



35 Watt Power Amplifier

HIGH EFFICIENCY

MADE IN U.S.A.

- One input with front-panel volume control
- Bass and Treble tone controls
- Designed as a single zone amplifier
- Master volume VCA controlled with remote adjustment capability
- Amplifier output on detachable terminal block
- Unbalanced summing inputs on RCA jacks
- Includes power supply
- High-efficiency Class D operation



HD-PA35
4 Ω / 8 Ω



HD-PA35A
25 V, 70 V, 100 V

The HD-PA35 is a single input audio amplifier for systems demanding high energy efficiency. It may be used as a single zone amplifier fed from a variety of RDL or OEM mixers. It is ideal for providing one or more additional zones to a mix originating from another RDL HD series mixer amplifier. The 35 W power amplifier output is driven from a high-efficiency Class D amplifier stage. The amplifier output level may be VCA controlled using various optional RDL remote controls, or by industry standard 0 to 10 Vdc or 0 to 10 k Ω controls. The output drives 4 Ω or 8 Ω speakers. The output impedance is switch-selectable on the rear panel. The HD-PA35A has all the features of the HD-PA35 except its 35 W amplifier provides a constant voltage output (25 V, 70 V or 100 V) instead of a low impedance speaker output. The HD-PA35 is engineered and manufactured in the U.S.A.

The HD-PA35 provides a front-panel control to set the input gain. An optional remote control connected to the rear-panel detachable terminal block provides for remote adjustment of the output level. The tone controls adjust the equalization at the amplifier output.

The amplifier includes an analog compressor/limiter for audio fidelity noticeably superior to conventional class D amplifiers with digital limiting. Increasing the input gain can substantially increase the average output power beyond that of a standard 35 W amplifier. A red front-panel LED flashes when the compressor is preventing output clipping. Normal audio level signals remain unaffected by the compressor thereby preserving audio dynamics. The audio is compressed according to three dynamic time constants providing aural transparency while maintaining clean, unclipped amplified audio for input overloads of up to 20 dB. The HD-PA35, with compression, is capable of producing average audio output levels and clarity normally expected from amplifiers with a much higher output power rating.

A blue POWER LED illuminates when the HD-PA35 is powered from its external 24 Vdc power supply (included). The power LED is dim when the mixer amplifier is in the standby mode, and is bright when the amplifiers are fully active. A front-panel pushbutton is provided to manually switch between standby and active modes. The power amplifiers are equipped with both thermal and output short-circuit protection. The high-efficiency Class D output stage produces minimal heat for all levels of expected voice or music modulation.

HD-PA35 & HD-PA35A

Audio Power Amplifiers

HD-PA35: Low Impedance Output 4 or 8 Ω

HD-PA35A: Constant Voltage Output 25 V, 70 V or 100 V

LEVEL CONTROL

Adjusts the amplifier output level.

TONE CONTROLS

User controls adjust bass and/or treble boost or cut.



RLC10K

Remote Control Examples



RDL REMOTE CONTROLS

Multiple RDL remote controls are available to allow user adjustment of master output level. Remote controls sold separately.

SIGNAL PRESENT INDICATOR

The LED glows if an audio signal is present at the input. The LED is not affected by the level control.

COMPRESSION LED

LED flashes when audio compressor is acting on the amplified audio.

POWER BUTTON

Latching pushbutton turns the amplifier ON or off (STANDBY).

POWER INDICATOR

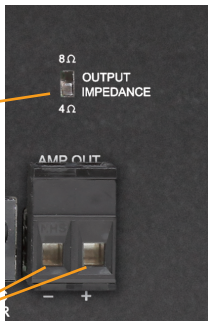
Glow dimly when the amplifier is powered and is in standby (off) mode; glows bright when amplifier is on.

- Amplifier Output: 35 W RMS
- Output Impedance Switch-Selectable 4 Ω or 8 Ω (HD-PA35)
- Constant Voltage Outputs 25 V, 70 V or 100 V (HD-PA35A)
- Unbalanced Stereo-Summing Line Input on RCA Jacks
- Balanced Line Input on Detachable Terminal Block
- Front-Panel Tone Controls
- Amplifier Output on Detachable Terminal Block

- VCA Control on Detachable Terminal Block
- Compatible with RDL Remote Level Controls
- Aurally Transparent Compressor Controls Clipping
- Compressor Maximizes Average Output Power and Level
- Audio Compression Threshold LED
- High-Efficiency Class D Operation
- Thermal and Short-Circuit Protection

OUTPUT IMPEDANCE

Set output impedance to match a 4 Ω or 8 Ω load.



