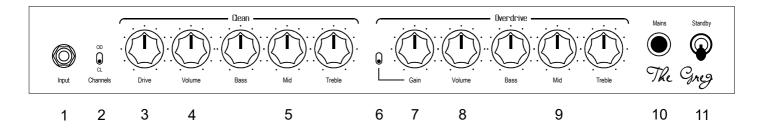
The Greg

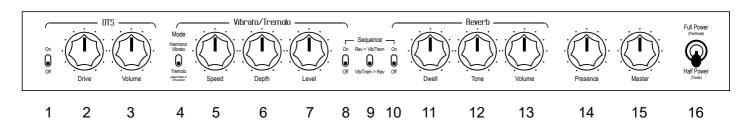
USER MANUAL



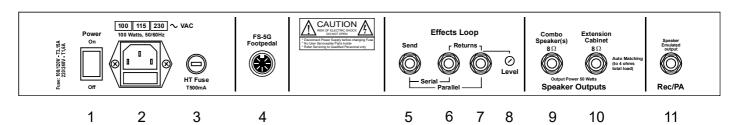
Front panel



Top panel



Back panel



Thank you for choosing THE GREG from KOCH. You now own a "state-of-the-art" all-tube guitar amplifier of the highest quality. THE GREG has been designed in co-operation with Greg Koch (no family) and built by people who - from their own experience as musicians - take guitar sound and quality very seriously. That is why this product was designed and built with the utmost care in order to meet all professional standards. Our goal was not only to design an amp which sounds fantastic and has everything on board you need, but is also easy to operate. Besides that it has been built in such a way that it will serve you loyally for many years to come.

Please take your time to read this manual carefully before you switch on THE GREG

Thanks again and lots of success with your new THE GREG!

CAUTION:

- * BEFORE PUTTING INTO OPERATION READ THESE OPERATING INSTRUCTIONS CAREFULLY.
- * NO USER SERVICEABLE PARTS INSIDE.
- * REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

WARNING:

- * TO REDUCE THE RISKS OF ELECTRICAL SHOCK, DO NOT REMOVE THE COVER.
- * TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE AMPLIFIER TO RAIN OR MOISTURE.
- * THIS APPARATUS MUST BE EARTHED.
- * TUBES ARE HOT. DO NOT TOUCH DURING OPERATION.

FRONT PANEL FUNCTIONS

[1] INPUT: Input for all types of instruments, e.g. guitars with single-coil, humbucker or active pickups.

[2] CHANNELS: Selects the Clean or the Overdrive channel if no external footpedal (e.g. the FS5-G) is connected to the FOOTPEDAL jack ([BP 4].

[3] DRIVE: Controls the amount of gain in the Clean channel.

A totally clean sound is achieved at lower settings (1-4). At middle settings (4-7) the sound will get more juicy. At high settings (7-10) medium overdrive occurs which will produce more sustain and a subtle distortion.

In order to maintain the volume at the same level the Volume knob [4] has to be turned down.

NOTE: The best setting also depends on the output level of your pick-ups. For example to get a clean sound 1-3 will work well for high-output humbucker pick-ups while 2-4 the best range is for low output single coils.

[4] VOLUME: Controls the volume level of the Clean channel.

[5] BASS, MID & TREBLE: Classic passive tone controls for the Clean channel.

[6] GAIN BOOST: Selects Medium Gain for Crunchy sounds (down) or High Gain for Lead sounds (up), in the Overdrive channel.

[7] GAIN: Controls the amount of distortion in the Overdrive channel. A cleaner sound is achieved at lower settings (1-3). At middle settings (3-6) the sound will get more distorted and harmonically richer. At high settings (6-10) high-gain overdrive occurs with more sustain and distortion.

NOTE: If the Gain Boost is switched on, squealing and/or excessive hum and noise may occur at high Gain settings, due to microphonic guitar pick-ups and insufficient screening of guitar-circuitry.

[8] VOLUME: Controls the volume level of the Overdrive channel.

[9] BASS, MID & TREBLE: Classic post-distortion passive tone controls for the Overdrive channel.

[10] PILOT LAMP: Illuminates when the Power is switched on [BP 1].

[11] STANDBY SWITCH: Allows THE GREG to be placed in Standby (down) or Active (up) mode. In Standby mode the tubes remain hot, but the amplifier is not operational.

TOP PANEL FUNCTIONS

[1] ON/OFF: This switch places the OTS circuit in the signal path if no external footpedal (e.g. the FS5-G) is connected to the FOOTPEDAL jack [BP 4].

[2] DRIVE: Controls the amount of (output tube) distortion of the OTS circuit.

[3] VOLUME: Controls the volume level of the OTS circuit.

