



PTU-51/5000/4000 Series

Fixed UHF Frequency

Dual / Quad / Eight-Channel Wireless Microphone System



USER MANUAL

IMPORTANT SAFETY INSTRUCTIONS

1. Read and follow these instructions carefully.
2. Only use attachments, accessories, and spare parts specified by the manufacturer.
3. Avoid exposing the product and its connections to liquids and electrically conductive objects that are not essential for its operation.
4. Do not operate near any heat sources, such as open flames, radiators, or other apparatus that produce heat.
5. Keep the power cord safe by preventing it from being walked on or pinched, especially at the plugs.
6. Do not use the apparatus during lightning storms, and unplug it when unused for a long period of time.
7. Any modifications not approved by the manufacturer for the product could result in personal injury or product failure.
8. Operate this product within its proper operating temperature range.



Caution: This symbol indicates the unit might have a risk of electric shock.



Caution: This symbol is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.



Caution: This symbol indicates possible risk of electric shock within the unit.



Caution: This symbol means the product must not be discarded as household waste, and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling helps protect natural resources, human health and environment. For more information on disposal and recycling of this product, contact your local municipality, disposal service, or shop where you bought this product.

IMPORTANT PRODUCT INFORMATION

Licensing: A ministerial license may be required to operate this equipment in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment. Licensing of PHENYX PRO wireless microphone equipment is the user's responsibility, and licensability depends on the user's classification and application, and on the selected frequency. PHENYX PRO strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

FCC Information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

***NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment does not cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Statement

This device contains license-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met. This product meets the applicable Industry Canada technical specifications.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps

Industry Canada ICES-003 Compliance

Label: CAN ICES-3 (B)/NMB-3(B)

EU Directives

This product meets the Essential Requirement of all relevant European directives and is eligible for CE marking.

Meets essential requirements of the following European Directives:

WEEE Directive 2019/19/EU

RoHS Directive EU 2015/863

Note: Please follow your regional recycling scheme for batteries and electronic waste

Authorized European Representative



UK CROSSBORDER LIMITED
7 Bell Yard London WC2A 2JR, UK
United Kingdom
Email: uk-crossborder@outlook.com



OASIS SERVICE SP. Z O.O.
ul. Młynarska 42 lok.115
01-171 Warszawa
Email: oasisservicepl@outlook.com

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 system extends up to 260 ft, 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 Receiver

Transmitters

PWH-5	Handheld Transmitter
PWB-5	Bodypack Transmitter

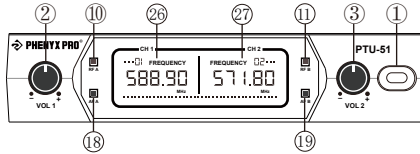
Accessories

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-ADP1	Power Adapter
PTA-CBL	1/4" Audio Cable
	AA Batteries
	Anti-rolling Rings
	6.35MM to 3.5MM Adapter
	User's Manual

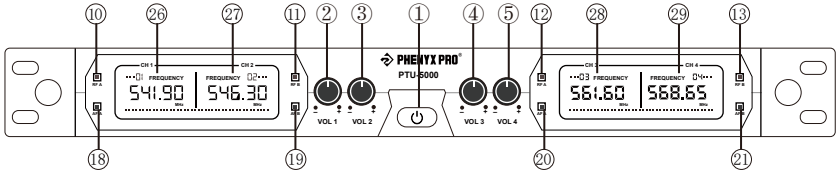
Functions of Parts

Receiver

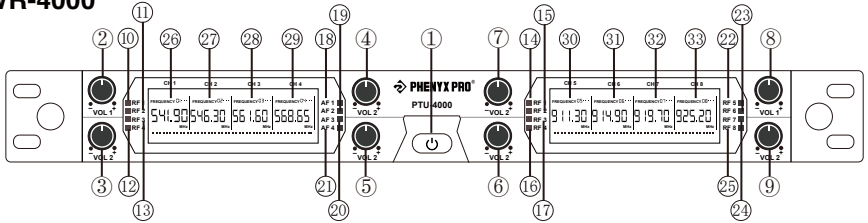
PWR-51



PWR-5000



PWR-4000



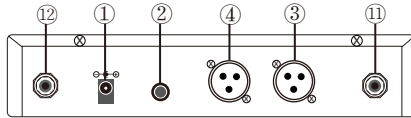
Front panel

- 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 CH7.
- ⑨ **Volume 8 control:**
Adjust volume for CH8.
- ⑩ **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.**
- ⑫ **RF 3: CH3 RF signal indicator.**
- ⑬ **RF 4: CH4 RF signal indicator.**
- ⑭ **RF 5: CH5 RF signal indicator.**
- ⑮ **RF 6: CH6 RF signal indicator.**
- ⑯ **RF 7: CH7 RF signal indicator.**
- ⑰ **RF 8: CH8 RF signal indicator.**

