



MODEL TU6/TU6P

DUAL CHANNEL AM/FM TUNER

OWNERS MANUAL

TU6/TU6P

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to understand every detail by familiarising yourself with the controls and features as you read. You will find it easier to install using the relevant sections of this manual as a reference.

We have attempted to explain every feature and operational facet clearly and concisely. Your Perreaux dealer will be happy to assist if you encounter any unforeseen problems.

Read this manual, install your TU6 correctly and realise the sonic significance of your investment in Perreaux.

Perreaux products are designed to provide the utmost in sonic realism and electronic reliability with a functional yet elegant appearance, this reflects the care and craftsmanship applied during all stages of construction.

To maintain the consistently high quality that you expect from us, and we expect from ourselves, Perreaux products are essentially hand-crafted.

We maintain the human link throughout, from design and construction, through to the ultimate test, your music, your system, your ears.

Because we too listen to our products we know that with your Perreaux you will discover many more of the musical secrets we strive to reveal.

NOTE: At initial turn - on (i.e. for the first time) the Mute Off / Mono function is selected by the TU6. To select stereo operation, push the Mute Off / Mono button once at initial installation. This set-up will not have to be repeated unless the TU6 mains supply is interrupted for more than a week or so

INTRODUCTION

Congratulations on your PERREAUX Model TU6 purchase. To realise the full potential of your Perreaux TU6 you need to appreciate all aspects of its operation.

Before installing the TU6 into your system, read the entire manual carefully. Endeavour

N.B. All references to Model TU6 are also applicable to Model TU6 'P' series

Great care should be taken to avoid the use of solvents for cleaning particularly on Classic series products . Use only a

soft cleaning cloth with a mild solution of detergent if necessary.

CONTENTS

Safety Instructions	2
Important Information	2
Product supplied without mains plug	2,3
Remote Controller	3
Front Panel Display & Controls	3,4
- Standby Button	
- Tuning	
- Digital Display	
- Mute Off / Mono Button	
- Memory Button	
- Band	
- Remote Sensor Window	
Rear Panel Connections/Labels	4, 5
- Serial Number Label	
- Mains Line Voltage Label	
- FM Antenna Socket	
- AM/Ground Antenna Sockets	
- Left/Right Output Sockets	
- AC Power Cord	
Installation and Operation Procedures	5
Installation and Operation Precautions	5,6
Mains/Line Voltage Change	6
Mains/Line Fuse	6
Specifications	7

SAFETY INSTRUCTIONS

1. Read Instructions

All safety and operational instructions should be read before the TU6 is operated. Keep the Owners Manual in a safe place for future reference.

2. Follow Instructions

All installation, operation and other instructions should be followed.

3. Warnings

All warnings on the TU6 and in the Owners Manual should be strictly adhered to.

4. Water and Moisture

The TU6 should not be used near water, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc.

5. Rack / Wall / Ceiling Mounting

The TU6 should be rack mounted only in a heavy duty rack or stand that is recommended for audio equipment use. Mounting to a wall or ceiling should be via a heavy duty bracket or shelf designed for audio equipment use.

6. Heat

The TU6 should be situated away from heat sources such as radiators, stoves, or other appliances that produce excessive amounts of heat.

7. Power Sources

The TU6 should be connected to a mains power supply only of the type described in the operating instructions, or as marked on the rear of the TU6.

8. Power Cord Protection

The mains power supply cord should be routed so that it is not likely to be walked on or pinched by items placed on or

against it. Pay particular attention to the cord at power points, convenience receptacles, and the point where it exits from the TU6.

9. Cleaning

When cleaning any Perreux product use luke warm water with a few drops of a mild detergent.
DO NOT USE SOLVENTS.

10. Non-use Periods

The mains power cord of the TU6 should be unplugged from the mains/line outlet when the unit is to be left unused for long periods of time.

11. Object and Liquid Entry

Care should be taken so that objects and/or liquids do not accidentally fall inside the TU6.

