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Reprint

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AV Pre/Power amplifier duo Primare A30.7 + SP33:

Surround Strongroom



Surround Strongroom

The name Primare stands for top-class hifi devices from Scandinavia. Let's see if their latest AV pre/power amplifier duo SP33 and A30.7 can keep what the stereo components were already promising

It's not for the first time that the reviewers got the association »strongroom« on their minds when unpacking the latest SP33 surround preamp and the matching A30.7 power amp from Primare. The fact that the »Swedish steel« actually consists of dark shimmering, brushed, anodised aluminium, does not change a thing about the sensation of

value and consistency, which inevitably comes with the first touch and will repeat itself upon turning the metal controls, when they glide smoothly, but well noticeably through the lock-in positions. A look at both rear panels confirms the first impression of professionalism with an entire row of robust, balanced XLR connections on each of them. These allow to use long cables as well, an interesting feature especially on the preamp in combination with active loudspeakers. Furthermore, next to the outputs the preamp also offers two balanced stereo inputs and a digital AES/EBU input with huge professional sockets.

The 7-channel power amp A30.7, too, is a true »behemoth« and requires some effort to get it out of its sturdy box with the precisely fitting styrofoam packaging parts and heave it onto the rack. However, when peeping through the generously

slotted cover lid you'll be a little surprised, for considering the weight you'd rather expect one or several large toroidal transformers and massive heatsinks. Instead there are only two large pc boards with a comparably huge switching power supply in discrete build and a second board with the switching power amps. Finally we spot the small, dainty looking input board, which also takes up the full width, because the phalanx of balanced and unbalanced input sockets on the rear is evenly spaced over the entire back panel. The rest is air, surrounded by a really massive enclosure. Die-hard high-end followers know that this is no humbug, for a large mass reduces microphonic effects and, due to its high thermal capacity, also produces a homogeneous microclimate during operation. In the typical Primare style the powerhouse sits tilt-proof on three large damping feet, just like the preamp.

The huge pc board for the mains supply uses a power factor correction, as is compulsory in the EU for large switching power supplies. This is to reduce the grid load, induced by power supply interferences, on other loads and to provide a more constant and almost infinitely efficient electricity supply on the secondary side. The no less than seven power amps are run as »Ultra Fast Power Devices« (UFPD) in class-D mode and, due to their extremely high efficiency, they don't need a sophisticated cooling system, because they send almost the entire energy to the speakers instead of dissipating it in the form of heat like classic class-A/B colleagues do. This relieves the mighty multi-channel power amp of the heatsinks and simply helps to save electricity as well. For years the UFPD power amps have proven themselves in the hifi and high-end amplifiers from Sweden as a musical and powerful sounding drive, which has completely done away with the horror of past time class-D circuits.



Reduction to the essential

The controls on the A30.7's front panel almost seem to be overly thrifty. They didn't even think of a power switch or a stand-by button. And why should they? The powerhouse can be activated either by a switched voltage via the supplied control cable or integrated into room controls using the RS-232 interface. For a safe shutdown there is a main breaker at the mains inlet. The seven inputs are individually switchable from RCA to XLR by classic toggle switches and the wiring can therefore be mixed in a flexible way. The robust speaker terminals are arranged in pairs horizontally side by side, all lateral drilled holes are aligned vertically to perfection – thus all cables can be plugged in easily without fiddling or mutual obstructions. All terminals are securely insulated by transparent plastic, thereby limiting the maximum outside diameter for cable lugs.

At a crucial point the SP33 processor/preamp is fitted with future-proof slide-in modules, which allows coming upgrades to new standards. Maybe the most impor-



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tant module is the video board with its five HDMI inputs and two outputs. It is state-of-the-art and can handle resolutions up to Full HD and 3D. Ultra HD, which is not yet fully established as standard (although already offered with certain restrictions by many AV amps), will remain reserved for later versions of the video module. However, on the audio side the HDMI board can handle all all current signals from PCM to all Dolby and DTS codecs with a maximum sampling rate of 192 kilohertz. And because the video board comes from DVDO, it offers an ample range of top-level de-interlacing, filtering and scaling options. The simultaneous operation of a Sony beamer and an LG TV in the test cinema also proved to be stressless. Analogue video connections are no longer found on the Primare.

