



PRO-XR

**2.4 GHz WIRELESS
MICROPHONE SYSTEM**



INSTRUCTION MANUAL

ADVISORY

CAUTION: DO NOT STORE OR OPERATE THIS PRODUCT NEAR A HEAT SOURCE OR IN AN ENVIRONMENT OF EXTREME TEMPERATURES. AVOID EXPOSURE TO RAIN OR ANY OTHER SOURCE OF MOISTURE. DO NOT SUBMERGE IN WATER. IF EXTERIOR IS EXPOSED TO WATER, WIPE DRY BEFORE USE. DO NOT ATTEMPT TO OPEN THE CASING OR MAKE ANY MODIFICATION TO THE INTERNAL ELECTRICAL COMPONENTS. ELECTRIC SHOCK OR INJURY MAY RESULT. ANY UNAUTHORIZED MODIFICATION TO THIS PRODUCT WILL VOID ANY APPLICABLE WARRANTIES.

The PRO-XR 2.4 GHz Wireless Microphone System is certified for legal operation in the United States of America and Canada. Use of the PRO-XR may or may not be allowed in other countries. It is the responsibility of the user to check the local wireless frequency regulations of any country outside of the previously stated certified countries.

Federal Communication Commission Interference Statement

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 generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does 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 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The exposure standard for wireless devices employing a unit of measurement is known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID: BZBPRO-XR.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard.

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. 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.

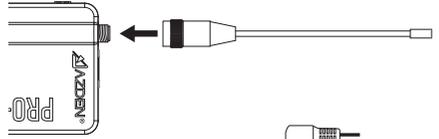
IC Radiation Exposure Statement:

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

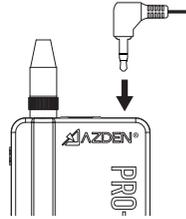
Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation du débit d'absorption spécifique (DAS).

QUICK START GUIDE

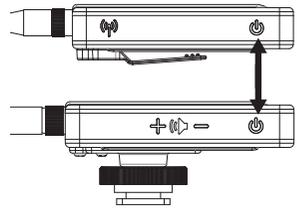
- ① Attach one of the included antennas to the transmitter (TX) by screwing it to the antenna threads on top.



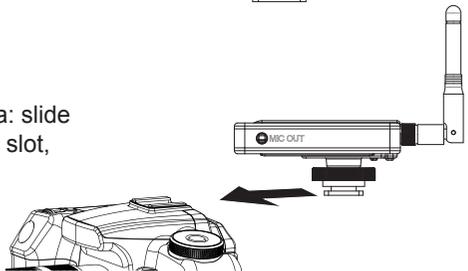
- ② Plug the EX-507XR lavalier microphone into the transmitter's (TX) Microphone Input located on top.



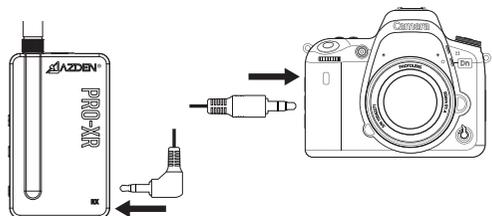
- ③ Turn on both the receiver (RX) and transmitter (TX) units by pressing and holding down the power button for 1 second. The units should pair automatically, and each show 2 solid green lights.



- ④ Mount the receiver (RX) to your camera: slide the shoe mount into the camera's shoe slot, and tighten the thumb wheel.



- ⑤ Connect the MIC OUT of the receiver (RX) to your camera's microphone input using the included Audio Output Cable.



You're ready to start shooting video with your PRO-XR 2.4 GHz Wireless Microphone System!
Keep reading for more detailed instructions.

INTRODUCTION

Congratulations on purchasing the Azden® PRO-XR 2.4 GHz Wireless Microphone System. The PRO-XR was designed to provide amateur and semi-professional video producers alike with a high quality, yet affordable wireless audio solution.

The PRO-XR has a number of unique features that allow it to perform well even in the face of a crowded 2.4 GHz environment. First, the system auto-scans the full 2.4 GHz spectrum each time it is powered on and finds the most interference-free frequencies to use for its connection. Second, the PRO-XR uses Automatic Interference Avoidance where it adapts to the ever changing 2.4 GHz environment and changes its transmission frequencies anytime interference is detected. Lastly, the PRO-XR employs Signal Redundancy Technology, which broadcasts two identical audio signals on two different frequencies, and seamlessly switches to always use the better quality signal.

