

PHENYX PRO[®]

PTU-4000

PHENYX PRO PTU-4000 8-CHANNEL UHF FIXED
FREQUENCY WIRELESS MICROPHONE SYSTEM



PHENYX PRO[®]
www.phenyxpro.com
Designed in US Made in China

OWNER'S MANUAL

Thank you for purchasing the PHENYX PRO PTU-4000 8-Channel
UHF Fixed Frequency Wireless Microphone System.

This manual includes a description of features and a
step-by-step guide to operate the unit.

Please read this manual carefully to ensure proper use and operation,
and keep it for future reference.

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Technical Support & Warranty Information

Our Warranty to you:

Phenyx Technology ("Phenyx") warrants Phenyx products against evident 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 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

Specifications

• Overall System

Frequency range	500 - 960 MHz (Depends on local regulations)
Frequency stability	± 0.003%
Dynamic range	> 105dB
Operation temperature	-10 °C --- 50 °C
Frequency response	50Hz - 18kHz
Audio output level	1/4 interface: 0 - 500mV; XLR interface: 0 - 500mV
Working distance	80m/260ft

• 8-Channel Wireless Receiver

Oscillation mode	PLL Synthesized
Power consumption	> 7W
Output impedance	XLR connector: 200 ohm. Antenna connector: 50ohm
RF sensitivity	-105 dBm
Image rejection	> 100 dB
Spurious rejection	> 90 dB
Power requirement	DC 13.5V, Current 500mA, External power adapter.

• Handled 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

System Description

Box Contents

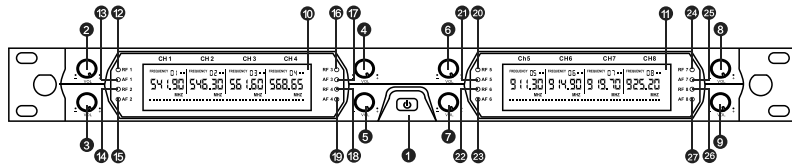
- 1 x 8-Channel UHF wireless receiver with mixed XLR and 1/4" output
- 4 x Antenna
- 8 x Anti-rolling ring for microphone
- 8 x UHF wireless handheld microphone
- 16 x AA battery
- 1 x Power adapter
- 1 x 6.5mm Audio cable
- 1 x User manual

Note: Additional antenna kit and accessories are available on www.phenyxpro.com

System Overview

The PTU-4000 is a 8-channel UHF fixed frequency wireless microphone system developed by Phenyx Technology, a truly reliable and affordable solution for wireless performance. With LCD display of frequency and channel information, the setup and operation of this system is straightforward and simple. High quality microphone capsule is engineered to ensure true and clear sound quality. The whole mic set features stable and reliable outdoor performances, ideal for conference rooms, classrooms, dance hall, KTV rooms, churches and parties. Operating distance is up to 80m/260ft line of sight in open space.

Front Panel



- ① **Power Switch**
Press the button for 1 sec to turn on receiver and press it again to turn it off
- ② **Volume 1 Control**
Adjust the volume output of sound from CH1
- ③ **Volume 2 Control**
Adjust the volume output of sound from CH2
- ④ **Volume 3 Control**
Adjust the volume output of sound from CH3
- ⑤ **Volume 4 Control**
Adjust the volume output of sound from CH4
- ⑥ **Volume 5 Control**
Adjust the volume output of sound from CH5
- ⑦ **Volume 6 Control**
Adjust the volume output of sound from CH6
- ⑧ **Volume 7 Control**
Adjust the volume output of sound from CH7
- ⑨ **Volume 8 Control**
Adjust the volume output of sound from CH8
- ⑩ **Channel 1 to Channel 4 (CH1, CH2, CH3, CH4) LCD Display**
- ⑪ **Channel 5 to Channel 8 (CH5, CH6, CH7, CH8) LCD Display**
- ⑫ **RF 1: CH1 wireless signal indicator**
- ⑬ **AF 1: CH1 audio indicator**
- ⑭ **RF 2: CH2 wireless signal indicator**
- ⑮ **AF 2: CH2 audio indicator**
- ⑯ **RF 3: CH3 wireless signal indicator**
- ⑰ **AF 3: CH3 audio indicator**
- ⑱ **RF 4: CH4 wireless signal indicator**
- ⑲ **AF 4: CH4 audio indicator**
- ⑳ **RF 5: CH5 wireless signal indicator**
- ㉑ **AF 5: CH5 audio indicator**
- ㉒ **RF 6: CH6 wireless signal indicator**
- ㉓ **AF 6: CH6 audio indicator**
- ㉔ **RF 7: CH7 wireless signal indicator**
- ㉕ **AF 7: CH7 audio indicator**
- ㉖ **RF 8: CH8 wireless signal indicator**
- ㉗ **AF 8: CH8 audio indicator**

