E530
Tube Preamp
Operator´s Manual

The ENGL 530 "modern Rock" an all-tube preamplifier delivers stunning professional quality tube sounds in a modern, exceptionally compact 19" rack-mountable package (1 rack space). The two main channels Clean and Lead feature dedicated voicing sections, gain pots and volume controls for precision sound shaping and fine-tuning. The Gain Lo/Hi switch converts the Clean channel to a Crunch channel and, in the Lead channel, the sound spectrum encompasses everything from Heavy Crunch to Ultra Gain. With a 4-band voicing section featuring two midrange bandwidths and a Contour switch that can be accessed via footswitch or the optional ENGL MIDI Switcher Z-11, the Lead channel is amazingly versatile. Another handy feature is the Defeat function, which bypasses the preamp and routes the guitar signal directly to the output. This feature enables you to connect two preamps in series and this option enlarges the tonal spectrum. The variable Stereo Line Out and a frequency compensated Line Out give you a wide range of application options, for instance you can patch the preamp signal directly to a mixing console or recording device and simultaneously drive an stereo power amp. For this purpose, the ENGL all-tube stereo poweramp 840 or the ultra-modern 930/60 (120), which is equipped with an impressive array of high-tech features that deliver a wide range of devastating sounds, come highly recommended. The integrated 2 x 1, 5 Watt stereo poweramp is suitable for three different applications:

1, practicing with stereo headphones,
2. practising with hi-fi stereo speakers, and
3, practicing with a conventional guitar speaker cabinet.

This preamp is defined by the effort and materials that went into it: intelligent design features, superior craftsmanship, impeccable finishing and quality components. However keep in mind, that a few precautions will radically extend tube life (see handling and care guidness).

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 PREAMP 530.

***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 preamp 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 on side 3 of the manual.*

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 10 and 1 o'clock positions and 12 to 3 o'clock for single coils for a pure clean response.*

TIP 2 *For a crisp glassy tone, set the Bright switch to the On position. This setting boosts the treble response of muddy pickups.*

TIP 3 *To get an idea of this preamp's capabilities in the Clean-Mode, we suggest you set the tone control pots Bass (5), Middle (6) and Treble (7) to the 12 o'clock position.*

TIP 4 *To get Crunch or heavy Rhythm sounds, set this control between the 10 and 1 o´clock´s position (depending on the type of pick-up) and leave the Gain Boost (15) pusbutton in the Off-position.*

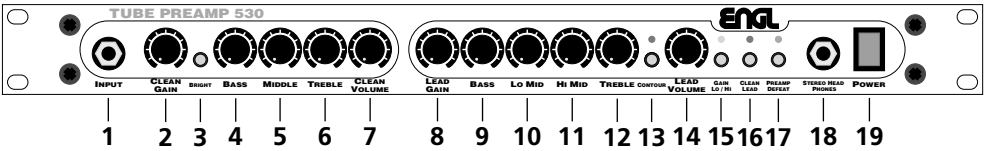
TIP 5 *To get an idea of this preamp's Lead sounds, we suggest you set the tone control pots Bass (9), Lo Mid (10), Hi Mid (11) and Treble (12) to the 12 o'clock position. The Treble control is important when operating the preamp in combination with a poweramp that does not feature a Presence control: Set the Treble pot between the 7 and 12 o´clocks position it suppresses the gritty upper frequencies.*

TIP 6 *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 (22) and (23) 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 functions (e, g. Lead, Hi -Gain, Contour active, Defeat off) 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 7 *The integrated miniature stereo poweramp delivers maximum output of 2 x 1. 5 Watts at 4 ohms. However, you can connect diverse systems with impedances of 4, 8 and 16 ohms as well as headphones with 200 ohms. To the achieve the desired audio result, it is essential that the Selector switch (24) located on the rear panel is set to the proper position. The volume level of the poweramp is determined by the volume level settings for the two channels and the setting of the LINE LEVEL control (29). If the LINE LEVEL pot is turned up fairly high, then the setting for the two volume controls (7) and (14) must be reduced substantially so that the poweramp is not saturated!*
PLEASE ENSURE YOU HEED THE FOLLOWING: *If you are using the amp to drive just one speaker cabinet, connect only one stereo channel via a 1/4" stereo plug. A mono 1/4" plug will short-circuit the poweramp's second channel. If you operate the amp under these conditions at high volumes for a longer period of time, this may destroy the amp or other components!*

