



REVIEW: I32 INTEGRATED AMPLIFIER AND CD32 CD PLAYER
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Primare CD32 and I32

The new system from Primare reveals the excellence of sound possible from a system with Class D amplification.

For years Primare has astounded me with the superb quality of its workmanship: its product fascias have always looked impressive. Despite the widespread use of aluminium front panels in the industry, the quality of materials and the precision of the finish can vary enormously from peer to peer. Primare makes these things absolutely exquisite. From the very first moment, you suspect that the products were crafted with utmost care. The 32 system reviewed here appeared on the market just a few months ago, and the greatest surprise initially is the implementation of OLED displays. Primare is not the first manufacturer to have implemented OLED displays, but they're still rare. Not only do they offer exceptional readability but also they allow for a smooth brightness adjustment, which significantly raises the comfort factor. Although a closer inspection reveals that the images are created by pixels, the effect is no less impressive.

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Primare has comprehensive inputs/outputs but still it is a pity that speaker outputs are singular.

CD32 Compact Disc Player

The player has only three buttons, which is slightly limiting. It is possible to power the player up, open the CD tray, play the disc, stop the disc and skip to the next or previous track. Other functions are operated via the remote control only. From the back there is access to standard RCA outputs and balanced XLRs. There are three ways to output the digital signal: Toslink, AES/EBU and S/PDIF. A USB type A input enables the connection of a USB stick or a hard disk for playing music files (MP3 or WMA). It is a bit of a nuisance that access to the port is at the back – it should be located on the front panel – but it is a good thing that the screen facilitates file title display. Other connectors, such as RS232, trigger input and output, as well as a IR will come in handy in multi-room setups or when you want all the elements of the system to switch on at the same time. Anyway, all necessary cables are included, so it's a waste not to use them.



The mechanism implemented in the CD32 is an Asatech drive. The servo circuit utilises Toshiba components. The 5-second buffer is an interesting addition as it successfully separates the mechanics from potential read errors. Power supply is based on an R-Core transformer with separate windings for the digital, analogue, and mechanical sections. In standby mode the player uses a small switch-mode power supply that lowers power consumption to a fraction of a watt (EU recommendation). In the digital-to-analogue section, the player utilises two Burr-Brown PCM1740 converters combined with a DF1706 digital filter. The circuit is mounted on a few PCB modules, made possible with the implementation of surface mounting technology. This has also allowed Primare to achieve the shortest possible signal paths.

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I32 Amplifier

The main reservation I have about the operation of the I32 amplifier is the reversed mounting of control dials – the left is used for volume level control and the right for source selection. This may be a little irritating to start with but you do get accustomed to it. Then there is the power button and three buttons for browsing the menu: the first displays the menu, second confirms selection, and third allows a return to the previous screen. Browsing is facilitated by the right dial – the one used normally for source selection. What seems initially to be somewhat complicated proves in practice to be very intuitive, giving you the freedom to configure many interesting functionalities which are not available in other amplifiers. Every input can be setup to have a customised name, sensitivity level, balance setting and maximum level. The inputs which are not used can be disabled.

The back panel allows for the input of a balanced signal from two sources (XLR) and the unbalanced signal from three (RCA). Two line loops make it possible to output signal to the recorder or an amplifier (pre-out). Just as in the CD player a trigger input/output for IR is available, as well as RS-232. Speaker outputs are universal and very convenient, and allow you to use cables with any type of plug, but they've not been doubled.



That's not all though: there is a cover above the outputs for a slot which will accept an optional upgrade board, destined to expand the I32's capabilities considerably. Preliminary specs indicate that it will add a DAC, iPod docking station, DAB tuner, and even network audio player functionalities (Ethernet and Wi-Fi connectivity).

The I32 is the first stereo amplifier from Primare to be based on its proprietary switched mode UFPD (Ultra Fast Power Device) electronics. The company maintains that the problems with Class D amplification arise from too limited a range of feedback, which causes instability through impedance variations, and rising THD with frequency. It is said that all those ills are rectified by the active use of a consistent feedback loop gain. Thanks to a PFC (Power Factor Correction) switch mode power supply, the amplifier is operationally transparent to the mains power network. Power consumption is also very low relative to the output power of the amplifier (2 x 120W per channel for 8 ohms and 2 x 230W for 4 ohms), but this feature is standard in all Class D amplifiers.

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The Sound

I had formed my opinion of the amplifier's sound when I learnt that it works in Class D. Preconceptions will often adversely influence the experience, but I tried not to rule out the possibility of a D Class amplifier ever sounding good. Although the first examples of this type have not been to my liking, the technology is improving, and it's becoming easier to find designs that are not only energy-saving and eco-friendly, but that also satisfy our audiophile appetites.

What is interesting is that this, the first Class D amplifier from Primare, also features a sound quality that is unique to this company – a sense of analytical detachment, a feeling that it is presenting the sound in the most matter-of-fact way, even at the cost of a certain cooling of emotions. In this respect the 32 system proves to be a little different from its 30 series predecessors.

From the very first moment the sound is crystal clear. You sense that it is not adding to the original sound. It is therefore precise (one could even say sterile, but this would add too negative a bias). The sound is simply 'objective' in character, devoid of colouration. All this is done with much precision, preserving all the details so that you can hear all of them - even the smallest ones - easily. This creates a very interesting effect. **You're surprised by tiny musical resonances that were always present on the disk but now reproduced with honesty. Although at first this seems cold and impersonal, eventually it proves to be very complex and rich. What is perceived as lacking in emotion at the start becomes more engaging with every album played. It is the micro detail that is responsible for inspiring new emotions.** Vocals are not made warm but are instead very communicative. Acoustic instruments astound with the complexity of their sonic structure. Even when larger ensembles are played you will be surprised by the presence of a hidden melody line, which was once obscured by other instruments. Very precise contours define the entire audible bandwidth. Bass is agile, quick and rather deep, while high frequencies are painted with a fine resolution. **To tell you the truth I did not think that sound of this character could be so musical.**

Our Opinion

Primare 32 system is not only pleasing to the eye it also delivers a precise, clear, detailed and truly musical sound. It is worth listening to.



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Technical data**CD 32 Player**

Frequency Response	20Hz – 20kHz (-0.5dB)
Signal to Noise Ratio	100dB
THD	<0.01
Dimensions	430 x 106 x 375 mm (W x H x D)
Weight	10.5 kg

I32 Amplifier

Output Power	2 x 120 watts (8ohms), 2 x 230 watts (4ohms)
THD	<0.05%
Signal to Noise Ratio	100 dB
Dimensions	440 x 106 x 420 mm (W x H x D)
Weight	11 kg

Rating

Neutrality Clear, very precise and neutral sound.	100%
Fidelity Surprisingly detailed.	100%
Musicality Very compelling, as long as the speakers are not too harsh.	95%
Stereophonic Quite a spacious stage, good localization of apparent sound sources.	90%
Dynamics Very good both in the micro and macro scales.	90%
Bass Agile, quite quick and deep.	90%
Total rating	94%

