## TANDBERG TPT 3031A

# Operating Instructions



#### **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 tuner, 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 tuner, and interfere with the electronics, damage may occur in the outputstage 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 control/power amplifier or the speakers. To avoid this problem, switch off all the units in the system before connecting.

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#### Power requirements

Make sure the tuner is marked at the rear panel with the correct mains voltage for your area:

US version:

110 - 115 V ± 10 %, 50/60 Hz

European version: GB version:

 $220 - 230 \text{ V} \pm 10 \%$ , 50/60 Hz240 V ± 10 %, 50/60 Hz

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

The power consumption is 23 watt maximum.

Fuses:

220 - 240 V: 115 V:

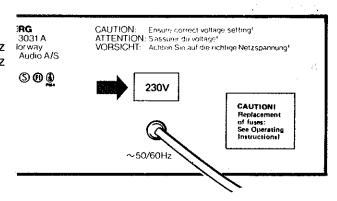
Fuse: 5 x 20 mm slow blow

Eu: T 160 mA

mm,

mm. US: T 400 mA

NOTE! Before connecting the tuner to the wall socket, read chapter Main power on page 2. Do not switch Power on yet.



Check that the tuner is marked with the correct mains voltage.

#### Connecting to control amplifier

Important!: Connecting the audio output must be carried out **before** the Power is switched on.\*

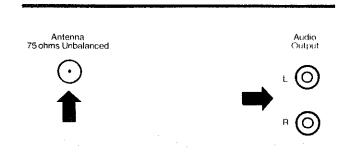
Audio Output

 Connect the output to a control amplifier. Output voltage: 1.0 V/1 kohm.

#### Antenna 75 ohm:

FM antenna with 75 ohm down lead should be connected direct to this input.

FM antenna with 300 ohm down lead should be connected via an antenna transformer 300/75 ohm. A 75 ohm antenna plug with an antenna transformer will be supplied with tuners intended for the US market.



<sup>\*</sup> See page 2.

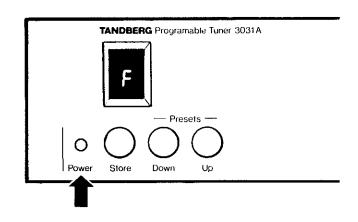
#### Switching on

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

- Press the Power switch to turn on the tuner.

When power is switched on, the functions of the tuner are automatically set as follows:

- Tuned to the last station you listened to.
- F is shown in the left display.
- Auto/Man LED off, the tuner is ready for manual search.

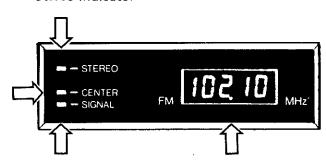


#### Tuning display

The Tuning display window shows the frequency of the FM scale, stereo or mono transmitting, center tuning and signal strength.

Center indicator

Stereo indicator



Signal indicator

Frequency in MHz

#### Frequency:

When searching to a station the frequency counter display shows the frequency in MHz.

#### Stereo:

The Stereo indicator will light when receiving a stereo signal.

If the stereo program is affected by noise, you can press the Mono button to have the program reproduced in mono with less noise.

#### Center:

When the Center LED is on, the station is exactly tuned in.

At auto search, no further adjustment is necessary when the required station is found.

At manual search, press the Search Up/Down button until the required station is found and the Center LED goes on.

#### Signal:

The Signal indicator shows at full light that the signal level is sufficient to receive the station without noise. At low signal strength the light in the Signal indicator is weak and the signal is possibly affected by noise.

#### Search functions

Both automatic and manual search are possible on the tuner.

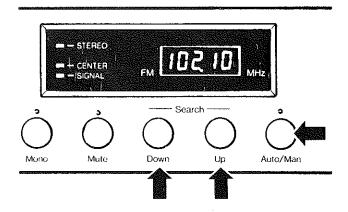
#### Manual search

Press the Auto/Man button to turn off the Auto/Man LED, if this LED was on. The tuner is now ready for manual search.

Press Search Up or Down button to start searching for the required station.
 By giving the Up/Down button a short press you can increase/decrease in 50 KHz steps (100 KHz steps for USA).
 By keeping the Up/Down button in, the searching is at first slow and after a short time the searching will be fast. (See the frequency counter display).

When reaching the end of the scale, the frequency counter stops at 108.00 MHz for "Up" searching and at 87.50 MHz for "Down" searching.

Each time the Up or Down button is pressed, the sound is muted.



#### Auto search

- Press the Auto/Man button to switch on the Auto/Man LED (if the LED was off). The Tuner is now ready for automatic search.
- Give Search Up or Down a short press. The tuner will now start searching for the nearest station (with a strong enough signal) and stop. If you want another station just press the Up/Down button again. When reaching 87.50 or 108.00 MHz the searching reverses and stops at the nearest station.

At any time the searching can be reversed by pressing the opposite button (Up or Down). During auto search the sound is muted.