TIP 8 *The LINE outputs (25) and (26) provide signals that emulate the response of a 412 guitar cabinet, The signal level is nominally identical to the level at the LINE outputs (27) and (28). However in practice, the level deviates slightly due to frequency compensation. When the preamp is active, the output level of the LINE outputs depends on the following factors: the input level (Gain), the Volume control settings for the respective channels, and in some measure, the voicing section control settings. This is why we recommend that you dial in the desired sound via the front panel control features, set a desired FX level (if you have connected a processor) and then use the LINE LEVEL pot (29) to dial in a suitable level. The following is another conceivable practical application: Patch the outputs (27) and (28) to a stereo poweramp (e.g. ENGL 830/50) to drive two cabinets (e.g. ENGL 412G or S) and the two frequency compensated LINE outputs to the PA mixing console. The emulated 412 signal can be used for the FOH sytem so you do not have to mic your guitar cabinets. The filter stages, integrated LINE amp and the headphones amp can also be used for external application, depending on how you route the signals. Use the two FX LOOP RETURN jacks (30) and (31) as signal inputs. The preamp signal is interrupted when a 1/4" jack is inserted. (refer to the Signal Routing Plan).*

Front



1 INPUT
Unbalanced 1/4" (main) input jack.

2 CLEAN GAIN
TIP 1
Input sensitivity control for the Clean channel

3 BRIGHT
TIP 2
Alters the EQ by boosting the upper treble range; (above 2 kHz).

4 BASS
TIP 3
Bottom end voicing control for the Clean Channel.

5 MIDDLE
TIP 3
Mid-range voicing control for the Clean Channel.

6 TREBLE
TIP 3
Upper range voicing control for the Clean Channel.

7 CLEAN VOLUME
Volume control for the Clean channel.

8 LEAD GAIN
TIP 4
Gain control for the Lead channel, controls the amount of distortion in the Lead mode.
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!

9 BASS
TIP 5
Bottom end voicing control for the Lead Channel.

10 LO MID
TIP 5
Lo Mid-range voicing control (at 500 Hz) for the Lead Channel.

11 HI MID
TIP 5
Hi Mid-range voicing control (above 1 kHz) for the Lead Channel.

12 TREBLE
TIP 5
Upper range voicing control for the Lead Channel.

13 CONTOUR
TIP 6
Press this button to alter the mid-EQ. When the button is pressed, mids between 300 & 500 Hz and mids between 1 & 2 kHz are boosted slightly; the red LED indicates Contour active. This function can also be activated via a footswitch connected to jack (23). Once a footpedal is connected, the channel selector pushbutton is deactivated.

14 LEAD VOLUME
Volume control for the Lead channel.

15 GAIN LO / HI
TIP 6
This button increases the gain levels for both channels. When you activate it, the Clean channel responds more like a Crunch channel, and the Lead channel delivers a hi-gain lead sound. You can also activate this function via footswitch (Jack 22), the Gain Boost pushbutton is then no longer functional. The LED illuminates to indicate Hi-Gain mode is active.

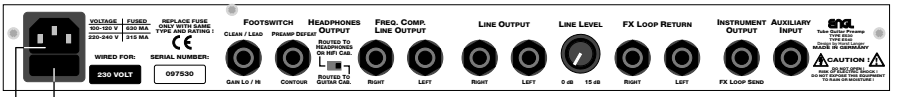
16 CLEAN / LEAD
TIP 6
Channel selector pushbutton for Clean and Lead modes, red LED indicate Lead mode; This function can also be activated via a footswitch connected to jack 22. Once a foot-pedal is connected, the channel selector push-button is deactivated.

17 PREAMP DEFEAT
TIP 6
This feature bypasses the preamp when the button is depressed. In this case the guitar signal is routed to the Instrument Output jack (32) .
You can also activate this function via footswitch (at Jack 23), the Preamp Defeat pushbutton is then no longer functional.
The LED above the button illuminates to indicate the preamp is bypassed.

18 STEREO HEAD PHONES
TIP 7
1/4" stereo output designed for stereo headphones. you can also connect hi-fi speakers or guitar cabinets. When you connect a conventional guitar cabinet set the selector switch (24) to ,,Routed to Guitar Cabinet."
CAUTION! Ensure You Heed The Following: Always use a 1/4 stereo plug. If you use a mono plug, it may short-circuit and destroy the poweramp!

19 POWER
AC power on/off.

Rear Planel



20 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.

21 AC Fuse Box
Contains mains fuse (rear chamber) and spare fuse (front chamber).
NOTE: **Ensure replacement fuses bear identical ratings (refer to the table)!**

22 FOOTSWITCH: CLEAN/LEAD; GAIN LO/HI
1/4" stereo jack for connecting a dual footswitch (e.g. ENGL Z-11) or a MIDI-switching system (e.g. ENGL Z-11).
The following functions can be executed:
1.Channel switching Clean - Lead (mono terminal)
2.Gain Lo - Hi (stereo terminal).

