

# 330 SYSTEM User's Guide

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330UPR • 35BT • 35HT • 35XT  
DUAL-CHANNEL ON-CAMERA  
UHF WIRELESS MICROPHONE SYSTEM

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Adapted PLL synthesized control method provides constant audio receipt for dual audio receipt. First make sure matched channel is used between receiver 330UPR and transmitters such as 35BT (bodypack transmitter), 35HT (handheld transmitter) and 35XT(plug-in transmitter). To get best constant audio receiptant, should keep 10 channel difference between one microphone to the other microphone. For example, setting CH1:001, other channel CH2: 011. 10 channel difference avoid cross talk between these two microphone's operation.

Below shows the description of each part of goods.

**Antenna**  
Azden original antenna For keeping the original performance, dont move the antenna.

**Channel power switch**  
CH1 is for Channel 1 power on/off and CH2 is for Channel 2.

**CH 1 and 2 display**  
Each channel setting condition is displayed. For the details of Channel setting, go to the LCD panel information clause.

**Channel up / down button**  
By pressing it up and down, channel number is set up.  
To push the botton, use phillips type screw driver or similar one.  
To avoid the cross talk between CH1 and CH2, at least apart 10 channel or more between the two channel. For example, CH1 is 001 and CH should be 0011 or upper number.

**LCD panel switching button (DISP ?)**  
By pressing it, switch to either channel  
Last selected channel is kept in memory and is displayed when the power is ON.

**MODE switch**  
The button is anable for users to check currently using channel in " CH001 " or " actual using frequency " .

**Headphone jack**  
This jack allow users to monitor the input audio to the receiver.  
Monirtering with stereo headphone, CH1 is left earphone side and CH2 is right earphone side.

**Audio out jack CH1 and CH2(MIC OUT)**  
The 330UPR is supplied with both a mini(stereo) to mini(stereo) and a mini to dual XLR cable.

For mini jack mirophone inputs: Use the supplied mini to mini cable. Plug one end fo the cable into the receiver (CH1/CH2 audio out jack) and the other end of the calbe into the microphone input of the video camera.

## CONFIGURATION OF THE PACKAGES

The contents of each package are described below.

Package: 330ULT		Quantity
Description		
330UPR Dual-Channel Receiver		1
Audio cable (XLRx2 – Stereo Mini plug)		1
Audio cable (Stereo Mini plug -Stereo Mini plug)		1
Velcro (Attaching receiver to portable mixer or camera)		1
35BT Transmitter		2
Livelier microphone EX-553		2

Package: 330ULH		
330UPR Dual-Channel Receiver		1
Audio cable (XLRx2 – Stereo Mini plug)		1
Audio cable (Stereo Mini plug -Stereo Mini plug)		1
Velcro (Attaching receiver to portable mixer)		1
35BT Transmitter		1
Livelier microphone EX-553		1
35HT Handheld Transmitter		1

Package: 330ULX		
330UPR Dual-Channel Receiver		1
Audio cable (XLRx2 – Stereo Mini plug)		1
Audio cable (Stereo Mini plug -Stereo Mini plug)		1
Velcro (Attaching receiver to portable mixer)		1
35BT Transmitter		1
Livelier microphone EX-553		1
35XT Plug-in Transmitter		1

