

OFFICIAL WARWICK AMP OWNER MANUAL



Congratulations on the purchase of your new Warwick combo. Please read through these instructions before connecting and operating the device. Following the guidelines you will soon will benefit from your new Warwick amplifier. Please keep this instruction booklet handy in case you need to consult it again. Please send the PASSPORT to the address indicated therein.

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SAFETY HINTS

- Please read these instructions
- Please heed all warnings



Caution: To reduce the risk of electric shock, do not open the amplifier's case. Avoid exposure to rain or moisture. No user serviceable parts inside, refer all service to a qualified technician. No vessel filled with liquids, such as vases shall be placed on top of the unit.



This symbol, wherever it appears, alerts you to the presence of dangerous non-insulated voltage inside the case. Risk of electric shock!



This symbol, wherever it appears, indicates to important operating and maintenance instructions in this user manual. Please read the manual.

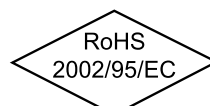


This recycling logo informs the end user that it is forbidden to throw away the product in the trash. It has to be disposed of accordingly.

Weee-Nr.: DE93670540



CB Approved



GENERAL INFORMATION

For safe and reliable operation please follow these instructions:

- DO NOT open the amplifier case! You might receive an electrical shock. For any repair refer to qualified service personnel.
- Avoid dust, excessive moisture, direct sunlight and extremely high or low temperatures.
- Safeguard the device from impact. Always place the unit on a stable and horizontal surface.
- Do not block any of the ventilation openings.
- Avoid leaving the unit near radiators or other heat producing devices.
- Internal components should be adjusted or cleaned by qualified service technicians only. Make sure no object or liquid penetrates the device through its cooling vents.
- Fuse must be replaced with one of the same type and value to avoid damaging the amplifier.
- the mains cable or mains switch have been damaged,
- objects or liquids have penetrated the device,
- it has been exposed to excessive moisture,
- malfunctions or abnormal operating conditions have occurred,
- the device has been dropped or the case has been damaged.

Have the device examined by a qualified service technician in the following cases:

- Make sure the unit is plugged into a socket outlet with a protective grounding connection.
- Mains plug must be accessible at any time to disconnect it from mains in case of abnormal operation.
- If the device shows any malfunction, immediately disconnect the mains cable from the mains socket.
- Use effects pedals only between the instrument and the amplifier since these devices do not meet the electrical specifications of the effects loop.
- Unplug the unit whenever changing a fuse.
- Replace fuse only with one of the same type and value. Never bridge defective fuses.

PROTECTIVE CIRCUITS

Your new Warwick amplifier is equipped with a series of circuits to prevent it from destruction in case of inadequate operating conditions:

- Power-up delay:** When the unit is switched on, the SPEAKER OUT sockets are activated with a slight delay to protect the loudspeakers.
- Short-circuit:** In the event of a short-circuit at the power amp outputs, this feature prevents the output stage transistors from destruction by a fast responding current limitation.
- Direct current (DC):** This circuit continuously monitors the power amp output for direct current and protects the loudspeakers from overload in case a transistor burns out.
- HF oscillation:** This safety feature prevents from damages caused by frequencies above 20 kHz (feedback, etc.) by switching the power amp off.
- Temperature:** Should the temperature controlled fan cooler prove to be insufficient in extreme conditions, this circuit protects the output stage transistors from destruction by switching the device off.
- Limiter:** In order to protect the loudspeakers the combos CL and CCL are equipped with a limiter that limits the power amp outputs to 200 watts and 300 watts respectively.

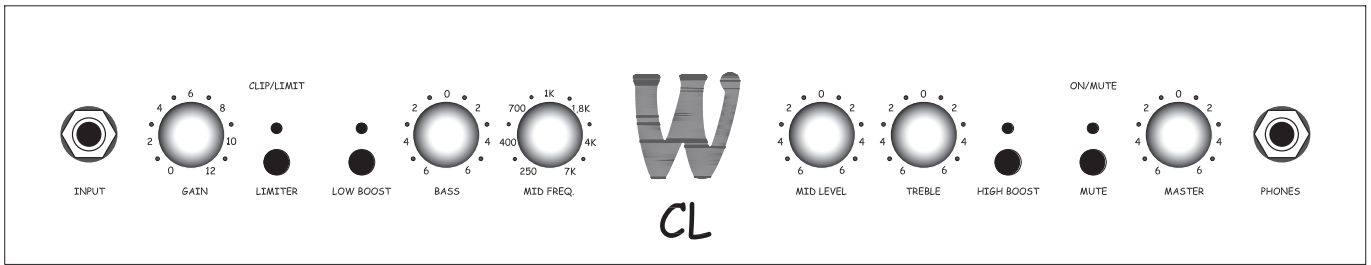
Note: One of the protective circuits is active when you find the MUTE LED is lit without having switched MUTE on.

