

UHF wireless microphone

product manuals



product model:XST-Y-HU-OSA Series

Department: Technical Support Department

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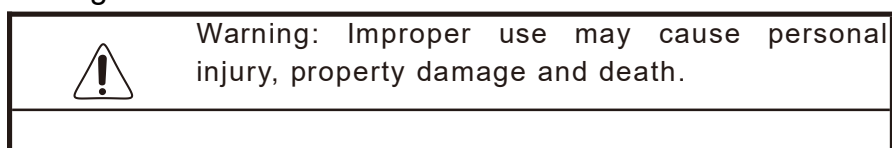
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1. Notes

- Please read this manual in detail before use.
- Pay attention to the safety warnings in this manual.
- It is recommended that you keep this manual for future reference.
- The safety symbols and warnings shown in this manual are intended to prevent personnel injuries and property losses caused by improper operation. Please read this manual in detail before using this product and be sure to understand all safety symbols and warnings to fully understand the potential dangers.

When installing this machine



- Please use within the voltage range specified by this machine. If higher voltage is used, it may cause electric shock or fire.
- Do not cut, twist, break or replace the power cord at will. When using this machine, please avoid close to the heater to avoid fire or property loss.
- Do not place heavy objects on the machine to avoid equipment damage, electric shock or fire.
- Because the output terminals of this machine can cause harm to the human body, these joints must not be touched to avoid electric shock. After the installation and debugging of the product is completed, please confirm that the high voltage part has been installed with terminal cover, and the connection of these terminals to external wires must be installed and connected under the guidance of professionals.
- Please install this machine on a stable surface that can bear the weight of this machine. Do not install or set up this machine in an unstable place (such as a shaking table or an uneven surface) to avoid personal injury or property loss when this machine falls.
- Never use wet hands to plug or unplug the plug to avoid electric shock accidents.
- When unplugging, make sure you are unplugging the plug body and not pulling the power cord directly.
- When moving the machine, be sure to unplug the power plug first. Moving the machine with the plug may cause fire or electric shock.
- Do not cover the ventilation port of the machine, so as not to cause fire due to excessive internal temperature of the machine.
- Avoid installing the machine in a humid or dusty place, in direct contact with sunlight, near electric heaters, or in places with steam, so as not to cause fire or electric shock. Such as bathrooms
- If any of the following abnormal conditions are found during use, please immediately turn off the power supply, quickly unplug and contact your nearest dealer. Do not continue to use this machine until the problem is resolved, as it may

cause fire or electric shock.

If you find smoke or a strange smell coming from the machine.

If water or metal falls into the machine.

If the machine falls or the housing is damaged.

For example, the wire is damaged (the wire core is exposed, the wire is broken, etc.).

If a fault is found (no sound).

- Because the machine contains high pressure parts, in order to avoid fire or electric shock, do not open the shell of this machine, if there is a problem please notify your nearest dealer.
- Do not place cups, bowls, vases and other liquids on the machine. If you accidentally spill liquid into the machine, it may cause fire or electric shock.
- Do not expose the machine to rain or any damp or water prone areas, which may cause electric shock or fire.
- Do not put metal objects or flammable materials into the vents on the machine cover, nor coins, which may cause fire or electric shock.
- Do not place heavy objects on the machine to avoid personal injury or property damage caused by the machine falling.
- Do not continue to use the machine when the sound is distorted, which indicates a fault and may cause high temperature and fire inside the machine.
- If the dust needs to be cleaned for a long time, please inform your dealer to clean the machine regularly to avoid damage or fire.
- The power supply of the equipment must be connected to a power outlet with a grounding device to ensure that the equipment is fully grounded.本产品 Use the power plug or appliance input socket as a disconnect device from the grid power supply. For safety, disconnect it when necessary.
- If the machine panel is upgraded, we will not give further notice. Please refer to the actual product for details.

