



**PDWM4300  
VHF WIRELESS SYSTEM**



**OPERATION MANUAL**



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## VHF WIRELESS SYSTEM OPERATION MANUAL

Thank you for buying the PDWM4300 Wireless System. Please read through these operation instructions so you will know how to operate your model properly. After you read it, put it away in a safe place for future reference.

### CONTENTS

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## PRECAUTIONS

- Avoid exposure of the system to rain or moisture.
- No user-serviceable parts inside the system. Refer all servicing to a qualified technician only.
- Handle the wireless system carefully, dropping or other shocks may cause failure.
- Avoid using the system where it may be subjected to heat, such as direct sunlight, near radiators or other heat sources.
- Should any liquid be spilt on the system, stop using it immediately. It may be possible to dry the system, but you should have it checked by a qualified technician before using it again.
- Take care with the main power adapter and lead. If damaged in any way, do not use the system and refer to a qualified technician for repair.
- Only use the system with the supplied components. Do not attempt to use with any other main power supply adapter .
- If the wireless system is not going to be used for a while, remove the battery to prevent leakage. In the event of electrolyte leakage inside the battery compartment, carefully remove the leakage with a damp cloth. Take care not to get battery electrolyte in contact with your skin, however if it does, wash your hands under a running tap. If electrolyte comes into contact with your eyes, seek medical advice immediately.
- Only replace the battery with the same or an equivalent type.
- Please dispose of old batteries in an environmentally friendly manner in accordance with the relevant legislation.
- Do not use any solvents to clean any part of the wireless system .

## SPECIFICATIONS

### A. Overall system

Oscillation mode:	Quartz controlled
Carrier Frequency Range:	VHF 169-270MHz
Stability:	$\pm 0.005\%$
Max Deviation:	$\pm 56\text{KHz}$ with level limiting
Dynamic Range:	$> 100\text{dB}$
S/N Ratio:	$\geq 80\text{dB}$
T.H.D.:	$\leq 0.5\%$
Squelch:	"Pilotone & Noise lock" dual squelch circuit
Frequency Response:	100Hz~15KHz
Operating range:	Up to 240 Feet

### B. Receiver

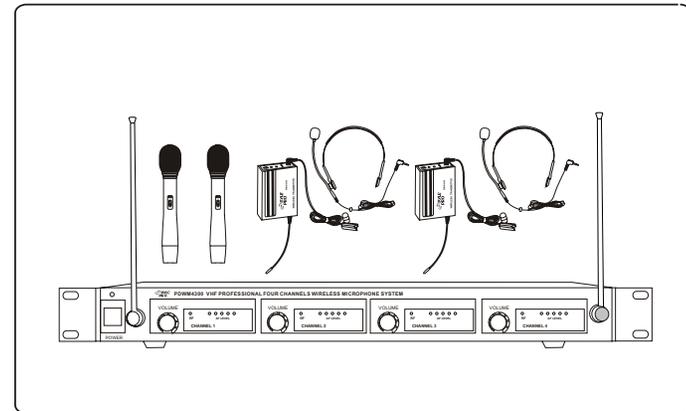
Sensitivity:	6dB $\mu\text{V}$ at S/N>90dB
Image Rejection:	>60dB
Stability:	>80dB
Audio output:	-12db/600ohms unbalanced and balanced
Power supply:	15VDC/0.5A
Dimensions(m/m):	16.5 $\times$ 8.2 $\times$ 1.8 inch

### C. Transmitter

Mike capsule:	Dynamic microphone(Handheld mic) Condenser Microphone(Headset mic/clip-on mic)
Antenna:	Built-in housing(Handheld transmitter) External(Belt pack transmitter)
RF Output:	<10mW
Spurious:	<-40dB
Battery:	one 9V battery

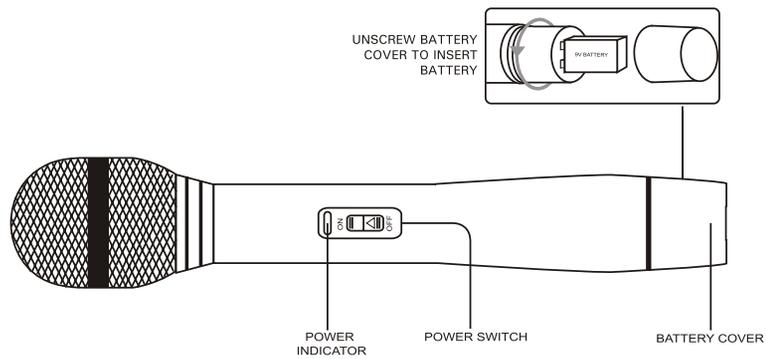
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## SYSTEM DIAGRAM



