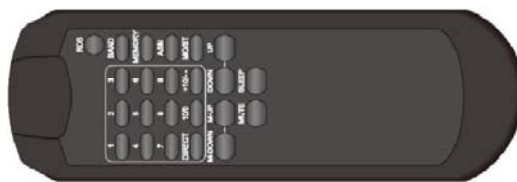


PULSE

AM / FM Tuner + RDS

Model: TU-101



www.pulse-audio.co.uk

Safety Information



The lightning bolt within a triangle is intended to alert the user to the presence of dangerous voltage levels within the product's enclosure.



To reduce the risk of electric shock, do not remove cover of this device. There are no user serviceable parts inside. Refer servicing only to qualified service personnel.



The exclamation point within a triangle is intended to alert the user to important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This voltage may be of sufficient magnitude to constitute an electric shock risk.

Safety Precautions

- Read and retain these instructions.
- Follow all instructions and heed warnings.
- Do not use this device near water or in high humidity areas.
- If the surface becomes dirty, clean only with dry cloth, do not use solvents or thinners.
- Install in accordance with the manufacturer's instructions.
- Do not install near heat sources such as radiators, heat registers, stoves, or other devices that produce heat.
- Do not defeat the safety purpose of the grounded plug. The BS1363A 13A mains plug has two blades and a third ground prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being stressed at the plugs, main socket outlet, and where they exit the tuner.
- Only use accessories specified by the manufacturer.
- Unplug the device during lightning storms or when unused for an extended time.
- Refer all servicing to qualified personnel.
- This device must not be exposed to water in any way. No object filled with liquids should be placed on apparatus.
- Keep unit away from other tuners & TVs as this may cause undesirable interference to these devices.
- For installation, mount unit securely in a 19" rack, or on a solid flat surface.

Pulse 1U 19" AM/FM Tuner with RDS

The PULSE TU-101 is a fully featured, 19" rack mounting professional AM/FM tuner. Designed to provide high quality, reliable performance for all applications including schools, community centres, retail shops and industrial installations.

This unit includes a host of features, along with an impressive list of specifications, which are detailed over the next pages. Please take the time to read this document completely prior to installation of this product. Should you have questions regarding installation or operation of this unit, please contact your Pulse Retailer or Pulse Technical Support.

