

Primare PRE32/A34.2

Packed with trickle-down tech from its flagship siblings, this feature-rich pre/power pairing shows that Primare's latest 30-series amplifiers are a chip off the new block
Review: **Andrew Simpson** Lab: **Paul Miller**

With the hotly anticipated release of its 60-series amps last year, it's perhaps easy to overlook just how much effort Primare has also been ploughing into keeping its mid-market 30-series amps up to date. The 30 line-up is Primare's most populated model range, and includes the standalone NP30 network player [HFN Jul '14], DAC30 outboard DAC [HFN Feb '13], R32 phono stage [HFN Jan '12] and a selection of amps boasting Primare's 'Ultra Fast Power Device' Class D power modules.

As well as arming this range with its latest technology, Primare has catered for both the diehard separates fan and audiophiles happy to combine boxes and save some shelf space, by offering a wealth of integrated or standalone solutions to suit varying system needs.

UPGRADABLE PREAMP

The PRE32 is the 30-range's dedicated preamp, which costs £1750 in standard, analogue-only guise. In this basic form, with its sleek OLED front panel and remote control, you get four line-level (RCA) and two balanced (XLR) inputs, alongside two sets of line-level and one set of balanced outputs, to feed a range of power amp options. There's also a fixed-level set of analogue outputs over RCA, for legacy tape recorders, etc. All analogue signal paths are kept short and fully balanced, employing Burr-Brown OPA2134 op-amps. Source selection, volume level and balance control are all performed in the analogue domain.

Like its R32 phono stage sibling, the PRE32 also uses an R-core power transformer and is DC coupled from input to output via DC servos – there are no capacitors in the signal path.

For our review, we also opted to include the company's MM30 media board, which slots into a dedicated rear port, adding a range of digital inputs (while upping the

PRE32's price to £3000). Since this module comes directly from the £2000 NP30 and gets the same Burr-Brown PCM1792 DAC and SRC4392 192kHz/24-bit upsampling converter for digital duties, this extra outlay seems like money well spent.

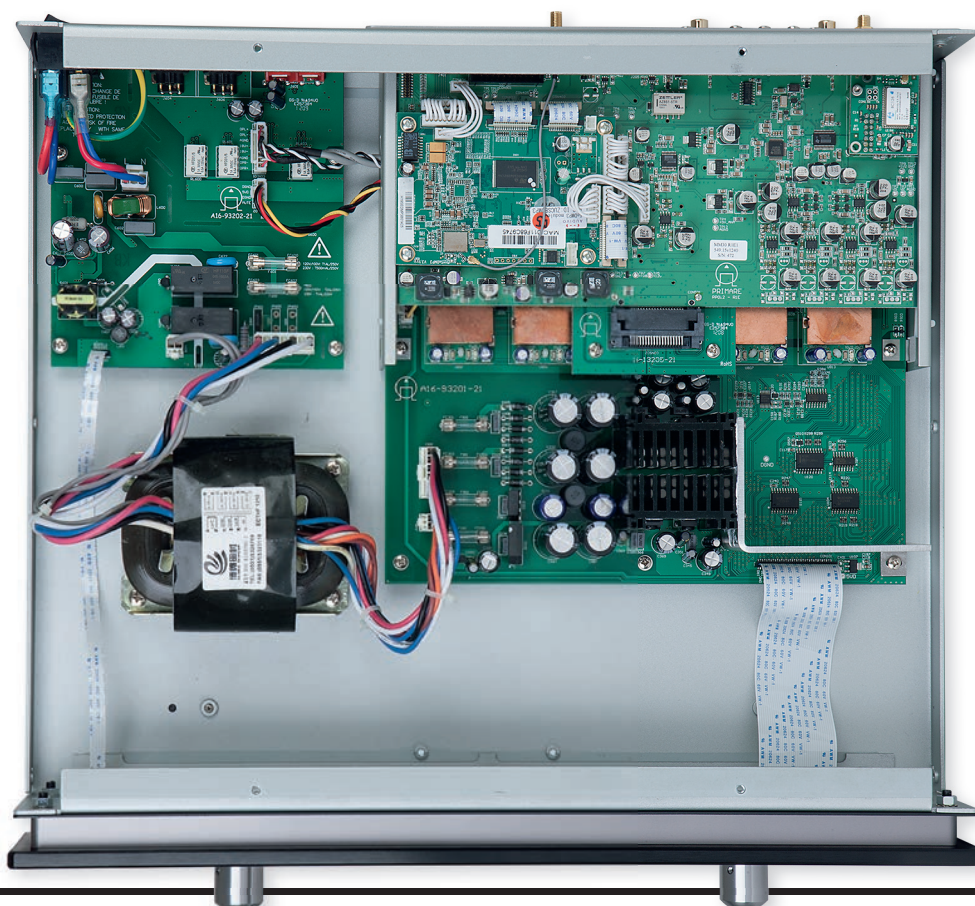
Digital inputs are well served by the MM30 and include an asynchronous USB-B port to connect a computer, a USB-A port for music stored on memory sticks and hard-drives, and S/PDIF inputs shared over three optical (Toslink) ports and a single coaxial (RCA) socket. Wi-Fi streaming is facilitated via a rear-panel stubby antenna, but as this is limited to 48kHz/16-bit, the Ethernet port is arguably the better route to the preamp's digital internals.

