



**E840**  
**Tube Poweramp 50/50**  
**Operator's Manual**



In addition to a first class tube tone, the **ENGL 840** poweramp offers a number of practical features in a powerful 2x50 watt package. Each of the two stereo channels features two volume and two presence controls (A and B), so you can dial in diverse volume and presence settings. The A/B controls are switchable via an external footswitch or through MIDI commands via a MIDI Switcher. Intelligent design features, superior craftsmanship and finishing and quality components are what this device is all about. However keep in mind, that a few precautions will radically extend tube life (see handling and care guidance). The entire **ENGL-Team** would like to thank you for your faith in our product; we hope you derive a great deal of joy and satisfaction from your **ENGL TUBE POWERAMP 840**.

**PLEASE NOTE:** Read the Operator's Manual carefully and thoroughly, especially the Handling and Care section as well as the guidelines in bold-face type. Avoid operating errors and potential damage to the amp by heeding the guidelines and cautionary remarks in this manual. The footnotes also cover a few convenient pointers and interesting tips on several functions. These are listed below.

**TIP 1** The VOLUME A/B switching feature can be used for the following application: In combination with a multi channel preamp, to activate two different volumes for each channel, for instance one for rhythm work, the other for soloing.

**TIP 2** The PRESENCE A/B switching feature can be used for the following application: In combination with a two-channel preamp (Clean/Lead) a possible option could be a setting of 1 to 4 o'clock for the PRESENCE A controls and a setting of 8 to 12 o'clock for the PRESENCE B controls. Use PRESENCE A when the preamp is in the clean mode, and PRESENCE B for lead tones.

**TIP 3** The two functions VOLUME A/B and PRESENCE A/B can also be switched via the ENGL MIDI Switcher Z-11. Simply connect the 1/4" stereo jack (23) to the stereo input of the Switcher via a cable equipped with 1/4" stereo plugs. You can control these switching functions via the buttons on the Switcher. The respective functions (e. g. Volume B and Presence A) 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.

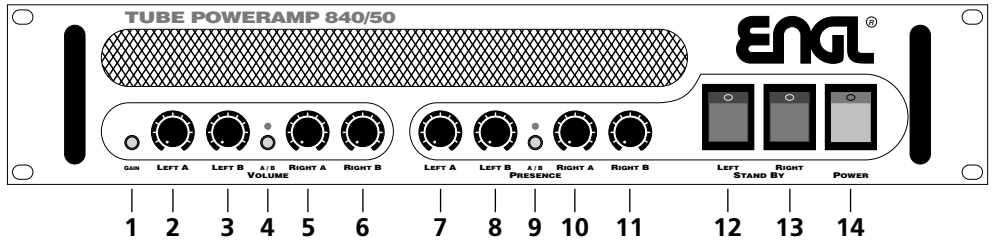
**TIP 4** This poweramp is designed for one speaker cabinet per channel. If you decide to connect additional speakers, ensure you keep the overall impedance in mind! For instance, if you want to connect two 8 $\Omega$  systems per side, you must first connect them in series and then to the amp's 16 $\Omega$  outputs.

If you are using a stereo speaker cabinet for both channels, ensure it actually operates in the stereo mode, otherwise you may damage the power amp. A convincing stereo image is achieved via a quality stereo effects processor and a separate speaker for each channel.

For a very compact setup we recommend the ENGL speaker cabinets E112 (loaded with one 12" Vintage speaker; wide open panoramic sound with a punchy bottom and crisp high) or the E210" cabinet (loaded with two 10" Vintage speakers; nicely balanced, warm tone with a burly midrange). To achieve enormous bottom end, we recommend our flagship cabinets, the E212 and the E412.

**TIP 5** Use this switch to silence (0 position) the amp when you take a lengthier break. The amp's tubes stay warm, which means that it is ready to roll immediately when you switch it back to full power. The standby switch is also well-suited for muting the amp for brief breaks, for instance when you're switching guitars. If you choose to use just one power amp channel, ensure you switch the other channel's STANDBY switch off. Never operate an active stereo channel without a connected speaker, you may destroy the power amp!

# Front



## 1 Gain

Power amps' input sensitivity. This button increases the gain level for both channels at the INPUT jacks (24) and (25).

