

## Specifications

### 310UDR Receiver

Frequency Range:	UHF 240 Selectable Frequencies (794.000-805.950MHz)
Type of Reception:	FM
Oscillator:	PLL Synthesized
RF Squelch Level:	-95 dBm
Frequency Response:	50Hz – 15kHz
S/N Ratio:	>57dB ( $\pm$ 5kHz) "A" Weighted
Audio Out:	MIC Level – Unbalanced – 3.5mm Mini Jack -58 dBm – 600 ohms @ $\pm$ 5kHz deviation -22 dBm – 600 ohms @ $\pm$ 40kHz deviation
Batteries:	2 "AA" Alkaline (2 x 1.5V), 6-8 hours runtime 2 "AA" Rechargeable Ni-MH (2 x 1.2V)
Dimensions:	2 1/2" x 3 15/16" x 1 3/16" (64 x 100 x 27mm)
Weight:	Approx. 6oz (170g) w/ batteries

### 35BT Body-Pack Transmitter

Frequency Range:	UHF 240 Selectable Frequencies (794.000-805.950MHz)
Oscillator:	PLL Synthesized
RF Power:	25mW
Frequency Response:	50Hz – 15kHz
Max Deviation:	$\pm$ 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 1/2" x 3 15/16" x 1 1/16" (64 x 100 x 27mm)
Weight:	Approx. 6oz (170g) w/ batteries

### 35XT Plug-in Transmitter

Frequency Range:	UHF 240 Selectable Frequencies (794.000-805.950MHz)
Antenna:	Internal
Max Input Level:	-16dBm
RF Power:	25mW
Input Impedance:	25k ohms
Audio Adjust Range:	-65dBm to 46dBm
Batteries:	2 "AA" Alkaline (2 x 1.5V), 6-8 hours runtime 2 "AA" Rechargeable Ni-MH (2 x 1.2V)
Dimensions:	1 9/16" x 1 9/16" x 4 1/2" (40 x 40 x 114mm)
Weight:	Approx. 6.4oz (180g) w/ batteries

### 35HT Handheld Microphone/Transmitter

Frequency Range:	UHF 240 Selectable Frequencies (794.000-805.950MHz)
Oscillator:	PLL Synthesized
RF Power:	25mW
Frequency Response:	50Hz – 15kHz
Max Deviation:	$\pm$ 40kHz @ 1kHz Modulation, MIC input – 65dBm (dev $\pm$ 5kHz)
Batteries:	2 "AA" Alkaline (2 x 1.5V), 6-8 hours runtime 2 "AA" Rechargeable Ni-MH (2 x 1.2V)
Dimensions:	$\phi$ 1 7/8" x 9 9/16" L (48 x 234.5mm)
Weight:	Approx. 9.6oz (270g) w/ batteries

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



## 310 DIVERSITY CAMERA-MOUNT UHF WIRELESS MICROPHONE SYSTEM 310UDR - 35BT - 35HT - 35XT



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## INSTRUCTION MANUAL

Thank you for purchasing the Azden 310 Diversity Wireless Microphone system. The following table will show you the contents of the system you ordered:

**310LT**

- 1 x 310UDR Diversity Receiver
- 1 x Stereo Mini-to-Dual XLR Cable
- 1 x Stereo Mini-to-Stereo Mini Cable
- 1 x 35BT Body-Pack Transmitter
- 1 x EX-50 Lavalier Microphone

**310HT**

- 1 x 310UDR Diversity Receiver
- 1 x Stereo Mini-to-Dual XLR Cable
- 1 x Stereo Mini-to-Stereo Mini Cable
- 1 x 35HT Handheld Microphone/Transmitter

**310XT**

- 1 x 310UDR Diversity Receiver
- 1 x Stereo Mini-to-Dual XLR Cable
- 1 x Stereo Mini-to-Stereo Mini Cable
- 1 x 35XT XLR Plug-in Transmitter

**Operating the System**

**WARNING**

- Do not use other batteries than the ones specified in this manual. Do not mix a fresh battery with a used battery.
- When installing batteries, make sure battery polarity is correct as marked inside the battery compartment.
- Remove the batteries if the products are not used for a long period of time.
- Do not submerge the products.