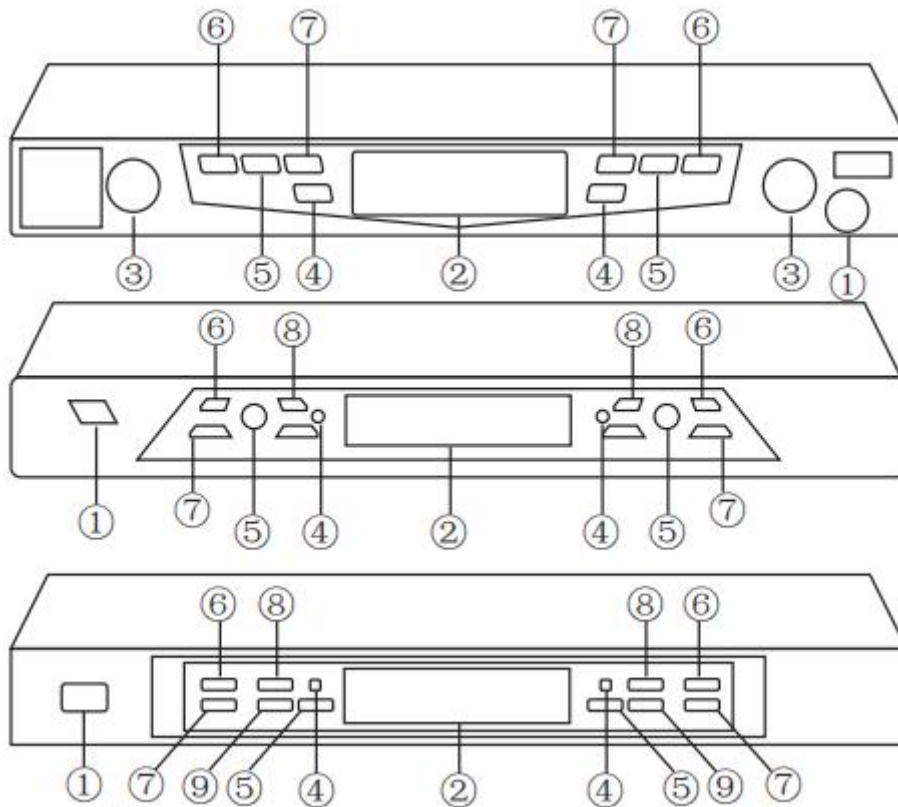
2. Product Introduction

The system adopts digital frequency guide technology, 2048-bit symmetric encryption algorithm to eliminate eavesdropping!

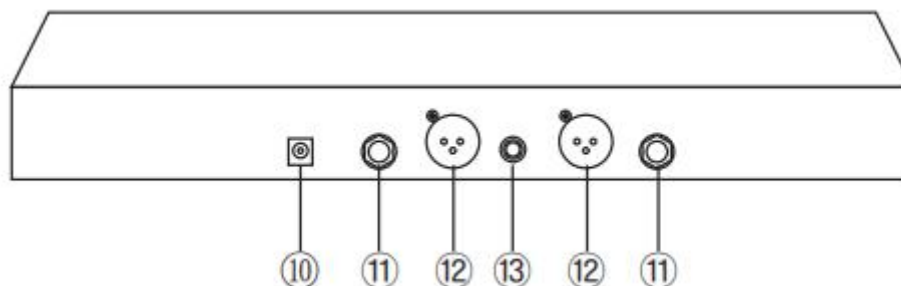
HU-102OSA Product Dimensions



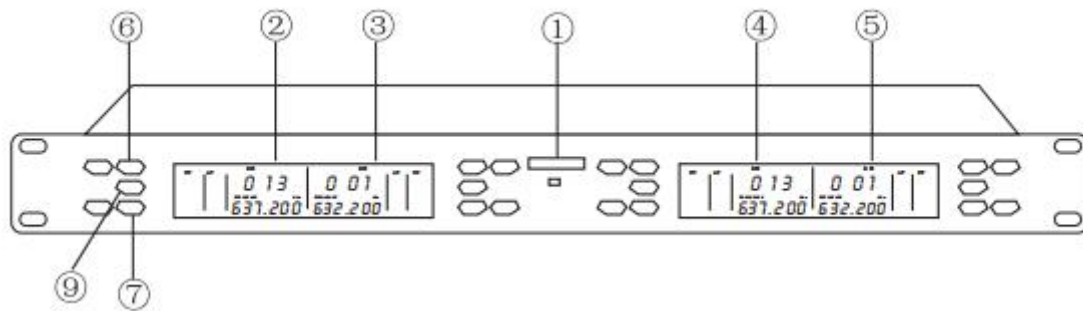
3. Wireless receiver function description and use function



