

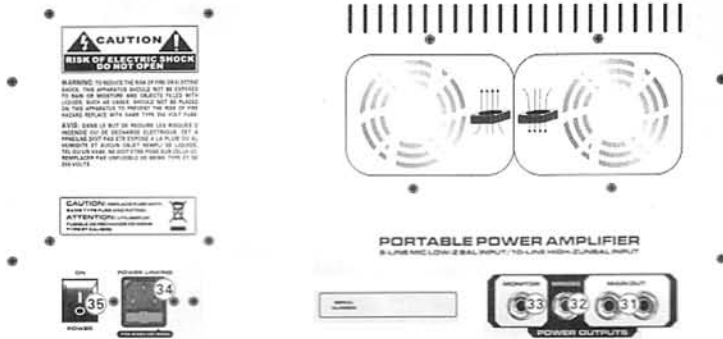
www.guardianaudio.com **MottAudio**

# Guardian Audio®

## B82M



### Owners Manual



#### (31)SPEAKER OUTPUTS

These are four two-conductor 1/4" speaker outputs. Each one is rated at 4 ohms minimum impedance. Total minimum load for each amplifier channel is 4 ohms, except Bridged which is 8 ohms. You may connect either one 4-ohm (except Bridged), one 8-ohm or two 8-ohm speakers per output jack. Do not operate below rated minimum impedance. For maximum power transfer, be sure to use speaker cables and not instrument cables to connect to the speakers. We recommend the use of 18-gauge or larger speaker wire.

#### (32)BRIDGED OUTPUT

Two conductor 1/4" speaker output rated at 8 ohms impedance. Do not operate below minimum rated impedance.

#### (33)MONITOR OUTPUT

Two conductor 1/4" speaker output rated at 4 ohms impedance. Also, this serves as one of the main speaker outputs when in MAN / MAIN mode. DO not operate below minimum rated impedance.

#### (34)POWER CONNECTOR

This is a standard IEC cable connector for use with standard voltages from AC wall outlets. Its safety ground pin is connected to the chassis and should never be removed (or defeated in the line cord) for any reason. The IEC connector contains an internal fuse holder. The fuse rating is 5 amperes.

#### (35)POWER SWITCH

This switches the unit on or off.

## SPECIFICATIONS

#### AUX SEND Output:

-10 dBv nominal, 1k ohms

#### Tape REC Output:

-10 dBv nominal, 1k ohms

#### Input Impedance:

Low-Z Mic: 1k ohms

High-Z Line: 10 k ohms

#### Input Channel Equalization:

Bass Control: 100 Hz

Mid Control: 2,500 Hz (or 2.5 kHz)

Treble Control: 8,000 Hz (or 8kHz)

#### MasterGraphicEqualization:

63 Hz: +/- 12dB

160 Hz: +/- 12dB

400 Hz: +/- 12dB

2.5 kHz: +/- 12DB

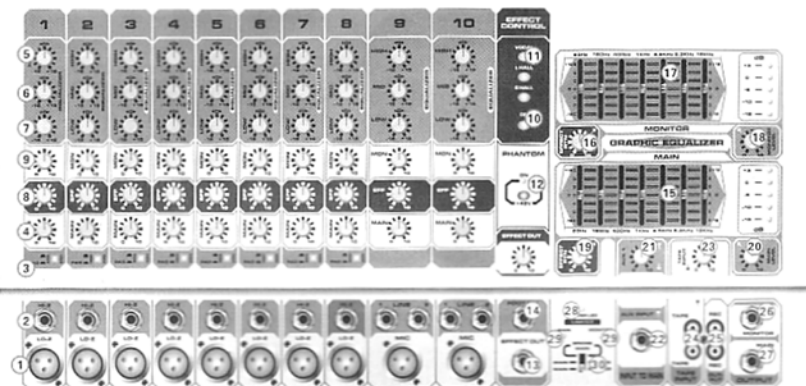
16 kHz: +/- 12DB

#### ProtectionCircuit:

power on Muted delay time: 2 seconds

## Features

- 6, 8, 10, 12 Channel Balanced Microphone and line inputs.
- Tape / CD, Aux inputs.
- High, Mid, Low, Reverb Level control on each channel.
- Phantom power +48V.
- Footswitch Jack.
- 2x7 Band Graphic Equalizer.
- 2x5 Band LED Display.
- REC output.



## Front panel

### (1) 3-PIN LOW-IMPEDANCE MICROPHONE INPUT

This input is for typical balanced, low-impedance microphones. It will automatically provide Phantom power (48V) for condenser mics or active direct boxes. This has an input impedance of 1k ohms. The connector is wired as: pin 1=shield; pin 2=positive (hot); pin 3=negative (cold).

