PDWM4520 - PDWM4540 - PDWM4560

Wireless Microphone System

USER MANUAL
FOREWORD
This professional wireless set provides a high quality microphone with UHF radio system for freedom of movement without loss of audio quality. Please read this manual before using this equipment in order to avoid damage through incorrect operation and to get the best performance from your purchase. This professional series wireless microphone system used an efficient American, low consumption discharging technique with a super sensitive UHF high broadband frequency receiver and controlled with 10ppm crystal, matched with an independent developed mobile frequency compression, expander circuit, image frequency limiting circuit, a multiple checked silent and noisy circuit, switch impact noise defect circuit, resist reverberation circuit and changed output controlled slowly etc. Designed by a computer EDA system and finished on its item named pattern line. Every system is available to an excellent electric function by Q.C. strictly.

INTRODUCTION
Your new wireless Series system is designed to give you the best of both sound reinforcement worlds: the freedom of a wireless system, and the excellent quality. This manual covers each of the Series system: The VocalArtist-UHF, The Presenter UHF, The headset-UHF and The Guitarist-UHF.

SYSTEM FEATURES
All UHF Series systems offer a variety of exceptional features, including:
1. Simultaneous Output Use: Unbalanced 1/4’ phone plug and balanced XLR output connectors may be used simultaneously to different external devices.
2. Range: UHF Series transmitters will work at a distance of up to 50 meters (about 164 ft.) from the receiver.
3. Noise Squelch: Squelch circuit analyzes signal strength and quality so that can reduce the likelihood of noise burst due to environmental RF (radio frequency) noise.
4. Low Battery Warning Light: A red light on the body-pack and hand-held transmitters warns the user that there is less than one hour of battery life left.

SYSTEM TYPE
The Vocal Artist-UHF is a hand-held system designed for singers who desire the high quality of microphones and the freedom of wireless performance. The Presenter-UHF is a body-pack system designed for public speakers who prefer an inconspicuous, hands-free lavalier microphone. The Headset-UHF is a body-pack system designed for users in physically active applications, who desire the freedom of hand-free microphone. The Guitarist-UHF is a body-pack system designed for use with electric guitars, basses, and other electric instruments.
FOUR CHANNEL RECEIVER FEATURES

1. **Power Button**: Power ON/OFF the receiver.
2. **Power Indicator**: Indicates the power ON/OFF.
3. **"AF" Audio Level Indicator**: Indicates the wireless system audio signal level.
4. **Volume Knob**: Adjust the volume output of receiver.
5. **"RF" Signal Indicator**: It glows when the Receiver receive RF signal from Transmitter.
6. **Antenna A/B**.
7. **"1/4" Audio Output Jack**: Connects the audio cable from this jack to the input port of amplifier, mixer.
8. **XLR Balanced Output Jack**: Connects the audio cable from this jack to the input port of amplifier, mixer.
9. **Power Jack**: Connects the DC adapter to receiver.

MICROPHONE-TRANSMITTER FEATURES

1. **Grille**: Protects the cartridge and helps reducing the breath sounds and wind noise.
2. **Battery Cover**: Open it to install the battery.
3. **Low Battery Indicator**: Red light glows when it is lack of power and should renew the battery.
4. **Power and Audio Mute Switch**.
BODY-PACK TRANSMITTER FEATURES

1. Power and Audio Mute Switch.
2. Antenna: Transmit the RF signal of transmitter.
3. Belt Clip: Attach the transmitter to the belt.
5. Low Battery Indicator: Red light glows when it is lack of power and should renew the battery.
6. State Setting Switch: Set the using state of lavalier system (L) / headset system (H).
7. Gain Adjusting Volume: Adjust the transmitter audio input gain.

TRANSMITTER BATTERY INSTALLATION

1. Battery Installation of Handheld Microphone: Open the battery cover. Insert the supplied batteries into battery jar in polarity and cover the battery cover.