The second most important module is the digital audio board with its signal processing and the decoder chips plus a full set of digital sound in- and outputs. The

third and final swappable module is reserved for controlling options. To control the SP33, it currently offers an infrared repeater input for an external receiver – practical, when the amp is installed e.g. in a cabinet – and an RS-232 interface for control by means of controller systems à la Crestron. Three trigger outputs act as remote turn-on, for instance of the power amps or active loudspeakers.

Practical remote control

Four of the RCA input socket pairs may be used as a multi-channel analogue input to connect e.g. an SACD player. Other comfort connections such as frontside inputs for mobile devices or the likes have been dropped by the puristic Swedes. The included system remote control, too, can do without any bells and whistles and clearly stands out against the majority of its competitors: it's unusually flat and surprisingly low in weight. Which is more pleasant in practice than many a wanna-be »cast ingot«, as they are supplied with

some high-end devices. True, these will impart a nobler haptic feel – but in everyday life you'll soon mutate into a bodybuilder. In contrast the superslim hand bar from Primare appears to be calmly ergonomic, not least because it's also nicely flat due to the fact that it uses button cells instead of full-fledged batteries.

In the listening room manual work was in demand when adjusting the system, for there is no auto-calibration – hence a measuring tape, a level meter, a good hearing and a little experience were needed. A trained tester can perform the set-up in even less time, because he won't have to wait for the constantly beeping, pulsing or noise-emitting automatic helper. The simple, but well-structured Scandinavian menu helps to find the right presets for all parameters quickly. To each input and the two HDMI outputs the displayed names, triggers, an input level correction, video signal processing and the default playback mode for stereo signals may be freely assigned.

After all the necessary adjustments had been made, we moved on to the listening check. The testers soon noticed two prominent characteristics: the spatial imaging always appeared to be relatively close and the dynamic impression rather compact. But in this context compact must not be equated



Five HDMI inputs and two outputs with Full-HD and 3D compatibility are perfectly practice-oriented.



Little toggle switches on the power amp serve to select between the RCA and XLR inputs.

with compressed, no – in fact, the opposite is the case. The SP33 gave a very dynamic, yet always full-bodied and powerful performance and hence is probably not be the right choice for people who lay their focus on a particularly airy sound character. The high-frequency range, too, revealed a slightly reserved tendency, although nothing was missing. What has been curbed here by the Swedes, is made up for by an unusually sophisticated midrange resolution. As a listening example I'd like to mention the cymbals in Dave Brubeck's famous »Take Five« recording. Sure, over many electronic components they sound delicately resolved, but way too bright and massless. The Primare duo let you feel the weight of the metal and gave the acoustical timbre, dipped into the dark shimmer of the polished brass, a very realistic impression.



Primare's Swedish leading trio is comprised of Product Manager Siemen Algra, Sales Director Flemming Johannsen and Executive Director Lars Pedersen (left to right).

Special status confirmed

The surround processing also delivered a conclusive, gapless and highly musical imaging. However, the end of the road comes at 96 kilohertz sampling rate; more finely sampled digital signals go out as they get in. In 99.99 per cent of all cases this should bother nobody, only with a 7.1 configuration using lateral and rear surround speakers the imaging of 5.1 recordings slips forward a bit too far, because the rear speakers keep silent. 192 kilohertz stereo recordings can't be played back in surround, either. It really couldn't be any more exotic.



