P R I M A R E

Primare I30 Integrated Amplifier

The I30 is an integrated preamplifier and power amplifier with extraordinary performance for its price.

High-performance power amplifier

The amplifier is capable of delivering 100watts into an 8 ohm load and 180watts into a 4 ohm load. Its robust topology means that loudspeakers will always receive a highly stable and symmetrical signal. Even so, special care has been taken to protect loudspeakers against faulty input signals. Four individual DC-servos together with DC-blocking and protection circuit provide this state of the art protection.

Careful design for operational stability

As with all Primare units, the I30 is housed in an alloy heavy gauge steel chassis, which provides strength, rigidity, and screening, while being effective at damping vibrations from external sources.

Display and audio circuits are isolated

The front panel design isolates the display circuitry from the audio circuitry to avoid interference

Fully balanced Dual-Mono design

The I30 provides the opportunity to enjoy the benefits of ultra-low noise 'balanced' signal transfer, of the kind employed by recording engineers. It is fully balanced all the way from the balanced (XLR) inputs to the speaker outputs.

Balanced signal transmission means that two signal lines are used per channel, which carry the same signal with opposite phase. On the receiver side the signals are mixed, and since any interference that has arisen during the transmission will be present in both lines with identical phase, such noise and distortion products are cancelled out leaving only the pure original signal. Balanced connection therefore keeps the signal as free as possible from interference.

The I30 is a dual-mono design, ensuring that each channel remains electrically independent and identically resourced throughout. Each channel has its own identical, dedicated mono amplifier incorporating a heavy-duty custom-made toroidal transformer and low noise regulated power supplies.

To increase the dynamic range, the input buffers and the unbalanced to balanced conversion stage have been improved with the use of Burr-Browns OPA2134, one of the best operational amplifiers available.

Clean power supply for the best possible performance

Each part of an electronic design has specific power requirements. Primare's forensic approach to ensuring that clean power is supplied throughout the design is a key part of its design philosophy and has significant sonic benefits.

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The amplifier uses one separate power transformer for each channel. The rectification and regulation is 'floating ground' configured instead of the standard 'fixed ground' approach. This is to keep any disturbance and hum as low as possible. The driver stage and preamp stage are individually regulated, so is the digital supply to the front panel. Ten individual power regulators are used, an unusually high number for an integrated amplifier.

Shortest signal paths

Special care has been taken while designing the circuit to keep the signal path as short as possible. SMD components, including excellent 1% MELF-type resistors are used whenever possible.

Precise volume control

Four digital volume controls, two per channel, are used to ensure a precise channel balance and a flat frequency response at any volume level

Clean input switching

The input signal switching is carried out with solid-state relays, which give a much higher performance than the more commonly used C-Mos switches.

For special applications a 180 degrees phase shift function is provided.

Flexible inputs and outputs

The amplifier incorporates two sets of balanced inputs (XLR) and four gold-plated unbalanced inputs (RCA) for CD, Tuner, Aux and Tape. A Preamp Output is provided for bi-amping configurations and a record output is provided.

The amplifier incorporates the massive high quality gold-plated speaker terminals suitable for most audiophile speaker cables.

Intuitive user interface

In keeping with the philosophy of the Primare range of systems, the I30 can be controlled through a very simple and intuitive set of front panel controls. Alternatively all the functions of the I30 can be controlled by the C22 RCU supplied, or by using the optional C32 RCU.

Although the I30 is flexible enough to work with virtually any other equipment you have in your system, it is ideal for use with the other products in the Primare range, such as the Primare CD31 CD Player. A particular benefit of using the I30 with other Primare sources is that you can control your entire system with a single remote control, to give you a fully integrated system with the simplest possible user interface.

Specifications

Output power per channel 2 x 100W into 8Ω , 2 x 180W into 4Ω Speaker terminals 4 – 16Ω Output impedance <0.06 Ω DC offset <3mV Balanced inputs 560mV Line inputs 280mV Tape outputs 280mV Frequency response <10Hz – 100kHz, -3dB THD <0.07% at full power Signal-to-noise, line -100dB (A-weighted) Mains 100/115/230V Power consumption 600W max Peak current \pm 40A Dimensions (WxDxH) 430 x 375 x 100mm Weight 15.5kg

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