
TANDBERG[®]

PRE AMPLIFIER 4038

Operating Instructions

SCAN BY PACKRAT014 - NOT FOR RESALE



READ THIS FIRST!

For your safety!

To prevent electrical shock or fire, do not expose electronic products to rain or moisture, and do not remove covers (or back). If anything fails, leave the repair to a qualified technician.

Pull out the power plug during thunder storms and when you are away for a long time (e.g. holidays, etc.).

Warning!

Faults on the units caused by the circumstances described in the warnings below, do not necessarily apply for warranty service.

Main power

In some areas the main power wall outlet carries high frequency data and intercom communications. To prevent this high frequency to reach the receiver/power amplifier, an HF filter should be connected in the power line. Ask your local Tandberg dealer if this high frequency is in your area. Should this high frequency reach the receiver/power amplifier, and interfere with the electronics, damage may occur in the output stage or the speakers.



Connecting

When connecting the units in a Hi-Fi system together, it is very easy to touch the hot wire on the phono lead and generate a hum signal. This signal can be amplified and cause damage to the receiver/power amplifier or the speakers. To avoid this problem, switch off all the units in the system before connecting.

Remote control (extra)

This control amplifier can be operated from remote control RC 3030. See page 6 for more information.

Contents

	Page
Power requirements	3
Placing the control amplifier	3
Connecting external equipment	3
In/outputs	4
Switching on	4
Headphones	4
Controls	5
Short description for Remote Control RC 3030 (extra)	6
Technical data	7

Power requirements

Make sure the power amplifier is marked at the rear panel with the correct mains voltage for your area.

US version: 110 V-115 V \pm 10%,
50/60 Hz.
European version: 220 V-230 V \pm 10%,
50/60 Hz.

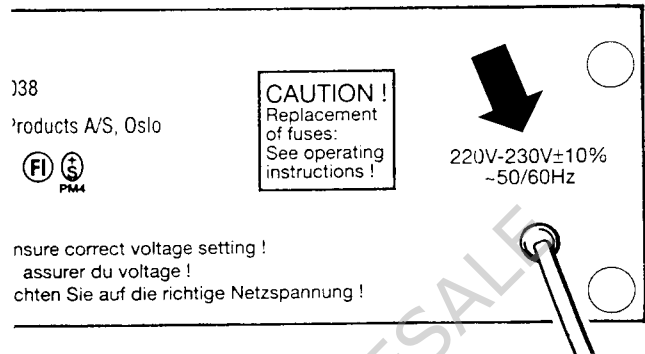
Changing the mains voltage setting and fuse (inside) should only be carried out by a qualified service technician.

The power consumption is 18 Watt maximum.

Fuses:

220 V/230 V: 70 mA PTC.
110 V/115 V: 140 mA PTC.

Check for correct mains voltage at the rear panel.



Placing the control amplifier

The best position for TCA 4038 is free on a shelf with minimum 5 cm space to each sides. If the shelf is open on the back, the space to the sides can be slightly reduced.

Never place the amplifier in a soft surface that can impede ventilation or in front of or above a radiator.

If placing units on top of each other the power amplifier must always be positioned at the top.

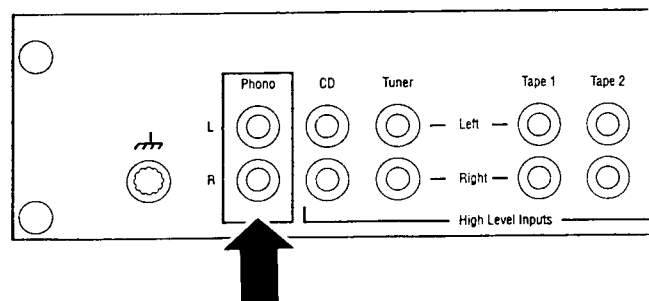
Connecting external equipment

Important!: All connections must be carried out before the Power is switched on*.

Record player

- Connect the record player (MM) to the Phono inputs, see figure.

The ground lead (static) from the record player must be connected to the ground terminal.