#### Presets

In addition to the search functions there is a second stage which stores 16 pre-tuned FM stations in an electronic memory.

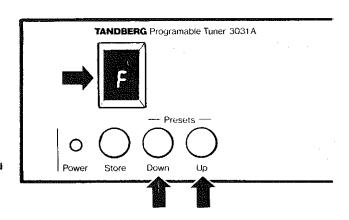
#### Using presets

When the power is swiched on, a F will show in the left display. If you press one of the Presets buttons, the tuner will allways start with preset No. 1.

When F is shown in the left display during manual or auto search, you will get the last preset No. you listened to by pressing one of the Presets buttons.

#### Changing preset No.

Press Preset Up or Down to the required preset No. Short presses will step the No. one at a time. Continuously depressing Preset Up/Down, the preset No. will increment/ decrement. By pressing Preset Up when the No. is 16 the preset will change to 1, and by pressing Down when No. 1 is shown the preset will change to 16.



The stored stations will remain in the memory for approximately one week after the tuner has been switched off.

#### To store a station:

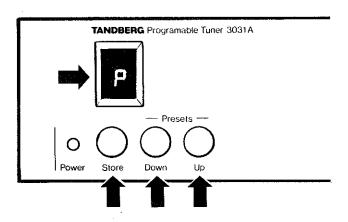
- Search to the required station by pressing Search Up or Down (See Search functions).
- Press Store and a preset No. is displayed.
  If you want to store your station at the displayed preset No., just press Store once more within 8 10 seconds. Then the letter P will be displayed a moment to acknowledge the storing.

Another preset No. is chosen by pressing Preset Up or Down after Store was pressed the first time.

- Choose the required preset No.
- Press Store once more (within 8 10 seconds).
  The letter P for acknowledgement will be displayed a moment, and your station is stored at the chosen preset No.

#### Aborting storing of a station:

- Wait until F is displayed (10 12 seconds)
  or
- Press any other touch button than Store or Preset Up/Down. F will then immediately show on the left display.



#### Transferring presets

Occationally you might want to move a station from one preset No. to another.

- Choose the preset No. you want to transfer from.
   The frequency is shown in the display and you can listen to the program.
- Press Store.
- Choose the new preset No. The program on the preset No. you want to transfer from is not changed.
- Press Store. The letter P is shown a moment to acknowledge the storing. You have now copied your station to another preset No.

#### Mono - Mute

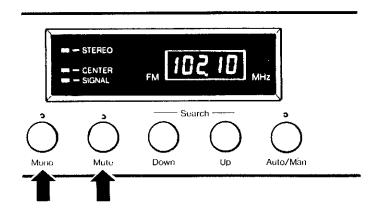
#### Mono

 Press Mono for mono reproduction of programs. The Mono LED goes on and the tuner is set to mono. In stereo mode the LED is off.

#### Mute

The muting circuit blocks weak signals and thereby ensures noise-free tuning.

Press Mute for mute function.
 Weak stations below the muting threshold will not be presented.



#### Remote control

The Master Remote Control RC 3000 is designed to operate many different units in the Tandberg series 3000.

Make sure the batteries are correctly inserted.

NOTE! For longer periods of absence, we recommend removing the batteries. Worn out batteries should be removed immediately. Leakage from the batteries might damage the electronics.

Point the remote control at the unit during operation. Maximum range, 10 to 14 metres, is achieved when there is a clear line of sight between the remote control and the unit you wish to control.

The RC 3000 can control the following units:

 Receiver, Tuner, Cassette deck, CD player, Tape deck and preamplifier.

#### Remote control functions

To control the functions on the tuner the Tuner button must be pressed first. When the Tuner button is pressed you have access to all functions without pressing the system button each time. To leave the Tuner control system you must press any one of the other system buttons (Receiver, Cass etc.).

#### **Presets**

From the key board you have access to the already stored presets in the tuner. The preset number (up to 16) can be chosen as follows:

Press the required preset No. directly.
 The number "0" can not be set as the first preset No. you enter.

 If the required preset No. is from 10 to 16, you must press the last number button within a few seconds. Otherwise the receiver will only accept the first number, and give you the station on preset No. 1.

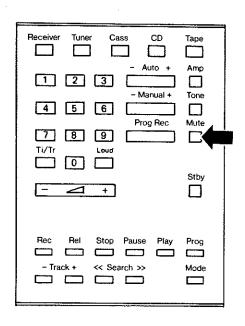
To avoid ruining the stored presets with the remote control, the storing can only be performed directly on the tuner.

#### Tuner Cass CD Tape Auto + Amp Manual + Tone 4 5 6 Prog Rec Mute 8 9 \*\*\* Stbv Rel Stop Pause Ptay Prog - Track + << Search >> Mode

#### Mute

The muting circuit blocks weak signals and ensures noise free tuning.