## Specifications

<b>330UPR Receiver</b>	
Frequency Range	UHF 240 Selectable Frequencies (794-805.950MHz)
Type of Reception	Dual-channel Receiver
Oscillator	PLL Synthesized
RF Squelch Level	-95dBm
Frequency Response	50Hz – 15kHz
S/N Ratio	>57dB (±5kHz) "A" Weighted
Audio Out	MIC Level – unbalanced – 3.5mm Mini-Jack -64 dBm – 600 ohms @ ± 5kHz deviation -28 dBm – 600 ohms @ ± 40kHz deviation
Batteries	2 "AA" Alkaline (2 x 1.5V) - 3-4 hours runtime 2 "AA" rechargeable Ni-MH (2 x 1.2V)
External Power	6VDC @ 0.5A
Dimensions	2.87"W x 4.45"H x 1.59"D (73 x 113 x 40.5 mm)
Weight	Approx. 10.2oz (290g) w/batteries
<b>35BT Body-pack Transmitter</b>	
Frequency Range	UHF 240 Selectable Frequencies (794-805.950MHz)
Oscillator	PLL Synthesized
RF Power	25mW (10mW in Korea)
Frequency Response	50Hz – 15kHz
Max. Deviation	±40kHz @ 1kHz Modulation, MIC Input – 11dBm
Batteries	2 "AA" Alkaline (2 x 1.5V) – 6-8 hours runtime 2 "AA" rechargeable Ni-MH(2 x 1.2V)
Dimensions	2.52"W x 3.93"H x 1.106"D (64 x 100 x 27 mm)
Weight	Approx. 6oz (170g) w/batteries
<b>35XT Plug-In Transmitter</b>	
Frequency Range	UHF 240 Selectable Frequencies (794-805.950MHz)
Antenna	Internal
Max. Input level	-16dBm
RF Power	25mW (10mW in Korea)
Input Impedance	25k ohms
Audio Adjust. Range	-65dBm to 46dBm
Battery	2 "AA" Alkaline (2 x 1.5V) – 6-8 hours runtime 2 "AA" rechargeable Ni-MH(2 x 1.2V)
Dimensions	1.57"W x 1.57"H x 4.49"L (40 x 40 x 114 mm)
Weight	Approx. 6.35oz (180g) w/battery
<b>35HT Handheld Microphone/Transmitter</b>	
Frequency Range	UHF 240 Selectable Frequencies (794-805.950MHz)
Oscillator	PLL Synthesized
RF Power	25mW (10mW in Korea)
Frequency Response	50Hz – 15kHz
Max. Deviation	±40kHz @ 1kHz Modulation, MIC Input – 65dBm (dev ±5kHz)
Batteries	2 "AA" Alkaline (2 x 1.5V) – 8-10 hours runtime 2 "AA" rechargeable Ni-MH (2 x 1.2V)
Dimensions	Φ1.89" x 9.2"L (48 x 234.5 mm)
Weight	Approx. 9.5oz (270g) w/batteries

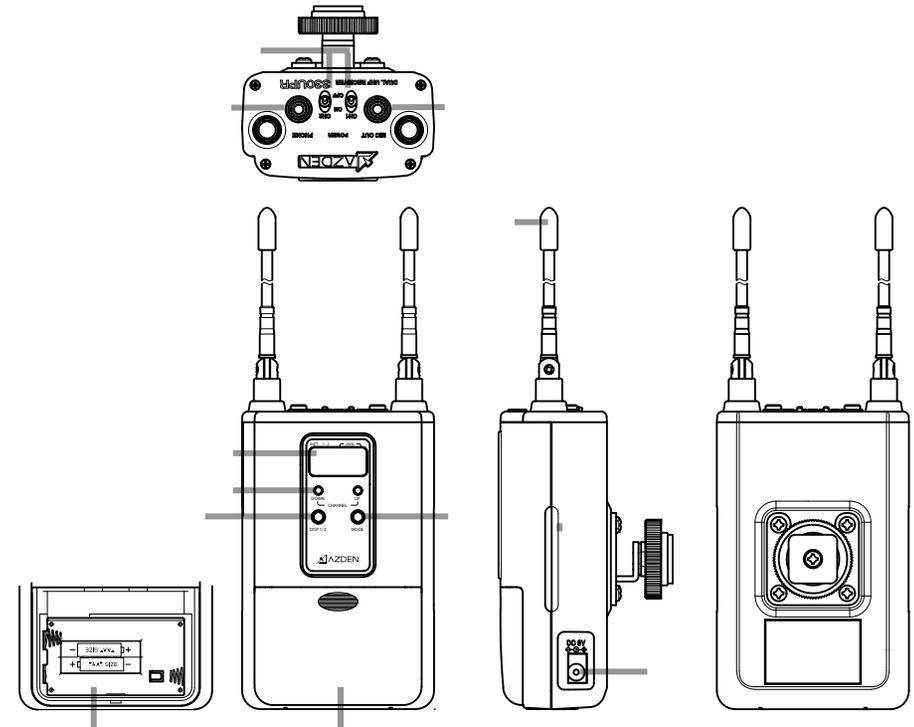
For 3-pin XLR microphone inputs: Use the supplied min to dual XLR cable. Plug the mini-plug end of the cable into the receiver (user the screw-down sleeve to secure it to the receiver) and plug the XLR ends of the cable into the microphone inputs of the video camera

### Battery compartment

Insert the fresh alkaline "AA" batteries into the compartment. Make sure the battery polarity is connect as marked inside the battery compartment. Batteries are not packed as standard item. Obtain "AA" alkaline batteries 2 pcs. Using Azden recommending re-chargeable batteries, get AC/DC adapter for recharging from Azden and charge batteries for 8 hours to get full charge. To make sure the batteries at full level, check three bar on the LCD is indicated.

