PRO250

250 Watt Professional Acoustic Guitar Amplifier

OPERATING GUIDE

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PRO-250 Front Panel

GUITAR CHANNEL (CHANNEL - 1)

GUITAR INPUT: Instrument input. Designed for both active and passive pickups.

VOLUME: Adjusts the pre amp gain, (sensitivity), of the guitar channel. This control should be used to match your guitar pickup to the amplifier. If amp overloading occurs when using this unit with an active pick up system be sure to decrease this level until the overloading situation ceases.

BASS: Adjusts the amount of cut or boost in the low frequency range.

TREBLE: Adjusts the amount of cut or boost in the high frequency range.

NOTCH FILTER HZ: Sets the frequency of the 18db cut NOTCH FILTER that is used to control resonant feedback.

Notch Filter**: ON/OFF** - Enables or disables the notch filter control.

EFX LEVEL: Controls the amount of digital effect mixed in to the guitar signal from 0% to 50%.

EFX MODE: This is a rotary encoder, which selects 1 of 16 different digital effects. See Digital Effects Program List.

SHAPE: ON/OFF This toggle switch enables or disables the SHAPE control. The shape control is a mid dip control. In the on position the mid frequencies will be cut and the high and low frequencies will be boosted.

MIC/AUX CHANNEL (CHANNEL - 2)

MIC INPUT: XLR input designed for direct connection of a microphone.

AUX INPUT: 1/4" input designed for connection to an instrument such as a guitar or keyboard, and can also be used for connection to a line level signal from a digital effects processor.

MIC VOLUME: Controls the volume of the microphone signal.

AUX VOLUME: Controls the volume of the Aux. signal.

BASS: Adjusts the amount of cut or boost in the low frequency range.

MID: Adjusts the amount of cut or boost in the mid frequency range.

TREBLE: Adjusts the amount of cut or boost in the high frequency range.

EFX LEVEL: Controls the amount of digital effect mixed in to the Mic/Aux signal from 0% to 50%.

EFX MODE: This is a rotary encoder, which selects 1 of 16 different digital effects. See Digital Effects Program List.

OVERLOAD LED: This indicator will illuminate when an overload situation occurs in the Channel - 2 pre-amp section. IF an overload is detected in either the Mic Input front end, Aux input front end, or the tone controls this LED will illuminate. This is very useful when setting up Channel - 2 for different Microphones, instruments, or effects processors. To remedy an overload situation the corresponding Volume control on the ***PRO*** or on the connected instrument can be turned down until the LED does not illuminate.

MASTER SECTION

HORN VOLUME: Adjusts the amount of signal being sent to the on board electronic crossover which feeds the separate high frequency power amplifier. A higher setting of this control adds crisp clean high end to the sound of the amplifier which makes this control one of the most important when setting up your ***PRO*** for your applications. If you are playing an acoustic instrument a higher level on the Horn Volume control will be desirable. If you are playing an electric guitar through a digital efx processor a lower Horn Volume level may be more desirable to reduce any harshness. The Horn Volume control when used in conjunction with the separate Treble controls in the pre-amp sections will give you a lot of control and flexibility over the high frequency section of the ***PRO***.

MASTER VOLUME: Adjusts the overall loudness of the amplifier.

PRO-250 Rear Panel

DIRECT/LINE OUTPUTS: The ***PRO*** has both XLR (balanced) **DIRECT OUT** and 1/4" (unbalanced) **LINE OUT** outputs. The XLR outputs can drive long cable lengths without added noise while the 1/4" outputs can drive virtually any line level input. Separate **CHANNEL-1**, **CHANNEL-2**, and **CHANNEL 1+2** outputs are post eq/efx to ensure a finished mixed signal to a PA system.

EFX LOOP **-** The ***PRO*** has 2 EFX Loops, one for Channel-1 and one for Channel-2
EFX SEND: This jack provides an unbalanced output signal from the preamp for supplying signals to external low-level effects or signal processing equipment. This signal is "pre" tone controls. (The tone controls will not affect the EFX SEND signal)
EFX RETURN: Input for "returning" signals from external low-level effects or signal processing equipment. This signal is pre tone controls and EFX. **(Tone controls and on board digital EFX will affect this signal)**

EFX F.S. (FOOTSWITCH): This jack is for connection to a shorting footswitch. When the switch is closed, the on board digital EFX for the corresponding channel will be bypassed.

GROUND LIFT: This is a global ground lift, which lifts the ground from pin 1 of the XLR jacks and the sleeve of the 1/4" jacks to break any ground loops between the ***PRO*** and a PA system.

