'There are few

less costly ways

of getting this

sort of thump'

Web: www.primare.net; www.karma-av.co.uk Prices: £2600-£3500 (pre)/£2700 (power)



# **NETWORKED PRE/POWER AMP**

# Primare PRE35/A35.2

With wireless streaming, class-leading connectivity and 200W of Class D power, this sophisticated Scandinavian pre/power combination covers all the digital bases Review: David Price Lab: Paul Miller

rimare – the company that describes itself as 'the sound and vision of Scandinavia' - is also becoming rather more visible in the UK and rest of Europe thanks, in part, to the boost provided by a couple of EISA awards. Based in Sweden and founded by Danish designer and audiophile Bo Christensen, Primare has found its métier over the past few years. Its Prisma platform brought integrated wireless streaming functionality to the hi-fi world before most - and delivered it with typical Scandinavian panache. Ergonomic excellence is central to the brand's values, and this is surely a concept whose time has come.

Prisma, previously optional for the company's I15 [HFN Oct '18] and I35 [HFN Mar '19] integrated amplifiers, now finds itself offered in the fully-loaded £3500 PRE35 Prisma preamplifier you see here. As is standard Primare practice, you can order the preamp minus the Prisma package and accompanying DAC for just £2600. Thus specified, it's a purist analogue preamplifier, because unlike the integrated models it doesn't first convert the analogue line inputs to digital. When partnered with the matching £2700 A35.2, this means Primare's basic pre/power combination comes in at just over five thousand pounds.

## **READY TO GO**

The all-singing, all-dancing pre/power duo on test here costs £6200. Either way, you certainly get a lot of connectivity, functionality and power for your money. The manufacturer claims 200W/80hm for the A35.2 [see PM's Lab Report, p55], with the ability to bridge the amp to mono for 800W. This is courtesy of Primare's UFPD 2 analogue Class D amplification technology [see PM's boxout, opposite].

When you first connect up the PRE35, having first screwed in its rear-mounted

**RIGHT:** The PRE35's linear PSU [lower left] includes separately regulated supplies for the main analogue preamp [top left], the optional DM35 DAC board [top centre] and the Prisma network streaming solution [top right]

twin Wi-Fi antennae, it enters set-up mode. Give it your wireless router details - or plug in an Ethernet cable - and you're all ready to go. The app lets you to play music via Wi-Fi and Bluetooth, AirPlay, Spotify

Connect and Chromecast quickly and easily, as well as offering multi-room/multizone control. Available on both iOS and Android platforms, it looks elegant and confers great flexibility thanks, in part, to its Roonready status. Meanwhile,

the fascia controls feel silky and its whiteon-black OLED display is clean and crisp. The pressed-steel casework is well finished and less resonant than that of many rivals.

Those going for more traditional source options will be pleased to see that the rear panel is crammed with sockets. There are twin analogue XLR inputs and outputs,

three pairs of RCA inputs, four Toslink optical digital inputs and two coaxial digital ins, plus a USB input. These feed a sophisticated AK4497 DAC, working at up to 768kHz/32-bit PCM and DSD256

> resolution. Fixed and variable analogue outputs, a coaxial digital output and IR in/outs complete the picture, along with an RS232 service port.

Primare says that it employs short signal paths, this made

possible by the use of multi-layer, doublesided circuitboards and surface mount components. All digital and analogue inputs are relay-switched, and are able to be configured via a set-up menu.







LEFT: The PRE35's control knobs feel silky and the central **OLED display looks** crisp, although its minor controls might be fiddly for big fingers. The A35.2's power switch forms part of the fascia's central logo

The best way to connect the A35.2 power amp to its matching preamp is via the balanced XLR sockets, but single-ended RCAs are also available. Switches on the rear panel let you toggle between those two inputs, as well as select bridged mode operation. There's also a 'Sense' switch that puts the amplifier into standby mode if it doesn't detect an input for 20 minutes. Its fascia is a model of minimalism, with only an on/standby switch neatly inlaid into the large Primare logo. As per the preamp, the main power switch is at the back.

# SLAM DUNK

There are several ways to hear what this pre/power duo is capable of, whether you have it hooked up to an external analogue source, an external digital

source feeding its internal DAC or via its various Prisma-enabled network/streaming options. Whichever route you choose, it's immediately clear that these Primare components make an impressive combo, one offering real bang for your buck.