Each single Primare device, like e.g. the A30.7, is measured prior to shipping and checked for trouble-free function

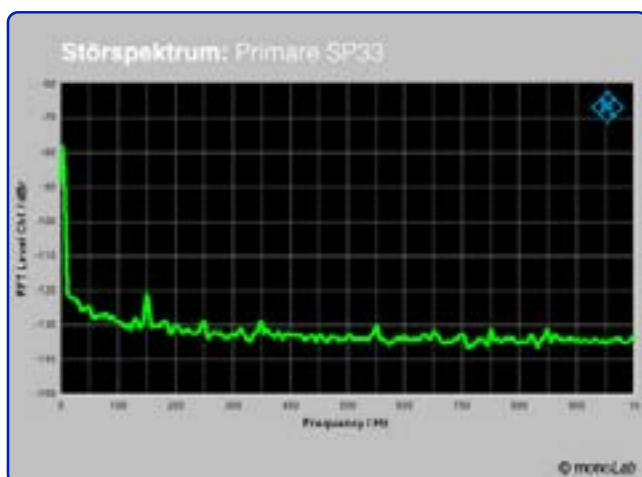
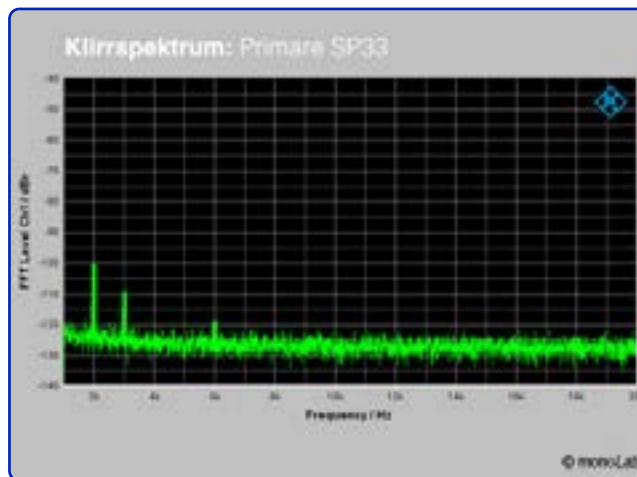
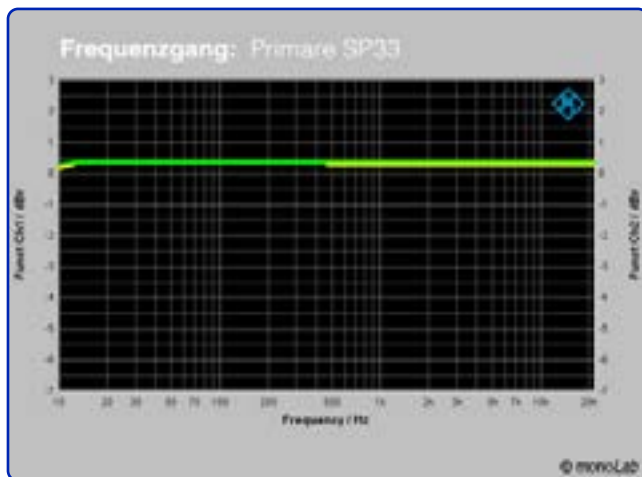
No matter what the testers were throwing at the Viking team, the sound image was with no exception very substantial, almost palpable and comparably massive, but by no means bloated, yet tight and robust. Whether they were looking over Keith Jarrett's shoulder at his clavier, listening to Ella Fitzgerald's voice, as she was standing right before them in front of the carpet, or sitting in the centre seat between the musicians of the Big Phat Band in surround, who turned the test cinema into a stage – the whole always retained a stable imaging and a musical flow, which you just couldn't escape from. Similar story with movie reproduction. The tight and quite full-bodied rendition gave all scenes a suspense-enhancing, almost intimate closeness and palpability that we mostly miss in less complex AV amplifiers. Here, too, the imaging always showed a clear, fine dynamical separation; with action scenes the force of the UFDP power amps was shattering the entire room in a realistic and seemingly effortless way.

