



UA™ 2050

Utility Installation

Power Amplifier

Owner's Manual

UA™ 2050

Installation Power Amplifier

The UA 2050 is a high quality utility amplifier ideally suited for varying installation requirements. It produces 50 watts into the 4 Ohm direct output, the 70V output or the 100V output. Level controls are provided for mic/line and AUX. The AUX input is accessible via screw terminals or RCA jacks. Bass and treble controls are functional on the total system (mic/line/AUX). When a signal is present at the mix/line input, the AUX input is muted. This feature can be internally defeated when required. (see appendix for details)

The unit is packaged for shelf or wall mounting convenience. The user-friendly control layout, coupled with state-of-the-art circuit design, ensures reliable long-term operation and smooth trouble-free installation.

This manual was written to provide as much information as possible for your new Crest Audio Professional Series Installation Power Amplifier. It is our sincere desire that you enjoy your purchase. We feel that the best way to fully enjoy any purchase is to have an in-depth understanding of the product's features, functionality, and performance characteristics. We hope that this manual, along with the manuals of our other products, will provide this. If you require additional information that this manual does not provide, please let us know. We are continuously looking for better ways to provide information about our products, and your input is always appreciated. If you require additional information not provided in this manual, please let us know or check out our website at:

Web site: [http://peaveycommercialaudio.com/products.cfm/cr/:](http://peaveycommercialaudio.com/products.cfm/cr/)

Email: techserve@crestaudio.com

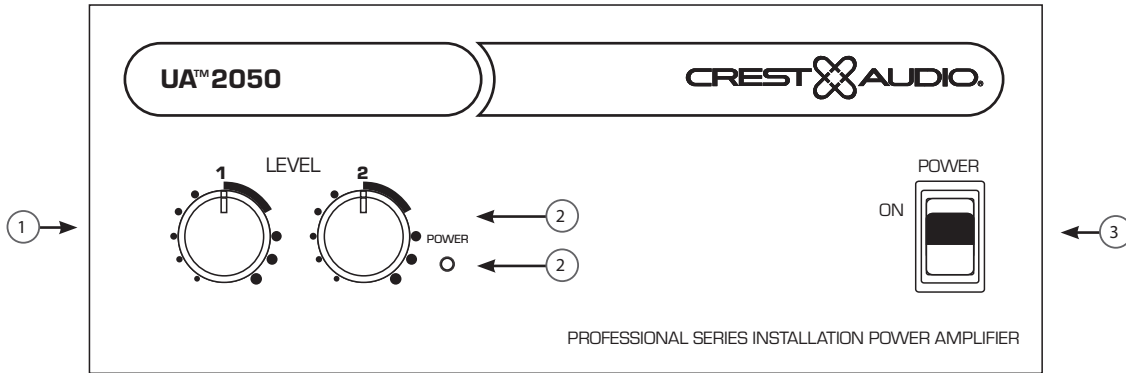
UA™ 2050 Features:

- 50 Watt output power
- 4 Ohm, 70V and 100V outputs
- Balanced Mic/Line input with Input gain selector switch and screw terminal connections
- Auxiliary line input with dual RCA jacks and screw terminal connections
- Priority mute system mutes input 2 when Input 1 signal is present. (Internally defeatable)
- Bass and treble controls on rear panel
- Shelf or Wall mount installation

WALL OR SHELF MOUNTING:

The UA 2050 can be mounted on a vertical or horizontal surface using the brackets formed on the bottom panel. For mounting on a wooden or paneled surface, use No. 6 x 1/2" or larger wood screws. For mounting onto a masonry or drywall type surface, use fasteners that are designed for this purpose.

Front Panel



(1) Input 1 MIC/LINE Level Control

Controls the signal level at the mic/line input. (See mic/line switch.)

