Musician 60®
Combo Amplifier

Operating Manual

FCC Compliancy Statement

This device complies with Part 15 of the FCC rules. 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.

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.

Peavey Electronics Corporation • 5022 Hartley Peavey Drive • Meridian, MS • 39305
(601) 483-5365 • FAX (601) 486-1278 • www.peavey.com • 80305780 • ©2011

ENGLISH

Musician™ 60® Tube Guitar Combo

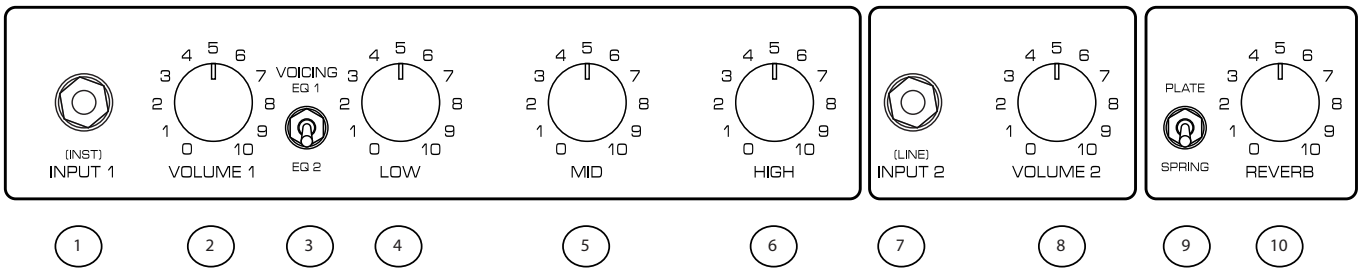
In the true spirit of American vacuum tube innovation, for its 60th Anniversary, Peavey offers the all-new Musician™ 60 tube guitar amp combo. With its groundbreaking and patented ModeMaster™ power amplifier section, the Musician™ 60 is the ultimate tube amplifier pedal platform for gigging and recording guitarists in all genres. The ModeMaster™ all-tube power section (US Patent #7,053,714) is the first of its kind in that it allows for either pure Class A or conventional Class A/B operation with either fixed or self-biasing with all other circuits in the amp held constant, at the flip of a switch. In Class A mode, an all-new output transformer design is used to reconnect both output tubes in parallel for a total of ~27 Watts that dynamically rivals the 50 Watts provided in class A/B mode (with stock 6L6GC power tubes), in terms of volume, with all the sonic benefits. To further control the output and power amp distortion characteristics, a 3-position power attenuator is included as part of the front bank of switches. A massive power supply transformer is used to keep it all real with any combination of topologies and power levels. Several common octal power tube types can be substituted using the wide-ranging external bias adjustment and test points, however, the Musician™ 60 ships with a perfectly matched pair of 6L6GCs and three 12AX7s doing the front-end duties. To drive this new power amp, Peavey has included two independent channel-style inputs. The first has a conventional preamp with an extremely wide-ranging input Gain control, two EQ voicing options, and a passive 3-band EQ while the second is a buffered line-level input with its own input Level control. The latter is most useful in receiving high output external preamps or effects that the user would prefer to keep uncolored by the preamp. The all-new reverb system has a Level control and an all-new switch to allow for either Spring or Plate operation. On the back, there are several more pedal-friendly features, including a 9VDC (negative tip barrel) power supply outputs capable of up to 900mA of DC current, and a buffered Effects Loop (footswitchable). There are also several new Peavey standards on-board, including a variable MSDI (microphone simulated direct interface) with a Filter Bypass switch for optional full-range operation, a Speaker Defeat for silent MSDI use, and dual Speaker Outputs with a 4/8/16 Ohm Impedance selector. To top it all off, the 100% 15mm Birch plywood cabinet is loaded with the fantastic new Sheffield 1230+ (16 Ohms), which is a more consistent and dialed in version of the best Peavey-made Sheffield speakers from the 1990s. A footswitch for activating the Reverb and Effects Loop (MIDI compatible TRS switching) is included, along with a detachable 15' shielded TRS cable.

VENTILATION: For proper ventilation, allow 12" clearance from the nearest combustible surface.

All vents should have a minimum of 2" of free air space so air can flow thru the unit freely for proper cooling. This equipment is not suitable for use in locations where children are likely to be present.

