

# WHAT HI FI?

## SOUND AND VISION

MAY 2015 ₹100

INDIA'S No.1 HOME ENTERTAINMENT MAGAZINE



### 4K TITANS BATTLE IT OUT

LG and Samsung bring their sharpest pixels to the fight



**DAC WAR!**  
We get DACs from Chord and Oppo to fight in the audio arena

**JAMO FLOORSTANDERS**  
Designed by the Danes, heard by us

### BEST OF NOISE-CANCELLING

# HEAD PHONES

Silence is golden and so is music...



**SUPERTEST: SPEAKERS**  
B&W's Award-winning 685 S2s vs six great rivals

### WANT THE BIG PICTURE? GET A PROJECTOR

Brilliant 100in+ HD thrills for the price of a TV



## BUYING GUIDE: 1500 VERDICTS

TVs • Soundbars • Headphones • Speakers • Amplifiers • Streamers • Systems



**CERWIN-VEGA!**  
The Loud Speaker Company

- ▶ High efficiency design
- ▶ Computer optimized waveguide (High frequency Horn)
- ▶ High power cast frame woofers
- ▶ Legendary Cerwin-Vega Bass
- ▶ 10"/12"/15"/18" & 21" Active subwoofers
- ▶ Compatible with AV Receivers & Stereo amplifiers rating from 4 ohm to 8 ohm
- ▶ Circuit Breaker/Fuse Protection for the Front speakers.

# BASS-ically Brilliant

www.prodigiindia.com  
email: info@prodigi.co.in



**XLS**  
Series

**SL**  
Series



For the first time in India, a soundstation in speaker systems that will blast your senses & shatter your soul and surge to a surreal space. That's the sound that defines who you are - Cerwin Vega.

Due to policy of continuous product improvement, Cerwin Vega Speakers reserves the right to change specifications and appearance without notice. All registered trademarks are the property of their respective holders.

Showroom: Old No. 104 New No. 76, Dr. Radhakrishnan Salai, Mylapore, Chennai - 600 004. Ph: 43213453 / 54.  
Contact: V S. Jayaganesh - 98410 62201. Email: jayaganesh@onkyo.co.in

For more information, call: ● BENGALURU: J. Venkat-98411401631- venkat@onkyo.co.in ● DELHI: S. Baskhar - 98117 76762 - baskhar@onkyo.co.in ● HYDERABAD: V. Srinivasa Rao - 98480 41504 - srinivas@onkyo.co.in ● MUMBAI: Usama Niaz - 98209 00726 - usamah@onkyo.co.in, chirag@onkyo.co.in, chiraag@onkyo.co.in, chiraag@onkyo.co.in, chiraag@onkyo.co.in

Premium Partners: Ahmedabad: Pavilion Electronics, FF-113, Shangrila Arcade, Nr. Shyamal Cross Road, 100 Feet Road, Almedabad - 380 016. Ph: 079-26752515, Mob: 98254 82900/98254 14595  
Email: brijesh@pavilion.co.in BENGALURU: Modern World, #13814, Service Road, Old Airport Road, Domlur, Bengaluru - 560 071. Ph: 2535 8192 / 2535 9406. Mob: 77609 88167. Email: modernworld@vsnl.com  
● Modern World, No.25.30, Hennur Road, Behind Sony Centre, Kalyan Nagar, Bangalore-560 043. Ph: 4212 674243. CHENNAI: S.D Digital Park, New# 35, Second Avenue, Ashok Nagar, Chennai - 600 083 Tel: 044 4203, 3291 Mobile-98844 00714, 98844 19416 Email: s.digitalspark@gmail.com KOLKATA: Promises Instruments Pvt. Ltd, 45, Shaokopere Sarani, Kolkata - 700 017. Ph: 2290 2644, Fax: 91-33-2283 4461. Mob: 96303 38898  
NEW DELHI: AV Zone, L-4, Opp. Nehru Apartment, Chittranjan Park, New Delhi - 110 018. Mob: 98111 76789 RAJKOT: Esham Electronics & Home Appliances, Gayatri Commercial Complex, Dr. Vaiglik Rd. Nr. Jagdish Police Station, Rajkot - 360 001. Ph: 0281-246 7191/246 4873, Mob: 98796 43004, Email: esteemelec@yahoo.com SURAT: Paramjeet Electronics, No.M-33, Asconcity, Citylight, Surat - 395 007. Ph: 0281-225 3656, Mob: 91-98251 33320, Email: jk@abeculiesound.in

Authorised Dealers: BENGALURU: Mithay Home cinema system, # 450, Basement, 15th cross, Jayanagar, 2nd block, Bangalore-11, CHATTISGARH: Vital Link, MIG - II / 201, Arid Nagar, Bhalai - 491009, Chattisgarh, Mob: 098930 08800 / 98450 22240 COHIN: HD Zone, Jack Castle, 2nd Floor, No.36/282C, Kakinadavu, (Near AXIS bank) Kadavanthara Road Kaloor Kochin - 682017 Kerala Mobile:09037995116 0924909006  
HARYANA: Bass Punk Entertainment Pvt.Ltd, SF-3, 2nd Floor, Metropolitan Mall, MG Road Gurgaon, Haryana-122 002, Ph: +91-124-4147 662, Mob: +91 98997 67077/9893261006 JAPUR: Rubber Rings Automation, 1st Floor, Madhav Mansion, Shop No.1, Gopinath Marg Link M1 Road, Jaipur, 302001. Mob: 8003776655 Ph: 0141-4018673. KOZHIKODE: Resonance Audio, 61 636, 640, Red Cross Road, Kozhikode 673 001 Kerala, Ph: 6050 055 Mob: 94955 50055 MUMBAI: The Shop, Plot no.195,D.N ragar Bldg No.35, New-Andheri Oshwara Link Road, -Andheri (west), Mumbai -400053 Tel: 91 22 2620 4710 / 2620 4706 / 2623 7800 Mobile: 98206 54522 Email: theshop1@rediffmail.com MYSORE: Resonators, # 905/37, 4th main, 3rd cross, Vidyaranyapuram, Mysore-570008. Mob: 098805 35569 MADURAI: A Team Entertainers, # 12, Lajapathy Roy Road, Chinnai Chokkikulam, Madurai - 625002. Mobile: 98429 65396 NAGARCOIL: Rajan & Co., No.50, Court Road, (OPP) S. L. B. School, Nagarcoil 629 001. Tel:04652 233 715, 233 815 Mobile:94431 33615  
PATNA: Enmatrix Technologies Pvt.Ltd, Flat No.A3, V.L. Villa, 30, Guru Sahayal Nagar, Magistrate Colony, Ashiyani Nagar, Patna 800 025. Mobile: 9431022733.

BENGALURU: Unit No. 102, First Floor, Barton Centre, MG Road, Bengaluru - 560 001. Ph: 2559755/3055293055293056162. Mob: 7760988163 ● 223A, 2nd Floor, Forum Value Mall, Whitefield Main Road, Bengaluru - 560 066. Ph: 40961342143. Mob: 7760988165 ● CHENNAI: 49, Kaburi Rangam Road, Avenex, Chennai - 600 016. Ph: 044-2487 1921, 4211 16480 1648, 4205 9044, Fax: 4200 0094, Mob: 98410 62201, 98410 01640. Email: jayaganesh@onkyo.co.in, shanumam@onkyo.co.in ● HYDERABAD: # 11-11-247, 2nd Floor, Surya Arcade, Opp. Barber Cafe, Beside MCM & ME, Begumpet, Hyderabad - 500 016. Ph: 040-2778 2228. Mob: 98460 76539 776034 66777. ● KOLKATA: 45, Shaokopere Sarani, Kolkata - 700 017. Ph: 2290 2644, Fax: 91-33-2283 4461. Mob: 96303 38898 ● NEW DELHI: L-4, Opp. Nehru Apartment, Chittranjan Park, New Delhi - 110015. Mob: 98111 76789 ● 546, First Floor, Sankar Road, Old Rajinder Nagar, New Delhi - 110080. Mob: 98111 30041.

**ONKYO**  
Wonderland



SMS: PRODIGI CERWINVEGA  
XL515 to 56767

Simply SMS PRODIGI space your location / model number to 56767 and receive information on your nearest dealers / details of the product. You can SMS PRODIGI Help Service to have our customer service cell to call back and attend your queries.

On line Tie-up with  
**snapdeal**

**Onkyo Helpline**  
3970 4455

**Dealer**

**Enquiry**

**Solicited**

**P.S. Sayee Jayaraman**

**98417 21137**

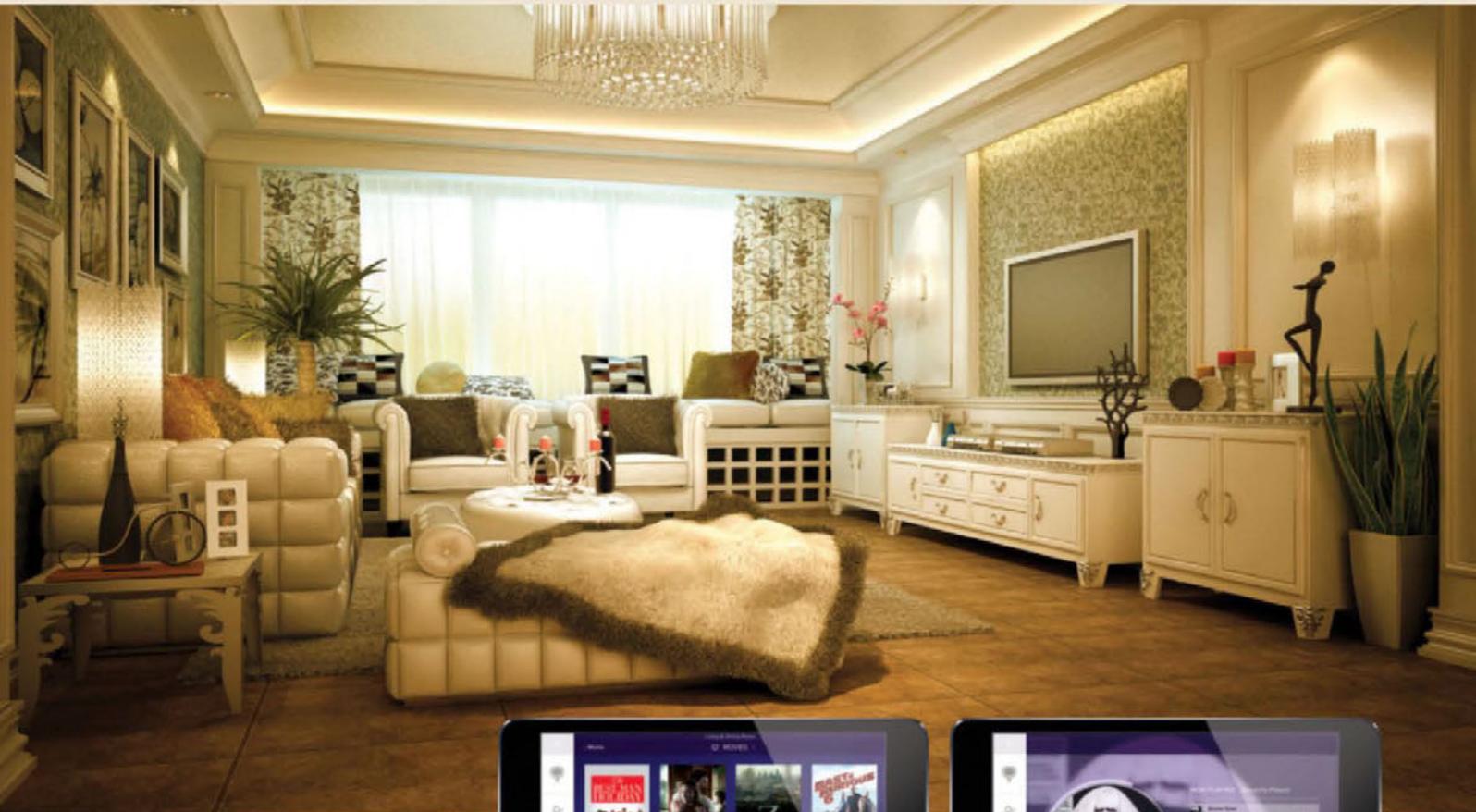
**sayee@onkyo.co.in**

Chigs

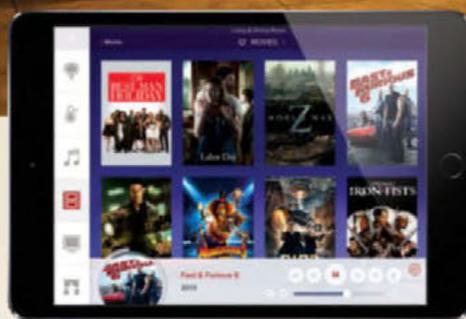


**iPad operated luxury homes from  
World's No.1 luxury technology brand.**

# World's most precious technology for luxury homes. Now in India!



→  
Movie Management  
Music Management



Ultimate luxury is about the experience.  
Having things happen, without having to ask.  
Which is why the most iconic hotels in the world use our technology.  
Technology, which is now available in India for iconic, luxury homes.  
Call us to know how your home can be an experience.

**CASADIGI**   
the luxury of intelligent homes

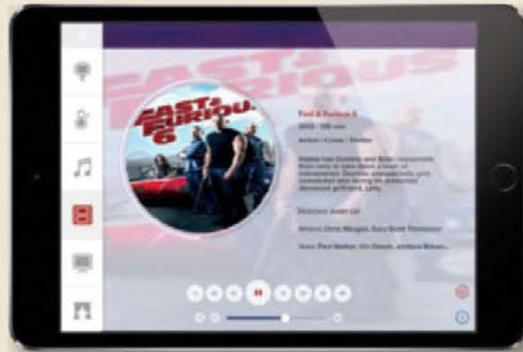
## Features

- Movie Management
- Music Management
- Television Control
- Climate Control
- Curtain Control
- Light & Mood Management
- Door Camera & Control
- Surveillance & Security
- Power Savings

**FLIP OVER**  
for detailed features  
& installations

# Install what most luxury homes in the world would be proud of...

Entertainment



Movie Management



Television Control

Convenience

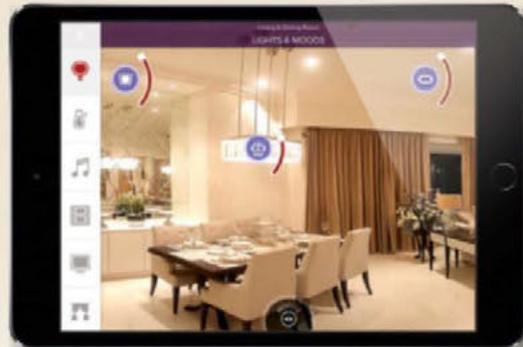


Curtain Control



Climate Control

Personalisation



Light Control



Mood Management

**CASADIGI**  
the luxury of intelligent homes

To know more or to seek a meeting  
Call Ashish Tijare : +91.97555 08800 or  
Mail: [experience@casadigi.com](mailto:experience@casadigi.com)



Choose luxury that is driving the wow! factor at world's tallest hotels!

Casadigi Experience Centres:

D E L H I | M U M B A I | H Y D E R A B A D | C H E N N A I

# WHAT HI FI? SOUND AND VISION

Ground floor, Podar Centre, 85, Parel Post Office Lane,  
Off Dr. B Ambedkar Road, Parel East, Mumbai 400 012.  
email us [whathifi.edit@haymarketsac.com](mailto:whathifi.edit@haymarketsac.com)  
Call us 022-43021000 fax us 022-43021050

## EDITORIAL

**Editor** Nishant Padhiar  
**Deputy Editor** Yatish Suvarna  
**Technical Editor** Farhan Kapadia  
**Editor-Special Projects** Vaibhav Sharma  
**Correspondent** Kaizad S Billimoria  
**Staff Writer (Web)** Karan Lohan  
**Sub Editor** Shanth Swaroop  
**Deputy Art Editors** Manoj Kokitkar, Kritika Dayal  
**Sr. Designers** Sahaya Johnson, Sukhdeep Singh

**Head Business Solutions** Debolin Sen  
**Sr. Manager Special Project** Amlan Mukerjee

## Marketing

**Sr. Manager** Kunal Marjadi  
**Executive** Preeti Wadhwa

## ADVERTISING

**Group Head** Harvinder Pal Singh  
**National Manager** Preeti Sinha  
**Chief Manager** Amjad Khan (Mumbai)  
**Sr. Managers** Santhosh Kumar (Bangaluru)  
**Manager** Nackeeran (Chennai)  
**Asst. Manager** Kanika Sood (Delhi)  
**Senior Executive** Priyanka Rathore (Delhi)  
**Executive** Ratan Deb (Mumbai)  
**Advertising Co-ordinator** Sonal Jain

## PRODUCTION

**Sr. Manager** Sanjeev Govekar  
**Deputy Manager** Prasad Gangurde

## CIRCULATION & SUBSCRIPTION

**General Manager** Gilbert D'Souza  
**Regional Manager** P Vijayakumar (South)  
**Asst. Manager** Saravana D  
**Sr. Executive** Ashok More (West)  
**Executives** Tapan H, Yogesh S  
**Asst. Manager Subscription** Mahesh Malusare  
**Co-ordinator** Rajesh Sallian

## INTERNATIONAL

**Managing Editor** Jonathan Evans  
**Brand Editor** Andy Clough  
**Managing Director** David Prasher  
**Chief Operating Officer** Brian Freeman  
**Chief Executive** Kevin Costello  
**Chairman** Rupert Heseltine  
**Licensing Account Manager** Isla Friend

## CONTACT

**Mumbai** Ground floor, Podar Centre, 85, Parel Post Office Lane,  
Off Dr. B Ambedkar Road, Parel East, Mumbai 400 012.  
Tel: 022-43021000 Fax: 022-43021050  
e-mail: [whathifi.edit@haymarketsac.com](mailto:whathifi.edit@haymarketsac.com)

**New Delhi** A2/9, Lower Ground Floor, Safdarjung Enclave,  
Africa Avenue Road, New Delhi - 110029  
Tel: 011-46020600, 32444090, 32969125 Fax: 011-46020633

**Chennai** M H V Pinnacle, First Floor 8/27 Govindu Street, T Nagar  
Chennai 600 017. Tel: 044-65446363 Telefax: 044-4212 3230

**Bengaluru** No. 811, 'A' Wing, 8th Floor, Mittal Towers, M.G. Road,  
Bengaluru - 560001. Tel: 080-2559 3775

**Secundrabad** No. 6-1-144, Nirmal Bhavan, Ground Floor,  
Street No 9, Walker Town, Padmarao Nagar, Secundrabad - 500 025

**News-stand price** ₹100

All prices and content correct at the time of going to press (\*denotes indicative pricing)

All rights reserved. All the data contained in this magazine is based on the information available with the publisher at the time of going to press. No part of this publication may be reproduced without the written consent of the publisher. The publisher makes every effort to ensure that the magazine's contents are correct. However, he can accept no responsibility for any effects from errors or omissions. Unsolicited material - including photographs and transparencies-is used in WHAT HI-FI? SOUND AND VISION, but is submitted entirely at the owner's risk, and the publisher accepts no responsibility for its loss or damage. Advertisements are accepted by us in good faith as correct at the time of going to press.

Printed and published by Hormazd Sorabjee on behalf of  
Haymarket SAC Publishing (India) Pvt. Ltd.  
Ground floor, Podar Centre, 85, Parel Post Office Lane, Off Dr. B Ambedkar Road,  
Parel East, Mumbai 400 012.

Printed at Indigo Press (India) Pvt. Ltd.  
Plot No. 1, C/7 16, Off Dadoji Konddeo Cross Road, between Sussex and Retiwalla  
Industrial Estate, Byculla (East), Mumbai 400 027.

Published at Haymarket SAC Publishing (India) Pvt. Ltd.  
Ground floor, Podar Centre, 85, Parel Post Office Lane, Off Dr. B Ambedkar Road,  
Parel East, Mumbai 400 012.

Editor: Nishant Padhiar

CIN No. U22120MH1998PTC116780

This magazine contains 112 pages including both covers.

# Hello/05/15



**Audio was hailed as the future of hi-fi way back in 1981 but it hasn't been until recent years that it has truly come of age.** DACs, amplifiers with built-in

DACs and DACs with built-in streamers are just some of the popular ways of injecting a new lease of life into your digital files. The proliferation of specialist sites to

download hi-res music has definitely helped propel this trend and it will only be fuelled further by hi-res music streaming services. We look at some of the current contenders in this issue that could convert you from analog to the digital side.

We also look at next-generation technologies like **portable DAC/headphone amplifier** (p110), **wireless music components** (p20) and **noise cancelling headphones** (p49). The variety on offer in this issue means there will be something for everyone, no matter what your poison. We also review the return of **Jamo** (p80) with the Concert series and a loudspeaker that could prove to be significant for this old Danish brand. With an all-new design sketched by a world-renowned industrial designer, it proves that great sound can live harmoniously with great decor without having to fight for attention. Now get to your favourite section and start saving.

Nishant Padhiar, Editor



## Why we're No.1!

### Experience and heritage

In the AV universe our deep rooted heritage and experience helps us share a wealth of information, helping you make a sound decision

### Dedicated test facilities

Our bleeding edge test facilities are stocked with the top of the line reference systems to put incoming products through their paces

### We spot big trends first

Don't blame us for breaking the best stories, it is a habit that ensures you get to learn about tomorrow, today

# CONTENTS

**Group test**  
**Noise-cancelling headphones**  
"Sometimes we just want to be alone with our thoughts and our music"



## Our products of the month



**Onkyo C-7050**  
**First test** p8  
"A nice stepping-stone into the world of hi-fi separates and an ideal solution for burgeoning hi-fi aficionados"



**Jamo**  
**Off-the-shelf** p80  
"They also allow surprising power handling to truly appreciate the expansive soundstage they can muster up"



**PSB**  
**Group Test** p49  
"It's a full-bodied and exciting listen, never holding back in any area"



**Supertest Stereo speakers**  
"Each have a distinctive sonic flavour that made us pay attention"

## What's in this issue...

**8 First Tests** We exclusively spend quality time with the Onkyo C-N7050, stream music via Yamaha R-500, tuck the Cambridge Audio TV5 under our 4K set and give the Triangle Esprit Titus EZ a listen

**30 Supertest: Stereo speakers** The bookshelf speaker market is stuffed with choice and in B&W, Cabasse, Elac, Epos, Focal, Tannoy and Triangle you have seven options to occupy your shelf space

**49 Noise-cancelling headphones** Put the mute button on all those around you by investing in a pair of noise-cancelling cans. We have six efforts ranging from ₹ 20,000 to ₹ 30,000 that'll provide a moment of silence

**58 Projectors** Projectors still lead the way for a cinematic experience and for less than ₹ 2 lacs we have four that can do that without breaking the bank



**First Test**  
"Both large-scale and low-level dynamics are delivered with infectious enthusiasm and no sense of the rounding-off"

## Insider 4K content p18

We say bye to reality and take a dive into the virtual world as we check out the latest in wearable technology

## Subscriptions p70

### Special subscription offer!

Buy one year of *What Hi-Fi? Sound and Vision* and get the second year free

## Top Shelf p110

We stock up our music and give the Onkyo DAC-HA300 headphone amp+Hi-res music player a test ride

## Group test Projectors

"For less than ₹2 lacs you can get up to 300in of picture from some of the units here"



## Head to head DAC's

"You'll definitely feel like you're getting your money's-worth here"



**64 Head to Head** We get two Blu-ray players to lock horns and follow that with a duel of the DACs

**72 Temptations** A top-notch turntable absolutely mesmerises us this month

**76 Playlist** We bid a final farewell to middle earth in Peter Jackson's *The Hobbit: The Battle of the Five Armies*, save our planet again with *Avengers: The Age of Ultron* and ponder on who will get axed in Season 5 of *Game of Thrones*

**79 Off-the-shelf** We give a good hard listen to the Jamo floorstanders, FiiO X1 and the LG Music Flow and pit two top 4K TVs against each other



**Temptation**  
"It's brilliant at latching on to that infectious rhythm track and thumps out the dense, undulating bass with considerable skills"

## New Buyer's Guide... two mags in one!

**The most trusted hi-fi guide!**  
1500 products rated **p85**  
With new categories and key tech specs, we've made it easier for you to pick the best kit for your cash.



## Our ratings explained

We always test products as a team, in dedicated facilities, and always compare them with their peers. That's why our ratings are the most authoritative in the industry.

One of the best



A serious contender



Worth a look



Disappointing



Awful



**WHAT HI-FI?**  
**TEST WINNER**

If it's one of our winners, you know it's top quality

**BRANDS WITH  
OUTSTANDING  
PERFORMANCE &  
QUALITY**

**WOLF**  
CINEMA  
www.wolfcinema.com

**CANTON**  
German loudspeaker tradition  
www.canton.de

**[audio physic]**  
www.audiophysic.com

**ATI**  
Amplifier Technologies  
www.ati-amp.com

**SI**  
Screen Innovations  
www.screeninnovations.com

**naim**  
world class sound...  
www.naimaudio.com

**BAYAUDIO**  
www.bayaudio.com

**HECO**<sup>®</sup>  
German HiFi since 1949  
www.heco-audio.de

**AA**  
ACCUSTIC  
ARTS  
www.accusticarts.de

**INNOVATIVE INFORMATION  
TECHNOLOGY PVT. LTD**  
1507, Maker Chamber V, Nariman Point,  
Mumbai 400021. Phone: 09819257839.  
Email: marbinc@gmail.com  
Tel: +91-9819257839  
Mr. Prashant Nahata: +91-9970330055  
Email: pnahata@gmail.com

Exclusive reviews of the latest kit  
**FIRST TESTS**



## Onkyo combines two into one for serious dual-function fun

**Onkyo C-N7050 | CD player/streamer**  
**₹34,212 (approx)**

Is the Onkyo C-N7050 a CD player that can stream, or is it a hi-res streamer with a CD player built in? No matter which angle you look at it from, this networked CD player aims to give you access to both worlds - for an attractive price.

It's a nice stepping-stone into the world of hi-fi separates, while giving the freedom to experiment with different sources before settling on a specific path - an ideal solution for burgeoning hi-fi aficionados.

The C-N7050's sonic presentation is upbeat and smooth, but edges aren't softened so much that detail is obscured. The Onkyo doesn't make a fuss with file types, either, having a forgiving balance that makes the most of low bit-rate MP3s while still retaining enough transparency to make listening to 24-bit/192kHz FLAC files a worthwhile experience.

Detail is crisply drawn and plentiful. You can hear taut strings being plucked in Public Service Broadcasting's funky *Gagarin*, while the layers of harmonics surrounding piano notes in The Unthanks' *Gan To The Kye* are conveyed with passion. Voices are direct and expressive, and it's easy to get caught up in the lovely melody.

It's a neat and tidy presentation, with enough drive and dynamic variation to keep the music enjoyable. There's a pleasing cohesion throughout the frequency range and a nicely judged tonal balance that refuses to emphasise one frequency band above another.

### Cool under pressure

There's a good level of composure too, so when the music gets complex the Onkyo has the talent to keep every instrumental



USE IT WITH

## The Race For Space – Public Service Broadcasting

Re-live the eponymous US/Soviet scramble via this evocative, sample-sprinkled mix of meaty dance beats and alluring soundscapes. Streamed or from disc, the Onkyo's flair with detail will ensure high standards of PSB



Onkyo has managed to tuck itself into an enviable niche - there are very few CD player/streamer combinations on the market, let alone capable and affordable ones

## A nice stepping-stone into the world of hi-fi separates and an ideal solution for burgeoning hi-fi aficionados

strand in place and under control.

Judged against a class-leading dedicated CD player such as the Marantz CD6005 the C-N7050 lacks a little bite, authority and rhythmic drive. Let's not forget, though, that it streams music across a network too.

That pleasant sonic character remains constant whether you're listening to CDs or streaming. We did, however, find that *The Imitation Game* soundtrack sounded just a touch more spacious and dynamic when streamed from our server than it did when played via a disc.

Aside from the CD drive, the only other physical inputs are two USB ports. The front USB is Apple-approved, and will play music stored on your iPhone, iPod or iPad, while also charging those devices.

You can listen to other radio or music-streaming apps, as long as it's

hardwired to the port. There's no Bluetooth or AirPlay to stream through, so third-party apps - such as Soundcloud and other services - can be played only through wired means.

The USB port at the back, meanwhile, will play files stored on a stick or flash drive. To plug the C-N7050 to your amplifier, you can choose between optical, coaxial and line-level outputs.

The streamer side of the C-N7050 has plenty of tricks up its sleeve. DLNA support means the Onkyo streamer can play music stored on laptops, smart devices and NAS boxes, as long as they're all connected to the same network. There's no wi-fi, so you'll have to plug the Onkyo to your home network using the ethernet port. It connects instantly, and recognises all devices on the network without a hitch. >



### Onkyo Remote 3 - Apple iPod/iPhone only - ₹ free

The control app is very useful to have at hand - provided you can access it. For now, it's available only for Apple users, is limited to iOS 8 and doesn't have an iPad-optimised version. Once you do gain access to it, the app is simple yet effective, with an interface that lets you scroll through the songs on your network with minimal delay.

# Live in Flowing Sound



NP7550

Make every moment memorable and immerse into your favorite music that follows you everywhere you go. At LG, we believe in **Innovation for a Better Life.**

## LG *MUSIC flow* P7

Portable Bluetooth Speaker



### Auto Music Play

Shake your Android device to automatically sync and play music on LG Music Flow.



### Multipoint

Connect and switch between up to three Bluetooth devices simultaneously.



### Dual Play

Enrich the listening experience with twice the sound performance (Stereo Mode, Twin Mode).



### More Color More Fun

Available in Black, Silver and White.

**INTRODUCTORY  
COMBO OFFER**



Buy LG Portable Speakers with Protective Cover Case and **Save ₹4990\***

\*Available in attractive colors



**In detail...**

**1** When it comes to connecting to your amplifier, the Onkyo offers the standard choices of line-level for analogue and coaxial or optical for digital signals.

**2** There's no wi-fi capability on the C-N7050, so any connection to your home network will necessarily be via the ethernet port, which, thankfully,

works quickly and has universal device recognition. This is also the route for accessing the world of internet radio, courtesy of the widely connected vTuner service.

You can also tune into hundreds of internet radio stations via the vTuner service.

The Onkyo's file compatibility is extensive. From MP3 and AAC to high-resolution 24-bit/192kHz FLAC and WAV (and 96kHz ALAC), the C-N7050 will play all popular music formats. It supports DSD files, too, but doesn't spin SACD discs.

If you'll be streaming files from a variety of sources, we'd recommend you download Onkyo's Remote 3 app. The simple interface makes it easy to scroll through long lists of songs, while the drop-down menu lets you jump between various sources with ease. We found using the remote handset when changing CD tracks more natural, though.

The app is free to download, but it's currently only available for Apple iPods and iPhones (see panel on p9).

**Quality look and feel**

The C-N7050 is well made and nicely finished too - in either black or silver. Build quality is decently solid considering the price. The CD loading tray operates smoothly, with no judders or stutters, and the mechanism is pretty quiet.

The fascia is neat and orderly rather than flashy, with only basic controls planted on the brushed-metal front panel. The three main control buttons - one each for CD, USB

and Network - make switching between inputs quick and easy.

The Onkyo responds swiftly to any commands, whether from the unit's buttons and dial, or the ones logically laid out on the remote-control wand. We'd definitely keep the remote in close reach - even if we have the control app at hand - as it's simple yet intuitive to use.

**Display details**

This is all good news for the C-N7050 - and those looking for an affordable CD player/streamer - but we do have one or two niggles. The player's large display is easy to read from a distance, but its single line of scrolling text looks meagre. It scrolls very slowly, and the cut-off text can be frustrating to read. We'd like a more sophisticated display - two lines, at least - that gives more information in one glance.

But we can see this Onkyo having wide appeal, and rightly so. There aren't many products that can spin CDs and stream files from one box, and not for such an affordable price either. A common starting price for individual CD players and streamers is ₹35K, which makes this two-in-one machine very attractive as a gateway to building your hi-fi system. It's a clever, feature-packed performer we urge you to consider.

**We can see this Onkyo having wide appeal, and rightly so. There aren't many products that can spin CDs and stream files from one box, and not for such an affordable price either. This is a clever, feature-packed performer**

**SYSTEM BUILDER**

These three proven performers will make great partners for the Onkyo



**Stereo speakers**  
**Wharfedale Diamond 220**

₹23,000 ★★★★★

These impressive speakers deliver a finely balanced, articulate, dynamic performance.



**Stereo amplifier**

**Marantz PM6005** ₹44,900 ★★★★★

With its snappy timing and crisp detail, this Award-winner will add agility and energy.



**Music streaming service**

**Tidal** \$20/month ★★★★★

The catalogue may not be as extensive as Spotify's, but Tidal offers CD-quality files.

**Total build from ₹NA**

**TECH SPECS**

**CD drive** Yes • **Hi-res** Yes, 24-bit/192kHz • **Supported file formats** FLAC, WAV, ALAC, AAC, WMA, MP3, DSD • **Inputs** 2 x USB • **Outputs** Optical, coaxial, line level • **Streaming options** DLNA; vTuner • **Wi-fi** No  
**Size (hwd)** 10 x 44 x 30cm • **Weight** 5kg

**Rating ★★★★★**

**FOR** Dynamic, lively sound; crisp detail; low-end weight; feature-packed; price

**AGAINST** Limited app availability; display could be more sophisticated

**VERDICT** The dual role is hugely appealing, especially given the price and performance

**Also consider**

**Pioneer N-50A**  
₹60,000 (approx) ★★★★★

With superb performance and great features, this is fantastic if you're looking to only stream.

**REVIEWER'S NOTES... GETTING TO KNOW THE ONKYO C-N7050:**

**1** Taking the C-N7050 out of the box, we're surprised at how light the unit is - still, it's nicely made. And responsive.

**2** Connecting the Onkyo to the internet takes mere seconds. It recognises our reference Naim server immediately, too.

**3** There's an app! Simple yet effective, it lets us scroll through our vast music library intuitively. Good job we use Apple...

**4** The unit supports DSD files, so it puzzles us that there's no mention of SACD compatibility. It's not a crucial omission, though.

**5** The Onkyo's lively, pleasant character is constant, but it sounds more dynamic when streaming than when disc-spinning.



Market Share of more than 19.11%  
Source: Future Source Consulting Report, 2014

W+ Series Projectors

# Turn your Living Room into a Stadium



**ISF CERTIFIED**  
Allows you to enjoy perfectly calibrated picture quality.



**SIX SEGMENT COLOUR WHEEL**  
More colors to produce incredibly realistic picture depth and range



**SIDE PROJECTION**  
Offers the flexibility to project at center and any corner of the room



**MOBILE HD LINK**  
Share content from your Android devices on big screen.



**OPTIONAL WIRELESS**  
New level of cable free convenience to home entertainment.



**LENS SHIFT**  
Extra flexibility during projection installation



**CONNECT HD-DTH**  
Watch your regular TV-soaps, movies, live sports on a Big Screen.



**10W CHAMBER SPEAKER**  
Plug 'n' Play for a Theatre like entertainment



**Upto 300" Screen**



**100" Screen at a distance of only 1.5 meters**

W1070+

W1080ST+

Short Throw Projector

See more of what you love with your loved ones. Pets included!

Short Throw

1080P Full HD 3D

Simulated REC.709

High ANSI Contrast

EQ Sound Mode

Smart User Interface

HDMI 1.4a x 2

\* W1080ST+ only.



Because it matters



**Authorised Dealers:** NORTH- CHANDIGARH: Emsoniq- 9814171908; DELHI: NEW DELHI: M/S Lakozy Audio Imagination- 9910041260, Gemini Technologies- 971155550, Sound Lounge- 9811040054; HARYANA: PANIPAT: Mateos: 8950700027 PUNJAB: LUDHIANA: Classic Technology- 9646140581, Rabs- 9501177800; PATIALA: Lanstec 9646024365; RAJASTHAN: JAIPUR: jB's- 9829365222; UTTAR PRADESH: KANPUR: Sunnoor Soundlab- 8090807000, Technoserva- 9839035884, LUCKNOW: Solutions- 8684003838; WEST- GUJARAT: AHMEDABAD: Lakozy- 9898062104, Iscon Techno Solution- 9227219007; BARODA: Yash Computers- 9825060263; MADHYA PRADESH: BHOPAL: Techno Aspect- 7509084590; INDORE: Pacific Marketing- 9826037540; NAGPUR: Technosales- 9860555969; MAHARASHTRA: GOA: Ripples- 9326141848, MUMBAI: Lakozy- 9820027219/9323897006; NAVIMUMBAI: Decible Studio- 9702057720; PUNE: Lakozy- 9822326001, Technosales- 9860124888; RAIPUR: Surabhi Electronics- 9425208644; SOUTH:- HYDERABAD: Color Edge- 9849077597, Sound & Vision- 9849019080; KARNATAKA: BANGLORE: DNI Home Theatre- 9845283741; KERALA: Metro Digital- 9846598467; TAMIL NADU: CHENNAI: RakhiWala- 960008060; COIMBATORE: Audisee- 9944123222; MADURAI: Visual Focus- 9842266322; TIRUNELVELI: Avalon Data Products- 9842176494; TRICHY: Museek- 9790003371; EAST:- ASSAM: GUWAHATI: TechnoGuru- 9954016338; ORISSA: BHUBNESHWAR: Corporate Business Machines 9437029139; WEST BENGAL: KOLKATA: Promises- 9903371100

**Yamaha R-N500 | Music system | ₹42,000 (approx)**

# Musical prodigy can play anything

The **Yamaha R-N500** is almost the ideal streaming system. Whether your music collection consists of CDs, vinyl, high-resolution audio files stored on a NAS device or just a Spotify Premium subscription (or all of the above), the R-N500 can play it all.

For an astonishingly wallet-friendly ₹42K, this one-box system has an impressive list of features. All you need to do is connect it to the internet, add speakers, and you're ready to start streaming.

## Spacious sound

With alt-J's *Breezblocks* streaming from our server, we're immediately struck by how big and spacious the R-N500 sounds. Instruments and voices are easy to place on the airy soundstage.

It has that warm, full-bodied presentation characteristic of Yamaha's sound, combined with a squeaky-clean, smooth quality that's lovely to listen to. There are rich layers of detail here, while the smooth quality to the treble ensures you won't hear any bright or sharp edges. It's an easy-going approach that suits all kinds of music files, whether a 24-bit/96kHz Tom Waits album or the *Guardians Of The Galaxy* soundtrack streamed over the internet.

