

User Manual

Product Name: Wireless Acoustic

Transmission System

Brand: EXMAX

Model: EX-218T

Manufacture: Shenzhen Qi Xin Chuang Zhan Technology
Co., LTD

Quick Operation Guide & Key Attentions

1. Open the battery compartment door and insert batteries correctly

As per the following picture, firstly press the buttons at both sides of the compartment simultaneously to the center, meanwhile, pull open the compartment door.

How to Open the Lid of the Battery Compartment



Insert 2 x AA batteries correctly(batteries no included), pay attention to the positive and negative mark in the compartment.“+” means positive, “-” means negative.Then turn the power switch to “on”.Now transmitter or receiver can be powered on.If still can not start up,please check the batteries power capacity or check if the positive and negative of batteries are installed incorrectly.

How to Install AA Batteries Correctly

When install the AA batteries, please install the Positive and negative electrode of battery correctly, "+" means positive and "-" means negative. If you mix up the Positive and negative electrode of battery, it couldn't be powered on.

AA Batteries(Not Include)



How to Enter Adjustment Mode

Press the button A and button B simultaneously for 1 or 2 seconds to enter adjustment mode.



2. Please turn off the machine when not using, which saves power and makes the battery working longer. Please take out the batteries if not using for long time, to avoid corroding the machine or other danger that caused by batteries.

3. Two operation modes for transmitter EX-218T : A and C.

Please be noted that the transmitter EX-218T has 2 operation modes, which are A and C. A stands for AUX---Audio or Line in; C stands for Mic---Human Sound transferred via microphone. A and C modes can not work simultaneously but only work in turn, as both A and C modes need to use the same unique 3.5mm jack.

Please pay attention that do not mix up the 2 working modes of EX-218T

Mode A stands for external audio input, which means when you need to play music or other audio files, you need connecting the transmitter EX-218T via 3.5mm audio cable to other devices, such as cellphone, CD, MP3/MP4 Player or voice recorder etc, now you need to set the EX-218T to Mode A.

When used for live events like speech, commentary, training, interpretation or tour guide, a microphone is connected to EX-218T via 3.5mm jack, now you need to set the EX-218T transmitter to Mode C .

If you choose wrong working mode, the people who use the receivers will hear noise.

4. How to set working Mode A or C on EX-218T

Turn on Ex-218T, pull out the battery compartment cover, press the 2 buttons on both sides of the compartment(refer to below picture) for 1-2 seconds simultaneously, you will see the CH logo flashing,which means the transmitter is in the setting mode.please just click the left button to choose Mode A or C when CH logo flashing, release the left button after you choose Mode A or C, the CH logo will stop flashing after 3 seconds, which means you finished the process of setting the operation mode.



5.How to set the Channel of EX-218T

Please turn on EX-218T, open the battery compartment cover, press the 2 buttons on both sides of the compartment(refer to above picture) for 1-2 seconds, you will see the CH logo flashing,which means the transmitter is in the setting mode.just click the right button to choose the channel from CH01 to CH12 when the CH logo is flashing.Release the right button after you've chosen the channel, 3 seconds later the CH logo will stop flash, which means you finished the process of setting the channel.Please note that only when the transmitter and receiver are set in the same channel, the receiver can receive signal from the transmitter.

6. How to set the Channel of the receiver EX-218R

Turn on EX-218R, pull out the battery compartment cover, press the 2 buttons on both sides of the compartment(refer to below picture) for 1-2 seconds, you will see the CH logo flashing,which means the receiver EX-218R is in the setting mode.Press the right or left button of EX-218R when the CH logo is flashing, you could choose the 12 channels from CH01 to CH02. Release the button after you've chosen the channel, 3 seconds later the CH logo will stop flashing, which means you finished the process of setting the channel of EX-218R.Please note that only when the transmitter and receiver are set on the same channel, the receiver can receive signal from the transmitter.



7.How to adjust the volume of Receiver EX-218R

Turn on EX-218R, pull out the battery compartment cover, press the left button(refer to above picture) to decrease the volume, while press the right button(refer to above picture) to increase the volume. The minimum volume of EX-218R is 0 and maximum is 8.After tests, we suggest to set the volume at 5 or 6, then you could get the most perfect voice transmission quality.