Additionally, the PRO-XR system allows the user to change the transmission power from the default of 20 milliwatts (mW) to 50 mW or 100 mW. These stronger transmission powers allow the system to perform well at extreme distances, and help to overcome limiting factors such as line-of-sight obstructions, and over-crowded Wi-Fi environments.

Each PRO-XR system includes a body-pack transmitter (PRO-XRT), receiver with attached shoe mount (PRO-XRR), a lapel microphone (EX-507XR), a Smartphone Mount with accessory shoe and ¼"-20 thread, an audio output cable, a TRS to TRRS adapter cable, a certified Apple Lightning to Headphone Cable, a USB dual-charging cable and an A/C power adapter. Two antenna options are included for the transmitter: a flexible antenna and high-gain antenna, while the receiver's antenna is included already attached to the unit.

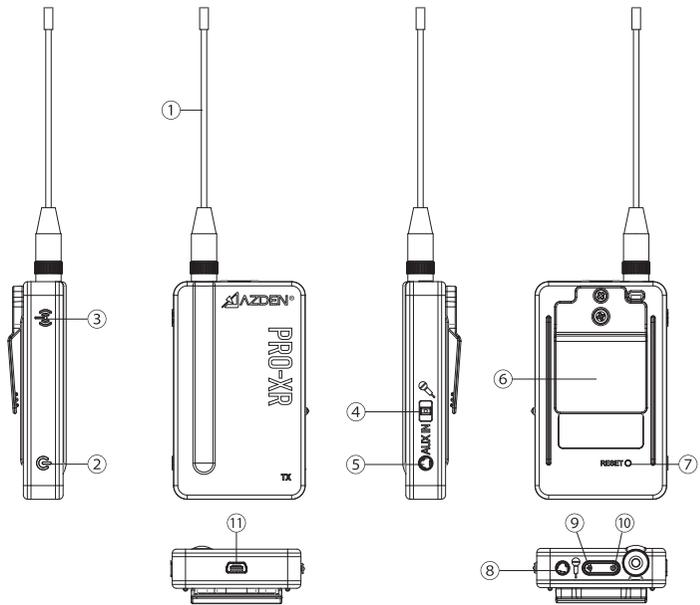


TX Antennas

There are two different transmitter antennas included in the box. The thinner, flexible antenna will be the most comfortable to use and will perform well in most situations. The high-gain antenna, which is identical to the antenna on the receiver, is more obtrusive but will improve performance. Use of the high-gain antenna is recommended whenever possible, especially if you are using the PRO-XR in an environment with over-crowded Wi-Fi, line-of-sight obstructions, or intend to operate it at a long distance. See page 11 for more on antennas.

PRO-XRT TRANSMITTER (TX)

- ① Antenna
- ② Power Button
- ③ Transmission Power Button
- ④ Input Selector
- ⑤ Aux Input
- ⑥ Belt Clip
- ⑦ Reset
- ⑧ Microphone Input
- ⑨ Signal Indicator
- ⑩ Power Indicator
- ⑪ Mini USB Charging Port



OPERATION

Power On/Off

Turn on the PRO-XRT by pressing and holding the Power Button (2) for 1 second. It may take a few seconds for the transmitter and receiver to connect and show solid green Signal Indicator (9) lights.

Power Indicator

The Power Indicator light (10) will change color or blink to show the remaining battery capacity.

GREEN: more than 50% battery remains / ORANGE: between 30-50% battery remains / RED: 10-30% battery remains.

BLINKING RED: Less than 10% battery remains. Charge soon or risk losing audio.

Signal Indicator

The Signal Indicator (9) on the transmitter will let you know the status of the connection and the transmission power: When this light is lit SOLID GREEN it means the unit is broadcasting a wireless signal. If this light is FLASHING GREEN, it indicates that the transmitter is in pairing mode and trying to establish a connection. See detailed instructions on Pairing on page 7. See below for transmission power status.

Transmission Power

The PRO-XRT unit can transmit its signal at 3 different intensities: 20 mW, 50 mW and 100 mW. While the unit is on, the transmission power can be changed by pressing (hold for 1 second) the Transmission Power Button (3). The default setting is 20 mW and will always reset to this default each time the unit is powered on. GREEN indicates the default 20 mW output power. The Signal Indicator (9) will turn YELLOW to indicate 50 mW transmission, and RED to indicate 100 mW transmission.