We just wish it would sound a little more energetic. The R-N500 knows exactly how to deliver all the right notes at the right time - it just doesn't have quite the drive to do it. The lively, sprightly tune of Pink Martini's *Donde Estas, Yolanda?* sounds laid-back when it should be bubbling over with nimble-footed excitement.

## Get the right speakers

The system does need careful speaker matching. B&W's 685 S2 speakers show off the large scale and refined detail of the R-N500's sound, but the Wharfedale Diamiond 220s (₹23,000 - see below) are a better fit because the system sounds perkier and more upbeat.

When it comes to features this Yamaha covers most bases. Plug it into your home network (via ethernet only, there's no wi-fi)



Stacked with features - and useful ones too - the R-N500 is deeply versatile. It sounds good as well

**The R-N500 is good value for a product of its kind, and is a fine system for anyone with a sprawling collection of music files**

and you can stream all your music files stored across laptops, smartphones, tablets and NAS devices. File compatibility is extensive: you can play anything from standard MP3s to hi-res 24-bit/192kHz FLAC and WAV files.

## Music from many sources

AirPlay and DLNA support are also available, and with Spotify Connect, vTuner internet radio, and FM and AM tuners on board, you have access to more music than you can shake a glowstick at. Streaming quality is stable and we don't experience any drop-outs during testing.

There are multiple digital and analogue inputs if you prefer a wired connection, and even a moving-magnet phono stage for plugging in your trusty old turntable. There are two things the R-N500 can't do: wi-fi and Bluetooth, but we didn't miss either. If you want them, you can buy separate modules from Yamaha.

We like using the neatly designed and intuitively laid out NP Controller free app

more than the old-fashioned remote handset thanks to its logical, organised layout. It can be a little unresponsive at times though. The physical remote may be old hat, but it is at least reliable.

We're puzzled every time we look at the R-N500's relatively budget price tag, as it looks and feels every inch a premium piece of kit. Those beautifully machined controls are wonderful to use.

The R-N500 is good value for a product of its kind, and is a fine system for anyone with a sprawling collection of music files, or someone wanting to take their first steps into hi-fi. All it needs is a fresh dose of energy, and a touch more precision and punch.

## Rating ★★★★★

**FOR** Huge, spacious sound; clear and richly detailed; smooth presentation; features; price

**AGAINST** Lacks attack; could be more agile, precise and dynamic; no Bluetooth or wi-fi

**VERDICT** A pleasing all-in-one system that might win you over - especially at this price

## Also consider

### Bluesound Powernode

₹65,000 ★★★★★

Almost double the price, but punchier and more fun. It's a great buy.



## System builder total build ₹NA

### Stereo speakers

#### Wharfedale Diamond 220

₹23,000 ★★★★★

A recent price drop has made this astonishingly capable, entertaining pair of speakers even better value.



### Tablet

#### Apple iPad mini 3

from ₹17,900 ★★★★★

A sleek, intuitive interface for using the Yamaha's app and controlling all your music.

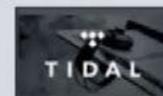


### Music streaming service

#### Tidal

\$20/month ★★★★★

A vast catalogue of uninterrupted music at your fingertips that will keep you entertained for hours.





## MSB WORLD TOUR 2015

*The Select DAC*



**The World's Finest DAC is now in India**



**DELHI** : The Experience Centre by Sight & Sound India Pvt. Ltd. : +91 9810339238

**MUMBAI** : Sharper Image : +91 22 2491 5886, Total Home Theatres : +91 9821557571 **THANE** : ABI : +91 97690 90164

**PUNE** : Melody Pro Audio & Lighting : +91 20 26155154 **BENGALURU** : Babblar Marketing Pvt. Ltd. : +9180-30644655

**HYDERABAD** : Vector Systems: +91 40-23551622, Awicon Technologies : +91 88975 09199

**CHENNAI** : Decibel : +91 99406 72834 **KOCHI** : Suus Electronics : +91484-329 4868 **KOLKATA** : Sollfege : +91 98300 80082

**RAJKOT** : Esteem Electronics & Home Appliances : +91 281-2464873 **LUCKNOW** : Madhav Enterprise : +91 9415434861

**VISAKHAPATNAM** : Awicon Technologies : +91 8008328899

**MUMBAI** : 2nd Floor, New Empire Cinema Building, Murzban Road, Fort, Mumbai - 400 001 Tel : +91 022 6600 5000 / 2200 4040

**BENGALURU** : No. 34, Ground Floor, 80 Feet Road, HAL 3rd Stage, Bengaluru 560 075 Tel : +91 85530 50505 / 85530 10804

Email : [avi@audiovisionindia.com](mailto:avi@audiovisionindia.com) **WEBSITE** : [www.audiovisionindia.com](http://www.audiovisionindia.com)

Cambridge Audio TV5 | Soundbase | ₹27,500 (approx)

# An affordable 'base hits the big time

It's not much to look at, granted, but start listening and this twin-subbed 'base is revealed as a gem



Soundbases may not come in different shapes, but sizes they do. Cambridge Audio is now the second manufacturer (after Canton) to produce a giant version of its debut soundbase specifically for 'larger' TVs. It's a sensible move: bigger soundbases can take the weight of bigger tellies and accommodate their bigger stands.

If you haven't already guessed, the TV5 is a larger version of the Award-winning TV2, 18cm wider than its forerunner (bringing its width to 73cm) and housing a second 16.5cm subwoofer underneath the unit for a bigger, bassier sound.

## Worth the extra

It might cost a tad more than the TV2, but it wasn't long into our viewing of time-loop thriller *Edge Of Tomorrow* we decided this was a reasonable extra spend, for the TV5 not only embraces the TV2's rich, full-bodied and balanced character, but builds on its level of clarity, subtlety and dynamic ability too.

Sure enough, it has a bigger sound. Though matching the TV2's level of amplification (100W), the TV5's bigger enclosure and extra woofer help it achieve greater scale and an increased sense of power. Skip to Cruise's combat-training scene and, as the machinery swings across the screen from all angles, there's no doubting the soundfield is as immersive as you're going to get at this price. It certainly had no trouble spanning the 55in screen we tested it with.

There's no questioning the upshot of the extra woofer elsewhere, too. Bass is laid on thick as Cruise is given his first taste of battle: compared with the TV2, there's much more rumble from the aircraft, and a harder thud as it falls to the ground. Explosions (the film's time-loop style

ensures there are plenty) have punch and definition, too. The bold, rich bass presence gives the entire presentation a solid backing, meaning that everything from gunfire to dialogue sounds solid, but never over-egged. It's this grasp of balance and weight that makes the TV5 comfortable at high volumes.

This soundbase's muscular delivery isn't without control and subtlety, either. It might not be natural to listen out for the finer details behind the high-energy action, but that subtle information adds to the whole experience.

The TV5's flair for dynamics is the highlight: it laps up the soundtrack's crescendo when our heroes prepare for war, and it ably communicates the drama and intensity of the battlefield.

It's a case of *déjà vu* viewing the unembellished black chassis and cloth grille front (hiding the same dual 57mm drivers as the TV2). The minimalist design isn't in the least eye-catching, but it's functional at least. Build is reassuringly sturdy so you won't be afraid to mount a hefty TV on top of it. Our only gripe: while a single, colour-changing LED indicates sources well enough, we'd prefer everything spelled out with a text display.

## Digital and analogue

The TV5 (like the TV2) is analogue-friendly, with both 3.5mm and RCA sockets, and an optical input too. It supports Bluetooth aptX and, while there's no sign of NFC, it has its own neat trick for making Bluetooth pairing quick and convenient by remembering up to eight paired devices and connecting to them automatically when in range.

Also handy (and in this case, environmentally friendly) is the Cambridge

## Remote synchronisation

Gently peel away the clothed front panel and you'll see that between the two BMR drivers is a control panel. This allows you to set up the TV5 so that it can 'learn' your TV or set-top box remote's functions and so obey their volume-level commands. Note that you'll still need the TV5's own remote handy for changing source input and sound modes.



Audio's ability to automatically power down when sound isn't detected after what the company quotes as "several seconds" and switch back on when it does. Those who covet convenience might also prefer to set up the base so a TV remote can control its volume.

A "step up in size and sound", promises Cambridge Audio. Tick, tick. The TV5 does exactly what it sets out to do, and is a sensible addition to the company's range at a time when good budget soundbases are few and far between.

Should you buy the TV5 over the TV2? If you have the space and extra cash, then sure. It's a great budget option for anyone looking to take their first step to improve their TV's thin, tinny sound - and not just for those of us with large tellies. And what's ₹5000 between friends?

## Rating ★★★★★

**FOR** Big, powerful sound; punchy bass; dynamic and detailed; digital and analogue inputs; reasonable price

**AGAINST** Nothing of note

**VERDICT** A sensible move for Cambridge Audio - the TV5 is yet another success

## System builder total build ₹1,48,932

### Television

**Sony KDL-50W800B**  
₹1,12,900 ★★★★★

Not the crispest with detail, but bright and punchy with good smarts and an attractive price.



### Blu-ray player

**Sony BDP-S5200** ₹8532 (approx) ★★★★★

The basics done well. This strikingly styled player delivers an impressive picture both with Blu-rays and DVDs.



## Also consider

### Cambridge Audio TV2

₹22,600 ★★★★★

Got less space or a tighter budget? The award-winning TV2 is exceptional value.





CUSTOM  
ELECTRONIC  
DESIGN &  
INSTALLATION  
ASSOCIATION

## CEDIA is the International Trade Association for the Home Technology Industry

Whether you are building a new home, remodelling, updating your electronics or just need some help from a specialist, CEDIA members are your trusted home technology partners.



Visit [www.cedia.org](http://www.cedia.org) to find a CEDIA professional in your area using the free online Finder Service.

Company	City	Phone
Madhav Enterprise	Ahmedabad	91 28 1292 6644
Vinshek Marketing	Ahmedabad	91 79 2685 7539
ARN Systems	Bangalore	91 80 4145 9999
Cinerama	Bangalore	91 22 6696 3641
Simphony	Chandigarh	91 17 2498 1685
Speedfreaks	Chennai	91 98 4090 4059
Tejas Innovative Solutions	Chennai	91 44 4214 7999
Achme Communication	Coimbatore	91 42 2256 3666
Soundroom Lifestyle Technologies	Hyderabad	91 40 4029 3004
Galaxy HiFi	Mohali	91 172 462 4005
AVI Sound Consultancy	Mumbai	91 22 6600 5000
Boom Audio	Mumbai	91 22 6770 6262
CCI Intertrade	Mumbai	91 22 6635 1888
Entelechy Automation	Mumbai	91 22 4225 8200

Company	City	Phone
Lakozy Impex & Services	Mumbai	91 22 2369 7001
Radio Ga Ga	Mumbai	91 22 24141323
Sound Decisions	Mumbai	91 22 2677 2339
Trescent Lifestyles	Mumbai	91 22 2493 9473
Yograj Services	Mumbai	91 22 2207 1207
NEO Home Automation	Mumbai	91 98 2105 3395
Anusha Technovision	New Delhi	91 22 6576 4366
M.N. Corporation	New Delhi	91 11 6468 7451
MacBee	New Delhi	91 88 0083 5127
Lakozy Delhi	New Delhi	91 11 4683 8373
AVXellence	Pune	91 20 2616 5000
Tech Innovance	Pune	91 84 1100 0497
Absolute Sound	Surat	91 98 2513 3320
Audiovision	Tirupur	91 93 6001 1328

**Home Technology, Professionally Installed**

**Triangle Esprit Titus EZ | Stereo speakers | ₹78,500**

# Titus delivers an imperial performance

We've long been fans of Triangle's approach to music replay. The company may not always produce the most rounded speakers, but in our experience its products rarely lack entertainment value. The Titus EZs, the only standmounters in the French company's new Esprit range, are a fine example.

Listen to these standmounters straight out of the box and you might well wonder what the fuss is about. They sound tonally uneven and have a peaky treble that needs little encouragement to sound harsh and aggressive. Triangle has long promoted horn-loaded tweeters so it's no surprise to find one here. It's a titanium dome fronted by a distinctive and rather aggressive looking phase plug.

Give the Titus EZs a couple of days of use and things improve considerably. The speakers' high frequencies gain in smoothness and integration improves. We would still recommend taking care in partnering electronics (avoiding brighter-sounding kit). The result, when you do take care, is excellent. We tried a range of amplifiers - from NAD's D 3020 and Arcam's A19, right through to our reference Bryston BP26/4B SST2 - and at each stage these Triangle speakers have the transparency to take a notable step up in performance.

## A powerful reckoning

They're small, standing just over 30cm, so really deep bass isn't on the menu. Accept this innate shortcoming and you have one of the most articulate and expressive speakers we've heard below the ₹1lac mark.

Positioned around 30cm from a rear wall on some solid stands, the Tituses sound fast, responding to leading edges and dynamic shifts with admirable precision. Play a complex piece of music such as Hans Zimmer's *Gotham's Reckoning* and they take it all in stride, keeping a multitude of instrumental strands under control and refusing to blur things even when the music becomes demanding. Both large-scale and low-level dynamics are delivered with

### Cellulose hero

The mid/bass driver is a new development. It uses a cellulose cone, with plenty of attention put into optimising the balance between rigidity and low weight.



infectious enthusiasm and no sense of the rounding-off of which many rivals are guilty. The result is an involving sound that pulls you in and holds you until the music ends.

Moving on to Tracy Chapman's *Goodbye* shows the Titus's subtler side. There's finesse here, with a nuanced rendering of Chapman's distinctive voice leaving us spellbound. We're impressed by the way these speakers deliver rhythms and the way they portray changes of pace. All the energy and drive, particularly in upbeat tracks like Bruce Springsteen's *Radio Nowhere*, is delivered with determined skill.

## Finishing touch

They're well made and nicely finished. Finish hasn't always been Triangle's strength in its more affordable ranges, so it's nice to see progress here. If you don't like the walnut of our review sample, white- or black-gloss alternatives are available for a premium.

We rate the Triangle Esprit Titus EZs very highly (even if they are harder to track down

Finishes come in walnut or, for a premium price, white- or black-gloss

than alternatives from better-known brands, it's well worth the effort). In a suitably-talented system, these classy standmounters will excel.

## Rating ★★★★★

**FOR** Articulate and agile presentation; excellent rhythmic drive and strong dynamics; fine-detail resolution

**AGAINST** Need care in system matching

**VERDICT** One of most enjoyable speakers we've heard below the ₹1lac mark

## Also consider

**B&W 685 S2**

₹65,000 ★★★★★

Our current Product of the Year delivers more authority and bass reach than the Triangles, but lacks the Tituses' agility and rhythmic precision.



## System builder total build ₹4,50,500

### Digital-to-analogue converter

**Chord Chordette QuteEX ₹1,29,000**

★★★★★

Chord has won rave reviews for its latest range of DACs, and this 2014 Award-winner is another class act.



### CD player

**Naim CD5si CD player ₹1,35,000 ★★★★★**

Its features might be minimal, but this Naim CD5si CD player is as musical as they come at this price.



### Stereo amplifier

**Rega Elex-R amplifier ₹1,08,000 ★★★★★**

One of the most talented stereo amplifiers we've heard, this Rega Elex-R features a built-in phono stage.



Wearable technology

## Time for a giant leap into virtual reality

Wearable technology is set to revolutionise the way we enjoy our music and movies

**C**ould the next generation of AV products see the biggest advances in technology yet? From Dolby taking its latest cinema sound to virtual reality to Apple's latest 'iPod' being on your wrist, wearable technology could be about to change the way we're enjoying music and movies in the not-too-distant future.

Once strictly the preserve of Hollywood, this futuristic technology is setting the wider tech agenda in 2015. As with any new tech development, the latest wearable kit is sure to have a knock-on effect on the wider world of hi-fi and home cinema.

### Show time

This year Mobile World Congress saw the traditional slew of new smartphones and tablets, but the real trend of the show was wearable technology, and specifically virtual reality.

HTC sprang the biggest surprise of the show by teaming

up with gaming company Steam to reveal its Vive VR headset. Delivering a 1200 x 1080p pixel-per-eye picture, the Vive VR aims to deliver games, video and more with an unrivalled level of immersion. Gaming may be the hook for early adopters, but HTC is already talking about live sports and concerts.

### Choose your angle

Would you like to watch a live music concert from the stage? Or follow a football match from a camera by the dugout? With such events already using a huge number of cameras, VR could allow you to do just that. The HTC Vive VR is due on sale by the end of the year, so this is more than just a pipe dream.

So it's no wonder home cinema companies should have VR tech on their radar. Cinema companies don't get much bigger than Dolby and aside from the first Atmos-enabled smartphone, and new Atmos



tablets (above), the company revealed it has been working on its own VR solution, which it sees as a natural fit for its new Atmos surround-sound format.

Working with virtual reality company Jaunt, Dolby is bringing live concerts and videos, complete with Dolby Atmos soundtracks, to VR, allowing anyone with an affordable Google Cardboard headset to experience virtual reality and surround sound.

Cinema giant Dolby has thrown its hat into the virtual-reality ring by collaborating with VR company Jaunt to produce its own immersive technology, complete with Atmos surround sound



### Live performance

While TV and films could gain an extra dimension, the real advantage could be live concerts and sport, where the user is free to roam their environment. Even a 4K OLED picture might struggle to compete with that... (You can read our first impressions of the experience opposite. Spoiler: we loved it.)

With the Facebook-owned Oculus Rift being the original flag-bearer for virtual reality and Sony recently revealing its Morpheus VR headset prototype, there's plenty of energy focused in this area. But VR isn't the only wearable tech to look out for...

Once strictly the preserve of Hollywood, this futuristic technology is setting the wider tech agenda in 2015. The latest wearable kit is sure to have an effect on home cinema

**DEALERS**

**OSAKI**

osaki@mtnl.net.in

JOKER & SKULLY & MONSTER

CUBE & PORTA PLAYER

2.1

5.1

SOUNDBAR R

DISTRIBUTORS

[www.osakispeakers.com](http://www.osakispeakers.com)

98212 77587

**\* Huawei Honor 6 Plus**  
Featuring an Octa-Core processor, a 3600mAh battery and three 8MP cameras, the Huawei Honor 6 Plus is now available for ₹26,499.



## Analysis

# “Atmos with virtual reality takes cinema to a new level”

**D**olby thinks Atmos is the perfect all-encompassing audio experience to complement the visual experience you get with virtual reality, and will “transform the way we tell stories”. To demonstrate its enthusiasm, the company was showcasing two new platforms for Atmos at Mobile World Congress: Atmos sound on mobile, and as part of a virtual-reality experience.

First we tried Atmos on mobile using headphones. Overhead noises are convincingly recreated, and there is a decent sense of width and space that pushes the surround-sound effect even further than traditional surround-sound processing in headphones.



**Combine Atmos sound with the VR headset and the effect is convincing**

But coupling Atmos sound with the virtual reality headset takes the experience to another level, giving you the audio cues you need to move yourself around a virtual environment. The on-screen visuals certainly work alongside the audio to help ‘place’ sounds in certain areas. Close your eyes and you can more easily pick up on the trickery Dolby is using to create the multi-directional effect, but then that’s not really part of the fun.

Effects are less pronounced and the experience is, overall, less immersive than being in the cinema, but it’s worth remembering this is working with just two speakers and some clever processing. Dolby tells us it’s not trying to match the cinema experience, it’s trying to complement it and improve the mobile audio experience we already have.

The only catch is content. Aside from the demo clips we saw, there is currently no native Atmos content available for mobile. This means it will be working mostly with non-Atmos-mixed audio and upscaling it to create the effect.

But it’s early days. With Dolby adamant that virtual reality will be crucial in the future, we look forward to seeing how the technology develops.

## Apple Watch



**Wearable technology** is about much more than virtual reality. The elephant in any tech room is Apple, and the Cupertino company has confirmed more details on its first play in the market – the Apple Watch.

As shown by the stellar success of the iPhone and then the iPad, underestimating any Apple product’s impact on the wider consumer electronics industry tends to be a mistake.

The idea of a mobile phone being a hi-fi product was laughable 10 years ago. Now the smartphone is one of the most popular devices in the world for listening to music, let alone streaming, buying and ultimately controlling your tunes and your wider AV system.

Could the Watch make a similar impact? Well, it’s also an iPod (it can play music without a phone connected), and is set to launch with “thousands of apps”. Who’d bet against Apple moving our collective eyes to our wrist?



## TOP 5 New launches

Dynaudio Excite speakers, B&O Love Affair, Sony Xperia Z4 tablet



## Hungama and Saregama

Hungama.com has partnered with Saregama to offer more retro music. The site now boasts of over 100 playlists and 25 artist radio stations from a bygone era.

## Lapcare Bluetooth headphones

Priced at ₹1999, the LBH 208 headphone offers 16 hours of use on a single charge, a built-in mic and a foldable design for portability.



## Sennheiser has launched new sports headphones range in India

Targeted at sports enthusiasts, all the models are sweat and water resistant with a rating of IPX4. The proprietary Sennheiser transducers used in the headphones are touted to deliver the best sound performance without any distortion. Priced between ₹4990 and ₹7990, the headphones are available to buy on [en-in.sennheiser.com](http://en-in.sennheiser.com).



## boAt unveils splash-proof portable Bluetooth speaker named RUGGED

Available on Amazon.in for ₹3990 RUGGED by boAt is a portable and splash-proof Bluetooth speaker. With a 1800mAh battery, it claims 12-15 hours of playback on a single charge. The battery also acts as a power bank and can charge devices via USB. The RUGGED features twin drivers that handle audio as well as a built-in mic for phone calls.



## Lucknow and Ahmedabad see opening of two new HARMAN authorised service stations

With the launch of two new HARMAN authorized service centers in Lucknow and Ahmedabad, HARMAN, now has a total of eight service centers across India. Staffed by trained technical personnel and equipped with advanced diagnostic and repair tools, these centers will support customers of all HARMAN Professional brands, including AKG, AMX, BSS Audio, Crown, dbx, JBL, Lexicon, Soundcraft and Martin lighting.

## Sonus Faber's Chameleon debuts

Available in six different finishes- white, black, metal blue, metal gray, orange and red, Chameleon from Sonus Faber gets its name from the exchangeable side panels that allow colour customisation for the speakers. The Chameleon collection features three units- the 2-way bookshelf speaker Chameleon B, the centre channel speaker Chameleon C and the floorstanding speaker Chameleon T.

The collection boasts of a 1.14in high-definition pre-coated fabric dome driver with no ferrofluid and a 5.9in midwoofer with free compression basket design and PP cone. The floorstanding Chameleon T also has two 7in Sonus Faber-designed woofers with a nominal impedance of 40ohm. Suggested amplifier output for the Chameleon T is 40W-300W without clipping.

All the three speakers in the collection have similar design elements- leather covered cabinets, driver flanges embellished with aluminium trims and interchangeable side panels housed in side walls via a system of pins. Sonus Faber's designers have also developed cabinet shapes and proportions that are touted to guarantee exceptional control of internal resonance, perfect acoustics, excellent driver stability and easy integration into rooms. All units are handcrafted in Italy. The Sonus Faber Chameleon series is now made available via Rivera International.



A heavy zinc die-cast chasis makes the PLX-1000 mass-heavy

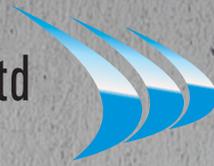
## Pioneer's PLX-1000 guns for vinyl purists



Pioneer believes its new PLX-1000 is what will finally convert audiophiles and vinyl enthusiasts to the joys of direct-drive turntables. Featuring a high-torque mechanism (over 4.5kg/cm, with fixed rotation speed achieved within 0.3 seconds), the PLX-1000 boasts of a user-friendly layout coupled with easy tempo control and an instant reset button. Direct-drive turntables have been more popular amongst professional DJs and have had trouble finding acceptance amongst audiophiles, who've so far preferred belt-driven units.

Pioneer claims that its latest turntable will change things by combining the clean sound of belt-drive with the high torque of direct-drive. According to Pioneer, the PLX-1000 is made extremely stable and quiet thanks to the heavy-mass zinc die-cast chassis, reinforced with a bottom section made of resin. The unit's base is also reinforced with damping material for even quieter playback. The tone arm hasn't been ignored either, and has been fitted with rubber insulation. Other features include low-impedance RCA jacks that utilise gold-plated, machine-cut components and detachable power and audio cables. Rivera International is the official distributor for Pioneer DJ.

Leading Lifestyle Solutions Pvt. Ltd



# When Sound Partners with Its Soul Mate ....



Home Theater in-a box ZVOX



Audio-Soundbase- ZVOX



Leading Lifestyle Solutions Pvt Ltd., has entered into a partnership with ZVOX - an American Killer brand Into Sound Base for promoting their Sound Base in Indian market. ZVOX has created a flutter in the US Markets with its amazing sound & very easy use of its 'plug & play' range of Sound Base.

The US customer's demand for Hi end audio in a simple way was more than met out with ZVOX single box solution. After creating an unflinching demand for its range of products in the US, ZVOX has found the right partner in LLSPL here to reach out to the mature Indian customers there' their wide spread dealer's network across India to promote their two series - Value Sound Base & Platinum Sound Base.

Solid MDF cabinet, Super clear vocals, Bluetooth, surround sound, built in sub woofer, Digital Processing and the Capacity to hold TV sizes up to 55" are the hall marks of Zvox Sound Base. Besides Homes, this convenient but genuine audiophile quality system suits the audio requirements for small halls, Training rooms, meeting rooms', class rooms etc., Watch out for this single box audio dynamite ready to blow soon in the Indian customer's houses.

## CERWIN-VEGA! The LOUD Speaker Company

Cerwin Vega has introduced a new line of professional Active Series subwoofers comprised of models CVHF-A21S and CVHF-A18S. They incorporate Cerwin Vega's noted driver design and bass performance, incorporated in a small compact footprint, with built-in amplifiers providing a completely integrated active system.

Functional cast aluminium grills double as a heat-sink to minimize power compression and maximize driver performance. Along with XLR and quarter-inch connectors, the CVHF subwoofers have Master/Slave output connectors that allow for multiple CVA subwoofers to be daisy-chained together using a single signal.

Both subwoofer enclosures are constructed of 18 mm hardwood and finished with the option of a durable Coolex polyurethane paint or high-grade black carpet finish.

The CVHF-A21S features Cerwin Vega's Stroker technology, which utilizes a three spider

driver design to optimize cone excursion and voice coil efficiency. The powerful built-in 1,200 watt (2,400 watt peak), high-efficiency Class H amplifier provides a highly-qualified amp solution.

In addition, the CVHF-A21S includes a unique onboard parametric equalizer that allows for added adjustment of the gain, frequency and Q for customized performance options. To add to its unique design, the subwoofer is housed in a cabinet the size of a traditional 18-inch subwoofer, and includes a striking cast aluminum grille design.

The CVHF-A18S includes a high-performance 18-inch Cerwin Vega woofer for extreme power handling and exceptional low-frequency response. Like its 21-inch big brother, the CVHF-A18S features built-in amplification for an integrated, all-in-one solution but with 700 watt (1,400 watt peak) of high performance output.

Cerwin Vega had built a 60 year legacy on mastering the art of bass and continue that heritage today with the CVHF subwoofer line.

This CVHF active subwoofer series demonstrates a level of innovation, uniqueness, and value is true to the Cerwin-Vega corporate culture."

### STROKER TECHNOLOGY

### STROKER



**CVHF-A18S**  
18 inch  
Active  
Subwoofer  
700 Watts  
continuous



**CVHF-A21S**  
21 inch  
Active  
Subwoofer  
1200 Watts  
continuous



Warranty support and Service support not available for any overseas purchase and for any online purchase other than from [www.snapdeal.com](http://www.snapdeal.com)

**Prodigy**  
TEXTOMER SERVICE  
*Literally, at your fingertips!*  
(SMS: prodigi model no to 56767)

Simply SMS PRODIGI space Your location / Model number to 56767 and receive information on your nearest dealers / details of the product. You can SMS PRODIGI Help / Service to have our customer service cell call back and attend your queries.

Simply SMS ONKYO space Your location / Model number to 56767 and receive information on your nearest dealers / details of the product. You can SMS ONKYO Help / Service to have our customer service cell call back and attend your queries.

**ONKYO**  
TEXTOMER SERVICE  
*Literally, at your fingertips!*  
(SMS: onkyo model no to 56767)

**Prodigy**  
www.prodigyindia.com

**f**  
<https://www.facebook.com/ProdigiIndia>

**t**  
[https://twitter.com/Prodigi\\_India](https://twitter.com/Prodigi_India)

**ONKYO**  
[www.onkyoindia.com/av\\_components.html](http://www.onkyoindia.com/av_components.html)

**f**  
[www.facebook.com/onkyoindia](http://www.facebook.com/onkyoindia)

**t**  
[twitter.com/onkyo\\_india](https://twitter.com/onkyo_india)

**YouTube**  
[www.youtube.com/OnkyoJPI](http://www.youtube.com/OnkyoJPI)

On line Tie-up with  
**SNAPDEAL**.com  
on select models

**Onkyo Helpline**  
3970 4455

## ★★★★ Lights on ★★★★★

I have been a dealer of Onkyo & Leading Lifestyle solutions pvt ltd., for the past one year. We get very good support from their sales & service team. Our customer's needs for higher and latest technology in AVRs are easily fulfilled by Onkyo.

Onkyo / LLSPL is the only company which supports the dealers & customers fully. Unauthorized purchases directly or thr' online sales is not supported by them which protects the customers & dealers.

We have been getting very good feed back from our customers for Onkyo, Cerwin Vega & OSSl products compared to other brands. The sound produced by Cerwin Vega is very natural & the wonderful performance of the sub woofer is very much appreciated by our customers. We want to fully promote Onkyo + Cerwin Vega to many of our customers in our area.



**P.M. Dinesh Babu,**  
RITZ, Salem.

## Happening



What hi-fi show 2015 at Palladium Hotel, Mumbai

## Customer Speak



**S.B.S. Surendran,**

Accredited Feng Shui Master, Vaastu Consultant,  
Bio-energetician and Media columnist - Bangalore

"It was a tough choice when I was looking for a good quality AV Receiver for my Home Theatre System project. I had to go through a long process of identifying many suppliers and the features offered in their various models but to me it was important that the product carries a good after sales support and technical team capable of resolving issues if any. My final choice was Onkyo as it not only met all my expectations on the technical specifications but also from the service and support point of view. Most importantly, Onkyo exists as an entity in India and with a customer care help line and extremely responsive and responsible service team my choice was right and my personal experience has been very good. As a product although there are many high end receivers in the market, my Onkyo 3010 is cut above the rest as it gives a visual treat on my 4K TV with its high quality Video Output and fills my room with quality sound reproducing even subtle nuances culminating to a aural treat. Absolute value for Money I am happy with my choice and wish Onkyo the very best in all their endeavors "

Onkyo AV Receiver TX NR838 and Cerwin-vega XLS 12 speaker package is an excellent set up with value for money. We experience a real theatre effect in this combination. The team from Onkyo and its partners have been involved with our project since the day of planning and helped us design the setup at every stage of construction.



**K. Natrajan,**  
Builder, Chennai



### DTS:X: What is it? How can you get it?

DTS has returned to cinema sound after 22 years with DTS:X, a new object-based sound technology that's a successor to DTS HD, and a rival to Dolby Atmos.

#### What is DTS:X?

DTS : X is an object-based audio codec that aims to create a multi-dimensional sound that "moves around you like it would in real life". You may think that sounds a lot like Dolby Atmos, and you'd be right. But where DTS:X differs, lies in the required speaker configuration.

While Dolby Atmos requires you to add extra height channels to your 5.1 or 7.1 setup, DTS:X will work with standard speaker setups - just like the one you might already have at home. It can support up to 32 speaker locations, which equates to 11.2 setups on 2015's AV receivers.

DTS says it's flexible, and will work with "any speaker configuration within a hemispherical layout".

This is thanks to DTS:X's Multi-Dimensional Audio (MDA) platform, which is open and licence-free and allows movie producers to control the placement, movement and volume of sound objects.

DTS has also made it possible for users to adjust the volume of just the voices on a soundtrack, making once hard-to-hear dialogue, a lot easier to understand.

## RED CARPET



### TX-NR636

7.2-Channel Network A/V Receiver



# Onkyo Brings "THE FINEST IN THE WORLD" to India

## Emotion. Delivered.

We not only amplify sound, we amplify emotion. The cornerstone of the Onkyo amplification concept perfected over our 65-year history - is high current. High current delivers more dynamic, engaging sound to bring you closer to the art you love. That's our promise.

### CP-1050 Direct Drive Turntable



#### Rediscover the Magic of Vinyl

There's never been a better time to rekindle your passion for collecting and listening to records. With the introduction of the CP-1050, Onkyo offers a turnkey solution for audiophile-level analog sound with less hassle and expense. It features a smooth and stable direct drive (there's no belts to replace and less high-frequency noise) controlled by a quartz-lock system to ensure the aluminum platter rotates with utmost precision. The aluminum tonearm ships with a quality MM cartridge, and thanks to an innovative counterweight system and detachable headshell, can also accept most popular aftermarket cartridges. Together with solid MDF deck construction, these elements combine to deliver exceedingly beautiful sound that's both clear and detailed while celebrating the lushness, depth, and warmth so beloved of the analog format. As you would expect from a company that created its first crystal turntable pickup for the CP-1000 back in 1946, every aspect of the design has been painstakingly engineered to deliver audio performance well beyond its suggested price.

### SKS-HT993THX

7.1-Channel Home Theater Speaker System



**THX** A-OMF

#### Time to Get Serious About THX® Reference Sound

If you're serious about experiencing THX-certified theater reference surround-sound in your entertainment space, look no further than the SKS-HT993THX package from Onkyo. Born of a legendary 70-year Hi-Fi heritage, each speaker has been painstakingly designed, tuned, and independently tested by Onkyo and THX technicians to ensure film soundtracks explode with rich layers of detail and immersive wide-spectrum dynamics. Solid MDF cabinets are fitted with either one (surrounds) or two (front LR and center) A-OMF woofer diaphragms that use layers of lightweight polyethylene naphthalate, cotton weave, and aramid to achieve exceptional speed and accuracy, while high-quality 2.5 cm soft-dome tweeters cleanly extend treble out to 45 kHz. And because the speakers are sealed, you can position them almost anywhere—it's even possible to wall-mount the surrounds—without compromising bass power or clarity. Rounding out this 7.1-channel speaker package is a 125 W powered subwoofer, its high-capacity cabinet and 30 cm front-firing cone filling rooms with wall-shaking bass impact. Forget lightweight toys—this beautifully finished full-scale system is the most convenient and affordable route to THX multiplex sound.

### DAC-HA 300

D/A Converter/Headphone Amplifier/SD Player



#### Portability and Pure Musicality for Lovers of Hi-Res Music

The DAC-HA300 DAC/headphone amplifier supports 192 kHz/24-bit Hi-Res PCM and 5.6 MHz DSD playback via iOS and Android devices using a Lightning or On-the-Go USB cables and our free HIF Player app. Whether you love the extra detail and clarity of next-generation audio formats, or just want to make compressed files sound better, the DAC-HA300's acclaimed MUSES8920 op-amp, fully discrete push-pull output stage, and high-end PCM 1795 digital-to-analog converter bring music alive with breathtaking realism. This device also accepts microSD cards filled with music, and together with its compact size, makes it a versatile and highly portable all-in-one Hi-Fi player when you're on the move. Thanks to a durable lithium-ion battery, you can expect up to seven hours of playtime between charges. For desktop use, there's a Micro USB Type-B Input to enable asynchronous D/A conversion and amplification of music files up to 192/24 via PC, and a 192/24-capable digital input to connect things like CD players and music streamers. Engineered to the highest standards by music lovers for music lovers, the DAC-HA300 is the class leader for pure high-fidelity sound on the go.

### CS-265 CD HI-FI Mini System

colibrino



**COMPACT DIGITAL AUDIO** MP3 **USB** **NFC** **Bluetooth** **Apple** iPad iPhone iPod

#### Stylish Colors and Features in One Sweet-Sounding Package

With quick and easy NFC pairing for mobiles, Bluetooth technology, and more amp power than ever, the CS-265 brings big and brilliant sound to small spaces. A quality front-loading CD player handles regular audio CD and both MP3- and WAV-encoded discs, while iOS mobile users are treated to an ultra-clear USB connection. Or fill a USB flash drive with MP3s and select tracks using the included remote control. Whichever way you play, you'll appreciate sound that belies the system's compact dimensions. A redesigned digital amp and powerful 2-way bookshelf speakers help to uncover hidden details in the mix while projecting music deep and wide in your room. Like it punchy, or with a more laid-back presentation? Proper tone controls and a 2-Mode Super Bass function let you find the right balance. Available in bold and vibrant colors, and looking fantastic with its clean, sleek lines, the CS-265 is easily the coolest and best-sounding mini system we've ever made at this price. It feels reassuringly weighty, solid, and well worthy of our 65 years in the Hi-Fi business.

# Digitex

**ONKYO**

**WHAT HI FI?  
SOUND AND VISION**

EXCLUSIVE NEWSLETTER FROM ONKYO

MAY - 2015

**ONKYO**

**Pioneer**

## Onkyo takes over Pioneer's Home A/V Business

Pioneer Home Entertainment has completed its transfer to Onkyo in Japan.

Pioneer's home entertainment group has entered the next phase of its development with the news that it has formally become a subsidiary of Onkyo.

The move was outlined last year when Pioneer agreed to sell its AV business to Onkyo and the two companies announced they would join forces to integrate their AV divisions.

Under the terms of the deal Pioneer has taken a 14.95 per cent stake in Onkyo and become Onkyo's third largest shareholder, with Gibson Guitar remaining the second

It's an increasing sign of the competitiveness in the audio-visual industry, leading to companies merging and pooling resources, such as product development, marketing, sales and technical expertise, across multiple brands.

According to Twice, all staff from Pioneer Electronics USA have been transferred to the new Pioneer Home Entertainment (PHE) subsidiary. PHE includes Pioneer's home cinema amplifiers, Blu-ray players and other AV products, but not its DJ or in-car audio products.

"The transferred personnel remain at Pioneer USA's facilities in Long Beach, California for now but will eventually



largest shareholder in Onkyo with a 21 per cent stake. Gibson has been buying up well-known audio brands, forming an alliance with Onkyo back in 2012 and subsequently buying TEAC and Woox Innovations, previously the AV division of Philips.

be transferred to a new facility in southern California," says Russ Johnston, EVP corporate communications for Pioneer Electronics USA.

By sharing back office functions the two companies hope to cut costs and "capitalise on the resources of the two companies such as strong brand power and superior technologies". It is expected that the two brands will continue to trade under their own names.

