



Peavey® 6505® II Tube Guitar Amplifier

Operating
Manual





FCC/ICES Compliancy Statement

This device complies with Part 15 of the FCC rules and Industry Canada license-exempt RSS Standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warning: Changes or modifications to the equipment not approved by Peavey Electronics Corp. can void the user's authority to use the equipment.

Note – This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.



Peavey® 6505® II

Congratulations on your purchase of the all new 6505® II. Peavey's classic high-gain legacy continues with the 6505® II. Like the original 6505 head, the 6505 II offers two channels. However, the 6505 II adds separate EQ, Resonance, and Presence controls to each channel, giving you more control and flexibility. The new footswitch provides foot control of channel selection, effects loop, and the newly added ability to select the Crunch feature. Now you can instantly obtain that extra gain in the Rhythm Channel with your foot and never have to take your hand off the guitar. Finally, the Clean Channel has been added, completely redesigned to sound much cleaner, and has one 12AX7 devoted to just the Clean/Crunch.

The following guide explains these features and how to operate each one in order to obtain your desired sound. We recommend that you read this manual carefully, paying close attention to any warnings or cautions.

FEATURES:

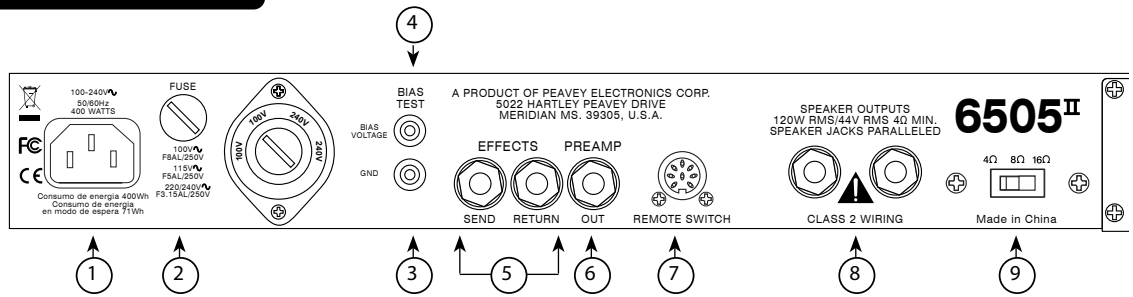
- Two distinct tube channels with footswitch control
- LED "active" indicators for each channel
- Bright switch for Rhythm channel
- Crunch switch on Rhythm channel with footswitch control
- Separate equalizer sections for each channel
- Separate power amp controls (Resonance and Presence) for each channel
- Separate preamp controls (Pre and Post Gain) for each channel
- Standby power switch
- Bias test points on rear panel
- Effects loop with footswitch control
- 1/4" Preamp output jack
- Speaker impedance selection switch (4, 8, 16 ohm)
- Two parallel 1/4" speaker output jacks
- 120 watts output power ohm output power
- Metal three button footswitch with detachable 25' cable



VENTILATION: For proper ventilation, allow 24" clearance from the nearest combustibile surface.

All vents should have a minimum of 2" of free air space so air can flow thru the unit freely for proper cooling.

Rear Panel



(1) LINE CORD (120 V units only)



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 6505ii



without proper grounding facilities, suitable grounding adaptors should be used. Greatly reduced shock hazard exists when the unit is operated with the proper grounded receptacles.

(2) FUSE

WARNING: THE FUSE SHOULD ONLY BE REPLACED WHEN THE POWER CORD HAS BEEN DISCONNECTED FROM ITS POWER SOURCE. A 5 amp fuse is located within the cap of the fuse holder. It must be replaced with the same type and value in order to avoid damage to the equipment and to prevent voiding the warranty. If the amp repeatedly blows fuses, it should be taken to a qualified service center for repair.

(3) GROUND SWITCH

This is a three-position, rocker type switch which, for most applications, should be operated in the center (zero) position. If hum or noise is noticed coming from the speaker enclosure(s) with the Ground Switch in the center position, place the Ground Switch to positive (+) or negative (-) to minimize hum. Should a hum/noise problem continue, consult your authorized Peavey dealer, the Peavey factory, or a qualified service technician.