CAUTION: Hot Surface. Do Not Touch.
ATTENTION: Surface chaude. Ne pas toucher

Front Panel



1) INPUT 1: This is a ¼" phono high-impedance instrument-level preamp input designed to accept signals from all electric musical instruments and effects devices.

2) VOLUME 1: This control adjusts the volume of this "preamp" channel between two tube stages before the passive EQ section. Even so, this control will NOT provide more preamp distortion, rather, it's purpose is to drive the power section to your desired type and level of power and clipping using the switches in the all-tube MODEMASTER™ power section.

3) VOICING: This switch selects between two distinctly different preamp voicings and passive EQ sections. EQ1 is more akin to American amp voicings and has more available low end, more suitable for use with overdrive, fuzz, and distortion devices that have a brighter profile or limited EQ options. EQ2 has a more British EQ voicing that is generally more suitable for preamps and gain devices with a more substantial low frequency profile or excessive gain/distortion availability. You should experiment with these two voicings in conjunction with the effects on your pedalboard for best results.

4) LOW: This control adjusts the incoming low frequency portion of the signals being processed by the MODEMASTER™ power section. Lower settings will result in less pronounced crossover and bias shift action from the power amp for a tighter sound, in general. Higher settings will generally allow for more "slop" and organic distortion from the power section, especially in the EQ1 setting.

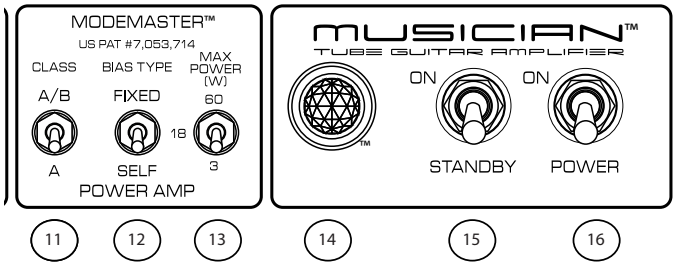
5) MID: This critical control adjusts the incoming midrange frequencies being processed by the MODEMASTER™ power section.

6) HIGH: This control adjusts the incoming high frequencies being processed by the MODEMASTER™ power section. In the EQ1 setting, this control has a "C" or "audio" taper, which comes up more slowly than when set to the EQ2 setting, which uses a "B" or "linear" taper.

7) INPUT 2: This is a ¼" phono super-high-impedance, non-reactive instrument-level preamp input with an expanded range designed to accept signals from all electric musical instruments and effects devices, as well as from line level devices, such as instrument preamps and preamp pedals. This stage uses a premium JFET operational amplifier for superior headroom and minimal noise.

8) VOLUME 2: This control adjusts the incoming signal of this "power amp" channel. This control will NOT provide typical front-end distortion, rather, it's purpose is to drive the power section to your desired type and level of power and clipping using the switches in the all-tube MODEMASTER™ power section.

9) PLATE/SPRING: This switch selects between PLATE and SPRING type reverb sounds.



10) REVERB: This control adjusts the level of the reverb type selected by the PLATE/SPRING switch. This feature can be toggled on and off via the REMOTE SWITCH.

The following three switches provide complete control over your power amp's distortion characteristics.

11) CLASS: This switch selects the class-of operation of the power amplifier in accordance with U.S. Patent #7,053,714. In Class A/B mode, both power tubes are connected to the output transformer in a conventional push-pull configuration for power outputs up to ~60W. In Class A mode the two power tubes are connected in parallel the push-pull windings of the output transformer are switched to a parallel connection to provide an impedance match for unparalleled Class A power, up to ~27W.

12) BIAS TYPE: This switch selects the method by which the bias is provided to the power tubes. In FIXED mode, the cathodes are grounded and a negative DC voltage (variable via the BIAS ADJUST control on the bottom of the chassis) is applied to the grids of each tube. In SELF mode, an RC filter is added to the cathode of both tubes to bring the cathodes positive with respect to the grids. The BIAS ADJUST control is not functional in SELF mode. Despite providing a little less power, the SELF BIAS mode will generally seem a little louder than the FIXED BIAS mode because it can provide more instantaneous power to the load on the attack.