Source : [whathifi.com](http://whathifi.com)

**LeTV Le Max**

China based LeTV has announced its flagship smartphone- The Le Max. The device features a 6.3in IPS WQHD display, 4GB RAM and a 21MP camera.

**Intex LED 4200 FHD**

Intex technologies has launched a 42in LED TV. The Full HD television is available at an introductory price of ₹41,999.



# PHILIPS LIGHTS UP 4K TV GAME

*Attempts enhancing viewing experience by moderating ambient lighting*

Philips has unveiled its first 4K Ultra High Definition Television with Ambilight in India. Ambilight or ambient lighting, projects light from the back panel of the television and changes according to the content being played. The ambilight is supposed to not only enhance the viewing experience, but also reduce the strain on eyes during long viewing hours.

The 4K UHD TV is powered by Pixel Plus Ultra HD picture quality engine and features Philips Micro Dimming Pro which produces deeper blacks and brighter whites, regardless of the level of light in the room.

The motion rate of 400Hz is to ensure a smooth experience for fast-moving images and is touted to be perfect for gaming. The Smart TV function offers access to social networking sites, Skype, Youtube, Vimeo, online games and a host of other applications. It also includes active 3D, which gives a higher resolution, better image depth and better colors than passive 3D. Priced between ₹1,55,000 to ₹3,72,500, the LED TVs will be available at brand stores, large-format retailers and modern retail outlets in 50in, 58in and 65in sizes.



## Audeze's odyssey finally sees the brand reach Indian shores

Popular high-end headphone brand, Audeze (pronounced Odyssey) which is renowned for its headphones with revolutionary planar magnetic drive units and open-backed design is now available in India. In planar magnetic drive units, the voice coil is printed on a flat diaphragm, thus reducing mass and mechanical complexity. Audeze's headphones, along with its Class A headphone amp and USB DAC named 'Deckard' are now available for purchase through The Headphone Zone ([headphonezone.in](http://headphonezone.in)) and Innovative Information Technology.



The LCD-2 (top)  
and the Deckard (bottom)

## Leading Lifestyle Solutions to retail ZVOX

Leading Lifestyle Solutions has tied up with ZVOX Audio to bring the US-based manufacturer's soundbase range to India. Available for TVs ranging from 27in to 85in, ZVOX's soundbases utilise built-in subwoofers and offer aptX Bluetooth streaming. Other features include MDF construction, AccuVoice vocal-boosting technology, PhaseCue virtual surround sound, Output Levelling, and Electronic Contouring, which ZVOX says allows the amplifier to compensate for irregularities in speaker response. Zvox's Platinum series Soundbase was launched at the *What Hi Fi Show 2015*, recently held in Mumbai between 27th February to 1st March 2015. The models available include the Soundbase.670, which uses three subwoofers and five drivers, and the Soundbase.350, which pairs a solitary subwoofer with three drivers.

# AURO 3D<sup>®</sup> AUDIO

## AURO-3D INTEGRATED 3D SOUND PROCESSORS



### AURO-3D<sup>®</sup> AURIGA™

Its 16 output channels include 13 amplified channels, each capable of delivering 200 watts / 8 ohms, all channels operating together, and 4 additional RCA line outputs.

### AURO-3D<sup>®</sup> MENSA™

With 16 output channels, the Auro-3D<sup>®</sup> Mensa™ allows to accommodate not only all Surround sound formats but also the most immersive experience available in the home market today. Your movie experience will be like nothing you have heard before with crystal-clear dialog and immersive soundtracks like originally intended by their creators.



### AURO-3D<sup>®</sup> CRUX™

Boasting 15 output channels, the Auro-3D<sup>®</sup> Crux™ delivers outstanding audio performance with high sensitivity. 10-band parametric equalization for each individual channel and superior bass management allow both flexibility and precise control.



#### Contact Information

Aditya Modi | Manager India Office

M : +91-0-99670 44276

E : aditya@auro-technologies.com

[WWW.AURO-3D.COM](http://WWW.AURO-3D.COM)

**STK Bluetooth headphones**

The BTHS800 features a built-in mic, 8 hours of music playback and 12 hours of talktime. It is available at retail stores for ₹3990.



# Definitive Technology ushers in DTS Play-Fi with new Wireless series

Revolutionary new technology poised to redefine multi-room audio, backed by Definitive Technology's latest compatible Wireless speakers



Pictured below, from left to right is the W Adapt, W9, W7, W Studio soundbar and subwoofer) and the W Amp

**W**hat is **DTS Play-Fi**? Simply put, Play-Fi is a wireless audio technology developed by DTS, usually more renowned for creating multichannel sound formats for movies. Play-Fi is an 'open-platform software', meaning one no longer needs to worry about sticking to only one brand while designing a wireless multi-room audio system, a common drawback found in AirPlay and other such systems.

You can mix and match compatible powered speakers from different brands to create and control a customised, ubiquitous system. Also, since the streaming is done across a Wi-Fi network, the audio signal does not get compressed, unlike over Bluetooth platforms, thus making audiophile-grade music output possible on paired speakers. All you

**Definitive Technology is one of the first brands to have incorporated this technology**

need is the free Play-Fi app, which is available for Android, iOS, Kindle Fire, and Windows devices. Using Play-Fi, you can play the same music on all paired components without lag, or play different music on different components at the same time. The source of audio can be from any device that stores audio such as a smartphone, tablet or laptop to name a few. In the near future, directly streaming media from music streaming apps through Play-Fi will be quite possible in India.

Definitive Technology is one of the first brands that has incorporated this open-architecture wireless audio technology with its new range of wireless speakers, which have been announced as the "First Audiophile-



Grade Wireless Music System." Named simply as Wireless Music Systems. The range comprises of the W Amp (a 3-input, 4-channel amplifier which can transform existing speakers into a music streaming system), W Adapt (which can bring the latest music streaming services to existing audio systems), W Studio (sound bar and subwoofer), W7 and W9 standalone wireless speakers with in-built woofers that offer audiophile-grade performance. Between the W7 and the W9, the latter (pictured above) is the flagship model with two 5 1/4in woofers built-in for optimal bass response with 'Tri-Polar Dispersion Pattern' for better dispersion.

Definitive Technology's Wireless Music System is now available in India through Mumbai-based, Audio Excellence.



# The True Music System



## HEGEL H160 - Integrated amplifier with AirPlay, streaming and DAC

The Hegel H160 is a true music system. The ultimate solution in terms of combining connectability and design with sound performance. The H160 allows both analog and digital connections. It can be integrated with a Home Theatre system or you can use it to power your favorite headphones.

You can even stream music from your Apple or Android device, or perhaps a music server. With the H160, YOU are in command, while the H160 makes certain that whatever you choose to connect will be brought to its fullest potential.

Brought to you by:



Bringing Greater Joy to your Movie and Music Experience

**\* Intex IT Crunch SUF**

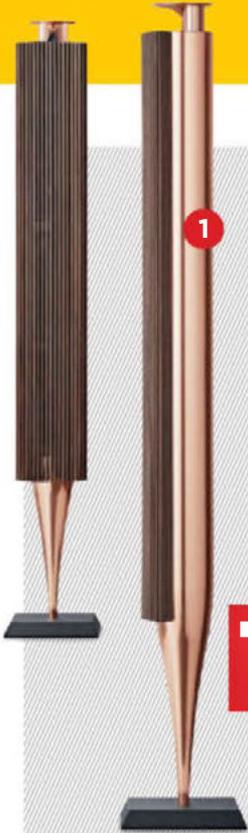
Intex has launched a new Bluetooth speaker, the IT-Crunch SUF for ₹3999. The 2.0 multimedia speaker has an output power of 15W + 15W.



1

**1 B&O Love Affair collection from ₹2,50,000**

To celebrate 90 years in the AV business, Bang & Olufsen has released six of its current products in a new rose-gold finish. The products featured are the BeoVision Avant 85 TV, BeoRemote One, BeoVision 11-46, BeoLab 18 speakers (pictured), BeoPlay H6 headphones and the BeoPlay A9 music system. We're reliably informed the rose-gold colour represents the "love and attention to detail" B&O has put into its products over the years.



2

**2 Sony Xperia Z4 Tablet ₹tbc**

Sony's new tablet features a 10.1in display and is claimed to be the "brightest 2K screen on the market". It also supports high-res audio and offers DSEE HX technology to upscale lower quality tracks. Elsewhere there's the latest Snapdragon processor and a 17 hour battery life. Want to know more? You'll simply have to wait it out.

**TOP 5 New launches**

3

**3 Dynaudio Excite X14A ₹tba**

The Excite X14A is a new, active version of Dynaudio's passive Excite X14 speakers. The electronics have been tailored with the drive units to create "the ultimate compact audio system". A 50W digital amplifier powers the bass/midrange driver while a separate 50W digital amp powers the tweeter. Three equalizer switches let users adjust the sound depending on where the speakers are placed in your room. Two analogue connections are available too - one RCA and one XLR.



4

**4 iRevo Smart TV Box ₹8499**

If you have invested in a brand new TV and later found out that it has no smart capabilities, fret not, the iRevo box is here to help. It is powered by iRevo's cloud-based application delivery platform called iRevo Apps. Consider it as your digital hub for the living room that lets you access online entertainment and Android apps under one hood.



5

**5 Samsung Galaxy S6/S6 Edge from ₹49,900**

Samsung's two new Galaxy smartphones have similar specs, but with one big difference. Both use a 5.1in Super AMOLED 2K screen, but the S6 Edge's 5.1in screen has its edges curved. This design brings with it some clever features.



STEREO SPEAKERS ₹33,000-₹99,999

# SUPERTEST



# The best pound-for-pound speakers you can buy

If you have a budget hi-fi system, chances are you can improve it significantly just by upgrading the speakers. And there are some stunning options out there...

## ON TEST

**B&W 685 S2 p33**

**Cabasse MT32 Antigua p34**

**Elac BS 73 p35**

**Epos K1 p36**

**Focal Aria 905 p37**

**Tannoy Revolution XT 6 p38**

**Triangle Esprit Titus EZ p39**



**Y**our first pair of speakers? Or maybe you're looking for an upgrade. Whatever your reason, we think you'll find your next hi-fi purchase in the next few pages. These seven standmount units are really good.

The Bowers & Wilkins 685 S2s are the ones to beat here. Our current Award-winner and office favourite, these talented speakers blew us away when we first heard them a year ago. Do they still have the same effect?

B&W has some serious competition at this price. We have the first set from Tannoy's spruced-up Revolution XT range, and French manufacturer Triangle also dazzled us recently with its elegant speakers - could they sail through to the final reckoning? Joining them are brand new entries from Cabasse, Elac, Epos and Focal, making this one of the most nail-biting tests to grace our listening rooms in a while. We're excited to find out who wins. Join us.

# MITASHI

RELEASE YOUR EMOTIONS

# SHOOJIT SIRCAR'S PIKU

MOTION SE HI EMOTION

IN CINEMAS  
8TH  
MAY



YouTube /msmmotionpicture    f /pikuthemfilm    t /pikuthemfilm

MSM RSE SARASWATI  
ENTERTECHNOLGY PVT. LTD. WISEC COMPANY

Mitashi Edutainment Pvt. Ltd., 414-424, B Wing Bhaveshwar Arcade, L.B.S Marg, Ghatkopar (W), Mumbai - 400 086. Tel.: 022-2500 6661  
For Corporate & Gifting Enquiries: Manish P: 099875 52799, Email: corporate@mitashi.com, Service Call: 09220020099, Email: service@mitashi.com  
For Enquires Call: Mah, Guj, Goa, M.P, CG: Amit C.: 09819989499, NCR, Delhi, U.P, U.K: Sachin S.: 09161444412.; Punjab: Satinder S.: 08427273740,  
Chandigarh, Har, H.P, J&K, Rajasthan: Neeraj U.: 09829917009, W.B, Orissa, NE & Bihar: Razi A.: 09748789403, A.P: Jameel A.: 09849302075,  
Karnataka: Vikrant B: 9986624240, T.N/ Kerala: C. Manikanda R.: 9840889657

www.mitashi.com

www.facebook.com/mitashikhelegakya

Available at (offers may vary):





## B&W 685 S2 ₹65,000 ★★★★★

The original 685s were instant stars in their class, but the well-judged improvements brought by the S2s ensure these speakers continue to stand out

**“They’re the speakers** we’d put on to get our friends into hi-fi, and we can’t think of a better reason to recommend the new B&W 685s.’ That’s what we said about the S2s when we first tested them and, exactly a year later, we still feel the same.

For ₹65,000 pair of standmounters, these speakers are superb. No other speaker in this price category comes close to the sheer power and dynamic punch that they provide. Their layer upon layer of detail unearths nuance and texture that render instruments and vocals startlingly realistic.

### Well-toned muscle

Nirvana’s *Smells Like Teen Spirit* hits you like a wall of sound, the 685s packing in so much muscle and depth to the low end that you feel the aggression coursing through the grungy guitars and attacking drums. Basslines plunge deep, rumbling along with control and enthusiasm.

Each note stops and starts with neat precision. The rhythm is fast, punchy and agile – these speakers certainly know how to have fun.

Dynamically, the B&Ws are hugely impressive. They communicate the shifts in tone and the build up of

tension in The Dead Weather’s *60 Feet Tall* with stunning subtlety, while the top end is free to soar in a clear, spacious soundfield. Vocals are nicely expressive, full of emotion in a way that really draws you into each song.

The S2s are revealing enough for you to hear exactly which of your albums are recorded poorly, but instead of making a fuss they simply apply their trademark gusto to deliver the most enjoyable performance possible. Play your old records through these 685s and you’ll feel like you’re hearing them for the very first time – it’s a really thrilling performance.

### Added protection

The cabinet itself is sturdy, and the chunky speakers come in black or white finishes. Next to the gorgeous Triangle Esprit Titus EZ speakers the S2s feel just a little plain, but they look pretty smart when perched on decent stands.

B&W’s distinctive yellow woven Kevlar mid/bass cone is certainly eye-catching, but what makes us jump with joy is the sight of a metal grille over the previously uncovered tweeter. It aids dispersion and means stray fingers will no longer be able to callously dent the delicate metal.

The S2 version was seven years in the making – plenty of time for B&W to work on the updates to the original 685s. Tweaks include improving the tweeter dome’s rigidity to increase precision, and decoupling the unit from the cabinet to reduce vibration. There’s also a new mushroom-shaped plug at the centre of the mid/bass driver for better damping. The result is a tauter, punchier bass than the original, and a clear treble that integrates smoothly with the rest of the frequencies.

### A rare breed

The 685 S2s remain one of the most captivating speakers we’ve heard at this price. The agile, musical Triangle Esprit Titus EZs are the only others in this test able to worry them. We urge you to listen to the B&Ws – we guarantee they’ll leave you with a huge grin on your face.

### Rating ★★★★★

**FOR** Powerful, muscular sound; clear, precise and agile; deep, rich bass; stunning detail

**AGAINST** The Triangle speakers are just a tad more agile, and better finished

**VERDICT** There’s no stopping B&W – these hugely thrilling 685s remain firm favourites



## Cabasse MT32 Antigua ₹46,000 ★★★★★

Unassuming in their appearance, the MT32s nevertheless employ a tweeter that's based on a premium design used in Cabasse's flagship speakers

**A big, spacious** sound that's hugely enjoyable to listen to. If that sounds like your cup of tea, you must have a listen to the Cabasse MT32 Antigua speakers.

### Playing with the big boys

Yes, they're rather big for bookshelf speakers, but they do the job expected of their size: delivering a huge, room-filling sound that's wonderfully open and pleasant to listen to. Hans Zimmer compositions sound grand and dynamic, while Nina Simone's soulful voice is enveloping and full of warmth.

They have the kind of smooth detail that's wonderfully easy on the ears without sacrificing too much sonic integrity. Harsh or coarse edges on a recording are ironed out. The top end soars high and open, while voices are projected clearly.

The bass is full-bodied and eager to please, although the Antiguas don't quite deliver the punchy, commanding performance we were expecting from speakers of this size. We'd like a bit more rumble and impact at the low-end. A tauter, more agile presentation - such as that found in the rival B&W 685 S2s and Triangle Esprit Titus EZs - would do wonders for the Cabasse's slightly laid-back performance.

The staccato rhythm of Trent Reznor and Atticus Ross's *On We March* needs a stricter sense of timing than the MT32s supply, but the speakers get by with the wide arc of sound they dish out. Voices could have more depth, too, while the easy dynamics that we like so much could be more subtle in the way they shift and soar.

Sure, these Cabasses are not quite as revealing as their aforementioned rivals, but it's impossible not to love that rich, open sound. It's inviting and full of enthusiasm - we could happily spend hours listening to these speakers.

### Give them room

Big and boxy, although surprisingly light, these speakers demand quite a lot of space in your listening room. It's not just because they're large bookshelf speakers, it's also because they sound best when given plenty of space. Push them too close to the wall and not only will you exaggerate the quality of the languid bass, you'll also lose a significant amount of that wonderful sense of space.

Available in ebony or walnut finishes, the speakers are well built and finished, even if their plain appearance looks a little severe.

The MT32 Antiguas may look humble, but their heritage can be traced back to Cabasse's high-end speakers. The 'MT' in the name stands for 'midrange tweeter', which is the DOM 37 tweeter - a design derived from the technology used in the flagship La Sphere and L'Ocean speakers (both with six-figure price tags). We wish they had retained some of those speakers' extravagant spherical design, too.

### Easy-going nature

The main impression we take away from the MT32 Antiguas is just how easy and enjoyable they are to listen to. They're not quite precise, punchy or revealing enough to worry the best in this class but their spacious sound is unrivalled at this price. If you have the space for them, these Cabasses will do their best to entertain you.

### Rating ★★★★★

**FOR** Huge, spacious sound; smooth detail; full-bodied; easy to listen to; good build

**AGAINST** Bass can get boomy if near a wall; rivals offer greater insight and precision

**VERDICT** A huge sense of scale and a smooth presentation give an enjoyable, easy listen



## Elac BS 73 ₹33,000 ★★★★★

These are beautifully assembled speakers, available in white or black - they certainly feel worth the money

**The Elac BS 73s** could have been a great pair of speakers. A lack of excitement and dynamic subtlety, however, means that they aren't quite the fully fledged entertainer we hope for when it comes to mid-priced standmounters.

The BS 73s get off to a good start. The jangly-blues guitars on Hot Tuna's *The Terrible Operation* sound solid and detailed, with a good amount of weight to the bottom end. Drums hit with a satisfying thump in Green Day's *Hitchin' A Ride*, although we'd like more punch and vigour to the presentation.

### In better company

Listened to on their own, the BS 73s sound perfectly fine. There are no harsh edges, and the drivers integrate smoothly. Set against their rivals, however, you'll notice they're quite dynamically restricted, their treble doesn't shine as sweetly as the competition, and there's a lack of subtlety to the otherwise solid sound.

The Elacs struggle to give the horns and strings in John Williams's *Hymn To The Fallen* the space to soar, and the sweeping music doesn't have the emotional pull to draw you in. The Epos K1s (the Elacs' closest rivals)

may not have the pleasing weight and depth to the bass that the Elacs do, but they're a much livelier and more open performer. Instruments sound more detailed through the Epos speakers, and there's a greater spark of excitement at the top end.

### Energy issues

The BS 73s seem to come up short of fully unleashing their potential energy and dynamic range, with the bass sounding ponderous when it should be punchy and agile. As a result, music lacks drive and excitement. We'd like a touch more clarity too - the edges of notes can sound a little blurred.

We'd recommend letting the BS 73s run in for at least a few hours before settling down for serious listening, as they sound quite sluggish when played out of the box. Take care with partnering equipment, too. The agile and full-bodied presentation of the excellent Rega Brio-R amplifier would liven up the BS 73s' sound.

Elac has chosen a minimalist look for the BS 73s, offering just two finishes: white or black. Build quality is great - the speakers feel solid and the smooth finish is pristine. You definitely feel like you're getting your money's worth here.

For anyone concerned with space, these are fairly compact speakers, with a 15cm mid/bass driver that takes up nearly the entire width of the cabinet. They won't look out of place in a small room. Be wary of poking the 25mm soft-dome tweeter - it sticks out, unprotected, and we'd feel more comfortable if there were some sort of cover shielding it from probing fingers.

### Fighting with the big boys

The Elac speakers are in formidable company. They do have price on their side (₹33K is only a notch up from the budget speaker price range) but then the superb Award-winning B&W 685 S2s are a seriously tempting proposition. The Elacs are decent speakers, but they need to offer greater clarity and precision, and a punchier rhythm, to compete with the very best.

### Rating ★★★★★

**FOR** Solid, weighty sound; decent detail; quality of build and finish; compact; price

**AGAINST** Lack drive, excitement and subtlety; could be more open and dynamic

**VERDICT** A decent if unexciting-sounding pair of speakers that just miss the mark



## Epos K1 ₹49,252 ★★★★★

The Epos K1's fascia is pure, with only a slot port and the drivers to break the line. Optional magnetic snap-on grilles are also available

**The Epos K1** bookshelf speakers are ideal if you're on a tight budget, have a small listening area and are looking for decent performance. At ₹49,252, these compact speakers are a tempting offer.

There's lots we like about the Epos K1s. They sound solid and lively. Detail definition is decent, with enough energy and dynamics to get you snapping your fingers and tapping your feet in time with the music. It's a smooth, weighty sound that's a pleasant listen.

### Complex problems

We like the even tonal balance of the speakers. There are no hard, bright edges to the horns in Quincy Jones's *Blues In The Night*. Nor does the bassline in The White Stripes' *Seven Nation Army* turn into a woolly, booming monster.

The K1s give a performance to match their capabilities - and price range - and while they may not be as transparent, precise or powerful as class rivals, they deliver an inoffensive sound that's easy to listen to. On the flip side, they can be overwhelmed by complex arrangements. They don't quite have the authority and subtlety to fully convey the dramatic, dynamic upheavals in Hans Zimmer's *The Dark*

*Knight* soundtrack, and we could do with more nuance and clarity from voices here too.

It's always worth bearing in mind, though, that the K1s cost ₹49,252. The Award-winning B&W 685 S2s offer more excitement and insight, but they will cost you ₹15,000 more. The Cabasse MT32 Antigua speakers (₹46,000) offer a bigger, wider soundstage, too, but the K1s have a more focused soundfield that's best suited to smaller rooms - they would be lost in a large listening space.

The Epos K1s are simplicity defined. Our review sample's white finish is startlingly minimal, with no distinct markings or branding on the clear, smooth fascia. The two drivers (a 25mm tweeter and a 15cm mid/bass driver) are similarly plain: all black, with no visible screws or any shiny accents.

### Minimal fuss

The minimalist design will appeal to many, while others may find it a touch too stark. Next to the distinctive designs of the Triangle Esprit Titus EZ and B&W 685 S2 speakers, the Epos K1s look rather nondescript. The speakers are nicely made, though: edges are smooth, build quality is sturdy and

there's the option to biwire them. You can also get the K1s in black, while a wood finish will be available later in the year. Magnetic snap-on grilles are also available for extra money.

### Active transformation

The K1s do have a neat trick up their sleeve: you can transform them into a pair of active speakers. The removable rear baffle (held on with screws) makes it easy to switch the passive crossover for an active alternative (an upgrade Epos will be releasing later this year).

Sure, if you shell out an extra ₹15K, you get the astounding B&W 685 S2s. This may seem like a reasonable jump, but for some, ₹50K is the absolute limit. And the Epos K1s make a convincing case for themselves. They may not be the most exciting, but don't overlook them.

### Rating ★★★★★

**FOR** Solid, lively sound; decent detail and dynamics; smooth listen; good build; price

**AGAINST** Rivals sound more exciting, detailed and powerful

**VERDICT** Not the most captivating or musical, but a pleasing speaker all the same



## Focal Aria 905 ₹99,999 ★★★★★☆

From solidity of build to fidelity of sound reproduction, the Aria 905s cut an impressive figure. The 13cm cone is made of flax, which is light and well damped

**If you want** a serious sound for serious money, the Focal Aria 905s are just the ticket. Their ability to deliver each thread of sound with the utmost competency is commendable - even if it comes at the cost of a little bit of fun.

Crisp, clear and precise, the Focal 905s are a hugely accomplished pair of speakers. Detail is abundant, and delivered with unerring control.

The stops and starts of notes are punctual. The staccato, electronic-sounding drum beats in the intro to Radiohead's *15 Step* are organised and hit their mark, while the Aria 905s confidently handle the dynamic shift into the more melodic, soothing guitar strums. The tinkling xylophone in Alt-J's *Ms* sounds sweet but also has a bite to it, while the taut bassline does a great job keeping in time with the nimble rhythm.

### Clinical efficiency

The Focals are ruthlessly efficient - they know exactly how each instrument should sound, how to convey a vocal nuance, how far the dynamics are allowed to soar, and how tightly controlled the entire rhythm needs to be. We just wish they would let loose and have some fun.

Next to the unbridled power and gleeful punch of the B&W 685 S2s, the Focals sound a little too controlled and serious. The Award-winning B&W speakers plunge ahead and have fun playing whatever you throw at them; they don't shy away from digging up grungy, crunchy textures around a bassline. The nasal twang in Stevie Nicks' voice on *You Can't Fix This* is politely subdued through the Focals. The B&Ws sound more soulful.

Placing the speakers close to a wall adds some much-needed heft to the sound. The Focals' mature presentation is admirable, but a touch more heart and emotion would make it a truly engaging performance.

### Varied material

Wood, glass, leather and metal - there's a lot happening with the Focal speakers' design. The various materials and panels are fitted together expertly, and the solid, sturdy build shows how much work has been put into these ₹1lac speakers. You get the choice of a high-gloss black or walnut finish too.

Some may find the design a bit too hectic, especially when compared with the simpler, more elegant designs of the Triangle Esprit Titus EZs or the

B&W 685 S2s. Focal's signature inverted-dome tweeter adds a distinctive touch, however, while the 13cm flax cone's well damped character ensures the 905s' precise nature.

### Unwanted prints

The finish isn't faultless. The leather base of our review sample was easily damaged by Blu-Tack (which we often use to fix speakers to stands), and the glass top is a fingerprint magnet.

The Focals have all the right ingredients, but they lack a touch of spice and zest. Confidence and competence are excellent qualities - and for some, just what they're looking for - but we want speakers that enjoy playing music as much as we enjoy listening to it. These are talented speakers, but it wouldn't hurt the Focals to let their hair down and have more fun.

### Rating ★★★★★☆

**FOR** Precise, crisp and confident sound; plenty of clear detail; taut, agile timing; build quality

**AGAINST** Need more punch and enjoyment; finish needs more attention; busy design

**VERDICT** A mature, confident performance that gets nearly everything right



# Tannoy Revolution XT 6 ₹82,500 ★★★★★

This next-generation speaker is definitely worthy of the lauded Revolution name, even if its integrated plinth makes life tricky if you want to use stands

**When a hi-fi manufacturer reinvents** one of its most successful ranges, we're excited and cautious in equal measure.

Tannoy's new Revolution XT range has the weight of expectation behind it. The original Revolution series spawned many Award-winners, so it's only natural to expect great things from this redesigned range. The XT 6 standmounters are the first to come under our scrutiny. And we've come away excited.

### Game played with enthusiasm

Play *The Imitation Game* soundtrack and the XT 6s zing through the fluid piano chords and the soaring strings with alacrity. These are nimble, speedy speakers. Give them a synth-heavy Nine Inch Nails track, or the lilting, exotic vocal quirks of Björk, and the XT 6s will happily deliver each note in a precise, attacking manner.

The Tannoys deliver a wide arc of sound, with plenty of space for individual strands to breathe. Detail is crisp and refined, with the midrange sounding particularly fluid and expressive.

We'd like a bit more weight and muscle to the XT 6s' sound, though. The XT 6s have a lean presentation -

great for agility and timing, but less good for the layers of rich, textured detail needed to fully engage our attention. Rivals offer a punchier, more full-bodied sound that's more satisfying to listen to.

The squelchy bassline in *Wildfire* by Sbrkt never puts a toe out of line, but it's not quite as rumbling and textured as it should be. The grungy, thumping drum beats in Marilyn Manson's *Killing Strangers* lack the muscle needed for a satisfying impact. B&W's 685 S2s have the appropriate weight and power to show exactly how it's done.

We'd recommend placing the Tannoy speakers close to a wall, as it adds some solidity and punch to the sound. Be wary of partnering the speakers with any bright-sounding equipment, too, as you don't want to exaggerate that lean character.

### Elegant and functional

The XT 6s look smart. The trapezoid cabinet (the shape helps reduce internal standing waves) is as sturdy and beautifully made as ever. The 'XT' in the name stands for 'extra technology', reflecting the changes on the new series.

Firstly, Tannoy's signature Dual Concentric driver has been redesigned to improve the integration between the tweeter and mid/bass driver, but the more obvious change is the addition of a fixed plinth. There's a downward-firing port that exits into the gap between the cabinet bottom and plinth, which makes sense when the XT 6s are standing on a table or on a bookshelf. But ideally you want to place them on dedicated stands, and in that context they can look awkward. We'd like a sleeker design.

### Compelling sound

These Tannoys are certainly speakers to watch out for. Their fluid, light-footed presentation and crisp detail are pretty compelling - we just wish there were more brawn and richness to the sound they produce.

### Rating ★★★★★

**FOR** Crisp, clear, attacking sound; brilliantly agile and precise; refined dynamics; fine build

**AGAINST** Rivals offer greater detail and more authority; awkward plinth

**VERDICT** Brilliantly speedy, fluid and refined speakers that look smart and sound exciting



## Triangle Esprit Titus EZ ₹78,500 ★★★★★

You might not find these speakers as readily available as those from more prominent marques, but their zesty sound is worth tracking down

**Look at that** shiny tweeter horn. Look at it. Listen to that exciting, captivating sound. Can you blame us for being a little bit in love with the Triangle Esprit Titus EZs?

The Triangle speakers race across Public Broadcasting Service's *Gagarin* with unfettered enthusiasm. The drums hit with precision, while the taut strings are funky and nicely textured. The fanfares blare triumphantly - the surge in dynamics is as subtle as it is rousing. The Triangles capture the upbeat, agile tone of the song perfectly, and their energetic, insightful delivery is riveting.

### Fit for action

Looking at their petite dimensions, you wouldn't think the Tituses capable of lashings of deep, cavernous bass. And you'd be right, they aren't. You'll have to go for the B&W 685 S2 speakers if you're after big-scale power and low-end authority, but the zippy nature of the Triangles make even the punchy 685s sound like they need a few miles on the treadmill.

They're admirably precise and transparent. The atonal, mangled tune of Tom Waits' *Bad As Me* has befuddled bigger, pricier speakers than the EZs, but these compact bookshelf units take

it in their stride. The clangorous drums and creeping, blues-tinged melody make perfect sense through the Tituses, which keep a taut hold on each instrumental strand to deliver a thoroughly engaging and cohesive performance.

Waits' intensity is palpable, his voice veering between sinister and cartoonish, and yet the Tituses effortlessly convey each subtle nuance and quirk of his performance.

The only chink in the Triangles' armour is a rather excitable treble. It sounds quite harsh and aggressive when you listen to the speakers from new. Give them a few days to run in, though, and the top end smoothes out considerably, sounding richer, fuller and more integrated with the rest of the frequencies. We'd still avoid partnering the Tituses with any bright or hard-sounding equipment, though.

### Premium and no mistake

Compact and beautifully built, the Tituses are hugely desirable speakers. The walnut finish of our review sample feels and looks of a premium quality - it makes all other speakers at this price look underdressed. If the woody look is not your thing, white and black gloss finishes are available.

The star attraction is that titanium tweeter. Some in this office are attracted to shiny things, but the horn-loaded tweeter looks more elegant than bling and the aggressively pointy phase plug gives the design a distinctive touch.

### Getting the balance right

The mid/bass driver uses a new cellulose cone that's been engineered to strike the right balance between lightness and rigidity. A listen to the Titus' taut, nimble low end shows the hard work has paid off.

The Triangle Tituses might be difficult to track down compared with some better-known brands, but they're worth the trouble. They're more than just a pretty fascia, too: these gorgeous speakers are talented enough to worry our Award-winning B&W 685 S2s.

### Rating ★★★★★

**FOR** Agile, enthusiastic presentation; insight and articulation; impeccable finish; design

**AGAINST** Needs careful system matching; rivals offer more low-end oomph

**VERDICT** Impressive in almost every way, these gorgeous speakers are very tempting

# TEST VERDICT



## THE WINNER

**B&W 685 S2**

₹65,000 ★★★★★

They've had to fight hard against varied and talented opposition, but the dynamic and subtle **B&W 685 S2s** continue to keep their rivals at bay and claim the honours at this price

**W**e have to hand it to them - all seven speakers in this test performed admirably. Each had a distinctive sonic flavour that made us pay attention, and we've come away elated that the mid-priced bookshelf speakers market is saturated with such competitive and entertaining options.

### Two peas in a pod

Elac and Epos share many characteristics: compact, minimalist design and a lower price compared with rivals. But it's the Epos K1s that win out here. They may not have the insight and precision of the Triangles, but the K1s are nicely detailed and have a smooth balance. They cost ₹49,252, too.

We wish the same could be said about the Elac BS 73s. While they sound perfectly fine in isolation they lack the energy and drive to really grab our attention.

The Focal Aria 905s, on the other hand, are serious about getting every aspect of their

sonic performance right. The rhythm is spot-on, the bass is taut and the top end soars but never sharpens. They should be a shoo-in for top marks, but they just lack the ability to have fun. More expressive dynamics and extra bass kick would help a lot.

If stark precision and control isn't your cup of tea and you'd prefer to be enveloped in a huge, spacious bubble of sound that's utterly pleasing to listen to, the Cabasse speakers are the ones for you. They're full-bodied and smooth without sacrificing too much detail, and the eager attitude is hugely enjoyable, even if the bass gets a little out of hand. Give these big boxes some space in your room, and you'll marvel at how open and expansive they sound.

### Reputation maintained

Tannoy has a reputation to uphold, and we think the company can hold its head up high with the newly designed XT 6 speakers. More muscle and weight to the low end wouldn't go

amiss, but the lean presentation means the speakers can be agile, accurate and attacking. We're in two minds about the look of that integrated plinth, though.

And now we come to the two stars of this test. The entertaining B&W 685 S2s have been firm favourites for over a year, but the new Triangle Esprit Titus EZs have wowed us with their incredible agility and that gorgeous finish. If we could give both of them the win we would, but it's the B&Ws that ultimately get the nod. The Triangles can be fussy with partnering kit, they're considerably pricier, and harder to find - but we'd make the effort as they're such a talented and desirable pair of speakers.

The B&Ws remain unmatched when it comes to dynamics, bass depth and punch, and they have the subtlety and control to support that immensely captivating sound. They're just so much fun to listen to, and that's what makes us keep coming back to them. The 685 S2s are the undeniable champions.

# THE AUDIOPHILE'S ULTIMATE DESTINATION



Indulge yourself this summer!

Whether you're a movie buff who loves seeing his favourite stars up close, or a cricket fan who demands a stadium experience right at home, snapdeal's got all the home theatre equipment you'll ever need.

**India's largest online store for audio solutions**

**snapdeal**

# FOR THE CRICKET FAN

This summer, head over to snapdeal and prepare to indulge yourself with the most immersive cricketing action you'll find anywhere



### Epson EH-TW6100 LCD Home Cinema Projector

Cricket matches are a lot more fun when you've got this powerful Full HD projector. Hook it up to your HD DTH connection, gather your friends around, and just sit back for a truly immersive experience.



### Onkyo LS-B50 Bluetooth Soundbar

It's the 21st century and we're all living wireless. So get your new 4K TV a fantastic, wire-free sound solution that not only looks chic and up-to-date but also gives you a multiple input options.



### JBL Cinema Base 2.2 Ch Soundbase

Get the maximum bang from the smallest package with this 2.2 channel soundbase. It supports Dolby Digital and Harman Display Surround, and also lets you stream music from your iPhone!



### Sony BRAVIA 55in 4K 3D TV

Cricket's now available in 4K Ultra High Definition! So why don't you get this new Bravia? It's got all the tech you need for your sports matches, and with its 3D abilities, is also the best pick for movie nights!



### Pioneer AJ-5235XT 5.1 Speaker System

You'll catch every snick and rejoice along with the crowd if you get this 5.1 speaker system. A down-firing sub, a sophisticated 6-element crossover, and powerful output make this the man of the match!



### Kortek Karaoke KHM-150

The match is over and it's time to celebrate your favourite team's big win. So get set to party in style with this neat stereo karaoke mic, which features over 3000 tracks and supports on-screen display of lyrics.



**GET EXTRA  
5% OFF**

USE PROMO CODE HIFIAVR5  
ON ALL AMPLIFIERS & AV RECEIVERS  
IN MAY

# FOR THE MOVIE BUFF

Make hot summer nights and grey Monsoon weekends even more fun with your very own home cinema



## LG 55in OLED Cinema 3D TV

The deep blacks and excellent contrast of LG's curved OLED panels meets 3D to give you the ultimate home cinema TV. Gather the entire family round and pick out your favourite movies for the perfect Sunday evening!



## Pioneer BDP-LX55 Bluray Player

Classic movies, summer blockbusters, streaming video and audio, or even the greatest moments of the World Cup, make it all come alive on your new home cinema TV with this Pioneer Blu-Ray player.



## Persang Dzire Karaoke System

Extend movie nights till the wee hours with this karaoke system - a wireless mic, real-time scoring, and recording ability make it so much more fun, while the key control lets anyone rock their heart out.



## Yamaha YHT-2910 5.1 Home Theatre System

This Home Theatre system relishes whatever you chuck at it. Cinema DSP, Dolby, and DTS support make it a perfect fit for the cinema buff while the multiple connectivity options will delight any gadget fan.



## Marantz PM8005 Amplifier

Audiophiles, please stop and pay attention. The Marantz PM8005 amplifier is just what you've been waiting for - it's got tri-tone control, 6 line level inputs, and Marantz Hyper Dynamic Amplifier Module tech!



## Audioengine P4 speakers

Pair your new audiophile amplifier with the speakers it deserves. Audioengine's P4 bookshelf speakers might be compact enough to place anywhere, but they sure pack quite a punch, with an excellent bass response.



**GET EXTRA  
5% OFF**

USE PROMO CODE HIFISPK5  
ON ALL SPEAKERS ABOVE ₹ 5000/-  
IN MAY

**snapdeal**

# MUST-HAVE ACCESSORIES

Stop over at the accessories corner to pick up some more AV gear that makes any room in your house a lot more fun!