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## HAND-HELD MICROPHONE



### OPERATION

1. Unscrew the battery cover at the end of microphone, put a 9V battery into compartment with correct polarities, then close the cover.
2. Move "ON/OFF" switch to "ON" position, "PWR" indicator will light for one second and then go off. This indicates correct operation. If it doesn't come on, please check the voltage of battery or polarities. If the "PWR" indicator lights red, this indicates the battery power is low. Please replace with a fresh battery.

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## TROUBLE SHOOTING

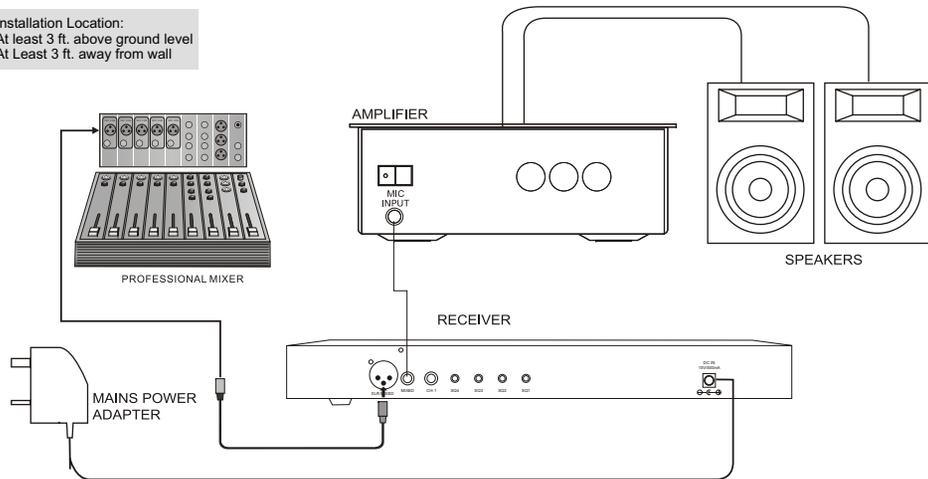
The on air indicator does not light up	The wireless microphone is not turned on.	Turn on the wireless microphone
	The microphone receiver is not turned on.	Turn on the microphone receiver and the connected audio equipment
	The microphone receiver is not connected properly.	Turn on the microphone receiver and the connected audio equipment
No sound	The battery in the wireless microphone is weak.	Replace the battery.
	The microphone receiver is not turned on .	Turn on the microphone receiver and the connected audio equipment.
	The connected audio equipment is not turned on.	Turn on the audio equipment.
The sound is distorted	The speakers/headphones. are not connected to the audio equipment.	Connect the speakers/ headphones
	The battery in the wireless microphone is weak.	Replace the battery.
A howling noise heard from the speakers.	The AUDIO OUT on the receiver is not set correctly.	Adjust the volume controls.
	The distance between the wireless microphone and speakers are too close.	Move the wireless microphone away from the speakers or change the direction of the microphone.
	The battery in the wireless microphone is weak	Replace the battery.

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## INSTALLATION

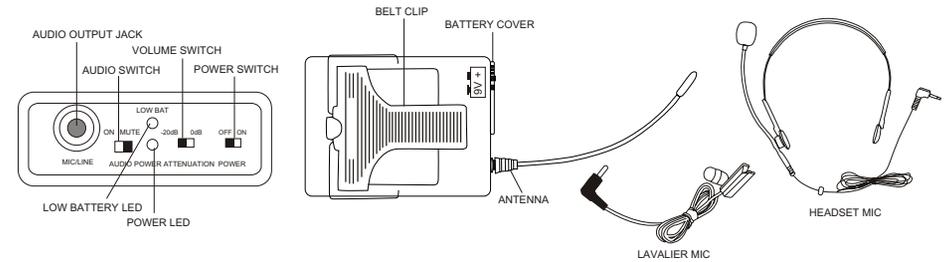
Using the supplied audio cable, connect from the MIXED jack socket to the "MIC IN" / "LINE IN" socket on amplifier. Alternatively, you can connect an optional XLR cable from the "XLR MIXED" socket on the receiver to a professional mixer. Connect the mains power adaptor from "DC 15V" jack to a suitable mains power socket.

