

T-Series Tuner

Owners' Manual

INTRODUCTION

Congratulations on purchasing this Cambridge Audio T-Series Superheterodyne Tuner. It has been custom designed to deliver maximum listening pleasure together with an unrivalled ease of use that will provide you with many years of exciting and trouble free listening. Expect a warm reception!

The T-Series has been developed as a result of the increased demand for affordable, high quality, full facility tuners and is dedicated for use with the finest output components. Unlike most similarly priced tuners, and even those costing much more, the T-Series has been built without compromise in terms of component quality and construction.

Because of the introduction of numerous new radio stations to the airwaves the vast majority of today's tuners suffer from the interference breakthrough of other radio frequencies. In order to minimise this reduction in sound quality the performance of a tuner is often compromised. To combat this dilemma the T-Series utilises double Superheterodyne technology. This effectively rejects all but the required signal, allowing the sonically critical stages to be optimised. As a result, a crisp, clear and atmospheric soundstage is achieved with all types of music.

We have worked hard to ensure that your T-Series Tuner is remarkably simple to use, however below the sturdy exterior there is an array of technical wizardry. The T-Series offers a choice of three wavebands, coupled with the ability to memorise up to 29 of your favourite stations in FM and MW (AM for US version) and 6 in LW. A custom designed rotary control knob offers easy selection of preset stations together with the precision required for accurately tuning weak signalled stations. The sophisticated auto tuning facility automatically searches through a waveband for your desired station. Further features include a ten bar signal strength indicator and a central tuning facility that 'locks on' to the optimum signal for crystal clear reception.

Close attention has also been paid to those audiophile features that are a rarity in today's tuner design and manufacture. Included is the latest 'blend' circuitry which automatically adjusts stereo separation, resulting in a reception quality with the least amount of background noise. A multipathing warning indicator will also let you know that multiple signals of the same station are

being received, thus enabling you to adjust the frequency and locate a stronger transmission.

To gain the greatest musical rewards from this equipment we would encourage you to use other high quality components and revealing loudspeakers. We particularly recommend amplification from the Cambridge Audio range, all of which has been designed to the same exacting standards as your T-Series Tuner. Although your Tuner is a very sensitive piece of equipment we would also strongly recommend that you use an external roof-mounted aerial to maximise performance.

Interconnects are also something that shouldn't be forgotten. Please do not compromise your system's performance by using poor quality interconnect cables to connect this tuner to your amplifier, after all, a system is only as good as its weakest link. For this reason we do not include cheap "freebie" cables in the box. Your dealer can supply quality Cambridge Audio interconnects that will ensure your whole system realises its full potential.

Now we invite you to sit back, relax and enjoy!

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SAFETY PRECAUTIONS

CHECKING THE POWER SUPPLY SETTING

For your own safety please read the following instructions carefully before attempting to connect this unit to the mains.

- Check that the rear of your unit indicates the correct supply voltage.
- If your mains supply voltage is different, consult your dealer.

This unit is designed to operate only on the supply voltage and type that is indicated on the rear panel of the unit. Connecting to other power sources may damage the unit.

SAFETY PRECAUTIONS

This equipment must be switched off when not in use and must not be used unless correctly earthed. To reduce the risk of electric shock, do not remove the unit's cover (or back). There are no user serviceable parts inside. Refer servicing to qualified service personnel. If the power cord is fitted with a moulded mains plug the unit must not be used if the plastic fuse carrier is not in place. Should you lose the fuse carrier the correct part must be reordered from your Cambridge Audio dealer.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the service literature relevant to this appliance.

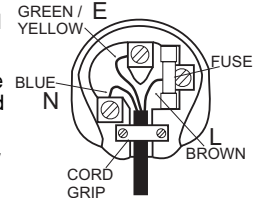


This product complies with European Low Voltage (73/23/EEC) and Electromagnetic Compatibility (89/336/EEC) Directives when used according to this instruction manual. For continued compliance only Cambridge Audio accessories should be used with this product and servicing must be referred to qualified service personnel

PLUG FITTING INSTRUCTIONS (UK ONLY)

