

PTU-51/5000/4000 Series

Fixed UHF Frequency
Dual / Quad / Eight Channels Wireless Microphone System



OWNER'S MANUAL

Thank you for purchasing the Phenyx Pro PTU-51/5000/4000 Series.
For the best results and the utmost satisfaction for your new unit,
please read this manual carefully to ensure proper operation,
and keep it for future reference. For more information,
please visit our store: www.phenyxpro.com

Table of Contents

System Description	4
System overview	4 4
Functions of Parts	5
Receiver Transmitters	5 7
Operation Guidance	8
Wireless Tips	9
Troubleshooting	9
Specification	10
Technical Support & Warranty Information	12

System Description

System overview

The PTU-51/5000/4000 Series comes to provide everyone with a reliable and affordable solution for wireless sound performance. The full metal housing receiver and handheld transmitters offer great durability. Fixed frequency design makes operation a breeze with the plug-and-go setup and provides stable UHF signals for smooth sound transmission. The coverage of the systems extends up to 260ft, ideal for KTV rooms, dance halls, churches, parties, conference rooms, classrooms, etc.

System features

- Fixed frequency in the UHF frequency band is designed for the plug-and-go simple setup.
- · Crisp, robust, lossless sound quality with cardioid pickup pattern to minimize noise.
- Sturdy all-metal construction for both receivers, handheld dynamic mics, and portable bodypack transmitters.
- XLR outputs for each channel and one 1/4" TS unbalanced mixed output for combined audio.
- Up to 260ft long operation range.
- > 8 hours battery life for each microphone.

System components

Your system comes with a combination of the following components.

Receiver

PWR-51	Dual-channel Wireless Receiver	
PWR-5000	Quad-channel Wireless Receiver	
PWR-4000 Eight-channel Wireless Re		

Transmitters

PWH-5	Handheld Transmitter	
PWB-5	Bodypack Transmitter	

Accessories

PHM-01-BLK	Black Headset Mic	
PHM-01-BGE	Beige Headset Mic	
PLM-01-BLK	Black Lapel Mic	
PLM-01-BGE	Beige Lapel Mic	
ANTB-500	Antennas for 500MHz UHF Band	
ANTB-900	Antennas for 900MHz UHF Band	
PTA-01	Power Adapter	
PTA-02	1/4" Audio Cable	
	AA Batteries	
	Anti-rolling Rings	
	6.35MM to 3.5MM Adapter	
	User's Manual	

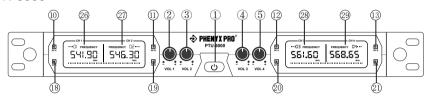
Functions of Parts

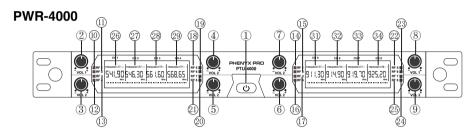
Receiver

PWR-51



PWR-5000





Front panel

- ① Power button:
 - Press the button for 1 sec to power the unit on and off.
- ② Volume 1 control:

Adjust volume for CH1.

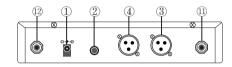
- ③ Volume 2 control: Adjust volume for CH2.
- 4 Volume 3 control:
 Adjust volume for CH3.
- 5 Volume 4 control: Adjust volume for CH4.
- 6 Volume 5 control: Adjust volume for CH5.
- 7 Volume 6 control: Adjust volume for CH6.

- **8 Volume 7 control:**
- Adjust volume for CH8.
- RF 1: CH1 RF signal indicator.
 It lights when the transmitter receives the RF signal to indicate successful synchronization.
- 11 RF 2: CH2 RF signal indicator.
- RF 3: CH3 RF signal indicator.
- 3 RF 4: CH4 RF signal indicator.
- 4 RF 5: CH5 RF signal indicator.
- (5) RF 6: CH6 RF signal indicator.
- 16 RF 7: CH7 RF signal indicator.
- (7) RF 8: CH8 RF signal indicator.

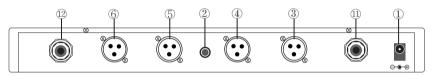
- (8) AF 1: CH1 audio signal indicator. It lights when the transmitter receives the audio signal.
- (9) AF 2: CH2 audio signal indicator.
- ② AF 3: CH3 audio signal indicator.
- 21) AF 4: CH4 audio signal indicator.
- 22 AF 5: CH5 audio signal indicator.
- ② AF 6: CH6 audio signal indicator.
- ② AF 7: CH7 audio signal indicator.