- ① On/Off button
- ② Display window
- ③ Volume knob
- ④ Green infrared frequency pairing window
- ⑤ SET key and infrared frequency pairing function key
- ⑥ FM up button
- ⑦ FM down key
- ⑧ Volume+ key
- ⑨ Volume - key



- ⑩ DC power supply unit
- ⑪ Antenna holder
- ⑫ XLR connector
- ⑬ 6.35 audio jack



①Power button

⑥Up button

②CHA LCD

⑦Down button

③CHA LCD

⑧Function button

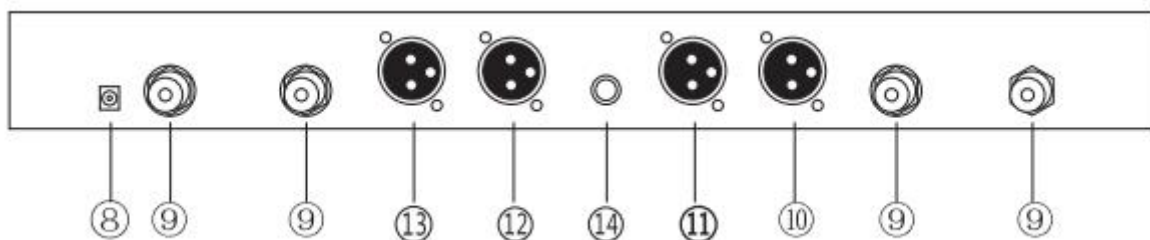
④CHA LCD

⑨IR Frequency Pairing Button

⑤CHA LCD

⑩Infrared transmission window

Motherboard Back Panel



⑧Power supply connection (12-15V1000mA)

⑨Antenna interface

⑩Independent audio output for A speaking channel

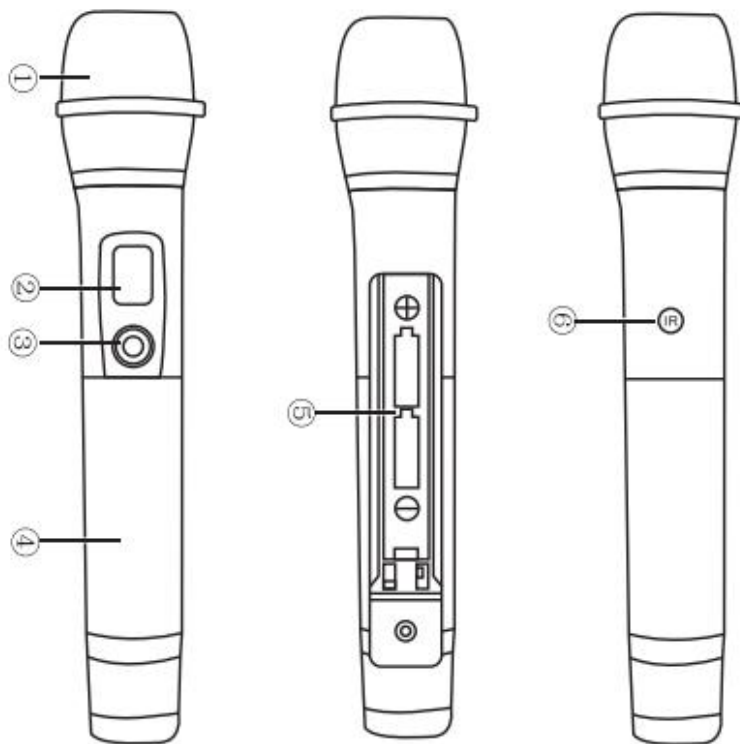
⑪B Speaking channel independent audio output

