

## Specifications

### 100UPR Receiver

Frequency Range	UHF 63-Channel Selectable (793.750 – 805.875MHz)
Type of Reception	Antenna Diversity
Oscillator	PLL Synthesized
RF Squelch Level	16dB $\mu$ V
Frequency Response	50Hz – 15kHz
S/N Ratio	>70dB "A" Weighted
Audio Distortion	<1% @ 1kHz
Operating Temp.	0°C – 50°C (32°F – 122°F)
MIC Out (Balanced)	-58dBm @ 600 $\Omega$
Monitor Out	-10dBm (Max) @ 33 $\Omega$
MIC Out Connector	3.5mm Balanced Mini-Jack
Monitor Out Connector	3.5mm Stereo Mini-Jack
Power Requirement	1 – 9V Alkaline Battery
Battery Life	6 – 8 Hours w/Alkaline Battery
Dimensions	62W x 100H x 22D mm (2.44W x 3.94H x 0.87D inches)
Weight	Approx. 120g Including Battery (4.23oz)

### 10BT Transmitter

Frequency Range	UHF 63-Channel Selectable (793.750 – 805.875MHz)
Oscillator	PLL Synthesized
RF Power	10mW (30mW Max.)
Frequency Response	50Hz – 15kHz
Max. Deviation	$\pm$ 75kHz @ 1kHz Modulation, MIC Input –11dBm
S/N Ratio	>70dB "A" Weighted
Audio Distortion	<1% @ 1kHz
MIC Sensitivity	$\pm$ 40kHz @ -22dBm MIC Input (0dBm+0.775V)
Operating Temp.	0°C – 50°C (32°F – 122°F)
MIC Input Connector	3.5mm Mini Jack
Power Requirement	1 – 9V Alkaline Battery
Battery Life	6 – 8 Hours w/Alkaline Battery
Dimensions	62W x 100H x 22D mm (2.44W x 3.94H x 0.87D inches)
Weight	Approx. 120g Including Battery (4.23oz)

### 10HT Transmitter

Frequency Range	UHF 63-Channel Selectable (793.750 – 805.875MHz)
Oscillator	PLL Synthesized
RF Power	10mW (30mW Max.)
Frequency Response	50Hz – 12kHz
Max. Deviation	$\pm$ 75kHz @ 1kHz Modulation, MIC Input –11dBm
S/N Ratio	>70dB "A" Weighted
Audio Distortion	<1% @ 1kHz
MIC Element	ECM
MIC Sensitivity	$\pm$ 5kHz @ -46dBm (0dBm+0.775V)
Operating Temp.	0°C – 50°C (32°F – 122°F)
Power Requirement	2 – "AA" Alkaline Battery (2x1.5V)
Battery Life	8-10 Hours w/Alkaline Battery
Dimensions	230H x $\emptyset$ 44D mm (9.05H x 1.73D inches)
Weight	Approx. 130g Including Batteries (4.58oz)

*Due to constant improvements, specifications are subject to change without notice.*