Because this is a frequency agile system, the receiver and transmitter must be on the same channel number. To change the channel selection, use a small, sharp object such as the tip of a pen, and press the “UP” or “DOWN” button to the desired channel. Make sure both the receiver and transmitter are on the same channel.

**310UDR Diversity Receiver**

After installing new batteries, mount the receiver to your video camera with supplied shoe mount or hook & loop fastener. Select one of the supplied cables and connect the output on the receiver and input on the video camera. Turn the power switch to “ON” and the battery level indicator on the LCD display should come on. If not, check the batteries. When the 310UDR receives a signal from the transmitter, the reception level indicator will come on. If it does not, make sure both the receiver and the transmitter are on matching channels.

RX		RX		RX		RX		RX	
001	794.000	051	796.500	101	799.000	151	801.500	201	804.000
002	794.050	052	796.550	102	799.050	152	801.550	202	804.050
003	794.100	053	796.600	103	799.100	153	801.600	203	804.100
004	794.150	054	796.650	104	799.150	154	801.650	204	804.150
005	794.200	055	796.700	105	799.200	155	801.700	205	804.200
006	794.250	056	796.750	106	799.250	156	801.750	206	804.250
007	794.300	057	796.800	107	799.300	157	801.800	207	804.300
008	794.350	058	796.850	108	799.350	158	801.850	208	804.350
009	794.400	059	796.900	109	799.400	159	801.900	209	804.400
010	794.450	060	796.950	110	799.450	160	801.950	210	804.450
011	794.500	061	797.000	111	799.500	161	802.000	211	804.500
012	794.550	062	797.050	112	799.550	162	802.050	212	804.550
013	794.600	063	797.100	113	799.600	163	802.100	213	804.600
014	794.650	064	797.150	114	799.650	164	802.150	214	804.650
015	794.700	065	797.200	115	799.700	165	802.200	215	804.700
016	794.750	066	797.250	116	799.750	166	802.250	216	804.750
017	794.800	067	797.300	117	799.800	167	802.300	217	804.800
018	794.850	068	797.350	118	799.850	168	802.350	218	804.850
019	794.900	069	797.400	119	799.900	169	802.400	219	804.900
020	794.950	070	797.450	120	799.950	170	802.450	220	804.950
021	795.000	071	797.500	121	800.000	171	802.500	221	805.000
022	795.050	072	797.550	122	800.050	172	802.550	222	805.050
023	795.100	073	797.600	123	800.100	173	802.600	223	805.100
024	795.150	074	797.650	124	800.150	174	802.650	224	805.150
025	795.200	075	797.700	125	800.200	175	802.700	225	805.200
026	795.250	076	797.750	126	800.250	176	802.750	226	805.250
027	795.300	077	797.800	127	800.300	177	802.800	227	805.300
028	795.350	078	797.850	128	800.350	178	802.850	228	805.350
029	795.400	079	797.900	129	800.400	179	802.900	229	805.400
030	795.450	080	797.950	130	800.450	180	802.950	230	805.450
031	795.500	081	798.000	131	800.500	181	803.000	231	805.500
032	795.550	082	798.050	132	800.550	182	803.050	232	805.550
033	795.600	083	798.100	133	800.600	183	803.100	233	805.600
034	795.650	084	798.150	134	800.650	184	803.150	234	805.650
035	795.700	085	798.200	135	800.700	185	803.200	235	805.700
036	795.750	086	798.250	136	800.750	186	803.250	236	805.750
037	795.800	087	798.300	137	800.800	187	803.300	237	805.800
038	795.850	088	798.350	138	800.850	188	803.350	238	805.850
039	795.900	089	798.400	139	800.900	189	803.400	239	805.900
040	795.950	090	798.450	140	800.950	190	803.450	240	805.950
041	796.000	091	798.500	141	801.000	191	803.500		
042	796.050	092	798.550	142	801.050	192	803.550		
043	796.100	093	798.600	143	801.100	193	803.600		
044	796.150	094	798.650	144	801.150	194	803.650		
045	796.200	095	798.700	145	801.200	195	803.700		
046	796.250	096	798.750	146	801.250	196	803.750		
047	796.300	097	798.800	147	801.300	197	803.800		
048	796.350	098	798.850	148	801.350	198	803.850		
049	796.400	099	798.900	149	801.400	199	803.900		
050	796.450	100	798.950	150	801.450	200	803.950		

**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.

②③ **MIC LEVEL Control**

This enables you to adjust the audio level of the microphone. Using the supplied tool, turn the orange dial clockwise to increase, or counterclockwise to decrease the audio level.