### AC/DC jack

DC6V external voltage supply is adapted for re-charging Azden standard NiMH batteries after installing them into the battery compartment. Azden original must need to get this feature. Other rechargeable NiMH batteries are not accepted. Buy adapter/batteries from your nearest dealers. Once the ac/dc is plugged, the external power supply is selected as the main power even if the batteries are installed.



## Operation flow

Conenct the standard parcked cable " stereo mini plug - dual XLR ". Connect the stereo mini plug side to the receiver and the dual XLR side to video camera. The dual XLR side, CH1 is white color marking and CH2 is black color marking. Make sure matching channel set between the receiver and video camera. Camcorder supports Phantom power supply through microphone jack. Set the Phantom power supply feature to " off " position. Otherwise, it may damage the receiver. The receiver and wireless microphone must user 1.5 m away or longer distance.

Otherwise, it may cause the interference.

Using two receiver at the same field, each receiver must have 3m or longer interval between thes two receivers.

Using the receiver with only one microphone, switch off the other microphone power. Otherwise, no audio transimition may occurs.

330UPR shows channel information on the LCD panel. Currently set up " Channel number " or " Frequency digit " can be switched via MODE switch ( ) The details of channel figure refer page 7. The default figure from our factory is CH1: 001 / 794MHz and CH2: 121 / 800.00.

## 1.LCD panel information

a : Current display channel on the LCD

Selected channel number condtion can be changed.

DISP ? can switch either channel.

b: Current set channle number

Channel number wil be displayed and switched to the actual frequency value by pressing MODE button.

Whenever the power on, Channel number is displayed.

c: RF level indication with four bar

Four bar indication is strong and best audio receiving status.

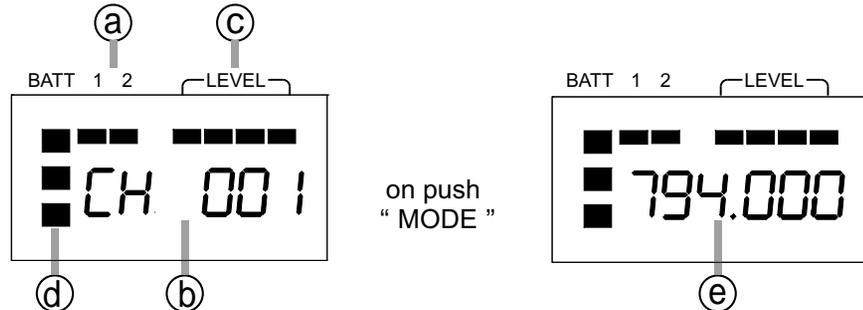
d: Battery status

Vertically " fout bar " is displayed when the power is at full condtion.

Dual channel model with " alkarive AA two batteries " can operate for five hours.

When the last bottom bar start flushing, replace the batteries.

e: Auditon transmission " wireless frequency level " will be displayed through mode menu.



RX	
001	794.000
002	794.050
003	794.100
004	794.150
005	794.200
006	794.250
007	794.300
008	794.350
009	794.400
010	794.450
011	794.500
012	794.550
013	794.600
014	794.650
015	794.700
016	794.750
017	794.800
018	794.850
019	794.900
020	794.950
021	795.000
022	795.050
023	795.100
024	795.150
025	795.200
026	795.250
027	795.300
028	795.350
029	795.400
030	795.450
031	795.500
032	795.550
033	795.600
034	795.650
035	795.700
036	795.750
037	795.800
038	795.850
039	795.900
040	795.950
041	796.000
042	796.050
043	796.100
044	796.150
045	796.200
046	796.250
047	796.300
048	796.350
049	796.400
050	796.450