(2) Input 2 AUX Level Control

Controls the signal level at the AUX inputs

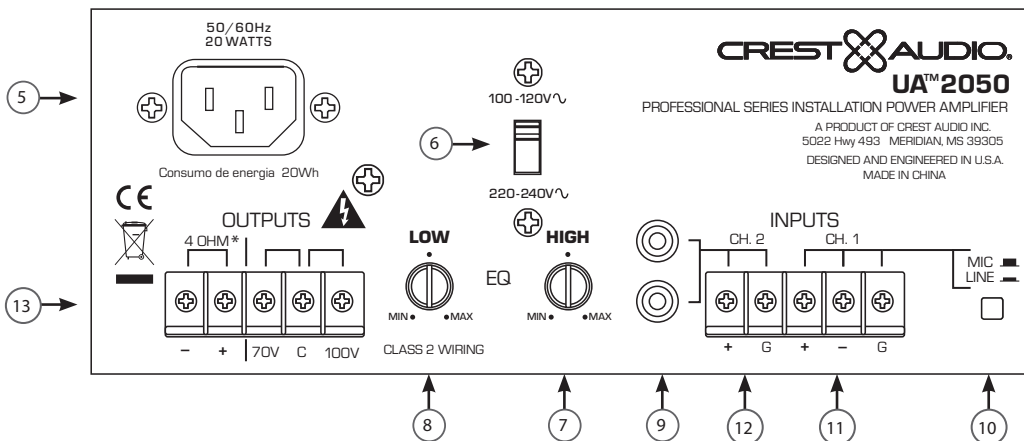
(3) Power Switch

Power On/Off switch.

(4) POWER LED

Green LED illuminates when power is being supplied to the unit.

Rear Panel



(5) IEC Inlet connector

! This receptacle is for the IEC line cord (included) that provides AC power to the unit.

(6) Line Voltage Selector Switch

! The line voltage select should be checked and set to match the mains voltage before connecting and operating this unit. The UA 2050 can be operated at 100V-120 VAC or 220-240 VAC 50/60 Hz.

(7) HIGH EQ Control (TREBLE)

Active equalization control that adjusts the high frequency response. Clockwise rotation boosts highs while counterclock-wise rotation provides a cut (reduction) of the high frequencies (± 10 dB).

(8) LOW EQ Control (BASS)

Active equalization control that adjusts the low frequency response. Clockwise rotation boosts lows while counterclockwise rotation provides a cut (reduction) of the low frequencies ($\pm 10\text{dB}$).

(9) RCA AUX IN

Accepts signals from other sources, such as another mixer or background music source. Signal level at this input is controlled by the AUX level control and is fed to the Master output.

(10) Input 1 MIC/LINE Switch

Sets the gain of Input 1 for mic or line level sources.

(11) Input 1

Low Z mic/line level balanced input is provided via screw terminals.

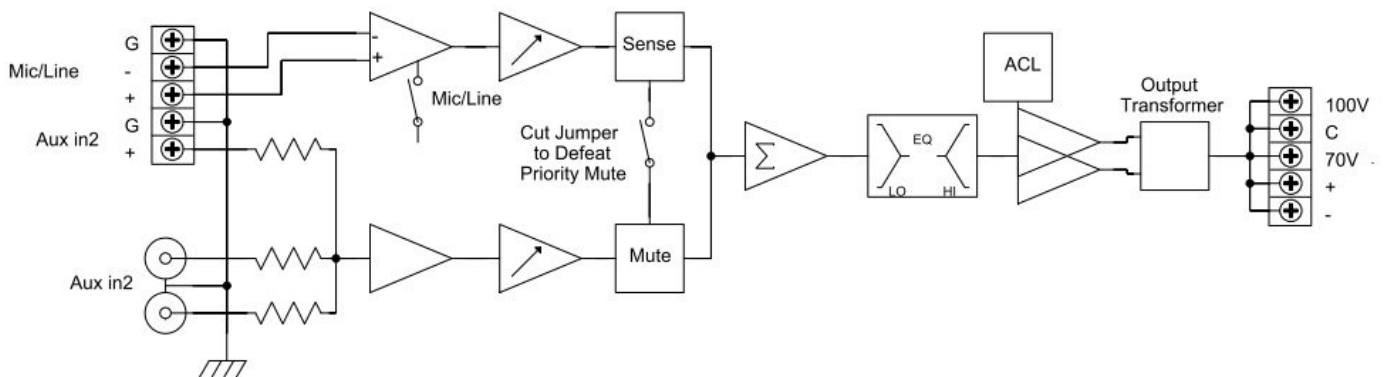
(12) Input 2

Screw terminal AUX inputs are summed with the AUX RCA jacks (9).

