

KLD Guitar AMP

GT-20H(M)

Tube Guitar Amplifier Manual



Kailing Electronic Co.,Ltd

<http://www.kldguitar.com>



Before printing this manual, assess if it is really needed



Intended to alert the user to the presence of un-insulated “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 to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

CAUTION Before you “ON” GT-20HM, please ensure it has been connected with speaker. If not, it will damage tube and transform.

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.

Congratulations on your purchase of the GT-20H. This is newest production of Kailing electronic Co.,Ltd(<http://www.kldguitar.com>).

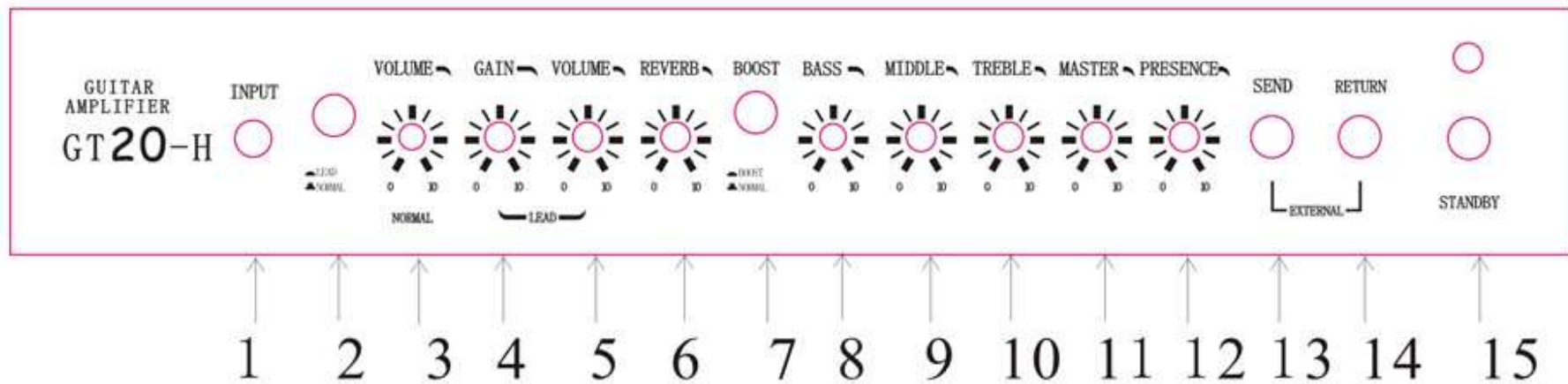
3 12ax7 being preamp design and 2 EL 84 being power amplifier, they allow quick variation of tone-from vintage blues to modern hard-rock and grunge tones. The boost switch is particularly useful in obtaining the more traditional “cranked-amp” tones without the harshness generated by sending too much low end to the power amp. The 20 watt power level is just the right amount for power amp chunk and sustain at a reasonable volume. This head provides all the extra gain you'll ever need. Classic Gain and Ultra Gain channels, both with 2 modes that can take you from warm, clean tube tones to the souped-up threshold of sonic danger. A Deep switch adds a resonant bass boost for a meatier bottom end and a Tone Shift scoops out the mid frequencies making it ideal for heavy metal tones. Two particularly modern additions to this amplifier are the reverb and effects loop. The reverb unit is the long-spring type found in most guitar amps since the 50s. The effects loop comes in especially handy when used with delay, chorus, and many other effect unit, rack or stomp box-when you don't want the associated noise of connecting them in-line with the amp

FEATURES

Power transform 108w

Tubes: Two EL84s and three 12AX7s

- 2 channel preamp
- Pentode/Triode SW (20/10w)
- Pre- and Post-gain controls on the lead channel
- Normal volume control on clean channel
- 3-band passive EQ (bass, middle, treble)
- Boost switch
- Reverb level control and spring reverb
- FX loop
- Footswitch selectable channel switching and reverb (select AUX)
- External speaker jack, 4, 8, 16, 2x8, 2x16ohm



1. INPUT: (1)

The Input jack will accept signals from all types of guitar pickups, Be sure to use a high-quality shielded cable to connect the guitar to the amplifier

2. LEAD/NORMAL: (2)

Allows selection of the Lead or Normal channel

NOTE: Channel selection may also be achieved by the remote footswitch. If remote selection is desired , the channel switch must be in the "in"(lead) position

3. VOLUME: (3)

Normal channel volume control

4. Gain: (4)(LEAD)

Lead channel level controls

5. VOLUME: (5)(LEAD)

Lead channel volume controls. The final level adjustment should be made after the desired sound has been achieved

6. REVERB: (6)

Reverberation is an echo effect. Rotate clockwise to increase the effect

7. BOOST SWITCH: (7)

"Boost"The overall system gain; Depress to the "in" position to activate

8. BASS: (8)(EQ)

Passive tone controls that regulate high, mid, and low frequencies respectively

9. MIDDLE: (9)(EQ)

10. TREBLE: (10)(EQ)

11. MASTER: (11)

12. PRESENCE: (12)

Presence volume control

13. SEND (13)(EXTERNAL)

Output for supplying signal to external effects or signal processing equipment.