The cord supplied with this appliance is factory fitted with a 13A mains plug fitted with a 3A fuse inside. If it is necessary to change the fuse, it is important that a 3A one is used. If the plug needs to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug must then be disposed of safely, as insertion into a 13A socket is likely to cause an electrical hazard. Should it be necessary to fit a 3-pin BS mains plug to the power cord the wires should be fitted as shown in this diagram. The colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug. Connect them as follows:-

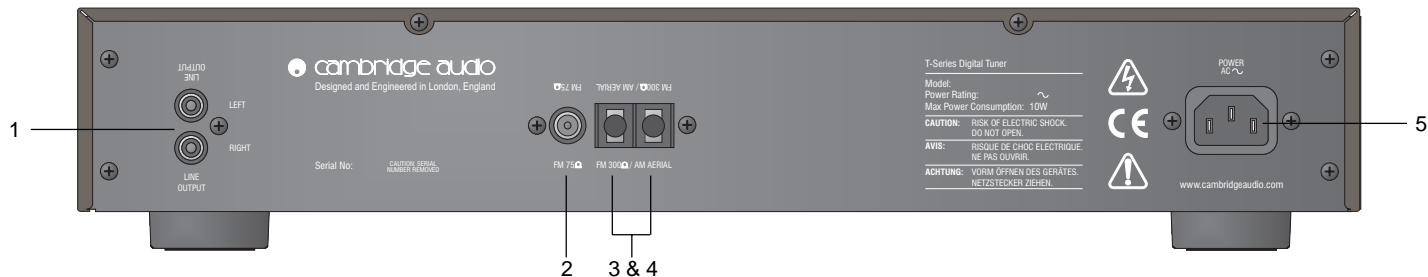
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter 'N' or coloured BLACK.
- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter 'L' or coloured RED.
- The wire which is coloured GREEN/YELLOW must be connected to the terminal which is marked with the letter 'E' or coloured GREEN.



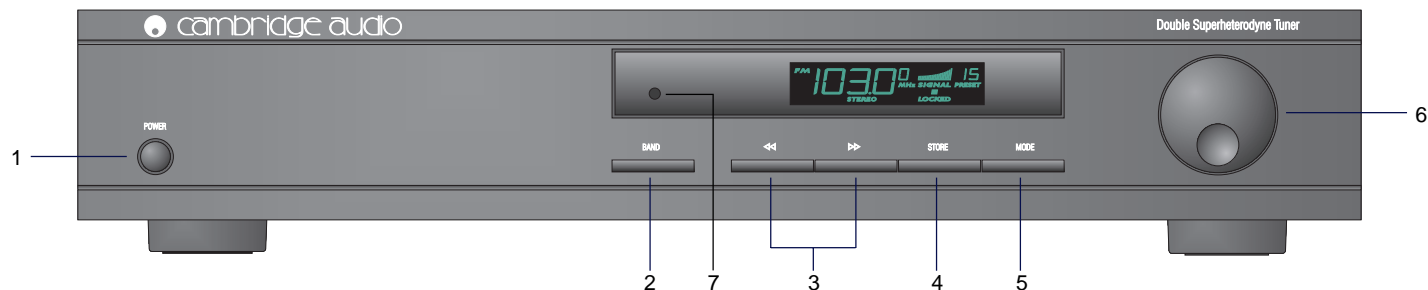
NOTE: If your model does not have an earth wire, then disregard this instruction.

If a 13 Amp (BS 1363) plug is used, a 3 Amp fuse must be fitted, or if any other type of plug is used a 3 Amp or 5 Amp fuse must be fitted, either in the plug or adaptor, or on the distribution board.

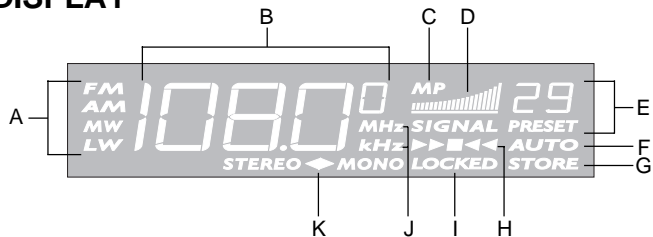
REAR PANEL



FRONT PANEL



DISPLAY



- | | |
|------------------------------|--------------------------------|
| A. BAND INDICATOR | G. STORE STATION INDICATOR |
| B. FREQUENCY INDICATOR | H. CENTRE TUNING INDICATOR |
| C. MULTIPATH INDICATOR | I. STATION LOCKED INDICATOR |
| D. SIGNAL STRENGTH INDICATOR | J. KILOHERTZ / MEGAHERTZ |
| E. PRESET STATION DISPLAY | K. STEREO/MONO/BLEND INDICATOR |
| F. AUTOMATIC SCAN INDICATOR | |