Test result

With the SP33 and A30.7 duo Primare offers a surround pre/power amp duo with an almost classical appearance, a perfect, massive workmanship and a pleasantly puristic no-frills design. Here the sound and build quality were absolutely put into focus, and not marketing promoting lists of features. But: all essentials are there, from a superb video signal processing, the straightforward audio signal processing with all decoders and maximum sampling rates of 192 kilohertz to serial interfaces and trigger signals for remote controlling. As opposed to many competitors the slim remote is a boon. Soundwise the combo presents a muscular body and a steady imaging that is virtually palpable and intimately close at the highest stage.

Raphael Vogt ifn

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Lab report

Primare SP33

Gain:

Gain factor: 17 dB / 7,1-fold
max. output voltage: 14,3 V

Distortions :

Distortion factor (THD+N): 0,0017 %
IM distortions (SMPTE): 0,0050 %
IM distortions (CCIF): 0,0006 %

S/N ratios:

Unweighted noise voltage (- 20 kHz): -94,5 dB
Weighted noise voltage (A-weighted): -97,1 dB

Others:

Upper limit frequency: > 185 kHz
Channel deviation: 0,052 dB
Input impedance: 4,2 kOhms
Output impedance: 95 ohms

Power consumption:

Stand-by: < 1 W
Idle : 56 W

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Highlight

Sound quality

superb

Laboratory

very good

Features

very good

Workmanship

very good

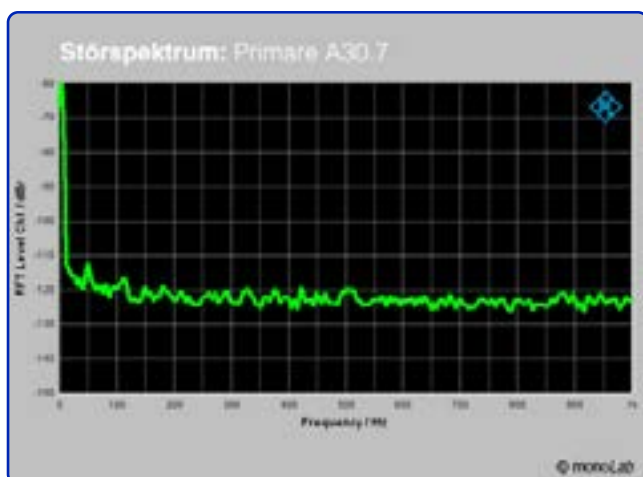
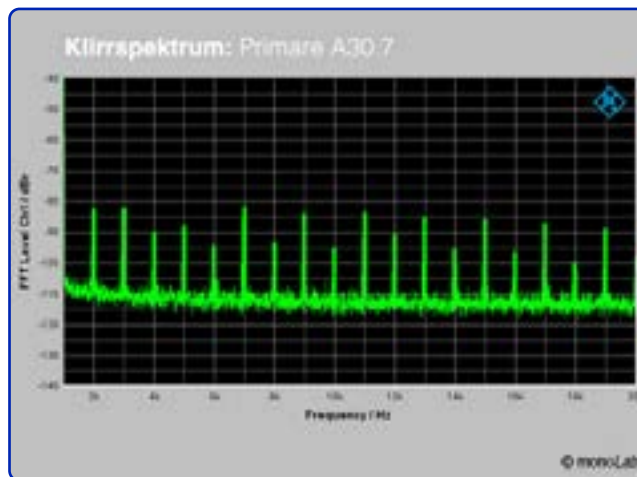
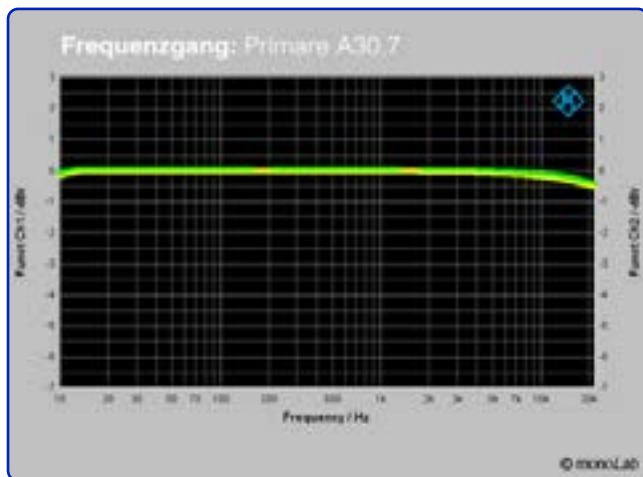
Overall score

