



Transrotor Phono III-Preamplifier

Manual

Important advise for undisturbed operation

Please kindly note the information listed below to enable durable maintenance of the excellent reproduction quality of this equalizer-pre-amplifier. These information also serve as your security.

1. Please read this manual carefully before starting-up the unit.
2. Keep the manual and the original packing at a safe place.
3. Please note each single advise and warning of this manual.
4. Never use this unit without the protecting housing.
5. Never undertake any repair attempts on your own. Any maintenance or repair shall only be executed by authorised and specially educated personell. Damages caused by incorrect usage or external encroachments (f. eks. incorrect repair attempts) possibly lead to expiration of the guarantee claim.
6. Never bridge a fuse. Only replace a defect fuse by an original fuse of the same type and value.
7. Never operate this unit in damp surrounding (f. eks. close to an aquarium, a sink or a bath tub, etc.).
8. Take care for sufficient ventilation at the final place of this unit.
9. This unit never shall be operated close to a heat source (radiator, fireplace, open fire etc.). Flammable materials have to be kept away from the equalizer-pre-emplifyer under all circumstances.

10. The equalizer-pre-amplifier is factory-made adjusted for 220-240 V mains voltage. Therefore please use this unit solely at a mains voltage for the named spheres.

11. Please only use the provided power-supply-unit in its original condition, as damages can occur at the phono-pre-amplifier when operating the phono-equalizer with another power-supply-unit.
12. Watch a tight fit of the mains plug. Multiple sockets, prolongings etc. have to correspond to the relevant German determinations.
13. In order to avoid dispersions the equalizer-pre-amplifier shall **not** be operated on or directly next to a power-amplifier / integrated amplifier.
14. Never clean the unit with aggressive cleaning agents.
15. Dissociate the power-supply-unit from the circuit at longer lasting no usage.
16. Switch-off the technical installation in any befor replugging or mounting of connecting cables.
17. Unplug the power plug before starting to clean the unit! Only use a soft cloth, possibly moistened with alcohol. Never spread the cleaning agent directly on to the surface of the housing.
18. Under no circumstances liquids have to attain into the housing. Keep the unit dustfree.
19. If one of the following points should become true, a repair has to be executed by the distributor of this unit:

* the power-supply-unit was damaged*	Materials fell into the housing gefallen
* Liquids attained the inner of the housing	* The unit was exposed to humidity for a long time
* The unit operates incorrect	* The installation was damaged
20. On appearance of a „buzz“ (double grounding or buzz loop) a specialist is to consult.
21. Please connect the equalizer-pre-amplifier only to the circuit when all other unit-connection are made!

Connection of the equalizer-pre-amplifier with the mains supply

Switch-off your amplifier before connecting your equalizer-pre-amplifier to the mains! It will first be switched-on when it is connected to the mains supply (blue LED on the front panel shines) and **all unit-connections** (turntable, pre-amplifier or integrated amplifier). Insert the barrel connector on the lead of the supplied power supply unit into the upper socket on the rear of the device. Now the mains plug of the power pack is plugged into the mains socket. Turn on the power switch on the power supply (the blue LED on the front panel lights up).

Attachment of the turntable to the equalizer-pre-amplifier

Stick the RCA-plug of the tonearm cable into the RCA-jack (**IN**) of the equalizer-pre-amplifier (watch the circuit allocation right / left). Now connect the ground lead of the turntable / tonearm with the ground screw-clamp (3mm allen wrench) central between the cinch-jacks. In individual cases it can be necessary to add an additional wire from the grounding clamp of the pre-amplifier / integrated amplifier to the ground attachment (GND). Please do not place the unit directly on to the power transformer of your amplifier or close by. Power transformers show a powerful magnetic field which can intersperse the phono-pre-amplifier or its supply lines though well shielding. A "buzz" would be the unpleasant result.

The rights NF-audio cable

Only use high quality, shielded NF-cables with marginal electric resistance and low cable capacitance. The same also holds for tonearm connecting cables. All cable

connections should be established with contact-safe RCA-plug. We recommend to plug and replug the sockets from time to time. This is to prevent an untimely oxidation, the electrical contact will be faultless at any operating times. Please also take advise from your specialist dealer.

Connecting of the equalizer-pre-amplifier with the amplifier

Connect the RCA-jacks marked with **Out** through a suitable RCA-cable (does **not** belong to the scope of delivery) with the auxiliary input (AUX, LINE) of your amplifier. For record dubbing from a digital to an analogue recorder, the jack Out must be connected with the entrance jack (LINE IN) of the recorder.

