



## Cocktail X30

Serving up the perfect mix of CD ripping and streaming

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# Hi-Fi Choice

PASSION FOR SOUND

Issue No. 383

April 2014

## Mighty CD plays on

Six disc spinners prove this is still the format of choice

**NEW SERIES!**  
Build a better sounding system p116



## Hi-res on a budget?

Sony's stunning mini DAC/amp delivers hi-res for less



# 35

PRODUCTS ON TEST:

Cambridge Audio, Exposure, JBL, Quad, Rotel and Tannoy

## Focal chords

Find out why the floorstanding Aria 926s are right on song

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# Group**test**

CD PLAYERS £300-£800

## 30 something

Over three decades after it was launched, new CD players continue to appear. **David Price** checks out six affordable models

**AT THE RIPE** old age of 32 years – and counting – the ubiquitous little silver disc continues to spin. Who'd have thought it? Will there ever be a future format that lasts this long again? I think not. Compact Disc continues to satisfy so many of us because it was able to gain traction before any rival formats arrived. For nearly 15 years, it was the only digital audio game in town.

**CDs are easy to play, don't require any fiddling around and sound really good**

Of course, SACD and DVD-A arrived at the end of the last century, expecting to usurp it. But the hapless powers behind it ensured that the public got confused and stuck with what they knew. The format war between the two incompatible new hi-res formats put the public off, just as the old video cassette wars of the

early eighties. Wasn't it Einstein's definition of madness to do the same thing repeatedly, but expect a different outcome?

CDs are easy to play, don't require any fiddling around and can sound really rather good if done properly. Indeed, just like vinyl towards the end of its expected life, CD has suddenly become quite palatable.

### The joy of six

The six models tested here range in price considerably, but all share the wealth of knowledge that we've amassed over CD's long lifespan. Designers know all about the need to minimise jitter and use decent DACs. Discoveries made by high-end companies some 20 years ago – such as Meridian with jitter and dCS with upsampling – have seeped down into basic CD player best practice, and are found in most machines here.

Are these latest budget boxes good enough to sway you into updating your existing player, or simply buying another one? Read on to find out... ▶

### ON TEST



**Cambridge Audio Azur 651C** £350 **p27**  
Many regard this machine as far more capable than it has a right to be at this price point. Its design is surprisingly slick and it now has a rather attractive brushed aluminium fascia.



**Exposure 1010CD** £415 **p29**  
From a company that made its name with high-quality amps in the eighties, this attractively styled deck has some serious engineering inside and promises a lot at the price.



**Quad Elite CDS** £800 **p31**  
Stretching way back to the 66, Quad's spinners have always been popular, with a smooth, musical and engaging sound. The Elite CDS also sports the latest 24/192 upsampling DAC.



**Rega Apollo-R** £550 **p33**  
The original Apollo CD spinner arrived nine years ago. The latest R variant uses technology trickled down from the flagship Isis and Rega DAC, to give a uniquely styled disc spinner.



**Rotel RCD-1570** £700 **p35**  
Undeniably one of the best looking machines here, the slot-loading disc mechanism is a joy to use. But don't let its looks confuse you; serious attention has been paid to its sonics.



**TEAC CD-H750** £300 **p37**  
This company's silver disc spinners have acquired a great reputation over the years, and more recently Teac has done very well in the field of mini components too.





TEAC

DOOR OPEN

TEAC

Compact Disc Digital Audio

COMPACT DISC PLAYER CD-H750

CD/Play  
T003 04:17

CD/USB RECORD

Elite

QUAD

04

023

Compact Disc Digital Audio

48:53

azur 651C  
Compact Disc Player

OPEN

ROTEL



# Rega Apollo-R £550



Looking like *Knightrider* and a joy to use, can the master record player maker come up trumps with CD?