PA IN: This input can be used in conjunction with another ***PRO*** amp. By providing a signal to this jack from the PRE OUT from another ***PRO*** amp, you make this amp the *slave* amplifier. (*The slave amplifier will be controlled by the amplifier providing the signal to the PA IN jack.)*

PRE OUT: This jack provides an unbalanced output from the preamp that is post eq and post efx. This send can be used to feed an additional ***PRO*** amp to be used as a slave if more audio power is needed with your system.

AUX INPUT: Unbalanced ***stereo*** input jack. This is an auxiliary input designed for use with a drum machine, tape player, CD player, etc. and can be used for playing prerecorded music.

AUX LEVEL: This "inset" control adjusts the volume level of the AUX input. This control can be adjusted with a small screwdriver. This signal is pre MASTER control which means that the MASTER volume setting will affect the loudness of the TAPE/CD input signal.

AC INPUT: Connect the female end of the AC line cord here. Connect the male plug to a suitable source of line voltage. Refer to the voltage information on the back of the amplifier for its voltage and current requirements. This connector also acts as the main fuse holder and includes a compartment for a spare 5x20mm ***6A*** fuse.

POWER: This rocker switch turns the AC power ON and Off. When ON the power indicator on the front panel is illuminated to indicate the unit is ready for play.

PRO-250 SPECIFICATIONS

- **Input**
  - Impedance: 1 Meg (CH-1), 220k (CH-2) MIC 4.4k (CH-2)
  - Sensitivity: 150MV to 6V
- **EQ:** (Active)
  - Bass: +/- 12db @ 150HZ (CH-1, CH-2)
  - Mid: +/- 12db @ 1kHZ (CH-2)
  - Treble: +/- 12db @ 5kHZ (CH-1, CH-2)
- **Shape** (CH-1)
  - +5db @ 3kHZ
  - -5db @ 1500HZ
  - +5db @ 100HZ
- **Notch** (Feedback Elimination) (CH-1)
  - Range: 100 to 350HZ
  - Attenuation: –18db
- **DIRECT OUTPUTS**
  - XLR balanced output level: -30 dBV nominal
  - XLR balanced output impedance: 150 ohms
  - ¼" unbalanced output level: +4 dBv nominal
  - ¼" unbalanced output impedance: 1 kohm
- **Output**
  - Power: (250W RMS)
  - Total Harmonic Distortion: .1%
  - Signal to Noise Ratio: 98db

PRO-250 dimensions:

Weight: 39 Lbs.
Height: 16"
Length: 21.5"
Depth: 10.5"

Speaker compliment
1 x 10" Eminence special design
1 x 4" Ultrasound Special design
1 - Eminence "Supertweeter"

DIGITAL EFFECTS

Processor type: *Alesis* DSP engine x 2.
(Separate processor for each channel)
Internal processing: 24 bit
A/D converter: 24 bit – 64X oversampling
D/A converter: 24 bit – 128X oversampling
Dynamic Range: 80 dB
THD + N (1 kHz): <0.01%
Sampling rate: 48 kHz

DIGITAL EFX PROGRAM LIST

1. **Chorus:** Stereo chorus.
2. **Flange:** Stereo flanger for jet wash effects.
3. **Plate 2:** Sizzling bright plate reverb.
4. **Plate 3:** Short vintage plate reverb.
5. **Room 3**: Warm room reverb.
6. **Plate 1:** Classic plate reverb.
7. **Bypass:** No Effect
8. **Rotary Speaker:** Rotary speaker emulation.
9. **Chorus/Room 1:** Chorus with reverb.
10. **Chorus/Room 2:** Auto-wah guitar effect with reverb.
11. **Delay 1:** 125ms slapback delay.
12. **Delay 2:** 190ms delay for percussive arpeggios
13. **Hall 1:** Bright hall reverb.
14. **Hall 2:** Warm hall reverb.
15. **Room 1:** Hardwood studio reverb.
16. **Room 2:** Ambience for acoustic mixes and synth sounds.

WARNING: When using electric products, basic cautions should always be followed, including the following:

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another **heat** producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord.
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13 Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammoniabased household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
    a. The power supply cord or plug has been damaged.
    b. Anything has fallen or been spilled into the unit.
    c. The unit does not operate correctly.
    d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise levelexposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	**90**
6	**92**
4	**95**
3	**97**
2	**100**
I I/2	**102**
1	**105**
I/2	**110**
I/4 or less	**115**

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss.
Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!