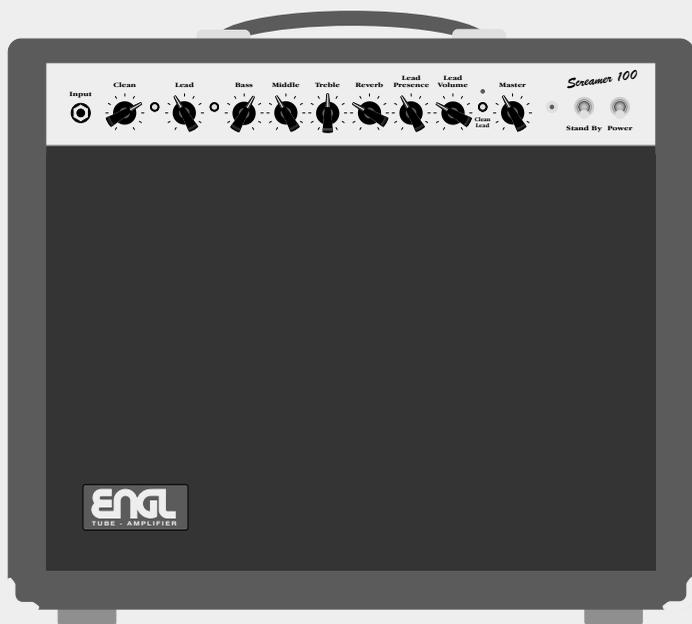


ENGL



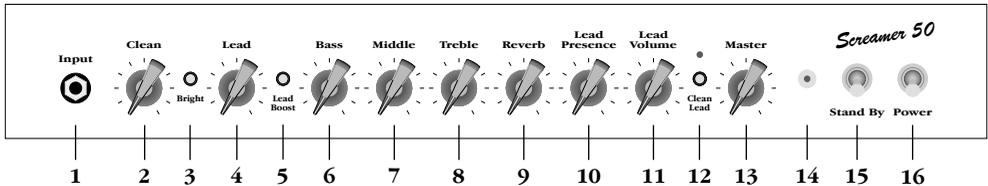
Screamer 100

Operator's Manual

Please, first read this manual carefully!

ENGL Screamer - 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 a noninterchangeable character. Channel selection, Lead Boost, two different Master volumes (V.L.S.) and the Reverb can be switched via conventional double footswitches or with the help of the **ENGL MIDI Switcher (Z-11, optional)** via MIDI. Futheron quality components, excellent workmanship and strict quality control measures ensure this amp retains its value. You will find guidelines on care and maintenance of tube amps on the last page of the manual. Please read and heed these before operating your amp. The boxes shaded in gray located between the diverse descriptions of the amp's functions contain interesting tips covering the preceding function. All crucial information pertaining to the operation of this amp is preceded by "NOTE" or "CAUTION." Please read and heed these as well. The **ENGL**-team wishes you a "harmonic future" together with this amplifier!

Front Panel



1 Input: Unbalanced 1/4" input jack.

2 Clean: Input sensitivity control (Gain) for the Clean channel, adjust the volume by means of this control and the Master (13).

Gain settings depend on what type of pickups are installed in your guitar. The recommended setting for humbuckers or active pickups lies between the 10 and 1 o'clock positions and 12 to 3 o'clock for single coils for a pure clean response.

3 Bright: Alters the EQ by boosting the upper treble range; effectiveness decreases at higher Gain (2, 4) settings; affects both channels.

For a crisp glassy tone, set the Bright switch to the On position. This setting boosts the treble response of muddy pickups.

4 Lead: Gain for the Lead channel, controls the amount of preamp overdrive in the Lead mode.

To get Crunch-sounds, set this control between the 9 and 12 o'clock's position (depending on the type of pick-up) and leave the Lead Boost pushbutton in the Off-position.

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!

5 Lead Boost: Boosts the degree of the distortion in the Lead channel. This feature can also be switched via a footswitch connected to jack (20), the pushbutton is deactivated once a footswitch is connected to the footswitch jack.

6 Bass: Bottom end voicing control.

7 Middle: Mid-range voicing control.

8 Treble: Upper range voicing control.

To get an idea of this amp's capabilities, we suggest you set the tone control pots Bass (6), Middle (7), Treble (8) and Lead Presence (10) to the 12 o'clock position.

9 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 connected to jack (19).

10 Lead Presence: This control defines the Treble response in the poweramp stage for the Lead channel.

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

12 Clean / Lead: Channel selector pushbutton for Clean and Lead modes, red LED indicate Lead mode; This function can also be activated via a footswitch connected to jack (20). Once a footpedal is connected, the channel selector pushbutton is deactivated.