NOTE: OTS stands for <u>Output Tube Saturation</u>. THE GREG is equipped with a 0.5 Watt all-tube power amp, not for driving any speakers but pure for creating new harmonic structures. This unique feature enables you to add real tube-power-amp distortion to all your sounds, clean as well as distorted! If The Clean channel is on, you can create nice and musical saturation of clean tones; in the Overdrive channel you can really fatten up all your crunchy or even your high-gain distortion tones. If the OTS is activated, the small tube-power-amp is placed in the signal path, like it was plugged in as an effects unit in an effects loop.

[4] MODE SWITCH: Selects between Harmonic Vibrato and Tremolo effect. The Tremolo effect varies the volume of the guitar signal. The Harmonic Vibrato effect varies both the volume and the phase of the guitar signal.

NOTE: Select MODE only when VIB-TREM switch [8] is 'Off'.

[5] SPEED: Controls the rate of the Vibrato/Tremolo effect.

[6] **DEPTH:** Controls the intensity of the Vibrato/Tremolo effect.

[7] LEVEL: Controls the volume level if the Vibrato/Tremolo circuit is switched on [8].

[8] VIB-TREM ON/OFF: This switch places the Vibrato/Tremolo circuit in the signal path if no external footpedal (e.g. the FS5-G) is connected to the FOOTPEDAL jack [BP 4].

NOTE: While switching a soft popping noise may occur. This is caused by the switching relay in the analogue tube circuit and is perfectly normal.

[9] SEQUENCE: Determines the sequence of the Vibrato/Tremolo and the Reverb circuits. In the lower position the Reverb comes after the Vibrato/Tremolo effect. In the upper position the Vibrato/Tremolo effect comes the Reverb.

[10] REVERB ON/OFF: Switches the 'wet' reverb signal on or off, if no external footpedal (e.g. the FS5-G) is connected to the FOOTPEDAL jack [BP 4].

[11] **DWELL:** Controls the amount of signal sent to the reverb tank. At low Dwell settings (2-4) the reverb sounds much like a quitar played into a large hall. At high Dwell settings (>4) the reverb signal will start to sound more "springy" or 'twangy"

[12] **TONE:** This control affects only the "wet' portion of the signal and acts much like a Treble control on the front panel. Turning the Tone control up allows more high frequencies through from the reverb to the mixed signal.

[13] **VOLUME:** The reverb "wet" signal and the 'dry" signal are mixed together at this control. Higher settings equal more reverb.

[14] PRESENCE: Controls the amount of boost in the upper mid frequency range of both channels.

[15] MASTER: Controls the overall loudness of the amplifier.

[16] POWER SELECTOR: Selects half (TRIODE) or full (PENTHODE) output power. In the TRIODE position the amp has a more vintage tone.

WARNING: Select POWER <u>only</u> when the amp is in STANDBY mode (FP 11)! If POWER is selected when the amp is in Active mode (while you play), damage might be done to the power tubes and/or other parts inside the amp.

BACK PANEL FUNCTIONS

[1] POWER: Turns AC power On (pilot lamp, [FP 10]) and Off. When the switch is Off the amplifier is completely shut down.

NOTE: When switching the amplifier on, leave the Standby switch [FP 11] in "Standby" position for 5-10 seconds thus allowing the tubes to heat up before switching to the "Active" mode.

When switching the amplifier off, first select "Standby" mode and allow the amp to dim completely before switching the power off

[2] A.C. POWER:

INPUT - Power cord input. The amp is equipped with a worldwide power supply. Inside the amp a mains selector switch can be set on one of three voltages, 100, 115 or 230. Either of these voltages will work worldwide with minor power differences. The amp will work on either 50 or 60 hertz. After resetting the internal mains selector switch **make sure fuses are replaced with printed ratings on rear of amp.**

FUSE - Both fuse and spare fuse are located on the sled of the fuse holder. Fuse sled can be removed with a screwdriver. If the fuse should fail, it must be replaced with the same type and value in order to avoid damage to the amp and to prevent voiding the warranty.

If the amp repeatedly blows fuses, check for a bad power tube. If tube-failure is not the cause, the amp should be taken to a qualified service centre for repair.

WARNING: Only a qualified technician should attempt an input voltage change. Personal injury or equipment damage may occur if done incorrectly.

WARNING: The fuse should be replaced or the voltage should be reset only when the power cord has been disconnected from its power source.

[3] HT FUSE: This fuse protects the power supply in case of tube failure. If it blows, check for a bad power tube. If tube-failure is not the cause, the amp should be taken to a qualified service centre for repair.

This fuse also must be replaced with the same type and value in order to avoid damage to the amp and to prevent voiding the warranty.

[4] FS5-G FOOTPEDAL CONNECTOR: Provides an input for the FS5-G footpedal and disconnects the CHANNELS switch [FP 2], the GAIN BOOST switch [FP 6], the OTS on/off switch [TP 1], the VIB/TREM on/off switch [TP 8] and the REVERB on/off switch [TP 10], when the footpedal is plugged in.