(13) Outputs

A direct output, as well as several transformer outputs, are provided to allow the proper interface between the amplifier and the speaker system. The direct output allows direct connection to a 4 ohm speaker system. Connect the speaker (or speakers) from the 4 Ohm “+” terminal to the 4 Ohm “-” terminal. The direct output is a bridged output and should not be grounded. 70V and 100 V outputs are also provided for “constant voltage” speaker distribution systems. The 70 V and 100 V output connection is between the COM terminal and the 70 V or 100 V terminal.

Block Diagram



Specifications

Technical support

Web site: <http://peaveycommercialaudio.com/products.cfm/cr/>:

Email: techserve@crestaudio.com

Rated Output Power: 50 Watts RMS

Frequency Response:

55 Hz - 20 kHz +1 -3 dB

THD:

Power Amplifier: 0.45% (1 kHz 1/8 power)

Signal /Noise:

86 dB, all controls nominal (22 kHz BW)

Tone Controls:

Bass +/- 10 dB 100 Hz

Treble +/- 10 dB 10 Hz

Input 1:

Balanced Mic/Line input:

Sensitivity Mic: -50 dBu (2.5 mV)

Sensitivity Line: -18dBu (100 mV)

Frequency response: 55 Hz - 20kHz +1 -3 dB

Connection: Screw terminals

Input 2:

Unbalanced Line level:

Sensitivity: -18 dBu (100 mV)

Frequency response: 55 Hz - 20kHz +1 -3 dB

Connections: Dual RCA summed mono or Screw terminals

Outputs:

4 Ohm output: Bridged direct output. Connect to “+” and “-” terminals

70V output: Connect to “C” and 70V

100V output: Connect to “C” and 100V

Front Panel Controls and indicators:

Input 1 Level control

Input 2 Level control

Power Switch

Power ON LED

Rear Panel Controls:

Mic/Line level gain switch for Input 1 Press for line input

Bass control

Treble control

Line voltage Selector switch: Set switch to correct mains voltage before connecting to the power line.

Dimensions:

3.5" H x 8.75" W x 13.5" D (89 mm H x 222 mm W x 343 mm D)

Weight:

7.8 lbs (3.54 kgs)