Troubleshooting Tips

ISSUE	REASON	SOLUTION
Transmitter battery indicator is rapidly flashing or continuously ON	The batteries are low	Replace with fresh batteries
A howling noise (also known as "feedback") can be heard from the speakers	The microphone is too close to the speaker	Increase the distance between the microphone and the speaker Avoid pointing the microphone directly at the speaker
No sound coming to the receiver	The wireless microphone is outside of the receiver's range	Keep wireless microphone within operating range of the receiver
Sound reaches the receiver, but no sound coming from the receiver	The wireless transmitter is off or muted (switch set to "OFF" or "MUTE")	Turn wireless microphone on. Replace batteries if necessary
The working distance is much shorter than described in the specification	Volume control too low	Turn up the output volume by turning the volume control buttons in the front of the receiver clockwise.
	Output is not (or wrongly) connected	Verify all connections to the rest of your system. Try different connection cables if available.
	Antennas are connected to the wrong slots	Connect the antennas with the "555 MHZ" mark to "ANT A" and "ANT B" slots at the back of the receiver (right behind the CH1 to CH4 LCD display) and antennas with "915 MHZ" mark to the "ANT C" and "ANT D" slots

If product is defective or for all inquiries including warranty cover, please email support@phenyxpro.com

Operating Instructions

Set up

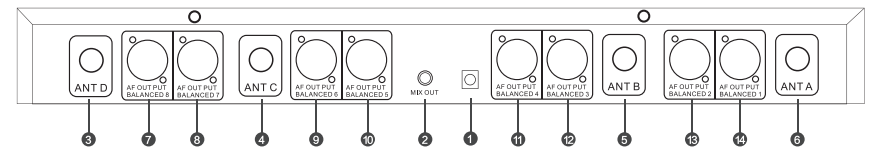
- 1 - Install fresh batteries in the transmitters (fresh to the section relative to the specific transmitter you are using).
- 2 - Connect the AC power adapter to a wall outlet and to the back of the receiver.
- 3 - Screw the two antennas with the "555 MHz" mark at the root to the "ANT A" and "ANT B" slots at the back of the receiver (right behind the CH1 to CH4 LCD display) and antennas with "915 MHz" mark to the "ANT C" and "ANT D" slots. Position the antennas 60 degrees apart from each other. NOTE: There are two groups of frequency range for the 4 antenna slots ("ANT A" and "ANT B" are 555 MHz and "ANT C" and "ANT D" are 915 MHz). It's recommended to connect antennas to slots with the same frequency range for best performance.
- 4 - Connect one of the nine outputs available at the back panel to the next stage in your system. Typically, use the 1/4" output to connect to unbalanced equipment such as a consumer level receiver, amplifiers and mixers. Connect to professional equipment using the XLR outputs (cable not included).
- 5 - Making sure the volume of your speakers is off, turn on the receiver and the transmitters. The LCD display turns on and the RF LED lights up, indicating that the corresponding transmitter is paired with the receiver. Note that the frequency and channel display are fixed and cannot be adjusted. The AF LED indicates the presence of an audio signal coming from the transmitter.
- 6 - Turn the volume of your speakers back on and start increasing the volume of the transmitters until proper volume is achieved.

Operation

For better result, keep the transmitter at least 2' away from the receiver but within the transmitter's range (80m/260ft). Keep the transmitters in a direct line of sight with the receiver whenever possible. Electronics devices such as mobile phones, radios, and other transmitting devices may interfere with the wireless system transmitters. Please keep transmitters and receiver away from those devices and other possible interfering sources.