**Google Chromecast**

Relaxing in your hotel after a hectic day or just chilling out in your home gym, put your smartphone library and streaming apps to good use with Google's remarkable Chromecast player!



**Noble 40in Full HD TV**

Kit out the children's room, the home gym, or your lounge with this sleek 40in TV. Powerful sound, multiple input options, a high-contrast panel and toughened components make this the ideal TV for an active lifestyle!



**Mobitron Swing Bluetooth Speaker**

Teleconferencing on the go, relaxing by the pool, or a picnic with your family, it's all a breeze when you've got this compact Bluetooth speaker that gives you up to 8 hours of playback!



**JBL T400BT Wireless On Ear Headphones**

Chew up those miles on the treadmill or make trans-Atlantic flights a lot more fun with these lightweight wireless headphones that are easy to stow away when you're done.



**GET EXTRA 5% OFF**

USE PROMO CODE HIFIHP5 ON ALL HEADPHONES IN MAY



IN ADMIRATION OF MUSIC

# DALI KUBIK ONE

- Listen Your Way



The new DALI KUBIK ONE allows you to listen wirelessly to your music and movies at an incredible level of sonic detail. This sound system gives you a variety of choices to listen to anything, anywhere in your home, from any device. It combines DALI's outstanding loudspeaker heritage with state-of-the-art digital amplification - designed by people who have devoted their lives to the pursuit of audio excellence.



Learn more about the KUBIKS on [www.dalikubik.com](http://www.dalikubik.com)

# Revolution XT



## Revolution in design. Revolution in sound.

Revolution XT lives up to its name, marking a major leap forward in loudspeaker design and the realisation of some of Tannoy's most radical and forward thinking technologies.

Retaining the classic trapezoid shape from its multi award-winning predecessor, the new Revolution XT cabinets now feature an ingenious reflex-coupled dual-cavity design. This optimises performance of the all-new Omnimagnet™ Dual Concentric™ driver across extremely low to mid-bass frequencies. The complex internal design is further perfected with an integrated plinth that provides a uniform and predictable low frequency interface to the listening environment, delivering the deepest bass notes with ease.

Dynamic, engaging and articulate, yet incredibly easy to set-up and place in any room, Tannoy's Revolution XT is a true revolution in sound. Find out more at [tannoy.com](http://tannoy.com)

# TANNOY

"The Tannoy Revolution XT6Fs are incredible speakers for the money and you must seek them out for an audition."

Tannoy Revolution XT6F



What Hi-Fi website March 2015



What Hi-Fi May 2015



**B&W 685 S2**  
**₹65,000 ★★★★★**  
 Power handling 100W • Sensitivity 87dB • Impedance 8 ohms • Biwirable Yes • Finishes 2 • Dimensions 35 x 19 x 32cm • Weight 7kg



**Cabasse MT32 Antigua**  
**₹46,000 ★★★★★**  
 Power handling 75W • Sensitivity 88dB • Impedance 8 ohms • Biwirable No • Finishes 2 • Dimensions 41 x 22 x 30cm • Weight 7.5kg



**Elac BS 73**  
**₹33,000 ★★★★★**  
 Power handling 70W • Sensitivity 87.5dB • Impedance 4 ohms • Biwirable No • Finishes 2 • Dimensions 30 x 18 x 27cm • Weight 5kg



**Epos K1**  
**₹49,252 ★★★★★**  
 Power handling 100W • Sensitivity 87dB • Impedance 4 ohms • Biwirable Yes • Finishes 2 • Dimensions 31 x 19 x 25cm • Weight 6kg



**Focal Aria 905**  
**₹99,999 ★★★★★**  
 Power handling 100W • Sensitivity 89dB • Impedance 8 ohms • Biwirable No • Finishes 3 • Dimensions 33 x 21 x 25cm • Weight 6kg



**Tannoy Revolution XT 6**  
**₹82,500 ★★★★★**  
 Power handling 60W • Sensitivity 89dB • Impedance 8 ohms • Biwirable Yes • Finishes 2 • Dimensions 40 x 22 x 30cm • Weight 7.5kg



**Triangle Esprit Titus EZ**  
**₹78,500 ★★★★★**  
 Power handling 60W • Sensitivity 90dB • Impedance 4 ohms • Biwirable No • Finishes 3 • Dimensions 31 x 17 x 27cm • Weight 6kg



**Speaker placement: dos and don'ts**  
 They may be nicknamed 'bookshelf' speakers, but don't put your brand-new standmounters in between volumes of *Game Of Thrones* if you want the best performance out of them.

We'd recommend placing them on dedicated stands. Not only do products such as the Award-winning Custom Design F104 Signature and Q Acoustics Concept 20 speaker stands offer a stable, stylish support, they also help reduce any unwanted vibrations for a cleaner, punchier performance.

If you think your speaker could sound less bassy, more open, or needs a bit more punch, something as simple as adjusting their placement in the room can work wonders. Only thing is, there are no universal rules about positioning. Some speakers sound fuller and more controlled when placed close to a wall, while others flourish when they're out in the open with plenty of space around them. As ever, experiment for yourself to get the best results.

**SYSTEM BUILDER**



**Turntable**  
**Rega RP6/Exact ₹1,20,000**  
**★★★★★**

Given the B&Ws' capability we urge you to treat yourself to this articulate and engaging Award-winning turntable.



**Stereo amplifier**  
**Rega Elex-R ₹1,08,000 ★★★★★**  
 A terrifically energetic and agile amp that gets right to the heart of the music.

**Total build ₹3,47,000**



**DAC**  
**Arcam irDAC ₹54,000**  
**★★★★★**

Want to play your digital files? Add this punchy, precise and well-built DAC.



## THE ONES WHO REACH THE TOP DESERVE A LITTLE NAP!

The made in India Recliner for the people who are making India a success story! Choose your own special throne from our carefully crafted and customised range of world class recliners. After all, it one of the perks that come with your success!



Design: Armonia

### LITTLE NAP DESIGNS PVT. LTD.

**New Delhi Showroom & Corporate Office:** #844, M.G. Road, Ghitorni, New Delhi - 110030  
Tel.: +91 11 26502800, Mob.: +91 98999 01948

**Hyderabad Showroom:** 4th Floor, Road No. 12, Banjara Hills (Near Motherhood Hospital),  
Hyderabad, Telangana - 500034 Mob.: +91 80966 25807

**Mumbai:** +91 98999 88774 **Shop-in-shop:** Houslife, Ishanya Mall, Pune Tel: 020 40004013 **Evok:** New Delhi

Follow us on :  / littlenap **Mail:** info@littlenap.in

MANUFACTURERS OF RECLINERS FOR: MULTIPLEX | HOME THEATER | LIVING ROOM | HOSPITAL | AUTOMOTIVE

# SPLENDID ISOLATION

## What's on Test

- Beats Studio 2.0 **p50**
- Bose QC25 **p50**
- Philips Fidelio NC1 **p52**
- Polk Ultrafocus 8000 **p52**
- PSB M4U2 **p54**
- Soul Jet Pro **p54**

**S**ometimes we just want to be alone with our thoughts and our music – but the world has other ideas. There's the annoying bloke on the train home talking too loudly on his phone, the chorus of babies wailing on a long-haul flight or just the general hubbub of an office that we'd rather do without.

That's where noise-cancelling headphones come into their own. Using internal and external microphones, they judge your surroundings and block outside noises, leaving you to enjoy your music without interruption.

There are brands that have made a name for themselves in this arena, and some promising newcomers here to challenge them. And it's high time to see how they all fare.



# Beats Studio 2.0 ₹25,000 (approx) ★★★★★☆

01

**Carrying the tagline** "an icon remastered", these are the successors to the classic Beats Studio cans. Perhaps most interesting here is the brand's reconsideration of the 'Beats sound' - a bass-heavy character that gave the original Studio headphones a bad name among audiophiles when they launched.

The Beats Studio 2.0s are now said to be tuned with "balance and accuracy" in mind. We'll see about that...

The design is still very much Beats, if perhaps a little more refined. They're still headphones to be seen in, available in a range of colours, with the now-iconic "B" logo emblazoned on each earcup.

The originals felt somewhat bulky, but these are lighter, and the foldable design makes them an easy portable companion. A case is included, as well as two cables - one with, one without inline controls.

The rechargeable (via microUSB) battery allows for around 20 hours of active noise-cancellation. Less than with some rivals - and there's no passive playback if the battery runs out - but it should cover you for most situations.

It's a relatively comfy fit, with the soft, thick leather earpads preventing any feel of clamping. The headband would

benefit from some better padding in place of its rubberised finish though.

The Beats Studio's efforts at noise-cancelling make an impact on the noises around us, but not to the extent that something like the Bose QC25s can offer.

If you're a fan of classical music, there is another thing to be aware of with Beats - there is a not-insignificant hiss when ANC is on. It's hardly noticeable with livelier tracks, but quieter, more subtle recordings can reveal it.

## Hip-hop is still their thing

While there has undoubtedly been a change in the Beats Studio's character, these headphones still lend themselves to the likes of pop, hip-hop and rock music the most - anything lively will bring out the best in these cans.

They're an exciting, upfront listen, and can fill your ears with some serious volume. The bass has been refined so it's better balanced in the frequency range, and never overwhelms the midrange or sounds heavy-handed in the mix.

Let's be clear: anyone looking for a neutral pair of 'phones will find there is still a tad too much bass here, but it's a balance that works better than it did.

The midrange is clear and open, and the treble crisp without ever being hard. Throw them a complex rhythm and there's agility and fluidity on show, and large-scale dynamics are portrayed with confidence and expression.

Vocals could have a touch more body and subtlety to them, and quieter sections of music don't offer the insight or expression found in some rivals.

It's ultimately a presentation that aims to be likeable rather than analytical, with finer detail smoothed off in exchange for a more forgiving character.

We can't argue with that - it's a clever tactic that will serve these headphones well with a lot of people. We would just like to see a touch more refinement and transparency in order to bestow a fifth star upon them.

## Rating ★★★★★☆

**FOR** Rich bass; exciting sound; smooth, forgiving character; dynamically confident

**AGAINST** No passive mode; notable hiss; bass bias will still be too much for some

**VERDICT** Beats Studios now sound better than ever, but purists may want to look elsewhere.

# Bose QuietComfort 25 ₹21,263 ★★★★★★

02

**For years, the** Bose QuietComfort 15s were our go-to noise-cancelling headphones, winning our Award for the category four times in a row. For a while we wondered if anything could ever beat them. Then came their successor.

The QuietComfort 25s are an improvement in every way. Whether it's design, aesthetics, performance or noise cancellation, Bose has built on every aspect that we loved in the QC15s and made it even better.

## Superb noise-cancelling

When it comes to noise cancellation, you won't get better than this. They are remarkably good at blocking out the consistent sound of an airplane engine, for example, but do a good job at taking the edge off an office environment too.

Switch on the noise cancellation while you're wearing them and you'll feel the ANC kick into action with powerful effect, creating a vacuum-like feeling between your ears and the headphones. You get used to it within a few minutes but it's a strange sensation to begin with.

The ANC runs via a single AAA battery, which should offer around 35 hours' life - and the QC25s do work

passively should you be caught short. They're quieter and lose a significant amount of clarity, detail and balance when used this way though, so try to keep a spare battery with you.

When used as they should be, the QC25s offer a well-balanced presentation, without ever leaning towards any part of the frequency range.

This means the low-end doesn't have the weight of the Beats Studios or PSB M4U 2s, but what it lacks in muscle it makes up for in agility and precision.

It integrates well with the midrange, which is smooth and open with plenty of detail and clarity. We love the insight on show here too - pianos have depth and texture to every note, while percussion sounds believable and never unduly harsh.

## Even-handed and mature

Despite the balanced presentation, the QC25s strongest point has to be their sparkling, open treble, which soars all the way up to the highest notes without a hint of hardening at any volume.

With such even handling, the QC25s are at home with any musical genre. They have the insight and maturity to handle subtle classical tracks, but can produce

the drive and attack required to take on faster pace rhythms with confidence.

There's a precision to the way notes start and stop too, and while the QC25s steer just clear of making the sound analytical, it does make them seem a little more restrained when compared to something more up-front and fun, such as the PSB M4U 2s. Which balance works for you will come down to taste.

The QC25s won't win any awards for devastating good looks, but they're light and comfortable to wear for hours at a time, which counts for a lot. There's a lot of plastic here, but it feels solid and durable, and keeps the weight down.

So what do you do if something ain't broke? Well, if you're Bose, you go ahead and tinker with it anyway, producing a new product that's better in every way.

## Rating ★★★★★★

**FOR** Class-leading noise cancellation; lightweight design; clear, open treble; precise, detailed sound; very easy listening

**AGAINST** Could be a touch more exciting

**VERDICT** Not our Award-winner for nothing, these are great noise-cancelling headphones

**01** —  
The Beats Studio 2.0s are available in nine different regular finishes



**02** —  
Frequent fliers apply here: the QC25s are superb at noise-cancelling

# Philips Fidelio NC1 ₹30,000 (approx) ★★★★★

03

**Philips has had** a good run of five-star cans of late, so when the Fidelio NC1 noise-cancelling headphones were announced at CES 2015 we couldn't wait to see if the Bose QC25s had a competitor for their noise-cancelling crown.

With a design even smaller and lighter than the QC25s, the NC1s are seriously portable - crucial in this arena - and helped further by their collapsing design.

Perhaps rather strangely for a pair of noise-cancelling headphones, though, is that the NC1s have gone for an on-ear rather than over-ear design. As it turns out, the Philips don't suffer too much from this - at a decent volume, white noise is hard to pick up during music playback. Office environments don't fare quite so well, with conversations and phones creeping in fairly easily.

## A design for life

Otherwise, the design works well. The NC1s look more stylish than the Bose QC25s, with a sleeker design made up of aluminium on the cups and a soft-touch material on the headband. The cable is a sturdy woven design, available both with or without inline controls, and there's a carry-case to provide protection.

Being slender and lightweight, the NC1s are very comfy to wear for long periods, the memory-foam and leather earpads doing well not to heat your ears.

The battery for the ANC is rechargeable via microUSB and will last around 30 hours on a full charge. That's pretty impressive, though if you ever are caught short without juice the NC1s are capable of passive playback, and do a surprisingly good job at it too.

We ran the NC1s in for two full charges before we started testing and even then they continued to improve - it will be worth giving them a lengthy bedding-in period if you want the best from them.

When it comes to performance, the NC1s show plenty of bite and attack, but sound noticeably smaller than something like the PSB M4U2s, and don't show the same level of separation and space as the Bose QC25s. The presentation tends to lean towards the upper mids and treble, leaving precious little warmth or body in the low end.

Ellie Goulding's *Burn* is a good example of this, the electronic synth melody ruling the roost while the drum bassline - though taut - takes a backseat, with very little power to be heard.

This dialled-back low-end can leave vocals sounding harsh and vulnerable at certain frequencies without the authority to balance them out, and the leading edges to some notes to sound hard too.

Strangely, turn off ANC and you'll find bass is boosted. You lose some clarity, but add much-needed warmth and body. Detail retrieval is decent and insight is good, though we're not convinced of the NC1s' ability to handle complex rhythms.

These cans are unfortunately not the roaring success that we were hoping for, often finding themselves held back by their size and design. Noise cancellation is surprisingly decent but ultimately the 'phones sound as small as they look. As it is, the Bose QC25s offer a lot of what's attractive about the NC1s in a better thought-out, better-realised package.

---

## Rating ★★★★★

**FOR** Decent noise cancelling; plenty of bite and attack; good detail levels; portability; battery life

**AGAINST** Bass is short of punch and depth; complex rhythms can sound disjointed

**VERDICT** Small and portable, but the sound quality can't compete with the competition

---

# Polk Ultrafocus 8000 ₹24,000 ★★★★★

04

**Polk Audio may** be one of the biggest hi-fi brands in America, but in India it's still making a name for itself. The UltraFocus 8000 headphones are the first over-ear cans we've reviewed from the brand, and join the competitive noise-cancelling market at this price.

There's no arguing that the Polks are on the bulky side. Although they come with a carry-case they don't fold down like the PSB M4U2s, making them less than readily portable. Still, despite a largely plastic finish our review sample feels relatively sturdy, with colour options of white and bronze or black.

Instead of placing controls on the cable, which offers a flat, durable design, Polk has put them on the right earcup. It sounds like a good idea, but in practice it is a bit fiddly, plus you hear a plasticky click in your ear every time you skip track or change volume. Not ideal.

The fit is snug but not uncomfortable, though we do find our ears get hotter more quickly than with competitors.

A single switch handles noise cancellation, and without it turned on music won't play. Beats Studios also operate like this, but the saving grace in the Polk's favour is that they operate on

two AAA batteries rather than being rechargeable - so just make sure you always have a spare set handy. Depending on your usage, you should get 40-60 hours of playback before you need them.

The noise-cancelling on the Polks is reasonably effective but not infallible, and some outside noise can creep in. We'd say they block out a bit more than the Beats Studio, but don't come close to the levels of quiet offered by the Bose QC25s. But then, not much does.

## Upbeat and inclusive

Like the PSBs though, the Polks offer a really big sound. They're not quite as powerful or as spacious, but they're just as confident and display real enthusiasm for most genres of music, with a preference for lively, upbeat material.

The Polks tip the balance in favour of a deep, warm low end. While they stop short of being overpowering or boomy - in fact the bass is quite controlled - feed them a bassy recording such as Jay Z's *F.U.T.W.* and it becomes a touch overemphasised for our taste.

The midrange is never muddled though, and is delivered with focus and clarity. Vocals are direct and full-bodied,

but can lose a touch of intimacy in more delicate recordings.

For the most part, the treble is crisp and controlled, but it does lack a bit of refinement. Play a brighter recording like Of Monsters And Men's *Little Talks* and while you'll hear plenty of detail, there's a hint of coarseness too. The 8000s are never flustered by complicated rhythms or complex instrumentals though, yet can begin to sound congested under those conditions, lacking the more open presentation of the Bose QC25s.

Overall, these are good headphones. There isn't enough for us here in terms of refinement and balance, but they will pump plenty of life into your music. For a more even-handed, refined approach, we'd look elsewhere, but for an engaging, exciting listen, these cans tick both boxes.

---

## Rating ★★★★★

**FOR** Big sound; deep, taut bass; exciting; good detail retrieval; clear midrange; well organised

**AGAINST** Bass is too forward; only so-so noise cancellation

**VERDICT** Not the last word in balance or refinement, but a fun and exciting listen

---



**03** — Noise-cancelling cans with an on-ear design? Philips has taken that challenge



**04** — Just add a pair of AAA batteries for 40-60 hours of exciting listening

# PSB M4U2 ₹26,500 ★★★★★

05

**It's been over** two years since we first reviewed the PSB M4U2 headphones. While competitors have been replaced and updated, the M4U2s have stayed the course unaltered. They remain as popular as ever, so we thought it was time to take a second look.

PSB might not be as familiar to you as some of the other brands it shares this test with, but it has been producing speakers for more than 40 years. The M4U2s are one of just two pairs of headphones it produces, the others being a purely passive model.

## Big and comfortable

This is a big pair of headphones, though the folding design does help their portability somewhat. Their size also makes them a little on the heavy side when compared with something like the Bose QC25, but the well-padded headband ensures your head never feels the strain, and large soft earpads keep them comfortable over your ears.

The pads are replaceable, with a spare set included in the box, alongside a 1/4in adapter, a second cable without inline remote and a carry case. You'll need two AAA batteries to power them. Most

competitors use only one, but with two you can expect around 55 hours of ANC playback - a clear benefit.

## Passive, active, noise-cancelling

As well as the ability to turn noise cancelling on or off (they'll work passively), the M4U2s offer an extra option to activate the amplifier without noise-cancellation for a supposedly cleaner, more powerful sound. This will also help to save the battery life on any portable device, as it won't need to work as hard to drive the headphones.

The noise cancelling on the M4U2s is pretty effective, and with the earpads offering a good amount of isolation you get a convincing feeling of being shut off from the world. The Bose QC25s best them in absolute noise-cancelling terms, but it's not a bad performance.

There's a clear difference between passive, active and noise-cancelling modes. Passively, playback is quieter and the treble has a harsh, thin edge to it. Move to active and you get a better-balanced sound and more volume, but any noise around can be heard.

Switch up to full ANC and you get the best performance of the three, with

noises all but disappearing and the headphones sounding their best.

It's a full-bodied and exciting listen, never holding back in any area. The weighty low-end packs plenty of punch in the bassline of Dr Dre's *The Watcher*, with enough sparkle and control in the top end to counter this.

Change pace to Katie Melua's *Piece By Piece* and the M4Us deliver a clear, open midrange, with the soulful vocal full of confidence and texture body. The guitar has depth and texture to every strum, and detail levels are superb.

Dynamically the PSBs are no slouch either - they'll devour high-tempo tracks with enthusiasm, but can be equally brooding and delicate when asked.

This, then, is a multi-talented pair of headphones indeed.

## Rating ★★★★★

**FOR** Exciting, engaging sound; big, powerful sound; flexible listening modes; punchy bass; clean, clear midrange; folding design

**AGAINST** Slightly bulky for travel

**VERDICT** Full-bodied, powerful and exciting, these headphones are superb travel companions

# Soul Jet Pro ₹30,000 ★★☆☆☆

06

**Following an attempt** to take on the likes of Beats by collaborating with rapper Ludacris back in 2011, Soul disappeared from our radar for a while, until we recently bestowed five stars on a pair of its sporty in-ears. A perfect time to take a look then at these stylish noise-cancelling cans.

The difference between the original Jets and this 'Pro' version comes down to just the premium, more stylish finish. There is an aluminium and leather-look headband in place of the plastic on the originals, and a solid construction rather than one that folds down to be more portable.

You'll also get a 99.99% oxygen-free copper-stranded "professional audio cable" alongside the standard inline remote cable (exclusive to the Pro version), a 1/4in adapter and a leather carry-case in the box.

## A lightweight, comfortable fit

Internal electronics are the same as on the standard Jets, so we attach the pro cable to get listening.

The design is relatively lightweight and we find the fit comfy enough to wear over extended listening sessions.

The earcups aren't as padded as some and though this doesn't affect the comfort level, it does mean they aren't as good at passive isolation compared with something like the PSB M4U 2s.

## Dulling, not blocking

Noise cancellation could be better too. Office noise is dulled but not convincingly blocked out, while more constant sound, such as airplane noise, is noticeable, particularly with quieter recordings.

Start playing some music and the news doesn't get much better. The Jet Pros are hollow-sounding, with little body or depth to their presentation, almost as if you are listening to your tunes in a big wooden box.

The bass is boosted and sits forward in the mix, but lacks punch or impact. Listen to Nicki Minaj's *Truffle Butter* and the bassline sounds bloated and soft, with a powerful low rumble but very little detail to go at, making them sound a bit cumbersome and imprecise.

In fact, detail is lacking across the frequencies, with a muddy midrange and vocals that sound like they're being sung behind a window, losing any finer detail or emotion in the process.

Dynamically the Jet Pros are pretty flat too, so you'll lose the impetus of livelier recordings while also sacrificing the intimacy of quieter ones.

Strangely, switch off ANC (powered by a single AAA battery) to listen to them passively and we'd say they sound a touch better - unusual in this category of headphones. There's a slight thinning of the treble but the bass is better balanced and the midrange is cleaner, with better clarity across the board. It's still a sound that's very much below par for this price point, but it is a saving grace of sorts.

For all their good looks, the Soul Jet Pros fail to impress, with sound quality far off the best and noise cancelling that needs improvement too. You can get both much better elsewhere, which makes these difficult to recommend.

## Rating ★★☆☆☆

**FOR** Good design; long battery life; interchangeable cable and battery

**AGAINST** Music lacks clarity; muddy midrange; bloated bass; lack detail and subtlety

**VERDICT** All looks but no real substance - and simply too hard to justify for the price

**05** — The PSBs' bulk is compensated for by the folding mechanism



**06** — The metal construction is solid, but these are bulky cans



# Turn your projector into a smart display

Easily connect to your laptop with HDMI

**HD26 / GT1080**

**Turn your projector into a smart display with ease by HDMI/MHL**

With 3200/2800 ANSI Lumens you can have quality Full HD viewing without dimming the light. Moreover, with built-in speaker, MHL and two HDMI inputs the HD26/GT1080 is easy to setup and use for life-size games, stream videos and share photos on the big screen.



**GT1080**  
ultra short throw projector

**HD26**  
home theater projector



**TEST VERDICT****THE WINNER****Bose QC25** ₹21,263 ★★★★★

Fresh from their success in our 2014 Awards, the **Bose QuietComfort 25s** dispense with their rivals as easily as they do with unwanted noise

If you're in the market for a pair of noise-cancelling headphones, you'll be looking for the right combination of sound quality, noise cancelling prowess and portability. For us, that's exactly what makes the Bose QuietComfort 25s so good. We loved their predecessors and these are better in every way, offering a wonderfully balanced, easy-listening sound and astonishingly good noise cancellation. They make five stars look easy.

Joining them in five-star glory are the PSB M4U2s. Their balance is more upfront than the QC25s, with plenty of low-end punch, and their flexibility with noise cancelling is a nice touch. They are nicely portable, too.

At four stars we have the re-imagined Beats Studio and Polk Audio's UltraFocus 8000. While neither will be for audio purists, the full-on bass of the Beats is now better controlled than it was, and the Polks offer plenty of detail as part of an exciting, upfront sound.

The Philips NCIs were something of a disappointment, their on-ear design leaving them at a disadvantage, while the Soul Jet Pros underwhelmed us with their muddy sound and poor noise cancellation. Unfortunately, they are a prime example of style over substance.

And so to our test winner. A finely balanced sound, excellent portability and the best noise cancellation available seal it for the Bose QC25s.

**SYSTEM BUILDER**

Hook your Boses up with these three and let your noise-cancelled music really shine

**Streaming service****Tidal \$20/month** ★★★★★

CD-quality streaming? We can't get enough of it, and Tidal does it superbly, with an easy-to-use interface and extensive catalogue.

**Laptop****Apple MacBook Pro** from ₹81,900

The perfect repository for high-resolutions files that the DAC can handle, and a handy means of streaming Tidal as well

**DAC****Audioquest DragonFly** ₹13,800 ★★★★★

Stylish and portable, the DragonFly will transform your computer-stored music, uncovering more detail and insight.

**Total build from ₹NA****Facts & figures**

**Beats Studio 2.0**  
₹25,000 (approx)  
★★★★★

Passive listening No  
Folding Yes  
Rechargeable Yes  
Battery life 20 hours  
Cable length 1.3m  
Weight 260g



**Bose QC25**  
₹21,263  
★★★★★

Passive listening Yes  
Folding Yes  
Rechargeable No  
Battery life 35 hours  
Cable length 1.2m  
Weight 195g



**Philips Fidelio NC1**  
₹30,000 (approx)  
★★★★★

Passive listening Yes  
Folding Yes  
Rechargeable Yes  
Battery life 30 hours  
Cable length 1.2m  
Weight 150g



**Polk Ultrafocus 8000**  
₹24,000  
★★★★★

Passive listening No  
Folding No  
Rechargeable No  
Battery life 60 hours  
Cable length 1.4m  
Weight 340g



**PSB M4U2**  
₹26,500  
★★★★★

Passive listening Yes  
Folding Yes  
Rechargeable No  
Battery life 60 hours  
Cable length 1.5m  
Weight 362g



**Soul Jet Pro**  
₹30,000 (approx)  
★★★★★

Passive listening Yes  
Folding No  
Rechargeable No  
Battery life 35 hours  
Cable length 1.2m  
Weight 252g

Size matters when seeking your home entertainment thrills,  
so allow us to light the path to your ideal projector...

# HUGE ACTION

**W**ith flagship tellies peaking at around 75-or-so inches, the ultimate big-screen cinematic experience still comes from having a quality projector at home. For less than ₹1,40,000 you can get up to 300in of picture from some of the units here - each of them new to our test rooms.

Projectors remain the pinnacle for the cinema aficionado, with all the pleasures of sitting in a darkened room with your favourite film or box set running on a large screen. Today's projector has plenty more to offer though: 3D playback seems to be standard now at this price, as are built-in speakers, multiple HDMI inputs and USB slots for media playback. We're also seeing wireless connectivity and DLNA functionality on board.

Read on to discover which of these big-screen behemoths is best for you.

**QN TEST**  
Acer H9505BD, p59  
BenQ W1500, p60  
Epson EH67W6600, p61  
InFocus IN5312a, p62



# Acer H9505BD ₹1,56,000 (approx)



**After starting out** in the PC market, Acer decided to spread its wings, becoming a respected brand in the world of smartphones and tablets. Most recently it has made a brave foray into wearable technology. Along with all that, the company is known to produce projectors as well - and here we have the flagship model in its new 'home' range.

### Three is a magic number

Most rivals have one or two HDMI inputs, but the Acer has three - handy if you're bypassing a home cinema amp and connecting sources directly into your projector. There's a host of analogue connections too (such as VGA inputs for laptops), and the potential for wireless playback by means of an optional wireless adapter (not included) that plugs into one of two USB sockets. The spare USB allows for playback of media files stored on a stick, while DLNA functionality allows you access files over your network via the projector's LAN input. The 'media' hub interface is nothing flashy, but it is easy to follow.

It takes a few minutes longer than usual to get up and running. This is partly

The remote is a bugbear: it fits well in hand, but is a pain to use due to its illogical layout (the 'enter' button is in a strange position, to say the least)



*We're pleased to report that the Acer H9505BD performs consistently with Blu-ray, DVD and 3D content. It's capable of a clear, bright (thanks to its 3000 lumens) picture, where edges are crisp*

due to the lack of adjustable feet, which can make positioning a little tricky (especially when the projector is placed in a position lower than the screen).

### Versatile performer

We're pleased to report the H9505BD performs consistently with Blu-ray, DVD and 3D content. It's capable of a clear, bright (thanks to its 3000 lumens) picture - edges are crisp, if not quite as sharp as the best. We play *TT3D: Closer to the Edge* on Blu-ray and the Acer shows respectable contrast: white details on bikes, and the black biker-jackets are convincing. Motion is mostly smooth - you have to put the Acer through fast-paced scenes to notice it's a little rougher round the edges than the Epson EH-TW6600 or BenQ W1500 in this test. The Acer's colour rendition is far from washed-out, but colours don't have that 'pop' factor or enough subtlety to convince. The same flaw applies with detail. The H9505BD's efforts are decent, but more subtlety is needed for it to compete with the very best.

Play the same film in 3D and, again, the picture becomes a little messy when motion is involved. It's not so bad as to hinder our enjoyment, but it is noticeable.

With only a six-watt output from the built-in speakers, it's little wonder the Acer's sound is restricted and unable to reach the same volume of rivals, but then again you won't have to worry about fan noise - it's a polite purr (though you will have to sit close by to hear movies clearly).

The Acer has its qualities: connections are decent and picture quality wins points for good clarity and brightness. Unfortunately, rivals best the H9505BD on performance at almost every other turn.

### Rating ★★★★★

**FOR** A bright, clear image; balanced, clean colours; plenty of connection options

**AGAINST** Has a few motion issues in 2D and 3D; rivals have more insight

**VERDICT** A decent performer, but outclassed by rivals. We expect more from a flagship model

# BenQ W1500 ₹1,30,000 (plus taxes)



The **W1500** is the next model up from the current Award-winning W1400 in BenQ's 'W' series, so it comes with plenty of expectation. And it copes with the burden admirably. Although not quite a class-leader like its smaller sibling (as the four stars awarded here shows), the W1500 maintains high standards.

Initially, it's hard to tell the W1400 and W1500 apart. They look identical and are fairly evenly matched for specification: both DLP projectors are Full HD (1920 x 1080), support 3D and have the same contrast ratios (10,000:1), brightness levels (2200 lumens), zoom (1.6) and throw ratio (1.07-1.71).

## Down to the wireless

However, the W1500's wireless ability helps justify the extra spend. With the supplied transmitter plugged into the HDMI socket of a compatible source (a Blu-ray player or gaming console, say) the projector can beam its picture to a screen without a direct connection. It's easy to set up, too. If you do prefer a physical connection, there are plenty: twin HDMI inputs (helpfully located on the left-hand side for easy access), a

The BenQ's remote control keys for picture adjustment are nifty shortcuts during set-up, although we would like bigger function menus



*The W1500's wireless ability helps justify the extra spend. With the supplied transmitter plugged into an HDMI socket of a compatible source, the projector can beam its picture to a screen without wires*

mini-USB, PC, component, RCA inputs, and a 3.5mm input and output.

This short-throw projector gives you a screen size of up to 84in at a distance of two metres, so it is ideal for small rooms where the projector and screen need to be close to one another (of course the zoom offers leeway here).

## All the right moves

The W1500 has all the right performance assets at this price: it's bright and controlled, with good insight and solid colours. It's not as eye-catching as the Epson, yet we find the BenQ convincing. Skintones are impressive, while true blacks and vivid whites make for exemplary contrast.

Load *Harry Potter* on Blu-ray and, as the battle on the broomsticks takes off, the BenQ doesn't miss a beat. Even in low-light scenes it shows a good eye for detail, although it's not quite as perceptive as the fine Epson EH-TW6600. When it comes to 3D, the W1500 is clear, stable and has depth, making it an enjoyable watch.

We turn to *The Grand Budapest Hotel* on DVD and the W1500 maintains its standards, losing only the insight you'd expect with the resolution drop. With striking aesthetics and vivid colours, this film is a good test. The BenQ complies happily: colours are deep and rich. Detail is decent too.

For sound the BenQ is clear, goes reasonably loud (fan noise being no more than a gentle whirr) and, surprisingly, has a decent amount of body. For TV viewing or gaming it will do the job.

The W1500 can't quite muster enough punch or subtlety to gain the full five stars, but there's no doubting its appeal. A very decent all-round performer.

## Rating ★★★★★

**FOR** Clear picture; realistic colours; decent contrast; can connect wirelessly; compact, portable build; logical remote; easy to set up

**AGAINST** Lacks a touch of punch; competition

**VERDICT** A well-featured product that's worth considering if wireless connectivity is a must

# Epson EH-TW6600 ₹1,35,159



The EH-TW6600 is, like many an Epson to have come before it, a seriously competent projector. Its picture is rich, punchy and insightful, and the complete package when it comes to build and ease-of-use. Epson has consistently been winning five stars of late (and an Award), so we've come to expect quality from the projector giant - and this EH-TW6600 doesn't let the side down.

## Compare and contrast

The specification sheet here looks standard at this price point: Full HD, 3D playback (as well as 2D-to-3D conversion) and a decent number of connections. Then you discover the 70,000:1 contrast ratio - seven times higher than most rivals. The proof is certainly in the picture. Deep, oily blacks and punchy whites (even without the 'Super White' mode on) appear from the very first frame of our THX Optimizer disc.

Colours are bold and punchy, opting for outright richness over the slightly more natural, refined palette of the BenQ W1500. The Epson's crispness and insight gives it the upper hand on its rivals though: *Guardians Of The Galaxy*

The remote is tall, chunky and not one you will lose down the back of the sofa. It's well laid out, despite a set of buttons applicable only to the 'W' model



*Colours are bold and punchy, opting for outright richness over the slightly more natural, refined palette of the BenQ W1500. The Epson's crispness and insight give it the upper hand on rivals though*

on Blu-ray is a picture full of detail and subtlety - every whisker on Rocket the racoon is perceptible, and the tree-like Groot is precisely outlined. The EH-TW6600 sets the standard for sharpness at this price, edging the BenQ W1500 by a pencil shaving or two. It doesn't trip up with motion either. Fight sequences take place without a hitch.

## Gravity has depth

3D performance is impressive: it's just as stable, detailed and clear as 2D, and communicates a good sense of depth as we look through the space shuttle in *Gravity*. Contrast remains the best in class, while our only grumble remains the richness of some colours. There's a pair of active glasses in the box (a three-minute charge gives three hours use; 50 minutes for 40 hours), although you may need to budget for a second pair.

Even when dropping down to DVD quality the Epson still manages to deliver big-screen thrills. It's hard to tell the difference in resolution as we play sci-fi thriller *Lucy*. You have to move up to the

pricier EH-TW6600W for wireless connections (hence the 'W' suffix), but the EH-TW6600 is still well equipped. Easily accessible around the back are the usual component, composite and RCA inputs beside two HDMI inputs. A single USB for photo playback is a nice bonus, too. The mini-USB is only for service.

The Epson's 20-watt speakers are rear-firing, so are ideal if you're sat behind the projector. But if that's not practical, don't worry: they can belt out sound louder and clearer than most.

Overall, it's another resounding success for Epson. If you don't care much for wireless features or portability, you can't really go wrong for the money.

## Rating ★★★★★

**FOR** Punchy, crisp picture; stable, smooth delivery; well-equipped; simple set-up; built-in speakers go loudish

**AGAINST** Remote control is big

**VERDICT** Performance-wise, it delivers pretty much everything. Another success for Epson



Since the arrival of 4K in the world of home cinema, Full HD has increasingly become a 'standard' spec. So it's surprising to still see products being made with lower resolutions, especially those with four-figure price tags.

The IN5312a has only a 1024 x 768 resolution, which means it not only has to upscale to play DVDs (like its Full HD rivals), but downscale Blu-rays, too. (The more expensive model of InFocus's two-strong IN5300a range has a 1920 x 1080 resolution).

**Lighten up**

Resolution may put the InFocus a step behind rivals on paper, but it does deliver 6000 lumens - double the measure of brightness of most at this price - so it could be ideal for rooms with a lot of ambient light. The result? An impressively bright picture that gives films a glowing presence. Beam *Killer Joe* on Blu-ray, and daylight scenes in the Texas trailer park are coherent (though colours aren't as rich or punchy as we'd like). Lots of brightness is often a trade-off for contrast, and although the InFocus's contrast ratio is only 2000:1

The InFocus remote control is nicely designed, with bright back-lit buttons and a ridge on the back for a more ergonomic effect



*The InFocus delivers 6000 lumens - double the measure of most at this price - so it could be ideal for rooms with a lot of ambient light. It's an impressively bright picture that gives films a glowing presence*

(the norm is four or five times higher) whites are clean and blacks have reasonable depth. A fair amount of detail helps make for a watchable picture too, although under closer scrutiny it's clear some subtlety is lost here.

**Struggles with dark matter**

Clarity suffers in low-light conditions and dark detail is too easily lost: in a low-lit caravan, furniture in the background is hard to make out, and Matthew McConaughey's black gloves and cowboy hat lack texture. There's a hint of motion blur as the camera moves around the caravan, but motion is really only an issue in faster, action-packed scenes.