②④ **Channel UP and DOWN Button**

To change the channel number, use the tip of the tool provided and press the UP or DOWN button until the desired channel number is shown on the LCD Display. Keep the button pressed to fast forward the channel numbers.

②⑤ **POWER Switch**

Turns the 35HT Transmitter/Microphone “ON” or “OFF”.

②⑥ **LCD Display**

The LCD display shows the following information:

Working channel CH 001 - 240

Battery level by 3-bar indicator (3 bars = High, 1 bar = Low)

AF (Audio Frequency) level by 4-bar indicator (4 bars = High, 1 bar = Low)

**35BT Body-Pack Transmitter**

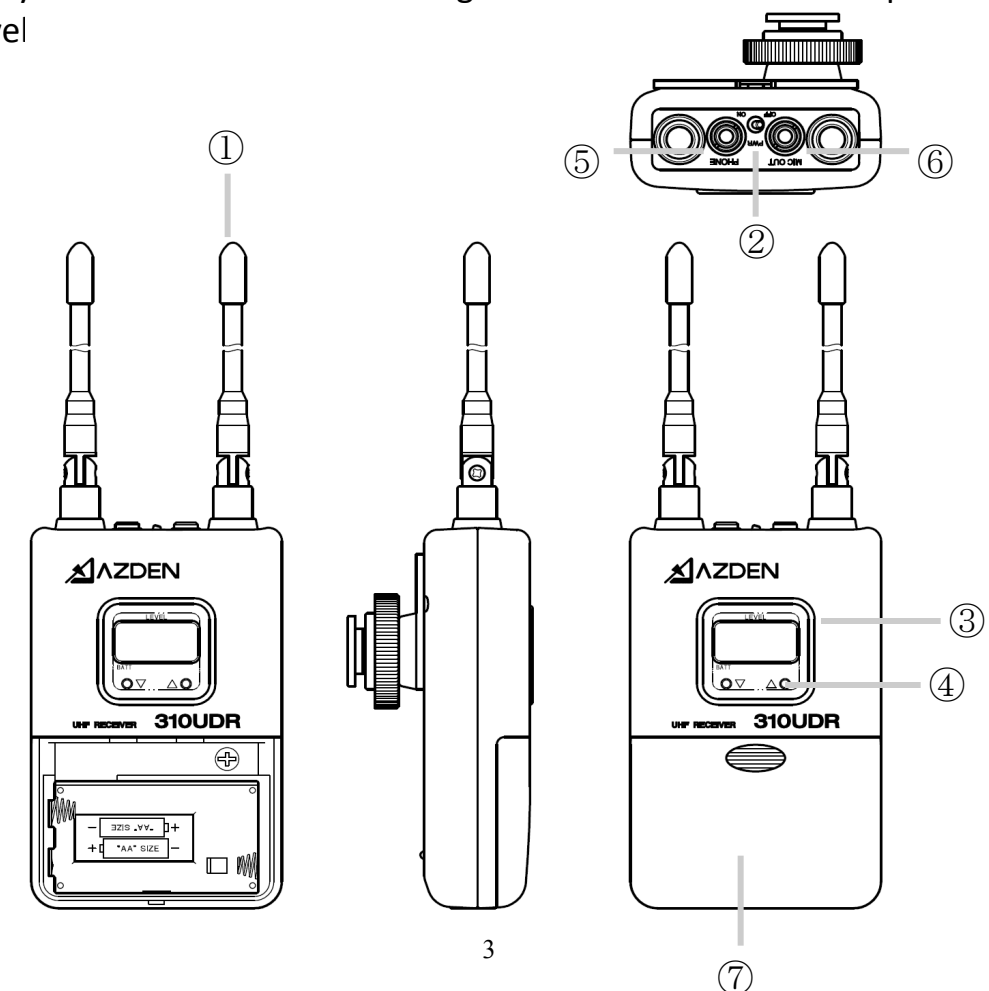
Plug in the supplied EX-50 Lavalier Microphone and clip it to your subject. The microphones should be placed 4”-12” from the subject’s mouth. Clip the transmitter to a belt by using the supplied belt clip or place it in a pocket. Turn the power switch to “ON” and the battery level indicator on the LCD display should come on. If not, check the battery. Have someone speak into the microphone as you monitor the sound through the 310UDR Receiver’s phone output. If the sound is distorted, lower the MIC input level on the 35BT Transmitter. If there is not enough volume, raise the MIC input level on the Transmitter.