23 FOOTSWITCH: PREAMP DEFEAT; CONTOUR
1/4" stereo jack for connecting a dual footswitch (e.g. ENGL Z-11) or a MIDI-switching system (e.g. ENGL Z-11).
The following functions can be executed:
1.Preamp Defeat / Bypass (mono terminal).
2.Contour switching (stereo terminal).

24 HEADPHONES OUTPUT: A) Routed To Headphones Or HiFi Cab. B) Routed To Guitar Cab.
Rear panel selector switch for front panel headphones jack. Set the switch to the left position A) when you connect stereo headphones or hi-fi speakers and to the right position B) when you connect a guitar cabinet to ensure proper frequency compensation for the respective systems.

25 FREQUENCY COMPENSATED LINE OUTPUT: RIGHT
TIP 8
Line Out for the preamp's right frequency compensated signal (1/4" unbalanced jack). This signal can be patched directly to a mixing console or a recording device.

26 FREQUENCY COMPENSATED LINE OUTPUT: LEFT
TIP 8
Line Out for the preamp's left frequency compensated signal (1/4" unbalanced jack). This signal can be patched directly to a mixing console or a recording device.

27 LINE OUTPUT: RIGHT
TIP 8
Line Out for the preamp's right channel (1/4" unbalanced jack).
This signal can be routed to a poweramp or a FX device via a shielded cable.

28 LINE OUTPUT: LEFT
TIP 8
Line Out for the preamp's left channel (1/4" unbalanced jack).
This signal can be routed to a poweramp or a FX device via a shielded cable.

29 LINE LEVEL
This control feature determines the level of the LINE outputs 25, 26, 27 and 28. The instrument output (32) signal can also be amplified to 15 dB if required.

30 FX LOOP RETURN: RIGHT
Signal input right stereo channel for the FX Loop. Connect this input to a signal processor’s right output/send jack via a shielded cable with 1/4" plugs.

31 FX LOOP RETURN: LEFT
Signal input left stereo channel for the FX Loop. Connect this input to a signal processor’s left output/send jack via a shielded cable with 1/4" plugs.

32 INSTRUMENT OUTPUT FX LOOP SEND
TIP 9
Output for patching the preamp signal to a poweramp input or the input of a another preamp or signal processor/FX device. Ensure you use a short shielded cable for this signal circuit.

33 AUXILIARY INPUT
Supplentary preamp input. This circuit is routed in series with the input located on the front panel and is used for patching the setup to a 19" rack. The front panel input has priority. In other words, when you insert a plug into the front panel jack (1), the signal routed in via the Aux. Input (33) is interrupted.

TIP 9 *The INSTRUMENT OUTPUT (32) delivers a signal similar to the one generated by a guitar's pickups when the preamp is active (PREAMP DEFEAT switch Off), i.e. a high-ohm signal at about the same level as a guitar signal. This feature is relevant when you want to establish the same conditions via a bypass circuit (guitar signal to the INSTRUMENT OUTPUT) for further signal processing, for instance by an FX device, another Preamp connected in series or a poweramp.You can connect a signal processor between the INSTRUMENT OUTPUT (32) and the FX LOOP RETURN jacks (30) and (31) or directly between the LINE OUTPUTS (27) and (28) and a stereo poweramp's inputs. There is a substantial difference between these two applications:*
When you connect the Processor to the FX LOOP, the send signal is identical to the guitar signal when the preamp is in defeat mode and the preamp signal when the defeat mode is off. The send level only is influenced by the settings of the volume controls in this case. The level of the master output signal routed to the LINE outputs can be increased via the LINE LEVEL (29) pot.
However, when you connect the Processor between the LINE outputs and the poweramp, the input (Send) signal to the FX device can be increased via the LINE LEVEL (29) pot and you have two Send signals (left, right) available. This option is recommended for low impedance (0 dB) FX devices that are not equipped with a variable input.

Technical Data

Input level (0 dB => 1Veff)	INPUT: -20 dB max. -3 dB
Output level (0 dB => 1Veff)	INSTRUMENT: -10 dB max. 0 dB LINE OUT: -10 dB max.15 dB
Headphones poweramp:	2 x 1,5 Watts at 4 Ohms
Tubes:	V1 => ECC83/12AX7 FirstQuality V2 => ECC83/12AX7 selected
Power Consumption:	approx. 16 Watts max.