12. Damage Requiring Service

The TU6 should be serviced by qualified service personnel if any of the following occur :

- a. The mains power-supply cord, and/or plug have been damaged
- b. Objects have fallen, or liquid has been spilt into the TU6
- c. The TU6 has been exposed to rain and/or excessive moisture
- d. The TU6 does not appear to operate normally, or exhibits a marked change in performance
- e. The TU6 has been dropped, or the chassis damaged.

13. Servicing

The user should not attempt to service the TU6 beyond those means described in the owners manual. All other servicing

should be referred to qualified service personnel.

IMPORTANT INFORMATION

Always make sure the volume control of your preamplifier or source unit is set to zero and the mains/line supply disconnected from your TU6 prior to performing any switching functions or connection alterations of any type to your TU6 (other than tuning, pre-setting of stations etc. during which volume should be at a low level) or to any other part of your entire system. This caution also applies to the normal use of your Compact Disc player, Cassette Deck, etc.

PRODUCT SUPPLIED WITHOUT MAINS PLUG

If your unit comes with a 2 or 3-core cable but without a plug, make certain LIVE and NEUTRAL leads are connected correctly to your plug terminals.

IMPORTANT :The wires of the mains/line lead in this unit are coloured in accordance with the following code :

BROWN	LIVE
BLUE	NEUTRAL
GREEN / YELLOW	EARTH

As the wire colours in the mains lead of this unit may not correspond exactly with those coloured markings on the terminals of your plug please note the following:

- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N, or colour coded BLUE or BLACK.

- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter P or L, or colour coded BROWN or RED.
- The wire which is coloured GREEN / YELLOW must be connected to the terminal which is marked with the letter E or Earth Symbol or colour coded GREEN.

NOTE: Wiring of mains plugs should only be undertaken by a registered technician

REMOTE CONTROLLER

The TU6 is primarily designed for operation utilising the supplied 29 button Universal infra-red remote controller. Preparing the controller for operation only requires removal of the battery housing on the back of the controller and installing the 2x AAA batteries provided.

Control of the TU6 is achieved via 17 buttons either coloured blue or labelled blue to the right of the button.

Note: Press the blue button labelled 'TU' to engage the TUNER code-set

The following is a list of the remote controller buttons and description of their functions: Also Refer FRONT PANEL DISPLAY & CONTROLS below.

STANDBY (Top right button)

The power or stand-by control button is located both on the remote control and front panel. Depressing this control alternately enables stand-by mode or normal operate mode. When switching from stand-by to normal operation the display on the front

panel will illuminate after approximately 2 - 3 seconds.

NOTE: The POWER indicator light located above the front panel power button will always be illuminated when the TU6 is receiving power from an AC power outlet. The stand-by mode will only operate if this light is illuminated

BAND (Located on the white button labelled RND)

The Band button is located both on the front panel and remote controller. Depressing this control alternately switches between AM and FM bands

TUNE + UP (located on the white CD next track button)

TUNE - DOWN (located on the white CD previous track button)

Tuning control buttons are located on both the remote control and front panel. These controls allow for manual search of AM and FM frequencies, up or down the band for suitable stations or auto search up or down if this option is selected (see AUTO TUNING below)

AUTO TUNING (Located on the white CD A=B button)

The auto tuning or scan button is located only on the remote controller and is enabled or disabled by repeated selection of this button. When auto tuning is selected 'AUTO' is illuminated on the front panel display. Auto tuning operates with the tuning up / down buttons enabling the tuner to scan for suitably strong stations up or down the selected AM or FM band. When a signal is sensed the tuner will lock-on allowing the user to either pre-set the station via a memory setting or continue searching by repeated use of the

tune up / down buttons. This feature is particularly useful when pre-setting memory channels or for surfing the selected band.