MUTE LED is continuously on even though you have not switched on MUTE. In case of a short-circuit please check the speaker cable. The amplifier must then be switched off and on again, to get back into playing mode after having removed the short-circuit. In any other situation the amplifier automatically switches back to playing mode as soon as it detects the fault has disappeared (e.g. the amplifier has overheated and cooled down again).

GETTING STARTED

1. Make sure that loudspeakers capable of sustaining the load of a bass signal are connected to the **SPEAKER OUT** sockets, meaning the speaker unit should be linked to the **SPEAKER OUT** at the combos.
2. Make sure that the mains lead is connected and all external devices (effects) are properly connected and working.
3. Set the **MASTER** control to zero.
4. Plug your bass guitar into the amplifier's **INPUT** with a shielded line-cable.
5. Press the **POWER** switch to turn the device on.
6. Switch off **MUTE** - the red LED will turn off.
7. Switch the **LIMITER** off (the 2-colored LED will turn off).
8. Turn up all volume controls of your bass guitar.
9. Adjust the **GAIN** control until the clip LED flashes.
10. Set the **MASTER** control to your desired volume.
11. Use the sound controls / switches to adjust the sound as described in the respective chapters FRONT PANEL CONTROLS.
12. If necessary readjust **GAIN**.
13. Use the **LIMITER** (LED green) to limit the preamp signal and fix its threshold (LED switches to red) using the GAIN control.

FRONT PANEL CONTROLS



INPUT

socket to plug in a bass guitar.

GAIN

control + CLIP / LIMIT LED to adjust the input level.

LIMITER

switch + 2-colored CLIP / LIMIT LED to compress the signal within the preamp.

LOW BOOST

switch + LED to boost the low end.

BASS

control to boost / cut low frequencies.

MID FREQ.

control to determine the midrange frequency.

MID LEVEL

control to boost / cut the frequency adjusted with the MID FREQ. control.

TREBLE

control to boost / cut high frequencies.

HIGH BOOST

switch + LED to boost the highs.

MUTE

switch + ON / MUTE LED mutes the signal of all outputs except the PHONES and TUNER socket. To avoid switching noise use the MUTE switch only while no audio signal is being played back.

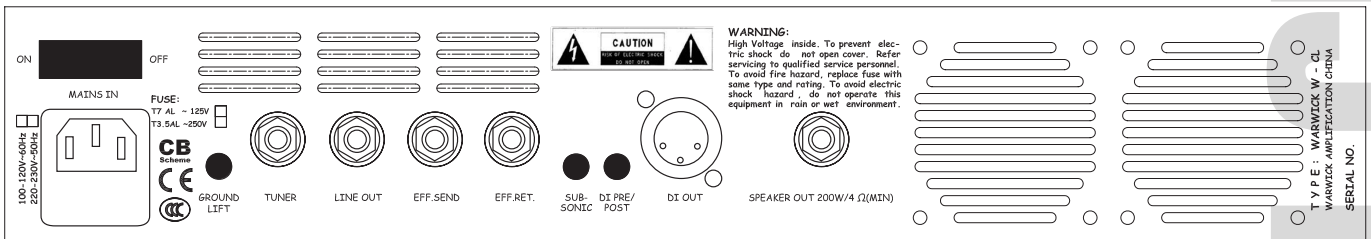
MASTER

control determines the main volume level.

PHONES

socket for connecting headphones (min 200 Ohm)

REAR PANEL



MAINS IN AC

terminal with integrated fuse compartment for connecting the amplifier to mains.

POWER

switch for turning the amplifier on and off.

GROUNDLIFT

switch disconnects the protective ground line from signal ground. A humming loop may occur when several devices are hooked up to the same protective ground line and connected by line cables. Use GROUNDLIFT to eliminate humming loops.

