

Ultra™

operating guide

ULTRA 212

PEAVEY

ULTRA 410

PEAVEY



ULTRA-TUBE



ULTRA-TUBE

High Gain Low Gain

VOLUME 0 10 15

LOW MID HIGH

GAIN VOLUME ULTRA GAIN VOLUME

BOTTOM BODY EDGE

REVERB MASTER

ULTRA 112

RESONANCE ON ON

STATUS POWER MADE IN U.S.A. STANDBY POWER

PEAVEY



Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock – DO NOT OPEN!

CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.



Este símbolo tiene el propósito de alertar al usuario de la presencia de "(voltaje) peligroso" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto.

PRECAUCION: Riesgo de corrientazo – No abra.

PRECAUCION: Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el usuario pueda reparar. Deje todo mantenimiento a los técnicos calificados.

ADVERTENCIA: Para evitar corrientazos o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea más advertencias en la guía de operación.



Ce symbole est utilisé pur indiquer à l'utilisateur la présence à l'intérieur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit.

ATTENTION: Risques de choc électrique – NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié.

AVERTISSEMENT: Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplémentaires situés dans le guide.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko – Elektrischer Schlag! Nicht öffnen!

VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

ACHTUNG: Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

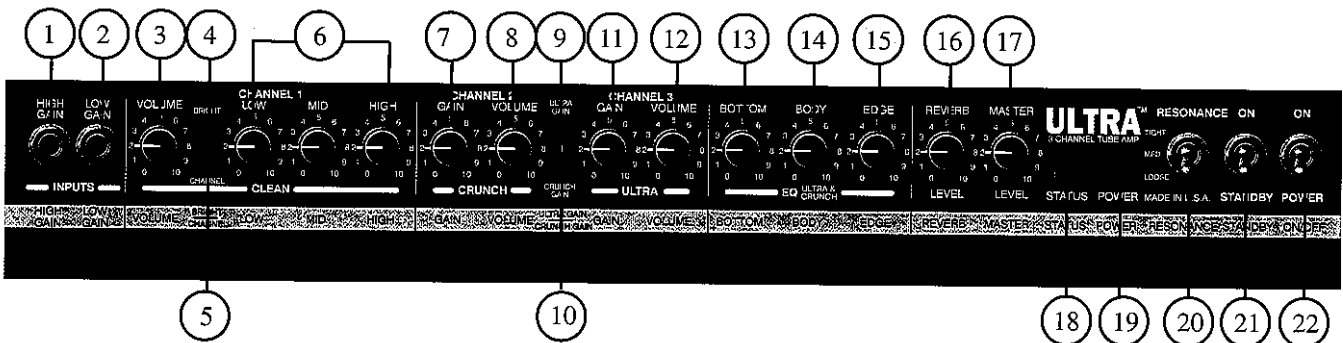
ENGLISH

Ultra™ Features

- All-tube design
 - Four 12AX7 preamp tubes
 - Two 6L6GC output tubes
 - 60 watts RMS @ 4, 8, or 16 ohms
 - Three switchable channels
 - Master Reverb
 - Low-level effects loop
 - Master level control
 - Three-position resonance switch
- Clean Channel
 - Volume control
 - Push Bright
 - Three-band EQ
- Crunch & Ultra Channels
 - Pre & post gain
 - Gain boost switch
 - Three-band EQ

The new Ultra all-tube, 60 watt guitar combo amp is designed for maximum tonal flexibility and power. This three-channel amp has features and tone rivaling amps 2 or 3 times its price.

Dial in any degree of Clean, Crunch, or Lead with the amp's three channels and switch among them from the footswitch. Peavey's patented, three-way Resonance switch tailors the bottom end to your speaker cabinet and room environment.



FRONT PANEL FEATURES

HIGH GAIN INPUT (1)

Used for most electric guitars. It is 6 dB louder than the low gain input.

LOW GAIN INPUT (2)

Provided for instruments that have extremely high outputs, which can result in overdriving (distorting) the High Gain input. If both inputs are used simultaneously, the output levels are the same (both are low gain).

VOLUME (3)

Controls the overall volume level of the Clean channel.

BRIGHT SWITCH (4)

Provides a preset boost to treble frequencies. To activate, depress the switch to its "in" position. The Bright function affects only the Clean channel.

CHANNEL SELECT SWITCH (5)

Allows selection of the Ultra or Clean channel. The "out" position selects the Clean channel.