**DIRECT STATION PRESET
BUTTONS 1 - 10 10+** (White numbered buttons)

The Channel Preset buttons are labelled 1 to 10 with an additional button marked 10+ and are located on the remote controller only. These buttons allow direct selection of pre-programmed station channel pre-sets and are also used in the initial station pre-setting procedure (see MEMORY section in applicable manual). For selection of channels 1 through 10 simply point the remote towards the tuner front panel and depress the channel number required. For channels 11 through 20 depress the 10+ button then release it. Then depress the number of the second digit of your required selection i.e. if channel number 15 is required depress the 5 after depressing and releasing the 10+ button at which time the display will indicate 'CH15'.

Note: do not push both the 10+ and 5 buttons together as no signal will be sent.

FRONT PANEL DISPLAY & CONTROLS

Whilst the TU6 is primarily designed for operation utilising the supplied remote controller, there are however some basic and seldom used controls on the front panel - the following is a list of the front panel controls provided and description of their functions: (Also Refer REMOTE CONTROLLER sections above).

- STANDBY BUTTON

The power or standby control button is located both on the remote control and front panel. For a description of its operation refer

to STANDBY BUTTON in the REMOTE CONTROLLER section above .

NOTE: The POWER indicator light located above the front panel power button will always be illuminated when the TU6 is receiving power from an AC power outlet. The standby mode will only operate if this light is illuminated.

- TUNING ∨ (Down) ∧ (Up) Buttons

Tuning control buttons are located on both the remote control and front panel. For a description of their operation refer to TUNING in the REMOTE CONTROLLER section above (see also AUTO TUNING above).

- DIGITAL DISPLAY

The fluorescent display is located on the front panel of the TU6 and indicates the following:

Frequency band (AM or FM)

Frequency -MHz for FM - kHz for AM

Auto (If auto tune function is selected)

Memory (If memory function is selected)

Stereo (if receiving a stereo broadcast)

Tuned (if tuned to a station)

Ch— (# of a memorised station pre-set)

- MUTE OFF / MONO BUTTON

The Mute Off / Mono control button is not replicated on the remote control. It is designed to enable the TU6 to receive weak signal strength stations. Operation of this mode will defeat the muting circuitry and produce a mono output signal. (The muting circuitry employed in the TU6 is designed to remove unwanted hiss and spurious noise).

NOTE: At initial turn - on (i.e. for the first time) the Mute Off / Mono function is selected. To select stereo operation, push the Mute Off / Mono button once at initial

installation. This set-up will not have to be repeated except if the TU6 mains supply is interrupted for more than a week or so.

- BAND

The Band button is located both on the front panel and remote controller. Depressing this control alternately causes the TU6 to switch between AM and FM bands

- MEMORY BUTTON

The Memory control button is not replicated on the remote control however this control in conjunction with the remote controller enables pre-setting of up to 20 AM or FM stations, directly accessible from the remote control. The instructions for setting up pre-set stations are as follows -

a) Select the band AM or FM you wish to select a radio station from.

b) Select a station you wish to pre-set using the tuning buttons on the remote control or front panel in either manual or auto tuning modes.

c) Decide which channel (pre-set) number to assign to the station (We will use channel 11 for this example).

d) With the remote in one hand, push the Memory button on the TU6 front panel at which time the Memory light will illuminate.

e) Point the remote at the TU6 front panel and depress the 10+ button then release it. Then depress the number 1 button and release it at which time the display will indicate 'CH11' and the 'MEMORY' light will extinguish - CH11 is now pre-set.

Note: do not push both the 10+ and 1 buttons together as no signal will be sent .

f) To pre-set further channels repeat as above.

NOTE: The Memory light will extinguish after approximately 5 seconds if no pre-set channel number request is received from the remote control. If you have been too slow setting the pre-set channel number simply press the Memory button again and re-select the channel number required.

- REMOTE SENSOR WINDOW

This window is located to the right of the front panel indicator panel and houses the remote sensor. Ensure this area is not covered in any way as this may inhibit the remote controls performance

REAR PANEL CONNECTIONS / LABELS

The following user connections and labels are situated on the rear panel of the TU6 - Please ensure all warnings are read, noted and adhered to.