TUNER OUT

to connect to a tuner, active when MUTE is enabled.

LINE OUT

socket allows connecting additional power amplifiers or active cabinets.

EFF. LOOP

for the insertion of an effects unit. Connect EFF. SEND with the input and EFF. RETURN with the output of the effects device.

DI PRE / POST

switch to route the signal to DI OUT socket PRE (pressed, direct signal from the bass) or POST (released, signal affected by equalizer or effects loop). Symmetric XLR out to connect to e.g. a mixing console.

SUBSONIC

switch to cut low frequencies from the power amp (CL ND 4: signals below 80 Hz).

SPEAKER OUT

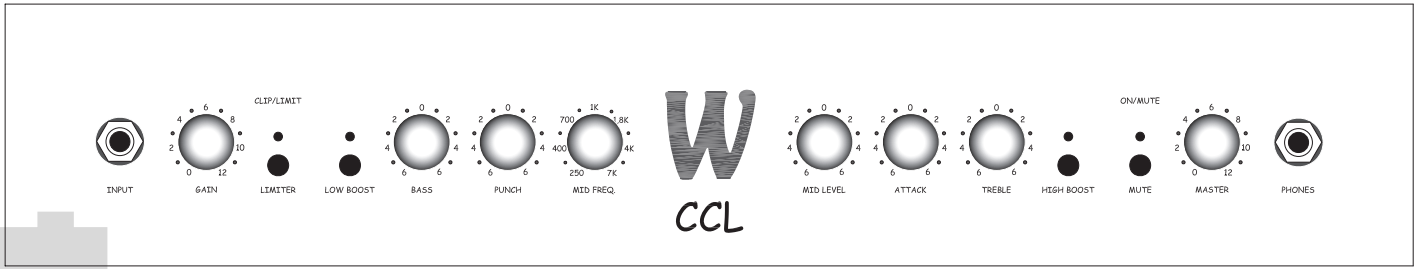
to connect the amplifier to the speaker.

HORN ATT.

to control horn volume separately.

Retractable handle and wheels make it easy to transport your Warwick Combo.

FRONT PANEL CONTROLS



INPUT

socket to plug in a bass guitar.

GAIN

control + CLIP / LIMIT LED to adjust the input level.

LIMITER

switch + 2-colored CLIP / LIMIT LED to compress the signal within the preamp.

LOW BOOST

switch + LED to boost the low end.

BASS

control to boost / cut low frequencies.

PUNCH

control for boosting/cutting deep mids.

MID FREQ.

control to determine the midrange frequency.

MID LEVEL

control to boost / cut the frequency adjusted with the MID FREQ. control.

ATTACK

control for boosting/cutting high mids.

TREBLE

control to boost / cut high frequencies.

HIGH BOOST

switch + LED to boost the highs.

MUTE

switch + ON / MUTE LED mutes the signal of all outputs except the PHONES and TUNER socket. To avoid switching noise use the MUTE switch only while no audio signal is being played back.

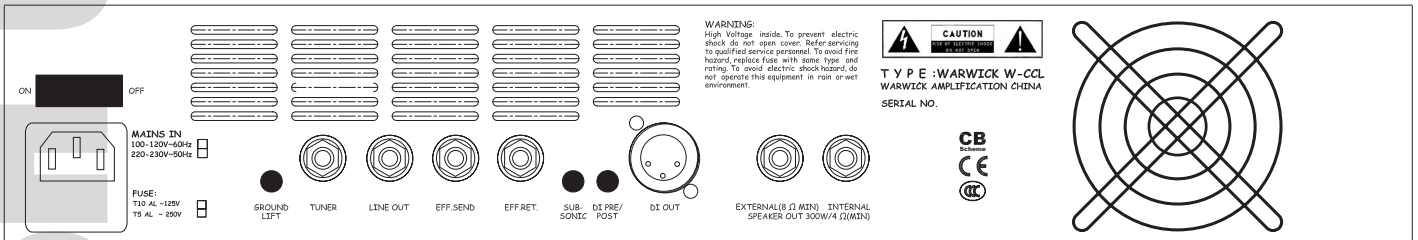
MASTER

control determines the main volume level.