RX	
051	796.500
052	796.550
053	796.600
054	796.650
055	796.700
056	796.750
057	796.800
058	796.850
059	796.900
060	796.950
061	797.000
062	797.050
063	797.100
064	797.150
065	797.200
066	797.250
067	797.300
068	797.350
069	797.400
070	797.450
071	797.500
072	797.550
073	797.600
074	797.650
075	797.700
076	797.750
077	797.800
078	797.850
079	797.900
080	797.950
081	798.000
082	798.050
083	798.100
084	798.150
085	798.200
086	798.250
087	798.300
088	798.350
089	798.400
090	798.450
091	798.500
092	798.550
093	798.600
094	798.650
095	798.700
096	798.750
097	798.800
098	798.850
099	798.900
100	798.950

RX	
101	799.000
102	799.050
103	799.100
104	799.150
105	799.200
106	799.250
107	799.300
108	799.350
109	799.400
110	799.450
111	799.500
112	799.550
113	799.600
114	799.650
115	799.700
116	799.750
117	799.800
118	799.850
119	799.900
120	799.950
121	800.000
122	800.050
123	800.100
124	800.150
125	800.200
126	800.250
127	800.300
128	800.350
129	800.400
130	800.450
131	800.500
132	800.550
133	800.600
134	800.650
135	800.700
136	800.750
137	800.800
138	800.850
139	800.900
140	800.950
141	801.000
142	801.050
143	801.100
144	801.150
145	801.200
146	801.250
147	801.300
148	801.350
149	801.400
150	801.450

RX	
151	801.500
152	801.550
153	801.600
154	801.650
155	801.700
156	801.750
157	801.800
158	801.850
159	801.900
160	801.950
161	802.000
162	802.050
163	802.100
164	802.150
165	802.200
166	802.250
167	802.300
168	802.350
169	802.400
170	802.450
171	802.500
172	802.550
173	802.600
174	802.650
175	802.700
176	802.750
177	802.800
178	802.850
179	802.900
180	802.950
181	803.000
182	803.050
183	803.100
184	803.150
185	803.200
186	803.250
187	803.300
188	803.350
189	803.400
190	803.450
191	803.500
192	803.550
193	803.600
194	803.650
195	803.700
196	803.750
197	803.800
198	803.850
199	803.900
200	803.950

RX	
201	804.000
202	804.050
203	804.100
204	804.150
205	804.200
206	804.250
207	804.300
208	804.350
209	804.400
210	804.450
211	804.500
212	804.550
213	804.600
214	804.650
215	804.700
216	804.750
217	804.800
218	804.850
219	804.900
220	804.950
221	805.000
222	805.050
223	805.100
224	805.150
225	805.200
226	805.250
227	805.300
228	805.350
229	805.400
230	805.450
231	805.500
232	805.550
233	805.600
234	805.650
235	805.700
236	805.750
237	805.800
238	805.850
239	805.900
240	805.950

## 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.

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) These devices 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.

These devices and their antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

## Operating the system

Because this is a frequency agile system, the receiver and transmitter must be on the same channel number. To change the channel number, use the tip of the provided tool and press the UP or DOWN button to the desired channel. Make sure both the receiver and transmitter are on the same channel.

### 330UPR Receiver

After installing new batteries, mount the receiver to your video camera with the supplied shoe mount or hook & loop fastener. Select one of the supplied cables and connect the output cable to the receiver and to the microphone input on the video camera. Switch Ch.1 and/or Ch.2 of the 325PR to "ON" and the battery level indicator(s) should come on. If they do not, check the batteries. When the 325UPR receives a signal from the transmitter the reception level indicator will come on. If it does not, make sure both the receiver and transmitters are on matching channels.

### 35BT Transmitter

Plug in the supplied lapel microphone and clip it to your subject. The microphone should be placed 10-30cm( 4-12 inches) from your subject's mouth. Clip the transmitter to a belt using the supplied belt-clip or place it in a pocket. Switch the 35BT to "ON" and the battery level indicator should come on. 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 MIC input level on the transmitter. If there is not enough volume raise the MIC input level on the transmitter.

### 35XT Transmitter

Switch the transmitter to "ON" and the battery level indicator should come on. If it does not, check the battery. Have someone speak into the microphone as you monitor the sound through the camera's monitor output. If the sound is distorted lower the level control on the transmitter. If there is not enough gain raise the level control on the transmitter.