Fuses

AC Mains:	230 Volts	100 & 120 Volts
external:	200 mAM	400 mAM
internal:	250 mAT	500 mAT

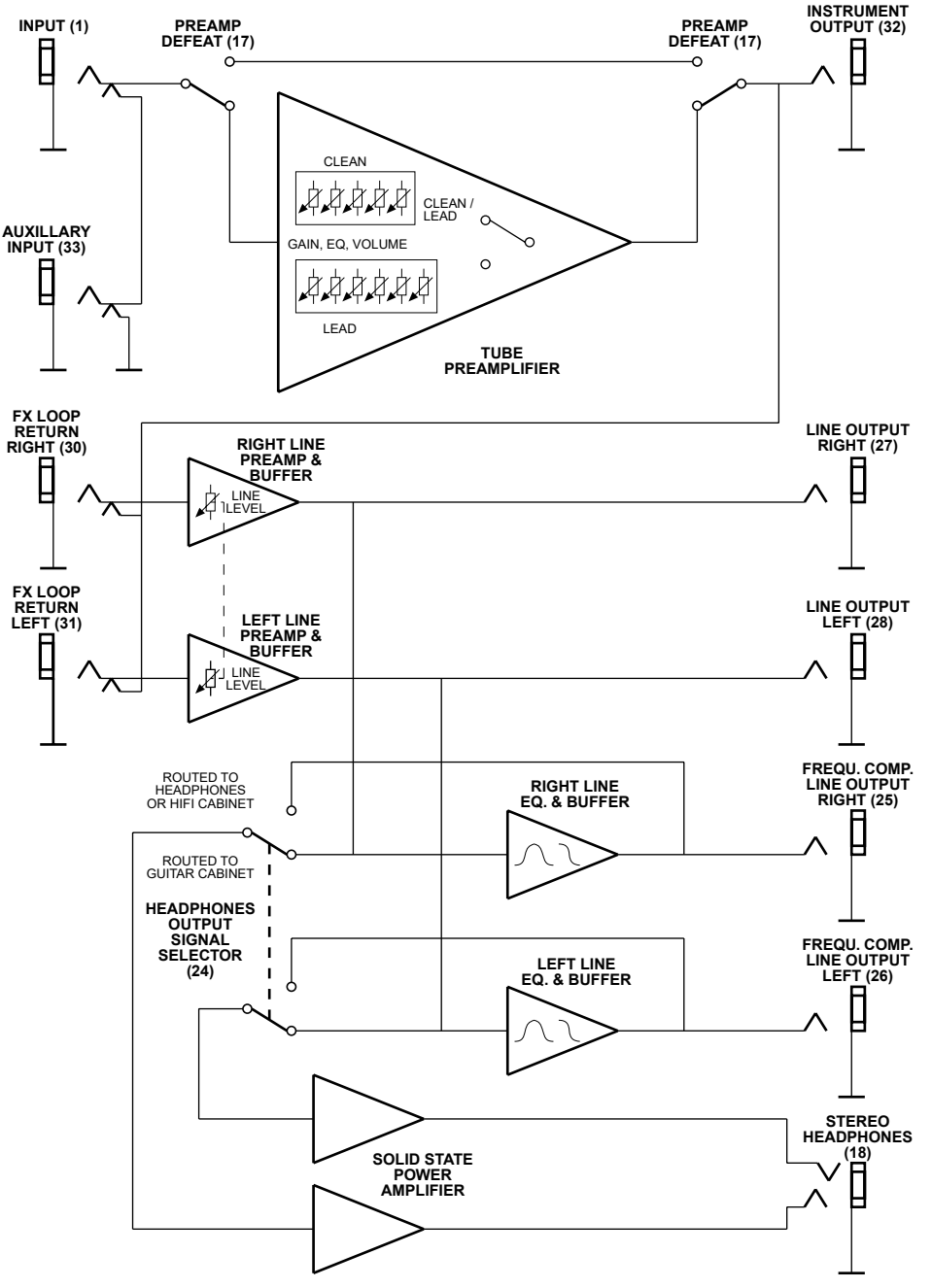
changed!

M => medium, T => slow

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

Dimensions:	19", 1 rack spaces, depth: 260 mm
Weight:	approx.4 kg

Internal Signal-path:



Handling and Care

- *Protect the preamp from mechanical knocks (tubes!).*
- *Let the preamp cool down before you transport it (approx. 10 minutes).*
- *Tubes need about 20 seconds to warm up after you switch the power on.*
- *Avoid storing the preamp in damp or dusty rooms, they are hard on jacks, switches and potentiometers.*
- *Replace tubes with select ENGL replacement tubes (special selection criteria) to avoid microfonic properties, undesireable noise and feedback.*

Attention! Please read the following!

- ***Leave tube replacement and repair service 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!***
- ***Never open the chassis or attempt repairs to your own. Consult qualified service personnel!***
- ***Never expose the preamplifier to extreme humidity or dampness!***
- ***Please read the instructions carefully before operating the unit!***
- ***Only operate the preamplifier in a manner it is designed for and therefore note this operational instructions!***

ENGL Gerätebau GmbH, Germany;
Internet: http://www.engl-amps.com
Text, design, grafics and layout by Horst Langer

We reserve the right to make unannounced technical upgrades!

Notes / Notizen

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