PHONES

socket for connecting headphones (min 200 Ohm).

REAR PANEL



MAINS IN AC

terminal with integrated fuse compartment for connecting the amplifier to mains.

POWER

switch for turning the amplifier on and off.

GROUNDLIFT

switch disconnects the protective ground line from signal ground. A humming loop may occur when several devices are hooked up to the same protective ground line and connected by line cables. Use GROUNDLIFT to eliminate humming loops.

TUNER OUT

to connect to a tuner, active when MUTE is enabled.

LINE OUT

socket allows connecting additional power amplifiers or active cabinets.

EFF. LOOP

for the insertion of an effects unit. Connect EFF. SEND with the input and EFF. RETURN with the output of the effects device.

DI PRE / POST

switch to route the signal to

DI OUT

socket PRE (pressed, direct signal from the bass) or POST (released, signal affected by equalizer or effects loop). Symmetric XLR out to connect to e.g. a mixing console.

SUBSONIC

switch to cut low frequencies from the power amp (CCL ND: signals below 120 Hz).

SPEAKER OUT

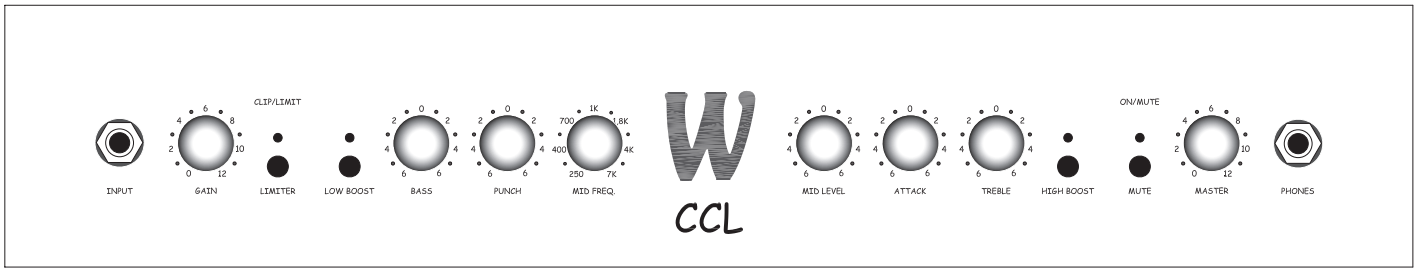
to connect the amplifier to the speaker.

HORN ATT.

to control horn volume separately.

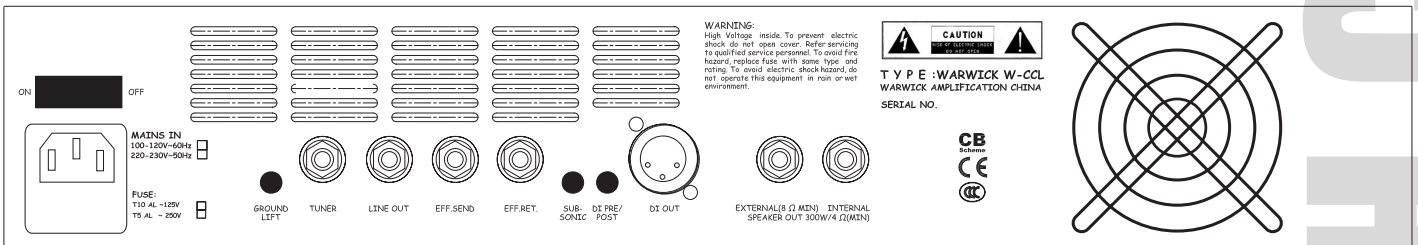
Retractable handle and wheels make it easy to transport your Warwick Combo.

FRONT PANEL CONTROLS (CCL ND 8 - CCL 210 ND 8)



- INPUT** socket to plug in a bass guitar.
- GAIN** control + CLIP / LIMIT LED to adjust the input level.
- LIMITER** switch + 2-colored CLIP / LIMIT LED to compress the signal within the preamp.
- LOW BOOST** switch + LED to boost the low end.
- BASS** control to boost / cut low frequencies.
- PUNCH** control for boosting/cutting deep mids.
- MID FREQ.** control to determine the midrange frequency.
- MID LEVEL** control to boost / cut the frequency adjusted with the MID FREQ. control.
- ATTACK** control for boosting/cutting high mids.
- TREBLE** control to boost / cut high frequencies.
- HIGH BOOST** switch + LED to boost the highs.
- MUTE** switch + ON / MUTE LED mutes the signal of all outputs except the PHONES and TUNER socket. To avoid switching noise use the MUTE switch only while no audio signal is being played back.
- MASTER** control determines the main volume level.
- PHONES** socket for connecting headphones (min 200 Ohm).