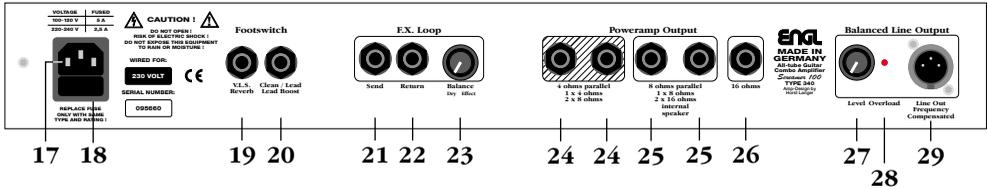
13 Master: Master volume control for power amp output. The feature to switch between two Master volume levels (V.L.S.) can be accessed by means of a footswitch connected to jack (19).

14 Power LED: This LED indicates the operation of the amp.

15 Stand By: Poweramp standby switch.

16 Power: AC power on/off.

Rear Panel



17 AC Socket: Connect AC cord here.

CAUTION: 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.

18 AC Fuse Box: Contains mains fuse (rear chamber) and spare fuse (front chamber).

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

19 Footswitch VL.S., Reverb: 1/4" stereo jack for double footswitches, executes the following functions:

1. Switching between the two Master volume levels Hi and Lo (mono terminal)
2. Reverb on/off (stereo terminal).

20 Footswitch Clean / Lead, Lead Boost: 1/4" stereo jack for double footswitches, executes the following functions:

1. Channel switching between Clean and Lead (mono terminal)
2. Lead Boost (stereo terminal).

All functions that can be accessed via footswitch can also be switched via the ENGL MIDI Switcher Z-11. Simply connect the two 1/4" stereo jacks (19) and (20) to the stereo inputs of the Switcher via two cables equipped with 1/4" stereo plugs. You can control switching functions via the buttons on the Switcher. The respective settings of the functions (e. g. Lead channel, Lead boosted, Reverb active, Hi Master volume) are saved to the desired MIDI program locations. The ENGL MIDI Footswitch Z-12 is ideal for activating MIDI programs. When used in conjunction with the ENGL MIDI Switcher Z-11, this durable footswitch does not require a separate AC power pack. The requisite power is routed via the MIDI cable.

21 FX. 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.

22 FX. 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.

23 Balance: FX mix control for the Effects loop: Rotate the knob to the Dry position for the pure amp signal, i.e. no effect on the signal. Turn clockwise to blend in an effect connected to the loop to the dry signal (parallel/passive). At the Effect position, only the wet signal, i.e. the signal sent from the FX device is fed to the power amp (serial/passive).

NOTE: If no effects processor is connected to this loop, leave this control in position Dry!

24 Poweramp Output, 4 Ohms parallel: 4 ohms speaker output jacks, internal connected parallel. For diverse cabinet options see the last chapter on this page!

25 Poweramp Output 8 Ohms parallel: 8 ohms speaker output jacks, internal connected parallel; the internal 8 ohms speaker is connected to one of this two jacks at the combo E340. For diverse cabinet options see the last chapter on this page! The impedance of a additional cabinet for the combo should bear 8 ohms.

26 Poweramp Output 16 Ohms: 16 ohms speaker output jack. For diverse cabinet options see the last chapter on this page!

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.

Choose only one of the following cabinet options:

A: One 4 ohms cabinet connected to a 4 ohms jack; (Combo E340: without the internal speaker to reach the maximum power !);

B: Two 8 ohms cabinets connected to the 4 ohms jacks; (Combo: An external 8 ohms cabinet and the internal 8 ohms speaker connected to the 4 ohms jacks. When you unplug the cable for the external cabinet, ensure you plug the internal speaker back into the 8 ohms jack!)

C: One 8 ohms cabinet connected to a 8 ohms jack (Combo: The internal speaker is connected to a 8 ohms jack);

D: Two 16 ohms cabinets connected to the 8 ohms jacks (Combo: without the internal speaker !);

E: One 16 ohms cabinet connected to the 16 ohms jack (Combo: without the internal speaker !).

27 Level: Signal level control for the frequency-corrected line output; it is used to match the amp's signal level at the Line output to the mixing console or recorder's input.

28 Overload: This LED denotes the Line output is overloading; in this case, reduce the signal's level via the Level control.

29 Line Out Frequency Compensated: The frequency-corrected, balanced Line output jack (XLR; Pin 2 and 3 signal, Pin 1 = N.C.). This signal can be routed directly to a mixing console or a recording unit. The line out is located post poweramp in the signal chain, so ensure the poweramp is activated and a load is connected to one of the output jacks.