2. Battery Installation of Bodypack Transmitter: Push open the battery cover. Insert the supplied batteries into battery jar in polarity and close the battery cover.
**BODYPACK TRANSMITTER CONNECTION**

1. **Lavalier Microphone Connection:** Connect the connector of supplied lavalier microphone to the connecting jack of transmitter (shown as below).
   Set the transmitter work state in wireless lavalier system (L).

2. **Headset Microphone Connection:** Connect the connector of supplied headset microphone to the connecting jack of transmitter (shown as below).
   Set the transmitter work state in wireless headset system (H).

**SYSTEM CONNECTION**

1. **Receiver Power Connection:** Connect the DC connector of supplied AC/DC adapter into the DC power input of receiver. Plug the AC Input connector into an AC120/60Hz or AC220V/50Hz outlet. (Shown as below)

2. **Antenna:** Keep the position of antenna at a 45 angle from vertical.
   (Shown as below)

3. **Audio Connection:** Connect the corresponding output of receiver by supplied 1/4w phone jack audio cable or your XLR cable to the Input of power amplifier, mixer.
The audio gain control on transmitter has been factory-at the mid-range position for best performance in most applications. This may be necessary for soft singers or talkers, or guitar or basses with low outputs.

- **To Increase Gain**: Rotate the transmitter gain control clockwise using a screwdriver to increase audio gain.
- **To Reduce Gain**: Rotate the transmitter gain control counterclockwise with the screwdriver to reduce audio gain.
- **To return audio gain to the factory setting**, rotate the transmitter audio gain control to the mid position.

**TIPS FOR ACHIEVING MAXIMUM PERFORMANCE**

- Make sure you can always see a receiver antenna from the transmitter position.
- Keep the distance from transmitter to receiver antenna as short as possible.
- Point receiver antennas away from each other at a 45 angle from vertical.
- Avoid placing the receiver antennas near metal surfaces and obstruction.
- If stacking or rack mounting receivers in a multiple-system use situation, do not allow antennas to touch or cross.
- Perform a walk-through before Performance or Presentation. If dead spots are found, adjust location of receiver. If dead spots remain, mark spots and avoid.

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**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>INDICATOR STATUS</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Sound</td>
<td>Red transmitter indicator is not flashing</td>
<td>Slide transmitter POWER ON/OFF switch to ON position. Make sure battery is inserted properly, observing battery (+/-). If the battery is inserted properly, replace with fresh battery.</td>
</tr>
<tr>
<td>No Sound</td>
<td>Red transmitter indicator is flashing</td>
<td>Slide transmitter MUTE/ON switch to ON position</td>
</tr>
<tr>
<td>No Sound</td>
<td>Red receiver POWER light off</td>
<td>Make sure AC adapter is securely plugged into electrical outlet and into DC input connector. Make sure AC electrical outlet works and supplies proper voltage</td>
</tr>
<tr>
<td>No Sound</td>
<td>Receiver signal indicators A/B lights glowing</td>
<td>Trun up receiver volume control. Confirm that the output connections from the receiver to the external equipment are secure</td>
</tr>
<tr>
<td>No Sound</td>
<td>Receiver signal indicators A/B lights off, Transmitter and receiver POWER lights glowing</td>
<td>Confirm transmitter and receiver frequency match. Move transmitter closer to receiver.</td>
</tr>
<tr>
<td>Sound level differs from the level of a cabled instrument.</td>
<td>Receiver signal indicators A/B lights glowing</td>
<td>Adjust transmitter gain level to compensate. Adjust receiver volume as necessary</td>
</tr>
<tr>
<td>Sound level differs from the level of different guitars</td>
<td>Receiver signal indicators A/E lights glowing</td>
<td>Readjust transmitter gain level to compensate differences in guitar outputs</td>
</tr>
<tr>
<td>Distortion level increases gradually</td>
<td>Receiver signal indicators A/B lights and transmitter LOW BATTERY light glowing</td>
<td>Replace transmitter battery</td>
</tr>
<tr>
<td>Bursts of noise or other audible radio signals present</td>
<td>Signal indicators A/B lights ON</td>
<td>Identify potential sources of interference (other RF sources) and turn OFF, remove or use a wireless system operating on a different frequency</td>
</tr>
<tr>
<td>Momentary loss of sound as transmitter is moved around performing area.</td>
<td>Receiver signal indicator A/B lights OFF when sound is lost</td>
<td>Reposition receiver and perform walk-through again. If audio dropouts persist, mark “dead” spot and avoid them during performance.</td>
</tr>
</tbody>
</table>
SYSTEM SPECIFICATIONS