⑫C speech channel independent audio output

⑬D speaking channel independent audio output

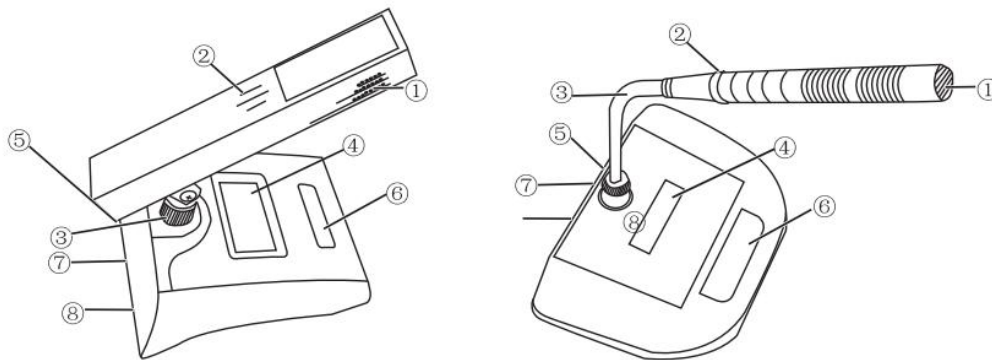
⑭Audio mixing output

4. Handheld transmitter control instructions



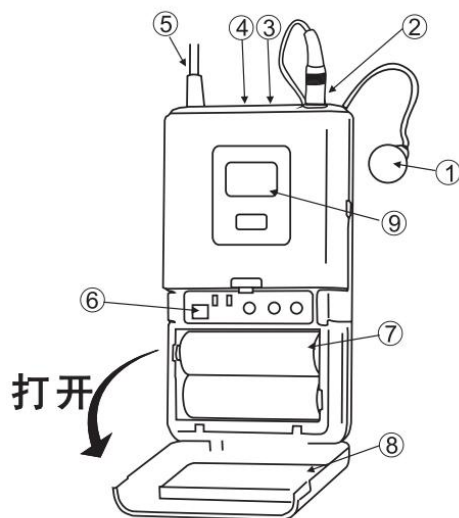
- ①Microphone head: including net head and head module
- ② LCD display: display channels and battery level
- ③Power switch: down for shutdown, up for normal use
- ④ Tube body: with batteries, transmitter circuit board, and built-in transmitter antenna at the end.
- ⑤ Battery compartment: 2 No.5 1.5V alkaline batteries are installed, the batteries should be removed if not used for a long time.
- ⑥ infrared receiver (Note: frequency alignment needs to work with the host infrared alignment distance of 2 meters)

5. Conference microphone indication



- | | |
|------------------------------|---------------------|
| ①Pickup microphone head | ②Speaking indicator |
| ③Bendable hose | ④Function display |
| ⑤Infrared frequency pair end | ⑥Power switch |
| ⑦Conference microphone body | ⑧Battery unit |

6. Lapel Clamp Transmitter Control Description



- | | |
|-------------------------|-------------------|
| ①Headphone | ②Headphone socket |
| ③Power indicator | ④Power switch |
| ⑤Transmitter Antenna | ⑥Coding window |
| ⑦Battery slot | ⑧Battery cover |
| ⑨Liquid crystal display | |

7. Technical parameters

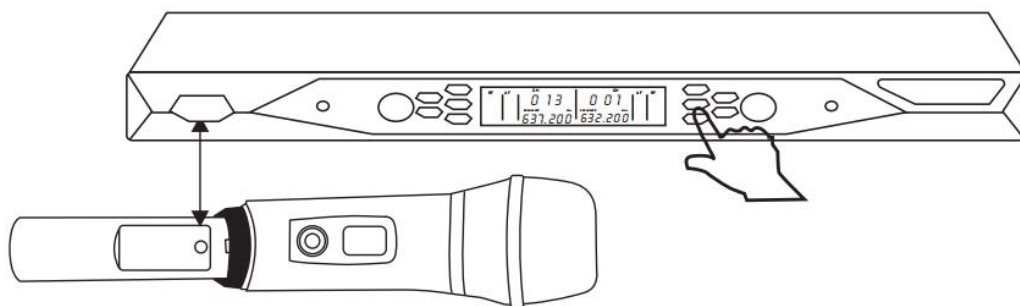
Mainframe power supply	DC12V-14V2A
Operating Current	600mAh
Power wastage	5W
Receiver Sensitivity	-105dBm
Audio Output Voltage	1V
Neighbor-frequency interference suppression	>60dBm
Microphone core directivity	heart-shaped pointing
Pickup Sensitivity	-10dBm
Firing Power	>+10dBm
Microphone power consumption	120mW
Receiving effective distance	Accessible straight line 30-80 meters
Audio Response	50HZ-15KHZ
Frequency Stability	+/-0.001%
noise-signal ratio	S/N>100dB
Distortion	THD:<0.01%