**35XT Plug-in Transmitter**

Attach the 35XT Transmitter to any low impedance microphone with a corresponding 3-pin XLR connector. Turn the power switch on the 35XT Transmitter to “ON” position and the battery level indicator on the LCD display should come on. Have someone speak into the microphone as you monitor the sound through the camera’s monitor output. If the sound is distorted, lower the MIC input level control on the 35XT Transmitter. If there is not enough volume, raise the level control on the Transmitter.

**35HT Handheld Microphone/Transmitter**

Turn the power switch on the 35HT Transmitter to “ON” position and the battery level indicator on the LCD display should come on. Have someone speak into the microphone as you monitor the sound through the camera’s monitor output. Adjust the MIC input level



## 310UPR Diversity Receiver

### ① Antennas

For the best reception, the antennas should be pointed in an upward position. Use caution and do not force them into this position.

### ② Power Switch

To turn ON/OFF the receiver

### ③ LCD Display

The LCD Display shows multifunctional readout. Refer to “LCD Display Readouts” in this manual for further details.

### ④ CHANNEL UP and DOWN Button

To change the channel number, use a small, sharp object, such as the tip of a pen, and press the UP or DOWN button until the desired channel number is shown on the LCD Display. Keep the button pressed down to fast forward the channel numbers. Once the desired channel number is selected on the receiver, set the transmitter to the same number.

### ⑤ PHONE Jack

This jack allows you to monitor the sound.

### ⑥ MIC OUT Jack

The 310UDR is supplied with both mini-to-mini and mini-to-dual XLR cables.

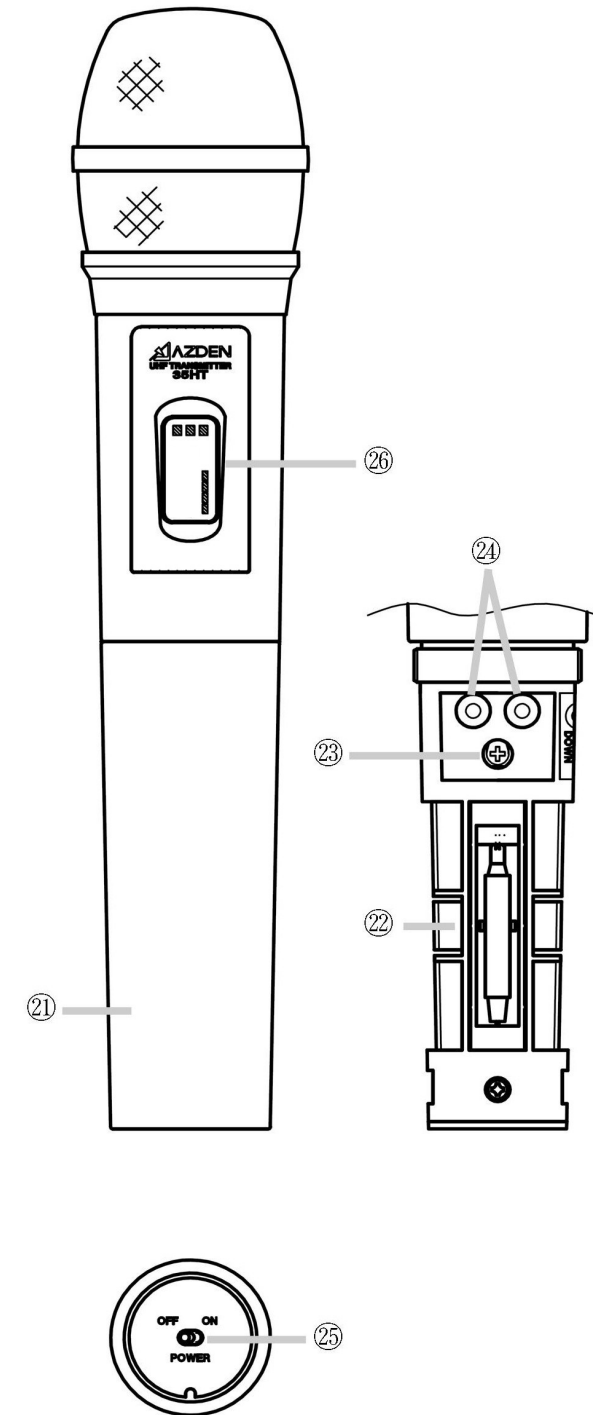
For mini jack microphone inputs: Use the supplied mini-to-mini cable. Plug one end of the cable into the 310UDR Receiver and the other end into the microphone input of the video camera.