Preface

1. Thank you for purchasing the audio products of EXMAX. This product is a wireless system that is suitable for mass consumption.The working frequency is within UHF.For your good information and use, please read this manual carefully and keep it good for future enquiry.

2. EX-218 wireless tour guide system consists of transmitter EX-218T,receiver EX-218R,microphone and earphone.It has EXMAX specific unique transmission signal ID code which is incompatible with transmitters or receivers produced by other manufacturer, so please don't mix up using of other brand products.

3.The microphone and earphone that coming with the package have been in a strict testing and adjustment process.Accessories of other brands or third party may cause poor quality such as lower voice or noise or no voice due to incompatibility.We have microphones and earphones for sale.

4. This manual has been carefully proofread. Please contact EXMAX via sales@iexmax.com for any errors or omissions.

5. We will update the manual timely if any change or improvement made to the products.

6. We are making a great effort to improve the products. As for the appearance and color,please refer to the actual products.Pictures are for reference.

Security and Warning

1. Avoid working in high temperature, humidity or other harsh environment. Please prevent all the parts from the rain when using.

2. Please do not disassemble, repair or refit this product if you are non-professional.

3. When the equipment is working improperly, please remove the batteries and contact EXMAX for repair or commissioned qualified person for repair.

4. EX-218 is UHF wireless voice transmission system, if there is a strong electromagnetic radiation around the surrounding (such as transmission tower, high-power walkie talkie, etc.), it may interfere with the use of this EX-218, at this time please try to adjust the channel to avoid interference.

5. The EX-218 transmitter and receiver are powered by 2 AA alkaline or rechargeable batteries. Please use qualified batteries! You can't use bad or damaged batteries (such as swelling, peeling, leakage, etc.), otherwise, it may damage the equipment or cause personal injury because of the battery!! The company will not bear any the losses arising therefrom!

Feature

1. Industry-leading latest circuit design and PLL frequency synthesis technique, ensure it is reliable and stable;

2. Intelligent ID identification mode, no eavesdropping risk;

3. Working on the UHF band, which is more effective to avoid clutter interference;

4. Digital analog hybrid transmission, no audio transmission delay;

5. Microprocessor control, effectively avoid receiving dead angle;

6. Preset 12 channels, can easily avoid interference;

7. With the compound anti-interference circuit, 8 groups of frequencies can be used simultaneously without interference with each other;

8. LCD screen display frequency, channel, battery power etc;

9. Standard AA battery ensures stable power supply at any time;

10. Transmitter EX-218T with two working modes: A and C, A for audio equipment and C microphone;

11. Adjustable volume of Receiver EX-218R could meet various needs of listening;

12. One transmitter can match multiple receivers in an effective distance on one channel;

13. The removable clip design, can be inserted into pockets or waistband; with a lanyard, you can also hang on the neck, easy to carry;

14. The transmission distance could be up to 100 meters.

Specifications

System

Operating Range: >100M---Opening spaces (actual distances are depending on the use of the environment)

Frequency range: 584.0MHz-597.2MHz

RF frequency accuracy: +/- 20ppm

Channel and its corresponding frequency: see the right table

Service temperature range: 0 degrees centigrade to 50 degrees centigrade

Frequency response: 80Hz-12KHz

S/N Ratio: >55dB(A weighting)

System total harmonic distortion: <3.5%/1KHz

Channel	Frequency
CH01	584.0MHz
CH02	585.2MHz
CH03	586.4MHz
CH04	587.6MHz
CH05	588.8MHz
CH06	590.0MHz
CH07	591.2MHz
CH08	592.4MHz
CH09	593.6MHz
CH10	594.8MHz
CH11	596.0MHz
CH12	597.2MHz

EX-218R

Receiving mode: DQPSK Mode

Sensitivity: -95dBm

Display Mode: LCD

Power Rating: DC3V/AA1.5V*2 (Not included)

Operation Time: about 6-10 hours (depending on battery quality)