Completing our test model's extras is Primare's £180 aptX Bluetooth module,

taking our fully-loaded PRE32 up to a total price of £3180. Given that the BT module outputs its signal directly into the PRE32's DAC and sample rate converter, where it's upsampled to 192kHz, this also seems a worthy add-on if you're prone to streaming from a smartphone as the mood takes you.

THE A34.2 ROUTE

Partnering the PRE32 is Primare's A34.2 power amp, housed in matching silver or black casework with a simplified logo-embossed fascia. Its preamp stage comprises Burr-Brown OPA2134 and Analog Devices AD8512 op-amps while the output stage employs Primare's now very familiar and efficient Class D UFPD technology. In practice, the A34.2 uses half the number of these UFPD Class D



RIGHT: PRE32 preamp including additional MM30 DAC/streamer media board and Bluetooth receiver, installed via a slot on the amp's rear panel to sit above the main PCB



modules found in its big £6500 A60 [HFN Nov '14], although employing one module per channel has not halved its power output [see Lab Report, p55]. Furthermore, by including a dedicated jumper cable to connect between the right (-ve) and left (+ve) speaker outputs alongside a rear panel rocker switch, Primare also gives you the option to run the A34.2 as a bridged monoblock amplifier, increasing its output further to a claimed 550W/8ohm.

Befitting products from Primare, the look and feel of both amps is first-class. From its customisable input naming and tweakable screen colour to selecting source and tailoring settings, the PRE32 is highly intuitive to use. The onboard streamer also lets you access Primare's excellent app (for iOS and Android portable devices), which is one of the best in the business, making it a joy to use. Alongside useful features including random and repeat settings for stored music and with

access to bit-depth and sample-rate info, the Primare app also opens the door to internet radio via the vTuner platform.

CLARITY AND RHYTHM

Whether streaming music over Bluetooth or piping hi-res audio through a hard-wired USB or Ethernet connection, these amps sound as though they have clarity in abundance. Streaming The Handsome Family's 'Far From Any Road' from their *Singing Bones* album [Carrot Top Records SAKI 036] through Spotify at 320kbps via Bluetooth from my laptop, the amps didn't draw too much attention to the obvious shortcomings of this compressed format.

Vocals had surprising levels of depth and lifelike timbre, while the trumpet's edges

'They stay true to the purity of the music, yet without sounding clinical'

ABOVE: Both amplifiers are superbly finished and also come in matching titanium silver livery. PRE32 preamp's OLED display with stainless steel rotary dials and switchgear are pure class

didn't have that sense of being curtailed or sounding flat. Compared to other similarly priced streaming devices I've heard

recently, the Primares sounded less 'boxed in' over Bluetooth, with a more open soundstage. Channel separation and stereo imaging were so well rendered that you sometimes had to look twice to realise you

were not hearing a higher bitrate version.

But while Bluetooth makes for a worthwhile inclusion, you really need to serve these amps a richer diet to benefit from everything they have to offer. Exploring a 44.1kHz/16-bit FLAC rip of Future Islands' *Singles* album [4AD CAD 3402] streamed over USB from my laptop running JRiver, lets you know that these amps relish having a more substantial stream to play with.