Input Selector

The Input Selector Switch (4) selects the audio input source and has 3 positions. Moving the switch towards the microphone icon selects the Microphone Input (8). Moving the switch towards the words "AUX IN" selects the Aux Input (5). Setting the switch in the middle will allow you to use both inputs simultaneously.

Microphone & Aux Inputs

The PRO-XRT has two audio inputs. The Microphone Input (8) is a 3.5 mm, unbalanced TRS jack located at the top of the unit and is designed to accept a mono, microphone level signal. Plug the EX-507XR lapel microphone into this input. The Aux Input (5) is a 3.5 mm unbalanced TRS jack located on the side of the unit and is designed to accept a stereo, line level signal (however, the system will sum this to mono for transmission). Read more about the AUX input on page 10.

Charging

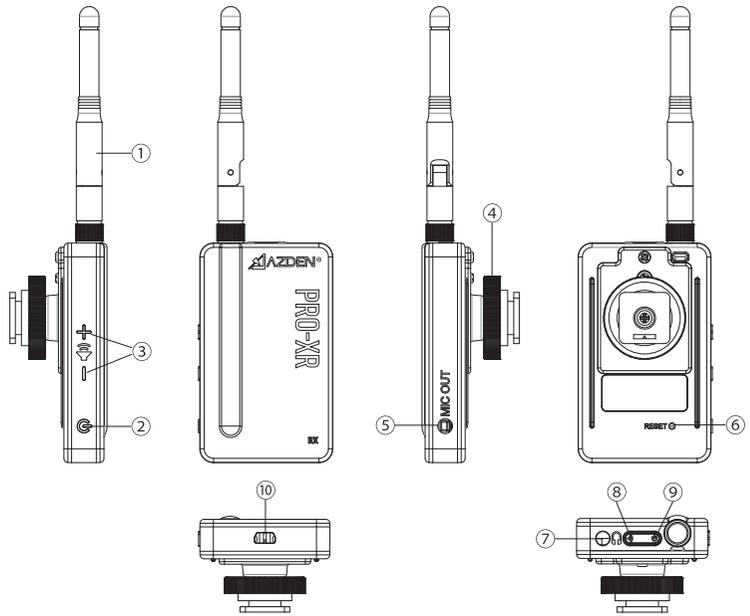
Charge the transmitter by plugging one of the mini ends of the USB dual-charging cable into the Mini USB Charging Port (11) and then plug the USB-A end into the included AC adapter (to be plugged into a power socket). During charging the Power Indicator (10) will FLASH GREEN; once the battery is full, this light will turn off. Read more about charging on page 10.

Reset

The Reset Button (7) acts as an emergency off switch in case the unit's Power Button (2) becomes unresponsive.

PRO-XRR RECEIVER (RX)

- ① Antenna
- ② Power Button
- ③ Volume Control
- ④ Shoe Mount
- ⑤ Microphone Output
- ⑥ Reset
- ⑦ Headphone Output
- ⑧ Signal Indicator
- ⑨ Power Indicator
- ⑩ Mini USB Charging Port



OPERATION

Power On/Off

Turn on the PRO-XRR by pressing and holding the Power Button (②) for 1 second. It may take a few seconds for the transmitter and receiver to connect and show solid green Signal Indicator (⑧) lights.

Power Indicator

The Power Indicator light (⑨) will change color or blink to show the remaining battery capacity.
GREEN: more than 50% battery remains / ORANGE: between 30-50% battery remains / RED: 10-30% battery remains.
BLINKING RED: Less than 10% battery remains. Charge soon or risk losing audio.

Signal Indicator

When the receiver is paired and communicating with the transmitter, the Signal Indicator (⑧) will be SOLID GREEN. If this light is FLASHING GREEN, it indicates that the receiver is not connected to the transmitter, or has gone out of range. If this light remains blinking, the units will have to be paired again. See detailed instructions on pairing on page 7.

