

Primare I22 and Primare CD22



At first glance both components look purist, but their design detail with the "pulled out drawer" look - the front panel (pretty solid) extends about 3 centimetres out of the box - is very elegant. Besides the CD drive drawer and display there are only three buttons for basic operation on the front panel of the CD player. Everything else is controlled by the remote control, which allows not only classic CD operation, but is designed for the I22 amplifier as well. It allows you to set and control many functions. Besides the expected ones it is also possible to set more unusual functions, i.e. to directly determine the upsampling with options of 48/96 or 192 kHz. This is performed by the Burr-Brown SRC4392 which is able to upsample to 216 kHz; however, here it is limited to 192 kHz. The data conversion to analogue is then performed by the DAC Burr Brown PCM1792 converter, Delta Sigma, 24 bits/192 kHz. The rear panel is much richer in functionality. There are two gilded cinch outputs, nicely separated, two digital outputs (optical and coaxial), RS 232, input for software

upgrade and USB connector for digital music sources, memory, or player (MP3, WMA). Filtering is provided by four 2200µF/50V capacitors and three 2200µF/35V capacitors. Primare's I22 amplifier is unique in our test because it is digital. For users it means that amplifier is lighter and it does not generate heat. The vast majority of the energy is changed to sound, not to heat. I22 works in class D and uses original Primare circuits. Due to its Ultra-Fast Power Device circuits, the response of the digital amplifier is very fast. There are actually two absolutely discreet UFPD amplifiers in the box. Signal paths are minimal. Everything is mounted on three separate printed circuit boards in a massive hard box. The rear panel contains four analogue inputs and the three digital inputs (USB, optical and coaxial). USB is marked as "isonchronous", so the data are recomputed and the data stream is synchronized. This makes the process in the DAC completely precise with an excellent acoustic result. It handles 24 bit/96 kHz, so here you can use your audiophile

recordings on your computer's HDD using a USB connection, which is installed in every notebook. The remaining digital inputs can handle up to 192 kHz sampling frequency. At the beginning, all signals are converted to 24 bit/96 kHz and then back to analogue PCM1792A 24bit/192 kHz. On the rear panel, there are also outputs for analogue recording and for an external power amplifier. Two pairs of loudspeaker terminals are sturdy with a clear plastic cover. The remote control looks sparse but it includes everything you need and it is clear and simple to operate. The sound is truly surprising. Besides the colourful sound, we hear the fine detail around each instrument to the extent that their real presence is tangible. Thanks to the incredible audio detail, the reproduction allows extremely easy and accurate spatial imaging in the music before us. The individual instruments fully stand out and complete the impression of real music. It is a reality for a very low cost.

Conclusion

As you can see from the interim evaluation, the most impressive product for us was the Denon DCD-1510AE in combination with the quality converters provides very accurate and realistic sound. The quantity of subtly and accurately audible details creates a vivid music image in front of the listener. Another asset is the connection options, especially for the digital signals, and the luxury of the input from a PC directly to the DAC. The Marantz SA7003 and dominant presentation. On the contrary, the Primare CD22 more intimate music systems: the precision and accuracy of its tones are of a high level. Marantz ended up in fourth position, but for many listeners it may be an interesting option.



TEST

INTEGRATED AMPLIFIERS



DENON
PWA 1510AE



MARANTZ
SA7003



PRIMARE
I22



ROTEL
RCD12

Contact	Eurostar Ostrava	www.us.marantz.com	High-End Audio Studio	Eurostar Ostrava
Inputs	6X	1x pair of cinch	4 +3X DIGITAL	5X
Outputs	2X	2X	1x	2X
Power	2 x 60 W	2 x 60 W	2 x 60 W	2 x 60 W
Frequency range	10 Hz – 100 kHz ± 1 dB	20 Hz – 20 kHz ± 0.3 dB	10 Hz – 20 kHz -0.5dB	10 Hz – 100 kHz ± 1 dB
THD	0.001 %	0.001 %	0.001 %	0.001 %
Signal-to-noise ratio	> 95 dB	> 95 dB	95 dB	> 80 dB
Dimensions/weight	434 x 134 x 410 mm/ 15.5 kg	445 x 74 x 337 mm/ 10 kg	440 x 106 x 420 mm/ 10 kg	430 x 92 x 342 mm/ 8.02 kg
Price	28,790 CZK	17,900 CZK	29,990 CZK	20,990 CZK

PLAYERS	DENON DCD-1510AE	MARANTZ SA7003	PRIMARE CD22	ROTEL RCD12
Frequency range	20 Hz – 20 kHz	2 Hz – 50 kHz	20 Hz – 20 kHz	20 Hz – 20 kHz
THD	0.001 %	0.001 %	0.001 %	0.001 %
Signal-to-noise ratio	117 dB	110 dB	100 dB	100 dB
Dimensions/weight	434 x 135 x 331 mm/ 8 kg	440 x 339 x 107 mm/ 5.9 kg	430 x 375 x 106 mm/ 10.5 kg	430 x 93 x 313 mm/ 5.4 kg
Price	28,790 CZK	18,990 CZK	29,990 CZK	16,990 CZK
Sound	95 %	85 %	100 %	90 %
Spatiality	90 %	90 %	95 %	95 %
Dynamics	95 %	95 %	95 %	95 %
Structure	95 %	95 %	95 %	90 %
Verdict	94 %	91 %	97 %	92 %