FS5-G FOOTSWITCH

The included FS-5G Footpedal is equipped with four switches:

- CHANNELS switch, for selecting channels [Overdrive channel = red LED on].
- GAIN BOOST switch, for activating the Gain Boost in the Overdrive channel (red LED on).
- OTS switch, for placing the OTS circuit in the signal path
- VIBRATO/TREMOLO switch, for activating the Vibrato/Tremolo effect.
- REVERB switch, for activating the reverb effect.

[5] FX LOOP SEND: This jack provides a buffered mono output from the preamp of THE GREG and can be used to connect an external effects unit. This jack must be connected with the input of the effects unit (see also CONNECTION DIAGRAM).

[6] FX LOOP RETURN SERIAL: This jack provides an input for an external effects unit and must be connected to the output of the unit. When used, it disconnects the preamp of THE GREG from the power amp.

[7] FX LOOP RETURN PARALLEL: This jack provides an input for an external effects unit and must be connected to the output of the unit. When used, it sends its signal to the LEVEL trimmer [8].

[8] LEVEL: The effect's 'wet' signal [7] and the 'dry' signal are mixed together at this control. Higher settings equal more effect.

If this parallel loop is used, direct signal must be taken off the effects unit's signal. For example by turning the effects unit's 'dry/wet' control to 'wet'.

NOTE: This effects loop operates on a -10dBV signal level which guarantees compatibility with both instrument-level effects like floor-pedals and guitar-processors, as well as line-level effects like professional 19 inch rack mount devices.

If connecting an effects unit to THE GREG causes hum, a ground-loop may be the cause of it.

[9] COMBO SPEAKER OUTPUT: For connecting the internal speaker(s) of the Combo.

[10] EXTENSION SPEAKER OUTPUT: For connecting an 8 ohms extension speaker cabinet to THE GREG. The output impedance of the amp switches automatically to the correct impedance of 4 ohms. (see also CONNECTION DIAGRAM page)

WARNING: <u>Never</u> play THE GREG without a speaker connected. This may cause serious damage to either the power tubes and/or the output transformer.

AND <u>ALWAYS</u> USE SPEAKER CABLE.

[11] REC/PA OUTPUT: This jack provides an unbalanced mono output suitable for recording or PA. Its signal is derived from the speaker output so the typical tube saturation of the power amp is included; it also includes all effect signals. This signal is at

line level (-10 to 0 dBV) and is shaped by a special filter that emulates the typical recording characteristic of a microphone placed in front of a guitar speaker.

REPLACING TUBES

- SAFETY FIRST: DISCONNECT THE POWER CORD FROM ITS POWER SOURCE AND LET HOT TUBES COOL.
- CHECK THE 'TUBE LOCATION DIAGRAM' ON THE CHASSIS FOR THE CORRECT TYPE NUMBERS AND LOCATIONS.
- REPLACE TUBES ONLY WITH ORIGINAL KOCH HIGH QUALITY TUBES. (IF OTHER TUBES ARE USED THE WARRANTEE OBLIGATION EXPIRES)
- BEFORE REPLACING THE POWER TUBES, REMOVE THE CE SAFETY CAP FIRST.
- AFTER REPLACING THE POWER TUBES, PUT THE CE SAFETY CAP BACK IN PLACE.

NOTE: Always have the amp re-biased after replacing the power tubes.

If you have any doubts, please take no risks and let a qualified technician do the job.

Preamp and Power tubes wear out and have to be changed from time to time to maintain THE GREG's best performance. Tubes behave like strings, they lose highs, lows and dynamics and after a period of time they have to be changed. Exactly when is hard to say but this is an indication: if you play almost every day change tubes each year, if you play once or twice a week change tubes every 2-3 years.

Tubes rarely fail. If they are bad, these might be the symptoms:

PREAMP TUBES (ECC83, 12AX7, 7025):

- Microphonic whistling or squealing on one or both channels.
- No or low amp volume on one or both channels.
- Excessive noise on one or both channels.

POWER TUBES (EL34):

- Loud crackling that is not affected by front panel controls.
- Intermittent or regular blowing fuses.
- Weird amp 'distorting'.
- Hum.

Changing a tube is a simple and quick fix for most problems in your amp.

Please always use two matched EL34 (= one duet) replacement tubes to obtain the amps best performance.

Again, if you have any doubts, please take no risks and consult your dealer and/or a qualified technician.

EC DECLARATION OF CONFORMITY

We, Koch Amps, Buys Ballotstraat 3BU3, 2693BD 's Gravenzande, The Netherlands, declare under our sole responsibility that the products:

THE GREG

to which this declaration relates are in conformity with the following harmonized standards:

* EN 50081-1 (1991) Electromagnetic compatibility. Generic emission standard.