Percussion on 'Like The Moon' is razor sharp, while being so foot-tapping and rhythmical it's addictive. Bass guitar notes take on a textured, robust quality, and the keyboard's atmospherics go deep and wide within the soundstage as their delayed echoes trail off into the distance. But it's not just the Primares' timing and musical scale that grab your attention, it's the way these amps seem to stay true to the purity of the music without being overly clinical. Despite this album's synthpop origins, the Primares are never to be found sounding

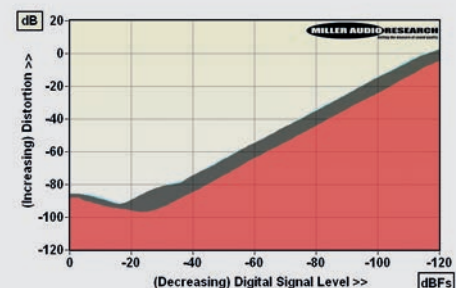
DESIGN FOR LIFE

Since the company's inception in 1986, Primare has sought to bring a contemporary lifestyle approach to the high-end audio market. Early landmark products include the company's rarefied 928 series of pre/power amplifiers released in 1986 and which remain the only hi-fi components in the Copenhagen Museum of Industrial Art. The stunning silver and gold-adorned 200 series followed in 1992, which included a top-loading CD player that looks as striking today as it did 23 years ago. An association with Xena Audio of Sweden, famous for its Copland and QLN brands, brought together the talents of Primare's Bent Nielsen and Xena's Lars Pedersen (now Primare MD) which led to the launch of the 20 and 30 series range of amplifiers and CD players in 1998. With the arrival of Björn Holmqvist in the late 1990s, Primare branched out into the high-end AV market, launching a range of DVD players and AV processors alongside its two-channel audio separates. Since 2007, Primare amps have featured its UFPD Class D technology, including the EISA-award winning I32 integrated amplifier.

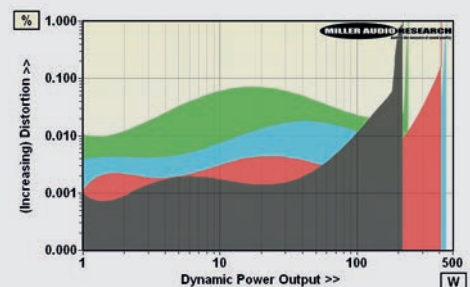
PRIMARE PRE32/A34.2

Judged as a plain vanilla 'analogue' preamp, the PRE32 acquires itself with flying colours – full gain is +16.7dB (bal. in/out) and full output 15V where distortion falls to a minimum of 0.000088-0.00067% (20kHz-20kHz) between 1-6V. The A-wtd S/N ratio is creditable at 95dB (re. 0dBV) and the response usefully extended from 1Hz (-0.0dB) to 20kHz/-0.12dB and 100kHz/-2.4dB. The MM30 Media Module brings its own 'colour' to the PRE32. Tested at Vol. '64' (an output of 2.05V), distortion increases to ~0.005%/0dBfs, ~0.004%/-10dBfs and ~0.0008%/-30dBfs [all 20Hz-20kHz, see Graph 1 below]. The S/N is improved at 103.6dB (re. 0dBfs), though still below 'average' for a modern DAC, while the responses of -0.55dB/20kHz (44.1/48kHz media), -3.4dB/45kHz (96kHz media) and -15.9dB/90kHz (192kHz files) bring an added HF roll-off to the PRE32's line response. On a purely digital front, jitter is vanishingly low at <10psec via S/PDIF and USB inputs at all sample rates (176.4kHz was not functional here via USB).