## 2 VOLUME LEFT A

volume control A for the left power amp. This control is active if button A/B is in the off position; LED does not illuminate.

## 3 VOLUME LEFT B

volume control B for the left power amp. This control is active if button A/B is in the on position (depressed); LED illuminates.

## 4 A/B VOLUME

switches between VOLUME A controls and VOLUME B controls.

1. A/B button position off: VOLUME A
2. A/B button position on: VOLUME B, indicated by the red LED.

This feature can also be switched via a footswitch connected to jack 23; the VOLUME A/B pushbutton is deactivated once a footswitch is connected.

## 5 VOLUME RIGHT A

volume control A for the right power amp. This control is active if button A/B is in the off position; LED is not illuminating.

## 6 VOLUME RIGHT B

volume control B for the right power amp. This control is active if button A/B is in the on position (depressed); LED is illuminating.

## 7 PRESENCE LEFT A

Treble control A for the left poweramp channel; it is active if button A/B (9) is in the off position; LED is not illuminating.

## 8 PRESENCE LEFT B

Treble control B for the left poweramp channel; it is active if button A/B (9) is in the on position; LED is illuminating.

## 9 A/B PRESENCE

switches between PRESENCE A controls and PRESENCE B controls.

1. A/B button position off: PRESENCE A
2. A/B button position on: PRESENCE B, indicated by the red LED.

This feature can also be switched via a footswitch connected to jack 23; the PRESENCE A/B pushbutton is deactivated once a footswitch is connected.

## 10 PRESENCE RIGHT A

Treble control A for the right poweramp channel; it is active if button A/B (9) is in the off position; LED is not illuminating.

## 11 PRESENCE RIGHT B

Treble control B for the right poweramp channel; it is active if button A/B (9) is in the on position; LED is illuminating.

## 12 STANDBY LEFT

left channel standby.

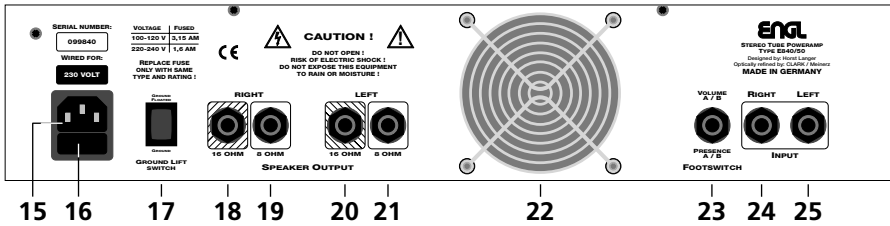
## 13 STANDBY RIGHT

right channel standby.

## 14 POWER

AC power on/off.

# Rear Panel



## 15 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 above the AC socket corresponds to the available current!

## 16 AC Fuse Box

contains mains fuse (rear chamber) and spare fuse (front chamber).

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

## 17 GROUND LIFT SWITCH

GROUND-position: direct connection between amp's ground and outlet ground.  
GROUND FLOATED-position: no direct connection between amp's ground and outlet ground => use this feature, to avoid ground loops in combination with other grounded 19" units.

**PLEASE NOTE:** If operating the Poweramp with a preamp or FX device, that does not have a direct connection between internal ground and outlet ground, ensure this switch is set to the position "Ground". Otherwise you may encounter a hum noise.

## 18 SPEAKER OUTPUT 16 OHMS RIGHT

16Z right channel speaker output jack; connect 16Z speaker cabinet here.

## 19 SPEAKER OUTPUT 8 OHMS RIGHT

8Z right channel speaker output jack; connect 8Z speaker cabinet here.

## 20 SPEAKER OUTPUT 16 OHMS LEFT

16Z left channel speaker output jack; connect 16Z speaker cabinet here

## 21 SPEAKER OUTPUT 8 OHMS LEFT

8Z left channel speaker output jack; connect 8Z speaker cabinet here.

**TIP 4**

**IMPORTANT:** If you choose to use just one power amp channel, ensure you switch the other channel's STANDBY switch off. Never operate an active stereo channel without a connected speaker, you may destroy the power amp!