REAR PANEL (CCL ND 8 - CCL 210 ND 8)



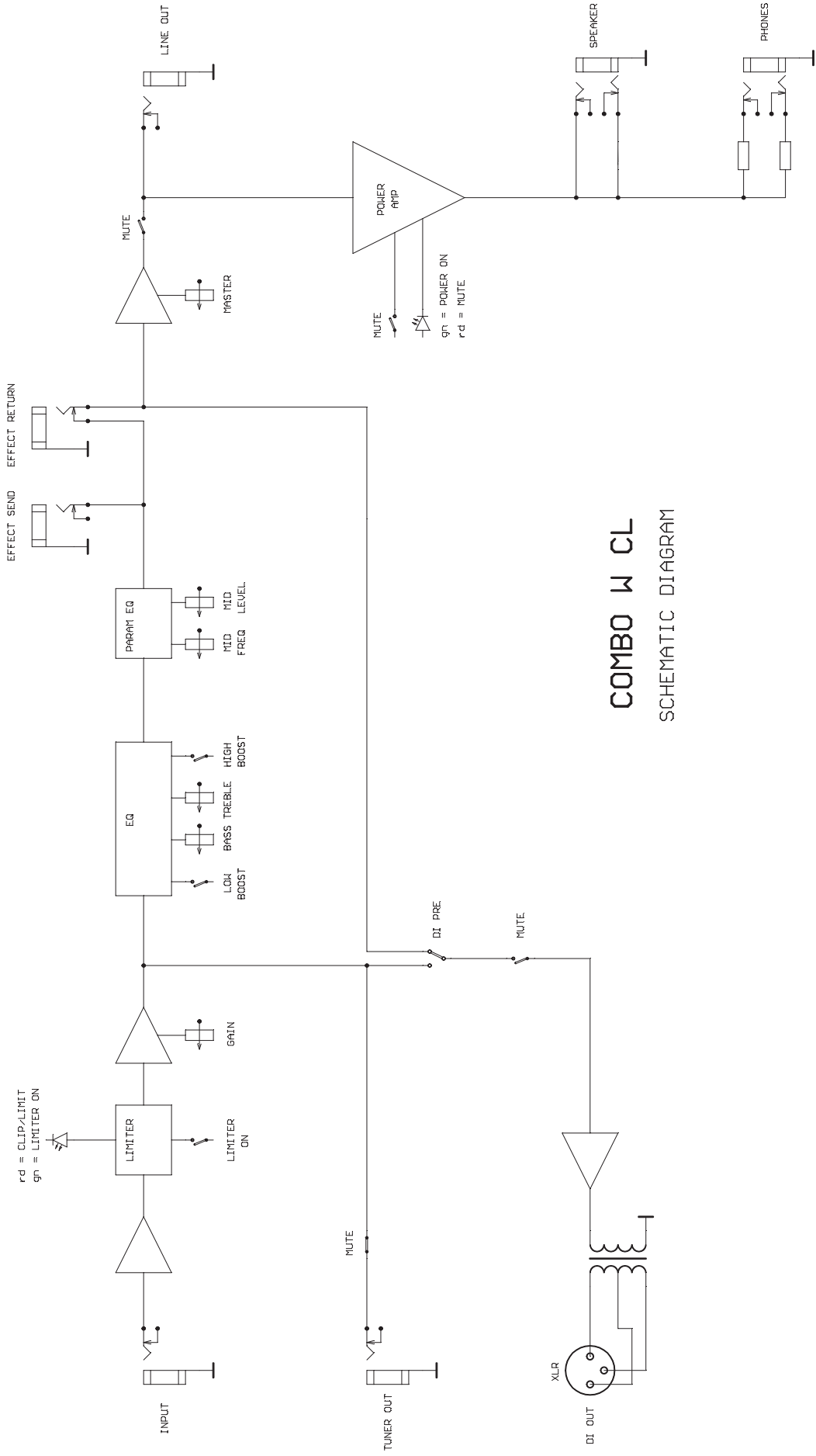
- MAINS IN AC** terminal with integrated fuse compartment for connecting the amplifier to mains.
 - POWER** switch for turning the amplifier on and off.
 - GROUNDLIFT** switch disconnects the protective ground line from signal ground. A humming loop may occur when several devices are hooked up to the same protective ground line and connected by line cables. Use GROUNDLIFT to eliminate humming loops.
 - TUNER OUT** to connect to a tuner, active when MUTE is enabled.
 - LINE OUT** socket allows connecting additional power amplifiers or active cabinets.
 - EFF. LOOP** for the insertion of an effects unit. Connect EFF. SEND with the input and EFF. RETURN with the output of the effects device.
 - DI PRE / POST** switch to route the signal to
 - DI OUT** socket PRE (pressed, direct signal from the bass) or POST (released, signal affected by equalizer or effects loop). Symmetric XLR out to connect to e.g. a mixing console.
 - SUBSONIC** switch to cut low frequencies from the power amp (CCL ND: signals below 120 Hz).
 - SPEAKER OUT EXT.** to connect an additional speaker with min 8 Ohm.
 - SPEAKER OUT** to connect the amplifier to the speaker.
 - HORN ATT.** to control horn volume separately.
- Retractable handle and wheels make it easy to transport your Warwick Combo.