Press the Mute button for mute function.
 Weak stations below the muting threshold will not be presented.



#### Search functions

Both auto and manual search are possible from the remote control.

#### Auto search

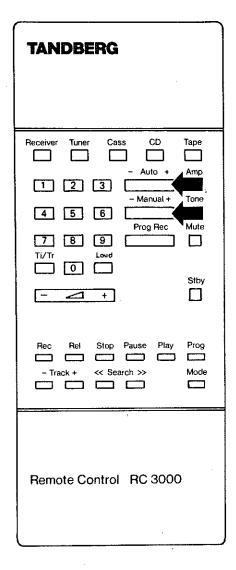
Press the Auto button (+ or — side) and the receiver goes directly into automatic searching independently of the position of the Auto/Man function on the receiver, and the Auto/Man LED will be switched on. The receiver is now searching for the nearest station (with a strong enough signal) and stops. If you want another station just press the + or — side on the Auto button once more or until you have found the required station.

For further information read chapter Auto search on page 10.

#### Manual search

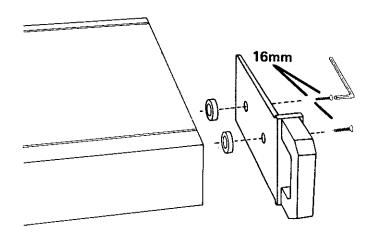
Press the Manual button (+ or — side) to start searching for the required station. The manual searching will start independently of the position of the Auto/Man function and the Auto/Man LED is switched off. By giving the + or — side of the Manual button short presses, the receiver will search in 50 kHz steps (100 kHz steps for USA). By depressing the + or — side of the Manual button the searching is at first slow and after a short time the searching will be fast. (See the frequency counter display on the receiver).

For further information read chapter Manual search on page 10.



#### Accessories (extras)

#### Mounting the 19"-rack mount kit (extra)

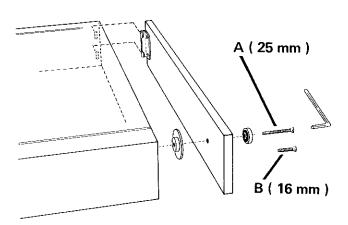


### Mounting the side panels (extra)

#### NOTE!

When fitting extra side panels you must use the long screws (A) which are supplied.

Take care of the short screws (B) originally used to hold the side panels because you will need them if you remove the extra side panels. The long screws must not be used without the extra side panels because they can cause damage inside the tuner.



### Technical Data

### Tandberg Programable Tuner TPT 3031A

Power requirements:

110 - 115 V/220 - 230 V/240 V ± 10 %, 50/60 Hz

Power consumption:

23 W

Dimensions:

Width: 17 1/8 " (43.5 cm) Depth: 13 3/4" (35.0 cm) Height: 3 1/4" ( 8.3 cm) Weight: 10.7 lbs (4.85 kg)

Technical Data according to IHF-T-200, 1975 IEEE Std. 185, 1975

Tuning range:		87.5 - 108 MHz ·
Usable sensitivity:	Mono	1 uV/75 ohm
50 dB aujeting sensitivity:	Mono	2 uV/75 ohm
	Stereo	20.0 uV/75 ohm
Signal-to-noise ratio:	Mono	78 dB
0.3	Stereo	75 dB
Muting threshold:		10 uV/75 ohm
Muting hysteresis:		6 dB
Stereo threshold:		1 uV/75 ohm
Frequency response (30 Hz to 15 kHz):	Mono	+ 0.5 dB — 1 dB
	Stereo	+ 0,5 dB — 1 dB
Distortion at 50 dB quieting:	Stereo	0.3%
Distortion at 65 dBf		
(0,5 mV/75 ohm at 1 kHz):	Mono	0.15%
• • • • • • • • • • • • • • • • • • • •	Stereo	0,15%
Distortion at 65 dBf (30 Hz to 15 kHz):	Stereo	0.4%
Intermodulation distortion:	Mono	0.2%
	Stereo	0.2%
Capture ratio, selectively measured:		1.0 dB
Adjacent channel selectivity ± 200 kHz:		8 dB
Alternate channel selectivity ± 400 kHz:		> 75 dB
Spurious response ratio:		>95 dB
I mage response ratio, balanced:		> 100 dB
RF intermodulation:		> 70 dB > 70 dB
AM suppression ratio:		> 70 db > 45 dB
Stereo separation (60 Hz to 10 kHz, selectively measured):		70 dB
Subcarrier product ratio:		70 dB
19 kHz suppression:		100 dB
38 kHz suppression:		20 dBf
Center LED on:		30 dBf
Signal LED on:		30 db,

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. We responsibility is assumed for defects in the unit's firmware.

We shall have no liability or responsibility to customer of any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by equipment sold or furnished by us, including, but not limited to, any interruption of service, loss of business or anticipatory profits or consequential damages resulting from the use or operation of the equipment or software,

