Please note:

In order to keep the file size small this PDF-File exists only of the internal pages of the original manual which contains the important technical information!

The **ENGL SOVEREIGN 50** *is on the cutting edge of modern guitar technology, it boasts a number of efficient features and operating modes: three channels, Clean, Crunch and Lead each featuring a Gain control. A separate volume control for Crunch and Lead and a Master Volume allow for precision tuning between the channels. The Presence Ratio control complements the 3- band voicing control system: This control adjusts the treble response of the Crunch and the Lead channel. Another clever feature: Two independent volume levels for the Master control, switchable via footpedal, automatically give you the volume you want for solos. We fine-tuned the three basic sounds assisted by professional guitar-players during numerous bench tests.*
Our philosophy regarding this amp: Great sound is the No.1 priority, easy handling through a clear, logical control concept and an excellent visual appeal; "just plug in and play".
This amp also features a number of signal paths: a passive, parallel/serial (!) FX loop, a variable balanced line out featuring speaker simulation and an overload LED. The integrated ***ECS (Emergency Circuit System)*** *protects the amp from damage due to power tube defects/failure and ensures the amp continues to function at reduced power until the failed tube can be replaced.*
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 guidness).***

PLEASE NOTE:

Read the Operator's Manual carefully and thoroughly, especially the following ***Handling and Care*** *section as well as the* ***framed g****uidelines. 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 at page 6 and 7 of the manual. This manual covers all the features, operational guidelines, technical specifications and many helpful hints and tips. It should answer all your questions, so keep it in a safe place and refer to it when necessary.*

Handling and Care

- *Protect the amp from mechanical knocks (tubes!).*
- *Let the amp 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 amp in damp or dusty rooms, they are hard on jacks, switches and potentiometers.*
- *Make sure air can circulate at the front 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, undesireable noise and unbalanced performance.*

Te last page contains a front- and backpanel illustration!

FRONT PANEL

1 INPUT
Unbalanced 1/4" input jack.

2 CLEAN-GAIN .....TIP 1
Input sensitivity control for the Clean channel, adjust the volume by means of this control and the MASTER (15).

3 BRIGHT (Lo/Hi) .....TIP 2
Alters the EQ by boosting the upper treble range; effectiveness decreases at higher GAIN (2/4) settings; affects all three channels.

4 CRUNCH-GAIN
Input sensitivity control, functions as pre-gain for the Crunch and the Lead channel and defines the amount or distortion in the Crunch channel.

5 LEAD-GAIN
Controls the amount of distortion in the LEAD mode; the CRUNCH-GAIN (4) and LEAD-GAIN controls are used to define the relationship between the Crunch and Lead signals.

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

6 BASS .....TIP 3
Bottom end voicing control in the main EQ

7 MIDDLE .....TIP 3
Mid-range voicing control in the main EQ

8 TREBLE .....TIP 3
Upper range voicing control in the main EQ

9 PRESENCE RATIO .....TIP 4
This control defines the Treble response in the Crunch and Lead channel in relation to the Clean-mode; therefore it only functions in the Crunch and Lead channel.

10 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 20).

11 CLEAN/CRUNCH
Main channel selector pushbutton for Clean and Crunch (or Lead, depending on the position of pushbutton 12), a yellow LED indicates Crunch mode is active; this function has priority. This function can also be activated via footswitch (jack 19); in this case the channel selector pushbutton is deactivated.

12 CRUNCH/LEAD
Channel selector pushbutton for Crunch and Lead modes, red and yellow LED´s indicate Lead mode; use this fuction to pre-select Crunch or Lead. This function can also be activated via footswitch (jack 19) in this case the channel selector pushbutton is deactivated.

13 CRUNCH VOLUME
Volume control for the Crunch channel. (in front of the FX loop, affects the SEND level).

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

15 MASTER
Master volume control for power amp output; the feature to switch between two Master volume levels (Hi/Lo-Master Volume) can be accessed by means of a footswitch (See 20).

