

Primare DAC 30 Digital to analogue converter

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Although there is a less is more ethos across the high end world few companies imbue their products with the degree of design purity that Primare does. This one suspects is down to their Scandinavian roots, that part of the world is well known for its clean, pared down design, frippery is not in their vocabulary when it comes to presentation and it's a look that people well beyond the hi-fi fraternity have come to appreciate. The DAC 30 has two buttons and two rows of LEDs, simple yet it takes a bit of familiarisation to get instant results. On numerous occasions I pressed the power button when trying to select another input! The remote makes this easier but it's not half as beautiful as the unit itself, nor so tactile.

At a glance there is not a lot to separate the DAC 30 from a host of other digital to analogue converters, but the difference is in the detail as is often the case. For instance it has a fully balanced output stage and XLR connections to access it. Many DACs have XLRs but not the balanced circuitry to go with them, they are provided purely to enhance feature count. This only has features that are fully functional, these include three optical and three electrical (coax) inputs plus an asynchronous USB input. The latter was

developed by Primare and XMOS which has become a leader in this rapidly developing field. Mac users will be able to hook straight up to this input and choose the XMOS output, Windows users will need the PC audio driver available from the Primare website. I recommend you use this input as well if you can because it delivers rather enjoyable results if the computer has been set up reasonably well (see this article <http://www.the-ear.net/how-to/build-computer-audio-transport> on how to get it that way).



There are plenty of DACs that have a similar feature set to the Primare but if you read a little deeper into the spec it is apparent that an awful lot of effort has gone into getting it right. The DAC feeds Primare's fully balanced output stage which has top notch parts throughout, even the single ended output has an actively driven MOSFET. Great attention has been paid to power supplies as well, this being the area where audiophile companies can really make a difference. DAC 30 has a linear PSU based around an R-core transformer that has separate windings for the analogue and digital supplies which are placed on opposite sides of the case to minimise interaction. Both supplies are made up of multiple small caps rather than fewer large ones because this reduces equivalent series resistance, in practice making them faster. Both feed super fast regulators with a discrete circuit for the analogue side. The converter itself is a Crystal CS 4398, a 24/192 chip that is proven rather than cutting edge, you can find it in Bryston and QUAD products for instance.

Attention has clearly been paid to detail, even as far as the mute circuit which is relay operated for minimum noise, you'll need the system handset to get it into this state however.

Sound quality

Primare makes a point about its components having no characteristic sound and this proved to be the

case in the listening room, DAC 30 is a pretty benign converter that has little difficulty getting out of the way and revealing the quality of the music signal. This makes it extremely good at revealing the quality of the source of course and I was quite surprised at the difference it revealed between the coax signal from a Naim UnitiServe compared to a Macbook Air, surprised because the latter seemed superior in many respects. It is certainly more three dimensional as a result of greater low level detail and has a more fluid, effortlessly musical sound. The coax feed resulted in a more precise image but that largely because it didn't have the depth of the USB.

All that power supply work pays dividends in the noise department, this is a particularly quiet converter, not that others make an audible noise but you can hear an awful lot of fine detail through it. The quieter sounds are easy to appreciate and combine to produce a more rounded and full sound. The Primare is also particularly good on voice whether it be Gregory Porter or Stevie Nicks with Fleetwood Mac. Gold Dust Woman has the full west coast high end studio sound that it should, by contrast other DACs can make it sound precise and timely but too dry. The other side of this coin is that there's no emphasis of visceral qualities, it won't put you on the edge of your seat unless the music really demands as much. It's not quite as immediate as some competitors but that is the price you pay for the finesse. The new Gregory Porter is also a big budget production but in the contemporary style, it sound both polished and properly three dimensional with masses of tonal colour. It's a more transparent form of luxury, presumably a more digital variety, but I have to say that it doesn't get in the way of the music and the Liquid Spirit album deserves your attention whether you like jazz singers or not.



I had the DAC 30 at the same time as a Constellation Audio Virgo pre and Centaur power amp which not only revealed more of its abilities but allowed the use of the balanced output. I didn't have the same cable for this comparison but there was a distinct increase in energy levels with the XLR connection, the bass was also improved in terms of depth while remaining just as tuneful as the single ended connection. If you have balanced inputs then this is probably the way to use a DAC like this, it's not always the case but Primare has clearly done its homework with this output. I really enjoyed Massive Attack's Mezzanine via the Primare/Constellation/802 Diamond combo, the sonic shapes and spatial manoeuvres it created in the room are truly inspiring, I wonder how many Massive Attack fans have

ever heard it like this? This album also reinforced the quality of bottom end on offer and made me yearn for a concrete floor to put my speakers on! In my experience that is the only way to get true gravitas in the low end.

Conclusion

The Primare DAC 30 is a subtle and expressive converter that does justice to all manner of musical flavours in the context of a self effacing, music serving character. It's at the smoother end of the scale which will suit some tastes/systems better than others but if you enjoy both the finer points and the heart of the music it's a very strong contender for your budget. Oh and it looks better in the stainless finish by the way.

SPECIFICATIONS:

Crystal DSD DAC CS4398 (BD32) 24/192 kHz

Fully balanced analogue output stage (BD32)

Outputs: 1 pair XLR and 1 pair RCA (both 4,3V)

Inputs: 1x asynchronous USB-B, 1x AES/EBU, 3x Optical, 3x Coax S/PDIF

Relay controlled MUTE circuit

Linear R-Core transformer

Signal to Noise 120dB

Input selection, DIM, ON/OFF can be operated by remote C23 or C33. (select MEDIA)

Dimensions WxDxH: 430 x 370 x 95mm (16.9x14.5x3.7 inches)

Colour: Black or titanium

PRICE:

£2,000

MANUFACTURER DETAILS:

Primare

www.primare.net

DISTRIBUTOR DETAILS:

Karma-AV

01423 358846

www.karma-av.co.uk