## DETAILS

**PRODUCT**  
Rega Apollo-R

**ORIGIN**  
UK

**TYPE**  
CD player

**WEIGHT**  
4.3kg

**DIMENSIONS**  
(WxHxD)  
220 x 90 x 320mm

**FEATURES**

- Wolfson WM8742 DAC
- 1x RCA phono line output
- 1x XLR balanced output
- Top-loading CD drive

**DISTRIBUTOR**  
Rega Research Ltd  
**WEBSITE**  
rega.co.uk

It is rare for companies that start out as turntable manufacturers to branch out into electronics, and then excel in making digital sources. The skill sets required for the two respective genres are very different, and hard to come by. Rega doesn't seem to have been dissuaded, however, and the Apollo-R turns out to be a striking product in several ways. The acrylic-fronted, aluminium casework is a delight, the top-loading mechanism a tactile joy, and the ergonomics excellent – it's a fine machine to use, surely the nicest here. Construction quality is superb at the price, and there's a choice of silver or black finishes complimented by a crisp red LED display, complete with retro 'music calendar'.

Inside, the company says lessons have been learned from its high-end Isis CD player and popular – HFC award-winning Rega DAC (issue 357). Since the original Apollo's launch in 2005, the printed circuit board layout has been tightened and a Wolfson WM8742 DAC fitted. Tweaking has been done to the power supplies feeding the CD processor, optical block and laser diode amplifier, and the analogue output stage has better op-amps fitted. It also runs the latest Rega software for controlling the optics; Rega says this improves sound noticeably. The user interface now gets its own dedicated processor for better stability; track access is super fast and smooth. A

remote is supplied, and round the back a coaxial digital output is fitted alongside standard analogue outs.

## Sound quality

There's nearly always one star performer in every round up, and this is it. However, as we'll discover, stars aren't always fully rounded things! Essentially, the Apollo-R is a brilliant-sounding silver disc spinner – it is mesmerisingly entertaining to listen to. It seems to unlock a whole extra layer of emotion in the music, as if to remind you that it isn't just hi-fi that you're listening to, but the expression of some poor musician's tortured inner soul. It makes everything an intense experience, and is guaranteed to keep even the most sleep-deprived night owl captivated on the edge of the sofa.

The beautiful Visioneers track appears to have about twice as much going on compared with when its heard on any other machine. That lovely sinuous bassline modulates up and down in a wonderfully hypnotic way, and the fat synths pulsate with an ease hitherto unheard. Indeed, even the excellent, but more costly, Quad seems a little standoffish in comparison. Likewise the Siouxsie and The Banshees song is amazingly dramatic – the Rega seems to pull the listener right in, on a rollercoaster ride. Rhythmically it proves brilliant, bouncing along like a rubber ball, making everything sound somehow interlinked to everything else. It's also

## ON TEST

This 'R' version of Rega's familiar Apollo CD player offers improvements in performance across the board. Most significant is the reduction in power supply-related jitter, down from 700psec to just 200psec in the 'R'. The output level is unchanged at 2.15V, but the A-wtd S/N ratio has widened from 102.9dB in the original model to 106.5dB here – a reflection of the superior Wolfson DACs and new analogue output stage.

Distortion is a little lower too, from 0.007% at peak output through the midrange (Apollo) to a mere 0.0005% here. This is a great result although, at lower digital signal levels, there's precious little difference in distortion between the old and new Apollo.

The Apollo-R has the very mildest bass roll-off of -0.2dB/20Hz and a similar -0.25dB shaving at 20kHz but, depending on choice of interconnect, the 550-600ohm output impedance may make more difference. **PM**

## RESULTS AT A GLANCE

### Output level & impedance

-20

### Signal-to-noise ratio

0

### Distortion vs. level & freq.

-20

### Digital jitter

-10

### Frequency response

-20

KEY: ■ Group average  
■ % below average ■ % above average

pretty dynamic too, really spotlighting the individual accents on the phrasing of the musicians.