8. FM operating instructions

Manual frequency tuning / red frequency method

ABCD channel respectively with ↑ ↓ tuned to the need to use the frequency, and then press the IR key, to immediately receive the host of the infrared frequency window should be facing the infrared window of the handheld microphone to achieve the receiver's current frequency through the infrared light to change the frequency of the handheld microphone, open a frequency of a good frequency of a good side of the A side of the microphone let go, and then to the side of the B side of the microphone.

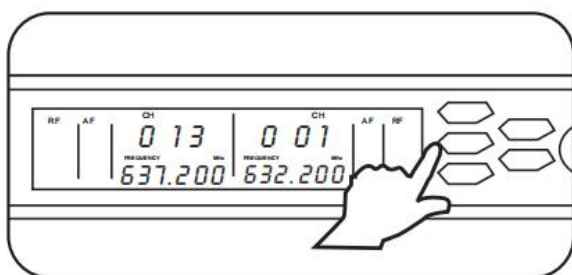
Note: Each microphone can be universal frequency pairing to ABCD, frequency pairing after the success of the above RF signal will be full frame.



Automatic frequency sweep (sweeps out the cleanest one in the field)

Turn off the two microphones that are currently ready for frequency pairing, press and hold down the

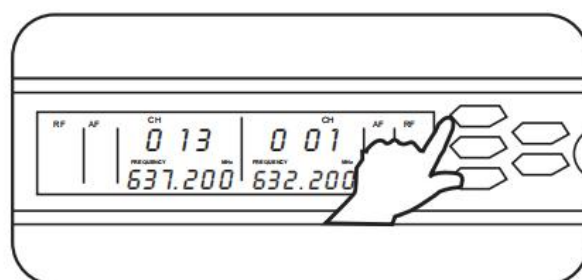
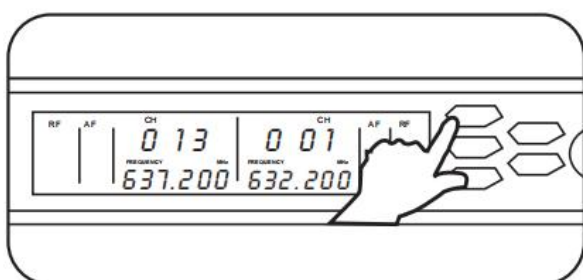
A-side IR key to sweep out a clean frequency, then press and hold down the B-side IR key, and so on to sweep out the cleanest other frequency in the scene. Then turn on one microphone, press the IR key on the A side, then turn on the other microphone and press the IR key on the B side to realize the success of the two sides of the frequency pairing. (All infrared frequency pairing must receive host infrared frequency pairing window, both must turn on the power)



If it is KTV or many sets of simultaneous use of the occasion of the same household, to close, to realize a set of automatic frequency sweeping and frequency pairing success, do not close, and then start another set, frequency sweeping and frequency pairing success of the same household, do not close, the back of a set of a set of increase, to ensure that there will be no interference with each other.