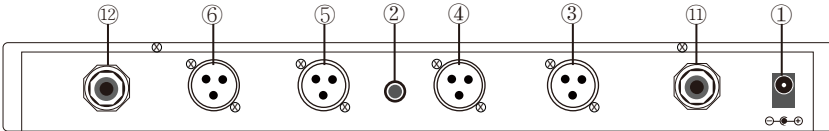
- ⑱ **AF 1: CH1 audio signal indicator.**
It lights when the transmitter receives the audio signal.
- ⑲ **AF 2: CH2 audio signal indicator.**
- ⑳ **AF 3: CH3 audio signal indicator.**
- ㉑ **AF 4: CH4 audio signal indicator.**
- ㉒ **AF 5: CH5 audio signal indicator.**
- ㉓ **AF 6: CH6 audio signal indicator.**
- ㉔ **AF 7: CH7 audio signal indicator.**

- ㉕ **AF 8: CH8 audio signal indicator.**
- ㉖ **CH1 frequency number**
- ㉗ **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**

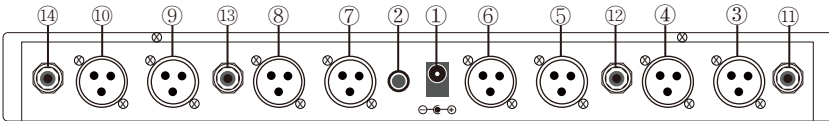
PWR-51



PWR-5000



PWR-4000

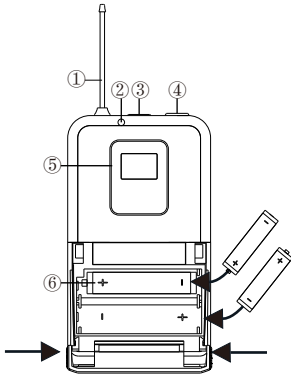


Rear panel

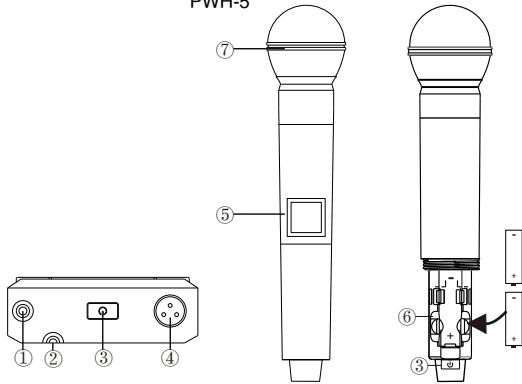
- ① **Power jack**
- ② **1/4" mixed output jack:**
The 1/4" (6.35mm) output jack accepts an unbalanced TS phone-type connector.
- ③ **Balanced XLR output for CH1**
- ④ **Balanced XLR output for CH2**
- ⑤ **Balanced XLR output for CH3**
- ⑥ **Balanced XLR output for CH4**
- ⑦ **Balanced XLR output for CH5**
- ⑧ **Balanced XLR output for CH6**
- ⑨ **Balanced XLR output for CH7**
- ⑩ **Balanced XLR output for CH8**
- ⑪ **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.
- ⑬ **Antenna C:** Connect the 900MHz antenna to pick up signals from transmitters.
- ⑭ **Antenna D:** Connect the 900MHz antenna to pick up signals from transmitters.

Transmitters

Bodypack transmitter PWB-5



Handheld transmitter PWH-5



- ① **Antenna:** For signal transmission.
- ② **Battery LED light:** It maintains green to indicate sufficient battery and red to show low battery.
- 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:** Connect to a 3-pin mini XLR connector headset or lapel mic.
- 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

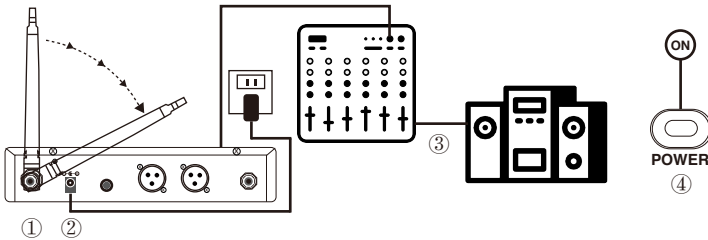
① Connect antennas to the receiver via ANT jacks.