- SERIAL NUMBER LABEL

All Perreaux units are allocated a unique serial number which are recorded at the factory against build details. If you should require information about your unit, providing the serial number will help achieve a prompt reply. Keep a copy of all your serial numbers in a safe place. The ability to identify and prove ownership can be very useful.

- MAINS/LINE VOLTAGE LABEL

The voltage label indicates the mains/line voltage the unit will accept. Always check this setting when first installing your TU6. A variance of +/- 5% above or below that voltage indicated is acceptable. Contact your

Perreux dealer for any voltage adjustment and updating of this label.

- FM ANTENNA SOCKET

This socket is for the connection of the FM antenna provided. The antenna should be extended and positioned for the best reception however it should be noted that superior performance will be achieved using a professionally installed outdoor antenna.

NOTE: Outdoor antenna's can be dangerous if incorrectly installed and through incorrect earthing - we recommend using the services of a registered contractor for outdoor antenna installation.

- AM / GROUND ANTENNA SOCKETS

These sockets are for the connection of the AM loop antenna provided. Again this antenna should be positioned for the best reception. A mounting clip is provided on the rear panel to hold this antenna. It should be noted that the inherent performance of AM signal broadcasts is not of high fidelity and can be noisy, hence the reason for the popularity of FM broadcasts.

- LEFT / RIGHT OUTPUT SOCKETS

These are high quality gold plated RCA type sockets for the connection of the TU6 to a pre or integrated amplifiers TUNER input. When connecting the TU6 to auxiliary equipment terminate the interconnect cables with a red plug for the right channel and white, black or blue for the left channel. These are the most commonly accepted colour coding combinations in use internationally to help maintain channel and phase integrity i.e. left to left, right to right, positive to positive, and negative to negative.

An initial set of interconnects is provided however we recommend substituting higher

quality cables at your earliest convenience for improved fidelity.

- MAINS/LINE INPUT RECEPTACLE

This receptacle accepts the female end of the mains power cord. For more information regarding MAINS/LINE VOLTAGE and connection see the relevant sections.

INSTALLATION / OPERATION PROCEDURES

The Perreux Tuner employs a quartz PLL synthesiser for easy and accurate tuning. Tuning frequency is visible on the digital display, and you can tune in to the desired station very accurately. With the units memory circuit, you can pre-set memory tuning, letting you recall a stored station frequency instantly with a single tap of a button.

One station can store one AM or one FM station in its memory; a total of 20 AM or FM stations can be stored.

The power source of the TU6's memory circuit is a capacitor back-up type. The electrical energy accumulated in the capacitor while the unit was switched ON will retain the frequencies stored in the memory circuit for a minimum of seven (7) days.

Before commencing operation, check to make sure all antenna preamplifier and power connections are properly made.

- Set the volume control on the control amplifier to a low position and selection switch to the tuner position.

- Turn on the TU6, the control amplifier and lastly the power amplifier (if applicable).

- Depress the FM or AM Band button on the remote controller to select the band required.

- Tune in to the desired station(See relevant sections TUNING and AUTO TUNING.

- Raise the volume to the desired level and enjoy listening

NOTE: If you have turned off the TU6 and turn it on again, it will tune into the station frequency to which it was tuned immediately before turn-off.

INSTALLATION AND OPERATION PRECAUTIONS

Precautions which should be observed during installation and operation are:

- Leave sufficient clearance between the top of the TU6 and the bottom of equipment above if installed in a rack or stack.

- Always operate in a horizontal position.

- Install away from excessive heat and moisture. Do not allow the ambient temperature around the TU6 to exceed 40° Celsius (105° Fahrenheit.)

- Check the mains/line voltage stated on the rear panel of your .TU6 Supply voltage must be within +/- 5% of the stated voltage.

- Connect all your hi-fi equipment to the same mains/line source to avoid possible earthing problems.

- The protection fuses for the TU6 are internal and not user serviceable.

- Always contact an approved PERREAUX dealer if any changes are noted in performance.

