

PDWM9000 User's Manual

Introduction

Thank you for selecting the PDWM9000 Dual UHF PLL Synthesized Diversity System. Before operating please read this instruction manual carefully and thoroughly in order to understand the correct operating procedures and achieve the best results.

The PDWM9000 is an advanced PLL synthesized UHF wireless system. Designed for professional applications, it has a 1U rackmount receiver, balanced XLR and unbalanced 1/4" connections.

This system includes the following accessories:

Audio Output Cable	Instruction Manual
Antennas (2)	AC Power Cable

1. Parts Name and Functions

A. Front Panel

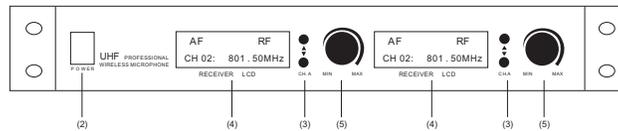


Fig. 1

B. Rear Panel

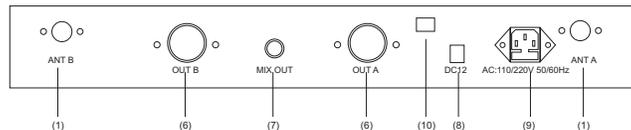


Fig. 2

- (1) Antenna Connector
- (2) Power Switch & LED Indicator
- (3) Channel Selector
- (4) LCD Display
- (5) Volume Control
- (6) Individual Balanced Audio Output Jacks
- (7) Mixed Unbalanced Audio Output Jack
- (8) DC 12V Power Input Jack
- (9) AC Power Input Jack
- (10) Voltage Selector

2. Installation of the Receiver

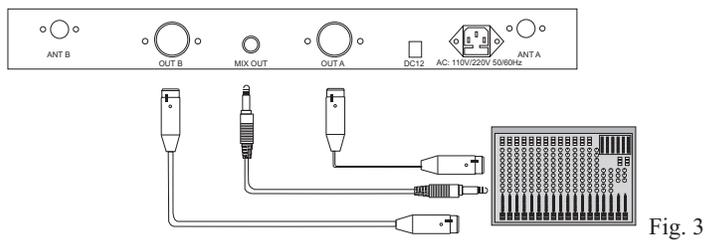


Fig. 3

1. Power Connection

Connect the AC power cable to the 110/220V AC jack (9) and the other end into an AC outlet. Check the voltage selector (10) as shown in Fig. 4.

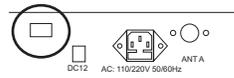


Fig. 4

2. Audio Output Connection:

(A) 1/4" Unbalanced Output: Connect a 1/4" cable from the unbalanced output jack (7) of the receiver to the input jack of the mixer or amplifier, as shown in Fig. 3. This outputs the sound from both microphones together.

(B) XLR Balanced Output: Connect an XLR cable from the balanced output jack (8) of the receiver to the input jack of the mixer or amplifier, as shown in Fig.3. There are two individual outputs corresponding to the two microphones.

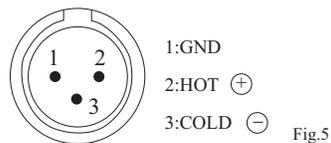


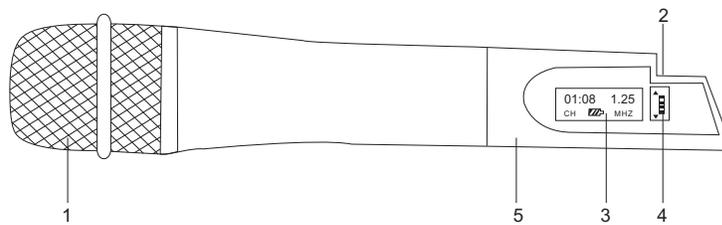
Fig.5

3. Extend antennas A & B. Make them perpendicular with the machine.
4. Push the power switch to turn on the unit.
5. Adjust the volume using the control knobs on the receiver.

Receiver Location

- The receiver should be placed more than 3 ft. above the floor and 3 ft. away from the wall.
- Antennas should be fully extended for best reception.

3. Parts Name And Function (Microphone)



1. Grill
2. Three position switch (on top).
3. LCD Display
4. Channel Selectors
5. Battery Housing

Fig. 6

4. Operation of the Microphone

1. Screw the battery box cover counter clockwise. Insert a 9v battery (check the polarity).
2. Turn on the microphone.
3. The microphone features a three position switch. Place the switch in Stand By (middle position) to mute the sound without turning off the mic.

Frequency & Channel Listing

Mic B		Mic A	
NO.	Frequency Range	NO.	Frequency Range
1	790.75MHz	1	801.25MHz
2	791.15MHz	2	801.55MHz
3	791.55MHz	3	801.85MHz
4	791.95MHz	4	802.15MHz
5	792.35MHz	5	802.45MHz
6	792.75MHz	6	802.75MHz
7	793.15MHz	7	803.05MHz
8	793.55MHz	8	803.35MHz
9	793.95MHz	9	803.65MHz
10	794.35MHz	10	803.95MHz
11	794.75MHz	11	804.25MHz
12	795.15MHz	12	804.55MHz
13	795.55MHz	13	804.85MHz
14	795.95MHz	14	805.15MHz
15	796.35MHz	15	805.45MHz
16	796.75MHz	16	805.75MHz

5. Troubleshooting

1. Unit does not turn on.
 - Make sure the power cable is connected properly.
 - Check the fuse.
 - Check the voltage selector
2. AF display moves, but there is no sound output.
 - Check volume level.
 - Check audio cable.
 - Check the settings on your amplifier
3. The effective receiving distance decreases.
 - Change batteries.
 - Check for any devices that may be causing interference.
4. Sound Quality Deteriorates
 - Change Batteries.
 - Check for any devices that may be causing interference.
 - Do not use two machines with the same frequency at the same time.

Caution:

Do not open the unit. There are no user serviceable parts inside. Refer service to a qualified technician.

6. Specifications

System Specifications

Carrier Frequency:..... UHF 790-806MHz
Frequency Stabilization..... < ± 30 ppm
Dynamic Range:..... More Than 90dB
Total Harmonic Distortion:..... Less Than 0.5%
Frequency Response:..... 40HZ-15KHZ ± 3 dB
Audio Output Level:..... Unbalanced Out: 0 – ± 400 mV
Balanced Out: 0 – ± 200 mV

Receiver Specifications

Power Supply: AC 110 60HZ/220V 50HZ or DC12V
Power Consumption:..... 5 Watts
S/N Ratio: > 90dB
Image & Spurious Rejection: > 80dB
Border Upon Channel Rejection:..... > 80dB
Receiving Sensitivity:..... < 10dBuV(SINAD=30dB)

Microphone Specifications

Transmitter Power: 8.5mW
Modulation Type: FM, F3F
Max Deviation: +25Khz
Spurious Emission: ≥ 40 dB (with carrier)
Battery Voltage: 9V
Battery Life: Approx. 8 Hours
Noise Control: Advanced Noise Reduction Circuitry

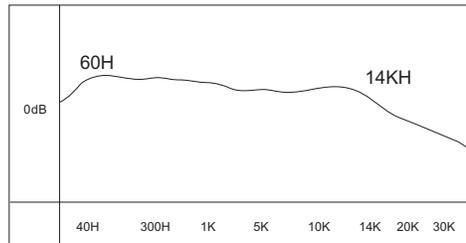


Diagram of AF Frequency Response

Attention:

1. For best reception, always maintain line of site between the transmitter and receiver.
2. Avoid direct sunshine or rain and distance the unit as far as possible from magnetic fields.