- **Wireless Operating Frequency Range:**
  Approximately 573.0 - 597.8 MHz (Available frequencies depend on applicable regulations in country where system is used).
- **Operating Range:** 50m (approximately 164ft) under typical conditions
- **Audio Frequency Response:** 100 to 18,000Hz, ±3dB
- **THD:** <1%
- **Mobile state Range:** > 100dB

**Operating Temperature Range**
-20.2°F to 165.2°F (-29°C to 74°C)

**NOTE:** Battery characteristics may limit this range.

OPTIONAL ACCESSORIES
1/4" to 1/4" Cable (The Guitarist -UHF only)
1/4" to Miniature Connector
1.8 Meter (6ft.) Receiver-Mixer Cable

**RECEIVER SPECIFICATION**

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>120V or 230VAC adaptor with 2.1 mm female plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Requirements</td>
<td>12-15 V DC nominal, 500mA+</td>
</tr>
<tr>
<td>Signal/Noise Ratio</td>
<td>MORE THAN 85dB</td>
</tr>
<tr>
<td>Border Upon Channel Rejection</td>
<td>MORE THAN 70dB</td>
</tr>
<tr>
<td>Image &amp; Spurious Rejection</td>
<td>MORE THAN 70dB</td>
</tr>
<tr>
<td>Audio Output Level</td>
<td>0-±300mV</td>
</tr>
<tr>
<td>Receiving Sensitivity</td>
<td>-105dBm</td>
</tr>
<tr>
<td>Dimensions</td>
<td>394MM X 235MM X 55MM</td>
</tr>
</tbody>
</table>

**HAND-HELD TRANSMITTER SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>1.5VAA battery X 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Current Drain</td>
<td>LESS THAN 100mA</td>
</tr>
<tr>
<td>Modulation Type</td>
<td>FM</td>
</tr>
<tr>
<td>RF Output</td>
<td>MORE THAN 10dBm</td>
</tr>
<tr>
<td>Max Deviation</td>
<td>±70KHz</td>
</tr>
<tr>
<td>Spurious Emission</td>
<td>MORE THAN 55dB</td>
</tr>
<tr>
<td>Dimensions</td>
<td>238mm x 50mm x 50mm</td>
</tr>
<tr>
<td></td>
<td>250mm x 51mm x 51mm</td>
</tr>
</tbody>
</table>

**BODY-PACK TRANSMITTER SPECIFICATIONS**

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<tr>
<td>Max Deviation</td>
<td>±70KHz</td>
</tr>
<tr>
<td>Spurious Emission</td>
<td>MORE THAN 55dB</td>
</tr>
<tr>
<td>Dimensions</td>
<td>100MM X 65MM X 30MM</td>
</tr>
</tbody>
</table>

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<tr>
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<th>120V or 230VAC adaptor with 2.1 mm female plug</th>
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Pyle PDWM4520 Wireless Microphone System, UHF Quad Channel Fixed Frequency, 4 Handheld Microphones, Rack Mountable

**UHF Band Receiver System**
- Quad Frequency Channel Design (Channel1, 2, 3, 4)
- Broad Frequency Response Range & Low Distortion
- High Signal/Noise Ratio Performance
- RF Signal & AF Signal LED Indicators
- Radio Frequency and Audio Frequency
- Independent Channel Adjustable Volume Controls
- Detachable Dual Antennas
- Rack Mountable System
- Includes (4) Handheld Microphones
- 4 XLR Output Connector Jacks