Architectural and Engineering Specifications

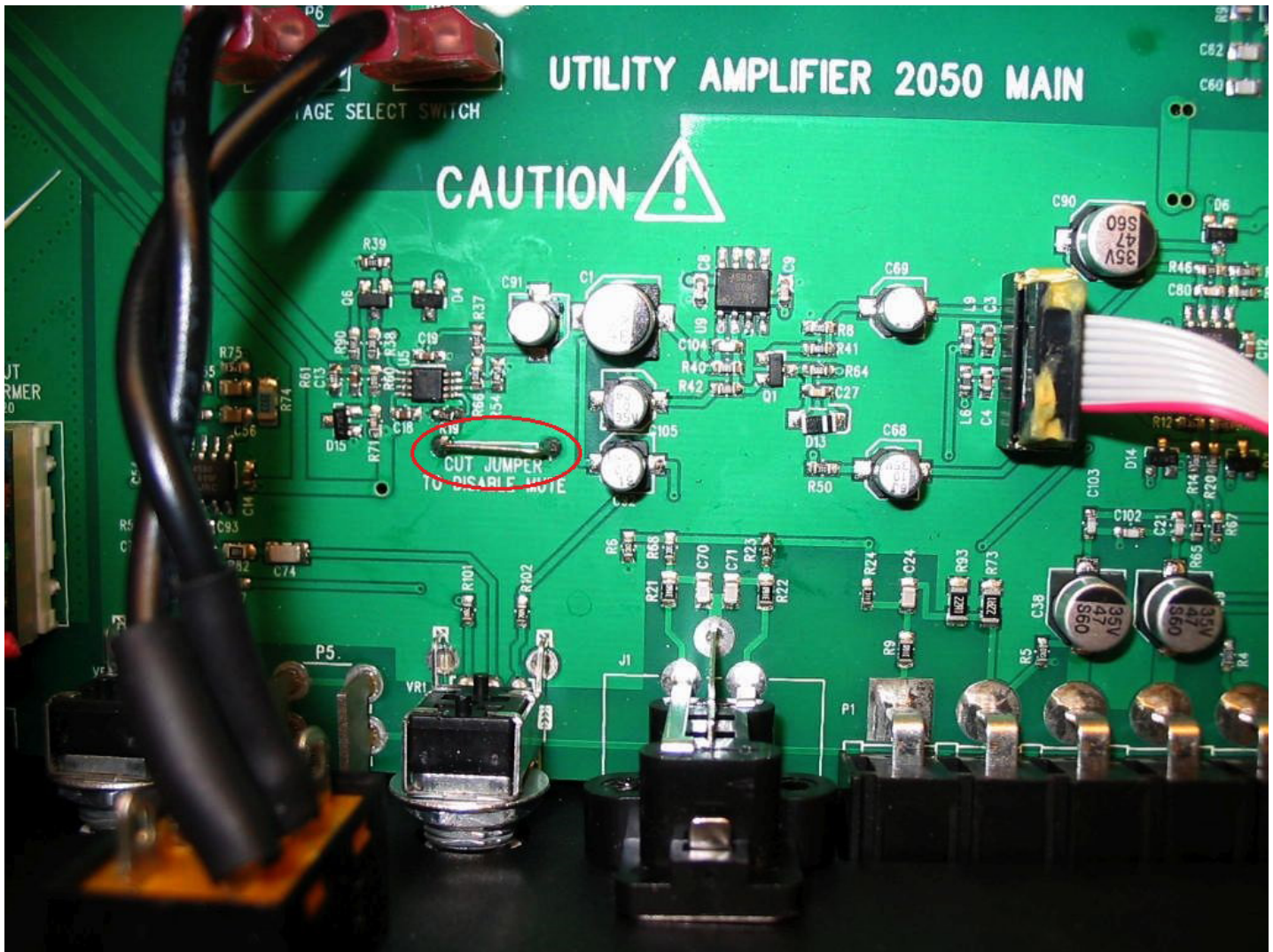
The mixer amplifier shall have one switchable microphone/line channel and one dedicated auxiliary channel. The mic/page input will be electronically balanced and will have the capability to automatically mute the AUX input. The master section shall include two EQ controls providing 10 dB of boost or cut at 100 Hz and 10 kHz. The unit shall be packaged in a rugged metal chassis 3.5" (89 mm) tall by 8.75" (222 mm) wide by 13.5" (343 mm) deep. Half-inch (13 mm) mounting flanges shall be provided on each side. The unit shall operate from 100-120 volts AC, 50/60 Hz or 220-240 volts AC 50/60 Hz. The internal amplifier shall be capable of delivering 50 watts RMS into 4 ohms as well as providing 70 volt and 100 volt line outputs. The unit shall be capable of delivering rated power from 50 Hz to 20 kHz +0, -2 dB into 4 ohms at its 4 ohms output at less than 0.5% distortion with system hum and noise at least 85 dB below rated power (Aux Input). The unit shall be a Crest Audio Professional Installation Series power amplifier model UA 2050.

DEFEATING THE PRIORITY MUTE IN THE UA2050

The UA2050 has a priority mute feature that automatically turns off Input 2 if there is a signal on Input 1. This is provided so that paging or emergency announcements can override background music (or other source) connected to Input 2. If this feature is not desired, it can be defeated by cutting an internal jumper on the main PCB.

Disconnect from mains before proceeding!

Remove the cover and locate the jumper. It is clearly labeled and resides behind the high frequency EQ control (see below). Observe caution when cutting so that no other components are damaged. Replace the cover. With this modification both channels will function without priority muting.



1. This procedure should be conducted by a skilled individual, extra precautions should be taken.
2. "Dangerous voltage" within the product may be of sufficient magnitude and constitute a risk of electric shock.
3. To prevent electric shock or fire hazard, please pull out the power plug and turn off the power before opening the cover.



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Warranty registration and information for U.S. customers available online at
www.peaveycommercialaudio.com/warranty
or use the QR tag below



Features and specifications subject to change without notice.

Crest Audio 5022 HWY 493 N. Meridian, MS 39305 (601) 483-5365 FAX (601) 486-1278



Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/38, 13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005