Volume Control

Use the Volume Control (③) to increase or decrease the microphone output gain level. A change in headphone level will also correspond with the change in microphone output gain level. The Volume Control has a total of 6 increments. Each time the unit is powered on it will start at the default volume setting. There are 2 increments of volume increase available above the default level. To increase the volume, press the plus (+) button. There are 3 increments of volume decrease available below the default level. To decrease the volume, press the minus (-) button. Each incremental change in volume corresponds to about 3 dB.

Microphone Output

The Microphone Output (⑤) on the receiver is a 3.5 mm, unbalanced TRS stereo jack that outputs a microphone level audio signal. Use the included Audio Output Cable to connect the receiver to the mic input of a camera. Additionally, the Audio Output Cable can be used in tandem with the TRS to TRRS Adapter Cable and/or the iOS Lightning to Headphone Cable to connect the receiver to a smartphone or tablet. See more about connections on pages 8-9.

Headphone Output

The Headphone Output (⑦) is a 3.5 mm, unbalanced TRS stereo jack that outputs a line level signal that is generally intended for headphones and earbuds (not included). Use this output to monitor the sound coming from the transmitter.

Charging

Charge the receiver by plugging one of the mini ends of the USB dual-charging cable into the receiver's Mini-USB Charging Port (⑩) and then plug the USB-A end into the included AC adapter (to be plugged into a power socket). During charging the Power Indicator (⑨) will FLASH GREEN; once the battery is full, this light will turn off. Read more about charging on page 10.

Reset

The Reset Button (⑥) acts as an emergency off switch in case the unit's Power Button (②) becomes unresponsive.

The EX-507XR Lapel Microphone

The PRO-XR system comes with a high quality lapel microphone. The lapel mic is omni-directional and powered by the transmitter (via plug-in power) and uses a standard, unbalanced TRS 3.5 mm male connector so it may be used with some other wireless systems if desired. It comes with a lapel clip and attached windscreen.

To use the EX-507XR with the PRO-XR system, simply plug it into the Microphone Input located on the top of the transmitter. For best results, clip the lapel microphone to your subject's clothing at a distance of 3 – 6 inches away from their mouth.



Pairing The Transmitter and Receiver

The transmitter (TX) and receiver (RX) of each PRO-XR system are paired at the factory and are ready to use out of the box. However, there may be some cases in which you will have to manually pair the units with each other again. If the RX's Signal Indicator light is blinking persistently, this would indicate that the TX and RX units have lost sync and need to be paired again. This pairing procedure would also be necessary if you have replaced either of your original TX or RX units and are using it for the first time, or if you want to use additional RX units with your TX.

1. Start with both the TX and RX units powered off. Note that pairing will not be possible if either unit is low on battery (red power indicator light).
2. On both TX and RX units simultaneously: Press and Hold the power button for five seconds to enter pairing mode. During this time the units will turn on. Continue holding the power buttons until the RX and TX both show a solid RED Signal Indicator light. (TX will take longer than RX).
3. Release the power buttons. The Signal Indicator light on both units will now be flashing RED. Wait until the RX's Signal Indicator light turns to flashing GREEN. This may happen almost immediately after releasing the power button or it may take a few seconds.
4. Press and release both power buttons once more to lock the pairing. The Signal Indicator lights on both units should turn to SOLID GREEN within a few seconds.

If your first pairing attempt is unsuccessful, please turn off the units and try again. Once the RX and TX units are paired they will remain so for subsequent uses. Pairing will be automatic upon both units being powered on.

To pair multiple RXs to one TX, complete steps 1-4 for each RX. When all units are turned on, the TX will auto-pair with all RXs. It is not possible to pair multiple TXs to one RX.

Setting The Transmission Power

The PRO-XR transmitter (TX) has the ability to broadcast its signal at 3 different strengths: 20 mW, 50 mW and 100 mW. The default is set to 20 mW and the TX will always start from the default each time it is powered on. To change the transmission power, press and hold for 1 second the Transmission Power Button. Each time this is done the Signal Indicator light will change color to show the new setting in effect, as follows:

Signal Indicator Light : GREEN = 20 mW / ORANGE = 50 mW / RED = 100 mW

In most scenarios, 20 mW will be sufficient for a reliable connection. However, increasing transmission power may improve performance when certain environmental challenges are present. Some examples include:

1. In areas where there is an overcrowding of Wi-Fi and other 2.4 GHz signals (hotels, convention halls, sporting events, etc.)
2. When line-of-sight between receiver and transmitter is obstructed by large objects such as walls, buildings, vehicles, etc., or by crowds of people.
3. When operating the system at extreme distances (100 feet and beyond).

