

SPECIFICATIONS

IRM™ 8150 Industrial Rackmount Mixer Amp

SPECIFICATIONS

NOTE: All specifications are typical unless otherwise noted.

0 dBV = 1 volt RMS

0 dBu = .778 volts RMS

All specs are referenced to nominal output level (0 dBV) unless otherwise noted.

All measurements are wideband 20 Hz to 20 kHz unless otherwise stated.

All control settings are nominal (50% rotation) unless otherwise noted.

CHANNEL

Equivalent Input Noise:

-114.5 dBV @ 40 dB max gain

Frequency Response:

(to speaker outputs)

±1 dB 20 Hz to 20 kHz

Distortion: (1 kHz)

Less than .015%

Input Impedance:

Low Z Bal = 1.7 K ohms

Line Input = 13 K ohms

High EQ:

±12 dB @ 10 kHz minimum

Center detent flat ±2 dB

Mid EQ:

±12 dB @ 600 Hz minimum

Center detent flat ±2 dB

Low EQ:

±12 dB @ 50 Hz minimum

Center detent flat ±2 dB

Nominal Channel Gain:

Low Z = 20 dB

Line = 0 dB

Minimum Channel Gain:

Low Z = -69 dB

Line = -89 dB

Maximum Channel Gain:

Low Z = 40 dB

Line = 20 dB

Nominal Input Level:

Low Z = -20 dBV

Line = 0 dBV

Minimum Input Level:

Low Z = -40 dBV

Line = -20 dBV

Maximum Input Level:

Low Z = +6 dB

Line = +26 dB

Phantom Power:

+48 V DC

GRAPHIC EQUALIZER:

Filter Bandwidth:

1 octave

Filter Frequencies: (ISO Stds.)

63 Hz, 125 Hz, 250 Hz, 1 kHz, 2 kHz,

4 kHz, 8 kHz, 16 kHz

Filter Q:

1.57

Maximum Boost & Cut:

+6 dB, -12 dB

Noise:

-100 dBV

Distortion: (1 kHz)

Less than .005%

Frequency Response:

±1 dB 7 Hz to 40 kHz

Input Level:

Nom = 0 dBV (1.0 V RMS)

Max = +19 dBV (9 V RMS)

Output Level:

Nom = 0 dBV (1.0 V RMS)

Max = +19 dBV (9 V RMS)

Input Impedance:

10 K ohms

Output Impedance:

100 ohms

MASTER

Gain:

Main: = 20 dB

Monitor: = 15 dB

Tape: = 15 dB

Aux: = 15 dB

Maximum Output Level:

Main: = +18 dBV (8.0 V RMS)

Monitor: = +18 dBV (8.0 V RMS)

Tape: = +18 dBV (8.0 V RMS)

Aux: = +18 dBV (8.0 V RMS)

Nominal Headroom:

Main: = 18 dB

Monitor: = 18 dB

Tape: = 18 dB

Aux: = 18 dB

Output Impedance:

Main: = 100 ohms

Monitor: = 100 ohms

Tape: = 10 K ohms

Aux: = 100 ohms

Output Noise:

Residual: -100 dBV (Master Level Down)

Bus: -94 dBV (Master Nominal, All

Channel Level Full CCW, Aux Returns Down)

Nominal: -86 dBV (All Controls Nominal,

Low Z Input Terminated 150 ohms)

PEAVEY[®]
ARCHITECTURAL ACOUSTICS[®]

Aux Input Impedance:

120 K ohms

Aux Input Level:

Nom: 0 dBV

Max: +7 dBV

Min: -15 dBV

Tape Input Level:

Nom: +4 dBV

Max: +11 dBV

Min: -10 dBV

POWER AMP SECTION**Frequency Response:**

+0, -1 dB 20 Hz to 20 kHz @ Rated Power (direct out)

+0, -1 dB 50 Hz to 20 kHz @ Rated Power (XFMR outputs)

Rated Power:**Direct Out:**

150 watts RMS @ 4 ohms

XFMR Outputs:

150 watts RMS @ 8 ohms

150 watts RMS @ 25 V (4 ohms)

150 watts RMS @ 70 V (33 ohms)

1 V RMS into 600 ohms

Intermodulation Distortion:

Less than 0.1%, (10 mW to rated power, 250 Hz & 7 kHz, 4 ohms)

Total Harmonic Distortion:

Less than 0.1%

SPS™ Dynamic Range:

Greater than 26 dB

SPS™ Maximum Distortion:

Below 0.5% THD for 6 dB overload

Below 1% THD for 20 dB overload

Hum & Noise:

-92 dB below 150 watts

Slew Rate:

15 V/μSec

Damping Factor:

Greater than 100 @ 1 kHz, 4 ohms

Input Sensitivity:

1 V RMS for 150 watts @ 4 ohms

Input Impedance:

19 K ohms

Power Requirements:

800 watts, 120 V AC, 60 Hz

DESCRIPTION

The IRM™ 8150 features a rugged, heavy-gauge, cold-rolled steel and aluminum chassis, finished in oven-cured epoxy for toughness and screen-printed utilizing the latest photographic film and U.V.-cured ink technology for razor-sharp, hard-wearing control I.D. and calibration graphics.

Every on-board component has been carefully chosen to deliver the highest possible performance. Precision, professional reliability and absolute minimal operating noise characteristics are only among the initial criteria used during the process of selecting the components that ensure that your IRM™ 8150 becomes an indispensable addition to your performance equipment.

All printed circuit boards are constructed from rugged, U.S. military-spec material, using the latest automated assembly technology, wave solder, and computer-controlled "all-faults-analyzed-and-corrected" Q.A. procedures.

Each channel features front panel main and monitor level controls, as well as high, mid, low equalization and AUX send controls. Every input channel has a studio-quality low impedance (XLR-

type input) microphone input as well as a 1/4" line input. Switchable +48 V phantom power is provided.

The unit features a 150 watt power amplifier.

ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The mixer shall have eight microphone/line channels with both low and high impedance inputs (XLR and 1/4" jacks). Each channel shall have its own level control as well as controls for high, mid, and low EQ. Each channel shall have controls for sending to the Mon. and AUX buses. The master section shall include master level controls for the Main, Mon., AUX, and Tape outputs, as well as providing a nine band graphic equalizer (ISO standard frequencies) with a metal security cover. The unit shall be packaged in a rugged metal chassis 19" wide (including rack ears) by 8 1/2" tall by 11 1/8" deep (including external heatsinks) (5U rack-mount). The unit shall operate from standard 120 volts AC, 60 Hz power. The internal power amplifier shall be capable of delivering 150 watts (RMS) into 4 ohms and 8 ohms, as well as providing 25 volt and 70 volt line outputs. The unit shall be capable of delivering rated power from 20 Hz to 20 kHz ± 1 dB into 4 ohms at its direct output at 0.5%, or less distortion with hum and noise at least 80 dB below rated output from a line level input. The unit shall be called the Peavey Architectural Acoustics Division model IRM™ 8150.

LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defects in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

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Peavey's liability to the original purchaser for damages for any cause whatsoever and regardless of the form of action is limited to the actual damages up to the greater of Five Hundred Dollars (\$500) or an amount equal to the purchase price of the product that caused the damage or that is the subject of or is directly related to the cause of action. This limitation of liability will not apply to claims for personal injury or damage to real property or tangible personal property allegedly caused by Peavey's negligence. For information on service under this warranty, call a Peavey customer service representative at (601) 483-5376.



Features and specifications subject to change without notice.

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#80302195

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Printed in U.S.A. 10/94