3D glasses are not included here, but if you're willing to spend the extra money for a pair, it won't go to waste. Though not particularly detailed, the 3D picture is coherent enough - clear, bright and holding up well with depth and motion.

The menus are helpfully blown up on-screen, though a little problematic in layout. The InFocus's single HDMI port is outnumbered by most rivals, but isn't

disastrous when sources are, typically, plugged into a home cinema amp. Elsewhere there's a generous smattering of connections: composite, component, 3.5mm and RCA inputs. A USB and mini-USB port are present, but they're solely for power and service respectively.

Ideally you will want a dedicated sound system, but the projector's two built-in 3W-speakers are adequate. If you sit close by, it goes loud enough for films to be heard above the fairly loud fan.

InFocus has been off form recently, and the IN5312a is not a turning point. The sub-₹2,00,000 projector field is hugely competitive, and this projector struggles against more talented and cheaper rivals.

**Rating ★★★★★**

**FOR** Clear, bright picture; decent colour palette

**AGAINST** Not Full HD: lacks sharpness, detail and subtlety of rivals; some motion instability; no 3D glasses supplied; size won't suit everyone

**VERDICT** A watchable performance that falls down on crispness and subtlety

**TEST VERDICT****THE WINNER****Epson EH-TW6600** ₹1,35,159 ★★★★★

From beam to screen, the **Epson EH-TW6600** is our top pick for superb colour, contrast and detail



**P**roducts with four-figure price tags rarely fall into the 'budget' end of their respective category. It's the case with projectors, though.

When you factor in the cost of a source (a Blu-ray player, say) and a screen as a minimum package, (and costlier again, a home cinema amp and 5.1 speaker package) you're talking serious cash. So you need to make the right choice.

There are two projectors in this test that will make part of a great set-up – but the Epson EH-TW6600 is unquestionably our top pick. Like its sibling, the EH-TW5200, it wins on performance, with an eye-catching colour palette, gorgeous contrast and, even more importantly, an eye for detail. And if you're a fan of 3D movies then its clear, bright performance gives you all the more reason to invest.

Anyone with particularly inflexible set-ups or a small room (or both) might favour the impressive BenQ for its wireless ability and compact build. And judging its performance, purchasing the BenQ

wouldn't be a bad move – the W1500 isn't quite as insightful or punchy as the Epson, but its clean, realistic picture earns it a hearty recommendation from us.

**Speaker of sorts**

Both the Epson and BenQ have decent, loud built-in speakers too, which will tide you over for TV viewing until a better solution (ideally a surround speaker package of sorts) comes along.

The Acer H9505BD and InFocus IN5312a are harder to vouch for – not least because they cannot match the Epson and BenQ for punch, colour depth or subtlety. The InFocus's lower resolution also proves problematic for sharpness, although its vast connectivity will no doubt please those looking to hook up a number of sources.

Acer's new flagship arrived with much expectation attached, and initially it looked good. But performance issues and a poor remote control handset cost it in the end.

**SYSTEM BUILDER**

Three partners that will help make sure you see the Epson EH-TW6600 at its best

**Home cinema amp****Yamaha RX-V673** ₹56,000 ★★★★★

Our 2012 winner packs in incredible value, and is a home cinema powerhouse that delivers both on sonic punch and features.

**Speaker package****Dali Zensor 15.1** ₹1,12,200 ★★★★★

This Award-winning package is as entertaining as it is insightful, delivering plenty of punch and drama. Superb.

**Blu-ray player****Sony BDP-S490** ₹13,990 ★★★★★

An Award-winning Blu-ray player that delivers terrific video and audio performance on a budget.

**Total build from ₹1,82,190****Facts & figures****Acer H9505BD**

₹1,56,000 (approx) ★★★★★

Type DLP • Aspect ratio 16:9 • Max image size 300in • Throw ratio 1.5-2.28  
• Resolution 1920 x 1080 • Rated brightness 3000lm • Fan noise 42dB • HDMI in 3 • Dimensions (hwd) 13x40x31cm • Weight 7kg

**BenQ W1500**

₹1,30,000 (plus taxes) ★★★★★

Type DLP • Aspect ratio 16:9 • Max image size 300in • Throw ratio 1.07-1.71 Resolution 1920 x 1080 • Rated brightness 2200lm • Fan noise 43dB • HDMI in 2 • Dimensions 12x34x28cm • Weight 3.9kg

**Epson EH-TW6600**

₹1,35,159 ★★★★★

Type LCD • Aspect ratio 16:9 • Max image size 300in • Throw ratio 1.32-2.15 Resolution 1920 x 1080 • Rated brightness 2500lm • Fan noise 44dB • HDMI in 2 • Dimensions 16x41x30cm • Weight 6.7kg

**InFocus IN5312a**

₹1,74,000 (approx) ★★★★★

Type DLP • Aspect ratio 4:3 • Max image size 217in • Throw ratio 1.6-2s • Resolution 1024 x 768 • Rated brightness 6000lm • Fan noise 49dB • HDMI in 1 • Dimensions 18x43x34cm • Weight 8.6kg

# THE LAST PICTURE SHOW?

**HEAD TO HEAD**

With movie streaming catching on, Blu-ray's days could be numbered. But these premium players have other ideas



**FACTS & FIGURES**

	<b>Oppo BDP-105D</b>	<b>Pioneer BDP-LX88</b>
HDMI out	2	2
Optical out	1	1
Coaxial out	1	1
Multichannel out	Yes	No
Compatibility	Blu-ray, DVD, CD, SA CD, DVD-Audio	Blu-ray, DVD, CD, SA CD, DVD-Audio
Dimensions (hwd)	12 x 43 x 31cm	13 x 44 x 34cm
Weight	7.9kg	13.4kg

## Oppo BDP-105D

### ₹1,20,000 ★★★★★

Oppo's flagship BDP-105D really won us over at the back end of last year, justifying its high price tag with an admirable can-do attitude.

We gave it five stars for combining a wide range of features with excellent performance, offering plenty of format compatibility to keep connoisseurs happy.

A few months on and little has changed - this is still a hugely accomplished player, and then some. Alongside the standard disc trio of Blu-ray, DVD and CD, the BDP-105D will also play SACDs and DVD-Audio discs, plus it can stream high-res music files (up to 24-bit/192kHz) over your home network.

Smart functionality hasn't been forgotten either, with YouTube and all other run-of-the-mill services built in. If that's not enough for you, the player's front-mounted HDMI/MHL port allows for the addition of

Noise levels are undetectable, shadow detail provides plenty of insight in darker scenes, and skin tones are reproduced with wonderful subtlety.

This carries across into DVD performance, which, despite the small increases in motion artefacts and noise levels, offers a superb level of detail and insight.

#### Sonic strength

Movie sound is handled with similar confidence, with a bold, full-bodied presentation that delivers big action scenes with power and authority. Our only criticism is that the bass could be a little tauter - it's weighty but doesn't always tell you as much as the precise Pioneer BDP-LX88. It doesn't take away from a wholly immersive, engaging presentation, though, with stacks of detail

**The Blu-ray picture here is absolutely superb. We love its crisp edges, strong handling of motion and rich colour palette. Noise levels are undetectable**

a Roku streaming stick or similar. Other inputs include three type A USBs for portable devices and USB keys, plus a further HDMI in on the back panel.

#### Digital audio provision

There's also a selection of digital audio ins, including optical, coaxial and type B USB, so you can take advantage of the player's reference-level ESS Sabre 32 ES9018 DAC.

Outputs are largely dealt with by the dual HDMI's, but analogue outs are accounted for too - single-ended and balanced XLR connections plus rarer multi-channel audio outputs.

The Blu-ray picture here is absolutely superb. We love its crisp edges, strong handling of motion and rich colour palette, so much so we found the DARBEE picture processing functionality largely surplus to requirements.

and plenty of drive and dynamism to soundtracks.

Play a CD and the player's full-bodied, authoritative character is replicated, but with plenty of refinement and a treble that shines without ever sounding hard.

It's a big, musical presentation that easily fills our listening room, and has the fluidity that the Pioneer lacks. It needs a bit more agility to come close to the performance of the best standalone players, but it's one of the best stereo performances we've heard from a Blu-ray player.

#### Master of all trades

Handling both movie and music content to an exceptionally high standard makes the BDP-105D a hugely multi-talented player that's hard to fault even at this price. This Oppo has the all-round talent to make its price tag look like a steal.

#### Rating ★★★★★

**FOR** Excellent picture quality; authoritative, powerful sound through stereo and multi-channel; good connectivity; well featured

**AGAINST** Bass could be tauter

**VERDICT** If you want a source that does it all - brilliantly - the Oppo is hard to fault

## Pioneer BDP-LX88

### ₹1,56,000 (approx) ★★★★★☆

It's been a few years since we've seen a reference-grade Blu-ray player from Pioneer - seven, in fact - but finally we have a successor to 2008's five-star BDP-LX91 with the new BDP-LX88. Can it justify the extra ₹36K over the Oppo?

#### Universal disc play

The LX88 is a universal disc player, so alongside Blu-ray, DVD and CD playback, it will play music from SACDs and DVD-Audio discs.

It can't, however, challenge the Oppo on connectivity. There are two HDMI outs, coaxial and optical outs, both RCA and balanced analogue stereo outputs and two USB ins, but no headphone jack nor any other digital inputs aside from USB. That seems a bit of a shame when the on-board DAC chip is such a good one - the same ESS Sabre 32 ES9018 DAC the Oppo uses.

Once it gets going, it's hard to fault the Blu-ray performance here. Lines are precisely etched, textures nicely detailed, and colours and skin tones natural - just on the cooler side of neutral. Motion is handled with confidence and noise levels are very low.

DVD performance shows up similar results. We try a DVD of 2014's *Robocop* and find edges to be crisp, colours natural and enough detail offered for one team member to question whether we are watching Blu-ray or not.

#### Detail and heft in abundance

When it comes to movie sound, the Pioneer continues to impress, with a precise and detailed presentation (if a slightly smaller-scale, more focused soundfield than found on the Oppo.) Fight scenes are backed with a tauter, more detailed bass

**A DVD of Robocop offers crisp edges, natural colours and enough detail for one team member to question whether we were watching Blu-ray or not**

Built-in network services are limited to Picasa for photos and YouTube for video, with no other services in sight. While it's likely your amp or TV will offer these services now, it's still a shame not to see them included.

Music-wise, it supports all the popular file formats and includes compatibility for DSD 2.8MHz and PCM files up to 24-bit/192kHz.

As you'd expect at this level, the LX88 is fully capable of 3D playback and packs an Ultra HD 4K reference converter for upsampling content.

The unit itself is well built and sturdy. The front panel is neat, while on-screen menus, if a little basic and uninspiring, are easily navigated and simple to understand. The remote, though, is still a little too cluttered for our liking, but at least it's backlit so you can see the buttons during dark movie sessions.

response, and there's a good sense of impact and solidity to explosions, where the Oppo can sound just a touch soft in comparison.

#### CD uncertainty

We can't help but be a little disappointed by the unit's stereo music sound. There's plenty of detail, but it's not a performance we'd recommend swapping out for your standalone CD player. Debussy's *Clair De Lune* sounds rather hard and bright, while Stevie Wonder's *Pastime Paradise* lacks the refinement and dynamic handling we crave.

With movies, there's little to separate this from the Oppo other than personal preference, but its stereo performance needs to be better to garner the full five. The BDP-105D offers a better all-round performance and feature set.

#### Rating ★★★★★☆

**FOR** Crisp, detailed picture; well built; good remote app; precise movie sound performance; solid, taut bass

**AGAINST** Minimal streaming services; sound on the lean side; stereo performance

**VERDICT** Stellar with movies, but its stereo performance lets it down

# JVC

## Cinema Comes Alive



## The Next Stage in 4K

**4K**  
e-shift3

**D-ILA**

**3D**

**DLA-X500R**

Dynamic contrast ratio: 600,000:1

**DLA-X700R**

Dynamic contrast ratio: 1,200,000:1

**DLA-X900R**

Industry's highest  
dynamic contrast ratio: 1,500,000:1\*

**SIGHT & SOUND PRO**

Official Partner in India

Sight & Sound India Pvt. Ltd  
Plot No. 4, M.G. Road, Ghitorni  
New Delhi - 110030

For trade enquiries: + 91 9810139238  
E-mail : [sunil@sightandsoundindia.com](mailto:sunil@sightandsoundindia.com)

**HEAD TO HEAD**

# Found in translation

The business of converting digital to analogue should be taken seriously. These two do just that, and the benefits are plain to hear

**D**igital music has transformed our listening habits, but to take advantage of it we need to convert that digital signal into an analogue version we can play. Most digital devices - phones, laptops, CD players - have their own built-in DAC, but they're of varying quality and can strip your music of more than you realise.

Upgrade your DAC and you'll hear your music transformed in terms of detail, dynamics, organisation and timing. And once you've got that far, well, there's really no going back.

Two hi-fi heavyweights go head to head for your affections here - read on to find out where your money is best spent.





**STYLE**  
Aesthetics haven't been forgotten - two 'windows' in the aluminium casework glow various colours depending on volume, source and sample rate.

## Chord Hugo

₹1,59,900 ★★★★★

**We've made no** secret of our love for the Chord Hugo. How it has managed to squeeze so much into such a compact box, without sacrificing an ounce of sound quality, is nothing short of astounding - we can't remember a time we enjoyed digital music more.

### Ample connectivity

Let's just recap what's on offer here an impressive range of connections, including optical, coax and twin USB inputs, with aptX Bluetooth for wireless signals. It can't quite top the choice of the Oppo HA-1 - there's no analogue inputs or balanced options here - but it should still suit most circumstances.

Alongside these inputs there's a 6.3mm headphone output and a pair of 3.5mm alternatives, plus a pair of line-level outs for using the Hugo as a digital pre-amplifier.

Sound good? Add to that portability and a 12-hour battery life, and the flexibility of the Hugo (which can go anywhere 'you go' - geddit?) adds to its charm. All this before you even listen to it, and that's where it really impresses.



The Hugo accepts input signals up to 32-bit/384kHz, but only through one USB input. The other is saved for use with tablets and phones, and is limited to 16-bit/48kHz. Despite its high-res capabilities, the Hugo is as at home with a 320kbps internet stream as it is with a meaty PCM or DSD file (up to DSD128).

There's stacks of detail up for grabs, the Chord delivering much more insight to the finer nuances of a track than the HA-1. This, in turn, gives way to a greater level of dynamic subtlety, timing and organisation that we've not heard from any other DAC at this price.

This more transparent nature means it's not as smooth a listen as the HA-1, and not as forgiving at lower-bitrate tracks, but even then you tend not to focus on a recording's shortcomings, thanks to the Hugo's inherently musical approach.

### You get out what you put in

Of course, it really shines when fed the best of signals, and a DSD file of Stevie Wonder's *Higher Ground* powers forward with the heart and energy we found lacking on the HA-1. It's a masterclass in timing and rhythmic know-how, and is dynamically hard to fault - the bouncing bassline is delivered with absolute precision without sounding uptight.

The intimacy and expression with which it delivers vocals is obvious in a playthrough of Ladysmith Black Mambazo's *Lord's Work*. Harmonies are textured, fluid and beautifully presented.

Tonally it's wonderfully natural and a little more even-handed than the Oppo, making it easy to fit into any system.

When placed into our reference system, hooked up to our Bryston 4BSST2 power amp and ATC SCM50 speakers, it doesn't drop a beat, delivering an entertaining and insightful sound, even squeezing out a touch more clarity in the process that we would normally get. Consider its ability to fill in for a ₹5lac pre-amp without a worry and the Hugo's ₹1,59,900 price tag starts to look like quite the bargain.

### None better at the price

There's no doubt the Hugo is the best-sounding DAC and headphone amp we've heard at this price, and when you add in its portability it becomes a quite superb proposition.

The Chord Hugo is nothing less than a stunning achievement - a multi-talented device that will transform your music listening so much you'll wonder what you ever did without it.

### Rating ★★★★★

**FOR** Detailed, dynamic performance; superb timing and organisation; portability; genuine pre-amp replacement; great level of insight

**AGAINST** Not always the most forgiving

**VERDICT** The Hugo delivers hard-to-beat sound quality in an unbelievably small and versatile package

**DESIGN**

Everything about the Oppo feels well considered, from the responsive volume and source knobs to the quality connections. It's built for true audiophiles.

**Oppo HA-1**

₹99,999 ★★★★★

**Oppo** is a name more traditionally associated with high-end Blu-ray players, but more recently it's been making moves in new territories. Last year saw us dishing out five stars to its first pair of headphones, the excellent PM1s, not to mention a commendable four stars to one of its first smartphones.

**New territory**

This portfolio expansion continues with the HA-1, its first DAC and headphone amp. Presented in a sturdy, well-built aluminium chassis in a choice of black or silver, it certainly knows how to make a good first impression, with a bright 4.3in colour display and equally smart remote control to back it up (there's also a control app if you prefer).

The screen on the front offers a simple graphical interface when it comes to choosing your source, and offers technical information on the audio signal - as a digital VU meter or a more modern spectrum display (you choose).

Inside the HA-1 you'll find the same ESS 9018 Sabre32 Reference DAC and output driving stage used in Oppo's high-end Blu-ray players, alongside a

Class A amplifier, meaning the HA-1 runs quite warm as a result.

When it comes to connections, the HA-1 is no slouch, offering users the choice of both RCA or XLR balanced analogue inputs and outputs, with its digital inputs including coaxial, optical, AES/EBU, and an asynchronous USB. Add to this an Apple-compatible USB-A input on the front of the device, along with Bluetooth aptX functionality, plus the ability to double up as a stereo pre-amp, and there's not much the HA-1 is missing on paper.

We plug in a pair of Beyerdynamic T1s and fire up our music library. The HA-1 is capable of playing back PCM files up to 24-bit/384kHz and both DSD64 and DSD128 (via USB-B).

It's a big, open and refined sound that's decently detailed and offers a richer, weightier presentation than the Chord Hugo. It also has a smoother character, making it a forgiving listen with lesser-quality tracks, but one that sacrifices a layer of detail and dynamics in the process, rounding off drive and attack a little and making it sound altogether more restrained.

**Energy levels**

Play Run The Jewels' *Oh My Darling Don't Cry* and while the rumbling bass line has a real presence, the high-pace lyrics and impatient instrumental lack the same level of energy you'll hear if you play the same track through the Hugo.

It ultimately comes down to timing and dynamics. The Oppo is simply not as rhythmically adept as the Hugo, and isn't capable of injecting the same level of excitement and fluidity to a track.

Plugging the HA-1 into our main system and taking audio from our MacBook Pro shows similar traits. The lively intro to Stevie Wonder's *Higher Ground* lacks the same level of bounce and dynamism that the Hugo offers, and vocals sound less expressive and direct.

**Revealing reference point**

We test the HA-1's claimed pre-amplifier prowess and as often with products of this type, we found it to be no substitute for our reference preamp, sounding overall weaker and less dynamic.

There's a lot to like about the HA-1. It's well built, excellently specified and has a refined, weighty sound. Many will love the choice it offers, but for the full five stars we want levels of drive, excitement and dynamics to challenge the Hugo. The Oppo falls short by a margin.

**Rating ★★★★★**

**FOR** Well built; extensive connectivity; big, weighty sound; refined; forgiving with lesser quality recordings

**AGAINST** Lacks the level of drive and dynamism found in the best

**VERDICT** Worth auditioning at this price, but it needs to deliver more energy for the full five



# SAVE UPTO 50%

Save time and money with **What Hi-Fi? Sound and Vision** - our expert advice will help you get the best kit for your cash, plus you'll get the latest news and the hottest reviews from the world's best home entertainment magazine!

The image shows two overlapping covers of the magazine 'What Hi-Fi? Sound and Vision'. The top cover features the headline '4K TITANS BATTLE IT OUT' with a sub-headline 'LG and Samsung bring their sharpest pixels to the fight'. It also includes a 'DAC WAR!' section and 'JAMO FLOORSTANDERS'. The bottom cover features 'BEST OF NOISE-CANCELLING HEADPHONES' with the tagline 'Silence is golden and so is music...'. It also includes a 'SUPERTEST: SPEAKERS' section and a 'BUYING GUIDE: 1500 VERDICTS' section. Both covers mention 'INDIA'S No.1 HOME ENTERTAINMENT MAGAZINE'.

WHAT HI-FI? SOUND AND VISION  
NOW ON APPLE & ANDROID DEVICES

Download from



SCAN TO SUBSCRIBE ONLINE



# CALL 022-43021006/7/8

# 3 YEARS (36 ISSUES)

Cover price ~~₹3600/-~~

You pay **₹2160/-**

You get **50% OFF**

# 1 YEAR (12 ISSUES)

Cover price ~~₹1200/-~~

You pay **₹960/-**

You get **30% OFF**

\*Note: The Above Amount payable is inclusive of all postage and handling charges (₹10 per issue)

## Reasons to subscribe

- ★ Delivery direct to your door
- ★ Never miss an issue
- ★ Plus exclusive subscriber-only offers and discounts

Subscribe online  
[www.haymarketsac.com](http://www.haymarketsac.com)

# WHAT HI-FI? SOUND AND VISION

Yes! Please start my subscription to WHAT HI-FI? Sound And Vision

### ORDER DETAILS

This is a  new subscription  renewal

Terms	COVER PRICE	YOU PAY	YOU GET
<input type="checkbox"/> 3 Years (36 issues)	₹3600	₹2160	<b>50% Discount</b>
<input type="checkbox"/> 1 Year (12 issues)	₹1200	₹960	<b>30% Discount</b>

\*Note: The Above Amount payable is inclusive of all postage and handling charges (₹10 per issue)

### PERSONAL DETAILS (BLOCK CAPITALS PLEASE - must be completed)

Title \_\_\_\_\_ Name \_\_\_\_\_ Surname \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Pincode \_\_\_\_\_ State \_\_\_\_\_

Occupation \_\_\_\_\_ Telephone \_\_\_\_\_

Email \_\_\_\_\_ Mobile number \_\_\_\_\_

Do you own a vehicle? Yes  No

Make \_\_\_\_\_ Model \_\_\_\_\_ Year \_\_\_\_\_

### PAYMENT DETAILS

Enclosed Cheque / DD. No. \_\_\_\_\_ for ₹ \_\_\_\_\_

drawn on \_\_\_\_\_ in favour of \_\_\_\_\_

### HAYMARKET SAC PUBLISHING (INDIA) PVT LTD

Please add ₹50/- for non-Mumbai cheques. Mention your subscription number in case of renewal.

Or contact:

Haymarket SAC Publishing (India) Pvt. Ltd.

Ground floor, Podar Centre, 85, Parel Post Office Lane, Off Dr. Ambedkar Marg, Parel East, Mumbai 400 012. Call (022) 43021000/24706410

Fax: 43021050 e-mail: [subscribe@haymarketsac.com](mailto:subscribe@haymarketsac.com)

Delhi: Tel: 011-46020600 Bangalore: Tel: 080-25593775

Chennai: Tel: 044-42123230

**Terms and conditions:** Rates and offer valid in India only \*HAYMARKET SAC PUBLISHING (I) PVT LTD. reserves the right to extend, cancel or discontinue the offer without giving any reason or prior notice \*All disputes shall be subject to Mumbai jurisdiction only.



# The world's most desirable kit

# TEMPTATIONS

## “This deck delivers a sound full of energy and sparkle”

### ■ Rega RP8/Apheta Turntable

■ ₹2,64,000 ★★★★★

**T**he RP8 is the most ambitious Rega turntable we've ever tested. Initially, it's possible to mistake it for one of the company's more modest offerings, but a closer look reveals there's far more going on here than first impressions suggest. And we're not talking about the glossy finish, either.

Rega has long believed in making its turntable plinths as light and rigid as possible. If the material is light it doesn't store unwanted vibration energy as long, which is a good thing as far as turntable sound quality is concerned.

Over the years Rega has used plinths made of either MDF or chipboard covered with phenolic resin to deliver low weight with rigidity, but with the RP8 the company has gone much further.

#### A very bearable lightness of being

The central core of this deck's plinth is made of light, closed-cell polyolefin foam. This material took three years to develop to match Rega's needs. As with the earlier designs, phenolic resin skins are added to both top and bottom surfaces to deliver higher rigidity and an element of damping. The result is a plinth - available in gloss-black only - that is a seventh the weight of the original Planer 3 plinth.

To improve the plinth structure even further, the company has added two braces where it thinks rigidity needs to be at its highest - between the arm base and main bearing. Two different materials are used for the bracing: the upper layer is made of magnesium and the lower is phenolic. Each material damps the natural resonances in the other resulting in an immensely light, stiff and well-behaved structure.



It goes further than just materials. The RP8's plinth is a skeletal design intended to be as small as practical. The smaller it is, the lighter and more rigid it will be - notice a theme here?

There is a slight issue when using the RP8's skeletal form, caused by the foam core. The material's edges aren't smooth, and to many it looks unfinished. That's just the way the material is, and Rega no doubt feels the advantages in terms of performance far outweigh the apparent aesthetic shortcomings.

In addition, there's a practical issue with skeletal decks and that's how to incorporate a dust cover. While some hardcore purists may not care for such practicalities, for many people it matters. Rega's answer is to build a surround for the skeletal structure resulting in what looks like a conventionally rectangular plinth; that way an entirely conventional lid can be used. Neat.

#### The space between

But look carefully and you'll see that there's an even gap between the plinth and the surround, and the connection between the two is limited to thin rubber bands at each of the deck's three feet. These bands make sure the spacing between the two parts stays even.

It's a simple but very clever arrangement. The lack of a rigid connection between the plinth and surround means that any vibration picked up by the lid - a significant issue

that degrades sound quality by feeding mechanical energy into the player's structure - is minimised, if not avoided altogether.

#### Weight on the outside

The only place Rega likes more mass is on its platters, or more accurately at the rim of its platters. Mass at this point helps to maintain rotational speed and irons out slight speed fluctuations - though go too far and you create problems with the main bearing design. As with everything in hi-fi, it's all about finding the best compromise.

The hefty platter of the RP8 is a complex affair. It comprises three layers of laminated glass. The top layer is where the record sits; the subsequent layers are rings to focus the mass on the outer edge. The idea is to maximise the flywheel effect but keep the weight at the centre low.

This glass platter sits on an aluminium sub-platter, rather than the plastic versions used in the more affordable models. We try to spot some play in the main bearing, but can't - it's as precisely machined as we'd hope for at this price. A 24V AC motor spins the sub-platter through a twin-belt arrangement. It's controlled by Rega's TT-PSU outboard power supply, which provides a clean, high-quality power feed. The power supply is fine-tuned to the specific

1 Three rubber feet help with isolation, but make sure the RP8 sits on a solid platform 2 A metal sub-platter, driven by twin belts, supports the main platter 3 Counterweight (right) and spring-loaded downforce control regulate the cartridge



**TECH SPECS**  
Speeds 33 $\frac{1}{3}$ , 45  
Electric speed change Yes  
Manual Yes  
Tone arm Yes  
Cartridge Yes  
Drive type Belt  
Finishes Black  
Dimensions (hwd)  
12 x 45 x 36cm

'Rega's answer is to build a surround for the skeletal structure resulting in a conventional plinth. Neat'





# Palm Expo Is All Set To Create New Benchmarks!

With business flourishing the floor and trade visitors soaring the exhibition ground, PALM 2015 will sustain being the largest gathering of the pro sound & light industry.

**T**he ultimate exposition with limitless global opportunities for producing a world-class experience 'PALM Expo' is all geared up for its upcoming 15th edition. This will be held alongside Music Expo 2015, India's exclusive B2B trade show for musical Instruments. At PALM, products rule the show floor and face-to-face opportunities draw the industry together. Show empowers fresh ideas and products to amplify the power of cutting edge technology in Pro Audio, Sound & Lighting segment.

## Record Participation at PALM!

The Indian market will witness participation from more than 400 brands and 166 exhibitors, the floor space has been increased by more than 30%; this includes 37 new companies. PALM has also focused on inviting Indian manufacturers to exhibit, thus promoting the government's initiative of Make in India

### The details

Thursday 28th May to  
Saturday 30th May 2015

11am to 8pm every day

### Venue:

**Bombay Exhibition Centre**  
Goregaon, Mumbai, India



## Features of 2015 edition include

### ■ PALM Integration for Entertainment Demo

The PALM Expo will once again provide an opportunity to experience world's leading projection & 3D mapping techniques.

### ■ HARMAN PALM Live Arena

With performances from some of the biggest artists and bands, technical seminars and training workshops, the HARMAN PALM Live Arena attracts a lot of dealers and distributors to the show.

### ■ PALM Demo Qube

This year, visitors will be able to experience three Demo Qubes at PALM.

### ■ Open Air Line Array Demo

The line array demo will host 11 eminent brands that

will demonstrate their latest line of speakers to over 3,500 visitors from the rental & event background and the event management and advertising fraternity.

### ■ 4th PALM Sound & Light Awards

The PALM Sound & Light Awards spread over 10 categories fulfils the primary objective of showcasing & recognizing individuals and organizations for their unparalleled contribution to the industry in the field of staging, lighting & live sound.

### ■ 9th IRA Awards

The Indian Recording Arts (IRA) Awards are the first ever music awards that recognize the music, recording and engineering talent in India. IRA Awards felicitate the music maestros and the technical & creative contributions by leading sound recordists

For details on the show and more, please visit [www.palmexpo.in](http://www.palmexpo.in)

# TEMPTATIONS

Rega RP8/Apheta

motor by hand to maximise smoothness. The TT-PSU also has speed control on it so you can swap from albums to singles (33 $\frac{1}{3}$  to 45rpm) at the press of a button rather than having to take the platter off and move the drive belt manually as with some rivals.

Compared with the plinth, other parts of the Rega may look more conventional - but that doesn't make them any less interesting. The arm is an RB808. It's handmade, with great care taken over the fit and tolerance of the bearings. Each bearing is individually selected to find the closest match to the relevant spindle. The bearing assembly is an all-new design too, majoring on - you've guessed it - low mass and high rigidity.

## Strong arm tactics

Even the arm tube is different from those used by Rega's lesser arms. It's been designed to redistribute mass and reduce resonances, and rigidity is also improved over earlier designs. Lastly, the RB808 uses high-quality cabling with fewer joins in the signal path than before and better quality plugs.

The final part of the package is the Apheta moving-coil cartridge (see panel). It's the only moving-coil cartridge the company makes, and is the natural partner for the RP8. While it may be tempting to save the some cash it costs and go for a cheaper alternative, we think it fits the turntable's character really well and is worth the expense.

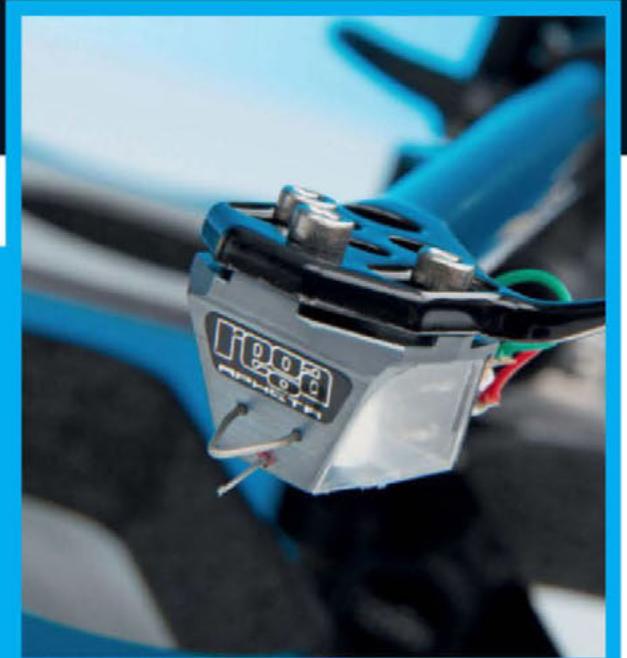
As with all turntables, the RP8 benefits from careful placement. There isn't much in the way of suspension, so performance will suffer if the deck is placed too close to the speakers or on a surface that resonates strongly. Take care

**It's brilliant at latching on to that infectious rhythm track and thumps out the dense, undulating bass with considerable skill**

## The cartridge

**The Apheta is** Rega's first moving-coil cartridge. The company looked at the conventional way of designing such a cartridge and decided that the workings could be simplified with modern materials and technology.

The result is a fast, agile and highly detailed performer but one which errs on the bright and lean side of neutral. Careful system matching will stop the tonal character from being an issue. Each sample is supplied with a specific tracking weight, rather than the general value given by most manufacturers.



with respect to these points and this Rega will reward you richly.

How does the package sound? In a word, detailed. We've heard many turntables at this level but can't think of one that digs up as much information as this one.

Play *Mars* from Holst's *The Planets* and the RP8 excels. There's power coupled to wide-ranging dynamics and the ability to keep a tight grip on instrumental strands. Nothing gets confused as the piece builds to its crescendo.

Tonally, things aren't quite neutral. The presentation is always just a touch lean and bright. Bass, while wonderfully taut and tuneful, doesn't quite have a full dose of weight to it. This lack of neutrality doesn't go too far though, and certainly won't be a problem unless other components in your system have harsh or aggressive tendencies.

## Energy and agility

The pay-off for that tonal balance is speed and plenty of it. This is a magnificently responsive-sounding deck and it delivers a sound full of energy and sparkle. If you want excitement, drama and the ability to just lose yourself in your music, we haven't heard a better alternative for the job. The soundstage is good too. It's stable, focused and nicely layered.

Switch to Michael Jackson's *Billie Jean* and the Rega is right at home. It's brilliant at latching on to that infectious rhythm track and thumps out the dense, undulating bassline with considerable skill. Jackson's distinctive vocals

are delivered with passion and superb clarity, and are in no way submerged by the packed instrumental backdrop.

## Takes all sorts

We scan our record collection, taking in the likes of R.E.M.'s *Automatic For The People*, Miles Davis's *Kind Of Blue* and Bob Marley's *Exodus*, and the Rega takes it all in its stride, delivering a class-leading combination of attack and subtlety.

This is a hugely accomplished package that lifts a massive amount of information off the groove and organises it in a musically engaging way. It's the kind of record player that has us listening well into the night, just wanting to see how good it makes the next record sound.

Rega is quite rightly recognised for the quality of its more affordable decks. The likes of the RP3 particularly have dominated their sectors, and our Awards, for longer than we care to remember. But when the company really goes for it, shooting for the stars rather than trying to meet a price point, the results are spectacular. If you have the budget for the RP8/Apheta combination, jump right in. You won't be disappointed.

**Consider if** You want an articulate and massively detailed-sounding turntable  
**Highlight** Resolution - this is as detailed a deck as we've heard at this level

## Rating ★★★★★

**FOR** A massively detailed sound; class-leading agility; strong dynamics and precision; build  
**AGAINST** Sympathetic placement a must; needs careful system matching

**VERDICT** The RP8/Apheta combination sets sky-high standards at the price

The TT-PSU power supply has a button for switching easily from 33 $\frac{1}{3}$  to 45rpm



# PLAY LIST

The movies and music to test your system

## Out this month



### The Hobbit: The Battle Of The Five Armies Blu-ray Out Now

★★★★★

#### Bonus content

- Recruiting the five armies
- Completing Middle Earth
- Part 1 - A Six Part Saga
- Part 2 - A Seventeen year journey
- The Last Goodbye
- Part 1 - Behind the Scenes
- Part 2 - Music Video
- New Zealand: Home of Middle-earth, Part 3

**Duration** 144m

**Audio** English: DTS-HD  
Master Audio 7.1

**Picture** 2.40:1, 1080p

Picture	★★★★★
Sound	★★★★★
Extras	★★★★★



## There and back again and again

**It's finally over.** We went *there* and back again, and then *there* and back again. And now we're safe.

It only took 14 years and six films to get here. The journey of a thousand minutes - 1223 if you count the extended editions - has come to an end. A bitter end.

The entire Hobbit trilogy has been a bloated mess until now, but part three marks its lowest point. That's because it's essentially a load of fights and references. This is what happens when you pad out a concise children's book with footnotes and appendices.

A lot happens in *The Battle of the Five Armies*. There is a dragon fight. There is a wizard fight. Dwarves have a turf war with elves, humans, orcs, bats and Orlando Bloom.

Hordes of CGI characters beat seven bells out of another horde of CGI characters, and then big eagles save the day. Again.

It's not epic or magical. It's convoluted and longwinded. Numbness is inevitable after seeing the hundredth bloodless casualty, and all those shots of New Zealand's mountainous landscape don't do much to stave off boredom.

#### Off the pace

It really doesn't help that the pacing is all over the place. Most situations are resolved abruptly, with little sense of threat.

The opening segment is entirely at odds with what follows, and really should have been attached to the end of the last film.

And then there are the multiple endings, where everyone either says goodbyes or makes references to *The Lord Of The Rings* trilogy.

At its worst, one of the elves even tells Orlando Bloom to go hang out with Viggo Mortensen (from *The Fellowship Of The Ring*).

If there is a saving grace, it's this: like the rest of the saga before it, *The Battle Of The Five Armies* is an audiovisual treat.

It must have taken an inordinate amount of time and technical effort to make a film look and sound this good. You need look no further than the opening segment, where a very angry dragon trashes a village.

Fire and gold serve up some lovely colours, which contrast nicely with the dull greys of armour and roof tiles. Boats crash, wood splinters, and arrows land with satisfying *thunks*. There are few better uses for surround sound.

But technical achievements aside, this was not an adventure. This was a delayed and sloppily executed conclusion to something that should not have been divided into three films in the first place. No, it was not worth the wait.

## MUSIC

### The Knack: My Sharona

Thumpingly angular white-boy power-pop from the last great era of the skinny tie, and a guaranteed crowd-pleaser.

**Lake People: Drifting Red** Clean, streamlined and entirely aerodynamic tune from the excellent *Purposely Uncertain Field* album. The authentic sound of Dresden.

**Nicky Thomas: Love of the Common People** When Trojan Records hit the bullseye, they turned out recordings for the ages. This is as warm and as inclusive as it gets.

**Kanye West: All Day** We're a decorous crowd here, so this is the radio-friendly (and consequently borderline-incoherent) version. There is a potty-mouthed version too.