(4) BIAS TEST TERMINAL

These terminals, along with the adjustment knob behind the grill are provided to measure and adjust the power amp tubes' bias. The bias adjustment should only be done by a qualified technician.

(5) EFFECTS SEND/EFFECTS RETURN

Signals are supplied to outboard effects or signal processing units by patching from the Effects Send output into the outboard unit(s) and back into the Effects Return input using shielded cables with 1/4" mono phone plugs. Only non-gain effects devices (chorus, reverb, delay, etc.) should be used in the effects loop. If footswitch is used, "Effects" must be selected (LED illuminated) for effects to work.

(6) PREAMP OUT

This output can be used to send a preamp signal from the 6505 II to a mixing console, tape recorder, etc., using a shielded instrument cable. Patching from the PREAMP OUT does not affect the normal operation of the amplifier.

(7) REMOTE FOOTSWITCH JACK

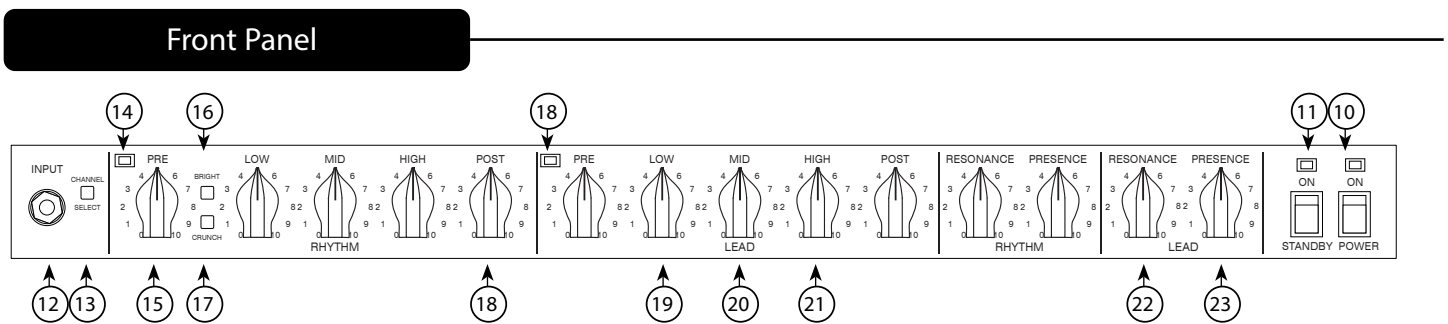
This jack is provided for the connection of the supplied remote footswitch. The footswitch cable should be plugged in before the amp is powered up. When the footswitch is plugged into the Remote Footswitch Jack, the Channel Select switch (14) must be pressed to the "in" position for remote selection of the Lead or Rhythm channel (right footswitch button). The On and Off operation of Effects (left footswitch button) will work at all times. Remote selection of Crunch gain boost (center footswitch button) is available only when the Crunch Switch (22) is selected. See page 9 for detailed Footswitch diagram.

(8) SPEAKER JACKS

These jacks are provided for the connection of speaker enclosure(s). The minimum speaker impedance is 4 ohms. The Impedance Selector Switch (5) should be set accordingly.

(9) IMPEDANCE SELECTOR SWITCH (5)

Use this switch to select the appropriate impedance of the speaker enclosure(s) connected to the Speaker Jacks (4). If two enclosures of equal impedance are used, the switch should be set at one half of that value (e.g., two 16 ohm enclosures: set switch to 8 ohms; two 8 ohm enclosures: set switch to 4 ohms).



(10) POWER SWITCH/LED

This switch supplies power to the unit. Depressed to the "ON" position, the red Power LED indicator will illuminate above the Power Switch when power is being supplied to the unit.

(11) STANDBY SWITCH/LED

This switch allows the 6505 II to be placed in a non-operational standby mode. When the Standby Switch is activated, the tubes remain hot and ready for instantaneous operation, eliminating warm-up time. The Standby LED indicator above the switch will illuminate when the amp is in the operational mode.

(12) INPUT

The 6505 II input jack is designed to accommodate a variety of guitar output levels, regardless of pickup configuration. Due to the extreme high gain capabilities of the 6505 II, it is imperative that you use a premium shielded instrument cable in order to minimize noise.

