



www.prolight.co.uk

TP-500

UHF

PLL

Wireless System

Order code: MIC40 Handheld

Order code: MIC41 Headset

USER MANUAL

SAFETY

WARNING

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**



CAUTION!

Keep this equipment away from rain,
moisture and liquids.



SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual



**CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**



Before your initial start-up, please make sure that there is no damage caused during transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.

Please note that damages caused by user modifications to this equipment are not subject to warranty.

SAFETY

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains, when equipment is not in use or before cleaning! Only handle the power-cable by the plug.
- Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable from time to time.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately.
- Pack the unit securely (preferably in the original (packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and electric connection must only be carried out by a qualified technician.

THIS UNIT CONTAINS NO USER SERVICEABLE PARTS

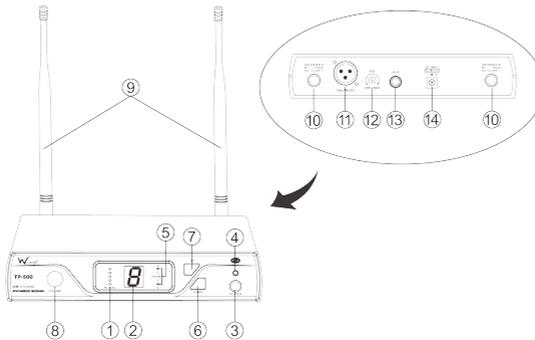
WARRANTY: One year from date of purchase.

Manual Contents

Contents.....	1
Receiver Features.....	2-3
Transmitter Features.....	3-4
System Connections.....	5
Transmitter Connections.....	6
Receiver operations.....	7
Specifications.....	8-10

Receiver features

Single channel Receiver Features:

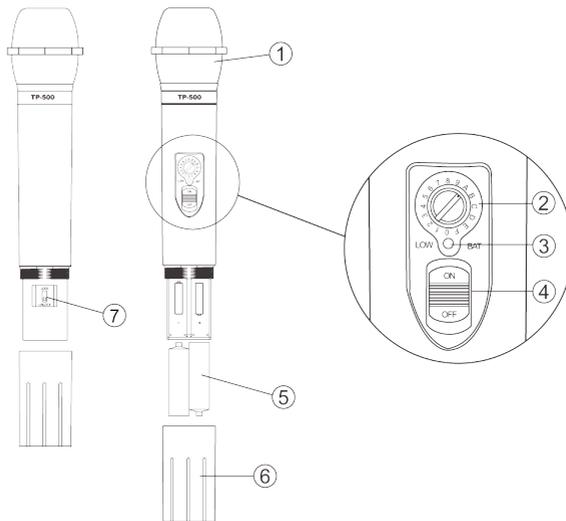


- 1, **AF Level indicators:** Indicates audio signal strength, Green indicates normal operation and Red indicates overload or excessive audio level.
- 2, **Channel Display:** Shows the frequency data of the selected channel group (1-16).
- 3, **Power button:** Turns the receiver ON/OFF
- 4, **Power ON indicator:** This light illuminates when the receiver is connected to a electrical outlet and is switched ON
- 5, **Diversity Signal Indicators:** The diversity A/B indicators illuminate when RF (radio frequency) signals are received from the transmitter. When channel A light is illuminated, channel A is being used and when channel B light is illuminated, channel B is being used.
- 6, **Down Function Button:** Decreases the channel value.
- 7, **Up Function Button:** Increases the channel value.
- 8, **Volume Control Knob:** Rotate the knob to increase or decrease the volume of the receiver output.
- 9, **Antennas:** Supply for the RF receiver.
- 10, **Antenna Input Connectors:** For use with the supplied antenna.
- 11, **XLR Output Connection:** Plug an XLR audio cable from this connector to your audio input.
- 12, **Squelch Control:** Adjust the squelch control setting to emphasize either signal quality or system range. This control is factory pre-set, and normally does not need further adjustment.

Receiver features (cont)

- 13, **1/4" Jack Audio Output Connector (Unbalanced high Z):** An unbalanced audio cable with a 1/4" Jack plug (e.g. a standard guitar cable) can be used between this connector and your audio input.
- 14, **Power input connector:** Connect the AC adaptor to this socket and then plug into a AC electrical outlet. (Please use supplied AC adaptor).

