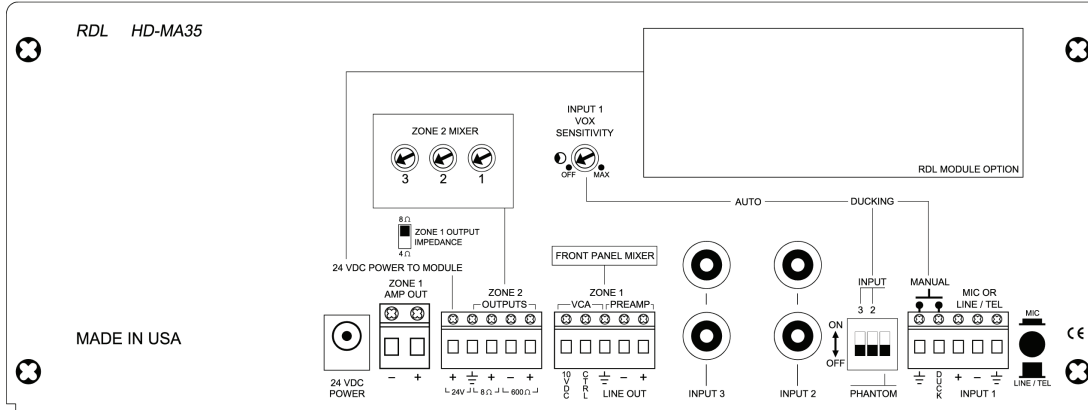


INTRODUCTION

Congratulations on your selection of an RDL HD-Series High-Efficiency commercial mixer amplifier. The HD-MA35 is part of the world's highest performance full-featured high-efficiency mixer amplifier series for commercial installations. This product includes a studio quality microphone input stage, line-level transformer isolation, equalization, remote control capability and integral analog compression coupled to a sonically pleasing analog-filtered high efficiency Zone 1 Class D output stage. The HD-Series mixer amplifiers are designed and manufactured in the U.S.A. using the most advanced automated manufacturing and testing processes for years of reliable high performance and cost savings.

CONNECTIONS



Connections are made on the rear panel. All connections are on detachable terminal blocks or connectors. The Zone 2 mixer, Input 1 MIC/LINE switch, ducking controls and assignments and phantom voltage selector are also provided on the rear panel. The Zone 1 mixer, tone controls, indicators and power button are on the front panel.

INPUT WIRING

Balanced MIC or LINE source connected using a single-pair shielded audio cable

Balanced LINE signal from phone PBX or audio transformer

Unbalanced MIC or LINE source connected using a single-conductor shielded audio cable

Three inputs may be connected. Each input is available on the primary Zone 1 front-panel mixer and on the Zone 2 rear-panel mixer. If used, the paging source is usually connected to Input 1.

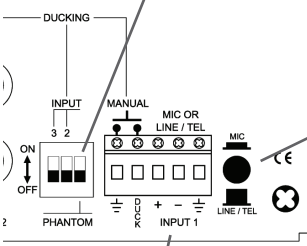
INPUT 1

PHANTOM VOLTAGE

If a condenser mic may be connected to INPUT 1, set the phantom voltage ON (switch up).

MIC or LINE Gain

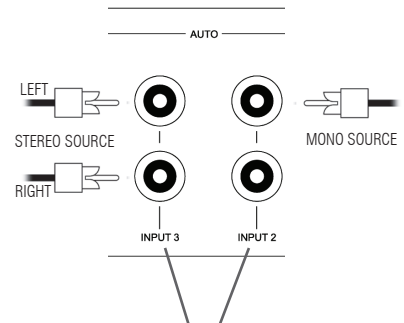
Set the Input Gain to MIC or LINE/TEL according to the input signal connected.



INPUT 1

Connect a MIC or LINE source. This is normally a paging mic or the line-level paging output from a phone PBX. The line-level input is transformer balanced (providing galvanic isolation) and may be connected balanced or unbalanced.

