

IMPORTANT SAFETY INSTRUCTIONS

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

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers)
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
11. Note for UK only: If the colors of the wires in the mains lead of this unit do not correspond with the terminals in your plug, Proceed as follows:
 - a) The wire that is colored green and yellow must be connected to the terminal that is marked by the letter E, The earth symbol, colored green or colored green and yellow.
 - b) The wire that is colored blue must be connected to the terminal that is marked with the letter N or the color black.
 - c) The wire that is colored brown must be connected to the terminal that is marked with the letter L or the color red.
12. Only use attachments/accessories provided by the manufacturer.
13. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use Caution When moving the cart/apparatus combination to avoid injury from tip-over
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or Moisture, does not operate normally, or has been dropped.
16. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord. Never break off the ground pin on a power supply cord.
17. If this product is to be mounted in an equipment rack, rear support should be provided.
18. 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 level exposure.

Duration Per Day In Hours	Sound Level dBA, slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ 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 exceeds the limits 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.

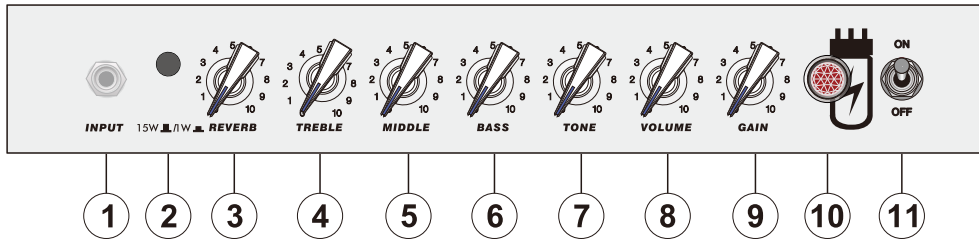
SAVE THESE INSTRUCTIONS

USER MANUAL

15W Tube Amplifier Head

TECHNICAL SPECIFICATIONS	
Rated Power	15 Watts
Frequency Response	80 Hz to 10 kHz
Total Harmonic Distortion	0.5% (clean mode)
Hum and Noise	-75 dB below rated power
Input Impedance	1M Ohms
Power Consumption	50 Watts maximum
Loudspeaker outputs	Extension speaker socket (8-16 Ohm Impedance)
Features	2xEL84 Power Tube 3xECC83/12AX7 Preamp Tube
Dimension	204mm H x 436mm W x 242mm D
Weight	9.0 kg



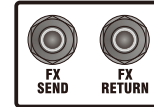


FRONT PANEL:

- (1) **INPUT:** 1/4" phone socket for instrument connection.
- (2) **INPUT SELECTION SWITCH:** Allow switching between two different power settings. 1W is designed for a full range clean sound. 5W can be overdriven more easily and has a restricted low frequency range to avoid a "mushy" sound from high output guitars.
- (3) **REVERB:** Controls how much reverb is added to your sound.
- (4,5,6) **BASS, MIDDLE, TREBLE:** These are a set of traditional passive tone controls that have the advantage of always sounding musical at any of their settings, mainly due to their unique interactive nature. This gives players a more natural set of tools to create their deal sound. (Try them all at 5 as a good starting point).
- (7) **TONE:** The tone control works in a similar fashion to the Tone control you probably have on your guitar except that it uniquely works at the other end of the amplification chain. This has the ability to not only control the overall top end response but also reduce upper end harmonics on the output stage and preamplifier overdrive sounds. This will give you bright cutting sounds at high settings and smooth rounded sounds at lower settings. (Midway (5) is a good starting point).
- (8) **VOLUME:** Sets how loud the amplifier is. Try cranking it up a little to drive the power tube harder for that real retro sound and feel, that only a quality tube amplifier can deliver. Now use your guitar volume to control the amount of distortion.
- (9) **GAIN:** Controls the amount of gain applied to the preamplifier. High Settings will give preamplifier distortion and low settings will give a clean sound. Use in conjunction with the volume control to obtain the balance of the preamplifier and power stage distortion you desire.
- (10) **POWER INDICATOR:** This lamp will be lit when the amplifier is switched on.
- (11) **POWER SWITCH:** This controls the main power of the unit. Tube amplifiers take from 30seconds to 2 minutes to warm up and be ready to play after switching on. This is normal.



FOOTSWITCH: A 1/4" 2 conductor jack that allows you to remotely switch the built in Reverb On/Off. Works with a FS1 footswitch.

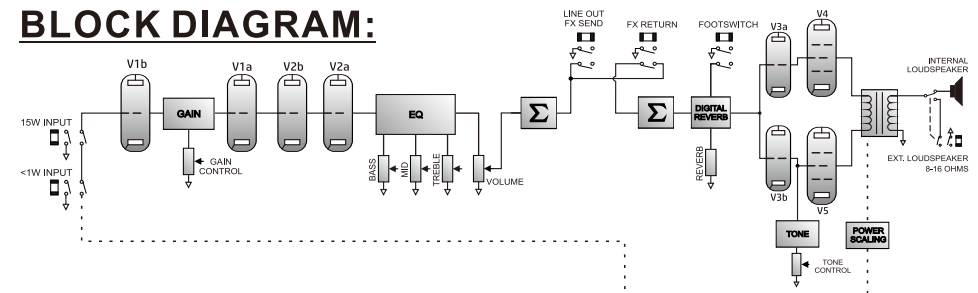


FX SEND: This socket is provided for connecting an external device. The output from this socket should be connected to the external devices input. This socket can also be used as a Line Level Out. (-10dBV Nominal)
FX RETURN: Use this socket to feed the processed signal from the external device back into the amp. (-10dBV Nominal)



EXTENSION CABINET: Use to connect an 8-16 ohm extension cabinet. Please note mismatched impedance will reduce the amplifiers performance and in some cases may cause damage to your amplifier.

BLOCK DIAGRAM:



Taking Care of your Tube Amplifier

1. Try to let your amp warm up some before use. If your amp has a separate power and standby switch you should turn on the power at least two minutes before switching on the standby.
2. If you replace output tubes always replace the whole set, preferably with tubes of the same make. Never mix tube types. So if your amplifier has EL34 power tubes you must always replace them with EL34s. If it has 5881 or 6L6 tubes you must use those. Always make sure that the pins on the base of the tube line up exactly and fit the tube base on the amplifier perfectly.
3. If possible, always allow the amp to cool down 15 or so minutes before moving it.
4. Always use high quality signal and speaker leads and check them regularly. Many guitar and bass cabinets use 1/4-inch connectors. A 1/4-inch connector always shorts out briefly when plugged and unplugged. Therefore you should always connect your cable to your cabinet before you connect it to the amp. That way you'll never put a short on the output of your amp. The same principle works well for signal lines. Plug the cable into the source (your guitar) first, and then plug the other end into the amp.
5. Never store your amp in damp or overly humid conditions. Garden sheds, greenhouses or garages – not a good idea. These conditions are also not very helpful for speakers.
6. Impedance and loading are very critical in some tube amp designs. Always make sure that the amplifier has the correct impedance selected to match the cabinets being used. Make sure you never load the amp down with too low an impedance by connecting too many speakers in parallel.
7. Tube amps (mainly the tubes and sockets) don't typically deal with bone crushing shocks very well. You may get by with dropping your keyboard's road case off the back of the truck (though we don't recommend it), but your tube amp is not likely to survive that kind of impact, even if it is in a padded road case.



Intended to alert the user to the presence of uninsulated 'Dangerous Voltage' within the products enclosure that may be sufficient to constitute a risk of electrical 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.

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

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

* Appearance and specifications of this product are subject to change without prior notice.