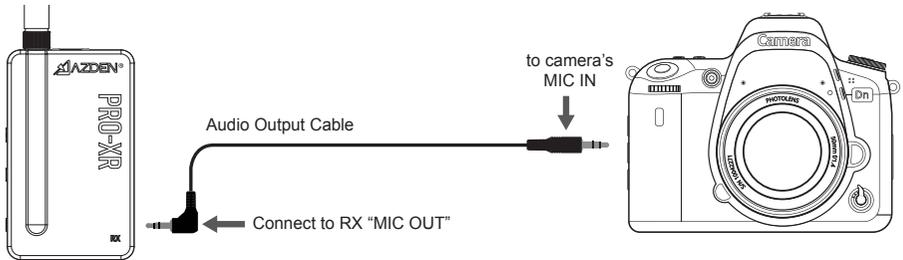
Some important things to note about Transmission Power:

1. Using the 50 mW and 100 mW settings may actually be detrimental to performance at short distances (less than 5 feet).
2. Using the 50 mW and 100 mW settings will drain the transmitter's battery more quickly (see specifications).
3. While 2.4 GHz wireless is legal for unlicensed use in almost every country, not all countries allow for transmission powers of 20 mW or more. It is recommended before traveling with the PRO-XR that you check the destination country's wireless regulations. The PRO-XR is approved by the FCC for unlicensed use in the United States, and approved by IC for unlicensed use in Canada.

Use With a Camera

The PRO-XR receiver comes with a standard camera shoe mount attached for easy mounting to a DSLR camera, mirrorless camera, or camcorder. To mount the receiver, slide the shoe mount into the camera's accessory shoe slot. Tighten the thumbwheel to secure the receiver in the shoe slot.

3.5 mm Mic Inputs: Your camera must be equipped with a 3.5 mm microphone input jack in order to use the PRO-XR system with it. Connect the receiver's MIC OUT jack to your camera's microphone input jack using the included Audio Output Cable. Once connected, most cameras will automatically detect that there is an external microphone being used. However, some cameras may require that you manually select the input audio source. Be sure to check your camera's manual.



XLR Inputs: Some large-format, professional cameras may only have XLR inputs available for microphone connections. If you wish to use the PRO-XR system with an XLR microphone input, this can be done with Azden's MX-2 Mini to XLR Stereo Y Cable (sold separately). While the MX-2 provides 2 male XLR connectors, it is only necessary to connect 1 to your equipment (does not matter which). Compatibility with balanced XLR inputs using any other cable cannot be guaranteed.

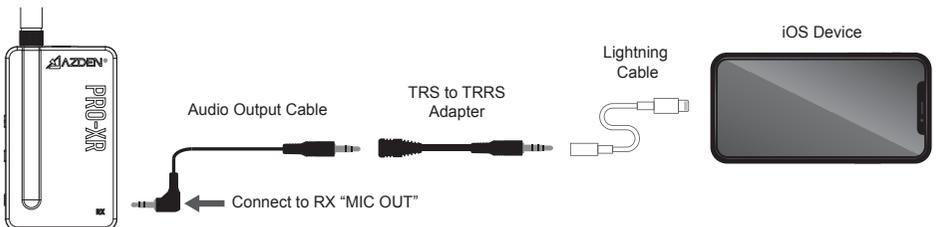
Use With Mobile Devices

The PRO-XR may be used with smartphones and tablets for mobile video shooting and live streaming. The PRO-XR system comes with two mobile adapter cables, both of which may be needed in order to use the system with your mobile device. These adapter cables should grant compatibility with current Apple iPhone and iPad models, Samsung Galaxy phones and tablets, as well as many other popular Android phones and tablets.

Also included in the box is a **Smartphone Mount** to facilitate the mounting of the PRO-XR receiver to your smartphone, and your smartphone to a tripod or mobile grip.