16 POWER
AC power on/off

REAR PANEL

17 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.*

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: CLEAN/CRUNCH; CRUNCH/LEAD .....TIP 5
1/4" stereo jack for double footswitches, executes the following functions:
1.Channel switching CLEAN/CRUNCH (mono terminal)
2.Channel switching CRUNCH/LEAD (stereo terminal)

20 FOOTSWITCH: REVERB; VOLUME LEVEL SWITCHING .....TIP 5
1/4" stereo jack for double footswitches, executes the following functions:
1.Reverb on/off (mono terminal)
2.Switching between the two Master volume levels Hi and Lo (stereo terminal)

21 REVERB SPRING SEND
Signal output for the reverb spring. This output is connected to the input jack of the reverb spring via a shielded cable with RCA connectors. (red plug)

22 REVERB SPRING RETURN
Signal input for the reverb spring. This input is connected to the output jack of the reverb spring via a shielded cable with RCA connectors. (black plug)

23 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.

24 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.

25 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!*

26 POWER TUBE FUSE

Power tube fuse (E.C.S.) for the left power tube (as seen from the rear of the chassis); LED illuminates when this fuse is defective. Replacement fuses are located at the housing´s rear panel.

27 POWER TUBE FUSE

Power tube fuse (E.C.S.) for the right power tube; LED illuminates when this fuse is defective.

28 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.

29 OVERLOAD

This LED denotes the LINE output is overloading; in this case, reduce the signal's level via the LEVEL control.

30 FREQU.-COMPENSATED LINE OUT (BALANCED) .....TIP 6

The frequency-corrected, balanced LINE output jack (XLR). (Pin 2 and 3 signal, Pin 1 = N.C.). Its signal simulates a 4 x 12" speaker cabinet.

31 POWERAMP OUTPUT: 8 OHM .....TIP 7

Speaker output jack for the internal speaker or, alternatively to the 16 ohm output, an external 8 ohm speaker cabinet.

32 POWERAMP OUTPUT: 16 OHM .....TIP 7

Speaker output jack for an 16 ohm speaker cabinet (unplug the internal speaker before connecting an 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 1

GAIN settings depend on what type of pickups are installed in your guitar. The recommended setting for humbuckers or active pickups lies between the 9 and 12 o'clock positions, and 10 to 3 o'clock for single coils, for a pure clean response. If your pickups are of the ultra-high output variety (> 1V or 0dB) you may have to back off the guitar's volume to achieve a truly clean tone.

TIP 2

For crisp glassy tones, set the BRIGHT switch to the HI position. This setting boosts the treble response of muddy pickups.

TIP 3

To get an idea of this amp's capabilities, we suggest you set all control pots to the 12 o'clock position and then adjust the sound according to your taste and the room's ambience.

TIP 4

Harmonic distortion in the Crunch and Lead channels generates a broad spectrum of overtones, adding a great deal of upper frequencies to the signal. The PRESENCE RATIO control reduces the amount of treble in the poweramp in relation to the Clean treble setting. The PRESENCE RATIO control turned all the way up is equal to the poweramp presence adjustment in the Clean channel. A setting between 8 and 1 o´clock is suitable to avoid grinding distortion, especially when you operating the Lead channel in high gain settings.

TIP 5

The switching functions CLEAN / CRUNCH (11), CRUNCH /LEAD (12), the REVERB (on / off) and the (MASTER) VOLUME LEVEL SWITCHING can also be executed via a Looper/switcher or other MIDI devices that feature 4 freely-programmable switching inputs. Depending on the type of MIDI device, you may have to split the FOOTSWITCH stereo jacks into two mono jacks. Each switching function requires the mono or stereo contact (see 21 and 22 for assignments) and the ground!

***NOTE!** If the switching and signal grounds are identical in the MIDI device, then you may encounter a ground loop, especially if the amp and device (e.g. FX processor) exchange signals!*

TIP 6

The LINE OUT's output level is influenced by the following factors: By the input level (GAIN-section), the VOLUME control settings for the various channels, 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.