## May in Hi-Def

### The best on the box



You hardly are given time to think and when you do get that spare split second, Joss Whedon injects it with humour that keeps you going to the next scene

### Avengers: Age of Ultron Cinema

After a stellar effort with *Captain America: The Winter Soldier*, the Marvel Cinematic Universe is ever expanding. With *Avengers: Age of Ultron*, Marvel lays down the perfect platform for upcoming movies. We had tickets to the best seats in the house, rigged with Dolby Atmos. The movie picks up from where the original left off, yet, never pushes the envelope as far as taking the story or the characters ahead is concerned. There is a wallop of action and comic relief, and every single Avenger has enough screen time to make their presence felt. *Avengers: Age of Ultron* dives straight into the action, new characters are quickly introduced and their intentions are swiftly propogated on-screen, it all feels a bit rushed, and at times the narrative feels a wee bit disjointed. Ignore that little chink and you

have the Earth's mightiest heroes standing by for action, which comes in abundance. You hardly are given time to think and when you do get that spare split second, Joss Whedon injects it with humour that keeps you going to the next scene. *The Avengers: Age of Ultron* packs in the goods, ramps up the action and humor and overall, is a fun ride, start to finish. However, it does not have the overall slickness of the original 2012 hit.

The soundmix is extremely enjoyable with Atmos piling on the sonic goodness from every angle of the cinema hall. As Ultron's plan takes action and a small city is lifted towards the sky, you can almost feel the ground tear apart. 3D has been used quite smartly in the movie and it never gets stressful on your eyes. To sum up, we highly recommend this movie as a must watch, but the



original was still more fun!

### Game of Thrones HBO Defined - Mon, 6:30am

Where do we start with *Game Of Thrones* series five? Do we talk about the dragons, the army at the Wall, the Lannisters' diminishing power, the introduction of the Sand Sisters? Or about the possibility that Daenerys might finally get to cross continents and

set foot in King's Landing to take the Iron Throne? The Houses of Westeros won't give up their claims without a fight, but how will they fare against three fire-breathing dragons? And that's before we get to fan favourites Arya and Tyrion, the secrets revealed by Cersei's flashbacks to a childhood prophecy. We can't wait.



More proof that we are all about technology.  
Stuff India on Apple and Android devices.



All you need to do is download the free 'Magzter' app and get your copy now.

iPad/iPhone users can download Magzter from the 'App Store'.

Android users can download Magzter from 'Android Market'.

Try it out today.



# REFERENCE SYSTEM



*We use only the best ingredients in the making of this magazine. This in-house system helps us to evaluate incoming products with more insight and accuracy, so you always get the best tests!*



### Arcam D33 DAC / UDP-411 BD/SACD Player

Capable of full high-resolution 24-bit/192kHz processing and SACD playback, this duo is state-of-art audio/video decoding



### Denon AVR-X7200W

Dolby Atmos out of the box and an upgrade to Auro 3D on its way, this is the most future-proof AVR we could get our hands on, yet.



### BlueSound Vault

All our CDs and music get stored and served by this elegant solution from the boys at NAD



### Mark Levinson No. 585

An integrated amplifier with (almost) no equal, this 200 w/pc dual mono design is the pinnacle of cutting-edge tech along with a 32-bit DAC onboard for added ammo!



### AudioQuest cables

Working truthfully between the various components, the DBS-equipped line of cables and interconnects helps us see and hear without any anomalies



### PMCTwenty Series speakers

Using the Twenty.26 as mains, Twenty.C for centre, DB1 Gold and Wafer 1 for surrounds, this speaker suite is the ideal blend of neutrality and musicality



### REL S5 Subwoofer

The cleanest and fastest way to add real weight and dynamics to our system was to introduce the brilliant S5 to the music and multichannel mix. A true legend



## Jamo C97

₹1,02,800

**Danes are known for their aesthetic sensibilities and their hi-fi industry is no different.** For a country roughly the size of a small Indian state, it has an unusually high concentration of loudspeaker manufacturers. Each of them with a unique design language that gives them a timeless sheen. Jamo holds the distinction of being one of the oldest speaker brands in Europe and with a lot of milestones along its timeline. The last great one being the launch of the iconic R909 open-baffle speaker that took the hi-fi press by storm. But that was 2006, and a decade later, Jamo has evolved into a more mature company with products that span into custom installation, multimedia, outdoor, home-cinema and THX-certified speakers. With the all-new Concert series, Jamo is trying to revive a popular model range that has been the brand's staple for many years. To helm the project, noted industrial designer Kieron Dunk was enlisted and he seems to have done a pretty neat job with the overall design. The Concert series is sizeable in its options but the two main pillars are the C10 and C9. Both these ranges have floorstanders, bookshelves, centre and surround speakers but with different sizes for their drivers and slightly different finish too.

Our review sample was the C97, the largest in the C9 range. It's a compact floorstander with twin 6in woofers, a single 6in midrange and a single silk dome tweeter with distortion-reducing geometry and an anti-diffraction waveguide that aims to widen the sweet spot beyond the one who's paid for the loudspeakers. That's a pretty substantial driver array, even by compact floor stander standards, but the design works wonders. The flat sides and convex baffle create the illusion of a slenderness, and the satin white enclosure with matt grey baffles juxtapose nicely with each other, making for a distinctly Scandinavian design. The metallic phase plugs of the mid/woofer drivers are another trademark feature of the Concert series and now, they even bear the Long-Displacement Surround which is said to increase bass definition and extension. With headlining acronyms that are peppered all over the marketing material, the new Concert series is aiming for a high post. So does it live up to the expectations?

To find out, we plugged it into our reference Mark Levinson No. 585 amplifier, Arcam SuperDAC and wired it

up with Audioquest's finest speaker cables. Placing them out in to the room allowed for surreal imaging and set them nicely for an extended listening session where we evaluated the finer aspects of this loudspeaker. Death Cab for Cutie's new album *Kintsugi* is a masterfully recorded mainstream record and on the Jamos, it sounds direct and immediate. The twin bass drivers maintain great control over the low-end, never letting it get boomy or bent out of shape. They also allow surprising power handling to truly appreciate the expansive soundstage they can muster up. There's almost no way of guessing the size of these speakers during a blindfolded listening test, they really do sound like much larger drivers working to pressurise the room. It was in the upper register of the vocals where the tweeter exhibits some tendency to get bright and sound a tad disconnected from the rest of the drivers. It never got fatiguing, but it never exuded a sense of effortlessness in a way the best silk dome tweeters do either.

Going through our playlist of HD tracks using the Audirvana player, we cycled through Rebecca Pidgeon, James Taylor and Hans Theesink and throughout our listening sessions, it was clear that this Jamo was aspiring to hit much above its category. In many ways, it does. Its speed and

**They also allow surprising power handling to truly appreciate the expansive soundstage they can muster up**

transparency are exceptional and the sweet spot is huge, allowing off-axis listeners to enjoy the music just as much as the money seat. That was in fact, one of the best attributes of this speaker and the reason why it should be considered if you have a large room with odd shaped or off-centre seating. They are also rather easy to place around without affecting the performance by a huge margin. Jamo has clearly designed this speaker to be a real-world contender and not to be tweaked endlessly by audiophiles looking for the last ounce of air in the presentation. Not to say it can't please audiophiles. Compared to a lot of other speakers in its category, it provides an authoritative tone to the music by always keeping it in control and weighty. Steely Dan's *Cousin Dupree* is a great test for speed and dynamics, which the C97 had no qualms delivering. Jamo's engineers used the Hybrid Composition Conical Cones (HCCC) in the drivers to simulate the stiffness of aluminium with the

lightness of wood fibres and it's impressive in the way they've been successful in this amalgamation. Steely Dan is known for its slick and polished production values and on the C97, this album becomes truly enjoyable and foot-tapping worthy. The transients are sharp and incisive, with the snare drum delivered with adequate bite and the trumpet screeching just as it should. These speakers work beautifully for rock, pop and electronic music. Large scale symphonic music is where it shows a bit of struggle. The *Tutti!* Orchestral sampler is a favourite amongst audiophiles and for good reason. It has a scale that can push your system to the limits, especially the amplifier and loudspeakers. The Jamos preserve the scale but can't keep up with the dynamic range and the temporal shifts of the complex recording. The tweeter and the midrange seem a bit hesitant to communicate with each other when the composition gets too complex and the hotter balance of the highs doesn't help in making for a seamless blend. Yet, this is only a minor quibble if your musical tastes don't run into the classical territory. For its modest asking price, there is a lot of speaker on offer here. Jamo has done its homework to recognise what its audience is like and what they prefer in terms of aesthetics and performance criteria. It may not be the last word in refinement but it does serve up dollops of excitement and true deep bass. It'll also be less of an eyesore in the room if you opt for the white or the dark apple finishes that are gorgeous to behold. One of the other advantages of the new Concert series is the possibility of complete timbre matching since it has a speaker for every purpose, keeping an even tonal balance no matter where the sound mixing engineer has decided to pan the sound. If you're just interested in a pair of capable floorstanders for stereo use, you'll find plenty of contenders. Where Jamo fits in, is its direct, almost headphone-like listening experience.

### Rating

**FOR** Aesthetically balanced, high power handling, great bass definition

**AGAINST** Slightly unrefined at the top end

**VERDICT** A floorstanding speaker for almost all kinds of music. It creates a lively presentation and an enjoyable listen

### TECH SPECS

**Design** 3-way bass reflex **Drivers** 2 x 6in woofers, 1 x 6in midrange, 1 x 1in tweeter

**Frequency Response** 32Hz-24kHz

**Sensitivity** 89dB **Weight** 23.1kgs

**Dimensions (WHD)** 8.5 x 42.2 x 13.5in

**Finish** Satin Black, Satin White, Dark Apple





**NEED TO KNOW**

**CONSIDER IF**

Home decor is important to you and you like music served with verve

**YOU'LL NEED**

A good amplifier to bring out the best in them and tone down the highs

**MAKE SURE**

You install the stabilisers. Without them, the speakers are prone to toppling over

**AVOID**

Placing them too toed-in towards the listening position

**HIGHLIGHT?**

Tight, clean sound that will be great for movie sound and music alike

Jamo

Jamo



## Samsung U65JS9000KLXL ₹4,40,900

Samsung does it again, enticing us with another 4K TV. This one, however, is from its new SUHD range, with the 'S' denoting 'Super'. Don't expect an Avenger to crawl out when you open the box though. What makes this set different from the UHD range is that this one injects a new DCI P3 color system that offers a wider colour pallet. Add Nano Crystal Technology into the mix and overall colour is scattered more uniformly to every corner of the gorgeous curved

screen. The SUHD range of TVs also offer deeper blacks and brighter backlight to further enhance your viewing experience.

All of the tech does make viewing a thoroughly engaging experience, rather than being a marketing stunt. This curved 3D 4K TV looks stunning, with its high-quality finish and is extremely simple to setup. The screen impresses with its grasp over Full HD and 4K (whatever little we could get our hands on) content. There was immense detail as we watched *Interstellar* on Blu-ray. Especially in scenes made by CGI, like the one that takes you inside a blackhole, has you dropping your jaws. Scenes from the

The tech makes viewing a thoroughly engaging experience, rather than being a marketing stunt

Dolby test disc were executed with a tight grasp on detail level too and colours, as usual, looked staggering good. Throw non-4K content at this set and its re-mastering engine will upscale it to 4K, doing a decent job of it. There is an 'Indian Cinema' viewing mode, aimed at enhancing your 'Indian' movie viewing experience by ramping up backlight, contrast and colour figures. We would keep the mode turned off, for good. We are impressed with the overall image quality, all we need is more 4K content.

### Rating

**FOR** 4K and HD picture quality, feature-packed. One connect unit makes connecting devices a simple process, stylish

**AGAINST** Remote control button placement could be better, sound lacks punch

**VERDICT** A feature-packed curved 4K set that is future-ready and offers a stellar picture

### TECH SPECS

**Screen size** 65in **Resolution** 3840x2160 pixels **Dimensions** 159.7x94.3x21cm **Weight** 30kg

### NEED TO KNOW

#### CONSIDER IF

You need a future-proof 4K TV with a curved screen and online capabilities

#### YOU'LL NEED

Press down on the 'Pointer' button on the remote for the gyro function

#### MAKE SURE

You use an HDMI cable that supports HDMI 1.4 spec for 4K viewing

#### AVOID

The 'Indian Cinema' mode as it only deteriorates the viewing experience

#### HIGHLIGHT

Staggering good colour detail, deep blacks

WHAT HI FI? TEST WINNER



## LG 65UF950T ₹4,00,000 (approx)

Just when we thought we had seen it all with the set above, LG sends us this scorcher of a set, we will tell you exactly why in a bit. One look at this new LG and you go weak in the knees and teary in your retinas. All thanks to the edgy stand and support for 4K picture. No curved screen here, but trust us, you won't be complaining. For starters, you get a gesture-sensing Magic Remote, IPS LED

panel with micro dimming for inky blacks, Harman Kardon sound, built-in timer recording and Web OS 2.0. LG also claims to equip this panel with its version of extended colour space, dubbed ColorPrime. Finding content that would take advantage of this feature is proving to be a bit of a struggle.

Talk picture quality and the LG shines in every department. The edge-lit LEDs offer reference-grade imagery. We could hardly contain our excitement while playing *Far Cry 4* in 4K, like little boys, we were glued on to the screen for hours.



Talk picture quality and the LG shines in every department. The edge-lit LEDs offer reference grade imagery

Spin a Blu-ray disc or play 4K content and you will be stunned with the retina-popping grasp of LG over colours and overall detail. Scenes in *The Hobbit: The Battle of the Five Armies* CGI or non CGI, are painted with immense levels of detail. The only slight chink being the patch that appears on a full white screen. The LG set's sound output is top-notch when compared to other TVs currently available in the market. We enjoyed our time with this TV and if you need one good reason not to buy a curved screen, this is it.

### Rating

**FOR** Colossal levels of detail, colour palette is beyond impressive, beautiful design, Web OS 2.0 is a charm to use

**AGAINST** No content for ColorPrime tech

**VERDICT** If you hate the very mention of curved TVs and need a large screen for your HD/4K viewing needs, buy this blindly

### TECH SPECS

**Screen size** 65in **Resolution** 3840x2160 pixels **Dimensions** 145.5x89.6x25cm **Weight** 29.6kg

### NEED TO KNOW

#### CONSIDER IF

You are looking for a 4K TV but prefer a flat screen instead of a curved one

#### YOU'LL NEED

To spend time tweaking the colour settings for best viewing experience

#### MAKE SURE

You invest in a 4K set-top box to enjoy on-air 4K content

#### AVOID

Enabling any kind of motion processing

#### HIGHLIGHT

Web OS 2.0 is one of the most intuitive and effortless interface to work with

## FiiO X1 Hi-Res Player

₹7999

What Neil Young's PonoPlayer started, FiiO's X1 is determined to fulfill and finish. Yes, we're talking affordable high-res music players and FiiO is creating quite a buzz. But does it live up to the hype? Considering its price, it most certainly does, just not in the design department. The design is clearly inspired by the iPod classic and the X1, unfortunately, looks like a cheap copy of it.

The click wheel physically moves and the selection button at the centre of it feels cheap and wobbly. The other buttons are solidly built. You plug your headphones into the 3.5mm output on top of the device (this output also levels up as a line-out). You'll also need to buy a microSD card (there is no internal memory) and load your music through the micro USB port that is at the bottom of the device.

With formats like APE, FLAC, ALAC, WAV, WMA, AAC, OGG, MP3 and MP2 all supported, the X1 leaves very little to be desired. Play a few of the regular test tracks and it is apparent that the FiiO X1 has a very neutral approach to music. It sounds better than the iPod Classic and the iPod Touch. The Texas Instruments



PCM5142 DAC paired with the Intersil ISL28291 digital amp offers a nice level of detail along with a very balanced and natural sound. The wantonly bass in Lorde's *Royals* is wonderfully presented and doesn't sound muddy. The player gets pretty loud and is dynamic as well, without ever sounding too harsh or unpleasant. However, there are some issues with fluidity in some of the more demanding audiophile tracks. Play *Winter* from the *Four Seasons* by Vivaldi and the shortcomings are easily exposed. The pizzicato notes from the high strings don't come across as well as they should and sound pale, while the faster section of the beautiful piece isn't handled too well either. But this is demanding too much from something

## The wantonly bass in Lorde's *Royals* is wonderfully presented and doesn't sound muddy

that just costs ₹8000.

The X1 can drive headphones with impedance ranging from 16 to 100 Ohms, anything above will need an amp. It doesn't get along too well with active noise-cancellation headphones too. We tried it with three different headphones and the X1 didn't impress much, resulting in a thin sound with a thick and ill-defined bottom-end. There is a seven band equaliser with a custom mode to help with that though. There's also a gapless mode that will keep iPod worshippers happy. All-in-all, the X1 is a good deal for the money.

### Rating

**FOR** Price, formats supported, decent build, natural sound, 10-hour battery life

**AGAINST** No internal memory, dated design, no headphones included

**VERDICT** The FiiO X1 is a great music player for the price and you get what you pay for

### TECH SPECS

**Dimensions** 96.7 x 57.7 x 14.1 mm (HWD)  
**Formats Supported** BAPE, FLAC, ALAC, WAV, WMA, AAC, OGG, MP3, MP2 **Battery** 10 hours

### NEED TO KNOW

#### CONSIDER IF

You want a high-res music player without having to spend a lot

#### YOU'LL NEED

To buy a decent pair of headphones to pair with the X1 as there aren't any included

#### MAKE SURE

You buy a microSD card with at least 16GBs

#### AVOID

Using active noise-cancellation headphones as the X1 doesn't get along too well and sounds thin

#### HIGHLIGHT

A high-resolution music player that sounds decent and won't break the bank



Pictured here: Music Flow H5 (left) and H7 (right)

## LG Music Flow

₹38,990 (H5), ₹52,990 (H7)

LG is the latest brand to join the multi-room party with its new Music Flow range - the family is made up of various components, of which the H5 and H7 active wireless speakers have made it to our test desk. Features are in abundance: Bluetooth, wi-fi, DLNA functionality and near-field communication (NFC) across the range.

The best bit? Both speakers support high-res WAV and FLAC files up to 24-bit/192kHz; topping the Sonos, while matching the capability of the pricier, Award-winning Bluesound system. So far so good, then - but how good

is the overall performance?

Ultimately, we can't help but feel a little disappointed with the Music Flow's sound as a whole. Each speaker delivers a fairly detailed and easily listenable sound that is a bit safe and restrained, lacking the insight, balance and energy of the respective Award winners at their price. The H5's bottom-heavy character makes Jamie Cullum's *Trippin' Up* stark, slightly raspy vocals muffled and a tad boomy. We expect more expression, balance and at least, an inkling of dynamic aptitude at this price. The H7 delivers a bigger, more dynamic and expressive sound in comparison. But it still lacks definition.

It's a shame about the so-so sound quality across the board, because the

## We expect more expression, balance and at least an inkling of dynamic aptitude at this price

Music Flow gets everything else pretty spot-on. Set up is straightforward; we are up and running within a few minutes. There's no remote for the speakers: the Music Flow Player app is the speakers' control hub. We like the design - the speakers are stylish and well matched with shiny, silver fascias and a rigid chassis that's sturdier than it might look.

LG has gone big on features with its first multi-room model, but the Music Flow needs huge improvements in sound quality to compete with the best.

### Rating

**FOR** High-res support, well featured, multi-room functionality, stylish, practical design

**AGAINST** Sound lacks insight and dynamics of rivals, app can be buggy

**VERDICT** A nicely uniform and feature-packed multi-room package, but one that disappoints with so-so sound quality

### TECH SPECS

**Features** Near Field Communication (NFC), Wireless Audio Stream, Multi-room Streaming  
**Remote control** App only **Colour** Silver

### NEED TO KNOW

#### CONSIDER IF

You need a simple, easy-to-setup multi-room sound system

#### YOU'LL NEED

To download the free iOS/Android app to control the system

#### MAKE SURE

You feed it high-res audio to take full advantage of its playback support for various file formats

#### AVOID

High volume listening. The bass tends to lose definition entirely

#### HIGHLIGHT

A multi-room sound system that takes just a few minutes to set up

haymarket

# WHAT HI-FI? magazine has gone digital.

Now available on Apple and Android devices.



Download from



All you need to do is download the free 'Magzter' app and get your copy now.

Apple users can download Magzter from the 'App Store'.

Android users can download Magzter from 'Android Market'.

Try it out today.



# The No.1 source of expert advice. Now, fully updated!

# BUYER'S GUIDE

## We can help

Welcome to India's best guide to TVs, hi-fi, home cinema and MP3, with full specs and ratings for hundreds of products.

## Up to date and to the point

We've put the Buyers Guide through a much needed refresher. All prices and products are now up to date and current, and there are also a few tips and tricks for getting the best out of your kit.



**Shanth Swaroop**  
Editor, Buyer's Guide



## How to use us

**1** Browse by section: categories are arranged logically, with products accompanied by price, date and star rating.

**2** Entries have a star rating followed by a concise summary of the review, so you can easily find the product for you.

**3** We offer the most comprehensive list of technical specifications for each and every product we've reviewed.

## Inside

### Home cinema

AV RECEIVERS AND AMPLIFIERS 86

SURROUND SPEAKERS 87

### Hi-Fi

CD PLAYERS 88

DACS 89

HI-FI SPEAKERS 90

STEREO AMPLIFIERS 93

PREAMPS 94

POWER AMPS 94

IPOD DOCKS 95

WIRELESS SPEAKERS 95

### Headphones

96

### All-in-one-systems

STEREO SYSTEMS 99

### Network systems

MEDIA STREAMERS 99

### Smartphones and Tablets

TABLETS 100

SMARTPHONES 101

### Accessories

HDMI CABLES 102

DIGITAL INTERCONNECTS 102

ANALOGUE INTERCONNECTS 103

SPEAKER CABLES 103



## AV receivers & amplifiers

Budget	Well-equipped and deliver convincing surround sound
Mid	There are gains in features, build quality and sonic performance
Premium	Real powerhouses that pack loads of features and cinema-style sound

Product	₹	Verdict	Channels /power (w)	HDMI in	HDMI out	Networking	3D passthrough	Dimensions (hwd, cm)
Pioneer VSX-522	NA	★★★★★	An agreeable entry-level amp	5x125	4	1	●	17x44x36
Pioneer VSX-922	NA	★★★★★	A highly specified all-round performer that excels at its new price point	5x125	4	1	●	17x44x36
Yamaha RX-V373	28,990	★★★★★	<b>Best home cinema amplifier (budget), Awards 2012</b>	5x100	4	1	●	15x44x32
Yamaha RX-V375	30,990	★★★★★	<b>Best home cinema amplifier (budget), Awards 2013</b>	5x100	4	1	●	15x44x32
Denon AVR-1912	45,900	★★★★★	A fine amp bettered by close rivals	7x90	5	1	●	17x44x38
Onkyo TX-NR525	46,000	Not rated	Not rated	5x160	6	1	●	17x44x33
Denon AVR-2113	49,900	★★★★★	Solid, likeable option for both novices and enthusiasts	7x125	6	1	●	17x44x33
Harman Kardon AVR171	59,990	★★★★★	Could be subtler but still delivers a powerhouse performance	7x100	6	2	●	12x44x30
Pioneer VSX-923	55,190	★★★★★	Needs more heft but it's still a compelling and confident amp	7x150	8	2	●	17x44x36
Onkyo TX-NR626	63,000	Not rated	Not rated	7x175	6	2	●	17x44x33
Onkyo TX-NR727	72,000	Not rated	Not rated	7x185	8	2	●	17x44x38
Denon AVR-X4000	1,34,900	★★★★★	A decent enough AV receiver	7x125	7	3	●	17x43x38
Yamaha RX-V673	56,990	★★★★★	<b>Best home cinema amplifier (budget-mid), Awards 2012. PRODUCT OF THE YEAR</b>	7x150	6	1	●	17x44x36
Pioneer SC-LX57	1,10,990	★★★★★	<b>Best home cinema amplifier (mid), Awards 2013</b>	9x190	9	3	●	19x44x44
Pioneer SC-LX87	1,73,990	★★★★★	Pioneer strikes gold again with this feature laden powerhouse	9x170	7	2	●	17x43x41
Onkyo TX-NR1009	1,30,000*	★★★★★	An incredibly talented amplifier	9x180	8	2	●	20x44x44
Yamaha RX-A3030	1,61,000	★★★★★	<b>Best home cinema amplifier (premium), Awards 2013</b>	9x150	8	1	●	19x44x47
Onkyo TX-NR828	95,000	Not rated	Not rated	7x215	8	2	●	20x44x40
Pioneer SC-LX56	NA	★★★★★	<b>Best home cinema amplifier (mid-premium), Awards 2012</b>	9x170	8	2	●	19x44x44
Arcam AVR750	4,50,000	★★★★★	It isn't flawless, but it is very good indeed	7x100	7	2	●	17x43x43
Yamaha RX-A1010	89,990	★★★★★	A receiver with huge but fluid delivery	7x170	8	2	●	18x44x43
Yamaha RX-A1020	89,990	★★★★★	Delivering excitement, detail and precision, this is a brilliantly capable all-rounder	7x110	8	2	●	18x43x43
Onkyo TX-NR1010	1,60,000	★★★★★	Power-packed heavyweight needs a touch more precision	7x200	9	2	●	20x44x59
Onkyo TX-NR3009	1,60,000*	★★★★★	Produces seriously rewarding surround sound	9x200	8	2	●	34x61x60
Onkyo TX-NR3010	1,90,000	★★★★★	A solid performance but lacks the subtlety to cut it as a complete all-rounder	9x160	9	2	●	20x44x60
Onkyo TX-NR5010	2,20,000	Not rated	Not rated	9x280	9	2	●	20x44x66
Pioneer SC-LX86	NA	★★★★★	<b>Best Home Cinema amplifier (premium), Awards 2012</b>	9x190	8	3	●	19x44x414
Yamaha RX-A3020	1,34,990	★★★★★	A shot across the bows of the class leaders	9x230	8	2	●	19x44x47
Yamaha RX-V377	34,990	★★★★★	Superb surround sound on a budget	5x70	4	1	●	15x44x32
Yamaha RX-A1030	1,04,000	★★★★★	Not without some niggles, but this receiver delivers big-time power and muscle	7x110	8	2	●	18x43x43
Pioneer SC-LX87	1,73,990	★★★★★	Pioneer strikes gold again with the feature-laden powehouse	9x220	9	3	●	19x44x44
Arcam AVR450	2,55,000	★★★★★	There's plenty to like with this receiver, but its rivals better it	7x110	7	2	●	17x43x42

Save up to  
**50%**

**WHAT HI FI?**  
SOUND AND VISION

Subscribe  
**now**

p70

## Surround speakers

Full size	Traditional cabinet design that are big but can deliver a great sound
Style	Compact speakers that make a lot of sense in smaller living spaces
Bipole/Dipole	Surround speaker designs that give a more cohesive soundfield

### The shortlist



**AWARD WINNER**  
**Q Acoustics 2000i 5.1**

Awards 2013: Best Traditional Pack (Budget)



**PRODUCT OF THE YEAR**  
**Dali Zensor 15.1**

Awards 2013: Best Style Pack (Mid)



**AWARD WINNER**  
**Cambridge Audio Aero 5.1**

Awards 2013: Best Traditional Pack (Premium)

Product	₹	Verdict		Front speaker (h/w/d, cm)	Center speaker (h/w/d, cm)	Rear speaker (h/w/d, cm)	Subwoofer (h/w/d, cm)	Finishes
Boston Ac. Soundware XS SE	33,099	★★★★★	Just as good as its predecessor: a must-hear	11x11x9	11x11x9	11x11x9	31x28x40	2
Canton Movie 125 MX	39,375*	★★★★★	A choice compact speaker package	12x9x10	9x20x10	12x9x10	43x24x42	3
Canton Movie 130	75,000	★★★★★	Likeable and listenable	12x9x10	9x19x10	12x9x10	41x24x42	3
Wharfedale DX-1HCP	45,000	★★★★★	Gets a lot right for this kind of money	19x12x12	12x29x12	19x12x12	34x29x32	2
Cambridge Audio Minx S215	58,500	★★★★★	Lots to admire here from very little	8x8x9	8x8x9	8x8x9	22x21x22	1
SKS HT-528	25,000	Not rated	Not rated	18x10x12	10x27x11	18x10x12	43x23x41	
KEF KHT3005 HD2	1,08,000	★★★★★	Great build with an expansive sound	25x13x15	13x25x15	25x13x15	38x37x18	1
Monitor Audio MASS	1,03,000	★★★★★	<b>Best style package (mid), Awards 2012</b>	22x13x13	13x22x13	22x13x13	42x38x38	1
Monitor Audio Vector AV10	59,000	★★★★★	For those who like big sound, not big boxes	24x15x17	15x35x17	24x15x17	37x32x32	3
Q Acoustics 2000i 5.1	87,750	★★★★★	<b>Best traditional package up to (mid), Awards 2012</b>	23x15x20	23x16x12	23x15x20	23x16x12	2
Q Acoustics Q7000	95,250	★★★★★	Product of the year - Speaker packages, Awards 2011	24x10x16	12x21x16	24x10x16	37x51x22	2
Tannoy HTS-101	60,200	★★★★★	<b>Best style package (budget-mid), Awards 2012</b>	16x11x14	11x25x17	16x11x14	42x28x37	1
B&W MT-50	1,91,250	★★★★★	<b>Best style package (mid-premium), Awards 2012. PRODUCT OF THE YEAR</b>	25x11x16	25x11x16	25x11x16	26x26x33	2
B&W MT-60D	3,28,500	★★★★★	<b>Best style package (premium), Awards 2012</b>	25x11x16	25x11x16	25x11x16	34x27x36	2
Cabasse Eole 2	88,000	★★★★★	Enjoyable sound meets decorative looks	13x13x13	13x13x13	13x13x13	33x33x36	2
DALI Zensor 1 5.1	1,12,000	★★★★★	<b>Best style package (mid-premium), Awards 2013. PRODUCT OF THE YEAR</b>	27x16x22	16x44x29	27x16x22	31x29x31	3
DALI Zensor 5 5.1	1,55,400	★★★★★	<b>Best traditional package (mid-premium), Awards 2012</b>	84x16x27	16x44x28	97x16x23	34x37x38	2
Elipson Planet M 5.1	1,05,000	★★★★★	Enjoyable looks and sound, just lacking a on detail	15x15x15	15x15x15	15x15x15	39x32x32	3
Jamo D500THX Select 2	2,17,000	★★★★★	Exceptional and unbeatable value too	26x45x13	26x45x13	26x45x13	42x40x42	2
KEF KHT3005SE	1,08,000	★★★★★	Still a valid product and test winner	25x12x15	13x30x18	25x12x15	39x44x19	2
KEF Q300 5.1	1,26,000	★★★★★	An admirable package for the purists	36x21x30	21x63x30	36x21x30	33x34x33	3
KEF T105	89,900	★★★★★	A stealthy package that looks the part	33x14x4	33x14x4	33x14x4	38x37x8	1
Monitor Audio Bronze BX2 5.1	1,60,000	★★★★★	Thrillingly fit for purpose	35x19x26	17x46x17	29x28x11	33x32x33	4
Monitor Audio Bronze BX5 5.1	2,75,000	★★★★★	Does a good job of filling a big room	85x17x25	17x46x17	29x28x11	33x32x33	2
Tannoy Rev. Compact 5.1	1,40,000*	★★★★★	Exceptional sound in the average living room	27x15x16	15x30x16	39x31x34	32x29x29	2
B&W CM9 Theatre	7,99,875	★★★★★	<b>Best traditional package (Premium), Awards 2012</b>	102x32x37	22x59x28	34x20x28	32x32x32	2
B&W CT800 system	2,01,65,625	★★★★★	Expensive but it's the best we've heard	110x33x55	33x110x55	110x33x10	48x48x48	1
DALI Ikon 5 Mk2 5.1	3,21,900	★★★★★	An exciting speaker package that will thrill film and music fans	81x15x28	15x57x26	38x27x15	45x41x46	2
Cerwin Vega SL Series 5.1	2,36,000	Not rated	Not rated	84x36x38	17x28x18	91x42x50	45x13x16	1
Cambridge Audio Aero 5.1	1,57,000	★★★★★	<b>Best traditional package (Premium), Awards 2013</b>	98x24x34	15x43x21	18x46x15	34x33x36	2
KEFR100 5.1	2,47,000	★★★★★	<b>Best traditional package (Premium), Awards 2012</b>	28x18x29	17x53x31	28x18x29	37x33x35	4
Monitor Audio Apex	1,68,100	★★★★★	Best style speaker package (Premium), Awards 2011	25x14x14	14x61x10	25x14x14	34x34x41	2
Energy Veritas RC Micro 5.1	47,100	Not rated	Not rated	12x9x9	9x9x15	12x9x9	32x31x27	1
Monitor Audio PL300 AV	14,10,000	★★★★★	One of the finest 5.1 speaker packages on the market	111x41x47	22x58x29	37x22x28	45x48x47	2
Mon. Audio Silver RX6 AV12	2,93,400	★★★★★	Best traditional package (Premium), Awards 2011	85x19x25	19x50x20	30x12x25	34x34x41	6
Mordaunt-Short Aviano 5.1	2,50,800	★★★★★	Guaranteed to keep you on the edge of your seat	95x21x32	18x46x23	95x21x30	42x31x36	3
Mordaunt-Short Mezzo 5.1	5,27,200	★★★★★	Lots of attack, with little respite	100x22x28	18x49x22	35x22x28	32x34x35	2
Mordaunt-S. Performance 5.1	13,14,000	★★★★★	Deeply impressive, they will leave you breathless	121x24x37	60x21x22	121x24x37	50x50x50	2
PMC DB1i 5.1	5,00,000*	★★★★★	Small and sonically brilliant package	29x16x23	16x29x23	29x16x23	55x20x55	4
Tannoy Revolution Signature	1,64,500*	★★★★★	As thrilling or as calming as you want it to be	85x17x18	17x45x18	27x17x18	37x34x34	2

# CD Players

**Integrated Transport** Has both a CD mechanism and digital-to-analogue conversion tech  
Needs an outboard DAC but can deliver a higher standard of sound

## The shortlist



**AWARD WINNER**

**Marantz CD6005**

Awards 2013: Best CD Player (Budget)



**PRODUCT OF THE YEAR**

**Naim CD5si**

Awards 2013: Best CD Player (Mid)



**AWARD WINNER**

**Roksan Caspian M2 CD**

Awards 2013: Best CD Player (Premium)

Product	₹	Verdict	Integrated Transport	Co-axial out	Optical out	XLR out	RCA out	Headphone out	Co-axial in	Optical in	AES/EBU in	USB in	Finishes	Dimensions (hwd, cm)
Cambridge Audio Azur 351C	30,800	★★★★★ A worthy rival to the Award-winning Marantz CD6004	●	1	1	0	1	0	0	0	0	0	2	9x43x31
Cambridge Audio Azur 651C	46,600	★★★★★ A spacious sounding disc spinner	●	1	1	0	1	0	0	0	0	0	1	9x43x31
Denon DCD-710AE	27,400	★★★★★ Enjoyable enough, but holds itself back	●	0	1	0	1	1	0	0	0	0	2	11x43x28
Marantz CD6004	39,900	★★★★★ <b>Best CD player (Budget), Awards 2012</b>	●	1	1	0	1	1	1	0	0	0	2	11x44x34
NAD C546BEE	41,000	★★★★★ Excellent all-rounder that entertains like no other at this price point	●	1	1	0	1	0	0	0	0	0	1	7x44x29
Audiolab 8200CD	80,000*	★★★★★ <b>Best CD player (Mid), Awards 2012. PRODUCT OF THE YEAR</b>	●	1	1	1	1	0	2	2	0	1	1	8x44x30
Cyrus CD T Transport	1,15,000	★★★★★ An impressive and affordable CD transport	●	1	1	0	0	0	0	0	0	0	2	8x22x36
Cyrus CD6 SE2	1,25,000	★★★★★ Subtly upgraded, with worthwhile results	●	0	1	0	1	0	0	0	0	1	2	8x22x36
Naim CD5si	1,25,000	★★★★★ A stripped down affair, but it's as musical as they come	●	0	0	0	1	0	0	0	0	0	1	7x43x30
Roksan Kandy K2	68,500	★★★★★ Big and powerful, with an entertaining sound	●	1	1	1	1	0	0	0	0	0	2	10x43x38
Burmester 069	45,00,000*	★★★★★ Quite possibly the best CD player money can buy	●	1	0	1	1	0	0	0	0	0	2	13x48x31
Audio Research CD5	6,18,750	★★★★★ Audio Research strikes gold again. The CD5 is a terrific player	●	1	0	1	1	0	0	0	0	0	2	13x48x31
Cambridge Audio Azur 851C	1,23,000	★★★★★ Impressive sonic presentation but a touch too clinical for our tastes	●	1	1	1	1	0	2	2	1	1	2	12x43x34
Cyrus CD 8 SE2	1,82,000	★★★★★ <b>Best CD player (mid-premium), Awards 2012</b>	●	1	1	0	2	0	0	0	0	0	2	8x22x36
dCS Puccini	9,50,000	★★★★★ With the master clock it's an amazing combo	●	1	0	1	1	0	2	0	0	0	2	11x46x40
Parasound Halo CD1	3,00,000	★★★★★ Great player for classical, jazz and sultry female vocals	●	1	1	0	1	0	1	1	0	1	2	11x44x34
Naim CD5 XS	2,50,000	★★★★★ It's an excellent CD player, but faces stiff competition	●	1	0	0	1	0	0	0	0	0	1	7x43x30
Naim CD555	14,00,000	★★★★★ The CD555/555PS has a hefty price tag, but a classy performance	●	0	0	0	1	0	0	0	0	0	1	11x43x31
Naim CDX2	4,50,000	★★★★★ The tweaked CDX2 remains a fine proposition	●	0	0	0	1	0	0	0	0	0	1	9x43x31
Primare CD32	1,63,000	★★★★★ It's massively detailed, but not as engaging as we'd like	●	1	1	1	1	0	0	0	0	0	2	11x43x38
Roksan Caspian M2 CD	1,98,000	★★★★★ <b>Best CD player (Premium) Awards 2013</b>	●	1	1	1	1	0	0	0	0	0	2	8x43x33
Marantz CD6005	41,900	★★★★★ <b>Best CD player (Budget), Awards 2013</b>	●	1	1	0	1	1	0	0	0	0	2	11x44x34
Esoteric K-05	8,50,000	★★★★★ A great place to start... If you're looking for your final disc player	●	1	1	1	1	0	1	1	0	1	2	13x45x36

Save up to  
**50%**

**WHAT HI FI?**  
SOUND AND VISION

Subscribe  
**now**

p70

# DACs

Digital-to-analogue converters take a digital data stream from its source (such as a computer or CD transport) and turn it into an analogue signal that your amplifier can work with. These devices have become more popular in recent years due to the emergence of computer-based audio

## The shortlist



### HRT microStreamer

Has beaten our 2012 Award-winner

“Truly captivated us with a stunningly agile-paced performance that reveals layers of subtlety hitherto unheard with just a pair of headphones and a laptop.”



