

PULSE








Models: PWM24-HH & PWM24-LAV-HSM

**2.4GHz Wireless Handheld
Microphone System
&
2.4GHz Wireless Belt Pack
Microphone System**

IMPORTANT SAFETY INFORMATION

Please read these instructions carefully before use and retain for future reference.

Safety Symbols	
	Used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.
	Used in service documentation to indicate that specific components shall only be replaced by the component specified in the documentation.
	Protective grounding terminal.
	Alternating current/voltage.
	Hazardous live terminal.

- When using electrical appliances basic safety precautions should always be followed.
- Check that the voltage indicated on the rating plate corresponds with that of the local network before connecting the appliance to the mains power supply.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- There are no user-serviceable parts in this appliance. Refer servicing to qualified personnel.
- The external wiring connected to the output hazardous live terminals requires installation by a qualified person, or the use of ready-made leads or cords.
- Unplug the appliance when not in use.
- Only use the batteries recommended for this product (*two AA, not included*).
- Ensure that the batteries are inserted correctly, observing the plus and minus marks on both the batteries and the compartment.
- Fit a full set of batteries at one time.
- Remove dead batteries, or if the appliance is not going to be used for a long time.
- Never mix old and new batteries together or different types of batteries.
- Never dispose of batteries in a fire or attempt to recharge ordinary batteries.

WHAT'S INCLUDED

PWM24-HH

- 1 Receiver
- 1 Wireless handheld microphone
- 1 Power supply adaptor
- 6.35mm jack-to-jack lead
- 1 User manual

PWM24-LAV-HSM

- 1 Receiver
- 1 Belt pack
- 1 Clip (lavalier) microphone
- 1 Headset microphone
- 1 Power supply adaptor
- 6.35mm jack-to-jack lead
- 1 User manual

INSTALLATION

Location

- To ensure the best possible performance the receiver should be at least one metre above the ground and at least one metre away from a wall or metal surface to minimise reflection.
- Keep the receiver antenna away from noise sources, other digital equipment, microwave ovens and any large metal objects.
- Keep the receiver nine metres away from wireless access points.

Output Connection

- There is one audio output on the rear panel: mono ¼" jack plug.
- Use shielded audio cable for the connection between the receiver and the mixer or speaker.

Power Connection

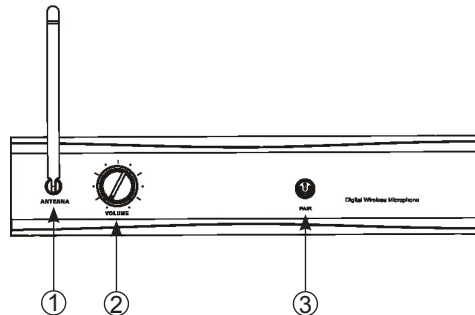
- Connect the supplied power adaptor to the DC power input on the back of the receiver.
- The receiver has no power on/off switch, therefore the receiver will be active whenever the power adaptor is connected and plugged into the AC outlet.
- Unplug the power supply from the AC outlet when the system is not in use, both for safety and for conserving energy.

Antenna

- Move the permanently attached antenna up and down to find the best reception.

RECEIVER CONTROLS & FUNCTIONS

Front Panel Controls and Functions



1. Antenna

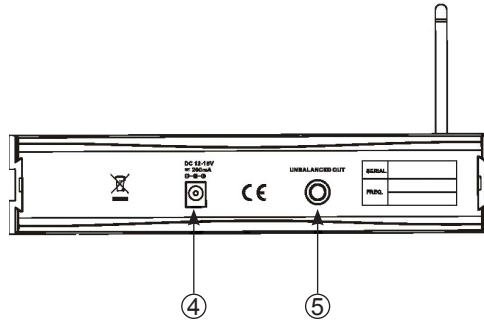
2. Volume knob

- Adjust the volume.
- Indicate pairing status: on = connected with handheld transmitter
off = not connected with any device
blinking = in pairing status

3. Pair button

- Indicates the receiver is on by lighting.
- Press and hold for about five seconds to enter into pairing status.

Rear Panel Controls and Functions



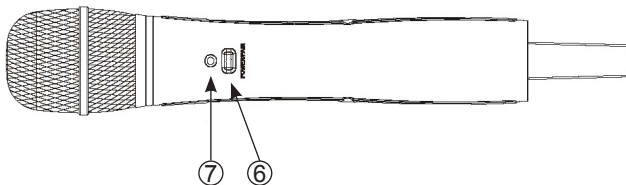
4. Power input jack

- Connect the DC plug with the supplied in-line AC adaptor.

5. Mono ¼” jack plug

- TRS connection used for mono unbalanced audio.