TIP 7

*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 speaker combined with one external 8 Z cabinet), you must first connect them in series and then to the amp's 16Z output. The **ENGL Speaker Cabinet Extension** (optional) offers a number of options, right up to four cabinets.*

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 unpluged!***
- ***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!***

Technical Data

Rated power: *50 W*

Power Outlet Impedances : *8Z, 16Z*

Minimum Input level: *- 43 dB*

Maximum Input Level: *- 3 dB*

Effects loop: *SEND* *- 10 dB (average), 0 dB (max.)*
RETURN *+ 3 dB (max.)*
LINE output: *+ 3 dB (at 1kHz!)*

Levels are based on 0db => 1 V eff, measured at 1kHz.

Tubes:
V1 -> ECC83/7025 F.Q.
V2, V3 -> ECC83/12AX7 selected
V4 -> ECC83/12AX7 standard
V5, V6 -> 6L6 GC matched set

Fuses:

	AC mains: 230 Volts	100 and 120Volts
external	1,25 AM	2,5 AM (medium)
internal	1,6 AT	3,15 AT (slow)

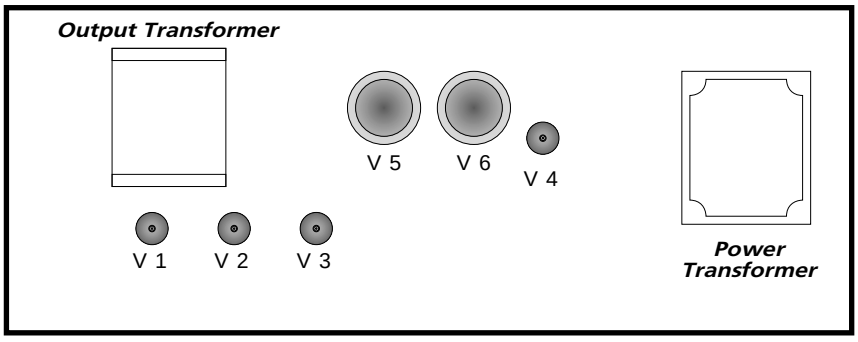
Power tubes (ECS): 2 x 160 mAM

Dimensions: (l x h x d) 57 x 52 x 30 cm (22,5 x 20,5 x 11,8 ")

Weight: *app. 26 kg*

We reserve the right to make unannouced technical upgrades.

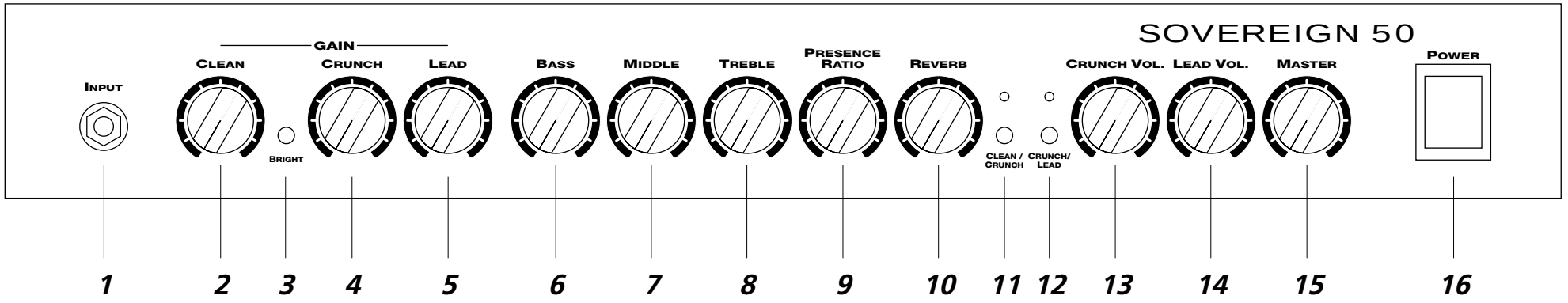
Tube array:



E C S (Emergency Circuit System):

This circuit ensures the amplifier does not shut down completely when a single power tube fails. The amp continues to perform at approx. 1/3 of the rated power, depending on the type of defect.
Gas developing in the power tubes can cause a momentary short circuit. The fuse activates, but the amp is not shut down! Often the tube absorbs the developed gas, and is operable after a short circuit. Sometimes the problem can be rectified by replacing the fuse, but if the new fuse activates as well, the defective power tube needs to be replaced.

FRONT PANEL



REAR PANEL