## 22 Fan Shaft

ultra-quiet fan ensures your poweramp remains cool; hot air escapes via this shaft.

**ATTENTION:** Install the amp in a 19" rack in such a manner as to ensure air circulation is not impeded. Do not block or cover the fan shaft, the side and the front coolant vents.

## 23 FOOTSWITCH:

**VOLUME A/B; PRESENCE A/B**

1/4" stereo jack for connecting a dual footswitch (e.g. ENGL Z-4) or a MIDI-switching system (e.g. ENGL Z-11).

The following functions can be executed:  
1. VOLUME A/B (mono terminal).  
2. PRESENCE A/B (stereo terminal).

**TIP 3**

## 24 INPUT RIGHT

Signal input right stereo channel. Connect this input to a preamp's or a FX processor's right output/send jack via a shielded cable with 1/4" plugs.

The Input sensitivity can be adjusted via the Gain pushbutton at the frontpanel.

## 25 INPUT LEFT

Signal input left stereo channel. Connect this input to a preamp's or a FX processor's left output/send jack via a shielded cable with 1/4" plugs.

The Input sensitivity can be adjusted via the Gain pushbutton at the frontpanel.

# Technical Data

**Rated power:** 2x50 Watt

**Outlet each channel:** 8 und 16 Ohm

**Input level power amp:** GAIN (14) off: -5 dB max. 15 dB  
GAIN (14) on: -20 dB max. 0 dB

## Tubes:

Input tube V1 => ECC83/12AX7, selected  
Phase shift tube V2, V3 => ECC83/12AX7,  
Power tubes V4, to V7 => 5881(or 6L6GC), matched sets

## Fuses

AC Mains:	230V	100V and 120V
external:	1,6 AM	3,15 AM
internal:	1,6 AT	3,15 AT

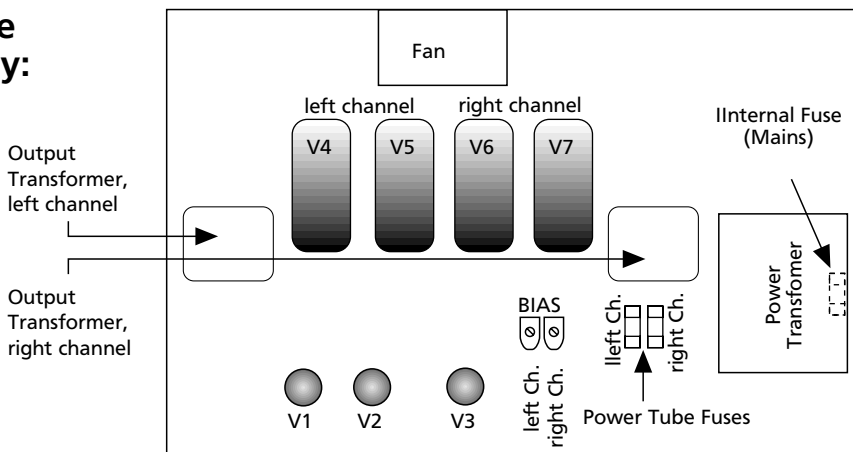
Power Tube Fuses: 2 x 315 mAM

**Caution:** Replace fuses only with others of the same rating!

**Dimensions:** 19", 2 rack spaces; depth: 300 mm

**Weight:** approx. 12 kg

## Tube array:



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## Handling and Care

- *Protect the poweramp from mechanical knocks (tubes!)*
- *Let the poweramp cool down before you transport it (app.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 poweramp in damp or dusty rooms, they are hard on jacks, switches and potentiometers.*
- *Ensure air can circulate at the rear, the front and both sides of the poweramp to allow for adequate cooling (increases component life).*
- *Never operate the poweramp 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 Amp is in a position, to produce high volume levels. Exposure to high volume levels may cause hearing damage!***
- ***Leave tube replacement and power amp biasing to a qualified professional. Ensure 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 ensure replacement fuses feature identical ratings!***
- ***Pull the AC mains plug before replacing fuses!***
- ***Never open the chassis or attempt repairs on 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!***

We reserve the right to make unannounced technical upgrades!

## **Notes / Notizen**

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