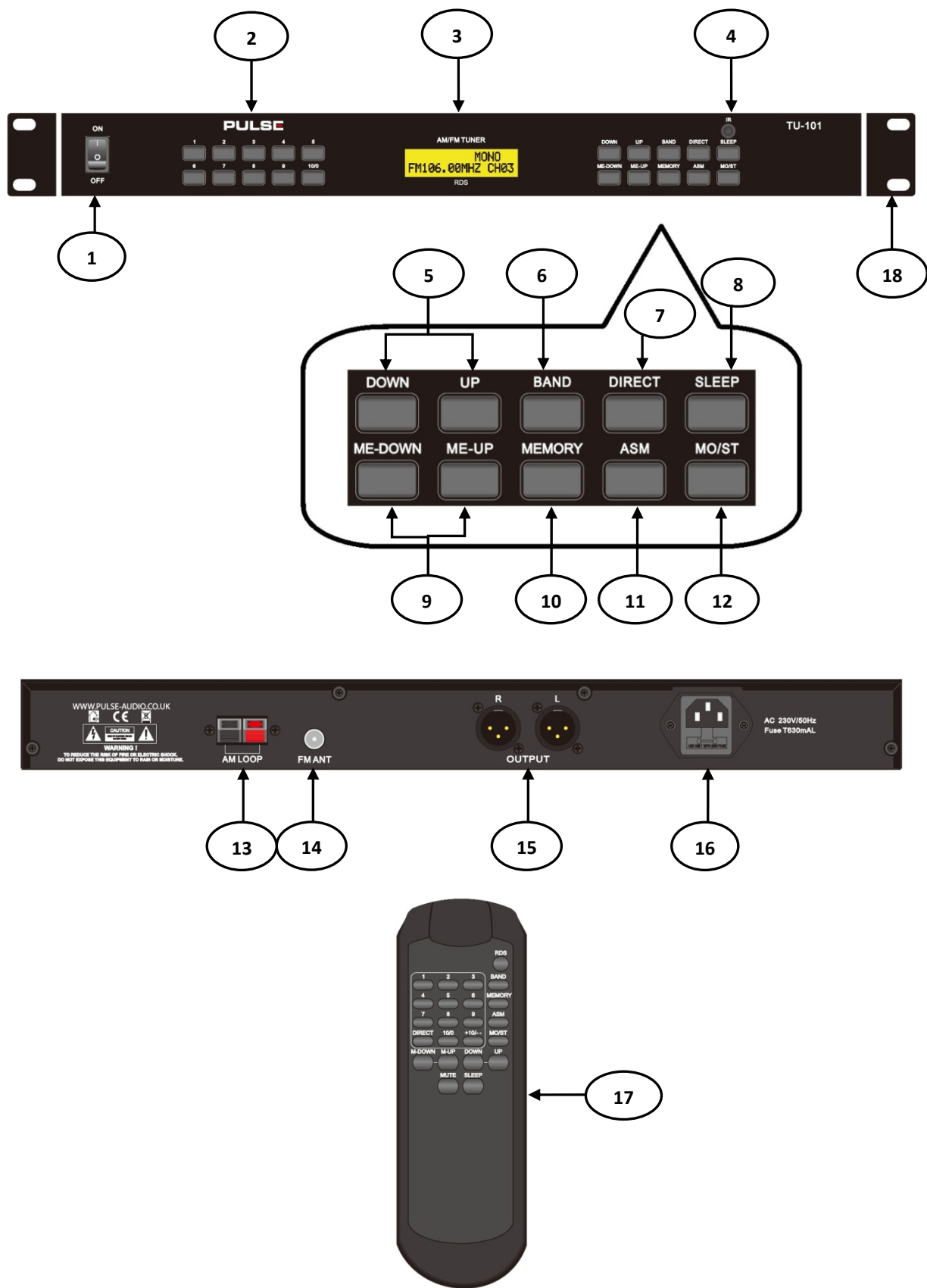
Features

- AM & FM Radio Tuner with RDS
- Auto/manual tuning
- 40 Preset memory (10 AM, 30 FM)
- LCD screen
- Radio station display
- Automatic radio controlled time & date
- Outputs: 2x Balanced XLR (L+R)
- IR remote control (requires 2xAAA batteries)
- 1U 19" Rack mountable with removable rack ears

Included Accessories

- Instruction manual
- IR remote control
- AM Loop antenna
- UK power cable
- Rack ears

Connections & Controls



1. **Power Switch:** Power on/off switch for tuner.
2. **Memory Presets:** Quick access to stored AM/FM radio stations (1-10).
3. **Display:** 2 Row, 32 character LCD display
4. **Remote Sensor:** Infrared sensor for remote control.
5. **Down / Up:** Press to decrease / increase the receiving frequency.
(By increments of:- AM: 0.09KHz - FM: 0.05MHz)
6. **Band:** Changes tuner between AM and FM modes.
7. **Direct:** This function allow you to select a specific radio frequency directly.
8. **Sleep:** This button allows a sleep timer to be set
9. **ME-Down/Up:** Toggles through the stored radio stations.
10. **Memory:** Used to manually set a memory pre-set.
11. **ASM:** Auto Search and Memory function.
12. **MO/ST:** Press this button to change the tuner between Mono and Stereo modes.
(Stereo mode will only be available if the signal is of sufficient strength)
13. **AM Input:** Spring terminals for supplied AM loop antenna. (For weak signal areas it is advised for an external aerial to be connected)
14. **FM Input:** 75Ω FM coaxial antenna input. (For weak signal areas it is advised for an external aerial to be connected)
15. **XLR Outputs:** Balanced audio signal outputs (left and right), for connecting to mixer or amplifier.
16. **Power Input:** IEC socket for supplied power lead.
17. **IR Remote:** Full function IR remote control.
18. **Removable Rack Ears:** Allows unit to be mounted into a 19" rack or removed for stacking.

Extra buttons on remote control:

RDS : Change RDS functions : PS – PTY – RT - CT

+10/-- : Used to advance through the memory pre-sets by +10.

Mute : Press to mute the audio output, press again to resume audio.

Functions & Settings

Change Between AM & FM Modes:

1. To change receiving mode from AM to FM, simply press the **BAND** button.

Tuning In AM Mode:

Auto Tune & Storing.

1. To carry out Auto tuning in AM mode press the **BAND** button so the display shows the tuner is in AM mode.
2. Press and Hold the **ASM** button for 2 seconds. The auto-scan function will search and store all available AM radio stations in the memory presets.
3. Any previously stored AM stations will be replaced when using this mode.

Note: If no stations are stored then the signal is too weak, either reposition the Loop antenna and try again or use an external antenna.

Manual Tuning.

1. To carry out Manual tuning in AM mode press the **BAND** button so the display shows the tuner is in AM mode.
2. Press either the **UP** or **DOWN** buttons to change the AM frequency by 9KHz steps to the desired frequency, or Hold the **UP** or **DOWN** buttons for 2 seconds to skip to the next available radio station.

Direct Tuning.

1. To carry out Direct tuning in AM mode press the **BAND** button so the display shows the tuner is in AM mode.
2. Press the **DIRECT** button (---- will be displayed), use the number keys (1-10/0) to select the desired frequency then press the **DIRECT** button again. (Note: If the frequency selected is outside the tuners range then ERROR will be displayed).