The A34.2 builds on the performance of earlier UFPD amps. Its 150W rating is exceeded to the tune of 210W/405W into 8/4ohm with a dynamic output of 215W, 410W, 447W into 8, 4 and 2ohm while distortion gently increases from 0.0007% at 1W to 0.0018%/10W, 0.0046%/100W and 0.017% at 150W [see Graph 2, below]. THD increases more markedly at HF (0.05%/20kHz/10W) while the A-wtd S/N remains slightly below average at 82dB (re. 0dBW). Readers may view comprehensive QC Suite test reports for Primare's PRE32 preamp/DAC and A34.2 power amp by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Distortion versus decreasing 48kHz/24-bit digital signal level via S/PDIF (1kHz, red and 20kHz, black) and USB (20kHz, blue)



ABOVE: Dynamic output versus distortion into 8ohm (black), 4ohm (red), 2ohm (blue) and 1ohm (green) loads. Maximum current is 15.4A

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	210W / 405W
Dynamic power (<1% THD, 8/4/2/1ohm)	215W / 410W / 447W / 238W
Output imp. (20Hz-20kHz, pre/power)	92ohm / 0.021-0.091ohm
Freq. resp. (20Hz-100kHz, pre/power)	+0.02 to -2.4dB/+0.0 to -13.0dB
A-wtd S/N ratio (re. 0dBV/0dBW)	95.2dB (0dBV) / 82.0dB (0dBW)
Distortion (20Hz-20kHz, pre/power)	0.00009-0.0007% / 0.0006-0.052%
Digital jitter (USB/ S/PDIF)	<10psec / <10psec
Power consumption (pre/power)	31W/340W (22W idle)
Dimensions (WHD, CD/Amp)	430x105x385mm/430x105x385mm



ABOVE: PRE32 ticks lots of analogue and digital boxes with four S/PDIF, two USB, Ethernet, Wi-Fi and Bluetooth inputs plus balanced and unbalanced analogue in/outs. The A34.2 power amp offers XLR and RCA inputs (note bridged mode toggle switch)

artificial. Even at low levels the way the music comes across undiluted nicely portrays all the fervour of the band's performance, while cranking up the volume takes you ever closer to the rawness of Samuel T Herring's vocal performance.

But that's not to imply the amps are especially forward-sounding, because they're not. What they are is focused across the audio band, and broadly without coloration.

TAKING CONTROL

While the A34.2 power amp's casework barely gets warm to the touch, betraying its cool running internals, it certainly sounded fully 'warmed up' just 20-30 minutes after switch-on and more than capable of driving my Dynaudio Focus 260 floorstanders without pause. Typically these speakers welcome plenty of muscle to really open them up, and the A34.2 showed no hesitation in taking control of their air-moving hardware.

A 96kHz/24-bit FLAC download of track 2, the *Adagio* from the 'Arpggione' Sonata, from *Schubert & Schumann* [Naim CD104], can sometimes sound flat and lacking life with an unsympathetic amp, but the A34.2 showed its character, adding genuine weight to the piano combined with the right degree of delicacy when needed.

Within the midrange the pre/power combo ensured the cellist was projected with a sense of purpose and poise, highlighting just how much control these amps are orchestrating across the music. The soundstage is well proportioned, giving each instrument ample breathing space to express itself with clarity and natural timing.

Via USB or S/PDIF digital inputs the Primare package also walks

a very impressive line between fleshing out lots of detail without sounding clinical or cold.

Bass too is particularly well controlled with the PRE32/A34.2. Streaming a FLAC download of Madonna's 'La Isla Bonita' [192kHz download from HDtracks – Sire/Warner], they conveyed excellent levels of grip without bleeding any of this track's palpable upper bass detail into the midrange.

Testing the PRE32's analogue inputs with a VPI Scout 1.1 turntable [HFN Oct '14], Denon DL-103R MC and Primare R32 phono stage reassured me that the heart of the preamp is not surpassed by its digital add-ons. Playing 'Small Things' from Ben Howard's *I Forget Where We Were* LP [Island 4701043] conjured a very organic sonic landscape that was very easy to get lost in.

This track's bass reaches very deep but the Primares had no difficulty in plundering these lower registers without over-emphasis. It left you free to relish the most physical of bass without feeling overwhelmed by it. ☺

HI-FI NEWS VERDICT

As an analogue input-only package these amps have lots to offer, but paying for the extra digital internals is a no-brainer, as this gives you access to a sophisticated DAC, streamer and intuitive app, making this a superb system for the modern audiophile. And it's not just their spec. sheets that score highly, as they're blessed with a sonic finesse that's smooth and highly articulate across all inputs.

Sound Quality: 84%