INSTALLATION

Your T-Series Tuner should be placed on a stable, level surface. Avoid placing the unit in direct sunlight, near damp or heat sources and in poorly ventilated areas.

Never allow the tuner to come into contact with water or other liquids. If this occurs then switch it off immediately, disconnect from the mains supply and contact your dealer for advice.

Do not route the power cable in a position where it can be walked upon or damaged by other items near it.

To clean the tuner switch off and remove the mains plug from the supply and wipe the case with a slightly moist lint-free cloth. Do not use any cleaning fluids containing alcohol, ammonia or abrasives. Do not spray an aerosol at it or nearby.

This equipment is not user serviceable. Do not open the case. In the event of a problem or failure, please contact your dealer.

Some CD players, other digital equipment and amplifiers with large power transformers can affect the performance of this product. If this occurs position your tuner away from products that create interference.

REAR PANEL CONNECTIONS

1. PHONO OUTPUT SOCKETS

Connect the conventional 'left' and 'right' (L and R) Audio Outputs to any input on your amplifier except 'phono' or 'turntable' using a high quality interconnection cable.

2. FM OUTDOOR ANTENNA

We strongly recommend that you install an outdoor FM antenna for maximum quality FM reception. This should be connected with a 75 ohm coaxial cable.

3. AM / FM INDOOR AERIAL

The supplied antenna wire is suggested for temporary indoor use only. Connect each end of the single length antenna to the antenna terminals. Place the antenna as far from the main system as possible and position it for optimum reception.

4. AM OUTDOOR ANTENNA

If you receive poor reception through the AM single length indoor antenna, an AM outdoor antenna consisting of a longer single length of wire of similar type to the AM indoor antenna can be used. This is not included in the package with your T-Series Tuner.

5. IEC POWER CORD INLET

After completing the installation and all the connections, make sure that the POWER switch on the front panel of the unit is set to OFF, then plug the supplied mains cable into the mains inlet and the mains plug into your mains supply.

FRONT PANEL CONTROLS

1. POWER BUTTON

Press this button to turn the power on and press again to turn the power off.

2. BAND SELECTION BUTTON

Toggles band selection between FM, MW and LW (FM and AM for US version).

3. SCAN UP / DOWN

Push button to automatically scan between each usable station.

4. STORE

Allows you to store the frequency of any preset station in the memory of your T-Series Tuner.

5. MODE

Toggles control of the rotary control knob between preset selection and manual tuning

6. ROTARY CONTROL

Selects preset stations or tunes up/down frequency range.

7. REMOTE SENSOR

Some T-Series Tuners are fitted with a remote ready facility and a remote handset is available from your Cambridge Audio dealer.

OPERATION

RECEIVING BROADCASTS

This section describes various ways in which to receive radio broadcasts. Before attempting these operations be sure to connect the necessary AM or FM aerials.

1. Press the **POWER** button to turn on the tuner.
2. Press **BAND** to select either FM, MW or LW (FM or AM for US version).

MANUAL TUNING

To manually tune to a station that you know the frequency of:-

1. Press **MODE** on the front panel so that the preset indicator is off.
2. Turn the **ROTARY CONTROL KNOB** clockwise to tune higher frequencies or anti-clockwise to tune lower frequencies. As you approach the desired station the **CENTRE TUNING INDICATOR** will help you to obtain the station's best performance. An arrow head pointing to the left or right shows the correct way to turn the rotary control knob to obtain the exact tuning of the station. When correctly tuned the arrows disappear to be replaced by a single block. The **LOCKED** indicator will also illuminate indicating optimum tuning.

The **LOCKED** indicator may not illuminate if the signal is too weak. The signal strength of a station is shown by the number of bars on the **SIGNAL** strength indicator. The greater the signal strength the more bars will be visible. Adjusting the aerial position will maximise the signal strength.