(13) CHANNEL SELECT SWITCH

This switch allows selection of the Rhythm or Lead Channel. Depressing the switch to the "in" position

position activates the Lead Channel. The red LED next to the Lead Pre control will illuminate to indicate that the Lead Channel is active. In the "out" position, the Rhythm channel is activated and the green LED illuminates next to the Rhythm Pre control to indicate that the Rhythm Channel is active. Channels may be remotely selected using the 6505 II's footswitch. If remote selection is desired, the Channel Select Switch must be set to the "in" position (Lead Channel).

(14) CHANNEL SELECT LED

Both the Rhythm Channel and Lead Channel have these LEDs to indicate which channel is active. The two Channel Select LEDs are never on at the same time. The channel with its indicator illuminated is the active channel.

(15/18) PRE and POST GAIN

The channel Pre (15) and Post (18) Gain controls operate in the same manner for both channels. However, the Lead channel does have more pregain than the Rhythm Channel. In most applications, the Rhythm channel should be set up with the Pre Gain at the lower "cleaner" settings (0-4) and the Post Gain should be set for overall volume. The Rhythm channel can be converted to a medium distortion channel by activating the Crunch switch (17). This will more closely match the pre gain of the two channels. The Lead channel should be set up with the Pre Gain at the mid to upper settings (5-10) and the Post Gain should be set for overall volume.

(19/20/21) EQUALIZATION

The 6505 II's equalization block features passive low, mid, and high EQ that is custom tailored for each channel to classic Peavey specifications. Adjusting the control(s) counterclockwise will result in an attenuation of the signal within the frequency band.

(16) BRIGHT SWITCH

Activates a preset boost in the treble frequencies (6 dB at 2 kHz) and affects only the Rhythm Channel.

(17) CRUNCH SELECT SWITCH

Boosts the gain of the Rhythm channel to create a medium distortion or in between tone. Depress to the "in" position to activate.

(22/2) RESONANCE / PRESENCE

Unique to Peavey instrument amplifiers, the Resonance control (22) can be set to boost the gain of the power amp in the low frequencies at the resonance/attenuation point of the speaker cabinet. In simple terms, the Resonance control works like a low EQ to offset low-end frequency drop out. The Presence control (23) works in the same manner, boosting the high frequencies. Experimentation using your particular speaker cabinet, along with personal taste, will determine your setting for these important controls.

6505 ® II SPECIFICATIONS

POWER AMPLIFICATION SECTION

RATED POWER AND LOAD:

120 W RMS into 16, 8, or 4 ohms

POWER @ CLIPPING:

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

130 W RMS into 16, 8, or 4 ohms

(Bias must be reduced to measure.)

FREQUENCY RESPONSE:

+0, -3 dB, 50 Hz to 20 kHz @ 100 W RMS into 8 ohms

HUM AND NOISE:

Greater than 75 dB below rated power

POWER AMP EQ:

Active Presence: +10 dB @ 2 kHz

Active Resonance: +10 dB @ cabinet resonant frequency

POWER CONSUMPTION (Domestic):

400 watts 50/60 Hz, 120 V AC (Domestic)

TUBE COMPLEMENT:

6-12AX7 preamp tubes

(1 for clean/crunch, 3 for Lead, 1 for EFX and 1 phase splitter

4-6L6GC

PREAMP SECTION

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

Low and High EQ @ 10

Mid EQ @ 0

Bright out

Lead and Rhythm Posts @ 10

Presence and Resonance @ 0 dB

Nominal levels with Pre Gains @ 5

Minimum levels with Pre Gains @ 10

PREAMP INPUT:

Impedance: Very high Z, 470K ohms

Lead Channel (with channel select in):

Nominal Input Level: -60 dBV, 1 mV RMS

Minimum Input Level: -76 dBV, .15 mV RMS

Clean Channel (with channel select out):

Nominal Input Level: -30 dBV, 30 mV RMS

Minimum Input Level: -34 dBV, 20 mV RMS

Maximum Input Level: 0 dBV, 1.0 V RMS

(Subtract 24 dB with Crunch switch in.)