For 3-pin XLR microphone inputs: Use the supplied mini-to-dual XLR cable. Plug the mini-plug end of the cable into the 310UDR Receiver (use the screw-down sleeve to secure it to the receiver) and plug the XLR ends into the microphone inputs on the video camera.

### ⑦ Battery Compartment

Remove the battery compartment lid by sliding it down. Install two fresh alkaline “AA” batteries. Make sure the battery polarity is correct as marked inside the battery compartment. Alkaline batteries are preferred, but Azden’s 1HR-3U rechargeable Ni-MH batteries may be used.

## 35HT Handheld Microphone/Transmitter



### ②① Battery Compartment Cover

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

### ②② Battery Compartment

Install two fresh alkaline “AA” batteries. Make sure the battery polarity is correct as marked inside the battery compartment.

**18 MIC Connector/Locking Ring**

This 3-pin XLR connector is the microphone input. Any low impedance microphone with a corresponding connector may be plugged 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 pull the microphone away while pressing the XLR release.

**19 MIC Input LEVEL Control**

This enables you to adjust the input level of the connected microphone. Using the supplied tool, turn the orange dial clockwise to increase, or counterclockwise to decrease the input level.

**20 LCD Display**

The LCD display shows the following information:

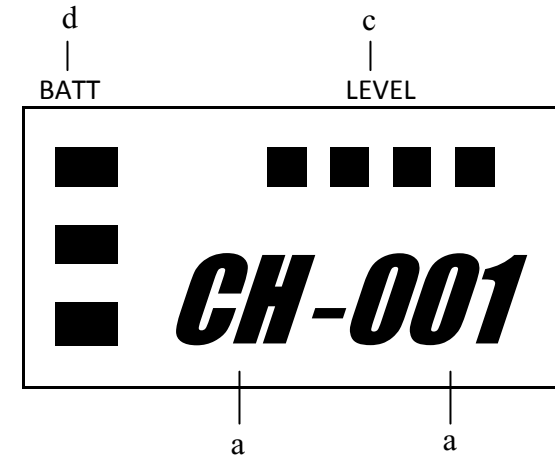
Working channel CH 001 - 240

Battery level by 3-bar indicator (3 bars = High, 1 bar = Low)

AF (Audio Frequency) level by 4-bar indicator (4 bars = High, 1 bar = Low)