Connecting to an Apple iOS Device with Lightning Connector (iPhone, iPad, iPod Touch)

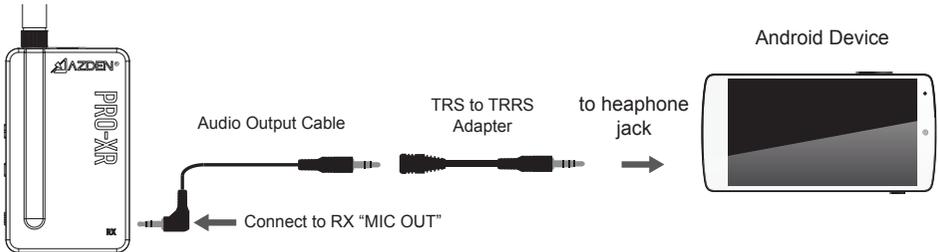
1. Connect the Lightning to Headphone Adapter Cable to the Lightning port of your iOS device
2. Connect the male end of the TRS to TRRS Adapter Cable to the female end of the Lightning to Headphone Adapter Cable
3. Connect one end of the Audio Output Cable to the female end of the TRS to TRRS Adapter Cable.
4. Connect the remaining end of the Audio Output Cable to the PRO-XR receiver's MIC OUT jack (located on the side of the unit).



Connecting to a Mobile Device with TRRS Headphone Jack

(Most Android devices / older iOS devices)

1. Connect the male end of the TRS to TRRS Adapter Cable to the headphone jack of your device.
2. Connect one end of the Audio Output Cable to the female end of the TRS to TRRS Adapter Cable.
3. Connect the remaining end of the Audio Output Cable to the PRO-XR receiver's MIC OUT jack (located on the side of the unit).



Using the Smartphone Mount

The PRO-XR package includes Azden's Smartphone Mount. To attach it to a smartphone: With the smartphone's back facing the inside of the mount, insert the bottom edge of the device into the mount's curved lip (at the bottom). As you angle your device so that its back sits flush against the mount, pull to extend the mount so that it clamps down snugly to the top edge.

The Smartphone Mount can accommodate phone widths from 2.4 – 3.3 inches, which should be wide enough for most phones even while inside of a case. Use the cold-shoe slot on top to attach the PRO-XR receiver or other shoe-mount accessories. The 1/4"-20 threaded hole on the bottom will allow you to attach the mount to a tripod or mobile grip.



Use With a Computer

TRRS Jack / Headset Inputs: Many computers today are equipped with the same type of headphone jack as found in mobile devices. This type of headphone jack incorporates the microphone input with the headphone output. This is sometimes referred to as a headset input or TRRS jack. If your computer has this type of jack you can connect the PRO-XR receiver in the same way as stated above in "Connecting to a Mobile Device with TRRS Headphone Jack."

Dedicated Microphone Inputs: Some computers are equipped with a dedicated 3.5 mm stereo microphone input. To properly identify this input, consult your computer's manual. If your computer has this input, then you may connect the PRO-XR receiver in the same way you would a camera with a 3.5 mm microphone input, without the use of any adapters.

Be aware that with a computer you may need to change the audio settings in the operating system and/or in the software you are using in order to utilize the audio coming from the PRO-XR system.

Use With Other Types Of Audio Equipment

The microphone output of the PRO-XR receiver is an analog, microphone level audio signal and thus can be used with any other analog microphone inputs so long as the correct cable is used. For 3.5 mm microphone inputs, the included Audio Output Cable will work. For balanced, XLR microphone inputs, it is required that you use the Azden MX-2 Mini to XLR Stereo Y Cable (sold separately). While the MX-2 provides 2 male XLR connectors, it is only necessary to connect 1 to your equipment (does not matter which).

Be advised that the PRO-XR receiver's MIC OUT is not compatible with line level inputs, such as inputs labeled as AUX or auxiliary.

Setting Optimal Recording Levels On Camera

If you are able to set the microphone recording level on your camera, it is generally best to keep the camera's gain level low and set the output level of the receiver to the maximum. This is because the preamps in most cameras tend to be of low quality and will add noise to the recording if a lot of gain is used. The output of the PRO-XR was designed to provide a strong audio signal to a camera so that gain levels on the camera's microphone input should not have to be turned up very high.