Receiver for PTU-4000

Back Panel



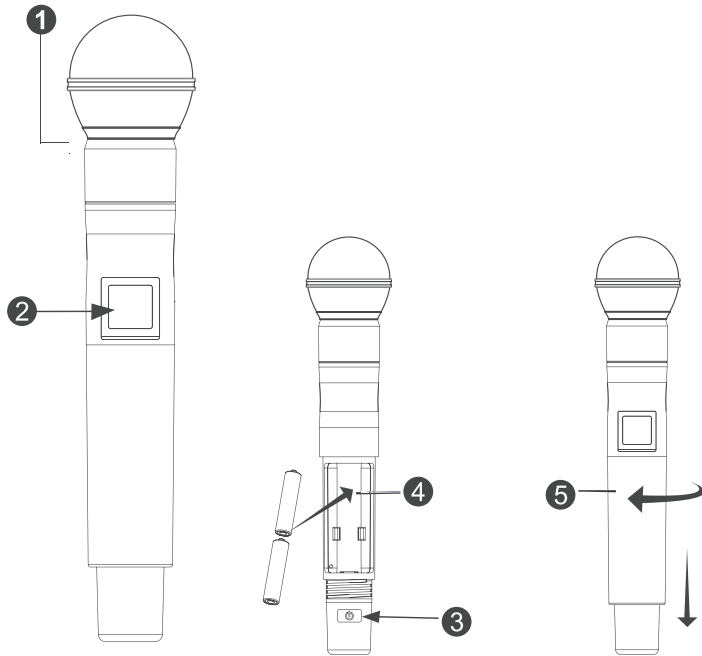
- 1 **Power Switch**
Connect AC/DC adapter to receiver
- 2 **1/4" Audio Output Jack**
Connect the audio cable from this jack to the input port of amplifier, mixer, or other PA system of your choice.
- 3 **Antenna D (915 MHz)**
- 4 **Antenna C (915 MHz)**
- 5 **Antenna B (555 MHz)**
- 6 **Antenna A (555 MHz)**
- 7 **Balanced XLR output for CH8**
- 8 **Balanced XLR output for CH7**
- 9 **Balanced XLR output for CH6**
- 10 **Balanced XLR output for CH5**
- 11 **Balanced XLR output for CH4**
- 12 **Balanced XLR output for CH3**
- 13 **Balanced XLR output for CH2**
- 14 **Balanced XLR output for CH1**

Attention: The antenna slots are of two different frequency groups and it's recommended to connect the antennas to the correct slots for best performance. Please refer to the Operation Section below for more detail.

Transmitters

Handheld Microphone

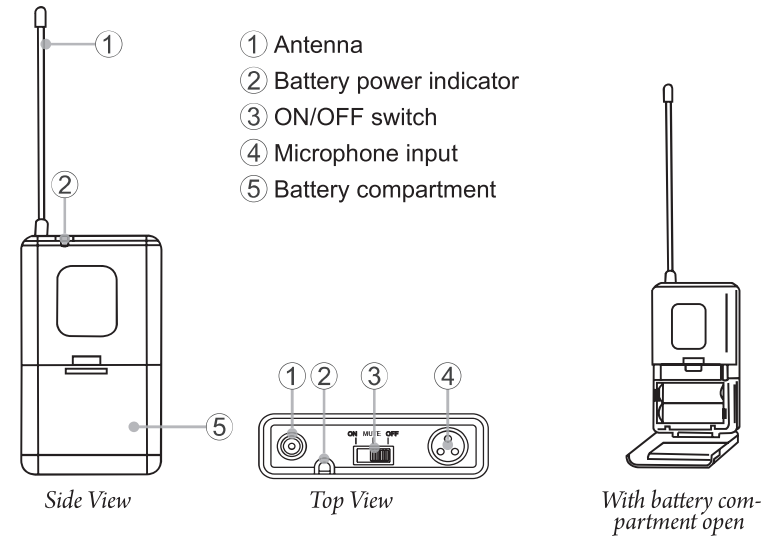
- ① Microphone capsule
- ② LCD display window
- ③ Power switch
Press the power switch to turn on or turn off the microphone.
- ④ Battery Compartment
- ⑤ Battery Cover



When turn on the transmitter, the battery power icon is on the right of the LCD display. If the battery icon indicates that battery power is low, the batteries must be replaced to maintain normal operation.

Bodypack

The Phenyx UHF bodypack is to be used with the Phenyx lavalier microphone & headsets.



Set Up:

- 1- Secure the bodypack to clothing, belt or pocket.
- 2- (a) For a lavalier microphone, clip the microphone to clothing about 1 foot under the mouth.
(b) For a headset, install headset comfortably on head so the microphone can be placed close to the mouth.
- 3- Connect the microphone audio connector to the bodypack microphone input (4)
- 4- Turn the bodypack on by sliding the the ON/OFF switch.
The battery power indicator (2) will light up briefly, indicating that the batteries have sufficient power.

If the battery power indicator (3) stays continuously on after powering on the bodypack, the batteries must be replaced. To replace the batteries, proceed as follows:

- Open the battery compartment door by pushing on the door sides and pulling it open
- After removing the old batteries, insert new ones, making sure to respect proper polarity
- Close compartment by gently pushing the compartment door until it clicks