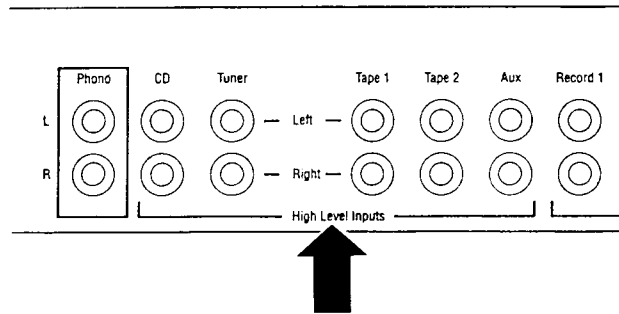


*See page 2.

In/outputs

High Level Inputs

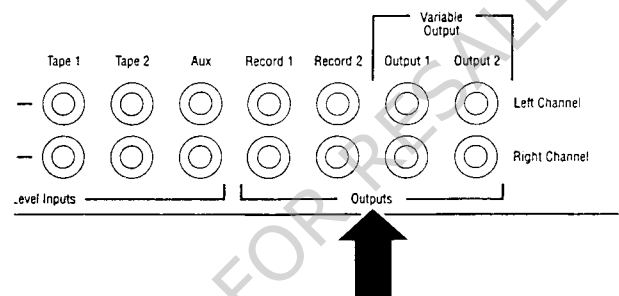
The High Level Inputs are used for connecting a CD-player, tuner, one or two cassette/tape deck(s) and a program from an extra program source (AUX).



Outputs

The Record 1 and Record 2 (program to be recorded) outputs are used for connecting one or two cassette/tape deck(s).

The Variable Outputs (Output 1 and Output 2) are used to connect one or two power amplifiers.



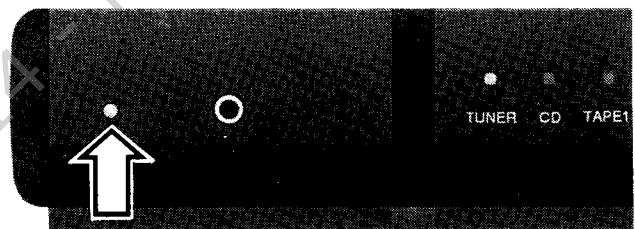
Switching on

Check that the control amplifier is marked with the correct voltage on the rear panel.

Plug the mains lead into the wall socket.

NOTE! The Zero Feedback stages have to stabilize before the control amplifier is ready for operation. Therefore a protection circuit will cause an approx. 2 - 5 seconds delay after switching on.

Press the power switch (see figure) to turn on the control amplifier. The control amplifier will always go to position TUNER and DEFEAT OFF after switching on.

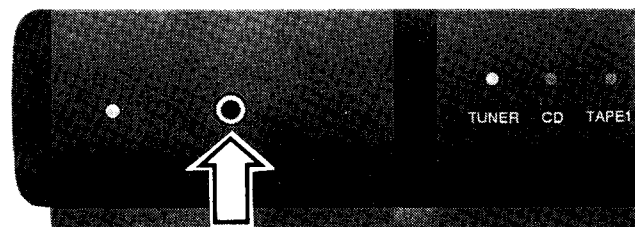


After switching on, all functions, except BASS, TREBLE and BALANCE can be operated from the remote control (extra).

Note: The pre-amplifier does not have a stand by function. The pre-amplifier must be switched on and off with the power switch.

Headphones

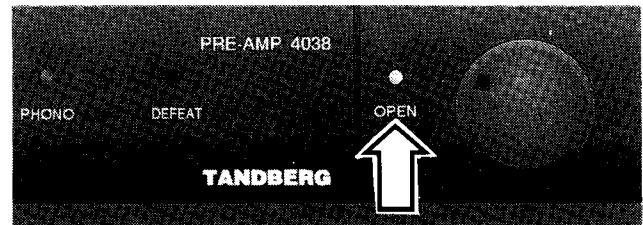
- Connect stereo headphones with a 1/4" stereo jack to the socket on the front, see figure.
- Adjust the level in the headphones with the Volume knob.
- **Note:** To cancel the sound from the speakers, turn off the power amplifier.