14. RETURN (14)(EXTERNAL)

Input for returning signal from external effects or signal processing equipment

15. STANDBY / LIGHT(15)

Green means working, Red means standby.



16. POWER SOCKET and ON/OFF

Switch to position "I" to activate; "O" to OFF

17. TRIODE/PENTODE SW

18. FOOT SWITCH (19)(EXRERNAL)

Provided for the connection of the optional remote footswitch. Footswitch is used to select the lead or Normal channels and defeat reverb. When using remote foot switch, always insert the plug fully (second click) to ensure proper operation.

19. OUTPUT: (19)

Provide for connection of external 4ohm speaker cabinet.

20. OUTPUT: (20)

Provide for connection of external 8ohm speaker cabinet.

21. OUTPUT: (21)

Provide for connection of external 16ohm speaker cabinet.

NOTE: The way connect with speaker

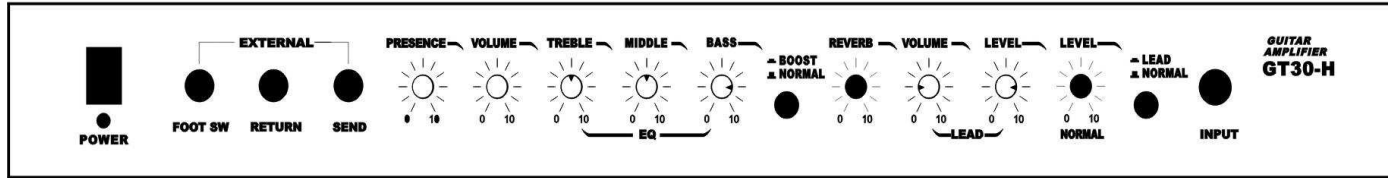
- (1) Connect three speakers at same time, The impedance of each speaker must 12 ohms
- (2) Connect with two speakers in the meantime, If you use INPUT 19 and 20(4ohms and 8 ohms). The impedance of each speakers is 4 ohms. If you use INPUT 20 and 21 (8 ohms and 16ohms),The impedance of each speakers is 8ohms.
- (3) If you only connect one speaker, please connect according to the impedance.