**System Receiver:**
- Wireless Operating Frequency Range: 573.0 - 597.8 MHz
- Image & Spurious Rejection: >70dB
- Receiving Sensitivity: -105dBm
- Signal/Noise Ratio: >85dB
- Border Upon Channel Rejection: >70dB
- T.H.D.: <0.5%
- Audio Output Level: 0-300mV
- Power Requirements: 12-15V DC nominal 1000mA
- Dimensions (L x W x H): 15.51" x 9.25" x 2.16"

**Microphones:**
- RF Power Output: >10dBm
- Modulation Type: FM
- Max. Deviation: +/- 40kHz
- Nominal Power Current: <40mA
- Spurious Emission: >55dBc
- Battery Powered: 2 x 'AA' Batteries (Included)
- Batteries Included
- Weight: 180g

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Pyle PDWM4540 Wireless Microphone System, UHF Quad Channel Fixed Frequency, 2 Handheld Microphones, 2 Body-Pack Transmitters, 2 Headset & 2 Lavalier Mics, Rack Mountable

**UHF Band Receiver System**
- Quad Frequency Channel Design (Channel1, 2, 3, 4)
- Broad Frequency Response Range & Low Distortion
- High Signal/Noise Ratio Performance
- RF Signal & AF Signal LED Indicators
- Radio Frequency and Audio Frequency
- Independent Channel Adjustable Volume Controls
- Detachable Dual Antennas
- Rack Mountable System
- Includes (2) Handheld Microphones, (2) Body-Pack Transmitters, (2) Headset & (2) Lavalier Mics
- 4 XLR Output Connector Jacks

**System Receiver:**
- Image & Spurious Rejection: >70dB
- Receiving Sensitivity: -105dBm
- Signal/Noise Ratio: >105dB
- Border Upon Channel Rejection: >70dB
- T.H.D.: <1%
- Audio Output Level: 0-300mV
- Power Requirements: 12-15V DC nominal 1000mA
- Dimensions (L x W x H): 15.51" x 9.25" x 2.16"

**Microphones:**
- RF Power Output: >10dBm
- Modulation Type: FM
- Max. Deviation: +/- 40kHz
- Nominal Power Current: <55mA
- Spurious Emission: >55dBc
Pyle PDWM4560 Wireless Microphone System, UHF Quad Channel Fixed Frequency, 4 Body-Pack Transmitters, 4 Headset & 4 Lavalier Mics, Rack Mountable

Transmitters:
- RF Power Output: >10dBm
- Modulation Type: FM
- Max. Deviation: +/- 40kHz
- Nominal Power Current: <40mA
- Spurious Emission: >53dBc
- Battery Powered: 2 x 'AA' Batteries (Included) Batteries Included
- Weight: 60g
- Bodypack transmitters require 2 'AA' batteries

System Receiver:
- Image & Spurious Rejection: >70dB
- Receiving Sensitivity: -105dBm
- Signal/Noise Ratio: >105dB
- Border Upon Channel Rejection: >70dB
- T.H.D.: <1%
- Audio Output Level: 0-300mV
- Power Requirements: 12-15V DC nominal1000mA
- Dimensions (L x W x H): 15.51" x 9.25" x 2.16"

UHF Band Receiver System
- Quad Frequency Channel Design (Channel1, 2, 3, 4)
- Broad Frequency Response Range & Low Distortion
- High Signal/Noise Ratio Performance
- RF Signal & AF Signal LED Indicators
- Radio Frequency and Audio Frequency
- Independent Channel Adjustable Volume Controls
- Detachable Dual Antennas
- Rack Mountable System
- Includes (4) Body-Pack Transmitters, (4) Headset & (4) Lavalier Mics
- 4 XLR Output Connector Jacks

Includes (4) Body-Pack Transmitters, (4) Headset & (4) Lavalier Mics

Battery Powered: 2 x 'AA' Batteries (Included)
Batteries Included
Weight: 180g