

# **KLD Guitar AMP**

## **PGA18H(M)**

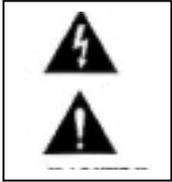
### **Tube Guitar Amplifier Manual**



**Kailing Electronic Co.,Ltd**  
**[Http://www.kldguitar.com](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" PGA18H, 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.

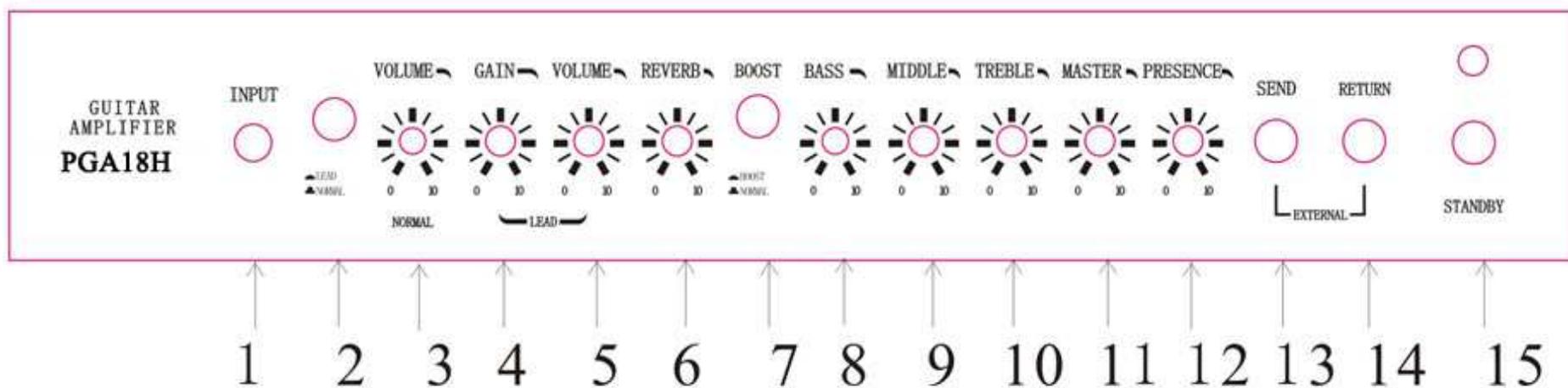
**WARNING** To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings

**Congratulations** on your purchase of the PGA18H. The KLDguitar PGA18H has many special features , which let PGA18H go from a roar to a whisper, shaking the boards on stage, tingling spines in the studio, and raising goose-bumps in the still of night - even during silent recording. Its three-step power soak brings the sound of the big stage into small clubs and your bedroom. Blending power soak with Pentode/ Triode, player can obtain from 18w to 0.5w power. Enable a reduction of power from 18w down to 0.5w. With the built-in Red Box and silent recording capability, you can lay down pro-quality tracks at any time day or night.

### **FEATURES**

- SMPT self monitoring tube matched status
- 18 watts (rms) into 16 or 8 ohms
- Tubes: Two EL84s and three 12AX7s
- Pentode/Triode SW
- Power soak in 8ohm, 18w, 5/18,1/18 and silence speaker. The max power is 18w, the mini power is only 0.5w.
- 2-channel preamp
- Pre- post-gain controls on lead channel
- Normal volume control on clean channel

- 3-band passive EQs(bass, middle, treble)
- Boost switch
- Footswitch selectable channel switching and reverb(select AUX)
- Speaker output jacks :4,8,16,2x8,2x16 ohm
- Red Box DI out(XLR Out)
- Spring Reverb with level control
- FX Loop
- Precise made parts used for lowest noise 5W metal oxide power resistors, 600V polypropylene film/foil and polyester military capacitors
- Metal heat-dissipating enclosure
- Connects with 112
- DIMENSION:  
46(L)x20(W)x27(H)CM(15.7"x7.9"x10.6") (Unpacked) 60(L)x32(W)x34(H)CM(23.6"x12.6"x13.4")(Packed)
- WEIGHT:  
10kg/22lbs(Unpacked),14kg/30.8lbs(Packed)