However, it's not all hearts and flowers. The New Order track again sounds lovely, but closer inspection reveals some frailties, too. First, tonally it's not quite as smooth or as well defined as the Rotel or even the Cambridge Audio; texturally it still sounds just a little unsophisticated. Also, spatially it's rather challenged. Like all players here it is nicely expansive, but the Rega isn't very precise on its placement of images in the mix and doesn't seem quite as stable either. Nothing's perfect I suppose, but this sure is fun ●



## Hi-Fi Choice

### OUR VERDICT

**SOUND QUALITY**  
★★★★★  
**VALUE FOR MONEY**  
★★★★★  
**BUILD QUALITY**  
★★★★★

**FEATURES**  
★★★★★

**OVERALL**  
★★★★★



# Group test verdict

**David Price** gives some context to this month's six contenders and ranks each of the silver disc spinners according to how well they charmed his ears

**THIS WAS ALWAYS** going to be an interesting group, due to the wide span of prices. There just aren't that many new CD models being launched that are closer in price to run tests on – the market is beginning to dwindle.

The Teac finishes bottom, but this in no way reflects on its abilities – for the money it is superb. It's well made and finished, wonderfully versatile and sounds surprisingly svelte and sophisticated. An excellent showing, but last all the same!

At the price the Exposure does very well indeed with a lovely smooth and spacious sound. But it faces very stiff

competition, and it doesn't excel here. Still, if you have a bright system and need a classy-sounding front end, the 1010CD is perfect in this role.

The Cambridge Audio is the best of the budget machines. At the price it is fantastic, with a wonderfully involving and insightful sort of sound that excavates deep into the digital disc and throws out loads of detail. If the very best sound at £350 is your quest, then look no further.

The Rotel costs twice as much as the Cambridge, but is only about one third better – the sound is punchier and more detailed, with a solidity

and unflappability that makes it a pleasure to listen to. Buy this and you'll have an excellent disc spinner that's appreciably better than the cheaper machines here.

The runner up is the Quad. In absolute terms it is the best sounding here with wonderful clarity, focus and ease – it does so well yet appears to expend such little energy trying. Suddenly tracks that other machines struggle over seem so serene and musically satisfying. But the trouble is, its ergonomics aren't great, its styling is odd and the price is high.



**WINNER**

Rega's Apollo-R is now entering its fourth year, and nothing has come along to worry it. At the price, it is remarkable, simply because it is such fun to listen to. Indeed, the Apollo-R is decidedly 'analogue' in the way it goes about making music and a worthy winner.



Make/model	Cambridge Audio Azur 651C	Exposure 1010CD	Quad Elite CDS	Rega Apollo-R	Rotel RCD-1570	Teac CD-H750
<b>Price</b>	£350	£415	£800	£550	£700	£300
<b>Sound</b>	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
<b>Value</b>	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
<b>Build</b>	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
<b>Features</b>	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
<b>Overall</b>	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
	Decent budget player with class-leading sound. Beats many pricier models	Highly sophisticated performer at the price, with a warm and sweet sound	Gorgeously open and musical sound meets odd styling and ergonomics	Great styling and ease of use combine with a wonderfully musical sound	Rock-solid build with even and weighty sound. An impressive player	Lovely styling, packaging and build allied to a smooth, sophisticated sound

### Key features

<b>CD text</b>	No	No	No	No	Yes	Yes
<b>USB input</b>	No	No	No	No	No	Yes
<b>iPod input</b>	No	No	No	No	No	Yes
<b>RCA output</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>XLR output</b>	No	No	No	No	Yes	No

### TRY WITH THESE

**INTEGRATED AMPLIFIER:**  
Arcam FMJ A19 **£650**

An extremely capable mid-price integrated amplifier, the A19 gives a wonderfully warm and expansive sound considering its relatively modest price. It has plenty of power, lots of facilities, and should be able to drive any budget loudspeaker.



**LOUDSPEAKER:**  
Q Acoustics 2050i **£460**

A largish floorstander for under £500, these represent excellent value for money. They have a big, powerful sound, and are nicely tuneful and musically engaging. Still, some think them on the warm side – making them ideally suited to relatively inexpensive digital sources.



**INTEGRATED AMPLIFIER:**  
Cambridge Audio Azur 651A **£350**

Although this is purpose-designed to work with the Cambridge Audio Azur 651C tested here, it will also make a nice noise with any of the other group test candidates. It has a powerful and clear sound, with plenty of detail and a fair smattering of facilities too.