Tuning In FM Mode:

Auto Tune & Storing.

1. To carry out Auto tuning in FM mode press the **BAND** button so the display shows the tuner is in FM mode.
2. Press and Hold the **ASM** button for 2 seconds. The auto-scan function will search and store all available FM radio stations in the memory presets.
3. Any previously stored FM stations will be replaced when using this mode.

Note: If no stations are stored then the signal is too weak, either reposition the Loop antenna and try again or use an external antenna.

Manual Tuning.

1. To carry out Manual tuning in FM mode press the **BAND** button so the display shows the tuner is in FM mode.
2. Press either the **UP or DOWN** buttons to change the FM frequency by 0.05MHz steps to the desired frequency, or Hold the **UP or DOWN** buttons for 2 seconds to skip to the next available radio station.

Direct Tuning.

1. To carry out Direct tuning in FM mode press the **BAND** button so the display shows the tuner is in FM mode.
2. Press the **DIRECT** button (---.-- will be displayed), use the number keys (1-10/0) to select the desired frequency then press the **DIRECT** button again.

(Note: If the frequency selected is outside the tuners range then ERROR will be displayed).

Storing A Memory Pre-Set Manually:

1. Tune into desired AM or FM radio station frequency.
2. Press the **MEMORY** button , a memory preset channel will now be flashing (CH01) on the LCD screen.
3. Use the **UP or DOWN** buttons to select the required Pre-Set location, then press **MEMORY** button again to finalise the selection.

(Note: If the process is left for 5 seconds without finalising, the station will not be stored in the memory location and the process will need to be restarted)

Selecting A Memory Pre-Set:

1. For memory pre-sets in locations 1-10 you can use the number keys to go directly to you stored radio station.
2. Or you can use the **ME-UP or ME-DOWN** buttons to skip through each memory location.
3. For FM mode only, you can skip by 10 memory locations by using the **+10/--** button on the remote control.

Setting a Sleep Timer:

1. Press the **SLEEP** button, this button allows a sleep timer to be set.
2. Select from one of the pre-set sleep times.

90min, 80min, 70min, 60min, 50min, 40min, 30min, 20min, 10min

3. Once the desired sleep time is selected the display will show how many minutes are left until the tuner automatically goes into sleep mode.
4. To exit sleep mode press the **SLEEP** button until no time is displayed.

Extra Remote Control Functions

RDS Modes:

1. The **RDS** button on the remote allows you to display the following data feeds on the LCD if available.
2. PS – Programme Service (Station identity name).
PTY – Programme Type (Genre style of programme. News, Drama, Rock, Varied).
RT – Radio Text (Static or scrolling programme text).
CT – Clock Time.

MUTE:

1. The **MUTE** button can be used to turn off the audio output signal from the tuner to the connected mixer or amplifier.
2. Press the **MUTE** button to turn off the audio signal (MUTE will be displayed).
3. Press the **MUTE** button again to resume the audio signal to the connected mixer or amplifier.

Technical Information

- AM Input: Spring terminals for Loop antenna
- FM Input: Coaxial for 75 Ohm Unbalanced antenna
- Outputs: 2x Balanced XLR (L+R)
- Power supply: 230V AC
- Power consumption: 50VA
- Dimensions (WxHxD): 430x44x185mm (excl. rack ears)
- Weight: 2.32kg

AM - Electrical Performance		
Parameter	Value	Unit
AM Tuning Range	522 - 1620	KHz
AM Step Freq.	9	KHz
Sensitivity	52	uV emf

FM - Electrical Performance		
Parameter	Value	Unit
FM Tuning Range	87.5 - 108	MHz
FM Step Freq.	0.05	MHz
Sensitivity	10	uV emf
Audio Stereo Separation	35	dB
Audio Output Voltage	400	mV rms
Audio (S+N)/N	50	dB
Audio THD	0.1	%

Compliance

When this product reaches the end of its life, do not dispose with household waste. See www.recycle-more.co.uk for details of how to dispose of PULSE products in an environmentally sound fashion, or contact PULSE directly via www.pulse-audio.co.uk



Warranty

Pulse products are warranted, by Pulse, against manufacturer defects for a period of one year from the original date of purchase. This warranty is limited to manufacturer defects, in either materials or workmanship. PULSE, or any other worldwide divisions of Premier Farnell PLC, is not responsible for any consequential or inconsequential damage to any other component, structure or the cost of installation or removal of said items. Defective items should be returned to the retailer from whom they were originally purchased.

This warranty will not cover damage due to improper use or items damaged by weather. Batteries are covered by a 90 day warranty from date of purchase.

For questions or specific information regarding warranty replacement or repair, please contact:

PULSE
www.pulse-audio.co.uk