### 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

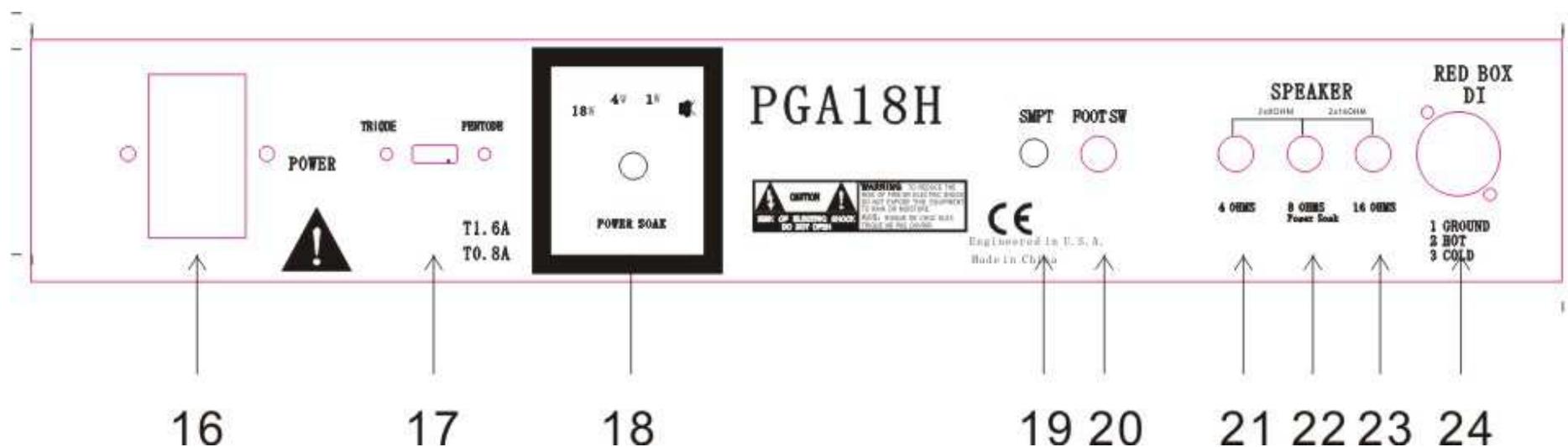
**15. STANDBY / LIGHT(15)**

Green means working, Red means standby.

**16. POWER SOCKET and ON/OFF**

Switch to position "I" to activate; "O" to OFF, This is the receptacle for an IEC line cord, which provides AC power to the unit. Connect

the line cord to this connector to provide power to the unit. Damage to the equipment may result if improper line voltage is used. (See line voltage marking on unit).



### 17. PENTODE /TRIODE SW

Enable a reduction of power by half. Combine with power soak. Power reduction to 18w, 9w,2.5w ,0.5W power.

### 18. POWER SOAK

Use this knob to adjust the PGA 18H's output power and set its basic volume level. This feature lets you enjoy the benefits of full-blown power amp saturation at low volume so you can play at home in your living room without disturbing your neighbors. Its silent recording capability lets you capture genuine tube-driven tone via a mixing console without speakers. And if you want to rehearse in silence any time day or night, simply plug a set of headphones into the mixer. The POWER SOAK is not just about managing volume; it's also about conjuring the right tone and response. For modern sounds that demand fast, tightly focused response, set the POWER SOAK to full power and turn the MASTER knob down. If you want classic rock sounds replete with spongier power tube saturation, drop the POWER SOAK down to a lower setting and crank the MASTER knob to give those power tubes a workout. The POWER SOAK offers the following modes:

Normal operation - full power at 18 watts

Power reduction to 4 watts

Power reduction to 1 watt

Speaker off

#### **19. SMPT**

SELF MONITOR PAIR TUBE. When amp is on without guitar connected, if SMPT LED lighted, it mentioned you that power tubes did not matched. It is better to replace them.

#### **20. FOOT SWITCH (20) (EXRERNAL)**

Provided 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.

#### **21. OUTPUT: (21)**

Provide for connection of external 4ohm speaker cabinet.

#### **22. OUTPUT: (22)**

Provide for connection of external 8ohm speaker cabinet.

#### **23. OUTPUT: (23)**

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 12ohms

(2) Connect with two speakers in the meantime, If you use INPUT 21 and 22 (4ohms and 8 ohms), The impedance of each speakers is 4 ohms. If you use INPUT 22 and 23 (8 ohms and 16ohms),The impedance of each speakers is 8ohms

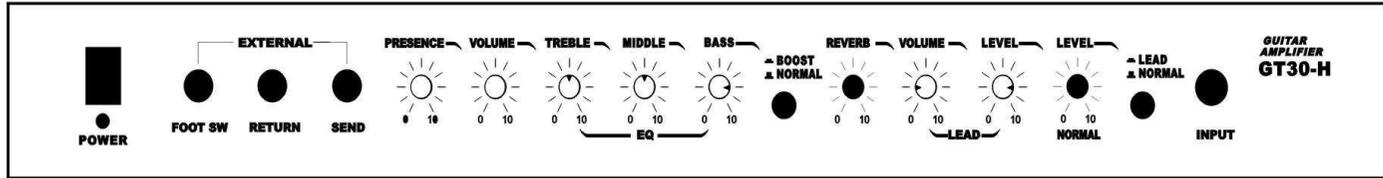
(3) If you only connect one speaker, please connect according to the impedance.