very good

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Primare SP33

Test verdict: very good



Lab report

Primare A30.7

Output power:

Nominal output power @ 4 ohms (1% THD): 354 W

Nominal output power @ 8 ohms (1% THD): 177 W

Distortions :

Distortion factor (THD+N, 10 watts @ 4 ohms): 0.0033 %

IM distortions SMPTE (5 watts @ 4 ohms): 0.017 %

IM distortions CCIF (5 watts @ 4 ohms): 0.0030%

S/N ratios:

Unweighted noise voltage (-20 kHz): -103.9 dB

Weighted noise voltage (A-weighted): -107.3 dB

Others:

Gain factor: 19.9 dB / 9.8-fold

Upper limit frequency (-3dB / 10 W @ 4 ohms): 56 kHz

Channel deviation: 0.05 dB

Sensitivity (full modulation @ 4 ohms): 3.8 V

Input impedance; 7.2 kOhms

Power consumption:

Idle: 44 W

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Top design

Sound quality

superb

Laboratory

good - very good

Features

good

Workmanship

very good

Overall score

very good

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Primare A30.7

Test verdict: very good

Menu navigation



The well-structured onscreen menu of the SP33 enables an extensive configuration of each input complete with editable clear name, assignment of picture and sound sources, stereo audio mode, triggers as well as a level and audio delay adjustment for synchronising picture and sound.



With its DVDO video board the Primare almost offers the parameters of a dedicated video processor. Thus for the sat receiver the reviewers were using e.g. the low setting of the mosquito artefact reduction together with a delicately dosed contour and detail enhancer to get a quieter and yet crisper picture from the TV reception.



Rare and highly professional: the trigger signals for the remote activation of power amps, active speakers/subwoofers et cetera can be coupled with individual delay settings to avoid unwanted start-up peaks. This will save you quite a few walks to the fuse box.



Features

Multi-channel AV preamplifier Primare SP33

HDMI ins/outs: 5/2
 Analogue ins/outs (RCA): 8 (4+7.1)/7.1 + Z2
 Analogue ins/outs (XLR): 2/7.1
 Optical digital ins/outs: 3/1
 Coaxial digital ins/outs: 3/1
 AES/EBU digital ins/outs: 1/-
 Zone outputs: analogue/digital: 1/-
 IR flasher input: 1
 RS-232C: 1
 Trigger outputs (3.5 mm mini jack): 3
 Dimensions (W x H x D): 43 x 18 x 39 cm
 (16.9 x 7.1 x 15.4 in.)
 Weight: 12 kg (26.5 lbs)
Price: 4.900 EUR
Warranty: 2 years

Multi-channel AV amplifier Primare A30.7

Analogue inputs (RCA): 7
 Analogue inputs (XLR): 7
 RS-232C: 1
 Trigger inputs (3.5 mm mini jack): 1
 Trigger outputs (3.5 mm mini jack): 1
 Dimensions (W x H x D): 43 x 15 x 40 cm
 (16.9 x 5.9 x 15.7 in.)
 Weight: 13 kg (28.7 lbs)
Preis: 3.000 EUR
Warranty: 2 years

Contact

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