KLD Guitar AMP

MC36H(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" MC36H, 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.

WARRING 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

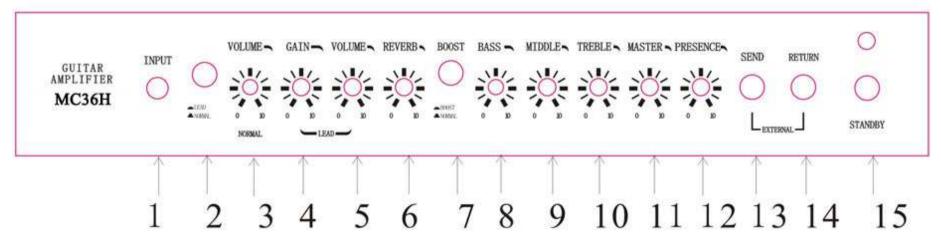
Congratulations on your purchase of the MC36H. The KLDguitar MC 36H has many special features generating sound from a roar to a whisper, shaking the boards on stage, tingling spines in the studio, and raising goose-bumps in the still of night. At the flick of a switch you can select class AB or class A amp settings. Class AB generates a powerfull sound for gigs, whilst Class A is warmer and more suitable in studio recording. Using the Pentode/Triode enables a reduction of power by half enable powerfull cutting sound at a reduced level – ideal for recording or bedroom practice. SMPT (Self Monitoring Pair Tubes) monitors each pair of tubes to guarantee a perfect auto-biased match across all four power amp tubes. An LED lights if at any time a mismatch occurs.

FEATURES

- ·36 watts (rms) into 16 or 8 ohms
- Tubes: Four EL84s and three 12AX7s
- ·2-channel preamp
- ·Pentode/Triode SW
- ·Class AB / Class A power structure selection
- ·Pre- post-gain control 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, 8,16,2x8,2x16ohm
- Red Box DI out(XLR Out)
- Spring Reverb with level control
- ·FX loop
- · SMPT self monitoring tube matched status
- ·Precision parts used for lowest signal to noise ratio. 5W metal oxide power resistors. 600V polypropylene film/foil and polyester military capacitors
- ·Metal heat-dissipating enclosure.
- Connects with 112.
- •DIMENSION: 46(L) x 20(W)x 27(H)(CM)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:
- 11kg/24lbs(Unpacked),14kg



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

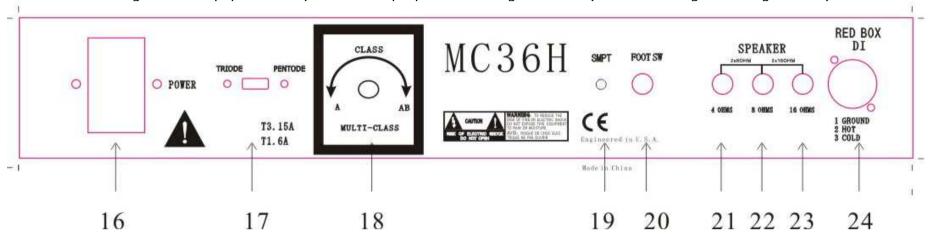
15. STANDBY / LIGHT(15)

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 CLASS AB/CLASS A. You can obtain 36w (CLASS AB), 18w(CLASS AB),18w (CLASS A),9W(CLASS A).

18. CLASS AB/CLASS A SELECTION

Normal, full-power, Class A/B operation results when the control is set at its fully clockwise (wide open) position and should be used as a starting point when setting this control. As the control is rotated counterclockwise, the effect of one half of the EL84 power tubes is progressively subtracted from the circuit, while the gain of the driver tube is slowly increased. The driver's low-frequency response is also altered along with the gain, resulting in more even-ordered harmonic distortion from your power amp, even at lower-than-stage-volume settings. Finally, with the Control knob in the fully counterclockwise position, the result is a real single-ended power amp section that operates and responds exactly like a true Class A power amp, driven by a real single-ended high-gain tube stage. This setting still allows the unused power tube(s) to draw idle current, thus retaining the efficiency of the standard Class A/B topology. In this mode, power output is also reduced by as much as 60% versus maximum rated power.

19. SMPT LED

SELF MONITOR PAIR TUBE. When amp is working on CLASS AB 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 40hm speaker cabinet.

22. OUTPUT: (22)

Provide for connection of external 80hm speaker cabinet.

23. OUTPUT: (23)

Provide for connection of external 16ohm speaker cabinet.

NOTE: The way connect with speaker

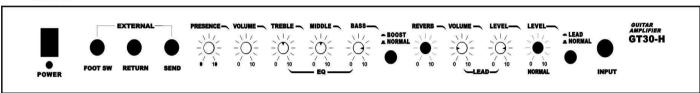
- (1) Connect three speakers at same time, The impedance of each speaker must 12ohms
- (2) Connect with two speakers in the meantime, If you use INPUT 21 and 22 (40hms and 8 ohms), The impedance of each speakers is 4 ohms. If you use INPUT 22 and 23 (8 ohms and 160hms), The impedance of each speakers is 80hms
- (3) If you only connect one speaker, please connect according to the impedance.

24. DI: (24)

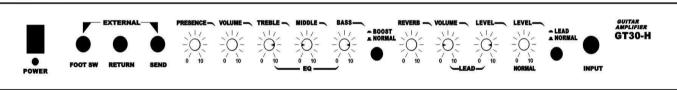
XRL DI out with speaker emulation (RED BOX) for recording. The RED BOX has for years set the industry standard for analog guitar DI boxes with built-in speaker emulation. It converts the MC36H speaker out signal into a balanced, frequency-compensated signal that you can patch directly to a recording or mixing gears. This signal it sounds very authentic, much like that of a guitar amp, when rendered by a PA or studio monitors.

TONE SETTINGS

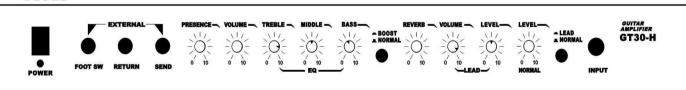
ROCK



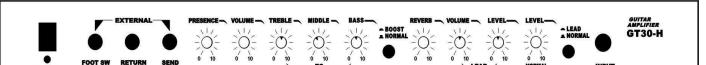
METAL



BLUES



COUNTRY



SPECIFICATIONS

POWER AMPLIFIER SECTION

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

Rated Power &Load

30w RMS into 16, 8,4 ohms

Power @Clipping(Typically)

(5%THD, 1KHZ,120vAC line) 30W RMS into 16,8,40hms(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:

150wtts 50/60HZ.120V(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

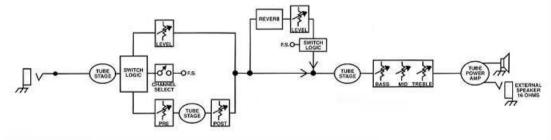
Designed input Level:

-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

- Treble damaged (5)
- 2. How to removed Tube.

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

- Turn off the AMP, and take off electric power plug , wait for the tube cold. Please change EL84 in pair. Don't use new and old together
- (2)