Audio Output: 3.5mm audio jack

Output Impedance: 32 ohm

Output Power: 30 mW

EX-218T

Dynamic Range: >65dB

Nominal Frequency Deviation: 25KHz

Transmitting Power: 10mW

Display Mode: LCD

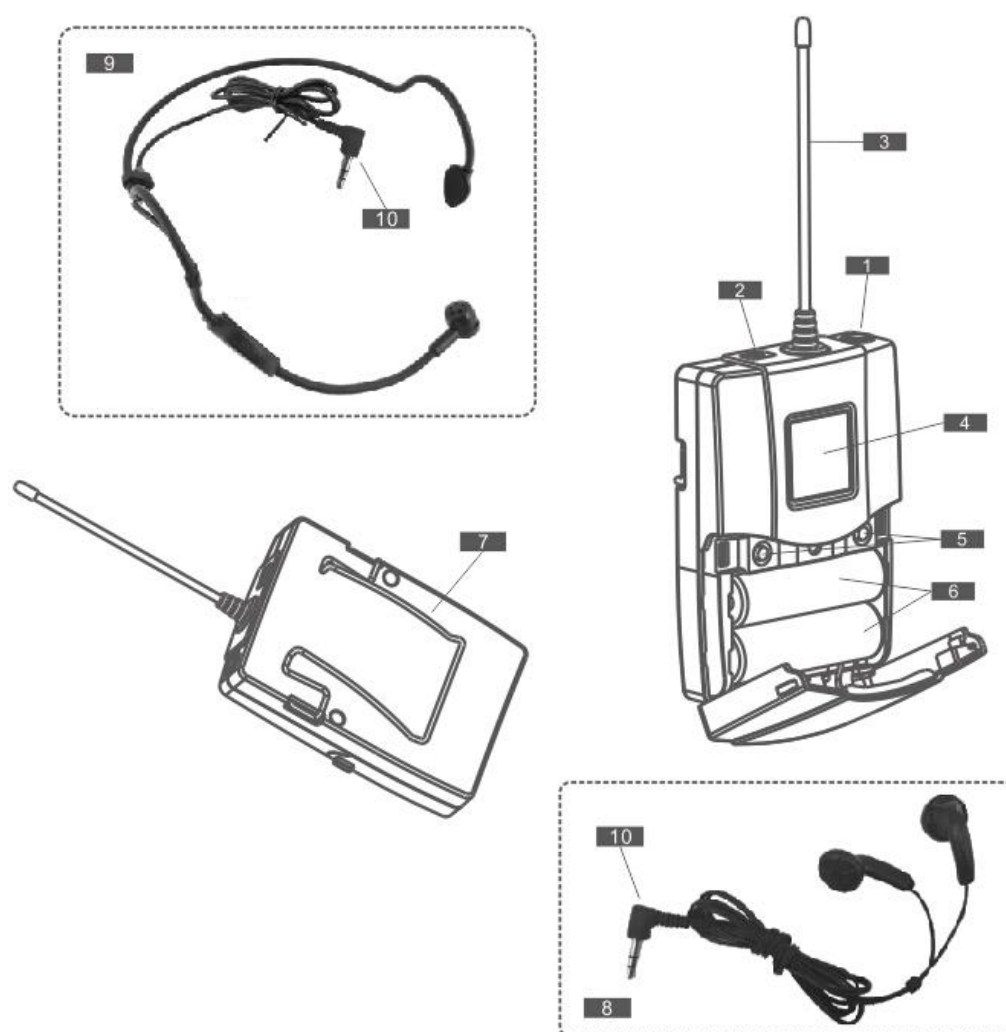
Power Supply: DC3V/AA1.5V*2 (Not included)

Operation Time: about 6-10 hours (depending on battery quality)

Audio Input: 3.5mm audio jack

Input Impedance: 1000 ohm

EX-218 Button Operation Instruction



1、 On the transmitter EX-218T, you can insert the 3.5mm audio cable (AUX input) or the microphone (MIC input), when connecting the 3.5mm audio cable, select the A (AUX) mode; when you insert the microphone, select the C (MIC) mode. On the receiver EX-218R, it's a 3.5mm headphone jack.