CCL ND 8

SPECIFICATIONS

	CL ND 4	CCL ND 4	CCL ND 8	CCL 210 ND 8
INPUT	25 mV	25 mV	25 mV	25 mV
PREAMP	transistor	transistor	transistor	transistor
POWER AMP	fan cooled	fan cooled	fan cooled	fan cooled
EQUALIZER	BASS, PARAM MID, TREB, LO / HI BOOST	BASS, PUNCH, PARAM MID, ATTACK, TREB, LO / HI BOOST	BASS, PUNCH, PARAM MID, ATTACK, TREB, LO / HI BOOST	BASS, PUNCH, PARAM MID, ATTACK, TREB, LO / HI BOOST
LIMITER	adjustable	adjustable	adjustable	adjustable
HEADPHONE	min 200 Ohm	min 200 Ohm	min 200 Ohm	min 200 Ohm
EFFECT LOOP	mono serial send 0 dBu, 600 Ohm return 0 dBu, 10 kOhm	mono serial send 0 dBu, 600 Ohm return 0 dBu, 10 kOhm	mono serial send 0 dBu, 600 Ohm return 0 dBu, 10 kOhm	mono serial send 0 dBu, 600 Ohm return 0 dBu, 10 kOhm
REAR CONTROL	HORN ATTENUATOR	HORN ATTENUATOR	HORN ATTENUATOR	HORN ATTENUATOR
NOMINAL POWER	200 Watt / 4 Ohm	300 Watt / 4 Ohm	300 Watt / 4 Ohm	300 Watt / 4 Ohm
SPEAKER	NEODYMIUM 12", HF HORN	NEODYMIUM 15", HF HORN	NEODYMIUM 15", HF HORN	NEODYMIUM 2 x 10", HF HORN
THD	< 0.1%	< 0.1%	< 0.1%	< 0.1%
CONNECTORS	TUNER OUT, DI OUT (pre / post)	TUNER OUT, DI OUT (pre / post)	TUNER OUT, DI OUT (pre / post) ext. speaker out (min 8 Ohm)	TUNER OUT, DI OUT (pre / post) ext. speaker out (min 8 Ohm)
SWITCHES	LIMITER, MUTE, GROUNDLIFT, SUBSONIC, DI PRE / POST	LIMITER, MUTE, GROUNDLIFT, SUBSONIC, DI PRE / POST	LIMITER, MUTE, GROUNDLIFT, SUBSONIC, DI PRE / POST	LIMITER, MUTE, GROUNDLIFT, SUBSONIC, DI PRE / POST
WEIGHT (NET / GROSS, kg)	19 / 23	26 / 33	27 / 32	27 / 34
DIMENSIONS COMBO (cm)	441 x 396 x 461	531 x 484 x 601	531 x 484 x 601	531 x 484 x 601