Part 1: residential, commercial and light industry;

* EN 50082-1 (1991) Electromagnetic compatibility. General immunity standard.

Part 1: residential, domestic and light industrial environment;

* EN 60065-1 (1993) Household electronic apparatus.

Part 7: Heating under normal operating conditions;

* EN 60335-1 (1988) Safety of household and similar electrical appliances.

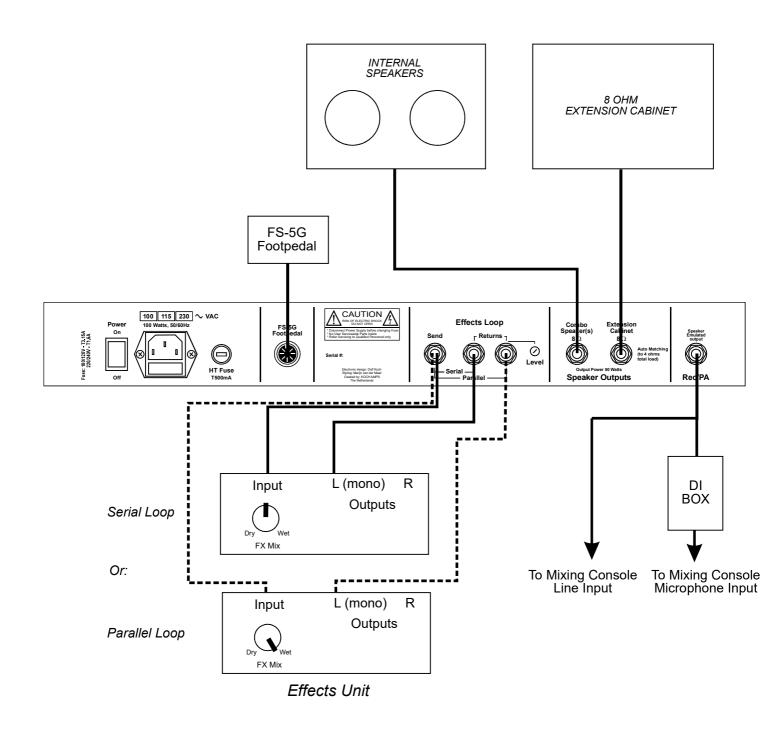
Part 1: general requirements.

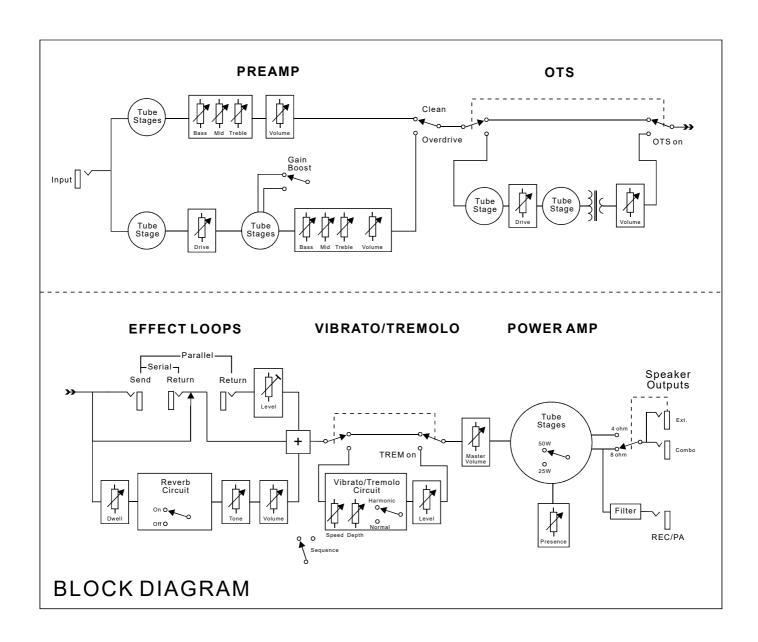
following the provisions of Council Directive 98/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility and the provisions of Council Directive 73/23/EEC on the approximation of the laws of the Member States relating to low voltage and electrical safety.

's Gravenzande, 1 december 2022

Edwin Kool

CONNECTION DIAGRAM





TECHNICAL SPECIFICATIONS

INPUT IMPEDANCES	Input FX Send Serial FX Send Parallel	1M ohms 100K ohms 25K ohms
OUTPUT IMPEDANCES	FX Send	1K ohms
SIGNAL LEVELS	Effects Loop	-10 dBV
TUBES	Preamp	1x 12AX7LM (low microphonics) 4x 12AX7 (standard microphonics)
	Power amp	1x 12AX7 2x EL34
OUTPUT POWER		50W(rms) in 4 or 8 ohms
MAINS	100-230VAC, 50-60Hz	100 Watts