Most obvious is the sense of sheer power on offer. There's a lot of heavy lifting done by the A35.2 amp, meaning that you can be sure that whichever type of music you play, it will be delivered with strength, solidity and a good dollop of slam. One area in which this rewards is the sturdy, reinforced bass. Manix's 'You Held My Hand' [Oblivion/Head In The Clouds; Reinforced Records RIVET

dB

-2

-3

4

1212] is an uptempo techno track driven

by vast tracts of sub-bass. Not only did the Primare PRE35/A35.2 ensure that my loudspeakers were given a serious physical workout but it was thrilling to hear the duo summon up such vast reserves of heft down low. Indeed, given the price of these components, this Primare pairing seems hard to beat when it comes to bass. After all, I can't think of many less expensive ways of getting this sort of thump. And it's tightly controlled too, bass guitar notes starting and stopping as they should.

#### STREET WISE

10k

Frequency >>

All told, this gutsy presentation makes for a thrilling ride, even when you're

running the duo at very high volume levels. Its rendition of The Crusaders' track 'Street Life' [Street Life; MCA Records MCAD-31024] showed this to the full, while also revealing the power amp's fine dynamic headroom. Even on the song's crescendos and with

the volume rammed right up, the music sounded authoritative yet effortless.

The PRE35/A35.2's other winning trait is its tonality. In short, this combo is quite the smoothie, having a sound that is less forward than that produced by many of its rivals, making it a jack of all musical trades. Cue up Herbie Hancock's 'Speak Like A Child' [Speak Like A Child; Blue Note TOCJ-9102] and you won't feel that this slightly thin-sounding late '60s recording is in any way uneven. You're able to enjoy the lustre of the brass, for example, yet the ⊖

#### PRIMARE POWER

Introduced in 2007, the UFPD (Ultra Fast Power Device) Class D modules at the heart of Primare's power amps are representative of the best of this cool-running analogue technology, inspired by and given 'audiophile credibility' by trailblazers Hypex and its UcD and Ncore units [www. hypex.nl]. Although Primare's UFPD amplifiers are proprietary they share many important features with the single-ended

Hypex modules used to great effect in the NAD M10 [HFN Jun '19] and, of

course, in Primare's own I15 [HFN Oct '18].

UFPD is a high efficiency, single-ended Class D amp that integrates both the switching and low-pass filter stages within a global feedback scheme. The feedback accommodates different signal conditions, promising a predictable response and distortion regardless of variations in the speaker load impedance. Within its latest UFPD 2 module, Primare has refined the output filter inductor and traded a reduction in amplifier gain for an improvement in gain bandwidth, pushing the response peak out to higher frequencies. The inset Graph shows the A35.2's frequency response into an open circuit (grey) and also 80hm (black), 40hm (red), 20hm (blue) and 10hm (green) speaker loads where it holds to  $\pm 0.1 dB$  from 20Hz-20kHz (note the 1kHz-100kHz scale). PM



ABOVE: PRE35 [top] includes wired/wireless network streaming (Bluetooth, Airplay, Spotify, Chromecast) alongside a digital module (four opt, two coax and one USB-B), five line ins (two balanced on XLRs) and four analogue outs (two on XLRs). A35.2 [bottom] has balanced (XLR) and single-ended (RCA) ins plus 4mm speaker outputs

flugelhorn doesn't scream out of the mix at you. There was a decent amount of detail to be heard too, with plenty of information about the acoustic of the recording studio.

Compared to some similarlypriced rivals, however, there's a slight opaqueness when you attempt to focus in on elements right at the back of a busy mix. Then things can sound just a little over-smooth. without the reach one might wish for. This was evident across all inputs, so it's likely to be the power amp at play here. It made Blondie's 'Hanging On The Telephone' [Parallel Lines; Chrysalis TOCP-67893] a little less gripping than I'd have hoped.

#### **CRANKED-UP**

There's no sense of the PRE35/A35.2 being too laid-back, however. The Blondie track showed good pace, the leading edges of notes being captured well enough to ensure that the cranked-up guitars cut through

the mix. Debbie Harry's

distinctive voice was nicely handled too, and sharply defined from her backing band. And her vocal phrasing was also well portrayed.

This Primare combo offers up an impressively wide, capacious soundstage. It was particularly good from left to right, generating an expansive, room-filling

LEFT: The C25 handset partners with all Prisma separates, offering input selection, volume and access to set-up for the PRE35 preamplifier

sound, even if the depth perspective wasn't quite so convincing. For example, while listening to the Blondie track the recorded acoustic didn't fall back quite so far as it should have.