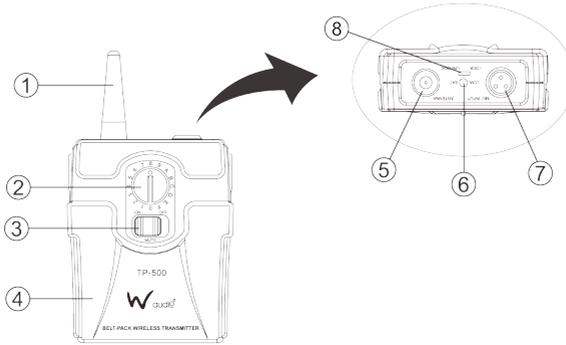
Transmitter Functions & Features:



- 1, **Grill:** Protects the microphone cartridge and helps reduce wind noise.
- 2, **Channel selection control:** Value must match the receiver indicator display.
- 3, **Battery indicator:** Green indicates the battery is normal, Red indicates that the battery should be recharged or replaced.
- 4, **Power switch:** Powers the transmitter ON/OFF.
- 5, **Battery:** 2 x AA (1.5V) alkaline batteries, or NI-MH rechargeable batteries.
- 6, **Battery cover:** Rotate clockwise to close and anti-clockwise to open.
- 7, **Channel Lock Switch:** Use this switch to lock or unlock the selected channel.

Transmitter function & features

Transmitter Functions & Features:

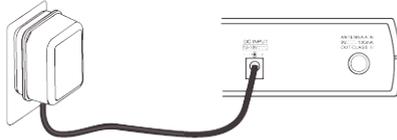


- 1, **Antenna.**
- 2, **Channel selection control:** Value must match the receiver indicator display.
- 3, **Power/Mute switch:** Powers the transmitter ON/OFF.
- 4, **Battery cover:** Slide the back panel downwards to open and change the 2 x AA (1.5V) alkaline batteries, or NI-MH rechargeable batteries.
- 5, **Antenna connector.**
- 6, **Battery indicator:** Illuminates when turned ON/OFF. Red indicates that the battery should be recharged or replaced.
- 7, **Input connector:** Suitable for the lavalier microphones system/headset microphone system and guitar microphone system.
- 8, **Channel Lock Switch:** Use this switch to lock or unlock the selected channel.

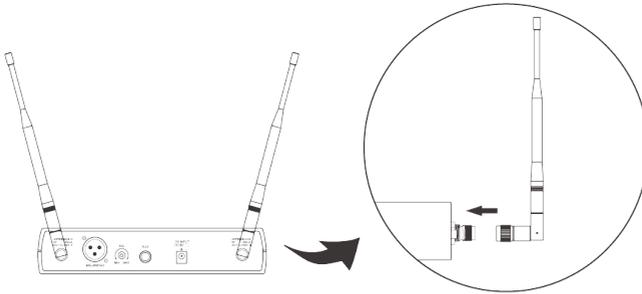
System Connections

System Connections:

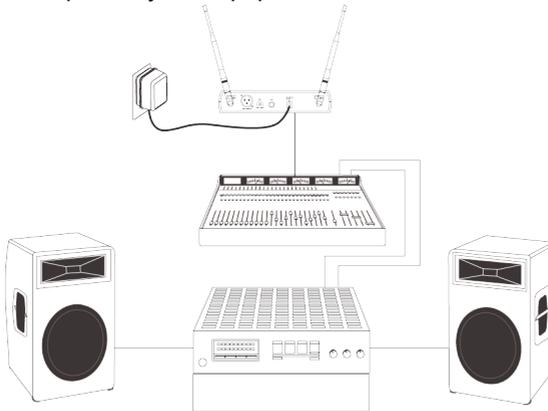
- 1, **Power connection:** Connect the power adaptor into the DC power connector on the back of the receiver. Plug the power adaptor into a 240V – 50Hz outlet.



- 2, **Antenna Connection:** Attach the two antennas to the antenna connectors.



- 3, **Audio Connection:** Connect the audio cable from the audio output on the receiver to the input on your equipment.



Transmitter Connections

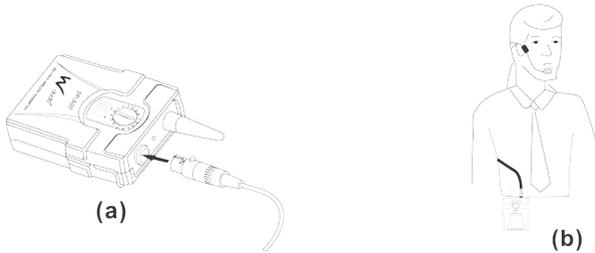
System Connections:

1, Lavalier microphone connection:

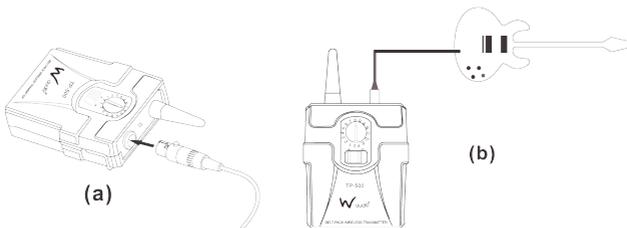


2, Headset microphone connection:

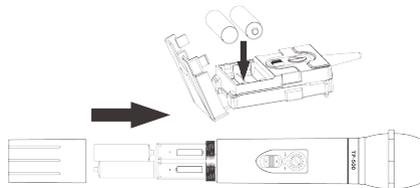
Note: Please ensure that the mic “pop” shield is fitted before use to avoid unwanted noise.



3, Guitar microphone connection:



4, Transmitter battery installation: Open the cover and insert 2 x AA (1.5V) alkaline batteries.



Receiver Operation

Receiver operation (Channel setting)

1, Turn on the receiver:



2, Channel set up: Press and hold the UP button to enter the channel setting mode, the display will flash, then press either the UP or DOWN buttons to enter the channel data.

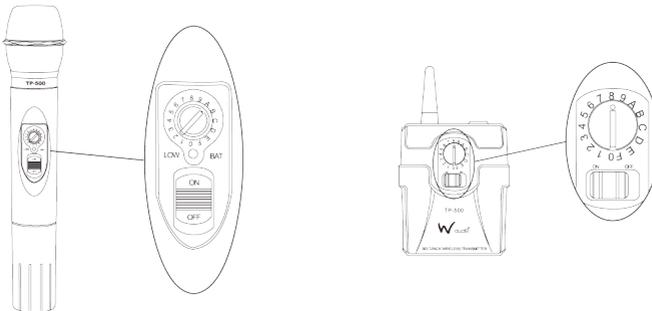
Use the UP and DOWN buttons to select the channel.



NOTE: After channel setting, the receiver's data will be retained until the receiver is reset.

Operation instruction:

Turn on the transmitter.



- 1, Rotate the channel selection knob to match the receiver display
- 2, Push the power switch to the ON position.
- 3, After selecting the desired channel, the lock switch **MUST** be set to the lock position for the settings to take effect.

Specifications

Specifications:

RF Carrier Frequency Range:

460.00MHz to 970.00MHz (Available frequencies depend on the applicable regulations in the country where the system is used)

Effective Range:

100m (300ft) under optimal conditions

NOTE: Actual working range depends on RF signal absorption, reflection and interference from objects and environment.

Audio Frequency Response:

Typically 50Hz to 15,000Hz, ± 3 dB

Body Pack Transmitter Output:

Actual Impedance	50Ω
Nominal Output Level	10mW

Handheld Transmitter Input:

Input Configuration	Unbalanced, Active
Actual Impedance	500 kΩ(GT)

Specifications

Handheld Transmitter Output:

Actual Impedance	50Ω
Nominal Output Level	10mW

Receiver Input:

Connector:	Antenna:	Power Input:
Connector type	TNC	
Actual Impedance	50Ω	
Nominal Input Level	-95 to -30 dBm	14V DC
Maximum Input Level	+6 dBm (-20 dBm recommended)	18V DC
Voltage for remote power	9V DC, 100mA max	

Receiver Output:

Connector:	High Z Audio	Low Z Audio*
Output Configuration	Unbalanced (1/4 in)	Balanced (XLR)
Actual Impedance	3kΩ	600Ω

* Output Level: Microphone Level = Line Level-20dB

Specifications

Receiver Audio output Level (25 KHz deviation, 400Hz tone):

XLR connector (into 600 ohm load): 24mV

¼ inch connector (into 3000 ohm load): 360mV

Impedance: Body pack (input): 500k Ω (GT)

Receiver: 50 ohms antenna level; 3000 ohm at mic level

Modulation: FM; \pm 25KHz

RF Power Output: 10mW

Dynamic Range: >100dB

RF Sensitivity: -150dBm (S/N-12dB)

Image Rejection: 80dB typical

Spurious Rejection: 60dB typical

System Distortion: <1% total harmonic distortion, typical

Power Requirements: Transmitters: 2 x AA 1.5V alkaline batteries

Single channel receiver: 12-18V DC

(negative ground), 500mA

Battery Life: Approximately 9 hours (varies with battery type)

Operating Temperature Range: -20 to 49°C (-4 to 120°F)

NOTE: Battery characteristics may limit this range

Overall Dimensions:

Body Pack: 83 x 67 x 25mm

Microphone: 245 x 50 x 50mm

Receiver: 213 x 150 x 43mm