Follow these steps for optimal recording levels on a camera:

(This guide assumes your camera has an adjustable microphone gain setting and a digital audio meter display)

1. Turn on the system and ensure that the units are paired, the lapel microphone is properly plugged into the transmitter and the receiver is properly connected to the camera's microphone input.
2. Find the microphone gain settings on your camera. Set the microphone gain to manual mode if necessary (turn off auto mode). Start by setting the camera's input gain level to the minimum setting.
3. Speak into the microphone to test levels and observe the audio meters. Ideally the audio level should peak at about 75% of the max output level. This leaves room for error to avoid distortion.
 - a. If the audio level is peaking below the 75% of the max output mark, increase the output gain on the PRO-XR receiver by pressing the plus (+) button until the level is satisfactory. If the maximum is reached, and levels are still not high enough, increase the input gain on the camera until the level is satisfactory.
 - b. If the audio level is peaking well above the 75% of the max output mark, or distorting, reduce the output gain on the PRO-XR receiver by pressing the negative (-) button. If further gain reduction is necessary, you can always move the lapel mic further away from the subject's mouth or ask them to speak more softly.

Using The Aux Input

A unique feature on the PRO-XRT transmitter is the inclusion of an auxiliary input (marked AUX). This input is intended for a line level signal and will not work with microphones (to use a microphone, plug it into the transmitter's MIC IN). To use the AUX Input, push the Input Selector switch to the side with the letters "AUX IN" or in the center to mix it with the Mic Input.

There are myriad uses for the Aux Input. One possibility is it can be used to connect the output of a multi-channel mixer, thereby allowing you to wirelessly send a mix of 2 or more microphones to the receiver. Another is to connect the line output of a digital recorder to wirelessly send the audio signal to a camera, giving you a backup recording in case of any interference.

Additional cables and adapters (not included with this system) may be required in order to connect line level equipment. It is important to note that the AUX input will accept a stereo signal but that signal is summed to mono in transmission to the receiver.

Internal Battery and Charging

The transmitter and receiver each have an internal lithium-ion rechargeable battery inside. Both units charge via the mini-USB port located at the bottom. The included USB dual-charging cable splits into two mini-USB plugs to allow for charging of the RX and TX units simultaneously. While these mini-USB plugs are different colors (red, black) it does not matter which you use to charge the units. Use the included A/C adapter to allow for charging from a power outlet. Alternatively, the USB charging cable can be connected to a computer or power bank for charging.

While each unit is charging, the Power Indicator light will blink GREEN. This light will turn off to let you know charging is complete.

The total full charge time for either unit is approximately 2.5 hours. The max run time from a full battery on the transmitter is approximately 14 hours (less at 50 or 100 mW outputs), while for the receiver it is approximately 20 hours. It is also possible to operate the receiver and transmitter while being charged.

Reset Button

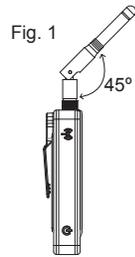
Both the transmitter and receiver have a recessed reset button located on the back. The reset button acts as a backup to the power button's "off" function. In case either unit's power button is unresponsive, the reset button can be used to power it off. To use the reset button, the unit must be powered on. Press the reset button by using a thin, rigid object like a paper clip or tip of a pen; push and hold for 1 second and then release. The unit will power off and need to be turned on again.

Transmitter Antennas

Flexible Antenna: Designed to be less obtrusive when wearing the transmitter on a belt, in a pocket, or under clothing, the flexible antenna will perform well in most situations. This antenna is designed exclusively for use with the transmitter and **should not be used on the receiver**.

High-Gain Antenna: The high-gain antenna can significantly improve wireless performance when used on the transmitter. The only drawback is that it is more obtrusive than the flexible antenna, and may not be suitable for use depending on the situation. However, we recommend the use of this antenna whenever possible, especially in challenging environments, ie: areas with a high number of Wi-Fi signals, situations with line-of-sight obstructions, and operation at long distances.

When placing the transmitter behind a person's back, for best results use the high-gain antenna and bend it away from the person's body at a 45° angle. (See Fig. 1).