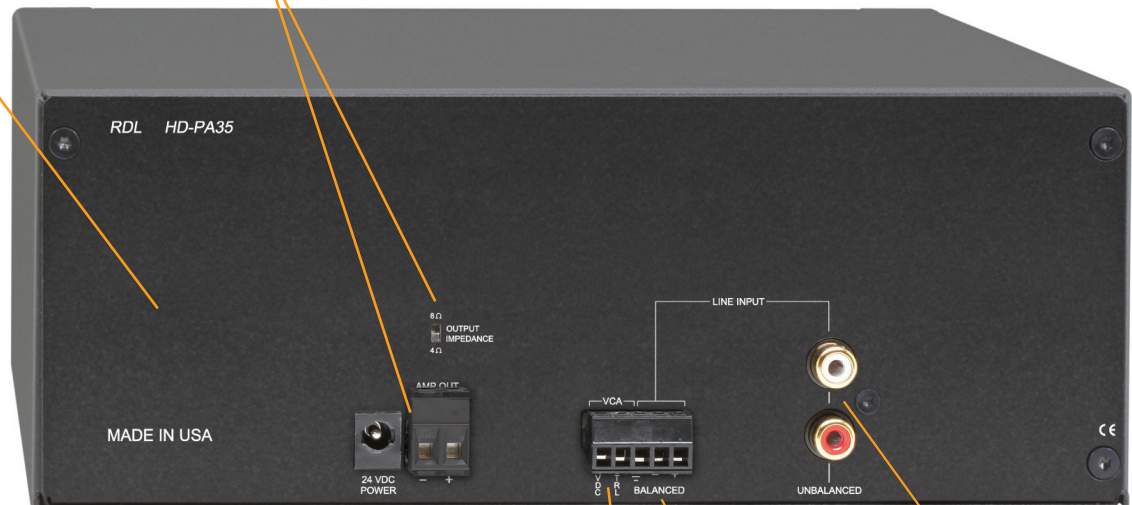
AMPLIFIER OUTPUT

35 Watt 4 Ω or 8 Ω amplified output.

OUTPUT DETAIL HD-PA35A



OUTPUT DETAIL HD-PA35



AMPLIFIER OUTPUT

35 Watt 25 V, 70 V or 100 V amplified output.



SECURITY COVER

Slides over the wired constant voltage terminal block to prevent accidental contact. Secured by tightening a single screw.

WIRE ACCESS

Wires enter through the bottom of the cover.

UNBALANCED LINE INPUT

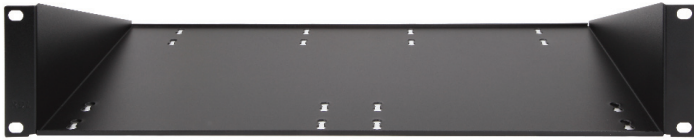
Connect any unbalanced audio source. Actively sums stereo sources.

BALANCED LINE INPUT

Connect any balanced (or unbalanced) audio source. Connect this input from the LINE OUT of an RDL HD-MA35 type mixer-amplifier to use this amplifier as an additional zone. Actively sums stereo sources.

VCA REMOTE CONTROL

Connect an RDL wall-mounted remote control to adjust the amplifier output level.



HD-RA2 Rack Adapter

Mounts 2 HD series products. Mixer amplifiers may be mounted forward for user control, or may be recessed securely behind a filler panel.



Amplifier mounted in HD-RA2



HD-BP1 BACK-PACK Rear Cover

Mounts to an HD series mixer / amplifier to prevent user access to the rear panel. The back-pack holds the power supply and provides a completely closed back for the installed amplifier.



Inside View with Power Supply



BACK-PACK Installed on Mixer Amplifier

Rear View



HD-FP1 Filler Panel

Fills an unused half of rack adapter or mounts in front of an HD series product to prevent user adjustment or tampering.

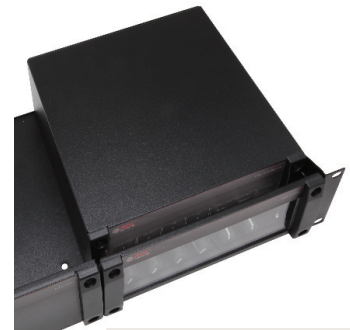


Amplifier mounted behind HD-FP1



HD-FP2L Filler Panel with Lens

Mounts in front of an HD series product to allow viewing while preventing user adjustment or tampering. Lens is removable during setup.



Amplifier mounted behind HD-FP2L



HD-ASC1 Amplifier Security Cover

Mounts to an HD series mixer / amplifier to prevent user adjustment or tampering. The power button and associated indicators remain accessible with the HD-ASC1 installed.



HD-ASC1 mounted to an amplifier

TYPICAL PERFORMANCE

Rated Power:	35 W RMS
Audio Input:	Unbalanced stereo summing input on RCA jacks
Maximum Input Level:	+ 9 dBV (+15.5 dBV, one input); (for 1% THD+N at output)
Input level:	-15 dBV (180 mV, to cross compressor threshold equating 23 W amplified output, both input jacks driven)
Noise:	< -75 dB (max gain)
THD+N:	< 0.5% (1 kHz at compressor threshold)
Compressor:	Threshold 2 dB below rated output, automatically adjusting attack and release times
Frequency Response:	Constant voltage: +/- 3 dB (50 Hz to 18 kHz); 4/8 Ohm: +/- 1 dB (50 Hz to 20 kHz)
Tone Controls:	±10 dB @ 10 kHz, ±9 dB @ 100 Hz (front-panel) with center detent
Power Amplifier Output:	HD-PA35: 35 W RMS (4 Ohms), 32 W (8 Ohms) on detachable terminal block (switch-selectable 4 or 8 Ohm impedance); HD-PA35A: 35 W RMS (25, 70 or 100 V); < 1% THD+N
Indicators (3):	Front-panel: Signal present (green), Compressor activity (red), Power (bright=on, dim=standby, blue)
VCA:	Output level, 0 to 10 Vdc control, detachable terminal block (compatible with RDL VCA wall controls)
Front-panel controls (4):	Input, EQ (2, bass and treble), Power (latching pushbutton, on/standby)
Ambient Operating Environment:	0° C to 50° C Maximum; 20° C Recommended
Power Supply (included):	100 to 240 Vac, 50-60 Hz, 50 W; 24 Vdc output to amplifier chassis
EMC:	CE
Dimensions and Weight:	Height: 3.5 in.(8.89 cm); Width: 8.5 in.(21.6 cm); Depth: 6.75 in.(17.1 cm); Weight: 4.5 lb.(2 kg) (HD-PA35), 6 lb.(2.7 kg) (HD-PA35A)