Controls

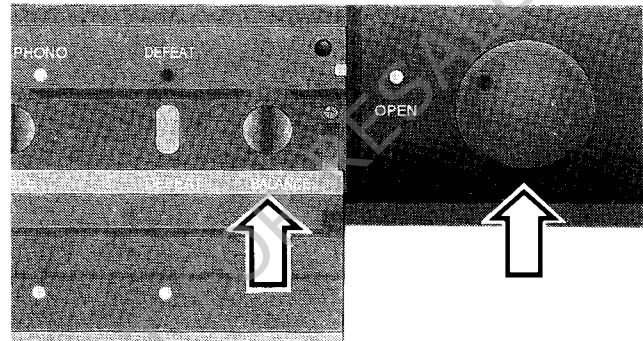
Opening the cover

To get access to the function controls, open the cover by pressing the OPEN-button, see figure.



Volume - Balance

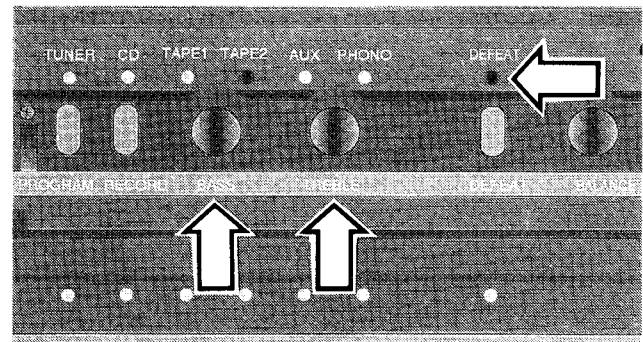
- Control the output volume with the volume knob, see figure, or use the remote control (extra).
- Control the volume's balance between right and left channels with the knob marked BALANCE, see figure. The balance function is not affected by the remote control (extra).



Bass - Treble

- Control the bass and treble levels with the knobs marked BASS and TREBLE, see figure. The bass and treble function is not affected by the remote control (extra).

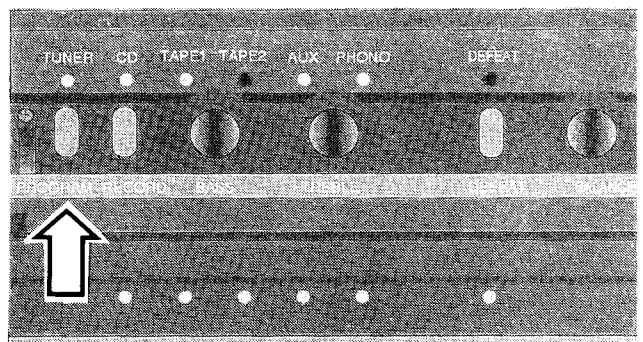
NOTE! The tone controls will only work when the DEFEAT LED is turned off. Press the DEFEAT button or use the remote control (extra).



Program selector

The program selector provides opportunities to choose between 6 program sources. You will listen to the program in the speakers depending on the position of the program selector. The LED will light, indicating the program source.

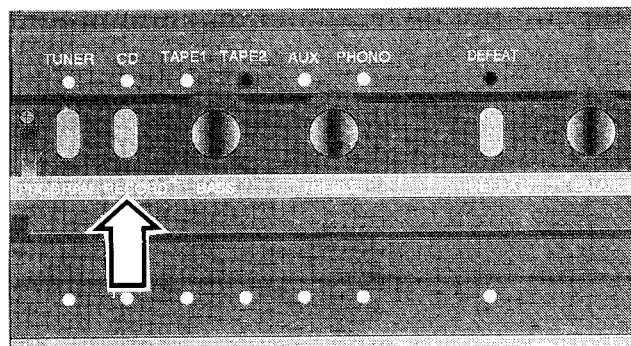
Short presses on the program selector step the program source one by one from left to right and back to TUNER again. Keeping the selector in will automatically step the sources and when releasing, stop at the present source, or use the remote control (extra).



RECORD selector

To improve the sonic quality on TCA4038, the RECORD selector provides opportunity to disconnect tapeunits from the record outputs (and the signal path).

The RECORD selector has two positions, indicated by red or green PROGRAM selector leds.



1: The RECORD selector position: ON (red)

PROGRAM selector position:

TUNER: Recording on both TAPE 1 and TAPE 2 outputs.

CD: Recording on both TAPE 1 and TAPE 2 outputs.

TAPE 1: Playback from TAPE 1 and recording on the TAPE 2 output (copying).

TAPE 2: Playback from TAPE 2 and recording on the TAPE 1 output (copying).

AUX: Recording on both the TAPE 1 and TAPE 2 outputs.