Tips For Best Results

1. For each use of the PRO-XR start with the RX and TX units fully charged.
2. Monitor sound from the receiver with headphones while filming so you can catch any possible disturbances in the signal before concluding your shoot.
3. Position the TX and RX with as few physical obstacles between them as possible. While the PRO-XR system can overcome minor obstructions fairly well, a clear line-of-sight between the TX and RX is always best.
4. Use the high-gain antenna on the transmitter whenever possible. When placing the transmitter behind a person's back, bend the high-gain antenna away from the person's body at a 45° angle for better wireless performance.
5. Over-crowded Wi-Fi environments can make it challenging for the PRO-XR to find a clear channel on which to connect. An over-crowded Wi-Fi environment will also limit the number of PRO-XR systems that can be used simultaneously in the same area. Consider these limitations when choosing your location.
6. Close proximity to Wi-Fi or bluetooth equipment can negatively affect performance. Avoid operating the PRO-XR near such equipment whenever possible. If your camera has a Wi-Fi functionality, you may want to turn it off.
7. The PRO-XR system will automatically scan the 2.4 GHz environment each time it is powered on and choose the best frequencies on which to connect. You can use this to your advantage; if you know of a trouble spot because of its proximity to other 2.4 GHz equipment, turning on the PRO-XR system in a trouble spot will allow it to better avoid frequencies that are already in use. If you encounter an area that causes frequent drop outs while using the system, carry both PRO-XR units into the trouble spot, power off the units and then power them on again. When the units pair up again they will avoid using any interfering frequencies in the area.
8. Do not use the 50 mW and 100 mW output powers at distances of less than 5 feet. Reserve their use for longer distances, and to overcome physical obstacles to line-of-sight or challenging 2.4 GHz environments.
9. When using the PRO-XR with a DSLR or mirrorless camera, set the volume level of the receiver to its maximum and then reduce the gain at the camera to get a strong audio signal without overloading. If additional reduction in gain is still needed, back off the volume on the receiver until levels are optimized. In general, it is best to engage the preamp on the camera as little as possible.

SPECIFICATIONS

SYSTEM

Operating Freq.: 2.4 GHz ISM Band
Signal-To-Noise: 86 dB A-weighted
Dynamic Range: Mic: 90 dB / Line: 87 dB
Operating Range: up to 500 feet in optimal conditions
Freq. Response: Mic: 30 Hz - 20 kHz
Aux: 30 Hz - 20 kHz
Bit Rate: 384 kbps
System Latency: 4.5 ms
Battery Life Span: 500 cycles (70% peak performance)
Battery Type: Lithium-ion 3.7 V, 1200 mAh, 4.44 Wh
Power Supply: USB 5 V

RECEIVER

Max Output Level: 1.5 dBV
Mic Output: Φ 3.5 mm dual-mono TRS
Headphone Output: Φ 3.5 mm dual-mono TRS
Output Impedance: Mic: 2 k Ω ; Headphone: 10 k Ω
Battery Life: 20 hrs
Charge Time: 2.5 hours
Dimensions: 48 x 79 x 14 mm (W/H/D)
Weight: 76 g

TRANSMITTER

RF Output Power: 20/50/100 mW
Mic Input: Φ 3.5 mm mono TRS
Aux Input: Φ 3.5 mm summed-mono TRS
Input Impedance: Mic: 9.1 k Ω / Aux: 100 k Ω
Max Input: Mic: -22 dBV / Aux: -2 dBV
Battery Life: \approx 14 hrs @ 20 mW
 \approx 12 hrs @ 50 mW
 \approx 10 hrs @ 100 mW
Charge Time: 2.5 hours
Dimensions: 48 x 79 x 14 mm (W/H/D)
Weight: 65 g

MICROPHONE

Mic Element: Electret Condenser
Polar Pattern: Omni-Directional
Freq. Response: 20 Hz - 20 kHz
Sensitivity: -38 dB @1 kHz, 0 dB=1 V/Pa
Impedance: 2.2 k Ω @1 kHz
Power Req.: Plug-in power DC 1-10 V
Connector Type: Φ 3.5 mm TRS
Cord Length: 1.2 m

Register For The Two Year Warranty

Congratulations on your purchase of the PRO-XR 2.4 GHz Wireless Microphone System! The PRO-XR is covered by a limited warranty for two (2) years from the date of original purchase by the end user. Registration is required for this warranty to be valid. Please complete the warranty registration within 90 days of purchase by going online to azden.com/register.

Azden Two Year Limited Warranty

Azden Corporation warrants, to the first purchaser, that the Azden brand product purchased is free from defects in material and workmanship. Azden's sole obligation under this warranty shall be to provide, without charge, repair or replacement (at Azden's sole discretion), within two years from the date of purchase. A dated receipt is required to establish the date of purchase and registration is required to receive warranty service under this two year limited warranty. The cost to ship a failed product to and from Azden or to its dealer shall not be covered by this warranty.

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