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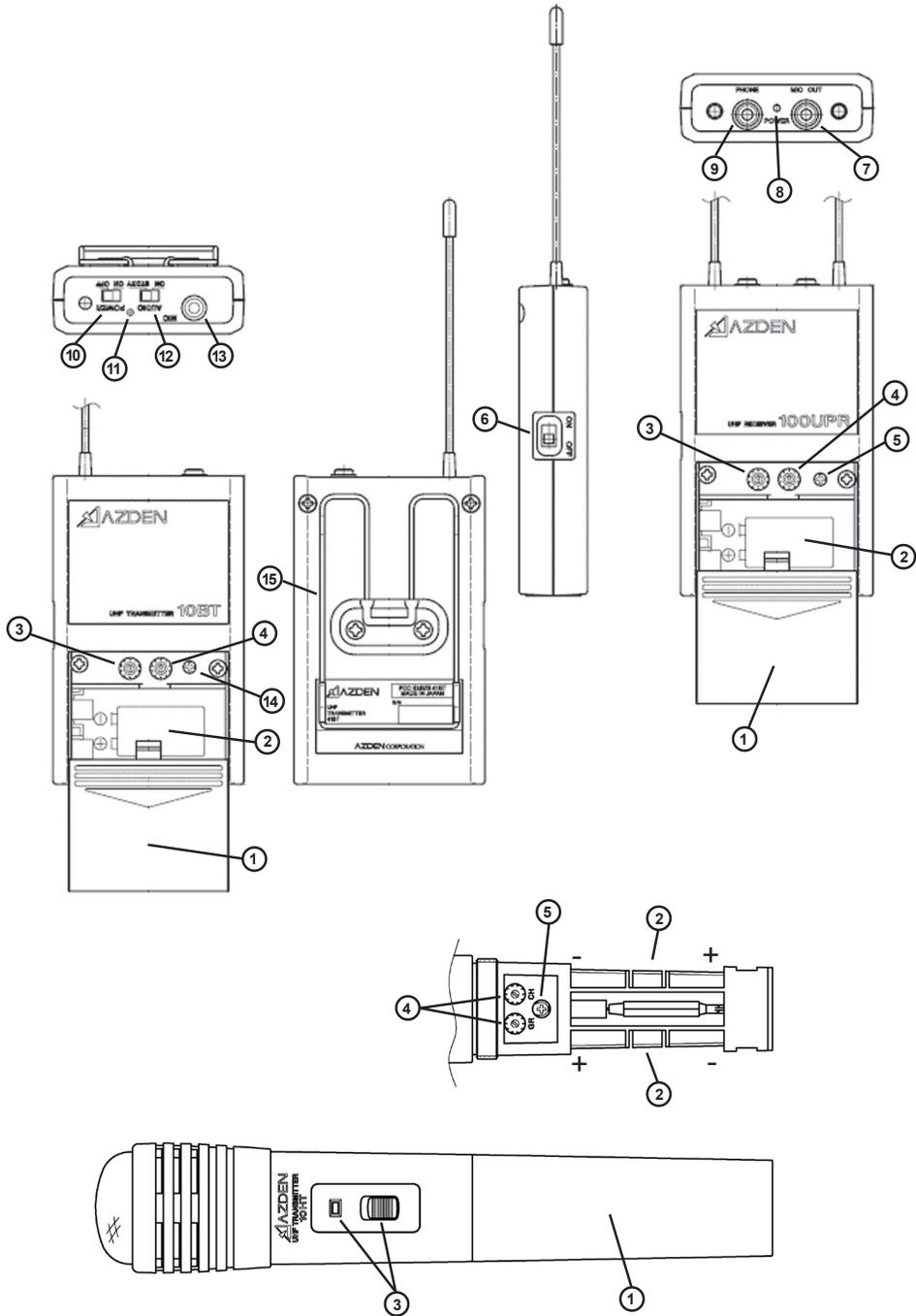
## 100LT / 100HT SYSTEM User's Guide

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### 100UPR • 10BT • 10HT ON-CAMERA UHF WIRELESS MICROPHONE SYSTEM

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UHF FREQUENCY CHART

GRP	CHANNEL								
	0	1	2	3	4	5	6	7	8
0	794.500	795.750	797.750	798.000	799.500	800.500	802.375	804.7850	805.875
1	794.375	795.625	797.625	797.875	799.375	800.375	802.250	804.625	805.750
2	793.750	795.000	797.000	797.250	798.750	799.750	801.625	804.000	805.125
3	794.250	795.500	797.500	797.750	799.250	800.250	802.125	804.500	805.625
4	794.125	795.375	797.375	797.625	799.250	800.125	802.000	804.375	805.500
5	794.000	795.250	797.250	797.500	799.000	800.000	801.875	804.250	805.375
6	793.875	795.125	797.125	797.375	798.875	799.875	801.750	804.125	805.250

**Important information**

Licensing of this, or any Azden wireless equipment is the user's responsibility. The ability to receive a license depends largely on the user's classification, application and frequency. Contact the appropriate agency (FCC in the US) for further 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: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

### **100UPR Receiver**

Mount the receiver to your camera using either the supplied Velcro or hot-shoe mount. Connect the output cable to the receiver and to the microphone input on the video camera. Switch the 100UPR to "ON" and the LED should turn *red*. If it does not light, check the battery. Plug an earphone into the phone jack to monitor sound. Adjust the phone volume as necessary. When the 100UPR receives a signal the LED will turn *green*.

### **10BT Bodypack Transmitter**

Plug in the supplied lapel microphone and clip it to your subject. The microphone should be placed 4-12 inches from your subject's mouth. Clip the transmitter to a belt using the supplied belt-clip (15) or place it in a pocket. Switch the transmitter Power and Audio to "ON". The LED should light *green*. If it does not, check the battery. Have someone speak into the microphone as you monitor the sound through the receiver's phone output. If the sound is distorted lower the input gain on the transmitter. If there is not enough volume raise the input gain on the transmitter.

### **10HT Handheld Transmitter**

Switch the transmitter to "ON". The LED should light *green*. If it does not, check the batteries. If it glows *red* it is time to replace the batteries. Have someone speak into the microphone as you monitor the sound through the receiver's phone output. If the sound is distorted lower the gain on the transmitter. If there is not enough volume raise the gain on the transmitter.

Thank you for purchasing Azden's 100LT or 100HT wireless system, which consists of the 100UPR receiver, 10BT transmitter and EX-503 lapel microphone or a 10HT transmitter. Optional transmitters for this system include the 51BT bodypack, the 51XT XLR plug-in and 51HT handheld microphone. This equipment is designed primarily for video cameras but is usable with most electronic components having a microphone level input.