22. DI: (22)

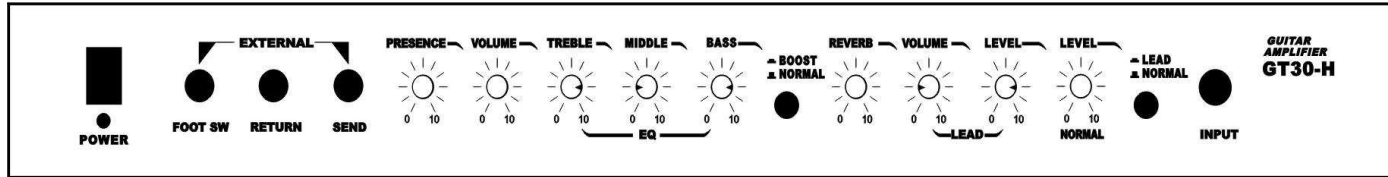
XLR out for recording

TONE SETTINGS

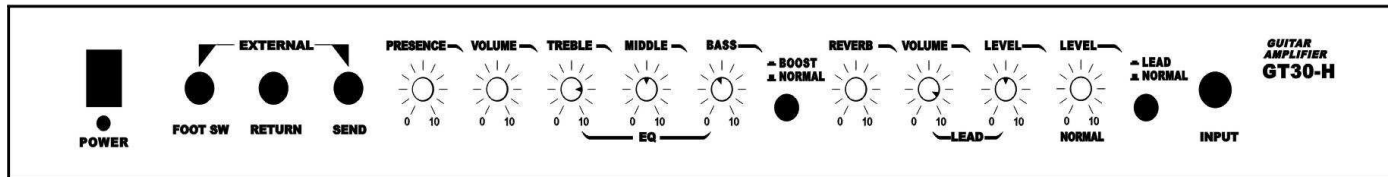
ROCK



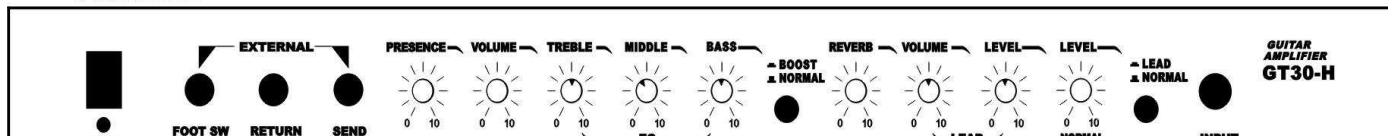
METAL



BLUES



COUNTRY



SPECIFICATIONS

POWER AMPLIFIER SECTION

2-6BQ5/EL84's with 12AX7 driver

Rated Power & Load

20w RMS into 16, 8, 4 ohms

Power @ Clipping (Typically)

(5% THD, 1KHZ, 120vAC line) 20W RMS into 16, 8, 4ohms (Bias must be reduced to measure)

Frequency Response:

+0,-2db, 50HZ to 15KHZ, @, 20w RMS into 16 ohms

Hum & Noise:

Greater than 80 db below rated power

Power consumption:

150watts 50/60HZ. 120Vac (domestic)

PREAMP SECTION

3-12AX7's

The following specs are measured @1KHz with the controls present as follows:

Pre & Post (lead) @ 0

Reverb Level @ 0

Bass & Treble EQ @ 12

Middle [EQ @ 0](#)

Channel Select Out

Boost Switch Out

Nominal Level is with Input Gain @ 6

MINI level is with Input Gain @ 12

Preamp Normal Input

Impedance: Very high Z, 470Kohm

Lead Channel

(Post Gain @ 12)

Nominal Input level -40dBV, 10mV RMS

MINI Input Level: -70dBV, 0.3mV RMS

Normal Channel:

Nominal Input Level:

-17 dBV , 140mV RMS

MINI Input Level: -28dBV ,40mVRMS

Max Input Level: 0dBV 1.0VRMS

Equalization:

(Lead &Normal Channels)

Customer bass, middle & treble passive-type EQ

Effect send

-Load Impedance: 1Kohm or Greater; Nominal Output Level: -6dBV, 0.5V RMS

Effect Return

Impedance: High Z, 2M ohms

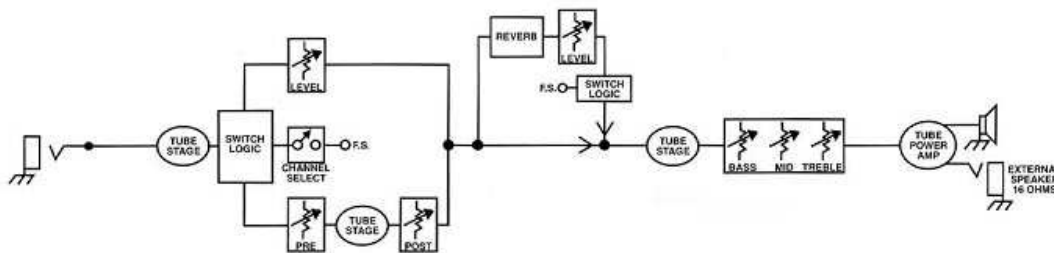
Designed input Level:

-6dBV, 0.5VRMS (Switching jack provides Effect Send to Effects Return connection when not used)

External Footswitch Function:

Reverb Defeat

(When reverb control is raised)Normal/lead channel select(when lead activated)



IMPORTANT SAFETY INSTRUCTIONS

WARNING : When using electric products, basic cautions should always be followed.

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 production should not be used near water, i.e.. a bathroom , sink, swimming pool, wet basement, etc.
6. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
7. 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
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 products is to be cleaned with damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
13. If the product is to be mounted in equipment rack, rear support should be provided.
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.

SAVE THESE INSTRUCTIONS

Other Tips

1. What time tube must be removed.
 - (1) clear micro sound effect
 - (2) "kalakala" noise in background of Guitar
 - (3) Out power reduced
 - (4) Bass become confuse

(5) Treble damaged

2. How to removed Tube.

Please look for expert to change tube. If you want change it self, please do as below

(1) Turn off the AMP, and take off electric power plug, wait for the tube cold.

(2) Please change EL84 in pair. Don't use new and old together