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 OUT:

Load Impedance: 47 k ohms or greater

Nominal Output: +10 dBV, 3 V RMS

REMOTE FOOTSWITCH:

Special 3-button unit with LED indicators (supplied)

Channel select and reverb

SYSTEM HUM AND NOISE @

NOMINAL LEVEL (clean channel):

(20 Hz to 20 kHz unweighted)

Greater than 63 dB below rated power

EQUALIZATION:

Custom Low, Mid, and High passive type EQ

Push Bright (Rhythm Channel only)

+6 dB @ 2 kHz

Push Crunch (Rhythm Channel only)

Increases gain

DIMENSIONS (H x W x D):

10" x 26.625" x 11.75"

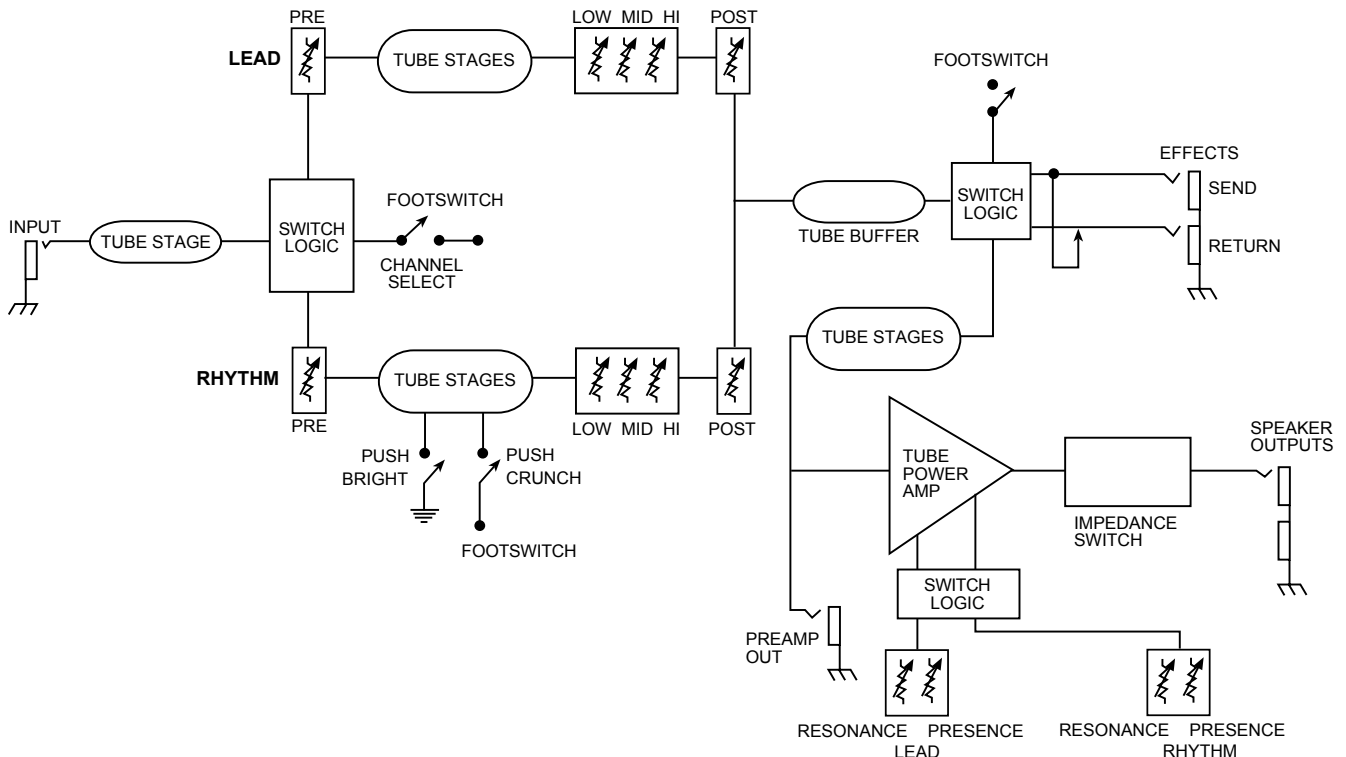
(25.4 cm x 67.6 cm x 29.8 cm)

WEIGHT:

48.3 lbs. (21.91 kg)

Features and specifications subject to change without notice.

6505 ® II BLOCK DIAGRAM





www.peavey.com

Warranty registration and information for U.S. customers available online at
www.peavey.com/warranty
or use the QR tag below



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Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/38,13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005