2. Power Switch: push left to turn off, Push right to turn on.

3. Antenna

4. LCD display

5. Function Button: Under the status of booting, pressing the left and right keys simultaneously, the CH icon flashes means entering the setting mode: Can set a working mode (A or C) and switch channels on transmitter EX-218T; Can adjust the volume level and switch channels on receiver EX-218R.

6. Battery: 2 AA1.5V batteries (Not included)

7. Removable back clip

8. Earphone

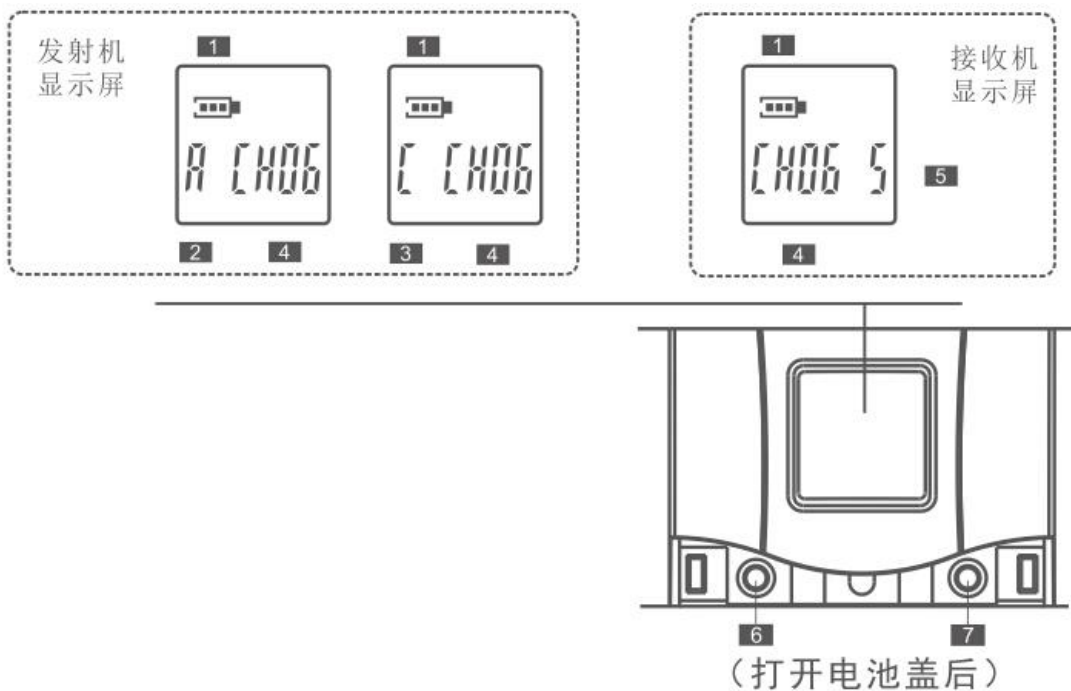
9. Head microphone

10. 3.5mm audio plug

Operating Instructions

1. Insert 2 AA batteries(Not Included) to transmitter EX-218T and receiver EX-218R according per instructions---please ensure the battery positive and negative pole installation is correct, otherwise it can not be powered on;
2. Insert the 3.5 audio plug (10) of head-worn microphone (9) into the microphone input socket of transmitter EX-218T (1);
3. Insert the 3.5 audio plug (10) of the earphone (8) into the earphone output socket (1) of the receiver EX-218R;
4. Turn on the power switch (2);
5. Adjust the transmitter channel (transmitter and receiver should be on the same channel frequency) and input mode (A or C), adjust the receiver's channel and volume (see the adjustment of equipment);
6. The equipment start to work.

Equipment adjustment



1. Power display indicator: when the battery power is depleted, the screen may appear abnormal display, at this time please close the device and replace the battery.
2. Transmitter EX-218T is in AUX working mode A: external audio input mode - when you need to play music or other audio files, you need to use 3.5mm audio cable connecting transmitter EX-218T to other playback devices, such as mobile phone, CD, MP3/MP4 or voice recorder, then set transmitter EX-218T on working mode A.
3. Transmitter EX-218T is in microphone input mode C: When you need to do live speaking, interpretation, training, translation, tour guide and other on-site activities, you need to insert the microphone into the 3.5mm interface of the EX-218T transmitter, and

adjust the transmitter EX-218T to working mode C.