INPUTS 2 & 3



INPUTS 2 & 3

Connect a mono or stereo standard unbalanced -10 dBV audio source to INPUTs 2 and/or 3. The two input jacks associated with each input provide active summing of the left and right channels, thereby preserving the stereo separation of the audio source.

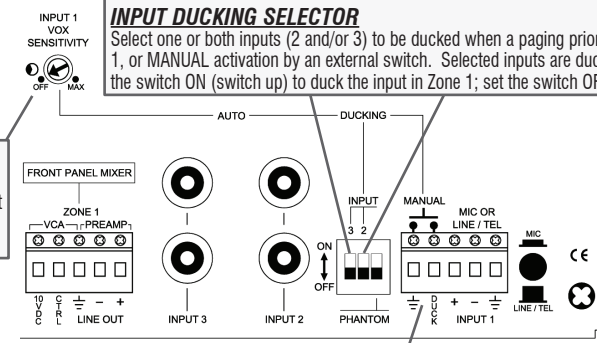
PRIORITY PAGING

VOX (VOICE-ACTIVATED PRIORITY)

If a paging signal is to automatically "duck" (fade down) other audio inputs, feed a normal paging signal into INPUT 1 and adjust the SENSITIVITY trimmer until the LED flashes regularly. Set the SENSITIVITY trimmer fully CCW to disable the VOX function.

INPUT DUCKING SELECTOR

Select one or both inputs (2 and/or 3) to be ducked when a paging priority is detected (VOX activated by audio signal on INPUT 1, or MANUAL activation by an external switch). Selected inputs are ducked only in Zone 1 (the primary amplified output). Set the switch ON (switch up) to duck the input in Zone 1; set the switch OFF to prevent ducking. Inputs are not ducked in Zone 2.



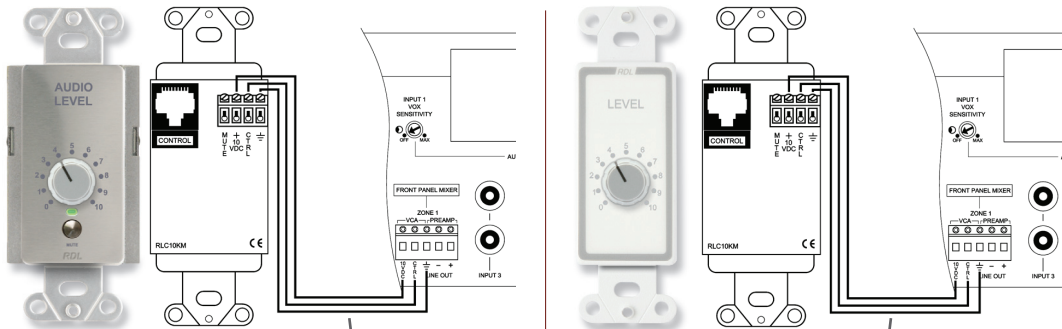
MANUAL PRIORITY

If a switch (such as a momentary paging mic push-to-talk switch) should "duck" (fade down) other audio inputs, connect the switch to the DUCK and Ground terminals.

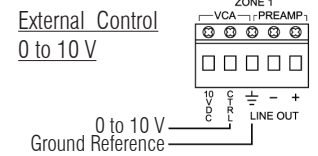
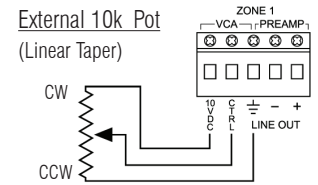
REMOTE CONTROL FOR ZONE 1 AMPLIFIER OUTPUT