### **RECEIVER (100UPR)**

(1) Remove the battery compartment lid by sliding it down.

(2) Insert one fresh alkaline 9V battery into the compartment. Make sure the battery polarity is correct as marked inside the battery compartment.

In addition to the battery, inside the battery compartment you will find the following:

(3-4) Frequency select

With the frequency group dial on the left (3) you can select any of seven frequency groups (numbered from 0-6). With the frequency channel dial on the right (4) you can select any of nine frequency channels (numbered 0-8).

(5) Phone level output adjustment

Using the supplied screwdriver, turn the dial clockwise to increase earphone output level. Turn the dial counterclockwise to decrease earphone output level.

(6) Power

Switches the receiver "On" or "Off".

(7) Mic Out jack

The 100UPR is supplied with a mini-to-mini (3-conductor-to-2-conductor) cable. Plug the end of the cable with one black band into the receiver. Plug the end of the cable with two black bands into the microphone input of the video camera. If your camera's microphone input is the 3-pin XLR type you'll need the optional MX-1 cable.

(8) LED indicator

The LED turns *red* when the receiver is switched "On" and *green* when receiving a signal from the transmitter.

(9) Phone jack

Plug an earphone into this jack to monitor the sound. The jack is wired to work with either mono or stereo headphones (you will hear mono in both ears).

## BODYPACK TRANSMITTER (10BT)

(1) Remove the battery compartment lid by sliding it down.

(2) Insert one fresh alkaline 9V battery into the compartment. Make sure the battery polarity is correct as marked inside the battery compartment.

In addition to the battery, inside the battery compartment you will find the following:

### (3-4) Frequency select

With the frequency group dial on the left (3) you can select any of seven frequency groups (numbered from 0-6). With the frequency channel dial on the right (4) you can select any of nine frequency channels (numbered 0-8).

### (10 and 12) Power and Standby switches

The power "ON" and "OFF" switch (10) enables and disables all transmitter functions while the Audio switch (12) "ON" and "Standby" positions turn the audio off and on. Switching the transmitter to "Standby" will cause the receiver to mute. This allows the microphone to be handled with no noise.

(11) The LED Indicator turns *green* when the Power is turned "ON". This LED will also turn *red* to indicate that battery level is low and the battery must be changed.

(13) The MIC jack accepts a 3.5mm jack from a microphone such as the supplied EX-503. Other lavalier and/or headset microphones can also be used.

(14) The Audio input Level Control enables you to adjust the input level of the microphone. Turn clockwise to increase, or counterclockwise to decrease the input level. A small screwdriver is supplied to make these adjustments. The level control is factory-preset in the center position.

## HANDHELD TRANSMITTER (10HT)

(1) Remove the battery compartment cover by rotating it counterclockwise and sliding it down.

(2) Insert one fresh alkaline 1.5 V battery into each side of the battery compartment. Make sure the battery polarity is correct as marked inside the battery compartment.

### (3) Power Switch and LED

The power "ON" and "OFF" switch (3) enables and disables all transmitter

functions. Sliding it toward the LED turns the transmitter ON. The LED will turn *green* when the batteries are fresh and *red* when it is time to replace the batteries. Sliding the switch away from the LED turns the transmitter OFF.

In addition to the batteries, inside the battery compartment you will find the following:

### (4) Frequency select

With the frequency group dial on the left you can select any of seven frequency groups (numbered from 0-6). With the frequency channel dial on the right you can select any of nine frequency channels (numbered 0-8).

(5) The Audio Level Control enables you to adjust the overall level of the microphone. Turn clockwise to increase, or counterclockwise to decrease the volume level. A small screwdriver is supplied to make these adjustments. The level control is factory-preset in the center position.

## Operating the system

Because this is a frequency agile system, you have to choose the frequency for both the transmitter and receiver via the group and channel dials (3 and 4). We cannot stress enough that the transmitter and receiver pair **MUST BE SET TO THE SAME GROUP and CHANNEL NUMBER**. Additionally, multiple systems used in the same location should be on the same group number but on different channel numbers. (See below for example) **ALWAYS CHECK THAT THE FREQUENCY YOU'VE CHOSEN IS CLEAR PRIOR TO USING THE SYSTEM.**

Finally, if you need to change the group or channel number you must shut off both the transmitter and receiver before making a change. When the units are turned "On" the frequency is locked and will not change.

**When operating multiple systems all receivers and transmitters must be on the same group.**

**Example: 4 systems operating simultaneously.**

	System #1		System #2		System #3		System #4	
	Group	Channel	Group	Channel	Group	Channel	Group	Channel
Receivers	2	4	2	5	2	6	2	7
Transmitters	2	4	2	5	2	6	2	7

**To change the frequency of a transmitter/receiver pair that is already on YOU MUST TURN BOTH THE TRANSMITTER AND RECEIVER "OFF" FIRST!**