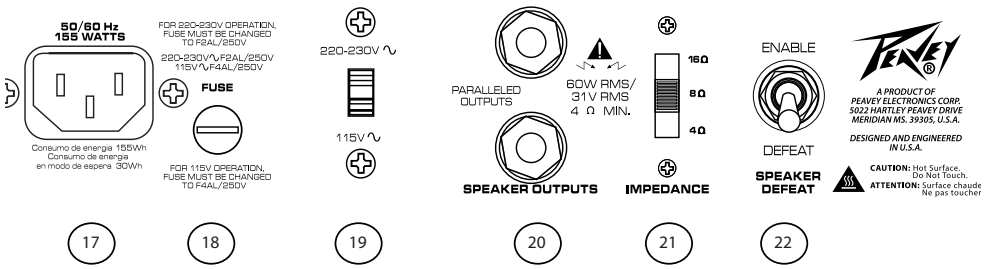
13)MAXIMUM POWER: This switch activates a series of L-pad attenuators to provide three distinct power levels for a given set of tubes. The maximum output of the MODEMASTER™ power section is 60W(rms) with 6550/KT88/6CA7 types, approximately 50W(rms) with most 6L6GC types, with most EL34 types falling somewhere in between. When having your tech replace tubes for different types, the idle plate current can be monitored at the BIAS TEST POINTS on the bottom of the chassis and can be adjusted using the BIAS ADJUST control on the bottom of the chassis. Lower power levels are used to reduce the overall volume of the power amp and will provide your desired type and level of power amp distortion at one of three distinct volume levels. The 3W setting is great for most practice situations, the 18W setting will suffice at most club gigs, and the 60W setting will provide maximum clean headroom and higher volume levels.

14) PILOT LIGHT: This indicates that power is being supplied to the unit.

15) STANDBY: This switch connects the screen grid voltage to the power tubes and plate voltage to the preamp tubes to allow the amplifier to make sound. This switch can be used for set breaks and other periods of non-use during performances, recording, or practice sessions. Wait at least 10 seconds after engaging the POWER switch before engaging the STANDBY switch.

16)POWER: This switch applies AC mains power to the unit.

Rear Panel



17) IEC POWER INLET: For connection of the AC line cord to the unit for providing AC power.

18) FUSE: This is the AC mains fuse holder. A standard 5x20mm fuse with a low-breaking capacity should be used, as noted on the chassis.

19) AC VOLTAGE SELECTOR: This switch selects between two transformer primaries for use with either 115VAC or 220-240VAC.

20) SPEAKER OUTPUTS: These 1/4" phono jacks are connected in parallel and are used to provide a connection to either the internal speaker or external speaker cabs. Speaker cables with a minimum 18AWG copper wire size should be used for best results. Maximum impedance is 16 Ohms.

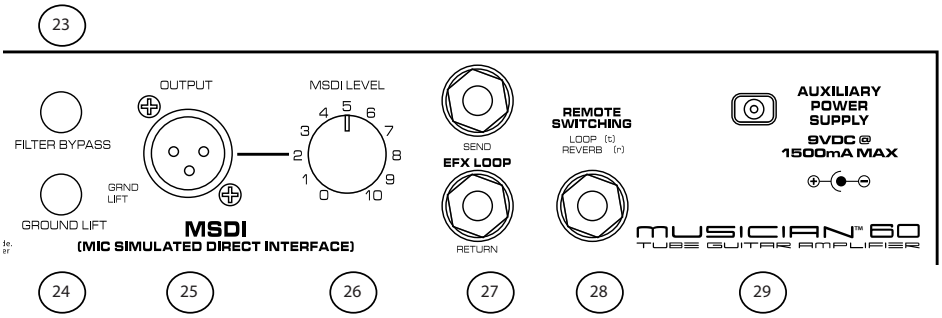
21) IMPEDANCE SELECTOR: This switch selects the nominal output impedance of the power amplifier section. The internal speaker is 16 Ohms and so the 16 Ohm setting should be used, unless external cabinets are being used. For instance, if you wanted to use the internal 16 Ohm speaker with an additional 16 Ohm external cabinet, you would use the 8 Ohm setting (i.e.: 16 Ohms in parallel with 16 Ohms is 8 Ohms). If you wanted to add an 8 Ohm cabinet to the internal 16 Ohm speaker, you could use either the 4 or 8 Ohm tap (i.e.: 16 Ohms in parallel with 8 Ohms is 5.33 Ohms which is not optimal but close enough to either to work), depending on your preference. If you ONLY wanted to use an external cabinet, the internal speaker wire could be disconnected, and the setting would match that of the external cabinet.

