

OPM™ MA Series Output Power Module

The OPM is a powered output / balanced line output module for the MMA™, WMA™, UMA™ and IPA™ Series of Peavey Architectural Acoustics mixer/amplifiers. The OPM consists of a 5 Watt power amplifier and balanced line amplifier, both driven from either the internal mix signal or external line-level source. The two signal sources are internally pre-selectable with a slide switch included with the module. Two separate screwdriver-adjustable controls are included that adjust the powered and line level outputs. euro-style output connector, and an unbalanced RCA line input round out the features of the OPM module. The electronic balancing affords a good Common Mode Rejection Ratio (CMRR) at a low cost for short to medium cable runs.

FEATURES:

- Modular construction
- 5 W into 4 Ohms power amplifier
- Economical electronically balanced line output
- Screwdriver-adjustable line output gain
- Screwdriver-adjustable power amplifier gain
- Euro-style output connector
- RCA unbalanced external line input
- Short circuit protection at the line and power outputs
- Thermal Protection at the power output
- Internal input / program selector

APPLICATIONS:

- Retail outlets
- Auditoriums
- Gymnasiums
- Paging systems
- Foreground music systems
- Background music systems
- Hotel meeting rooms
- Houses of worship
- Conference centers
- Civic centers

AUDIO SPECIFICATIONS

Nominal Load Resistance:

Line output: 600 Ohms (min)
 Power output: 4 Ohms

Nominal Output Level:

Line output: 1 Vrms (0 dBV)
 Power output: 4.5 Vrms (5 W @ 4 Ohms)

Maximal Output Level:

Line output: 16 Vrms (+24 dBV)
 Power output: 5.5 Vrms (7.5 W @ 4 Ohms)

Frequency Response:

Line output: +0/-1 dB, 20 Hz to 20 kHz
 Power output: +0/-7 dB, 20 Hz to 20 kHz at 4 Ohms

Total Harmonic Distortion (@1kHz, & nominal output level):

Line output: <0.05%
 Power output: <0.3%

SNR:

</- -86 dB Ref: Nominal output levels

Line Input Sensitivity (for nominal output levels, gain @ max):

</- 70 mV

Line Input Resistance:

>/= 20k Ohms

Maximum Available Gain (gain/dB):

Line output: 10/20
 Power output: 66/36

GENERAL SPECIFICATIONS

Dimensions:

3.07" H x 1.4" W x 3.6" D
 (77.97 mm x 35.5 mm x 91.5 mm)

Net Weight:

3.53 oz. (100 g.)

Power Consumption:

15 W (600 mA @24 V DC) supplied by the MMA, WMA, UMA or IPA Series mixer/amplifier.

Finish:

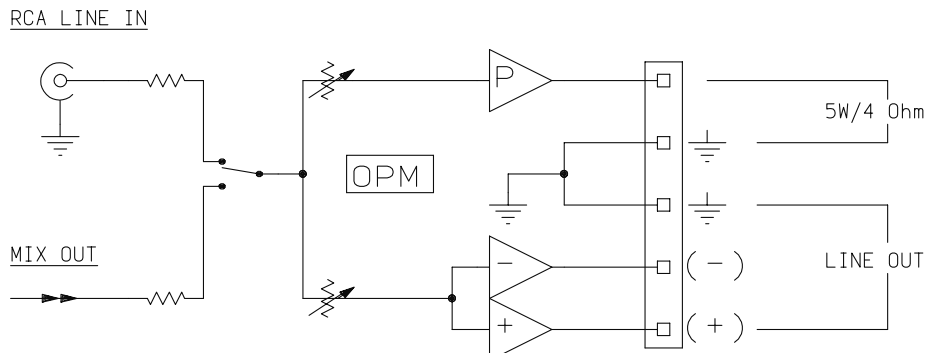
Black powder-coat painted steel on mounting panel

Input Selector Switch Settings:

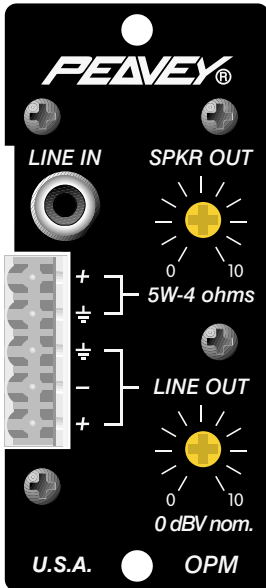
Up: External RCA line input
 Down: Internal mix input

*Drawing is shown with default (external RCA line input) position.

OPM Block Diagram



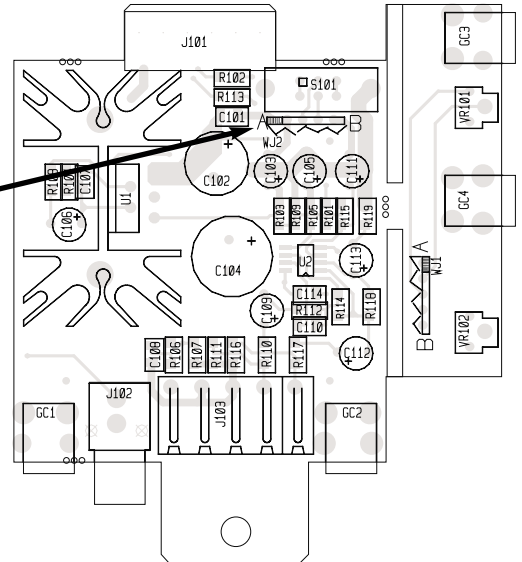
OPM™ Module



Care should be taken when adjusting the input select switch. This switch should be adjusted only when the OPM module is removed from the MMA™, WMA™, UMA™ and IPA™ Series chassis.

Board mounted input select switch shown in the default (up) position. (RCA input connector active.)

OPM Board Assembly



SWITCH (MOUNTED ON CIRCUIT BOARD):

This switch determines which of the inputs is active. When the switch is in the default up position, the rear-panel RCA input connector is the input source. When the switch is in the down position, the internal mixing bus of the MMA, WMA, UMA or IPA Series integrated mixer-amplifier is the input source. It is not possible to operate the OPM module with both input sources active simultaneously. NOTE: The position of the switch (up or down) is based on the installed orientation of the OPM module.

LINE IN:

Female RCA connector for terminating a single-ended, line level audio signal. When the circuit board input select switch is in the "line" position, audio at this terminal is present at both the line and speaker level outputs. When this switch is in the down position, this input is disabled.

SPKR OUT:

Rotary control adjusts the amplitude (output) of the internal power amplifier. Controls the audio source selected by the circuit board mounted input select switch. The output of the amplifier is 5 Watts at 4 Ohms.

SPKR OUTPUT TERMINALS:

Speaker level unbalanced output. The audio at this terminal is after the 5 Watt power amplifier and independent of the line level output. The signal is single ended, unbalanced to ground. The SPKR OUT control determines the level present at this terminal.

LINE OUT:

Rotary control adjusts the amplitude (output) of the internal line amplifier. Controls the audio source selected by the circuit board mounted input select switch.

LINE OUTPUT TERMINALS:

Line level balanced output. The audio at this terminal is after the line amplifier and independent of the speaker level output. The signal is balanced, referenced to ground. The LINE OUT control determines the level present at this terminal.



Features and specifications subject to change without notice.
Architectural Acoustics®, a division of Peavey Electronics Corporation
711 A Street • Meridian • MS • 39301
(601) 483-5376 • FAX (601) 486-1678 • <http://aa.peavey.com>

