

ENGL



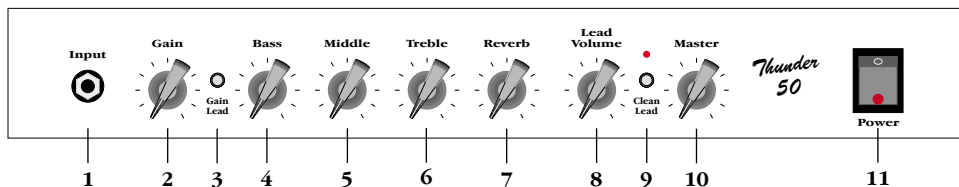
Thunder 50

Operator's Manual

Please, first read this manual carefully!

ENGL Thunder - a really great fully-tube guitar amplifier: The right choice for Rock and Blues! Sensible features and a very clear arrangement of the controls allow an easy handling of this amp. An exceptional noble optical design and the unique, creamy warm tube-sound combined with an excellent sounding spring reverb gives this amplifier an noninterchangeable character. Futheron quality components, excellent workmanship and strict quality control measures ensure this amp retains its value. While operating this amp please note the section "Handling and Care" on the last page of this manual. The **ENGL** -team wishes you a "harmonic future" together with this amplifier!

Front Panel



1 Input

Unbalanced 1/4" input jack.

2 Gain

Input sensitivity control, adjust the volume in the Clean channel by means of this control and the MASTER (10). Furthermore it controls the amount of distortion in the Lead mode.

3 Gain Lead

Switches between a lo-gain and a high-gain Lead.

TIP: e.g. activate this feature for high preamp overdrive in combination with low Gain settings (before the 11 o'clock's position) and set it to the off-position in combination with high Gain settings (after the 12 o'clock's position), for a normal Lead-overdrive. For Crunch-sounds set the Gain control between the 9 and 12 o'clock's position (depending on the type of pickup) and deactivate the Gain Lead pushbutton. Generate a heavy Lead with the Gain control after the 12 o'clocks' position and an activated Gain Lead pushbutton.

CAUTION: Extremely high gain and volume levels in the Lead mode can produce strong feedback. Avoid feedback squeals, they lead to hearing loss and damaged speakers!

4 Bass

Bottom end voicing control.

5 Middle

Mid-range voicing control.

6 Treble

Upper range voicing control.

7 Reverb

Reverb control, adjusts the portion of the reverb signal and increases reverb intensity if you rotate it clockwise; the reverb can be switched on/off via a footswitch (jack 14).

8 Lead Volume

Volume control for the Lead channel. (in front of the FX loop, affects the SEND level).

9 Clean / Lead

Channel selector pushbutton for Clean and Lead modes, red LED indicate Lead mode; This function can also be activated via a footswitch (jack 14). Once a footpedal is connected, the channel selector pushbutton is deactivated.

10 Master

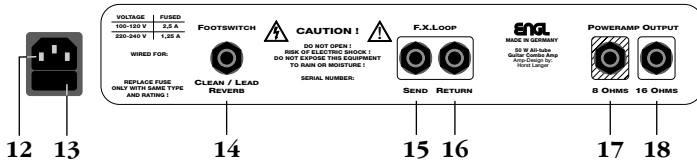
Master volume control for power amp output.

11 Power

AC power on/off.

TIP: To get an idea of this amp's capabilities, we suggest you set all control pots to the 12 o'clock position.

Rear Panel



12 AC SOCKET

Connect AC cord here

ATTENTION: Ensure you use an intact AC cord with an insulated plug only!
Before you power the amp up, ensure the voltage value printed beside the AC socket corresponds to the available current.

13 AC FUSE BOX

Contains mains fuse (rear chamber) and spare fuse (front chamber)

NOTE: Ensure replacement fuses bear identical ratings (refer to the table!)

14 Footswitch: Clean / Lead; Reverb

1/4" stereo jack for double footswitches, executes the following functions:

- 1.Channel switching Clean/Lead (mono terminal)
- 2..Reverb on/off (stereo terminal).

15 F.X. Loop: Send

Signal output for the Effects loop. Connect this output to a signal processor's input/return jack via a shielded cable with 1/4" plugs.

16 F.X. Loop: Return

Signal input for the Effects loop. Connect this input to a signal processor's output/send jack via a shielded cable with 1/4" plugs.

17 Poweramp Output: 8 Ohms

Speaker output jack for the internal 12" speaker or, alternatively an external 8 ohm speaker cabinet (unplug the internal speaker before connecting any external cabinet).

18 Poweramp Output: 16 Ohms

Speaker output jack for an external 16 ohm speaker cabinet. (unplug the internal speaker before connecting any external cabinet).

NOTE: Never operate the amplifier without a sufficient load, otherwise you may damage or destroy the power amp! Ensure your cabinet's specifications match the respective output's specs.

TIP: This amp is designed for the internal speaker or alternatively for one external speaker cabinet (8 or 16 Z). If you decide to connect additional speakers, ensure you keep the overall impedance in mind! For instance, if you want to connect two external 8 Z systems (or the internal 8 Z speaker combined with one external 8 Z cabinet), you must first connect them in series and then to the amp's 16 Z output. The ENGL Speaker Cabinet Extension (optional) offers a number of options, right up to four cabinets.

Technical Data

Rated power: approx. 50 watts at 8 or 16 ohms;

Tubes: 4 x ECC 83 / 12AX 7, 2x 5881; input-tube: FQ selected;

Fuses: external: 1,25 AM (medium) at 230 Volts; 2,5 AM at 100 / 120 Volts;
internal: 1,6 AT (slow) at 230 Volts; 3,15AT at 100 / 120 Volts;

Important: Replace fuses only against same type and rating!

Dimensions: approx. 525 x 450 x 250 mm (l x h x d)

Weight: approx. 17 kg

Handling and Care

- Protect the amp from mechanical knocks (tubes!).
- Let the amp cool down before you transport it (approx. 10 minutes).
- Tubes need about 20 seconds to warm up after you switch the power on, and further on a few minutes before they reach their full power capability.
- Avoid storing the amp in damp or dusty rooms, they are hard on jacks, switches and potentiometers.
- Make sure air can circulate at the rear and top of the amp to allow for adequate cooling (increases component life).
- Never operate the amp without an adequate load.
- Replace tubes with select **ENGL** replacement tubes (special selection criteria) to avoid microfonic properties, undesirable noise and unbalanced performance.

Attention! Please read the following!

- This guitar amplifier can produce high volume levels. Exposure to high volume levels may cause hearing damage!
- Leave tube replacement and power amp biasing to qualified professional. Be sure the unit is switched off and unplugged!
- Caution! Tubes can get very hot and cause skin burns.
- Always use high quality cables.
- Never operate the amp through an ungrounded outlet!
- Never bridge a defective fuse and be sure replacement fuses feature identical ratings!
- Pull the AC mains plug before replacing fuses!
- Never open the chassis or attempt repairs to your own. Consult qualified service personnel!
- Never expose the amplifier to extreme humidity or dampness!
- Please read the instructions carefully before operating the unit!
- Only operate the amplifier in a manner it is designed for and therefore note this operational instructions!

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**We reserve the right to make
unannounced technical upgrades!**