NOTE: Channel selection may also be accomplished by the remote footswitch. If remote foot selection is desired, the channel switch must be in the "in" position.

LOW MID, AND HIGH EQ (6)

Passive tone controls that regulate the high, mid and low frequencies.

CRUNCH GAIN CONTROL (7)

Controls the input volume level of the channel.

CRUNCH VOLUME (8)

Controls the overall volume level of the channel. The final level adjustment should be made after the desired sound has been achieved.

ULTRA GAIN SWITCH (9)

Boosts the overall system gain of the Ultra channel. Depress to the "in" position to activate.

CRUNCH GAIN SWITCH (10)

Boosts the overall system gain of the Crunch channel. Depress to "in" position to activate.

ULTRA GAIN CONTROL (11)

Controls the input volume level of the channel.

ULTRA VOLUME (12)

Controls the overall volume level of the channel. The final level adjustment should be made after the desired sound has been achieved.

BOTTOM (13)

An active tone control (peak/notch, +/- 15 dB) that varies the low-frequency boost or cut.

NOTE: This control is not functional on the clean channel.

BODY (14)

An active tone control (peak/notch, +/- 15 dB) that varies the mid-frequency boost or cut.

NOTE: This control is not functional on the Clean channel.

EDGE (15)

An active tone control (shelving type, +/- 15 dB) that varies the high-frequency boost or cut.

NOTE: This control is not functional on the Clean channel.

REVERB LEVEL (16)

Reverberation is an echo effect. Rotate clockwise to increase the effect. Remote footswitch can control on/off.

MASTER LEVEL (17)

Controls the overall volume level of the system. Once a desired balance of the Clean, Crunch, and Ultra channels is achieved, the entire system level may be increased or decreased with the master volume level control.

STATUS LED (18)

Illuminates when amp is on. Does not illuminate when on stand-by.

POWER LED (19)

Illuminates when AC power is being supplied to the amp.

RESONANCE SWITCH (20)

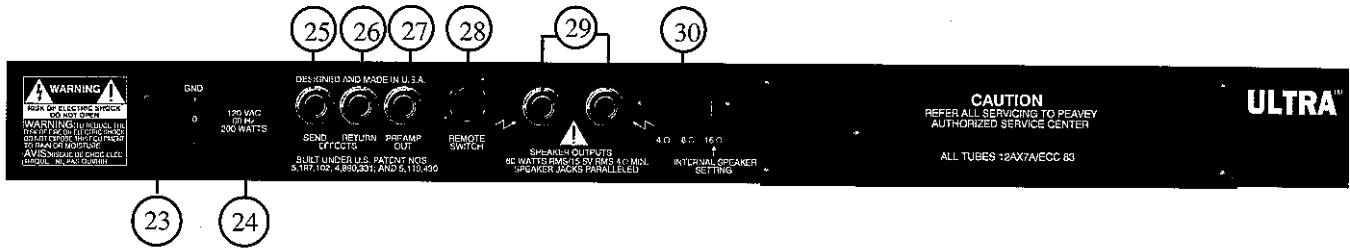
Used to fine tune the low-frequency range of the speaker enclosure by varying the damping factor of the amplifier between three presets.

STANDBY SWITCH (21)

Allows amp to be placed in standby or active mode. In standby mode, the tubes remain hot but the amplifier is not operational.


POWER SWITCH (22)

Switch to "on" position to turn on. The red power LED will illuminate, indicating power is being supplied to the unit.




BACK PANEL FEATURES

GROUND SWITCH (23)

 Three-position, rocker-type switch which, in most applications, should be operated in its center (zero) position. There may be some situations when audible hum and/or noise will come from the loudspeaker. If this occurs, position the ground switch to either positive or negative (+ or -), or until the noise is minimized. For export (220-240V) units, the ground switch is replaced by a 220-230B/240V selector switch.

NOTE: Should the noise problem continue, consult your authorized Peavey Dealer, the Peavey factory, or a qualified service technician. The ground switch is not functional on 220-230/240 volt models.

LINE CORD - 120V PRODUCTS ONLY (24)

 For your safety, we have incorporated a 3-wire line (mains) cable with proper grounding facilities. It is not advisable to remove the ground pin under any circumstances. If it is necessary to use the equipment without proper grounding facilities, suitable grounding adaptors should be used. Less noise and greatly reduced shock hazard exist when the unit is operated with properly grounded receptacles.