CIRCUIT DIAGRAM

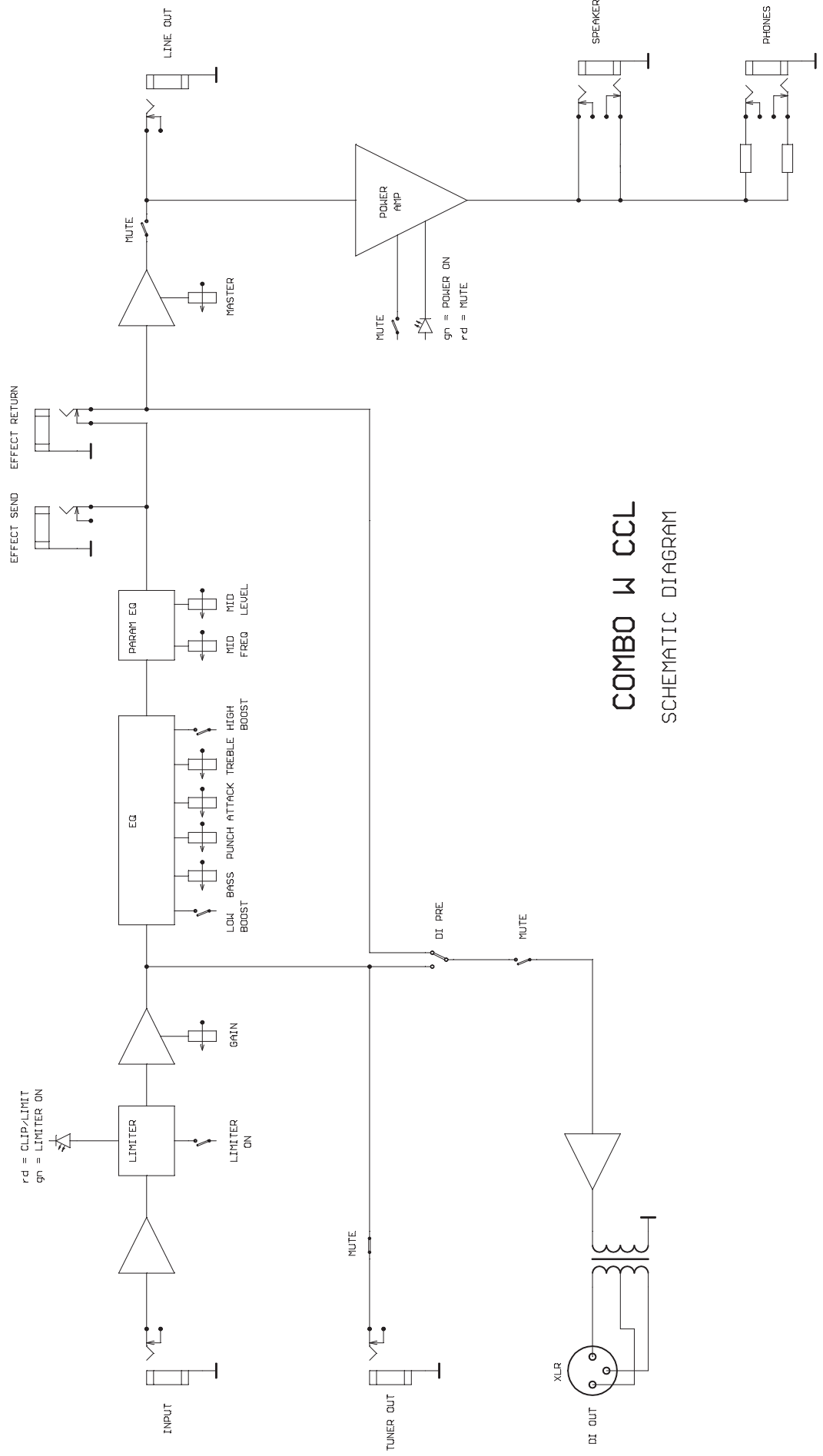


COMBO W CL
SCHEMATIC DIAGRAM

CLND 4

CIRCUIT DIAGRAM

CCL ND 4 / 8



COMBO W CCL
SCHEMATIC DIAGRAM

**Please see the new Warwick Bass Forum on www.warwick.de
For support information please refer to support@warwick.de**

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