The right adjustment of the used pick-up

In order to take up the adjustment the unit has to be opened. **Dissociate the unit from the mains!** Now dismantle both front screws with a 3mm allen wrench and flap these forward on to a soft cloth (sensitive). The upper part of the housing can be taken off in forward direction and the change over switches are accessible. After adjustment the assembly will take place in reverted direction.

MM – Systems:

Magnetic pickups (MM) with an output voltage of 2 - 7 mV / 5 sec. operate. The standard termination values for magnetic pickups are 250 pF, 47 kOhm. On the device board there are corresponding miniature key switches, separated by channels, which can be set with a ballpoint pen, pencil, etc. If no impedance switch (1-3) is switched on, the input is terminated with 47 kOhm.

MC – Systems:

Low-impedance dynamic pickups (MC) with a generator resistance of <10 ohms are preferably operated at an input impedance of the phono preamplifier of 100 ohms, whereby the capacitive load should be terminated with the highest capacity (250 pF).

The following table shows the selection of the input sensitivity (switches 6 - 8)

Gain DIP switch:

0,25mV	0,50mV	2,00mV		5,00mV
6 ON	7 ON	8 ON		All open

Complete table of values:

0,25mV	0,50mV	2,00mV		Results:
Off	Off	Off		5,00mV
Off	Off	On		2,00mV
Off	On	Off		0,50mV
Off	On	On		0,40mV
On	Off	Off		0,25mV
On	Off	On		0,20mV
On	On	Off		0,16mV
On	On	On		0,15mV

If a higher output voltage is required, the next more sensitive setting can be selected.

Impedance matching of the used pickup:

With the switches 1 - 3 of the eight-position miniature key switch the impedance of the used pickup can be adapted to the equalizer preamplifier; Intermediate values can be set using any combination of switches 1 - 3.

Input DIP switch:

100Ω	300Ω	500Ω		47kΩ
1 ON	2 ON	3 ON		All open

Complete table of values:

100Ω	300Ω	500Ω		Results :
Off	Off	Off		47kΩ
Off	Off	On		500Ω
Off	On	Off		300Ω

Off	On	On		188Ω
On	Off	Off		100Ω
On	Off	On		83Ω
On	On	Off		75Ω
On	On	On		65Ω

Capacity adjustment of magnetic cartridges (MM):

With switches 4 - 5 of the eight-position miniature key switch, the capacity of the used MM-Cartridge can be adapted to the equalizer preamplifier.

These switches can be combined with one another as required to set intermediate values. Please note that the cable capacities from the tonearm to the input of the equalizer preamplifier must be added. Take these values from the instructions for your turntable and tonearm. A rough standard value is given here as 150 pF.

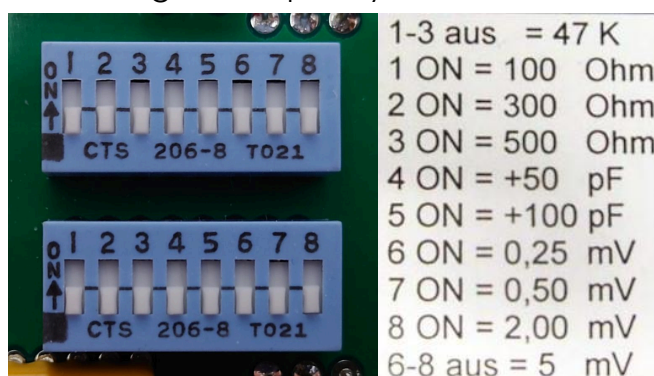
Example:

The input capacitance of the preamplifier is 100 pF + cable capacitance 150 pF + matching capacitance 100 pF (switch 5 on) results in 350 pF.

Capacity DIP switch:

DIP 4	DIP 5	
+50pF	+100pF	Results:
Off	Off	100pF
On	Off	150pF
Off	On	200pF
On	On	250pF

MC systems should always have the highest capacity (250 pF) can be set.



Technical data

Amplification	:38-64 dB	Gain MC adjustable	:150 μ V – 500 μ V
Input resistance MM	:47 kohm	Signal to noise distance	:MC 75 dBA at 64 dB amplification (1kHz)
Input resistance MC	:65-500 Ohm, adjustable	Frequency response (RIAA)	MM 82 dBA at 38 dB amplification (1kHz)
Capacity MM	:100-250 pF, adjustable	Charging rate	: \pm 0,2 dB
Input	:2 x RCA (cinch)	Housing	: \leq 1,5VA
			:6 mm aluminium

Output	:2 x RCA (cinch)	Front plate	:12 mm aluminium
Distortion (THD+N)	:0,01%	Dimensions (without power-supply)	:(w x h x d)
Cross-talk attenuation	:80 dB	without jacks	122 x 75 x 175 mm

This unit is expressly subject to any technical alteration, errors and omissions!