MASTER VCA REMOTE CTRL

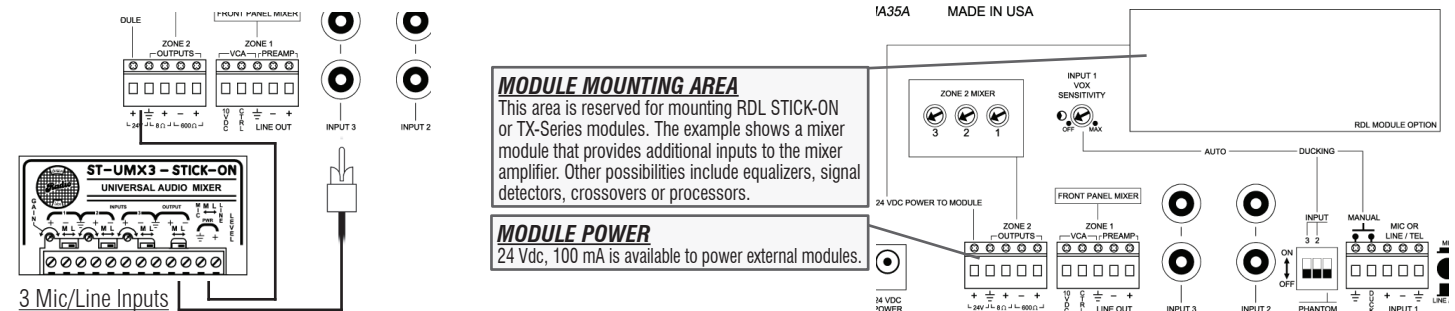
Connect the VCA terminals directly to an RDL remote control. (Examples providing a single volume control location: RLC10K or RLC10KS; RLC10KM or RLC10KMS with pushbutton muting) Other RDL remote controls are available to provide multiple control locations. Visit rdlnet.com for details. The VCA may be controlled by an external 10 kOhm linear pot or from other equipment control outputs that provide 0 to 10Vdc.



Wiring may be unshielded or single-pair shielded (connect the shield between the ground terminals). Shielded wiring is recommended for installations in environments where radio frequency emissions may be present.



EXTERNAL MODULES



MODULE MOUNTING AREA

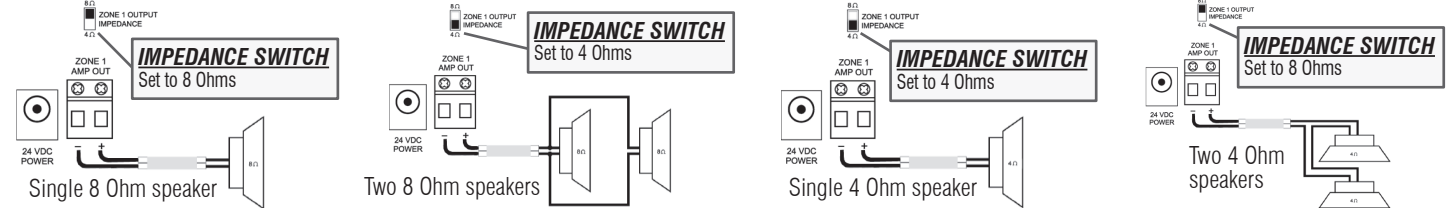
This area is reserved for mounting RDL STICK-ON or TX-Series modules. The example shows a mixer module that provides additional inputs to the mixer amplifier. Other possibilities include equalizers, signal detectors, crossovers or processors.