The Line Out's output level is influenced by the following factors: By the input level (Gain), the Volume control setting for the Lead channel, to some degree by voicing control settings, and by the Master volume level. First dial in the desired sound combination at the front panel. Then adjust levels at FX devices or signal processors (if connected). Now use the Level control to adjust the Line level. The Line output is not overloaded until the Overload LED illuminates brightly and continuously. You can push the level up to this point to match a mixing console or recorder's input level requirement. Use the respective device's input sensitivity or gain control to fine-tune level adjustments.

Technical Data:

Rated power: approx. 100 watts at 4, 8 or 16 ohms.

Tubes: V1 (input-tube): ECC 83 / 12AX7, FQ selected;
V2, V3: ECC 83 / 12AX7, selected;
V4: ECC 83 / 12AX7, standard;
V5 - V8: 5881(6L6GC) matched set.

Fuses: external: 2,5 AM (medium) at 230 Volts;
5 AM (medium) in the 100 and 120 Volts models.
internal: 3,15 AT (slow) at 230 Volts;
6,3AT (slow) in the 100 and 120 Volts models.

CAUTION: Replace fuses only against same type and rating!

Cooling: two fans each 12 Volts DC - 1,2 watts;

Please Note: To protect your amp from damage due to overheating, please ensure the cooling fans remains in operation at all times, especially during lengthy gigs or other occasions when your amp's operating temperature is high.

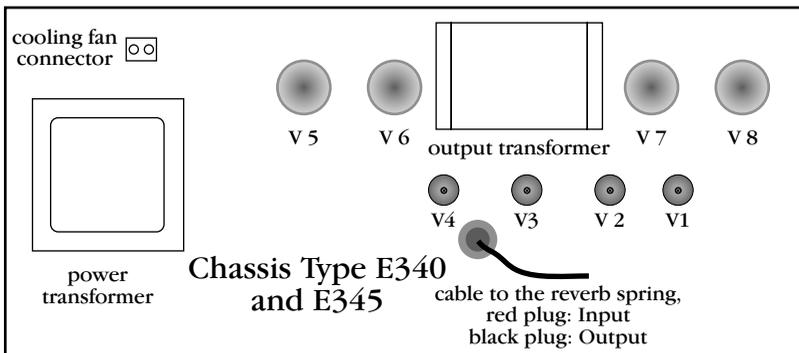
For recording in the studio or other applications that demand absolutely silent operation, you may disconnect the power supply to the fan pulling the central power supply plug. Ensure the fan is not off for longer than two to three hours. Combo E340: approx. 57,5 x 48 x 27 cm; Head E345: approx. 57,5 x 27 x 27 cm (l x h x d)

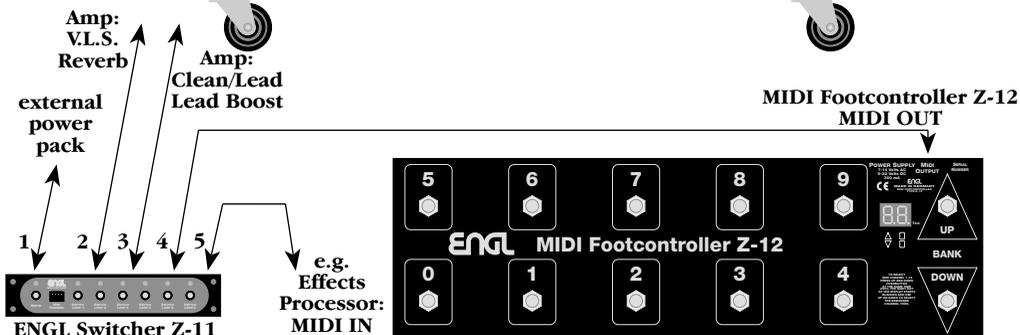
Dimensions:

Weight:

Tube array:

Combo E340: approx. 24 kg; Head E345: approx. 18 kg;





ENGL Switcher Z-11
 1: Power Supply
 2: Loop 3 & 4
 3: Loop 1 & 2
 4: MIDI IN
 5: MIDI THRU

this graphic depicts a typical setup: The Screamer 100 Head combined with the excellent sounding ENGL 412 cabinet; the channel switching, Lead Boost, Reverb and the Master Volume Level Switching (V.L.S.) is controlled via the ENGL MIDI Footcontroller Z-12 and the ENGL MIDI Switcher Z-11.

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 furtheron 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 side and the 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!

ENGL Gerätebau GmbH, Germany;

Internet: www.engl-amps.com

Text, design, graphics and layout by Horst Langer

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