EFFECTS SEND (25)

Output for supplying signals from external effects or signal processing equipment.

EFFECTS RETURN (26)

Input for returning signals from external effects or signal processing equipment.


PREAMP OUT (27)

The Preamp Out can be used to route the amplified signal to a mixing console, tape recorder, etc. Using a shielded cable, connect the Preamp Output to the input of a tape recorder, mixer, etc. This patch does not affect the operation of the amplifier.

REMOTE FOOTSWITCH JACK (28)

Provided for the connection of the supplied remote footswitch. The footswitch is used to select the Ultra channel, Crunch channel, or Clean channel and Reverb defeat.

SPEAKER OUTPUTS (29)

 Paralleled 1/4" output jacks for connecting speaker enclosure(s) to the amplifier (minimum is 4 ohms). When using more than one enclosure, be sure to calculate the total impedance and set the impedance switch (30) accordingly. (See below selection on Impedance Selector Switch.)

IMPORTANT: Use only high-quality unshielded cable for speaker connections.

IMPEDANCE SELECTOR SWITCH (30)

Used to select the appropriate impedance of the speaker enclosure(s). If two enclosures of equal impedance are used, the switch should be set at one half of that value (i.e. for two 16 ohms enclosures, set switch to 8 ohms; for two 8 ohms enclosures, set switch to 4 ohms.)

SPECIFICATIONS

POWER AMPLIFIER SECTION

Two 6L6GCs with 12AX7 driver

Rated Power & Load:

60 W RMS into 16, 8, or 4 ohms

Power @ Clipping:

(typically @ 5% THD, 1 kHz, 120 V AC line)

60 W RMS into 16, 8, or 4 ohms

(Bias must be reduced to measure)

Frequency Response:

+0, -2 dB 50 Hz to 20 kHz @ 100 W RMS into 8 ohms

Hum & Noise:

Greater than 76 dB below rated power

Power Consumption:

Domestic: 200 W, 50/60 Hz, 120 VAC

Export: 200 W, 60 Hz, 220-230/240 VAC

Dimensions & Weight:

20" (H) x 23.375" (W) x 11.25" (D)

53.7 lbs.

PREAMP SECTION

Four 12AX7s

The following specs are measured @ 1 kHz with the controls preset as follows:

Low & High EQ @ 10, Mid EQ @ 0

Bright out

Ultra & Crunch Posts @ 10

Gain switches out

Bottom, Body, & Edge @ 0 dB

Reverb level @ 0

Master level @ 10

(Nominal levels are with Pre Gain @ 5. Minimum levels are with Pre Gain @ 10.)

Preamp High Gain Input:

Impedance: Very High-Z, 470 K ohm

Ultra Channel: (with Channel Select in)

Nominal Input Level: -46 dBV, 5 mV RMS

Minimum Input Level: -64 dBV, 0.6 mV RMS

(subtract 15 dB with Gain switch in)

Crunch Channel: (Footswitch selected)

Nominal Input Level: -34 dBV, 20 mV RMS

Minimum Input Level: -52 dBV, 2.5 mV RMS

(subtract 15 dB with Gain switch in)

Clean Channel: (with Channel Select out)

Nominal Input Level: -16 dBV, 150 mV RMS

Minimum Input Level: -34 dBV, 20 mV RMS

Maximum Input Level: 0 dBV, 1.0 mV RMS

Preamp Low Gain Input: (-6 dB Pad)

Impedance: High-Z, 44 K ohms

(all levels are increased by +6 dB)

Effects Send:

Load Impedance: 47 K ohms or greater

Nominal Output: -10 dBV, 300 mV RMS

Effects Return:

Impedance: Very High-Z, 470 K ohms

Designed Level: -10 dBV, 300 mV RMS

Preamp Output:

Load Impedance: 47 K ohms or greater

Nominal Output: +10 dBV, 3 V RMS

Remote Footswitch:

Special 3-button unit with LED indicators (supplied)

System Hum & Noise @ Nominal Level:

(Clean channel — 20 Hz to 20 kHz unweighted)

Greater than 74 dB below rated power

(Special noise gate circuitry for Ultra & Crunch)

Equalization: (Clean channel only)

Custom Low, Mid, & High passive-type EQ

Push Bright: +6 dB @ 2 kHz

Voicing: (Ultra & Crunch channels only)

Active Bottom, Body, & Edge EQ

Push Gain: Increases gain in Ultra & Crunch channels

Speaker:

Ultra 112

1-12"/Sheffield 1230 8 ohms

Dimension:

20" H x 23.375" W x 11.250" D

Weight:

53.70 pounds

Speaker:

Ultra 212

2-12"/Sheffields 1230 16 ohms Series

Dimension:

20.625" H x 26.5 W x 11.125 D

Weight:

69 pounds

Speaker:

Ultra 410

4-10"/Blue Marvels series-paralleled 16 ohms

Dimension:

25" H x 23.5 W x 11.250 D

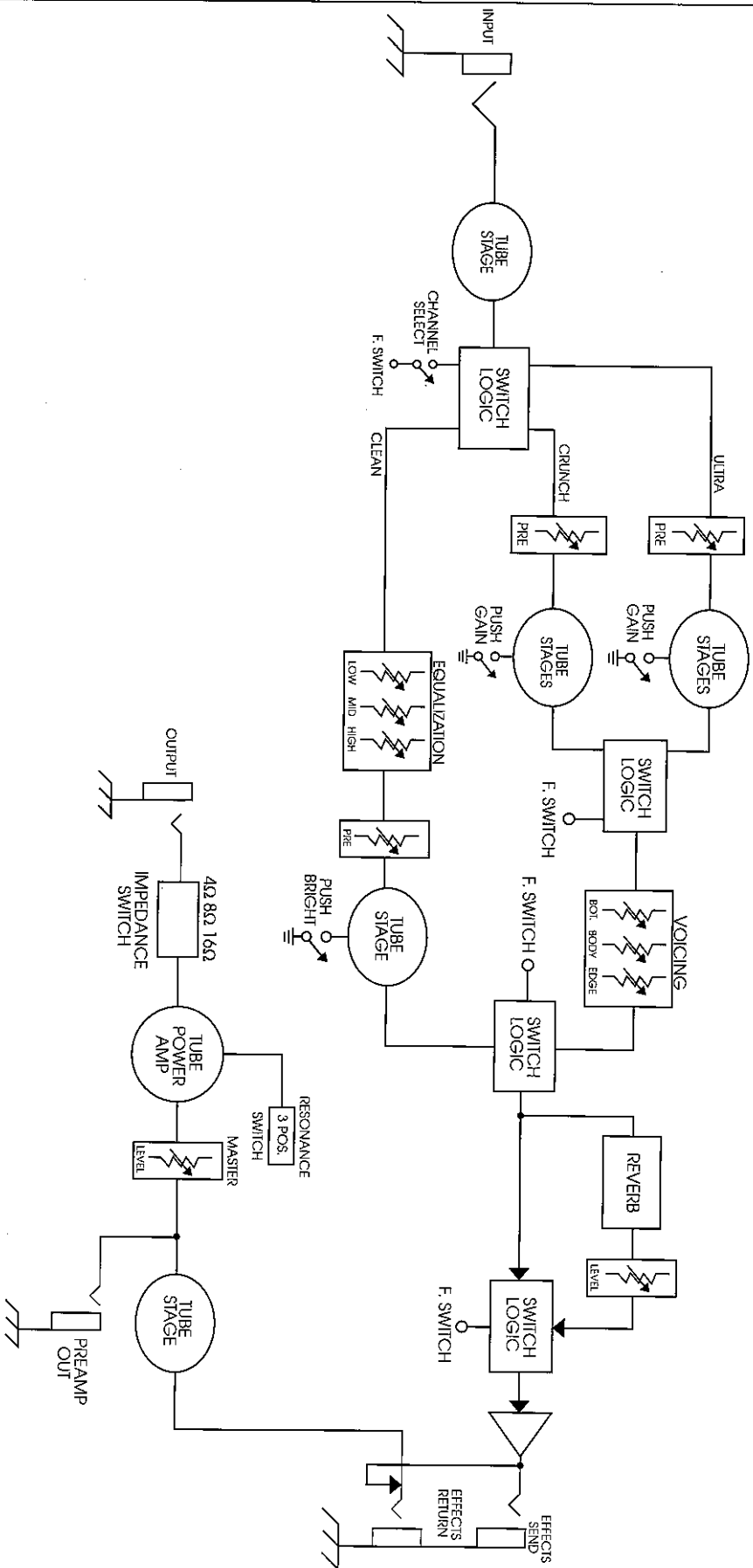
Weight:

71 pounds



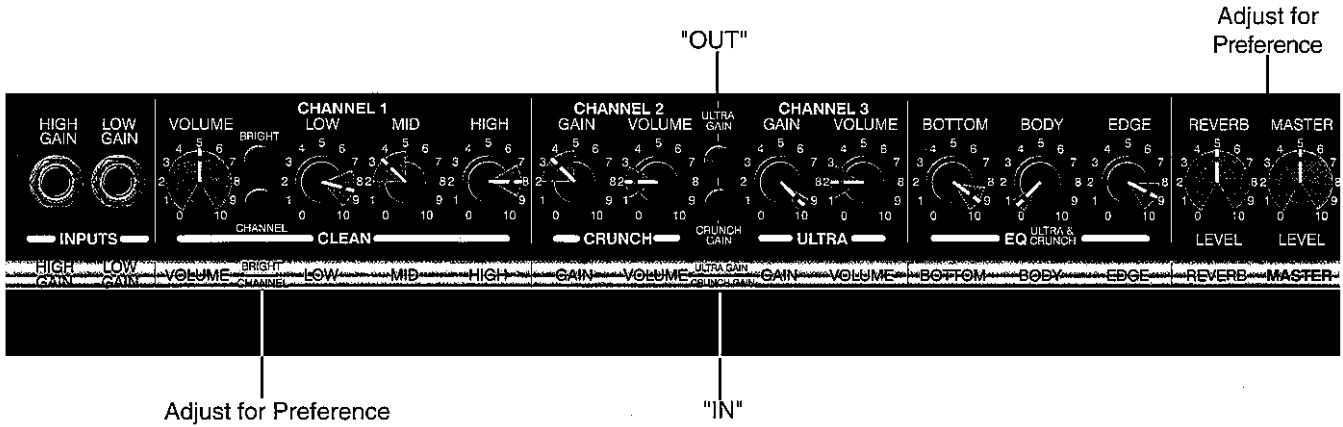
Due to our efforts for constant improvements,
features and specifications listed herein are subject to change without notice.

Flow Chart



This flow chart illustrates signal flow within the unit. In order to thoroughly understand the unit's functions, please study this diagram carefully.

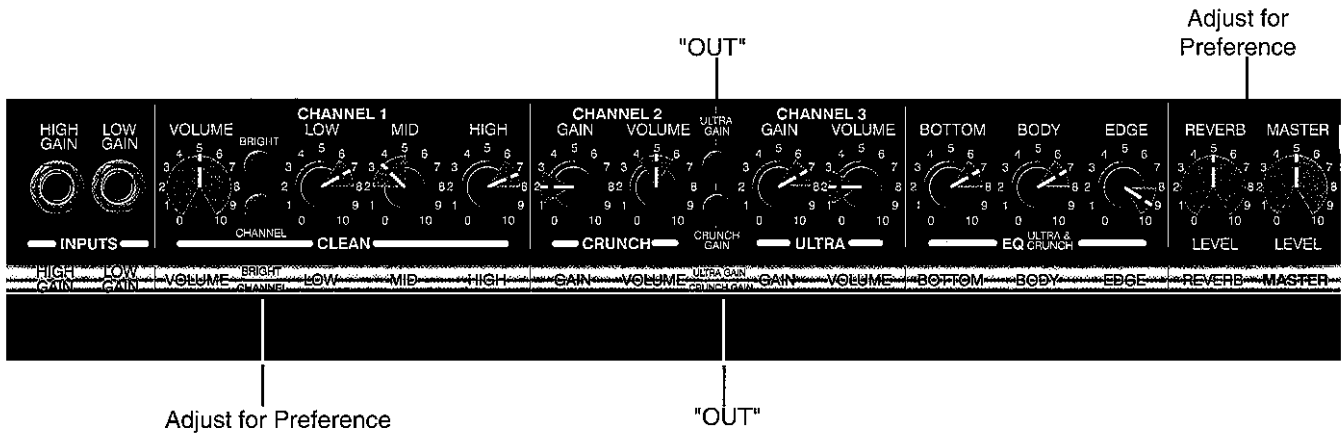
Tone Settings



CLEAN

**MILD
DISTORTION**

METAL



**COUNTRY
CLEAN**

**MILD RHYTHM
DISTORTION**

**COUNTRY/ROCK
LEAD**

Tone settings given are general and will vary according to the type of guitar, gauge type of the strings, the type of pickup, and even the type of pick. Personal preference, playing style, and type of music greatly contribute to desired tonality.