#### **24. DI: (24)**

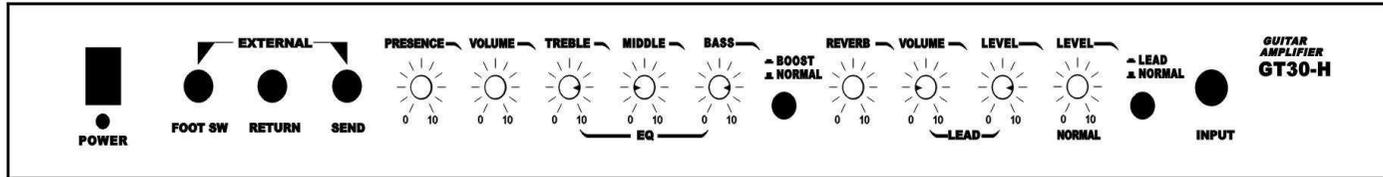
XRL DI out for recording. The RED BOX has for years set the industry standard for analog guitar DI boxes with built-in speaker emulation. It converts the PGA 18H's speaker out signal, which is tapped post power amp and pre POWER SOAK, into a balanced, frequency-compensated signal that you can patch directly to a mixing or recording gears. This signal it sounds very authentic, much like that of a guitar amp, when rendered by a PA or studio monitors. The channels' MASTER settings directly affect the signal level, but the selected POWER SOAK mode does not.

# TONE SETTINGS

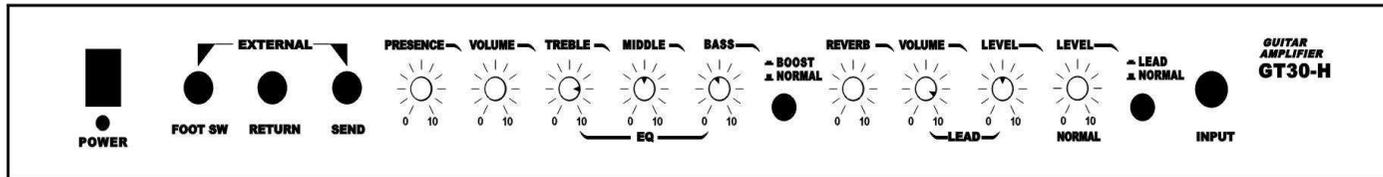
## ROCK



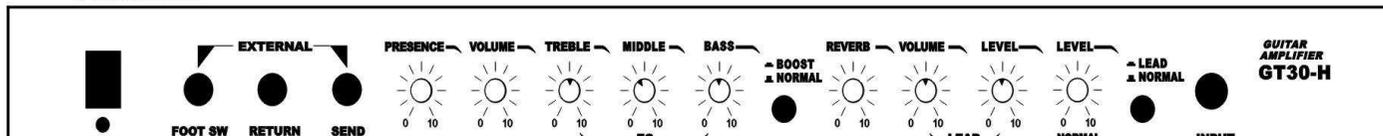
## METAL



## BLUES



## COUNTRY



## SPECIFICATIONS

### POWER AMPLIFIER SECTION

4-6BQ5/EL84's with 12AX7 driver

#### Rated Power & Load

18w RMS into 16, 8, 4 ohms

#### Power @ Clipping (Typically)

(5%THD, 1KHZ, 120 VAC line) 30W 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, 40mV RMS

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

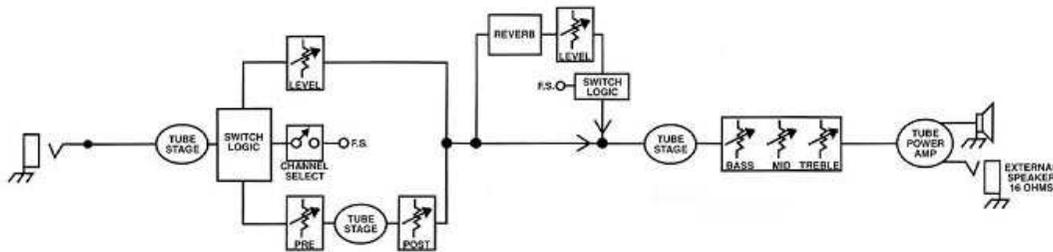
Designed input Level:

-6dBV, 0.5 VRMS (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 handle 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