

CURV 500[®] I AMP

4-CHANNEL CLASS D INSTALLATION AMPLIFIER



FEATURES

- 4 channels with DSP control
- Purpose-designed for CURV 500 installations
- Low-profile 1U 19" rackmount construction
- Drives up to six CURV 500 satellites or one CURV 500 ISUB subwoofer per channel
- Single push encoder operation
- High-contrast OLED display
- Temperature controlled low-noise fan
- High-efficiency switch mode power supply
- Only 6.8 kg

SPECIFICATIONS

Product type	Power Amplifiers
Type	Installation Power Amplifiers
Rated output power (1kHz @ 2,7 Ohms)	4 x 240 W
Rated output power (1kHz @ 4 Ohms)	4 x 240 W
Rated output power (1kHz @ 8 Ohms)	4 x 120 W
Rated output power (1kHz @ 16 Ohms)	4 x 60
Output circuitry	Class D
Frequency response	10 - 22000 Hz
THD	< 0,01 %
Protection circuits	Short circuit, thermal overload, DC, over-current, soft start
Controls	Push encoder
Indicators	OLED Display
Line inputs	4

DESCRIPTION

Purpose-designed for CURV 500 installations the I AMP is a low-profile 4-channel Class D rackmount amplifier with high-efficiency switch mode power supply and 10 Hz - 22 kHz frequency response. Sporting DSP control with presets for various satellite and subwoofer configurations, delay and parametric EQ each channel delivers 240 watts RMS at 4 ohms with less than 0.01% THD. Operating the iAMP is simple and intuitive with just a single push encoder and easily readable high-contrast OLED display. It features a soft start circuit, DC, overcurrent, thermal and short circuit protection plus a temperature controlled low-noise fan. Input is on balanced XLR and terminal block connectors. The iAMP is capable of driving up to six CURV 500 satellites or one CURV500ISUB subwoofer per channel providing terminal block and speakON-compatible output connectors.

Line input connectors	Terminal block, XLR
Loudspeaker outputs	4
Speaker output connections	Speakon compatible, terminal block
Cooling	Temperature controlled low-noise fan, noiseless in idle mode
Operating voltage	Switch mode power supply with power factor correction (PFC), 100 to 240 VAC, 50 - 60 Hz
Power consumption @ full load	1100 W
Width	482 mm
Height	44 mm
Depth	420 mm
Weight	6.8 kg

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ARCHITECTS SPECS

The amplifier shall provide four independent channels of amplification with DSP processing capabilities. Each channel shall provide a rated output power, at 1kHz with less than 0.5% THD, of 240W into 2.7 and 4 Ohms, or 120W into 8 Ohms. The amplifier shall be capable of working in bridge mode, providing 2 channels at a rated output power of 480W, into 4 Ohms, or into 70V constant voltage lines. The output circuit topology shall be Class-D. Frequency response shall be 10 Hz to 22 kHz (+/- 1dB); Input sensitivity shall be +6dBu at 3 ohms; Signal-to-noise ratio (A-weighted) shall be higher than 100dB. THD+N shall be less than 0,04% at 1 watt output. Crosstalk, between adjacent channels at 1kHz, shall be higher than 90 dB, depending on DSP preset selected.

The amplifier shall include an output multiband limiter, soft-start, and protection against short circuit, thermal overload, DC, and over current. It shall be equipped with a low-noise temperature-controlled fans. The amplifier shall be capable of continuous operation at 1/3 of rated power into 4-ohm loads, in ambient temperatures up to 35° C.

The power amplifier shall have four balanced analog inputs, with symmetrical XLR and 3-pin terminal block connectors per input, and four amplified outputs, with terminal block, and speakON-compatible connectors per output.

The amplifier shall include digital signal processing (DSP), with AD/DA converters with 24 bit/48kHz, and a dynamic range of 114 dB. Two main processing blocks shall be available in the amplifier. A channel processing block shall provide the following features per channel: Level, polarity and mute control, 10 band parametric EQ, and 166ms/59m delay with temperature adjustment. A channel link shall be available for DSPparameter linking between channels. A locked output processing block shall contain the following DSP features, only available via pre-programmed factory presets that contain any possible combination of CURV500 speakers: HPF, LPF, 12 band parametric EQ, Gain, Multiband limiter, and Soft-clip. A 4x4 routing matrix shall be included for routing and mixing of any input to any output.

A Master Volume control shall be available and can be enabled or disabled to provide a global volume control for all channels.

The front panel of the amplifier shall contain a multi-functional OLED display to show all the channel DSP settings, routing, preset selection for output DSP, and status information. A rotary push-encoder shall be provided for menu navigation and parameter settings. A Panel-lock function with 4-pin password shall be included to avoid non-authorized access to DSP and control parameters. Master Volume control shall be available when Panel-lock is activated.

A Type-B USB interface shall be available in the rear panel for updating device firmware and loudspeaker presets, managing global presets, and resetting the lock PIN. A software GUI shall be available for Windows OS computers.

The amplifier shall be powered by a highly efficient switch mode power supply with power factor correction (PFC), providing an operating range from 100 to 240 VAC, 50 - 60 Hz. It shall have a standard IEC C14 connector in the rear panel, and shall be supplied with a removable power supply cord. The amplifier shall draw 138W or less at 1/8 rated power into 3 ohms. The dimensions of the amplifier shall be 1RU (44 mm) height, 482 mm wide, and 420 mm depth. The amplifier shall weigh 6,8 kg.

The amplifier shall be in conformity with the EU directives 2014/35/EU (LVD), 2014/30/EU (EMC) and 2011/65/EU (RoHS); shall be CB Certified according to IEC 62368-1:2014 for use in Europe, USA and Canada; shall be listed according to UL 62368-1:2014 and CAN/CSA-C22.2 No. 62368-1-14, and shall comply with FCC 47 CFR Part 15.

The four channel DSP amplifier shall be LD Systems CURV 500 I AMP.