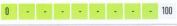
Switching to the digital inputs brought improvements however, delivering a distinctly more threedimensional sound. Yet the PRE35's internal DAC couldn't match the vim of the Chord Hugo 2 [HFN Aug '18] I had been using via the analogue inputs. A DVD-Audio disc of Rush's 'Limelight' [Moving Pictures; Mercury B0015272-00] attested to this. Yes, the internal DAC sounded spatially superior, but it didn't quite have the verve of the Hugo 2.

The Primare combo's streaming performance proved to be very good indeed, making light work of Tracy Chapman's 'Fast Car' [Tracy Chapman; Elektra 7559-60774-2]. The music was pleasingly smooth, delicate and engaging, while at the same time having no shortage of snap. It was also flattered by the power amplifier's obvious punch.  $\odot$ 

#### HI-FI NEWS VERDICT

Primare's sophisticated PRE35/ A35.2 combination is a class act. Especially in its priciest Prisma guise, it offers plentiful facilities coupled with slick ease-of-use and an enjoyably powerful sound. Furthermore, while optimised as a pair, both pre and power amp remain very competitive in their own right, the PRE35 as a go-to hub for comprehensive digital systems while the A35.2 is an all-round high-value powerhouse.

Sound Quality: 84%

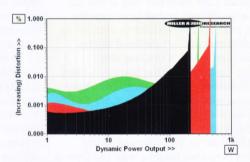


## LABREPORT

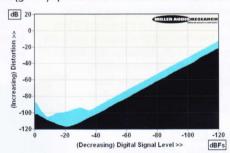
#### PRIMARE PRE35/A35.2

Unlike Primare's integrated DAC/amplifier solutions, like the 135 [HFN Mar '19], where the analogue line input is sampled at 48kHz, the PRE35's balanced line in/out remains analogue throughout. Distortion is just 0.00015-0.0016% (20Hz-20kHz, re. OdBV), the A-wtd S/N a wide 96dB and response flat to within ±0.1dB from 10Hz-100kHz. Via its digital inputs the maximum safe volume position is '83' - the preamp clips at volume '84' and higher at OdBFs - where the output is 11.7V (balanced) and distortion 0.0016-0.0068% (20Hz-20kHz re. 0dBFs). Distortion falls to a minimum of 0.0002% over the top 30dB of the PRE35's digital dynamic range [see Graph 2, below] where jitter is not entirely suppressed (440psec re. 48kFs) and its response scales with incoming sample rate, reaching -0.4dB/20kHz, -1.1dB/45kHz and -1.8dB/90kHz with 44.1/48kHz, 96kHz and 192kHz files, respectively.

The partnering A35.2 power amp builds on the performance of earlier UFPD amps, although its 215W/8ohm and 455W/4ohm power output is not substantially higher than that achieved by the older 150W-rated A34.2 amplifier [HFN May '15]. We have to go back to the Primare A60 [HFN Nov '14] before we find a bigger UFPD punch of 300W/ 575W (8/40hm). Otherwise, the A35.2 still holds up well under dynamic conditions where it supplies 220W, 465W, 570W and 300W into 80hm, 40hm, 20hm and 10hm loads, respectively [see Graph 1, below]. Distortion increases from 0.0009% at 10W output to 0.009%/ 100W and 0.09% at the rated 200W (all 1kHz), and quite abruptly above 10kHz (0.04%/20kHz/10W) while the A-wtd S/N remains slightly below average at 79dB (re. 0dBW). PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 10hm (green) speaker loads. Max. current is 17.3A



ABOVE: Distortion vs. digital signal level at 48kHz/ 24-bit via PRE35 preamp (1kHz, black; 20kHz, blue)

### **HI-FI NEWS SPECIFICATIONS**

Continuous power (<1% THD, 8/4ohm)	215W / 455W
Dynamic power (<1% THD, 8/4/2/10hm)	220W   465W   570W   300W
Output impedance (20Hz–20kHz)	0.009-0.012ohm (180ohm, PRE35)
Freq. resp. (20Hz–20kHz/100kHz)	+0.0 to -0.25dB/-5.9dB (A35.2)
Distortion (20Hz-20kHz, OdBFs/OdBW)	0.0009-0.007%/0.0008-0.010%
A-wtd S/N ratio (re. OdBFs/OdBW)	115.4dB (PRE35) / 79.0dB (A35.2)
Digital Jitter (48kHz/96kHz)	440psec / 155psec
Power consumption (idle/rated o/p)	25W / 450W (33W, PRE35)
Dimensions (WHD / Total weight)	430x106(145)x420(400)mm/ 23kg