***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.

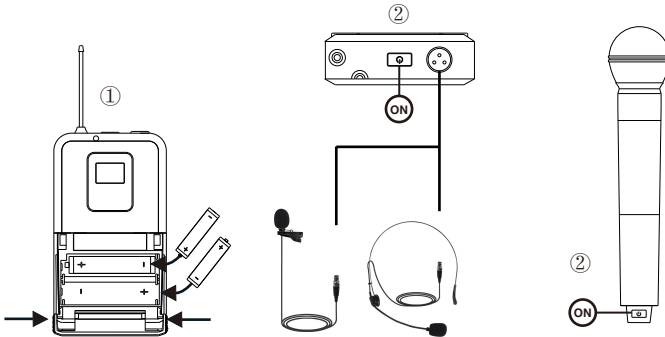
④ Long press (2s) the power button of the receiver to turn it on.



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

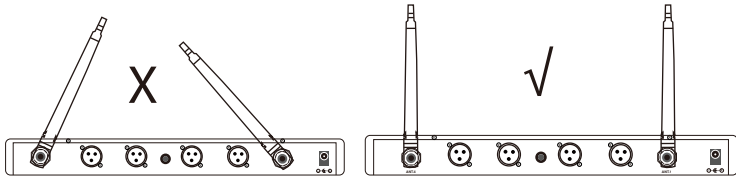
The transmitter and the receiver will pair up automatically.

***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.
- 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
No sound or faint sound	Receiver LCD screen off	<ul style="list-style-type: none"> • Make sure the DC adapter is securely plugged into an electrical outlet. • Make sure the receiver is powered on.
	Receiver LCD screen on	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Replace fresh batteries for the transmitter.
A howling noise (also “feedback”) from the speaker		<ul style="list-style-type: none"> • Do not point the microphone directly to the speaker. And increase their distance.

Specification

Specification

• Overall System

Frequency Stability	±0.003 %
Dynamic Range	>105 dB
Operation Temperature	-10 °C ~ +50 °C
Frequency Response	50 Hz-18 kHz
Audio Output Level	1/4 interface: 0-500 mV; XLR interface: 0-500 mV
Working Distance	80 M/260 ft

• Receiver

Oscillation Mode	PLL Synthesized
Power Consumption	>7 W
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 12-15 V, Current 1000mA, External power adapter

• Handheld & Bodypack Transmitter

Audio Input Level	Gain: 0 dB; -20 dBV maximum -10 dB; -0 dBV maximum
Gain Adjustment Range	10 dB
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
PWR-51	Channel 1: 558.90 MHz	ANTB-500
	Channel 2: 571.80 MHz	
PWR-5000	Channel 1: 541.90 MHz	ANTB-500
	Channel 2: 546.30 MHz	
	Channel 3: 561.60 MHz	
	Channel 4: 568.65 MHz	
PWR-4000	Channel 1: 541.90 MHz	ANTB-500
	Channel 2: 546.30 MHz	
	Channel 3: 561.60 MHz	
	Channel 4: 568.65 MHz	
	Channel 5: 911.30 MHz	ANTB-900
	Channel 6: 914.90 MHz	
	Channel 7: 919.70 MHz	
	Channel 8: 925.20 MHz	

Technical Support & Warranty Information

Our warranty to you:

Phenyx Technology ("Phenyx") warrants Phenyx products against evident defects 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 subject to registration of your product at www.phenyxpro.com.

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 profits, 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.



www.phenyxpro.com

Made in China

Manufacturer: Guangzhou VILAN Technology CO., LTD.

Address: No.101 Wanggangdexing Road, Baiyun District, Guangzhou, China

After-sales Service E-mail: support@phenyxpro.com ; info@phenyxpro.com

Thank you for purchasing the Phenyx Pro PTU-51/5000/4000 series.
For best results and satisfaction with your new device,
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	5
System overview	5
System features	5
System components	5
Functions of the parts	6
Receiver	6
Transmitter	8
Operating instructions	9
Radio tips	10
Troubleshooting	11
Specification	12-13
Technical support & warranty information	14