- (5) AF 8: CH8 audio signal indicator.
- **26 CH1 frequency number**
- ② CH2 frequency number
- **28 CH3 frequency number**
- **29 CH4 frequency number**
- 30 CH5 frequency number
- (31) CH6 frequency number
- 32 CH7 frequency number
- 33 CH8 frequency number

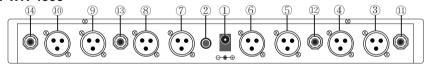
PWR-51



PWR-5000



PWR-4000



Rear panel

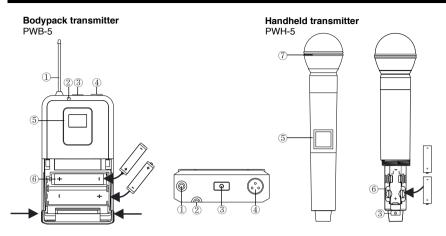
- ① Power jack
- ② 1/4" mixed output jack: The 1/4" (6.35mm) output jack accepts an unbalanced TS phone-type connector.
- 3 Balanced XLR output for CH1
- 4 Balanced XLR output for CH2
- **⑤** Balanced XLR output for CH3
- 6 Balanced XLR output for CH4
- 7 Balanced XLR output for CH5
- 8 Balanced XLR output for CH6
- 9 Balanced XLR output for CH7

- **10** Balanced XLR output for CH8
- ① Antenna A:

Connect the 500MHz antenna to pick up signals from transmitters.

- 12 Antenna B:
 - Connect the 500MHz antenna to pick up signals from transmitters.
- Antenna C: Connect the 900MHz antenna to pick up signals from transmitters.
- Antenna D: Connect the 900MHz antenna to pick up signals from transmitters.

Transmitters



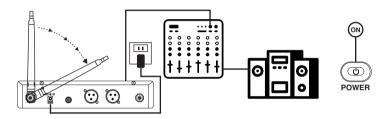
- ① Antenna
- 2 Battery light: It lights red to indicate low battery level.
- ③ Power button: For the bodypack transmitter, one short press (tap) the power button to turn it on/off. For the handheld transmitter, long press the power button for 1 second to turn it on/off.
- 4 3-pin mini XLR jack
- 5 LCD screen: It displays frequency number.
 - *NOTE: The handheld transmitter display lights green when the battery is sufficient and turns red when the battery level is low.
- (6) Battery compartment: Install batteries with the correct polarity.
- 7 Replaceable microphone capsule

Operation Guidance

Single system setup

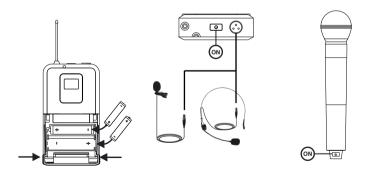
Step 1: Connect and power up the receiver

- ① Connect antennas to the receiver via ANT jacks.
 - *Note: For PWR-4000, connect two ANTB-500 antennas to ANT A and ANT B, and two ANTB-900 antennas to ANT C and ANT D.
- ② Connect the power supply to the receiver via the power jack.
- ③ Connect the audio output to an amplifier/speaker or mixer via the 1/4" mixed output jack or XLR audio output jack.
- 4 Long press (2s) the power button of the receiver to turn it on.



Step 2: Turn on transmitters

- ① Install fresh batteries with the correct polarity.
- ② Long press power buttons to turn on transmitters.



Step 3: Automatic Pair Up

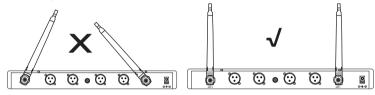
The transmitter and the reciever will pair up automatically.

^{*}NOTE: Check the frequency number on the LCD screen to distinguish each transmitter and channel of the receiver.

Wireless Tips

If you encounter wireless interference or dropouts, try the following suggestions:

- · Replace the transmitter batteries.
- · Choose a different frequency channel.
- · Avoid approaching the receiver and transmitters with metal or other dense materials.
- Place the receiver as high as possible on the equipment rack.
- Remove any devices causing possible signal interference, such as cellphones, computers, media players, two-way radios, and digital signal processors.
- Keep transmitters more than 6 feet (two meters) apart.
- Mark trouble spots during soundcheck and inform performers to avoid those areas.
- · Place antennas away from each other.