MODULE POWER

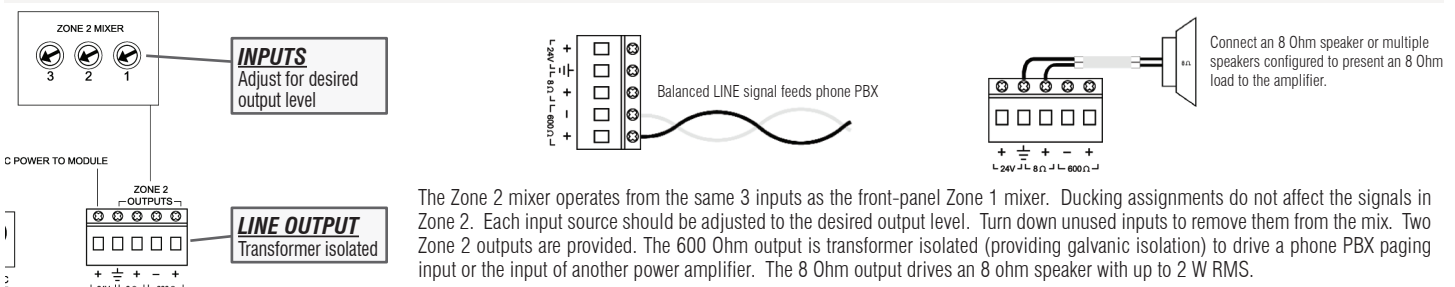
24 Vdc, 100 mA is available to power external modules.

ZONE 1 OUTPUT CONNECTIONS

DO NOT GROUND EITHER SPEAKER OUTPUT TERMINAL

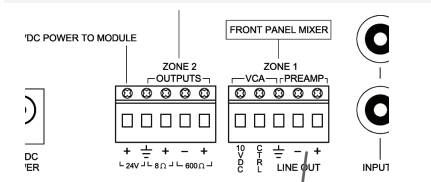


ZONE 2



The Zone 2 mixer operates from the same 3 inputs as the front-panel Zone 1 mixer. Ducking assignments do not affect the signals in Zone 2. Each input source should be adjusted to the desired output level. Turn down unused inputs to remove them from the mix. Two Zone 2 outputs are provided. The 600 Ohm output is transformer isolated (providing galvanic isolation) to drive a phone PBX paging input or the input of another power amplifier. The 8 Ohm output drives an 8 ohm speaker with up to 2 W RMS.

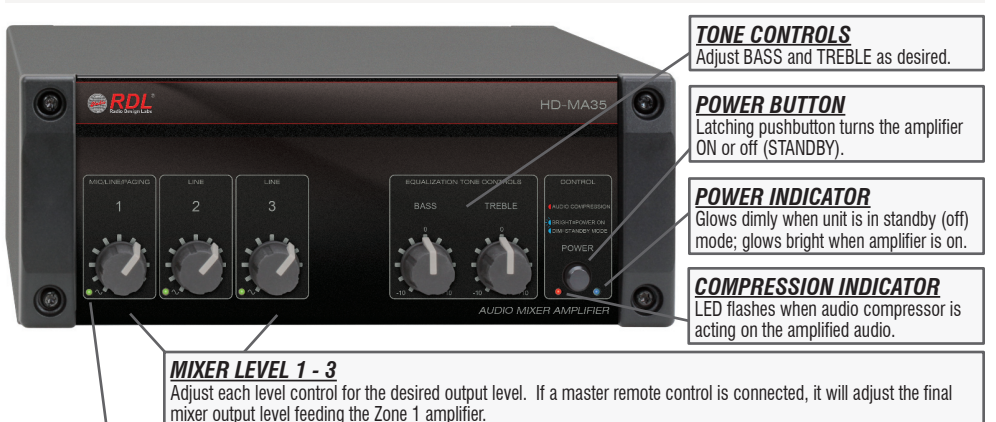
ADDING ZONES



ADDITIONAL ZONE AMPLIFIERS

Connect the LINE OUTPUT to the line input of one or multiple additional RDL amplifiers to permit the Zone 1 mixer to feed other zones. The LINE OUTPUT is not controlled by the master VCA remote control so each additional zone may have its own master level control. The LINE OUTPUT provides "flat" audio without equalization by the front-panel tone controls. The LINE OUTPUT may also be used to feed recording equipment or an audio distribution amplifier.

OPERATION



SIGNAL PRESENT 1 - 3 The green LED glows when audio is present at the input. The indication is not affected by the setting of the mixer level control.