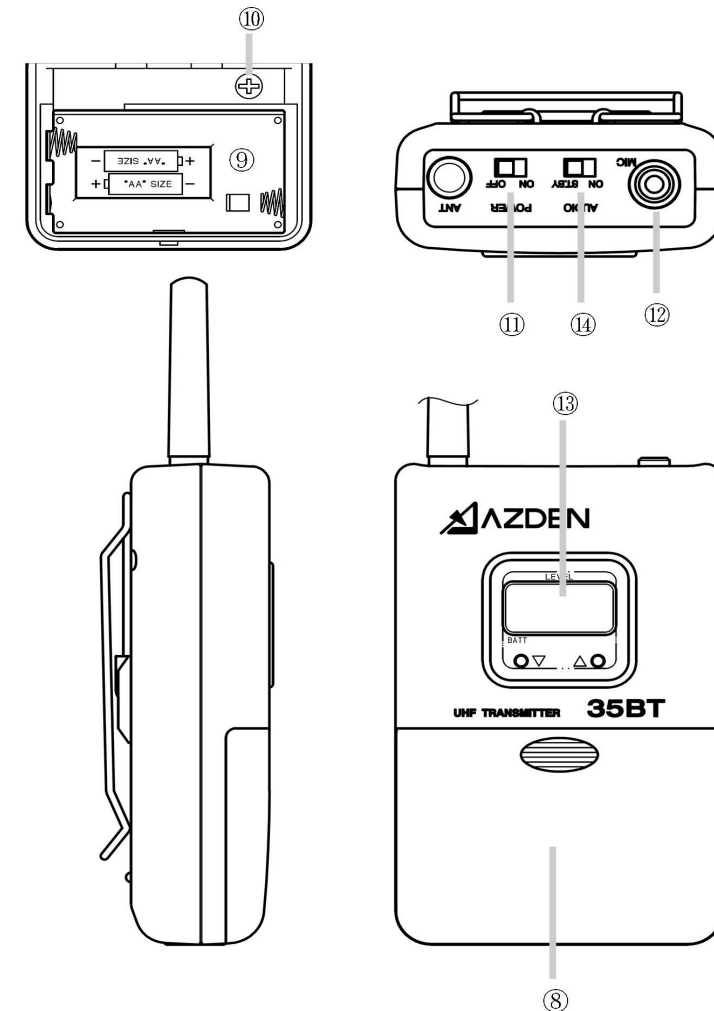
To change the channel number, use the tip of the tool provided and press the UP or DOWN button until the desired channel number is shown on the LCD Display. Keep the button pressed to fast forward the channel numbers.

**LCD Display Readouts**



- a. Working channel (Requency refer page"11")
- b. Reception level indicator: 4 bars = High, 1 bar = Low
- c. Battery level indicator: 3 bars = High, 1 bar = Low

**35BT Body-Pack Transmitter**



**⑧ Battery Compartment**

Remove the battery compartment lid by sliding it down. Install two fresh alkaline “AA” batteries. Make sure the battery polarity is correct as marked inside the battery compartment.

**⑨** Install two fresh alkaline “AA” batteries. Make sure the battery polarity is correct as marked inside the battery compartment. Inside the battery compartment, you will also find:

**⑩ MIC Input Level Control**

This control enables you to adjust the input level of the microphone. Using the supplied tool, also found inside the battery compartment, turn the orange dial clockwise to increase, or counterclockwise to decrease the input level.

**⑪ POWER Switch**

Switches the 35BT Transmitter “ON” or “OFF”.

**⑫ MIC Input Jack**

Plug the supplied EX-503L Lavalier Microphone into the MIC input jack. In addition to the EX-503L, other lapel and/or headset microphones with 3.5mm mini plug may also be used with the 35BT.

**⑬ LCD Display**

The display shows the following information:

Working channel CH 001 - 240

Battery level by 3-bar indicator (3 bars = High, 1 bar = Low)