### (2) 1/4" Line/HIGH-IMPEDANCE Input

This input may be used as either a high-impedance microphone input or for line-level devices such as a cassette player, CD player, video projector or laptop. This will also allow connection from an electric guitar, bass or keyboard. It is a two-conductor input with an impedance of 10k ohms.

### (3) PAD

Decreases input sensitivity 20 dB to compensate for high-amplitude input sources.

### (4) MAIN CONTROL

The main control for each channel sends the signal to the master mix bus. Typical operation is between 4 and 8 (dependent upon the input devices) but should be lower than the master level. Please remember that this acts like a preamp, so if you are using a device that has a volume output control (i.e., a tape or CD player) you will need to do some level matching by adjusting the main controls on each unit.

### (5) HIGH TONE CONTROL

This is used to adjust the overall tone of the individual inputs. Since it is a cut or boost control (+/-15 dB), it will add or diminish presence frequencies in the sound beginning at 2.5 kHz.

### (6) MID TONE CONTROL

This is used to adjust the overall tone of the inputs. Since it is a cut or boost control (+/-15 dB), it will add or diminish presence frequencies in the sound beginning at 25 kHz.

### (7) LOW TONE CONTROL

This is used to adjust the overall tone of the individual inputs. Since it is a cut or boost control (+/-15 dB), it will add or diminish bass frequencies in the sound beginning at 100 Hz.

### (8) EFFECTS CONTROL

This is used as a send control to the effects bus. It controls the amount of reverb added to the input signals.

### (9) MONITOR LEVEL

This controls the overall volume level of the entire amplifier. Typical operation is between 4 and 8.

### (10) EFFECTS SWITCH

This switch allows you to turn the built-in digital effect on/off.

### (11) DIGITAL EFFECTS

This controls the character of the Reverb that is added back to the master mix. This is analogous with changing the rate at which the echo decays.

### (12) PHANTOM POWER SWITCH

This switch allows 48 volt phantom power for support of electret microphones.

### (13) EFFECTS OUT JACK

Level of effects controlled by Effects Switch (12).

### (14) FOOTSWITCH JACK

This jack provides the connection of the optional remote footswitch. Footswitch is used to enable/disable reverb effects.

### (15) MAIN EQ

This is the 7-band EQ with level meter.

### (16) EFFECTS RETURN/MONITOR

This controls the level of effects applied to the monitors.

### (17) MONITOR

This is the 7-band EQ with level meter.

### (18) MONITOR

This controls the monitor output level.

### (19) EFFECTS RETURN/MAIN

This controls the level of effects applied to the mains.

### (20) MAIN LEVEL

This controls the main output level.

### (21) AUX 1

This is the AUX input to the main mix using the AUX input jack (24).

### (22) AUX INPUT JACK

This is the AUX input to main mix with levels controlled by AUX1 (23).

### (23) TAPE INPUT

This controls the level of the playback inputs (RCA jacks).

### (24) TAPE IN (L/R)

These RCA jacks are for connecting a cassette deck, CD player or other line-level source.

### (25) TAPE OUT (L/R)

These RCA output jacks are primarily intended for connecting a tape deck, MP3 player, or other device for the purpose of recording from the mixer. Both channels are summed into mono for compatibility. The signals are taken pre-master section, meaning that they are without reverb or the master tone section, and do not include the Tape-in signal. If you wish to record with the reverb and Tape In signals, use the 1/4" line output (2) with the proper cable.

### (26) MONITOR OUTPUT JACK

1/4" line-level output of monitor mix, controlled by Monitor EQ (17).

### (27) MAIN OUTPUT JACK

1/4" line-level output of main mix, controlled by Mains EQ (20).

### (28) POWER LED

Illuminates when power is supplied to the unit.

### (29) LIMITER INDICATORS

Red LED illuminates when unit approaches peak limit.

### (30) AMPLIFIER FUNCTION SWITCH

3-Way switch:

**Top position:** BRIDGE/MAIN: sends the main mix to mains via Bridged Output (2) on rear panel  
**Mid position:** MAIN/MAIN: sends the main mix to mains only via Speaker Outputs (1) and (3) on rear panel  
**Low position:** MAIN/MONITOR: sends the main mix to mains via Speaker Output (1) on rear panel and the monitor mix to monitors via Monitor Output (3) on rear panel

**NOTE:** In the BRIDGE / MAIN mode the monitors are disabled.