### Chord Chordette QuteHD

Awards 2012: Best DAC (Mid)

“It’s simple, looks great – and above all, sounds absolutely fantastic. You’ll have to spend twice as much to get something significantly better.”



### NAD M51

Awards 2012: Best DAC (Premium)

“The M51 sounds sensational. In fact, we’d go further than that by saying it’s one of the best NAD separates we’ve heard in recent memory.”

Product	₹	Verdict	USB in	Optical in	Co-axial in	AES/EBU in	HDMI in	Wireless	Headphone out	RCA out	Balanced XLR out	Dimensions (h/w/d, cm)
Audioengine D1	11,789	★★★★★	A DAC and headphone amp with a fine sound	1	1	0	0	1	1	1	0	3x9x10
Audioquest DragonFly	18,900	★★★★★	<b>Best DAC (Budget), Awards 2012. Now beaten by the HRT microStreamer</b>	1	0	0	0	0	1	0	0	1x2x6
Arcam rDAC Wireless	36,000*	★★★★★	No longer the default choice at the money, still very much a contender	1	1	1	0	0	0	1	0	4x16x11
Arcam rPAC	19,800	★★★★★	More desirable alternatives, but the rPAC still has plenty of merit	1	0	0	0	0	1	1	0	3x10x6
Camb. Audio DacMagic 100	18,800	★★★★★	An affordable, fine looking and listenable DAC	1	2	2	0	0	0	1	0	5x11x13
Camb. Audio DacMagic Plus	38,500	★★★★★	Better sound and features than the original - but pricey	1	2	2	0	0	1	1	1	5x22x19
HRT microStreamer	20,000*	★★★★★	HRT has struck gold again. The microStreamer is an excellent buy	1	0	0	0	0	1	0	0	1x3x6
Meridian Explorer DAC	31,000	★★★★★	The Explorer’s design and assured sonic performance makes it a top contender	1	0	0	0	0	1	0	0	2x3x10
Micromega MyDAC	32,000	★★★★★	If you like your music to have an attacking edge, then this DAC’s for you	1	0	0	0	0	1	0	0	2x3x10
Musical Fidelity M1 DAC	40,500	★★★★★	<b>Best DAC (Budget-Mid), Awards 2012</b>	1	1	1	1	0	0	1	1	10x22x30
NAD DAC2	25,500	★★★★★	A good, though not exceptional, wireless DAC	1	0	0	0	0	0	1	0	4x14x7
Cambridge Audio Azur 851D	1,03,000	★★★★★	A fine DAC, even if it isn’t the best in delivering outright entertainment	1	4	3	1	0	0	1	0	12x43x36
Chord Electronics QuteHD	1,00,000*	★★★★★	<b>Best DAC (Mid-Premium), Awards 2012</b>	1	1	1	0	0	0	1	0	7x16x4
Meridian Director	65,000	★★★★★	Packs a sonic punch but lacks the swagger present in others	1	1	1	0	0	0	1	0	3x14x8
Audio Research DAC8	5,30,000*	★★★★★	Pricey, but as organic-sounding as you can get	1	1	1	0	0	1	1	1	13x48x25
Arcam FMJD33	2,34,000	★★★★★	A well-equipped DAC, but not the best in class	3	2	2	1	0	0	1	2	11x43x37
Burmester 113	4,00,000*	★★★★★	Want excitement and insight above all else? The 113 could be for you	1	1	1	0	0	0	1	1	6x20x17
Rotel RDD-1580	80,000	★★★★★	Plenty to be impressed with, but the poor quality of its USB input holds it back	1	2	2	0	0	0	1	1	6x43x32
NAD D1050	42,500	★★★★★	If you’re looking for a desktop DAC, the NAD D1050 is a brilliant box of tricks	1	2	2	0	0	1	1	1	19x6x21
NAD M51	1,27,000	★★★★★	<b>Best DAC (Premium), Awards 2012</b>	1	1	1	1	2	0	1	0	8x44x30
Naim DAC	2,50,000	★★★★★	Best premium DAC, Awards 2010. Gives digital sources a big boost	2	3	3	0	0	0	1	0	7x43x30

**WHAT HI FI?**  
SOUND AND VISION

INDIA'S NO.1 HOME ENTERTAINMENT MAGAZINE

**SUBSCRIBE NOW**

p70

## Hi-Fi speakers

Standmounters	Usually smaller speakers that need to be put on a stand, not bookshelves
Floorstanders	Larger speakers that tend to go louder and deeper than standmounters
Powered	Have built-in amplifiers and need mains power to work

### The shortlist



**Q Acoustics Concept 20**

Awards 2013: Best Stereo Speaker (Budget)



**AWARD WINNER**

**KEF LS50**

Awards 2013: Best Standmounter (Mid)



**AWARD WINNER**

**PMC Twenty 22**

Awards 2013: Best Standmounter (Premium)

Product	₹	Verdict	Standmount Floorstander	Powered	Finishes	Dimensions (hwd,cm)
Audioengine P4	18,000	★★★★★	Small in size, huge in sound: a must-audition pair	●	3	23x14x17
PSB Alpha T1	37,000	Not Yet Rated	Not Yet Rated	●	3	91x18x31
PSB Alpha LR1	13,000	Not Yet Rated	Not Yet Rated	●	3	18x12x16
Waterfall Serio	15,000	Not Yet Rated	Not Yet Rated		3	5x5x3
Q Acoustics 2010i	19,200	★★★★★	Set the standard at this price and size level	●	4	23x20x15
Q Acoustics 2020i	25,900	★★★★★	<b>Best stereo speakers (Budget), Awards 2013</b>	●	4	26x17x28
Tannoy Mercury V1i	19,800	★★★★★	An excellent entry-level all-rounder	●	2	30x17x26
Wharfedale Diamond 10.0	11,500	★★★★★	An ideal choice for the easily startled, but a little straitlaced for our liking	●	7	24x15x17
Audioengine A5+	27,980	★★★★★	Bigger, better and more flexible than the originals	●	3	27x18x20
Q Acoustics Q-BT3	39,990	★★★★★	There are few other products as versatile and easy to like at this price	●	4	31x19x24
Boston Acoustics A-26	24,600	★★★★★	A beautifully accomplished standmounter	●	2	33x21x27
B&W 685 S2	65,000	★★★★★	A superb, hugely entertaining pair of speakers. Worth the wait? Absolutely	●	2	35x19x32
B&W MM-1	40,000	★★★★★	Still good, but there's better available	●	1	17x10x10
Waterfall Hurricane Evo	31,200	Not Yet Rated	Not Yet Rated		3	11x7x3
Bose Computer MusicMonitor	28,013	★★★★★	Enjoyable sound for a speaker this small	●	2	12x7x12
DALI Lektor 2	37,500	★★★★★	Seriously entertaining speakers and simply stunning at this money	●	2	31x18x22
DALI Zensor 3	33,000	★★★★★	If it's entertainment you crave, these standmounters deliver in spades	●	3	35x21x29
DALI Zensor 1	23,700	★★★★★	These brilliant budget standmounters demand a listen	●	2	27x16x22
Epos Epic 1	32,950	★★★★★	Punchy and exciting but they can't deliver all-round ability	●	2	31x19x25
Focal Chorus 706V	49,999	★★★★★	Thoroughly enjoyable but they may not cut it with dance music	●	3	39x22x29
Focal XS Book	29,999	★★★★★	A potent-sounding speaker that brings hi-fi listening to your desktop.	●	1	28x11x20
KEF Q300	33,000	★★★★★	Product of the year - Stereo speakers, Awards 2011	●	3	36x21x30
Totem Dreamcatcher	33,250	Not Yet Rated	Not Yet Rated		4	11x5x7
Totem Mite	44,750	Not Yet Rated	Not Yet Rated		6	11x6x8
Monitor Audio Bronze BX2	32,000	★★★★★	<b>Best stereo speakers (Budget-Mid), Awards 2012</b>	●	4	35x19x26
Monitor Audio Silver RX1	43,900	★★★★★	Form and function in perfect harmony, these speakers will sit pretty in any home	●	6	31x19x24
Mordaunt-Short Aviano 1	18,000	★★★★★	Still great, but the rivals have caught up	●	1	28x18x27
Mordaunt-Short Aviano 2	23,000	★★★★★	Plenty of bang for your buck, and more besides	●	3	32x21x30
Mordaunt-Short Mezzo 2	37,800	★★★★★	For speakers so small, you get surprisingly full bass	●	2	35x22x28
Q Acoustics 2050i	66,400	★★★★★	<b>Best floorstander (Mid), Awards 2012</b>	●	4	100x32x27
Quad 11L Classic	38,000	★★★★★	Impressive standmounters but lack a touch of sparkle	●	4	31x19x24
Tannoy Mercury V4i	48,200	★★★★★	Best floorstander (Mid), Awards 2011	●	2	97x20x28
Tannoy Revolution DC4	42,700	★★★★★	They may be small of stature but these Tannoys have a huge sonic heart	●	2	27x15x16
Tannoy Revolution DC6	70,300	★★★★★	<b>Best standmounter (Mid), Awards 2012</b>	●	1	36.5x20x25
Triangle Color	49,400	★★★★★	Small, but perfectly formed	●	3	29x17x24
Wharfedale Diamond 10.1	18,500	★★★★★	Fresh competition now offers more for the money	●	4	30x19x28
Wharfedale Diamond 121	20,000	★★★★★	Fabulous sound. For insight and entertainment, the 121s needn't fear any rival.	●	7	32x17x23
Audio Pro LV2e	86,625	★★★★★	Wireless desktop speakers with a hi-fi flourish		3	98x14x24
Audiovector Ki1 Super	TBA	★★★★★	These pint-sized speakers lack far-reaching dynamics, but are easy to live with	●	5	98x14x24
Audiovector Ki3 Standard	TBA	★★★★★	Packed with resolution and speed	●	5	98x14x24

## SPEAKERS continued

Product	₹	Verdict	Standmount Floorstander	Powered	Finishes	Dimensions (hwd,cm)
Dynaudio DM 2/6	59,000	★★★★★	●		2	29x17x24
Dynaudio DM 2/7	66,000	★★★★★	●		1	36x22x27
ATCSCM 11	93,000	★★★★★	●		1	38x21x25
B&WXT2	1,12,500	★★★★★	●		2	31x15x20
DALI Ikon 6 MK2	1,26,000	★★★★★	●		3	100x19x36
DALI Ikon 1 Mk2	60,000	★★★★★	●		3	33x15x26
DALI Mentor Menuet	84,000	★★★★★	●		2	25x15x23
DALI Zensor 5	54,900	★★★★★	●		2	84x16x27
Energy Speakers CF70	78,400	Not yet rated	●		1	103x21x40
Energy Speakers CF50	67,200	Not yet rated	●		1	98x18x37
PSB Image T5	67,000	Not yet rated	●		2	94x21x32
PSB Imagine T	1,39,000	Not yet rated	●		5	94x21x35
Elac BS142	60,000	★★★★★	●		1	26x16x26
Elipson Planet L	60,000	★★★★★	●		3	40x42x43
Epos Epic 5	66,425	★★★★★	●		2	92x21x32
KEFLS50	1,10,000	★★★★★	●		1	30x20x28
KEFR100	73,000	★★★★★	●		4	28x18x29
Monitor Audio Bronze BX5	55,000	★★★★★	●		4	85x17x25
Monitor Audio Silver RX2	65,300	★★★★★	●		6	37.5x23x30
Monitor Audio Silver RX6	83,250	★★★★★	●		6	91x28x31
Monitor Audio Silver RX8	1,09,000	★★★★★	●		6	96x28x39
Mordaunt-Short Aviano 6	41,500	★★★★★	●		3	95x21x30
Mordaunt-Short Aviano 8	52,000	★★★★★	●		3	95x21x32
Mordaunt-Short Mezzo 6	75,600	★★★★★	●		2	100x22x28
Mordaunt-Short Mezzo 8	1,09,000	★★★★★	●		2	107x22x31
PMCD B1i	1,20,000*	★★★★★	●		4	29x16x23
Quad 12L Classic	52,000	★★★★★	●		4	34x21x28
Spendor S3/SR2	84,500	★★★★★	●		4	31x17x18
Spendor SA1	1,35,800	★★★★★	●		3	31x17x19
Tannoy Precision 6.1	96,300	★★★★★	●		2	33x22x26
Tannoy Precision 8D	60,000*	★★★★★	●		1	44x27x37
Tannoy Revolution DC6T	1,03,700	★★★★★	●		1	95x26x29
Tannoy Revolution DC6T SE	1,10,000*	★★★★★	●		1	100x31x28
Tannoy Rev. Sig. DC4	40,000*	★★★★★	●		2	27x17x18
Tannoy Rev. Sig. DC6T	1,20,000*	★★★★★	●		2	14x9x9
Totem Rainmaker	59,500	★★★★★	●		4	36x17x23
Triangle Color 123	77,000	★★★★★	●		3	14x14x14
Triangle Comete Anniv.	1,24,000	★★★★★	●		1	42x20x34
Vienna Ac. Haydn Grand	85,920	★★★★★	●		5	36x17x27
Wharfedale Denton	52,000	★★★★★	●		1	32x20x31
Neat Iota	85,000	★★★★★	●		5	13x20x17
Elac FS249	2,40,000	Not yet rated	●			115x26x36
JBL Project Everest DD66000	16,16,999	Not yet rated	●		2	44x38x18
JBL Synthesis 4700	7,04,599	Not yet rated	●		1	43x20x15
Neat Motive SX1	2,20,000	★★★★★	●		4	93x16x20
PSB Synchrony One	3,47,000	Not yet rated	●		3	109x23x33
PSB Synchrony One B	1,49,000	Not yet rated	●		3	99x19x28
ATCSCM 100A	10,99,000	★★★★★	●		4	107x40x56

**WHAT HI FI?**  
**SOUND AND VISION**

INDIA'S NO.1 HOME ENTERTAINMENT MAGAZINE

**SUBSCRIBE  
NOW**

p70

## SPEAKERS continued

Product	₹	Verdict	Standmount Floorstander	Powered	Finishes	Dimensions (hwd,cm)
ATC SCM40	2,20,000	★★★★★ Among the best at this price level, but is your system good enough?	●		1	97x23x32
Harbeth P3ES-R	1,74,027	Not yet rated Not yet rated	●		4	30x19x20
Harbeth Compact 7ES-3	2,46,089	Not yet rated Not yet rated	●		4	52x27x32
Harbeth Super HL5	3,00,181	Not yet rated Not yet rated	●		4	64x32x30
B&W 800 Diamond	26,71,875	★★★★★ An exceptional performer, and a fine showcase for B&W's range of technology	●		3	118x45x65
B&W 805 Diamond	5,34,375	★★★★★ Good, but easier to admire than really love	●		3	42x24x35
B&W PM1	2,79,000	★★★★★ Best standmounter (Premium), Awards 2011	●		1	33x19x30
Burmester B10	5,60,000	★★★★★ Well built, well refined and an engaging listen. We're in love	●		3	39x22x28
Neat Motive SX2	1,75,000	★★★★★ Cohesive, authoritative and downright exciting	●		3	39x21x37
DALI Fazon F5	2,49,000	★★★★★ Stylish deliverers of audiophile sound	●		3	92x28x32
DALI Mentor 6	2,55,000	★★★★★ Dynamic floorstanders that are really fast and agile	●		1	40x8x15
Dynaudio Excite X32	1,94,000	★★★★★ These pack an eloquent, expansive sound	●		4	92x17x27
Dynaudio DM 3/7	1,48,000	★★★★★ Plenty of positives in this mid-range floorstander	●		2	96x20x27
Dynaudio Focus 160	1,88,000	★★★★★ Just do the job and don't intrude on the entertainment	●		6	35x20x29
Dynaudio Excite X12	80,000	★★★★★ They get enough right to warrant the full five stars	●		4	29x17x26
Focal Diablo Utopia	8,99,999	★★★★★ When it comes to levels of insight, little at this price even comes close	●		Any	43x26x43
Jamo R907	4,98,000	★★★★★ The innovative R907s are stunningly capable speakers	●		1	119x44x19
KEF Reference 207/2	12,50,000	★★★★★ Big, bold and stunningly built, they major on bass	●		4	123x40x69
Linn Akurate 242	6,74,860	★★★★★ Very impressive speakers, and ideal in a Linn set-up	●		2	100x21x38
Monitor Audio PL100	2,13,000	★★★★★ For those who want sonic delivery and insight	●		3	37x23x29
Mon. Audio Platinum PL300	4,78,000	★★★★★ Its been a long time coming, and it is well worth the wait	●		3	111x41x47
Mordaunt-Short Perf. 2	1,56,000	★★★★★ Not all-rounders, but exceptional in some areas	●		3	49x24x36
Mordaunt-Short Perf. 6	2,68,000	★★★★★ Among the most realistic-sounding speakers ever	●		2	121x24x37
Neat Petite SX	1,75,000	★★★★★ Small and perfectly formed standmounters	●		6	31x20x18
Neat Ultimatum XLS	6,20,000	★★★★★ An entertainer of the highest order if partnered with care	●		9	38x22x37
PMC DB15-All	2,20,000*	★★★★★ They may not look it, but these PMCs sound like every penny's worth	●		1	29x16x28
PMC Fact 3	4,20,000*	★★★★★ Hugely capable but a touch overcontrolled	●		4	54x16x30
PMC Fact 8	5,00,000*	★★★★★ These PMC floorstanders are quite simply magical - even at this price	●		4	103x15x38
PMCFB1i	2,50,000*	★★★★★ Great all-rounders. They have real long-term appeal	●		4	100x20x30
PSB Imagine Mini	49,000	★★★★★ Tiny speakers with a surprising amount of heft. Good for a small room	●		5	23x14x21
PMCPB1i	6,50,000*	★★★★★ Simply excellent speakers: big, bold and accomplished	●		1	108x20x40
PMCTwenty 22	2,20,000*	★★★★★ <b>Best standmounter (Premium), Awards 2012</b>	●		4	41x18x37
PMCTwenty 23	3,25,000*	★★★★★ <b>Best floorstander (Premium), Awards 2012</b>	●		4	92x15x33
ProAc Response D18	1,49,625	★★★★★ Best floorstander (Premium), Awards 2011	●		6	93x19x27
ProAc Studio 140 Mk2	1,16,275	★★★★★ An entertaining and dynamic performer	●		4	104x19x28
Quad ESL 2805	5,40,000	★★★★★ Exceptional electrostatic speakers	●		1	104x70x39
Quad ESL 2812	on request	★★★★★ Still a terrific electrostatic speaker, in certain respects it remains unmatched	●		1	107x69x38
Spendor A6R	2,25,000	★★★★★ An outstanding pair of speakers that do very little wrong	●		5	88x19x28
Sonus F. Cremona Auditor M	4,83,750	★★★★★ One of the best standmounts money can buy	●		2	35x20x37
Spendor A5	1,63,000	★★★★★ The most accomplished speakers for this money	●		4	79x17x25
Spendor A6	2,06,000	★★★★★ Brilliant speakers for the money - a class-leading combination of insight and naturalness	●		4	88x19x28
Spendor A9	4,06,000	★★★★★ Best stereo speakers (Premium), Awards 2010. Stunningly capable	●		4	103x21x35
Spendor D7	3,18,000	★★★★★ The finest Spendors in years	●		6	95x20x32
Spendor SP100R2	6,28,500	★★★★★ Can still compete with the best at this price level	●		2	70x37x43
Spendor SP2/3R2	2,24,500	★★★★★ They're wonderfully natural with a seamless presentation	●		1	55x28x33
Tannoy Definition DC8	2,81,500	★★★★★ Capable of seriously controlled sound	●		3	47x27x26
Totem Mani-2 Signature	2,49,900	★★★★★ When it comes to outright enjoyment we can't think of any rival speakers we prefer for this money	●			44x21x31
Triangle Quartet	2,48,400	★★★★★ Hugely entertaining premium floorstanders	●		2	123x37x39
Wharfedale Jade-5	1,52,000	★★★★★ Floorstanders that pack immense power and poise	●		3	106x25x40

# WHAT HI FI?

## SOUND AND VISION

INDIA'S NO.1 HOME ENTERTAINMENT MAGAZINE

# SUBSCRIBE NOW

p70

# Stereo amplifiers

**Integrated** These amplifiers combine a preamp and power section in one box  
**Power output** A higher number usually means louder, depending on speakers  
**Digital inputs** Some amplifiers now have a DAC built in, which could be useful

## The shortlist



**AWARD WINNER**  
**NAD D3020**



**PRODUCT OF THE YEAR**  
**Arcam FMJ A19**



**AWARD WINNER**  
**Naim Nait 5i**

Product	₹	Verdict	Power (w)	DAC	Line level in	MM phono in	MC phono in	USB in	Tape loops	Preamp out	Speaker outs	Tone controls	Headphone out	Remote control	Finishes	Dimensions (hwd, cm)
Arcam FMJ A19	72,000	★★★★★ Picky about partners but wonderfully talented	50	6	1	0	1	●	2	●	●	●	●	1	9x43x28	
Cambridge Audio Azur 351A	TBA	★★★★★ Worth considering if you prefer an energetic approach	45	5	0	0	●	1	2	●	●	●	●	2	9x43x34	
Cambridge Audio Azur 651A	43,000	★★★★★ Meaty and powerful, but not the most refined	75	5	0	0	1	●	2	●	●	●	●	1	12x43x35	
Cyrus 6a	1,24,000	★★★★★ <b>Best stereo amp (Mid), Awards 2012</b>	40	6	0	0	0	●	2	●	●	●	●	2	7x22x36	
Denon PMA-710	29,700	★★★★★ The most enjoyable Denon amp we've heard in ages	50	5	1	0	2	●	2	●	●	●	●	2	12x43x21	
Denon PMA-720AE	34,900	★★★★★ Entertaining and capable, but sonically stubborn	50	4	1	0	1	●	1	●	●	●	●	2	12x43x31	
Marantz PM6005	41,900	★★★★★ A shot across the bow to Marantz's rivals. An excellent system	45	5	1	0	1	2	●	●	●	●	●	2	11x44x37	
Marantz PM6004	39,900	★★★★★ Product of the Year - Stereo amplifiers, Awards 2011	45	5	1	0	1	2	●	●	●	●	●	2	11x44x37	
Marantz PM8003	56,700	★★★★★ Built like a battleship and delivers most of the goods	70	5	1	0	2	●	2	●	●	●	●	2	12x44x36	
NAD C326BEE	38,000	★★★★★ A really musical amplifier to grace any budget system	50	7	0	0	2	●	1	●	●	●	●	1	10x44x29	
NAD C356BEE	57,000	★★★★★ A party animal of an amplifier	80	7	0	0	2	●	2	●	●	●	●	1	13x44x34	
Naim Nait 5i	1,00,000	★★★★★ The Nait 5i gets all the basics right and more	50	4	0	0	1	1	1	●	●	●	●	1	7x44x31	
Onkyo A-9030	25,000	★★★★★ Proof that Onkyo knows how to build good stereo gear	65	4	1	0	1	2	●	●	●	●	●	2	14x44x33	
Onkyo A-9050	35,000	★★★★★ Lean presentation, but there's plenty to like	75	5	1	0	1	●	1	●	●	●	●	2	14x44x33	
Roksan Kandy K2BT	1,30,000	★★★★★ Full of power and punch, but some heart and soul is missing	140	5	1	0	1	●	1	●	●	●	●	2	11x43x38	
Roksan Kandy K2	82,600	★★★★★ Best stereo amp (Budget-Mid), Awards 2011	125	5	1	0	1	●	1	●	●	●	●	3	10x43x38	
Rotel RA-04SE	45,000	★★★★★ A startling upgrade to an already strong performer	40	4	1	0	1	●	2	●	●	●	●	2	7x44x34	
Rotel RA-06SE	91,125	★★★★★ A forceful, articulate listen. Could do with more detail	70	5	1	0	1	●	2	●	●	●	●	1	9x44x34	
Rotel RA-10	55,125	★★★★★ <b>Best Stereo Amp (Budget), Awards 2012. PRODUCT OF THE YEAR</b>	40	4	1	0	1	●	2	●	●	●	●	2	27x43x34	
Rotel RA-1520	1,05,750	★★★★★ It's got good looks, a good spec, and a great sound	60	5	1	0	1	●	2	●	●	●	●	2	9x43x269	
Cyrus 8a	1,82,000	★★★★★ Everything we've come to expect and love about Cyrus	70	5	0	0	1	●	2	●	●	●	●	2	7x22x36	
Cyrus 8 DAC	2,19,000	★★★★★ Meticulous and engaging amp and DAC combo	70	●	6	0	0	●	0	2	●	●	●	2	7x22x364	
Denon PMA-2010AE	1,39,900	★★★★★ Listen to this amp in full flow and it's a monster	80	4	1	1	2	●	2	●	●	●	●	1	18x43x449	
Naim Nait XS	1,75,000	★★★★★ Still a top class premium amplifier	60	3	0	0	2	●	1	●	●	●	●	1	7x43x30	
Quad II Classic Integrated	3,80,000	★★★★★ A fine integrated amplifier with a hefty price tag	25	3	1	1	1	1	1	●	●	●	●	1	20x31x38	
Roksan Caspian M2	1,80,000	★★★★★ <b>Best stereo amplifier (Premium) Awards 2012</b>	85	5	0	0	1	●	1	●	●	●	●	2	8x43x332	
Unison Research Preludio	2,40,000	★★★★★ Rubs shoulders with the very best at this price	14	4	0	0	1	1	1	●	●	●	●	1	20x40x38	
Unison Research S6	2,90,000	★★★★★ In the right system, the S6 is truly magical	33	5	0	0	1	1	1	●	●	●	●	2	21x35x49	
Unison Research S9	6,45,000	★★★★★ We can't help but love this quirky valve amplifier	35	4	0	0	0	1	1	●	●	●	●	1	25x41x57	
Unison Research Simply Italy	1,50,000	★★★★★ A well-engineered valve amplifier at a sensible price	12	5	0	0	1	1	1	●	●	●	●	2	26x19x35	
NAD D3020	42,500	★★★★★ <b>Best stereo amplifier (Budget) Awards 2013</b>	30	2	0	0	●	0	1	●	●	●	●	2	19x6x22	
Naim Nait 5si	1,25,000	★★★★★ <b>Best stereo amplifier (Mid) Awards 2013</b>	60	3	0	0	1	1	1	●	●	●	●	2	7x44x331	
Cyrus DACXP Signature	TBA	★★★★★ With the signature update, the DACXP remains a fine product	70	2	0	0	1	●	1	●	●	●	●	2	7x22x36	

## Preamps

Preamps are also known as control units. On a most basic level, they perform two functions: source selection and volume control. Most powered preamps also amplify the signal slightly in order to make matching to a power amplifier easier. Some include phono stages.

Product	₹	Verdict	Line level in	MM phono in	MC phono in	Tape loops	Preamp out	Balanced out	Headphone out	Tone controls	Remote control	Dimensions (hwd, cm)
ATCCA-2	1,43,000	★★★★★	A matchless preamp when paired with the P1 power amp	5	0	0	1	●	●	●	●	9x44x32
Cyrus DACXP+	3,28,000*	★★★★★	Massive ability in a small box	2	0	0	1	●	●	●	●	7x22x36
Linn Akurate Kontrol	4,18,600	★★★★★	Part of the Linn Akurate system - and truly awesome	4	1	1	1	●	●	●	●	9x38x38
NAD C165BEE	75,000	★★★★★	A brute of a preamp	4	1	1	2	●	●	●	●	8x44x29
Naim NAC 152XS	1,25,000	★★★★★	It's good, but could do better with dynamics	5	0	0	0	●	●	●	●	7x43x30
Quad Elite Pre	79,000	★★★★★	Doesn't blow us away, but it's still worth consideration	6	1	1	1	●	●	●	●	7x32x31
Rotel RC-1580	1,59,750	★★★★★	A likeable, fully featured performer that delivers much for the money	5	1	1	2	●	●	●	●	10x43x34
Audio Research LS27	7,31,250*	★★★★★	A fine preamp but struggles to shine in comparison to the Reference 75	6	0	0	1	●	●	●	●	13x48x34
Burmester 808 MK5	25,00,000*	★★★★★	A beautifully constructed, highly versatile preamp for serious devotees	Opt	Opt	Opt	Opt	●	●	●	●	95x48x33
Chord Electronics CPA 8000	20,50,000	★★★★★	A magnificent preamp, but not quite the masterpiece its price demands	0	0	2	●	●	●	●	●	31x42x36
Naim NAC252	6,50,000	★★★★★	Makes a magical combination with the NAP250 power amp	6	0	0	0	●	●	●	●	9x43x31

## Power amps

These are effectively the powerhouse of the system. They deliver the high currents necessary to make a loudspeaker work. They can be configured as a stereo unit, or monoblocs, where the circuitry for each channel is housed separately. Don't judge a power amp by its output level.

Product	₹	Verdict	Type	Power (w)	Phono in	XLR in	Dimensions (hwd, cm)	Weight (kg)
ATCP1	2,16,000	★★★★★	A matchless power amp when paired with the CA-2 preamp	Stereo 150	1	1	14x44x35	26
Cyrus Mono X300	3,28,000*	★★★★★	Exceptionally fluid and agile. Recommended	Stereo 235	1	1	7x22x36	73
Linn Akurate 2200	3,33,795	★★★★★	A fine product with a distinctive sonic signature	Stereo 111	1	1	9x38x38	6.5
NAD C275BEE	99,000	★★★★★	A great power amp, best matched with the C165BEE preamp	Stereo 150	1	0	13x44x35	15
Naim NAP 155 XS	1,50,000	★★★★★	It's a good performer, but not the last word in dynamics	Stereo 60	0	0	7x43x30	7.5
Naim NAP 250	3,75,000	★★★★★	Paired with the NAC252 preamp it's magical	Stereo 80	0	0	9x43x32	165
Quad QSP	95,000	★★★★★	Needs to be auditioned - a confident listen	Stereo 140	2	0	15x33x27	14
Rotel RB-1582	1,80,000	★★★★★	Great when paired with the RC-1580 preamp	Stereo 200	1	0	14x43x41	33
Audio Research Reference 75	9,00,000*	★★★★★	A fabulous power amp, match it with care and you'll have sonic magic	Stereo 75	0	1	22x48x50	21
Burmester 911 Mk3	35,00,000*	★★★★★	Awesome price, awesome bit of kit	Stereo 535	0	1	22x48x48	31
Chord SPM 14000 MkII	19,75,000	★★★★★	An awe-inspiring monobloc, yet not quite as sonically rounded as we'd like	Mono 700	1	1	31x48x69	75

## Instant expert... hi-fi separates

### 1. Why matching pairs are a winning combination

We advocate separates over all-in-one systems. Sound-wise, separates tend to perform better, but when buying we still suggest you demo the same maker's matching amp and CD player. The kit usually shares the same design team and will sonically complement each other: if you like the sound of the amp, you'll probably enjoy the CD player, too.

### 3. Position before you listen - and don't stack it, rack it

You've bought your shiny new system. But you're not going to stack your new amp, CD spinner and turntable on that rickety table, are you? And don't even think of putting the kit on the floor. To sound it's best, hi-fi kit needs a dust-free, level and secure base. Invest pounds in a dedicated rack, and the sonic (and visual) rewards justify the outlay.

### 2. Listen to your favourite music, not the dealer's

Hi-fi dealers should have a decent CD and vinyl collection for demo purposes, but we suggest you take your own. Take tunes you know so you can concentrate on how the kit is performing, rather than on the new music. And don't just take your 'good'-sounding CDs. If you listen to lots of compressed pop, take it and hear exactly how it sounds.

### 4. Give your amplifier room to breathe

Well done for buying that nice equipment rack, but before you undo all your good work, make sure you give your stereo amplifier room to breathe. These machines get hot, and the chassis vents shouldn't be covered up. The top shelf of your rack is ideal, but if you also own a top-loading CD player and/or turntable you'll need clearance for all.

### 5. Keep on running, keep on improving

Hi-fi units are also (sort of) like Spanish footballers. No, not constantly feigning a blown fuse, but happiest playing in the heat. New kit can take weeks to reach optimum levels. Once run-in - unless you have an environmental conscience - we suggest you leave your kit on. Otherwise, give it around half-an-hour to warm up before you hit play.

# iPod docks

**Docks with power** \_\_\_\_\_ These are ready-made systems for your iPod; usually include speakers  
**Docks without power** \_\_\_\_\_ These integrate an iPod into an existing system as a line level source

## The shortlist



Product	₹	Verdict	AirPlay	Bluetooth	Dock type	AUX	Power (w)	Dimensions (hwd, cm)
Arcam rCube	42,300*	★★★★★ Best iPod dock (Mid), Awards 2011			iOS	●	90	20x20x20
Bose SoundDock II	14,513	★★★★★ A talented dock that can fill an average-sized room			iOS	●	n/a	17x30x17
Epoz Aktimate Micro	27,500	★★★★★ <b>Best desktop speaker, Awards 2012</b>			iOS	●	40	24x15x20
Gear4 AirZone Series 1	19,900	★★★★★ AirPlay and iPad support, with good sound too	●		iOS	●	n/a	18x33x19
GenevaSound Model S	24,990	★★★★★ Discreet looks combine with authentically competitive performance			iOS	●	30	14x24x19
JBL OnBeat Venue LT	15,990	★★★★★ The VenueLT is a versatile, talented and enthusiastic dock		●	iOS	●	30	13x42x14
Logitech S71 Si	9995	★★★★★ <b>Best speaker dock (Budget), Awards 2012</b>			iOS	●	20	6x39x13
Logitech UE Air Speaker	TBA	★★★★★ <b>Best speaker dock (Mid), Awards 2012</b>		●	iOS	●	n/a	17x53x15
Monitor Audio i-deck 100	20,000	★★★★★ A dock that's full of style and substance			iOS	●	90	25x32x21
Monitor Audio i-deck 200	TBA	★★★★★ No frills but very high quality sound			iOS	●	140	25x55x21
Revo K2	30,000*	★★★★★ Lots to like - but it's not perfect			iOS	●	40	33x11x11
B&O BeoSound 8	92,000	★★★★★ Relishes big volumes, the performance justifies the cost			iOS		n/a	24x66x16
Bose SoundDock 10	48,263	★★★★★ This nifty Bose moves up a star		●	iOS	●	n/a	22x43x24
B&W Zeppelin Air	48,000	★★★★★ A massive step up from the original		●	iOS	●	150	17x54x21
Epoz Aktimate Maxi	56,450	★★★★★ True hi-fi sound in the form of a speaker dock			iOS	●	60	32x21x265
Geneva Lab Model L	1,10,000	★★★★★ More musical than your usual dock'n'speakers combo			iOS	●	100	29x45x37
Geneva Lab Model M	54,990	★★★★★ Still capable but rivals have caught it up			iOS	●	50	20x37x25
Geneva Lab Model XL	2,00,000	★★★★★ If you've lots of money and space, this is a must try			iOS	●	600	79x55x37
JBL OnBeat Xtreme	24,990	★★★★★ <b>Product of the Year - Speaker Docks, Awards 2012</b>		●	iOS	●	120	23x44x24
Loewe AirSpeaker	TBA	★★★★★ Stylish, subtle and great-sounding. It's a serious must-try		●	iOS	●	4x20	13x24x244
Marantz Consolette	75000*	★★★★★ Not an allrounder, but a unique device with lovely sound		●	iOS		150	26x54x21

# Wireless speakers

**Bluetooth** \_\_\_\_\_ Universal wireless system that's incorporated into most sources  
**AirPlay** \_\_\_\_\_ Apple's proprietary wireless system; works over your home network

Product	₹	Verdict	AirPlay	Bluetooth	AUX	Charging	Battery	Dimensions (hwd, cm)
B&O Beolit 12	66,600	★★★★★ A great design with amazing build quality		●	●	●	●	19x23x13
B&W A5	38,000	★★★★★ At this price there are few better AirPlay devices		●	●			18x30x20
B&W A7	62,750	★★★★★ If you use AirPlay, the A7 demands your attention		●	●			22x36x16
Bose SoundLink Air	23,513	★★★★★ Not the last word in power or dynamics, but a tidy little package		●	●			17x31x10
Bose Soundlink W'less Mobile	20,138	★★★★★ A flexible, and user friendly wireless speaker			●	●	●	13x24x5
Cambridge Audio Minx Air 100	36,100	★★★★★ A worthy option, but it can't match the best when it comes to sound		●	●	●		18x35x12
Cambridge Audio Minx Go	12,500	★★★★★ Best wireless speaker (budget), Awards 2013. PRODUCT OF THE YEAR		●	●	●	●	23x24x6
JBL Charge	9990	★★★★★ A punchy and energetic sound is let down by some coarse and harsh treble		●	●	●	●	18x7x7
Bose SoundLink Mini	16,200	★★★★★ A no-frills approach reaps dividends in the SoundLink's performance		●	●	●	●	5x18x6

# Headphones

**Ear tips** Most in-ears come with these. Experiment with sizes to get the best fit.  
**In-line remote** Mostly for Apple devices, but Android-friendly units are growing. Handy.