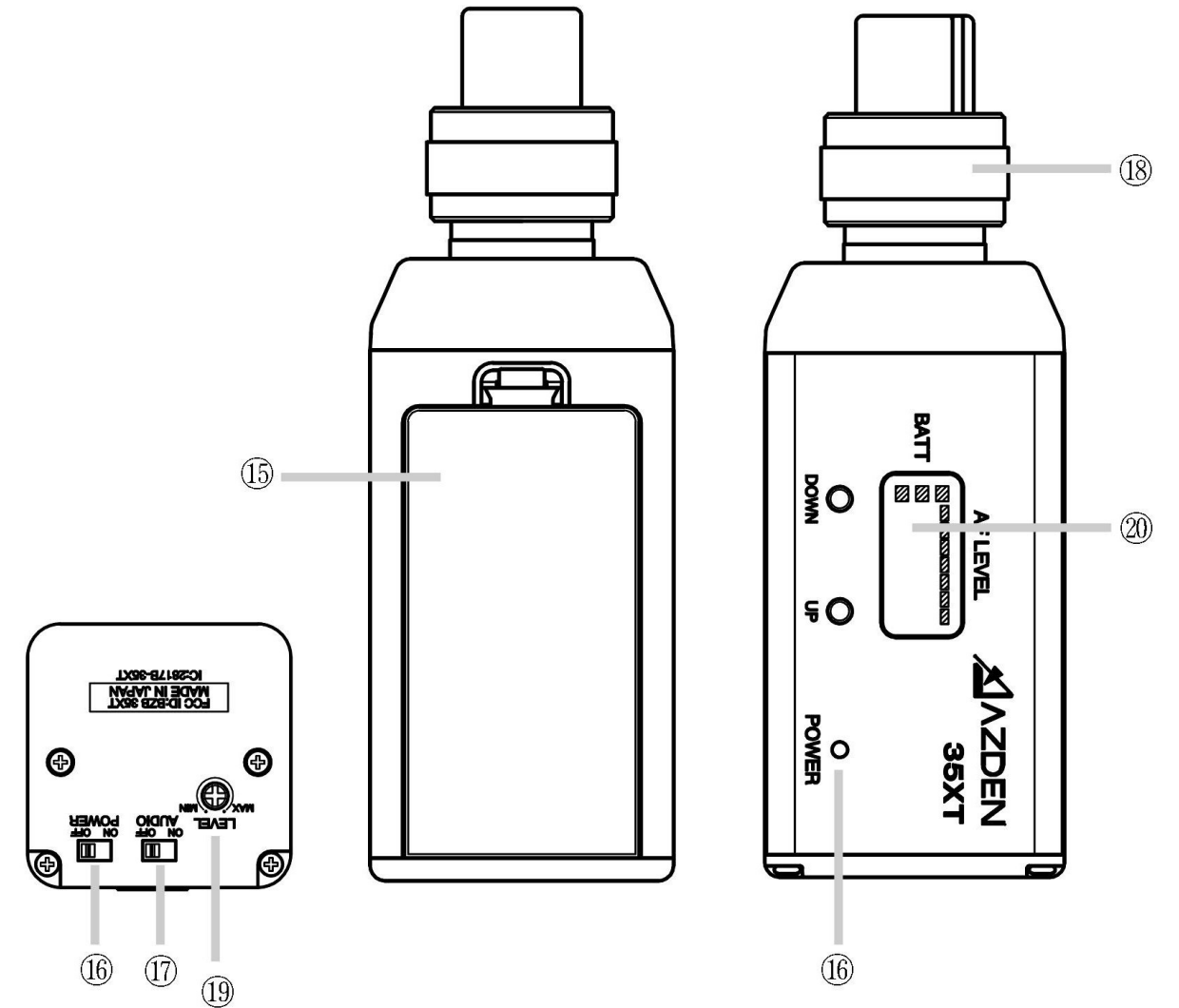
When showing 1 bar, you recommend to replace batteries to new one

AF (Audio Frequency) level by 4-bar indicator (4 bars = High, 1 bar = Low)

**⑭ AUDIO Switch**

It is best to set the AUDIO switch to “OFF” prior to first turning the POWER switch “ON”. When you are ready to begin transmitting, turn the AUDIO “ON”. The “OFF” position acts as “mute” that maintains the RF signal but turns off the audio.

**35XT Plug-in Transmitter**



**⑮ Battery Compartment**

Open the battery compartment lid by pushing down on the tab and lifting it up. Install two fresh alkaline “AA” batteries. Make sure the battery polarity is correct as marked inside the battery compartment.

**⑯ POWER Switch**

Turns the 35XT Transmitter “ON” or “OFF”.

**⑰ AUDIO Switch**

It is best to set the AUDIO switch to “OFF” prior to first turning the POWER switch “ON”. When you are ready to begin transmitting, turn the AUDIO “ON”. The “OFF” position acts as “mute” that maintains the RF signal but turns off the audio.