**Installation Location:**  
At least 3 ft. above ground level  
At Least 3 ft. away from wall



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## BODYPACK TRANSMITTER



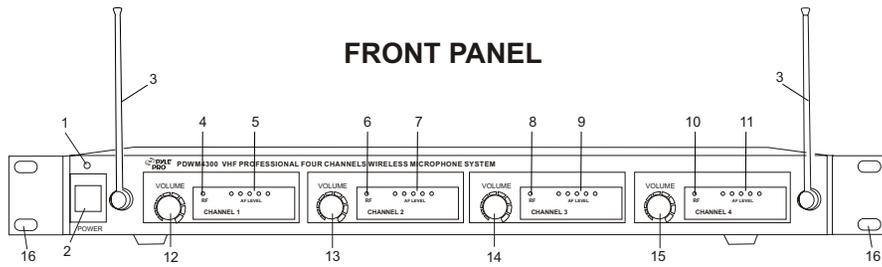
### OPERATION

- Open the battery cover to install a 9V battery (check polarities). Move the power switch to the ON position. The power indicator will be green to indicate normal operation. If the LOW BAT indicator turns red, replace with a fresh battery promptly.
- Before operation, please confirm that the frequency of transmitter is same as the frequency of receiver. Plug the 3.5mm connector of headset mic to screw-lock socket of transmitter. Move the audio switch to ON position. The MUTE switch cuts off the audio output without shutting off the transmitter.
- ATTENUATION is for volume adjustment. Move it to 0dB position to get normal volume output. Move it to -20dB position to reduce distortion and avoid feedback.
- If the system will not be used for a long time, please switch off the transmitter to avoid power consumption.

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# RECEIVER

## FRONT PANEL



- |                             |                              |                         |
|-----------------------------|------------------------------|-------------------------|
| 1. Power Indicator          | 7. CH-2 AF Indicator         | 13. CH-2 Volume Control |
| 2. Power Switch             | 8. CH-3 RF Signal Indicator  | 14. CH-3 Volume Control |
| 3. Antenna                  | 9. CH-3 AF Indicator         | 15. CH-4 Volume Control |
| 4. CH-1 RF Signal Indicator | 10. CH-4 RF Signal Indicator | 16. Rack Mounts         |
| 5. CH-1 AF Indicator        | 11. CH-4 AF Indicator        |                         |
| 6. CH-2 RF Signal Indicator | 12. CH-1 Volume Control      |                         |

### OPERATION

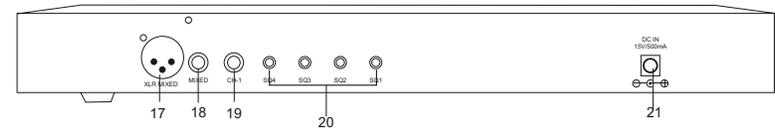
Attach the two antennas and extend them vertically. Switch on the receiver. The red power indicator will come on. Switch on the transmitter. The red indicator RF/Channel1, RF/Channel2, RF/Channel3, RF/Channel4 will come on to indicate signal reception. The green AF LEVEL meters indicate the audio level.

Adjust the volume of receiver, transmitters and amplifier. Please switch off the receiver, transmitters and amplifier when the wireless microphone system is not being used.

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# RECEIVER

## REAR PANEL



- 17. Balanced output jack
- 18. Unbalanced output jack
- 19. CH-1 Output jack
- 20. Squelch adjuster
- 21. DC Power in

### SQUELCH

The squelch control on the rear of the receiver is preset at the factory. If you must use the system in an area with considerable RF interference and there is some noise from the receiver when your transmitter is off, you can adjust the squelch control so that the system will receive the signal from your transmitter only but squelch or eliminate the unwanted background RF noise. This adjustment can

cause reduction in useable range of the wireless transmitter, so set the control to the lowest position that reliably mutes the unwanted RF signals.

Note that switching the microphone on and off can cause interference that will be heard if the microphone volume level of the amplifier system is still set high.

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