MICROPHONE TRANSMITTER CONTROLS & FUNCTIONS (PWM24-HH)



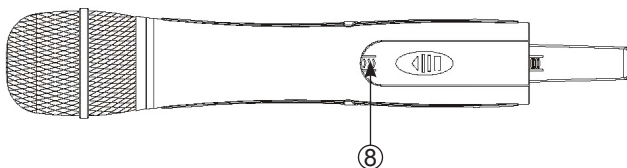
6. Power/Pair button

- Power on/off the transmitter by pressing and holding the button for 0.5 seconds.
- Pair the transmitter and receiver by pressing and holding the button for about five seconds.

7. LED indicator: on - the transmitter is on and/or in pair

off - the transmitter is off

blinking - in pairing status or short of power

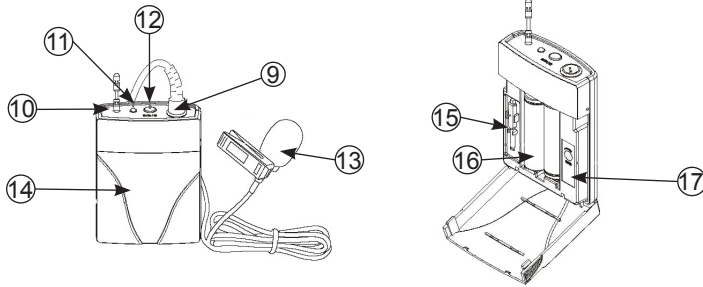


8. Microphone transmitter battery selection and installation

- Two alkaline AA batteries are recommended.
- Ensure that the batteries are inserted correctly, observing the plus and minus marks on both the batteries and compartment.
- When the LED is blinking (not in the pairing status), it indicates that the batteries need replacing immediately.
- Press the point marked '8' above and slide out the battery cover. Insert two new AA alkaline batteries as the polarity marks indicate, then replace the battery cover.

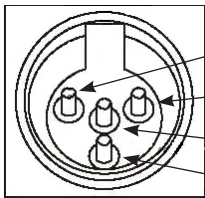
BELT PACK TRANSMITTER CONTROLS & FUNCTIONS (PWM24-LAV-HSM)

Controls and Functions



9. Mini 4P Connector

This connector is used to connect the unit with the clip to microphones, for example, the clip microphone or the lavalier (inc. in model PWM24-LAV-HSM).



- Pin 1 - GND
- Pin 3 - For guitar, bass and keyboards
- Pin 4 - For dynamic or condenser microphones
- Pin 2 - Phantom power supply for condenser microphones

10. Antenna

- 11. LED indicator:** on - the belt pack is on and/or in pair.
off - the belt pack is off.
blinking - in pairing status or short of power.

12. Power/Pair button

- Power on/off the belt pack by pressing and holding the button for about 0.5 seconds.
- Pair the transmitter and receiver by pressing and holding the button for about five seconds.

13. Clip (Lavalier) microphone

- A microphone with a clip that can attach the microphone to ties, shirts, etc.

14. Battery cover

- Press the left and right sides to open the battery cover.

15. Driver

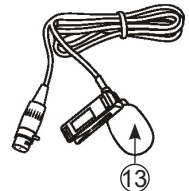
- This driver can be used to adjust the gain of the body pack transmitter.

16. Battery compartment

- Two alkaline AA batteries are recommended. When inserting the battery, observe the correct polarity as marked in the battery compartment.
- Stop using the batteries when the LED is blinking (not in the pairing status) as this indicates a shortage of power.

17. Gain level control


- The gain level can be adjusted by using the supplied driver to rotate the control.



PAIRING INSTRUCTION

- Power on the receiver and the handheld digital wireless microphone or the belt pack transmitter, then press and hold the pair button on them at the same time for about five seconds.
- The LED of the microphone or the belt pack and the volume circle will blink to show that they are in pairing status.
- After the pairing is successful both indicators will light constantly.
- As the system can memorise pairing devices, once they are paired together, they can be used without having to re-pair them, until you pair the microphone or the belt pack with another receiver.
- The receiver can pair with lots of microphones and belt packs, although only one transmitter (either the microphone or belt pack) can be used at once.

SPECIFICATIONS

Receiver	
Frequency	2.404 - 2.476GHz
RF Sensitivity	-78dBm
Transmission Distance	>25m (distance insight)
Frequency Response	50Hz ~ 15KHz (16bit 38.4KHz)
Distortion	0.05 @ 1KHz
SNR	>89dB
Transmission Delay	18ms
Power Supply	DC12V  200mA

Microphone/Belt Pack Transmitter	
Carrier Frequency	2.404 ~ 2.476GHz
Transmitting Power	10dBm Max ERP (Effective Radiated Power)
Transmission Distance	>25m (distance insight)
Frequency Response	50Hz ~ 15KHz (16bit 38.4KHz)
Distortion	0.05 @ 1KHz
SNR	>89dB
Transmission Delay	18ms
Power Supply	2 x AA batteries
Battery Life	>20 hours



INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronics Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.