- **Always** ensure the volume control on your control amplifier is set low before making any connection alterations or when changing input sources. The reason for this precaution is to protect your loudspeakers against bursts of very high powered signals from high level sources such as a CD player or whilst tuning the TU6 between stations when high level spurious noise can be present. Situations can arise when playing a low output cassette with a fairly high volume control setting then switching to CD or Tuner where a high level of signal may be present at the source input sockets. The resulting burst of high power may damage your speakers or cause damage in some power amplifiers.

- Make all connections logically and carefully, checking that you are maintaining channel integrity.

- Install your Tuner close enough to your control amplifier to avoid stretching or extending your interconnect leads.

- Keep your interconnect cables and antenna leads away from all mains / line cables and speaker leads.

MAINS/LINE VOLTAGE CHANGE

It is important that the TU6 be operated from the correct mains/line voltage. This unit is factory set for the voltage applicable to the original country of destination. The correct operating voltage is indicated by the voltage label on the rear panel (see section MAINS LINE VOLTAGE LABEL).

The TU6 will operate satisfactorily within a voltage variation of up to +/- 5% of that voltage at which the unit has been set.

If you require the voltage setting to be altered, e.g. relocation to another area, city or country, or extraordinarily high or low voltages, contact your Perreux dealer. This modification can only be performed by qualified service personnel.

NOTE : Always ensure this unit is disconnected from the Mains/Line supply before any covers are removed

Any modifications to the mains/line voltage setting within your Perreux product may only be carried out by a approved Perreux service agent. Failure to recognise this warning will void any warranty.

MAINS/LINE FUSE

The Perreux TU6 is equipped with internal mains/line fuses which are not user serviceable. These fuses do not usually blow without a reason. Any doubts about fuse failure should be conveyed directly to your Perreux dealer.

NOTE: Always ensure your TU6 is disconnected from the mains/line supply if attempting to change the mains/line fuse.

**SPECIFICATIONS
TU6 AM / FM STEREO TUNER**

FM SECTION (75 ohm antenna)

Usable Sensitivity	14.2 dBf (75 ohms)
50 dB Quieting Sensitivity	
Mono	20.2 dBf (75 ohms)
Stereo	45.3 dBf (75 ohms)
Signal to Noise ratio (@ 65 dBf)	
Mono	73 dB
Stereo	70dB
Harmonic Distortion (@ 65 dBf, 1 kHz)	
Mono	0.2%
Stereo	0.3%
Frequency response	10 Hz-15,000 Hz +3.0 dB
Stereo separation (100 Hz / 1 kHz / 10 kHz)	35 dB / 40 dB / 30 dB
Output level	1.0V
Sub carrier product ratio	60 dB
Alternate channel selectivity (\pm 400kHz)	63 dB
Capture ratio	2.0 dB
Spurious response ratio	90 dB
Image response ratio	80 dB
IF response ratio	80 dB
AM suppression ratio	55 dB
Antenna input impedance	75 ohm

AM SECTION (Loop antenna)

Usable Sensitivity	500 μ V/m
Selectivity	25 dB
Signal to Noise ratio	40 dB
Image response ratio	45 dB
IF response ratio	40 dB
AC Voltages	115 volts AC 50/60 Hz 230 volts AC 50/60 Hz
Power Usage	12 watts
Weight	7.5kg (16.5lbs)
Dimensions	482 (w) x 88 (h) x 315(d) mm 19.0" (w) x 3.5" (h) x 12.4" (d)

**PERREAUX INDUSTRIES LIMITED
RESERVES THE RIGHT TO CHANGE
SPECIFICATIONS FOR THE
IMPROVEMENT OF THIS PRODUCT.**

***Designed and Manufactured in
Nuclear Free New Zealand***

***Perreaux Industries Ltd
PO Box 47- 413
Ponsonby
Auckland
NEW ZEALAND***

Tel: +64 9 815 5452
Fax: +64 9 815 5981
E-mail: info@perreaux.com
Website: www.perreaux.com