Troubleshooting

ISSUE	INDICATOR STATUS	CORRESPONDING SOLUTION
	Receiver LCD screen off	Make sure the DC adapter is securely plugged into an electrical outlet.Make sure the receiver is powered on.
No sound or faint sound	Receiver LCD screen on	Make sure the transmitter is turned on with sufficient battery. And make sure it is successfully paired up with the receiver. You can see the RF indicator lighting on the receiver screen. Make sure the transmitter successfully transmits audio signals. You can see AF indicator lighting on the receiver screen. Otherwise, replace batteries for the transmitter. If it does not work, replace the transmitter. Adjust volume controls of the receiver and speaker to proper levels. Make sure the receiver is connected to the turned-on speaker or the turned-on amplifier and speaker together to output the sound.
Low battery	The battery indicator shows low battery status	Replace fresh batteries for the transmitter.
A howling noise (also "feedback") from the speaker		Do not point the microphone directly to the speaker and increase their distance.

Specification

Specification

· Overall System

Frequency stability	±0.003%	
Dynamic range	>105dB	
Operation temperature	-10 °°C 50 °°C	
Frequency response	50Hz - 18kHz	
Audio output level	1/4 interface: 0 - 500 mV; XLR interface: 0-500mV	
Working distance	80M/260ft	

· Receiver

Oscillation mode	PLL Synthesized
Power consumption	>7W
Output impedance	XLR connector: 200 ohm. Antenna connector: 50 ohm
RF sensitivity	-105 dBm
Image rejection	>100 dB
Spurious rejection	>90 dB
Power requirement	DC 12 - 15V, Current 1000mA, External power adapter

· Handheld & Bodypack Transmitter

Audio input level	Gain: 0dB; -20 dBV maximum -10dB; -0 dBV maximum
Gain adjustment range	10dB
Power requirement 2 AA size alkaline batteries for each transmitter	
Battery life	At least 8 hours with original batteries for each transmitter

· Frequency List

Receiver	Channel and frequency	Compatible antenna	
DWD 51	Channel 1: 558.9MHz	ANTE 500	
PWR-51	Channel 2: 571.8MHz	ANTB-500	
	Channel 1: 541.90MHz		
PWR-5000	Channel 2: 546.30MHz	ANTB-500	
FWH-5000	Channel 3: 561.60MHz		
	Channel 4: 568.65MHz		
	Channel 1: 541.90MHz		
	Channel 2: 546.30MHz	11175	
	Channel 3: 561.60MHz	ANTB-500	
PWR-4000	Channel 4: 568.65MHz		
	Channel 5: 911.30MHz		
	Channel 6: 914.90MHz		
	Channel 7: 919.70MHz	ANTB-900	
	Channel 8: 925.20MHz		

Technical Support & Warranty Information

Our warranty to you:

Phenyx Technology ("Phenyx") warrants Phenyx products against eviden de-fects in material and workmanship for a period of one year from the date of original purchase for use. This warranty is valid exclusively in the US and applies only to the original owner. If you discover a defect covered by this warranty, Phenyx will repair or replace the product at our sole discretion using new or refurbished components. Performance of repairs or replacements under this Warranty is sub-ject to registration of your product at www.phenyxusa.com/registerproduct.

Product failures not covered by this warranty:

This warranty covers defects in manufacturing that arise from the correct use of the device. It is limited to defects in materials or workmanship and does not cover electrical or mechanical damage resulting from abuse, misuse, unauthorized modification, lack of reasonable care, extreme heat, cold, damage due to natural forces, or corrosive environments. This warranty does not cover the normal wear and tear on covers, housing, connectors, and accessories.

Limits of liability:

If your Phenyx product fails or does not perform as warranted, your sole recourse shall be to replace or repair it as described above. Phenyx will not be liable to you or anyone else for any damages that result from the failure of this product. These damages include, but are not limited to, the following: lost profit ts, lost savings, lost data, damage to other equipment, and incidental or consequential damages arising from the use of or inability to use this product. IN NO EVENT PHENYX SHALL BE LIABLE FOR MORE THAN THE AMOUNT OF YOUR PURCHASE PRICE, NOT TO EXCEED THE CURRENT LIST PRICE OF THE PRODUCT.

How to obtain service under this warranty:

If you are receiving a system that is defective or you have any questions regarding operation or warranty cover, please contact us at support@phenyxpro.com with any questions or concerns and a Phenyx Pro representative will contact you to provide assistance. You can also reach out to us through Facebook page: www.facebook.com/phenyxusa/ or our official website: www.phenyxpro.com