### 35HT Transmitter

Switch the transmitter to "ON" and the battery level indicator should come on. If it does not, check the battery. Have someone speak into the microphone as you monitor the sound through the camera's monitor output. If the sound is distorted lower the level control on the transmitter. If there is not enough gain raise the level control on the transmitter.

## BODYPACK TRANSMITTER (35BT)

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

(12) Insert two fresh Alkaline "AA" batteries\* 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:

(13) MIC Input LEVEL Control

This control enables you to adjust the input level of the microphone. Using the supplied tool, turn the dial clockwise to increase, or counterclockwise to decrease the input level. Depends on microphone type, microphone input level differ.

(14) POWER

Switches the transmitter "ON" or "OFF"

(15) MIC Input Jack

Plug the supplied EX-503L microphone into the MIC input jack and tighten the collar until snug (DO NOT OVERTIGHTEN). In addition to the EX-503L, other lapel and/or headset microphones with 3.5mm mini plugs can also be used with the 35BT.

(16) LCD Display

This display shows the following information.

Channel Number: 001 to 240

Battery Condition: Using a 3 step indicator - 1 (Low) to 3 (High)

To change the channel number: Use the tip of the tool provided and press the UP or DOWN button to the desired channel, number appears (001 to 240). Once the desired channel number has been selected on the transmitter, set the receiver to the same channel number.

(17) AUDIO

Prior to first turning the 35XT "ON" it is best to set the AUDIO switch to "OFF". When you are ready to begin transmitting, switch to "ON". The "OFF" position acts as a "mute" that maintains the RF signal but turns off the audio.

\*While Alkaline batteries are preferred, you can use rechargeable Ni-Cd or Ni-MH batteries.

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## XLR PLUG-IN TRANSMITTER (35XT)

(18) Open the battery compartment lid by sliding it down and lifting it up.

Insert two "AA Alkrine batteries" into the compartment. Make sure the battery polarity is correct as marked inside the battery compartment.

(19) POWER

Switches the transmitter "ON" or "OFF".

(20) AUDIO

Prior to first turning the 35XT "ON" it is best to set the AUDIO switch to "OFF". When you are ready to begin transmitting, switch to "ON". The "OFF" position acts as a "mute" that maintains the RF signal but turns off the audio.

(21) MIC Connector/Locking Ring

This 3-pin XLR connector is the microphone input. Any low impedance microphone with a corresponding connector can be attached here.

Once the microphone is plugged into the 35XT the locking ring should be rotated clockwise until snug. To remove the microphone, first rotate the locking ring counterclockwise and then, while pressing the XLR release, pull the microphone away from the 35XT.

(22) MIC Input LEVEL Control

The MIC input LEVEL control enables you to adjust the input level of the connected microphone. Using the supplied tool, turn the dial clockwise to increase, or counterclockwise to decrease the input level

(23) LCD Display:

The display will light up when the power is turned "ON". The LCD display shows the following information.

Channels number: 001 to 240

Battery Condition: Using a 3 step indicator - 1(Low) to 3 (High)

To change the channel number, use the tip of the tool provided and press the UP or DOWN button until the desired channel number appears (001 to 240). Once the desired channel number has been selected on the transmitter, set the receiver to the same channel number.

HANDHELD MICROPHONE/TRANSMITTER (35HT)

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

(25) Insert two fresh Alkaline "AA" batteries into the compartment. Make sure the battery polarity is correct as marked inside the battery compartment.

In the battery compartment you will also find:

(26) MIC LEVEL Control

The MIC LEVEL control enables you to adjust the audio level of the microphone. Using the supplied tool, turn the dial clockwise to increase, or counterclockwise to decrease the microphone's audio level.

(27) UP/DOWN Channel Buttons

To change the channel number, use the tip of the tool provided and press the UP or DOWN button until the desired channel number appears (001 to 240). Once the desired channel number has been selected on the transmitter, set the receiver to the same channel number.

(28) POWER

Switches the transmitter "ON" or "OFF".

(29) LCD Display:

The display will light up when the power is turned "ON". The LCD display shows the following information.

Channel number: 001 to 240.

Battery Condition: Using a 3 step indicator - 1 (Low) to 3 (High)