## The shortlist



**AWARD WINNER**  
SoundMAGIC E10



**PRODUCT OF THE YEAR**  
AKG K451



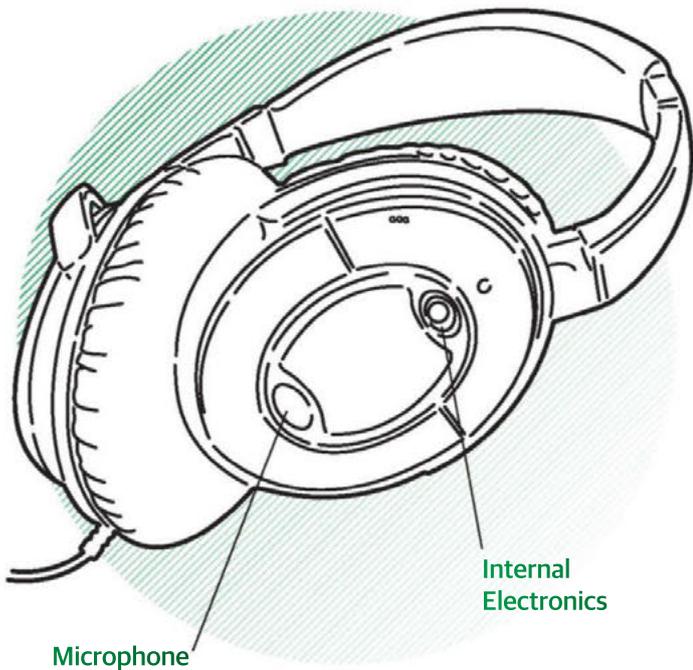
**AWARD WINNER**  
Sennheiser Momentum

Product	₹	Verdict	In-ear	On-ear	Type	Noise cancelling	Wireless	Weight (g)
Audio Technica ATH-CK550	TBA	★★★★★	●		Closed			8
Audio Technica ATH-CK555i	TBA	★★★★★	●		Closed			6
Audio Technica ATH-T400	TBA	★★★★★	●		Closed			260
Beyerdynamic DTX101IE	6795	★★★★★ <b>Best in-ears (Budget), Awards 2012</b>	●		Closed			11
Nokia BH-504	6500	★★★★★	●		Closed		●	108
Panasonic RP-HJE170	799	★★★★★	●		Closed			3
Panasonic RP-HTX7	3999	★★★★★ <b>Best portable on-ears (Budget), Awards 2012</b>	●		Closed			153
Sennheiser CX 300-II	3490	★★★★★	●		Closed			4
Sennheiser CX281	2790	★★★★★	●		Closed			16
Sennheiser HD 202	2290	★★★★★	●		Closed			130
Sennheiser MM 70i	7490	★★★★★	●		Closed		●	12
Sennheiser MM50	4990	★★★★★	●		Closed			7
Sennheiser PX100-II	3990	★★★★★	●		Open			80
Skullcandy Full Metal Jacket	3559	★★★★★	●		Closed			13
Skullcandy Icon 3	1949	★★★★★	●		Closed			45
SoundMagic E10	2500*	★★★★★ <b>Best in-ears (Budget), Awards 2012</b>	●		Closed			11
SoundMagic PL30	1486	★★★★★	●		Closed			10
SoundMagic PL50	2730	★★★★★	●		Closed			8
Sony MDR-570LP	2990	★★★★★	●		Closed			110
B&W P7	33,990	★★★★★ <b>Best portable on-ears, Awards 2013</b>	●		Closed			290
Audio Technica ATH-ANC1	TBA	★★★★★	●		Closed	●		100
Audio Technica ATH-ES55	TBA	★★★★★	●		Closed			120
Audio Technica ATH-ES7	TBA	★★★★★	●		Closed			160
Audio Technica ATH-ES88	TBA	★★★★★	●		Closed			130
Audio Technica ATH-EW9	TBA	★★★★★	●		Closed			33
Audio Technica ATH-M50	TBA	★★★★★	●		Closed			284
Audio Technica ATH-W1000	TBA	★★★★★	●		Closed			350
Audio Technica ATH-W1000X	TBA	★★★★★	●		Closed			350
Audio Technica ATH-WS55i	TBA	★★★★★	●		Closed			165
AKG K3003i	1,00,000*	★★★★★	●		Closed			10
AKG K370	8000	★★★★★	●		Closed			4
AKG K451	5000	★★★★★ <b>Best portable on-ears, Awards 2012. PRODUCT OF THE YEAR</b>	●		Closed			120
AKG Q701	19,990	★★★★★	●		Open			236
AKG Q460	TBA	★★★★★	●		Closed			120
Beyerdynamic DT880	22,399	★★★★★	●		Open	●	●	340
Beyerdynamic DTX80	4999	★★★★★	●		Closed			12

HEADPHONES continued

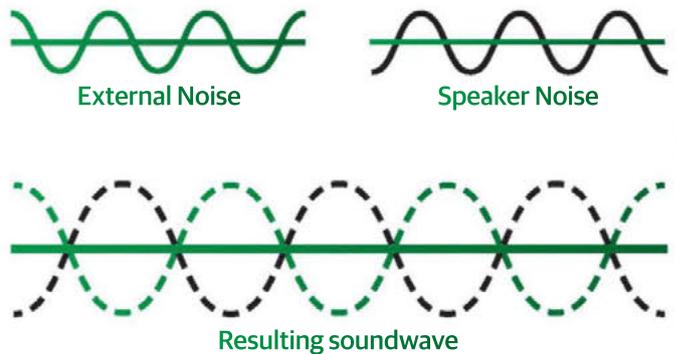
Product	₹	Verdict	In-ear	On-ear	Type	Noise cancelling	Wireless	Weight(g)
Beyerdynamic MMX 101iE	4750	★★★★★ <b>Best in-ears (Mid), Awards 2012</b>	●		Closed	●		11
Beyerdynamic T1	1,00,000*	★★★★★ Best home on-ear headphones (Premium), Awards 2010.		●	Closed			350
Beyerdynamic T50P	11,800	★★★★★ <b>Best portable on-ears (Premium), Awards 2012</b>	●		Closed			174
Bose Around-ear 2	8663	★★★★★ Packed with clever technology and work well		●	Closed			142
Bose MIE2i	7650	★★★★★ A perfect headphone meets microphone solution		●	Closed			19
Bose Mobile in-ear headset 2	8213	★★★★★ Unobtrusive in place, but lacking in excitement		●	Closed			18
Bose QuietComfort 15	17,550	★★★★★ <b>Best noise-cancelling headphones, Awards 2012</b>	●		Closed	●		227
B&W P3	16,500	★★★★★ Stylish and sonically talented on-ear headphones		●	Closed			130
B&W P5	23,500	★★★★★ Aesthetically beautiful and aurally accomplished too		●	Closed			195
Focal Spirit One	19,999	★★★★★ Refined enough, but not the most exciting		●	Closed			225
Grado SR80i	12,000*	★★★★★ <b>Best home on-ear headphones (Budget-Mid), Awards 2012.</b>	●		Open			200
Harman/Kardon CL	9990	★★★★★ An impressive headphone debut for Harman/Kardon		●	Closed			195
Klipsch Image One	6600	★★★★★ Perfect for those who enjoy a lot of bass		●	Closed			138
Klipsch Image X5	9750	★★★★★ Still a great buy, with a very balanced sound		●	Closed			11
Klipsch Image X10i	12,000	★★★★★ Best in-ears (Premium), Awards 2011		●	Closed			320
Klipsch S4i	4490	★★★★★ These Klipschs are great all-rounders, with an exciting edge		●	Closed			12
Logitech UE 9000	31,995	★★★★★ Could be more refined, but make up for this with bundles of energy			Closed	●	●	378
Martin Logan Mikros 70	TBA	★★★★★ If you like your music to be presented with a matter-of-fact approach, these are just the job		●	Closed			13
Monster Beats by Dre iBeats	15,000	★★★★★ For smooth, bassy sounds they're ace		●	Closed			n/a
Monster Beats Pro by Dre	38,000	★★★★★ Brilliant at what they do well		●	Closed			299
Oppo PM-1	79,999	★★★★★ Oppo's first pair of headphones are a resounding success		●	Open			395
Philips Fidelio M1	16,000*	★★★★★ <b>Best portable on-ears (Mid-Premium), Awards 2012</b>	●		Closed	●		166
PSB M4U2	28,000	★★★★★ PSB's first headphones are truly brilliant. Hear them now!		●	Closed	●		362

How Does Noise Cancelling Work?



This kind of design is usually battery-powered and will reduce background noise. They contain microphones that pick up external noise, and then invert its waveform electronically before outputting it to your ears. This inverse wave works against the original, and greatly reduces the amount you hear.

It works best on continuous low-frequency sounds such as plane engines and Brian Blessed humming. It's not unusual for such designs to tweak tonal balance to improve things, although some add a degree of hiss in the process.



Try these

**Bose QuietComfort 15** ★★★★★ ₹19,013  
 "The noise-cancelling is so effective it can feel like silence is being pushed into your head. Mid-tune, it's almost as if the outside world disappears completely."

**Logitech UE9000** ★★★★★ ₹35,000  
 "They could do better in terms of refinement - but if it's energy and entertainment you're after (as well as Bluetooth), they're pretty much spot-on."

**PSB M4U2** ★★★★★ ₹28,000  
 "If you want to turn your office, flight or train journey into a private listening experience of exceptional quality, these are the headphones to get."

## HEADPHONES continued

Product	₹	Verdict	In-ear On-ear	Type	Noisecancelling Wireless	Weight (g)
Sennheiser HD 380 Pro	9990	★★★★★ Still seriously good headphones, but rivals have caught up	●	Closed		220
Sennheiser HD25-1 II Adidas	3990	★★★★★ Stylishly excellent all-rounders	●	Closed		140
Sennheiser HD 800	84,990	★★★★★ They offer much, but close rivals pip them to the post	●	Open		350
Sennheiser IE 8i	24,990	★★★★★ Enjoyable enough, but need a better tonal balance	●	Closed		18
Sennheiser IE80	27,990	★★★★★ Expensive, but a truly quality option	●	Closed		5
Sennheiser MM 400-X	17,990	★★★★★ <b>Best wireless headphones, Awards 2012</b>	●	Closed	●	105
Sennheiser Momentum	24,990	★★★★★ Smooth, punchy, refined all-rounders	●	Closed		190
Sennheiser PXC 450	27,990	★★★★★ Excellent fit and great performance, but now beaten by newer rivals	●	Closed		240
Sennheiser RS 160	13,490	★★★★★ An exciting, affordable option but tiring over longer periods	●	Closed	●	226
Sennheiser RS 180	21,990	★★★★★ These comfortable, wireless headphones justify their premium price	●	Open	●	204
Sennheiser RS 220	29,990	★★★★★ A very neat wireless solution with great sound quality	●	Open	●	329
Sennheiser X 320	7990	★★★★★ The best Xbox gaming headphones we've heard so far	●	Closed		280
Shure SE115	8200	★★★★★ These Shures aren't only a colourful upgrade but a sound investment	●	Closed	●	30
Shure SE310	21,000	★★★★★ Detail and clarity is first class	●	Closed		7
Shure SE420	29,000	★★★★★ Once in your ears they offer a dynamic sound	●	Closed	●	29
Shure SE535	31,000	★★★★★ Still good but no longer the best	●	Closed	●	272
Shure SRH1840	49,778	★★★★★ Not cheap, but worth every rupee	●	Open		268
Sony MDR-1R	TBA	★★★★★ Detailed and airy, but need more kick	●	Closed		240
Sony MDR-Z1000P5	19,990	★★★★★ Impressive sounding cans - with good flexibility	●	Closed		270
Sony XBA-3iP	7990	★★★★★ <b>Best in-ears (Premium), Awards 2012</b>	●	Closed	●	7
SoundMagic HP100	15,000*	★★★★★ Sparkling detail, spacious character	●	Closed		228

## Headphones Jargon Buster

## OVER-EAR



The most popular hi-fi headphone design (also called circumaural), these cup your ears completely, usually with semi-air-tight earcups. You'll notice cans of this type used as monitors in recording studios: depending on the type of design they use they can be extremely effective at cutting out the outside world.

## ON-EAR



Supra-aural or on-ear designs tend to be smaller and lighter than circumaural models. They sit on your ear rather than over it, usually pressing on to it as well. Some listeners find them lighter and easier to wear for extended listening than over-ear models, but they do tend to allow in more sounds from outside.

## IN-EAR



Gone are the days when everyone else needs to hear your music. In-ear buds are a great way to isolate yourself in sound. Nowadays, in-ears usually come with rubber tips, which provide a good seal and help the music travel only down your ear canals. A better fit means better sound, so experiment with tip sizes.

## Try these

## AKG K550 ★★★★★

"The K550s are sweetly communicative, handle tempos in a natural, unforced manner and punch into and out of low-frequency information with precision."

## Philips Fidelio M1 ★★★★★

"A rounded, refined presentation. Vocals have room to breathe, while high-frequency sounds are natural and don't harden up when you crank the volume."

## Sony XBA-2iP ★★★★★

"Agility and precision is up there with the very best at this price, and the spacious delivery allows for plenty of detail all the way up the frequency range."

## Stereo systems

This category includes a wide range of products including all-in-one packages where the speakers are part of the system, through to micro systems where the electronics are housed separately from the speakers. A streaming option is available on many newer systems.

### The shortlist



**PRODUCT OF THE YEAR**

**Denon D-M39DAB**

Awards 2012: Best Micro System



**Ruark R4i**

Awards 2012: Best All-In-One Music System



**Onkyo CR-N755**

Awards 2012: Best Networked Micro System

Product	₹	Verdict	CD	Streaming	Internet Radio	DAB	FM	Analogue inputs	Digital inputs	Headphone out
Denon CEOL Piccolo	39,900	★★★★★	No matter what the source, the CEOL Piccolo will play all your music in superb style			●	●	●	●	●
Denon D-M39	44,900	★★★★★	<b>Best micro system, Awards 2012. PRODUCT OF THE YEAR</b>			●	●	●	●	●
Marantz M-CR502	31,758	★★★★★	Exceptional precision and timing, and better value			●	●	●	●	●
Onkyo CR-N755	32,000*	★★★★★	<b>Best networked micro system, Awards 2012</b>			●	●	●	●	●
Marantz M-CR610	54,900	★★★★★	<b>Best music system (premium), Awards 2013. PRODUCT OF THE YEAR</b>			●	●	●	●	●
Arcam Solo Mini	87,000	★★★★★	Best CD system (Mid), Awards 2010			●	●	●	●	●
Arcam Solo Neo	1,38,000	★★★★★	Extra functionality over the original Solo - great buy			●	●	●	●	●
Denon CEOL (RCD-N7)	39,900	★★★★★	Smooth and detailed, with great features			●	●	●	●	●
Linn Majik DSM	3,85,000	★★★★★	A thoughtfully designed system and a pleasure to use			●	●	●	●	●
Marantz M-CR603	39,900	★★★★★	Best microsystem (Premium) Awards 2011			●	●	●	●	●
Naim Uniti 2	3,25,000	★★★★★	Best Network Music Player (Premium)			●	●	●	●	●
Naim UnitiQute 2	1,25,000	★★★★★	Systems Product of the Year			●	●	●	●	●
Ruark Audio R4i	60,000*	★★★★★	<b>Best all-in-one music system, Awards 2012</b>			●	●	●	●	●

## Media streamers

These access the music or video files you have stored on your network. Check for file compatibility and decent control apps that improve usability.

Product	₹	Verdict	HDMI out	Optical out	Co-axial out	HDMI in	Optical in	Co-axial in	USB in	Wireless	Resolution (bit/kHz)	Video
Apple TV	8900	★★★★★	1	1	0	0	0	0	0	1	16/48	●
Asus O!Play HD2	8595	★★★★★	1	1	1	0	0	0	3		20/48	●
Cambridge Audio NP30	38,400	★★★★★	0	1	1	0	0	0	2	●	24/96	
Denon DNP-720AE	29,990	★★★★★	1	0	0	0	0	1		●	24/192	
Camb. Audio Stream Magic 6	69,700	★★★★★	0	1	1	0	1	1	1	●	24/96	
Cyrus Lyric 09	4,40,000	★★★★★	0	0	0	0	2	2	3	●	24/192	
Pioneer N50	NA	★★★★★	0	1	0	0	1	0	1		24/192	
Rotel RT-09	NA	★★★★★	0	1	1	0	1	1	1	●	24/192	
Cambridge Audio MinxXi	55,500	★★★★★	0	0	0	0	1	1	1		24/96	
Cyrus Stream X2	1,45,000	★★★★★	0	0	1	0	2	3	1	●	24/192	
Cyrus Streamline2	1,75,000	★★★★★	0	0	1	0	2	3	1	●	24/192	
Cyrus Stream XP2-QX	3,08,000	★★★★★	0	0	1	0	2	3	1	●	24/192	
Linn Kiko	3,20,000	★★★★★	1	0	0	4	1	0	0	●	24/192	
Naim NDX	3,50,000	★★★★★	0	1	1	0	0	1	1	●	24/192	
Naim Uniti 2	3,25,000	★★★★★	0	0	0	0	3	2	1	●	24/192	
Naim UnitiLite	2,00,000	★★★★★	0	0	0	0	3	2	1	●	24/192	

# Tablets

- Android** Offers great flexibility and innovation
- Apple iOS** Fantastic ease of use; massive choice of quality apps
- Windows** New kid on the block. Watch this space

## The shortlist



**Apple iPad Air**



**Apple iPad Mini Retina**



**Google Nexus 7**

Product	₹	Verdict	OS	3G	Screen size (in)	Resolution	Storage (GB)	Dimensions (h/w/d, mm)
Amazon Kindle Fire HD 16GB	14,590	★★★★★	Android	●	7	1280x800	16/32	241x186x10
Apple iPad 2 16GB Wi-Fi	24,500	★★★★★	iOS	●	9.7	1024x768	16/32	241x186x9
Apple iPad Mini 64GB Wi-Fi	33,900	★★★★★	iOS	●	7.9	1024x768	16/32/64	200x135x7
Apple iPad 4 32GB Wi-Fi	37,900	★★★★★	iOS	●	9.7	2048x1536	16/32/64	240x190x9
Asus Eee Pad Transformer	49,999	★★★★★	Android	●	10.1	1280x800	16/32	271x177x13
Asus Eee Pad Trans Prime	42,999	★★★★★	Android	●	10.1	1280x800	16/32	181x263x8
Google Nexus 7	9999	★★★★★ <b>Best tablet (Budget), Awards 2012. PRODUCT OF THE YEAR</b>	Android	●	7	1280x800	16/32	99x120x11
Google Nexus 10	34,413	★★★★★	Android	●	10	2560x1060	16/32	264x178x9
Amazon Kindle Fire HDX 7	25,000*	★★★★★	Android	●	7	1920x1200	16/32/64	186x128x9
Apple iPad Mini/Retina display	28,900	★★★★★	iOS 7	●	7.9	2048x1536	16/32/64	200x135x7
Apple iPad 4 16GB Wi-Fi	31,900*	★★★★★ <b>Best tablet over 8in, Awards 2013</b>	iOS	●	9.7	2048x1536	16/32/64	240x190x9
Apple iPad Air	35,900	★★★★★	iOS 7	●	9.7	2048x1536	16/32/64	240x170x8
Google Nexus 7 (2013)	20,999	★★★★★ <b>Best tablet up to 8in, Awards 2013. PRODUCT OF THE YEAR</b>	Android	●	7	1920x1200	16/32	200x114x9
Samsung Galaxy Note 10.1	49,470	★★★★★	Android	●	10.1	2500x1600	16/32/64	171x243x8
Sony Xperia Tablet Z	46,990	★★★★★	Android	●	10.1	1920x1200	16/32	72x266x9

## Things to consider: tablets



### Camera

Most tablet cameras are decent, but they won't be able to beat a dedicated camera in terms of picture quality. Think long and hard if you're looking to capture footage as quality can be inconsistent.

### Apps

iOS is the king of apps, but Android is hard on its heels and Windows is catching up. If apps are your thing then your choice may come down to which ones are available on each platform, rather than quantity.

### Keypad

Want to increase productivity? On-screen keypads are a mixed bag, but some have optional (and expensive) physical keyboards. Keep that in mind if you're looking to do some work on the go.

### Ecosystem

iOS, Android and Windows 8. Each one is better (or worse) than the other, in some way. Apple has the apps, while Android is customisable and Windows offers a lot in terms of functionality.

# WHAT HI FI? SOUND AND VISION

INDIA'S NO.1 HOME ENTERTAINMENT MAGAZINE

# SUBSCRIBE NOW

p70

# Smartphones

- Android** Offers great flexibility and innovation
- Apple iOS** Fantastic ease of use; massive choice of quality apps
- Windows** New kid on the block. Watch this space

## The shortlist



Product	Verdict	OS	4G	Screen size (in)	Resolution	Storage (GB)	Dimensions (hwd, mm)	
Google Nexus 5	★★★★★	A powerhouse of a smartphone in every respect	Android	●	5	1920x1080	16/32	138x69x9
Apple iPhone 5	★★★★★	Faster, lighter and better: iPhone gets its annual facelift	iOS	●	4.0	1136x640	16/32/64	124x59x8
Google Nexus 4	★★★★★	A top performer and a brilliant realisation of Android power	Android	●	4.7	1280x768	8/16	134x69x9
HTC One Max	★★★★★	A fine performer but could make better use of its big screen	Android	●	5.9	1920x1080	32	146x71x9
HTC One X+	★★★★★	Well worth considering: good for music and a joy to use	Android	●	4.7	1280x720	32/64	
LG G-Flex	★★★★★	All the pros of the G2 and more, but with a low-res screen	Android	●	6	1280x720	32	161x82x8
Nokia Lumia 920	★★★★★	A promising start for Nokia's flagship	Windows	●	4.5	1280x768	32	130x71x11
Nokia Lumia 1520	★★★★★	Apps still disappoint, but this is the best Windows Phone yet	Windows	●	6	1920x1080	32	163x85x9
Oppo N1	★★★★★	Quirky and flexible, this is a great effort from a promising brand	Android	●	5.9	1920x1080	16	171x83x9
Samsung Galaxy Note III	★★★★★	The original phablet. Updated and still among the best	Android	●	5.7	1920x1080	16/32	151x80x8
LG G2	★★★★★	Unbridled power and thoughtful design. A fantastic phone	Android	●	5.2	1920x1080	16/32	139x71x9
Samsung Galaxy S III	★★★★★	<b>Best smartphone, Awards 2012</b>	Android	●	4.8	1280x720	16/32	137x71x9
HTC One M8	★★★★★	Improves considerably on its predecessor. Does very little wrong	Android	●	5	1920x1080	32	146x71x9
Sony Xperia Z1	★★★★★	Sony fans will love it. A speedy, sleek and impressive smartphone	Android	●	5	1920x1080	16	144x74x9
HTC One	★★★★★	A true marvel in terms of smartphone tech	Android	●	4.7	1920x1080	16	
Apple iPhone 5S	★★★★★	<b>Best smartphone, Awards 2013. PRODUCT OF THE YEAR</b>	iOS	●	4.0	1136x640	16/32/64	124x59x8
Google Nexus 5	★★★★★	A powerhouse of a phone in every respect	Android	●	4.95	1920x1080	16/32	138x69x9
Nokia Lumia 925	★★★★★	The best Windows Phone yet	Windows	●	4.5	1280x768	16/32	129x71x9
Samsung Galaxy S4	★★★★★	Better than its predecessor but not as good as its rivals	Android	●	5.0	1920x1080	16/32/64	137706x8

## Consider these

Wired cans sound better, but wireless is catching up. Here are the best on offer



### Logitech UE 9000

Solid build and effective noise-cancelling features make the UE 9000 a fine proposition. The wireless connection is a tad unrefined but the energy produced is excellent. Good for six hours' use.



### Parrot Zik

Stylish and advanced, the Zik features the 2.1A2DP variant of Bluetooth which doesn't quite match aptX. Still, with NFC on board and a detailed sound to boot, the Zik should be on your list.



### Philips Fidelio M1BT

Our 2013 Award-winners boast aptX compatibility and easy-to-use controls. It's in the sound where they really shine, showing off an excellent turn of pace with bags of detail. Good for 10 hours' use.



### Sennheiser MM 400-X

A compact, portable design and low(ish) price make these cans quite enticing. Vocals have plenty of detail and directness, and with aptX along for the ride too, these are some capable headphones.

## HDMI cables

Digital cables that carry both picture and sound. These carry control signals as well, so they can integrate the operation of components in your system.

Product	₹	Verdict	Length as tested (m)	HDMI type
Audioquest Pearl	2100	★★★★★ <b>Best HDMI cable, Awards 2012</b>	1	1.4
Chord Company Supershield	5000	★★★★★ Still a class-leading cable, but now it's 1.4 too	1	1.3
Kimber Kable HD-09	6500	★★★★★ Picture quality is up with the best and it creates a wide sound field	2	1.3
Profigold SKY HDMI Ethernet	2999	Not rated Not rated	2	1.4
QED Performance HDMI-e	7410	★★★★★ Perfectly good cable that just falls down in its pricing	7	1.4
QED Profile HDMI	2225	★★★★★ Now with 1.4 status, this is still a worthy cable	1	1.4
Wireworld Chroma 6	1589	★★★★★ Best HDMI cable, Awards 2010. Great upgrade cable for higher-end systems	1	1.4
Audioquest Cinnamon	6600	★★★★★ A top-notch HDMI that's a credit to any system	2	1.4
Audioquest Forest	9300	★★★★★ A true and worthy rival to Chord's Supershield and again	5	1.4
Bridge Connect BPE105	3399	Not rated Not rated	1	1.4b
Chord Co. Active Silver + HDMI	9500	★★★★★ An impressive successor to the old Active cable	1	1.4
Chord Co. Supershield (5m)	9000	★★★★★ A punchy award winner that defies its low price tag	5	1.3a
QED Reference	7740	★★★★★ An assured, but expensive, performer	5	1.3ab
van den Hul Flat HDMI (3m)	10700	★★★★★ One of the best HDMI cables we've ever heard	3	1.3
van den Hul Ultimate	13000	★★★★★ It's pricey, but has good performance	1	1.3

## Digital interconnects

- USB** An increasingly common way to connect your computer to your hi-fi
- Optical** Digital cable that uses light to transmit sound between components
- Coaxial** Sends audio via an electrical signal between your hi-fi and AV kit

### The shortlist



**QED Performance Graphite**  
Awards 2012: Best Optical Digital Cable

"The sound through this cable is incredibly detailed and startlingly clear. There's a good grasp of dynamics, too."



**QED Performance**  
Awards 2012: Best Coaxial Digital Cable

"The QED is good at conveying subtleties. There's a good sense of energy too, with plenty of attack."



**Supra USB 2.0**  
Awards 2012: Best USB Cable

"It helps deliver impeccable timing and plenty of energy, both of which translate into a tangible sense of fun."

Product	₹	Verdict	Type	Length tested (m)
Profigold SKY Optical	2299	Not rated Not rated	Optical	2
QED Performance Digital	4135	★★★★★ <b>Best coaxial digital cable, Awards 2012</b>	Co-axial	1
QED Performance Graphite	2760	★★★★★ <b>Best optical digital cable, Awards 2012</b>	Optical	1
Supra AnCo (coaxial)	4700	★★★★★ Ideal if you like it meaty and beaty - it revels in low-end stuff	Co-axial	1
Wireworld Nova 6	1059	★★★★★ Like and up-and-coming band: unrefined but likeable and energetic	Optical	1
Wireworld Ultraviolet USB	1324	★★★★★ <b>Best USB cable, Awards 2010. If you use digital kit, this needs to be on your audition list</b>	USB	1
Chord Company Optichord	3300	★★★★★ Confident, competent and extremely likeable. Highly recommended	Optical	1
Bridge Connect BEA562	2599	Not rated Not rated	Optical	2

## Analogue interconnects

These carry audio signal from source to amplifier, or between pre-amplifier and power amplifier. Some use a shielding construction to reduce external electrical interference.

### The shortlist



AWARD WINNER

#### Atlas Element Integra

Awards 2012: Best Analogue Interconnect

“Improves on many of the things that the former champ did right. The Element Integra is highly recommended.”



#### Furutech Alpha-Line 1

“If your current soundstage sounds a little loose and disorganised, this can help to snap everything back into place. Best for owners of midrange systems.”



#### Chord Company Chameleon Plus

“Give your kit a serious shot in the arm – an overly dull system would certainly benefit from its ability and verve. One of our long-time favourites for high-end set-ups.”

Product	₹	Verdict	RCA phono 3.5mm-to-RCA XLR (balanced)	Length tested (m)
Wireworld Luna 6	979	★★★★★	●	1
Belkin Mini-Stereo Cable	649	★★★★☆		1.8
Chord Company CrimsonPlus	2800	★★★★★	●	1
Profigold PROI3301	899	★★★★★		1
QED Performance Audio 2	4770	★★★★☆	●	1
QED Profile	1855	★★★★★	●	● 1
Wireworld Oasis 6	2914	★★★★★	●	● 1
QED Profile J2P	1590	★★★★★	●	1.5
QED Reference Audio J2P	3290	★★★★★	●	3
van den Hul The Name	8000	★★★★☆	●	0.8
Bridge Connect BEA423	2499	Not rated	● ●	3
Chord Co. Chameleon Plus	8300	★★★★★	●	1
QED Signature Audio S	23,535	★★★★★	●	1
van den Hul The Wave	15,900	★★★★★	●	1

## Speaker cables

These carry the audio signal from your amplifier to your speakers. Bi-wiring uses two runs of cables per speaker and can lead to improvements in the speakers' performance.

Product	₹	Verdict	Biwire
Atlas Equator 2.0 OFC	750/m	★★★★★	
SCP 16/20FC-HD-WT	174/m	Not rated	
Chord Co. Carnival Silv. Screen	380/m	★★★★☆	
Chord Company Leyline	160/m	★★★★☆	
QED Silver Anniversary XT	668/m	★★★★★	
Wireworld The Stream 16/2	2119/2m	★★★★☆	
Wireworld The Orbit	4239/2m	★★★★☆	●
QED Revelation	1908/m	★★★★★	
QED Silver Anniv. XT Biwire	1336/m	★★★★★	●
van den Hul CS122	2050/m	★★★★☆	●

RESONANCE AUDIO

# INFINITE II Designed for performance!



## Real Cable now available in India

Experience and enjoy your favourite content across platforms. Ensure the best picture quality whether in FULL HD,3D or 4K. Designed for a powerful performance,HDMI cables from Real Cable are compatible across a wide variety of audio video devices with an excellent transmission quality of a record bitrate of 20.4 Gbps.



**Real Cable**  
CONDUCTEUR D'EMOTIONS

Exclusively brought to you in India by **RESONANCE AUDIO**  
5/58, 2nd Floor, Main Shankar Road, Next to Café Coffee Day, New Delhi-110060  
For more info contact:+ 91 997 153 1735 / raghu@resonanceaudio.in



WE GET YOU BACK TO WHAT IT'S ALL ABOUT – *MUSIC*

THE NEW DNM HI-FI STEREO AMPLIFIER AV-108 WITH BLUETOOTH INPUT  
IDEAL FOR USE IN BEDROOMS ALONG WITH A PAIR OF BOOKSHELVES

### DNM HI-FI STEREO AMPLIFIER AV-108



REMOTE HANDSET



FRONT VIEW

- 20 WATT RMS/CH
- DIGITAL FM RECEIVER
- DVD INPUT
- USB + SD/MMC CARD READER
- BLUETOOTH RECEIVER
- MICROPHONE INPUT WITH DIGITAL DELAY AND ECHO FOR KARAOKE
- ACTIVE SUBWOOFER OUTPUTS(2)
- COMPACT IN SIZE – WIDTH 300mm X DEPTH 235mm X HEIGHT 70mm

**DNM ENTERPRISE** [www.dnmaudio.com](http://www.dnmaudio.com)

211-D, Ansa Industrial Estate, Saki Vihar Road, Mumbai - 400 072 • Tel: 28474799 / 28474038 Email: dillipnbajaj@yahoo.co.in

## Lunette AcousticPro 4K Series

The Curve Series Fixed Frame Screen has a curved frame with 3.5" black frame borders with our award-winning, moire-free A4K acoustic transparent material for maximum visual and sonic immersion.

*The **Only** International Projection Screen Brand available in India from the manufacturer with service support*



**ES**  
ELITE SCREENS  
[www.elitescreens.com](http://www.elitescreens.com)

5-A Sowdambika Nagar, Opp. Police Station,  
Thudiyalur, Coimbatore 641034. India.  
contact: +91 7305640567.  
email: india@elitescreens.com

P. A. SYSTEM

Audio  
Mixer

Musical  
Amplifier

Power  
Amplifier

Speaker  
System

**Stranger**

*Sound with Expression*



**STRANGER AUDIO PVT. LTD.**

[WWW.strangeraudio.org](http://WWW.strangeraudio.org)

E-mail : [admin@strangeraudio.org](mailto:admin@strangeraudio.org) | [sales@strangeraudio.org](mailto:sales@strangeraudio.org) | Phone : 033 25334693 /94

**WHAT HI FI?  
SOUND AND VISION**

INDIA'S No.1 HOME ENTERTAINMENT MAGAZINE

**SMALL WONDERS  
UNDER ₹80,000**

Cambridge Audio,  
Dali, Monitor Audio,  
Polk, Q Acoustics,  
Wharfedale & more



**TV UPGRADE  
SMARTEN  
UP YOUR  
OLD TELLY**

Apple, Roku and  
Google streamers



**Starter AVR**  
Harman Kardon has a hit  
with the AVR-171



**ARCAM SAYS IT LOUD!**  
FIRST-EVER SOUNDBAR FROM THE BRIT BRAND



**FOR  
ADVERTISEMENT  
IN**

**WHAT HI FI?  
SOUND AND VISION**

CONTACT

**Ratan Deb (Mumbai)**

09960229268 / 022 - 43021035

**Santosh Kumar (Bengaluru)**

09886027788 / 080 - 25593775

**Nackeeran M (Chennai)**

09962502404 / 044-65446363



**PROFIGOLD®**

**LIVE THE EXPERIENCE**

**Imported & distributed in India for AV CHANNEL**



**West India**

AV ACCESSORIES AND ATTACHMENTS PVT LTD  
#2/43, "Nityanand sagar" No-4, S.N.Marg,  
Opp to Vaibhav hotel,  
Andheri (East), Mumbai 400069  
Hand phone: +91 96191 94876  
Website: www.avaaa.in  
Email: sales@avaaa.in

**JIVAAS**

**North India**

JIVAAS COMMUNICATION PVT LTD.  
B-16B, Gangotri Enclave, Alaknanda,  
New Delhi 110019  
Phone: +91 9873557875  
Email: jaydipp@jivaaas.com



**South India – Karnataka & Andhra Pradesh**

AWAN INDIA PVT. LTD.  
# 684,38<sup>th</sup> Cross, 16<sup>th</sup> Main Road,  
4<sup>th</sup> 'T' Block, Jayanagar,  
Bangalore 560041  
Off no: +9180 41330557  
Hand phone: +91 98453 0319 9  
www.awan.co.in

**PIPL 4 CAST & SALES**

**East India**

PIPL 4 CAST & SALES  
No - 209, A. J. C. Bose Road, Kolkata 700017  
Off No. : +91 3322834461  
Hand phone: +91 91435 17128  
Email: manoj@promises.co.in



**South India – Tamilnadu & Kerala**

RAKHIWALA MUSIC SQUARE  
#10, Venkatrayan Lane,  
off N.S.C Bose Road, Sowcarpet,  
Chennai - 600079  
Off no: +9144 23468785 | Hand phone: +91 99403 30003  
Website: www.rakhiwala.com  
Email: rakhiwala@hotmail.com

"Both large-scale and low-level dynamics are delivered with infectious enthusiasm and no sense of rounding-off of which many rivals are guilty. The result is an involving sound that pulls you in and holds you until the music ends."

**WHAT HI-FI?**



## Titus EZ

TZ25008 Tweeter with titanium dome  
Natural Cellulose membrane on driver  
New Rubber pads to reduce vibrations  
Next Generation biding post  
80w, 2 way 5.9 kg Bass Reflex Speaker

Exclusive Distributors



**AUDIO PLANET**

703/4, 3rd Block, behind BDA Complex, Koramangala  
Bangalore 560034. Tel : 080-25521266.

Authorized dealer - Chennai  
**AV ZONE**

No:101 Dr.Radhakrishnan Road, next to AVM Marriage Hall  
Mylapore, Chennai-600004  
Contact person: **Rakesh**. Mbi. 098884478825

Dealership enquiries solicited.  
Please contact

**Palani Loganathan**  
Mbi. : +91 9845019192/9845694986  
palani@audioplanet.co.in  
www.audioplanet.co.in

**Stuff.tv/in**

Live. Now.  
[www.stuff.tv/in](http://www.stuff.tv/in)

The best of the rest

# TOP SHELF

## High-res heaven!

Onkyo's new DAC-HA300 aims to make high-resolution music more accessible to everyone. Yes we are interested!



While high-definition viewing has truly percolated the homes of consumers with Full HD and 4K TV sets, on the audio front the progress has been rather slow. High-resolution music files encoded at 24-bit/192kHz are a rare commodity, and so are the players that support it. However, things are changing, slowly. Sony showed us promise with the launch of its ZX2 Walkman, and now, Onkyo goes a step further by adding high-resolution audio playback prowess to your iPhone or Android smartphone or tablet.

The device looks solidly built thanks to its aluminium frame, and is flanked by the charging and USB ports on the bottom and input ports on the top. It will be offered in a black finish when it finally hits the market early next month. With the new DAC-HA300 digital-to-analogue converter/headphone amp you can simply connect your Android smartphone/tablet or iDevice using the Apple Lightning connector or Android On-the-Go cable and turn it into a high-res audio player. You

can also use the DAC-HA300 as a standalone media player and headphone amp.

You can load up to 128GB of music via the microSD card slot. What about my music collection on the PC? You ask. Well, the DAC-HA300 has that covered too as it is also equipped with a micro USB Type-B input for asynchronous digital-to-analogue conversion of high-res audio from a PC, without the need to install drivers. The DAC also features a switchable optical/coaxial/analogue input, capable of accepting digital signals from connected devices up to a maximum resolution of 24-bit/192kHz. The DAC-HA300 uses a MUSES8920 operational amp, which is combined to a fully discrete push-pull output stage that gives it a high-driving power and low-distortion performance.

The device also features the TI Burr-Brown CM1795 Stereo DAC which you would find in other high-end audio equipment thanks to its low out-of-band noise performance and high resistance to jitter. Overall, we love the aluminium construction of this product and Onkyo has always

been known for its good build quality. We are sure the HA300 will feel like a high-quality, well-built product.

Since it weighs only 280 grams, lugging it around won't be a problem either. We look forward to testing this high-resolution audio player from Onkyo soon enough.



The microSD slot is neatly placed on the side along with the forward/rewind slider



Built out of aluminium and offered in black exterior, the DAC-HA300 looks solidly built. The input ports and volume knob take up space on the top

# microlab

just listen



H 500

## Unparalleled Power. Aesthetic Design.

Your very own Home Theatre Sound system for a movie like experience and sound effects, designed aesthetically to fit and add to your room decor. Powerful and high fidelity sound is courtesy of that beautifully made wooden cabinet and this sound is produced through 5 satellite speakers with a high powered subwoofer. All this can be controlled through a digital display console with an infrared remote control for an ease of access.



For corporate enquiries:

Microlab India: 325, Avior, Nirmal Galaxy, LBS Marg, Mulund (W). Mumbai - 80  
Tel.: +91-22-2567 0680 / 0681 | Email: info@microlabindia.net

Now Microlab products  
are also available at





# PLAY FOR YOURSELF



**INSPIRE 300**



**INSPIRE 100**



**FOCUS 300**



**VENTURE TALK**



**INSPIRE 300**  
SPORT EARPHONES FOR WOMEN



SWEAT PROOF SPORT EARPHONES



Available online exclusively on **amazon.in**