AUTO TUNING

To automatically search a waveband for stations:-

Press the **SCAN >>** to tune up or **<<** to tune down the frequency band.

When the tuner finds a station of sufficient strength the automatic tuning will stop at that station and the **LOCKED** indicator will illuminate.

If the station where tuning stops is not desired press the **SCAN** button again until the station you require is found.

STORING STATIONS IN THE PRESET MEMORY

The T-Series Tuner can memorise up to 29 of your favourite stations on FM and MW (AM for US version) and 6 stations on LW.

1. Tune into the required station using either **MANUAL** or **AUTO TUNE**.
2. Press the **STORE** button. The **STORE** indicator will start flashing.
3. Turn the **ROTARY CONTROL KNOB** until the desired preset location number is reached.
4. Hold down the **STORE** button until the **STORE** indicator stops flashing.

The station will now be stored in the location number displayed on the right hand side of the display. When memorising stations the preset number will automatically advance after each station is memorised.

When memorising a station over a previously used preset number the old station will be erased.

LISTENING TO PRESET STATIONS

1. Press the **MODE** button so that the preset indicator appears.
2. Select the desired preset station by turning the **ROTARY CONTROL KNOB**.

MULTIPATH INDICATOR

Illumination of the **MP** symbol is an indication that the tuner is receiving multiple signals (Multipathing) of the same station which is likely to cause unwanted background noise and distortion. A quality directional antenna will generally overcome this occurrence.

AUTOMATIC BLEND CIRCUITRY

When receiving weak FM stations your T-Series Tuner will automatically adjust stereo separation for reception with the least amount of background noise. When this function is operational the **STEREO** and **MONO** indicators are separated by a small illuminated diamond icon. If the signal is very weak the tuner will switch automatically into **MONO**.

TROUBLE SHOOTING GUIDE

There is no power?

1. Ensure the AC power cord is connected securely.
2. Ensure that the plug is fully inserted into the wall socket and is switched on.
3. Check fuse in the mains plug or adaptor.

There is no sound?

1. Ensure aerials are correctly connected.
2. Check that the interconnects are inserted securely into your amplifier.
3. Ensure the amplifier is switched on and that the correct source is selected.

Unable to tune a station?

1. Check the aerial is correctly connected.
2. Adjust the position of the aerial to gain a stronger signal.
3. Use an external aerial if you are located in a weak signal area.
4. Fine tune the frequency of the desired station to improve the signal.

Unwanted background noise and interference?

1. Reconnect cables that may have been pulled partially out of their sockets.
2. Adjust the position or direction of the aerial.
3. Tune to a station with greater signal strength.
4. Install a good quality external aerial for FM broadcasts.
5. Move the tuner away from a computer, television, large amplifier or other electrical equipment that is likely to produce interference.
6. Switch off your CD player or other closely located digital equipment.

SPECIFICATIONS

FM SECTION

Frequency range		87.0 - 108.0 MHz
Antenna terminals		75 ohm unbalanced
Sensitivity		0.9 μ V (DIN) 1.2 μ V (IHF)
Signal/noise	Mono	77 dB
	Stereo	72 dB
Selectivity		75 dB (\pm 400 kHz)
Frequency response (+0.5, -2.0dB)		20 Hz - 12.5 kHz
Distortion	Mono 1 kHz @ 75 kHz deviation	0.3%
	Stereo 1 kHz @ 67.5 kHz deviation	0.7%
Stereo separation @ 1kHz		40 dB

AM SECTION

MW Frequency range	522 kHz - 1611 kHz
LW Frequency range	153 kHz - 279 kHz
AM Frequency range (US version)	530 kHz - 1710 kHz
Sensitivity MW / LW	18 μ V / 30 μ V
Signal to noise ratio MW / LW	53 dB / 50 dB

GENERAL

Voltage and Power Consumption	as specified on rear panel
Dimensions (mm)	80(h) x 430(w) x 300(d)

Cambridge Audio's policy is one of continuous improvement. It is possible therefore, that specifications and designs may change without prior notice.



For the latest information on Cambridge Audio products visit us at www.cambridgeaudio.com

Made from recyclable material

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