



RTI-AMP-2-125

2 Channel 125W 8Ω, 1 Channel

70V/100V 250W DSP Matrix Amplifier

The AMP-2-125 power amplifier delivers configurable and reliable high-performance audio power amplification for commercial and hospitality applications requiring a mix of low-impedance and high-impedance outputs. Featuring a compact 1U half-rack design, this DSP-enabled Class-D amplifier supports low-impedance 4Ω to 16Ω loudspeakers and high-impedance 70V/100V transformer-coupled loudspeakers. The AMP-2-125 accepts four analog inputs (balanced and unbalanced) and one stereo S/PDIF digital input, delivering two low impedance mono channels (or one low impedance stereo zone) at 125W per channel, or one 70V/100V mono channel at 250W.

For setup, the RTI web GUI offers effortless browser-based configuration of the installed system. DSP configuration options include multi-zone setup, input mixing, priority and ducking, restrictions, input and output EQ, S/PDIF output routing, high-pass filtering, speaker presets, delay, Wall-S1 controller configuration, RTI-AMP-IWC Multizone control, sine wave generation, and more.

Key Features

- Four analog audio inputs (balanced or unbalanced) and one digital input. Outputs configurable as two Lo-Z or one Hi-Z
- One Lo-Z stereo or two Lo-Z mono output zones, one Hi-Z mono output zone.
- A Class D amplifier provides a robust and clear audio experience with 125 Watts @ 4Ω/8Ω per channel or 250 Watts @ 70V/100V per channel.
- Daisy-chain multiple amplifiers to expand the number of zones by distributing up to two audio inputs or zones.
- Built-in DSP allows fine-tuning of acoustic characteristics for each zone.
- Easy configuration via LAN or Wi-Fi.
- Offers IP and GPIO control options.
- Free-standing installation or rack-mount (rack-mount kit sold separately).

Included in the Box

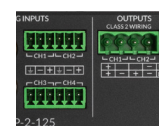
RTI-AMP-2-125, power cord, 6-pin Phoenix input connectors (2), 4-pin Phoenix output connectors (1), 8-pin Phoenix GPIO socket connector (1), adhesive rubber feet (4).



Ethernet Port, GPIO Control, and Digital Audio Input/Output



Balanced Audio Inputs and Zone Outputs



Unbalanced Audio Inputs



Compatible Products



RTI-AMP-IWC-W | RTI-AMP-IWC-B



RTI-AMP-IWC-W-EU | RTI-AMP-IWC-B-EU



AUDIO DISTRIBUTION

RTI-AMP-2-125

2 Channel 125W 8Ω, 1 Channel 70/100V 250W DSP Matrix Amplifier

SPECIFICATIONS

POWER

Total System Power	250 W
Output Power — Lo-Z (4Ω/8Ω)	2 x 125 W (4Ω / 8Ω)
Output Power — Hi-Z (70V/100V)	1 x 250 W (70V / 100V*)
PowerShare (up to)	1 x 250 W (across all channels)
Power Consumption (full load)	75 W
Power Ratings	1% THD @ 120 Vac and 230 Vac
Power Supply	UREC™ universal switch-mode PSU with PFC and standby converter
Operating Voltage / Frequency	Universal Mains — 100–240 VAC ~ 50/60 Hz
Standby Consumption	< 0.6 W

AUDIO

Amplifier Class / Output Circuitry	UMAC™ Class D — full bandwidth PWM modulator with ultra-low distortion
Output Voltage	70Vp / 140Vpp unloaded Bridged: 140Vp / 280Vpp unloaded
Signal-to-Noise Ratio	> 106 dB (A-weighted, 20 Hz–20 kHz, 8Ω load)
THD+N (typical)	< 0.05% (20 Hz–20 kHz, 8Ω load, 3 dB below rated power)
Frequency Response	20 Hz–20 kHz (+0 / -0.8 dB, 8Ω load, 3 dB below rated power)
Protection Circuits	Short Circuit, DC, Undervoltage, Temperature, Overload

PORTS

Analog Input	4x RCA (Unbalanced Stereo) 2x 6-pin Phoenix Connectors (Balanced Stereo)
Digital Input	1x Coax
Digital Output	1x Coax
Analog Output	1x 4-pin Phoenix Connector

CONTROL

IP	1x RJ45
GPIO	1x 8-pin Phoenix Connector

PHYSICAL / DIMENSIONS

Dimensions (H x W x D)	mm: 44 x 220 x 213 inches: 1.7 x 8.7 x 8.4
Weight	2.0 kg (4.4 lbs)
Rack Format	½ Rack, 1U
Operating Temperature	0 – 40 °C (32 – 104 °F)

*100V line mode is rated at -1 dB (≈ 90 V)
Specifications subject to change without notice.
Mass & dimensions are approximate

FEATURES

4 Analog Inputs, 1 Digital Input / 2 Outputs

Four analog audio inputs (balanced or unbalanced) and one digital input. Outputs configurable as two Lo-Z or one Hi-Z.

2 Zones

Choose between a standard stereo zone or a 70V/100V sound system.

Full Matrix

Distribute two audio source inputs to one zone, with the ability to expand to additional zones by daisy-chaining multiple AMP-2-125 units.

Powerful Stereo Output

Delivers 125W power output per channel for stereo zones.

Powerful 70V/100V Output

Provides 250W per channel for 70V/100V zones.

Built-In DSP

Easily configure and optimize DSP and matrix settings through the intuitive web user interface.

Ultra-Efficient

Cool Power® Class D amplifier technology ensures efficient heat dissipation and low power consumption.

Audio Source Versatility

Supports a combination of analog and digital audio sources for flexibility.

Control

Seamlessly integrate with RTI or third-party control systems via IP, or use GPIO control for volume, standby, mute, or trigger functions.

Mounting Options

Supports free-standing installation with rack-mount kit (sold separately) and adhesive rubber feet.