PHONO: Recording on both the TAPE 1 and TAPE 2 outputs.

2: The RECORD selector position: OFF (green)

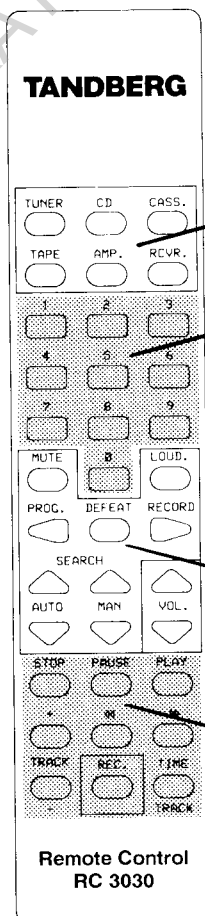
No record opportunities.

Short description for Remote Control RC 3030 (extra)

For complete description, see Operating Instructions for RC 3030

This remote control operates CD-PLAYER 4035, TUNER 4031 and PRE AMPLIFIER 4038 from TANDBERG. POWER AMPLIFIER 4036 can not be operated with the remote control.

This product group has no stand-by function. Use the power switch for on/off function.



Always select the type of unit before operating.

Number buttons for selecting pre-sets on the tuner and tracks on the CD-player.

Cassette deck/CD-player controls. LOUD-button not in use.

The name on the buttons indicate the function.

Technical data

Tandberg Control Amplifier
TCA 4038

Power Requirements: 110 - 115 V/220 - 230 V $\pm 10\%$, 50/60 Hz
Power Consumption: 18 W max.
Dimensions: Width: 464 mm
Depth: 380 mm
Height: 76 mm
Weight: 6 kg

Typical Technical Data
according to
IHF-A-202, 1978

Frequency Range
Phono MM: 20 - 20 000 Hz ± 0.5 dB
Tape 1, Tape 2, Tuner, CD: 20 - 20 000 Hz ± 0.25 dB
Maximum Voltage output:
Preamp output: 4 V at THD = 0.05%
Preamp output: 5.0 V at clipping level
Tape 1, Tape 2: 5.0 V
Headphone output: 8 V unloaded
Total Harmonic Distortion (20 Hz - 20 000 Hz):
Phono MM: <0.09%
Tape 1, Tape 2, DAT, Video, Tuner, CD: <0.04%
Input Sensitivity Ref. 0.5 V output voltage:
Phono MM: 1.2 mV
Tape 1, Tape 2, DAT, Video, Tuner, CD: 90 mV
A-weighted Signal-to-Noise Ratio:
Phono MM: >60 dB
Tape 1, Tape 2, DAT, Video, Tuner, CD: >90 dB
Maximum Input Voltage (1 kHz):
Phono MM: 100 mV
Tape 1, Tape 2, DAT, Video, Tuner, CD: 4 V
Input Impedance:
Phono MM: 47 kohm
Tape 1, Tape 2, DAT, Video, Tuner, CD: min. 10 kohm

Secondary Disclosures

Output Impedance
Preamp: 200 ohm + 15 μ F in series
Headphones: 150 ohm
Headphones (min. load): 150 ohm
Tone-control response:
Bass: ± 9 dB at 100 Hz
Treble: ± 9 dB at 10 000 Hz
Crosstalk (100 Hz - 10 kHz):
Phono MM: To any of the other sources >75 dB
Tape 1, Tape 2, DAT, Video, Tuner, CD: To any of the other sources >75 dB
Separation (100 Hz - 10 kHz):
Phono MM: >45 dB
Tape 1, Tape 2, DAT, Video, Tuner, CD: >70 dB
Transient intermodulation:
All inputs: Immeasurable

Other Technical Data

Frequency range
Tape 1, Tape 2, Tuner, CD: 1.6 Hz - 1.25 MHz +0/-3 dB
Phase shift (20 - 20 000 Hz):
Tape 1, Tape 2, DAT, Video, Tuner, CD: +5°/-5°

Specifications are subject to change without notice.

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NOTE

The information in this manual is subject to improvements without notification. Additional pages may be inserted in future editions. The user is asked to excuse any omissions or errors in the present edition.

No responsibility is assumed if accidents occur while the user is following the instructions in this manual. No responsibility is assumed for defects in the unit's firmware.

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