22) SPEAKER DEFEAT: This switch disconnects the speaker jacks and places a load on the output transformer for safe operation during silent recording and stage use.
MSDI (Microphone Simulated Direct Interface) SECTION

23) FILTER BYPASS: This switch bypasses the passive MSDI filter for full-range use to accommodate DAWs and Flat-Response/Full Range applications using IR loaders, etc..

24) GROUND LIFT: This switch can be used to break ground (hum) loops that exist between your amplifier and any outboard equipment connected to the MSDI by lifting the chassis ground connection to the XLR jack.

25) MSDI OUTPUT: This jack provides a balanced signal that is a close sonic representation of the amplifier and speaker combination if it were close mic'd with an SM57 about 1" in from the edge of the speaker cone. The filter that accomplishes this is 100% passive with no means for clipping or saturation. If the speaker is changed or an external cab is connected, the tone will follow the sound of the new speaker(s). if the SPEAKER DEFEAT is engaged, the tone will follow the non-reactive dummy load and will have a "flat" response. For a totally flat response with no MSDI filter, engage the FILTER BYPASS.



26) MSDI LEVEL: This control sets the level of the outgoing MSDI signal. Its maximum output is near line level when set at its halfway point and maximum power settings.

27) EFFECTS LOOP: These jacks provide a loop for insertion of effects devices that need to be placed after the preamp for best results, such as delay, reverb, and many modulation effects. This feature can be toggled on and off via the REMOTE SWITCH.

28) REMOTE SWITCH: This jack accepts allows for remote switching of the REVERB (ring) and EFFECTS LOOP (tip) functions. Use Peavey #03620960, 2-button footswitch w/LEDs. These functions can also be operated via MIDI using this TRS connection with the appropriate outboard gear.

29) AUXILIARY POWER SUPPLY: This jack provides a regulated 9VDC (negative tip) output for powering many common effects devices. A cable with a standard 2.1mm barrel connector will be required for use.

Specifications

ModeMaster™ Power Amplifier Section:

Rated Power & Load at nominal Return level; 120VAC; 6L6GC Power Tubes:

Class A/B, Fixed Bias = 50W(rms)
Class A/B, Self Bias = 40W(rms)
Class A, Fixed Bias = 30W(rms)
Class A, Self Bias = 27W(rms)

***NOTE: Any 6L6GC, 6550, or EL34 variant may also be used. Results will vary depending on type and match.**

Power Consumption:

<155W below rated power, 50/60Hz, 120VAC

Preamp Section:

The following specs are measured at 1kHz with all Volume and EQ controls preset to center (12 o'clock) using the EQ1 Preamp Voicing :

Channel 1 (instrument) Input:

Impedance = >1Meg Ohms
Nominal Input Level = 40mV(rms)
Maximum Input Level before clipping = 220mV(rms)

Channel 1 Equalization:

Low, Mid, & High passive equalization circuit
EQ1 & EQ2 Voicings for different pot tapers and FR profiles

Channel 2 (line/instrument) Input:

Impedance = >2.3Meg Ohms
Nominal Input Level = 225mV(rms)
Maximum Input Level before clipping = 450mV(rms)

Effects Loop:

Send Load Impedance = >1k Ohms
Nominal Input/Output Level = 420mV(rms)
Return Input Impedance = 1Meg Ohms

Auxiliary 9VDC Supply = 750mA capacity, negative tip, 2.1mm barrel

External Footswitch Functions (use Peavey #03620960, 2-button w/LEDs)

Effects Loop Defeat (tip) & Reverb Defeat (ring)

Dimensions & Weight

21.0"(w) x 19.2"(h) x 11.1"(d) - 40.0 lbs.

NOTE: There is a 3/16-18T T-nut insert on the front bottom of the cabinet so that the user can add a, bolt, threaded stud, or large appliance levelling foot to provide a precision fully adjustable tilt back foot. Take care to be sure that the foot is not so long, such that the amp may fall on its back when bumped.

www.peavey.com

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

Features and specifications subject to change without notice.

Peavey Electronics Corporation 5022 Hartley Peavey Drive Meridian, MS 39305 (601) 483-5365 FAX (601) 486-1278

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