4. Channel Display: Presetting 12 channels (CH01-CH12)

5. Receiver Volume: 9 volume level (0-8) for receiver EX-218R, and it is recommended to tune to level 5 or 6 for the best voice receiving effect.

6. On Transmitter EX-218T: only lights the screen when working, in adjustment mode (press 6, 7 keys at the same time to enter the adjustment mode) click button 6 to **switch working mode (A or C)**; On Receiver EX-218R: decrease the volume level, in adjustment mode (press 6, 7 keys at the same time enter the adjustment mode) click button 6 to **decrease channel frequency**;

7. On Transmitter EX-218T: only lights the screen when working, in adjustment mode (press 6, 7 keys at the same time to enter the adjustment mode) click button 7 to **switch channel from CH01 to CH12**; On Receiver EX-218R: increase the volume level, in adjustment mode (press 6, 7 keys at the same time enter the adjustment mode) click button 7 to **increase channel frequency**;

Attentions

1. It is very important to learn how to enter the adjustment mode. You need enter adjustment mode when you want to adjust channel and operation mode of transmitter EX-218T. Same when you want to adjust the channel on receiver EX-218R. Only the adjustment of the receiver volume doesn't need to enter adjustment mode.



Holding key 6 and 7 for 1-2 seconds at the same time, then CH icon flashing, now adjustment mode entered; When CH icon stops flashing, exit adjustment mode. If you adjust the volume of the receiver, no need to enter adjustment mode, press key 6 shortly, volume decreased; press key 7 shortly, volume increased.

2. Transmitter model: EX-218T, receiver model: EX-218R, one transmitter can connect multiple receivers;

3. Only when the transmitter EX-218T is in the same channel as the receiver EX-218 (same frequency), the receiver can normally receive the sound from the transmitter;

4. When connecting Microphone, please set the operation mode of EX-218T to mode(C);When connecting to external audio signals(e.g.mobile phone,MP3 player etc),please set to Mode(A).otherwise it will have a very high volume, which cause the receiver output distortion, moreover,high volume will cause discomfort to the people who use the receivers.
5. When the receiver EX-218R is used, please adjust the volume to 3 or below, and then gradually increase the volume to their own suitable level, excessive volume is harmful to hearing, usually 5 or 6 is more appropriate;
6. When battery usage display shows only 1 grid, please replace battery.Remember turn off the equipment before replacing.Please use high quality AA batteries and prepare spare batteries to avoid shortage.
7. The working distance of EX-218 in the open area can reach 100 meters; in the case of obstacles, the effective distance is between 30 meters and 80 meters, and the actual distance is related to the environment, the surrounding magnetic field and interference.
8. When selecting other microphones or headphones, choose a product of guaranteed quality, otherwise it may affect the sound quality or cause small, silent, noise and so on. Please select accessories according to the wiring mode below:



Trouble Shooting

Trouble Description	Possible Fault	Solutions
Unable to boot	Insufficient battery power capacity	Replace New AA batteries
	Wrong installation of positive and negative pole of the batteries	Please install the AA batteries correctly according to the "+" "-" icon
	Turned off	Switch to power on/off button to turn on equipment

No Sound	Transmitter turned off	Switch to power on the transmitter EX-218T
	Receiver turned off	Switch to power on the receiver EX-218R
	Low receiver volume	Increase the receiver volume
	Transmitter and receiver channel inconsistent	Please set the transmitter and receiver to the same channel
	The receiver is far away from the transmitter and the receiver is not within the effective operating distance	The receiver needs to be used within the effective range of the transmission
	insufficient battery capacity	Replace new AA batteries
Sound Distortion	Wrong operation working mode	Mode A is for external audio input, mode C is for Microphone input
The receiver EX-218R receiving signal Intermittently	There's radio interference nearby	Please use other channels (frequency) to avoid interference

Packing List

1x Transmitter EX-218T

1x User Manual

FCC Warning

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. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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 or more 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.