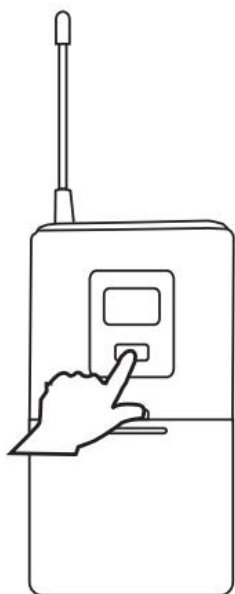
Power adjustment (control signal strength, avoid interference)

This product is divided into three levels of power regulation, the greater the power signal is stronger, the greater the possibility of mutual interference, the greater the power, the more power-consuming microphone. So the general KTV box power only adjust the first level of power is enough (minimum), outdoor distance demand is far from the use of three levels of power (maximum)



Power adjustment method. Press the IR key and then press ↑, when the screen displays 1 or 2 or 3, then

release the two keys at the same time, adjust the power with 1, and finally change the power of the handheld microphone by IR frequency. The power adjustment is only adjusted by the function key on the A side, after adjusting, the power of the two handheld microphones will be changed by infrared frequency pairing through the IR key on the A side and the I R key on the B side respectively.



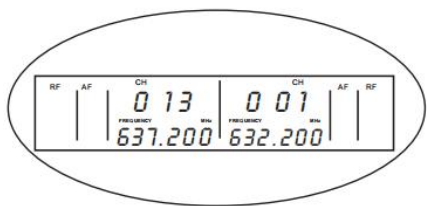
After the power pairing is successful, gently press the on/off key of the handheld microphone, you can see the current power level 1-3 used

Level 1-3 power distance: 30 meters for primary power, 40 meters for secondary power, 70 meters for tertiary power level.

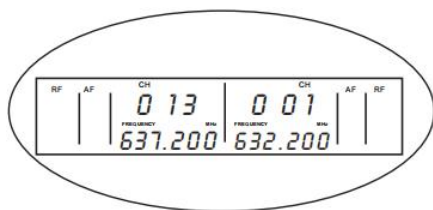
If you buy more than one set, we will stagger the frequencies before shipment. If there is mutual interference when used at the same time, use the automatic frequency sweep or power adjustment to solve the problem.

9. Receiver specifications

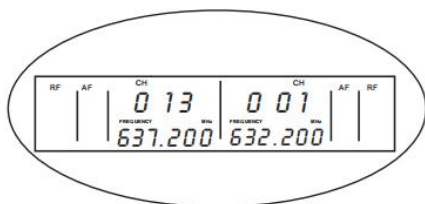
1. Must use wireless handheld U-band microphone equipment with at least 2 wireless microphones per set, each microphone must be equipped with a microphone anti-roll ring;
2. Support 2 or more microphones to input audio at the same time;
3. Pick-up distance of not less than 0.5 meters;
4. Wireless signal transmission and reception distance must be greater than 20 meters;
5. Frequency response range: 110Hz~15KHz.
6. Sensitivity: $\geq -40\text{dB}$.
7. Signal-to-noise ratio: $\leq 65\text{dB}$.
8. With the function of noise elimination and echo suppression.
9. Pickup angle: $360^\circ:10$.
10. Positioning accuracy: $\leq \pm 10^\circ$
11. output impedance (balanced): $\geq 100\Omega$
12. Sensitivity (94dB SPL@1kHz): $\geq 6\text{dBu}$
13. Signal-to-noise ratio: greater than 65dB



LCD dynamic screen, A+B total of 200 different frequency points can be selected to realize the simultaneous use of multiple sets, no conflict, no interference The system adopts UHF frequency band to transmit signals, the band is between 500MHz ~ 900MHz, UHF band can make the wireless microphone to avoid the signal blockage or interference with other frequency signals.



A/B infrared frequency pairing window, using infrared transmission to send the frequency setting parameters to the transmitter, so that the transmitter will be set according to the frequency list set by the Xiang receiver.



Humanized memory switch

When the power is turned on, it automatically repeats the last (power on/off) state without re-switching.

No need to re-switch.

10. Troubleshooting and solutions

Troubleshooting

The following table lists some common troubleshooting problems and solutions; if you are unable to solve the problem, please contact your dealer.

Problem	Solution
No sound (status: receiver RF display not illuminated)	Check that the power switches of the transmitter and receiver are in the "ON" (on) position. Check whether the positive and negative polarity of the batteries are mixed up.

	Check the antenna connection of the receiver Ensure that there are no obstacles between the antenna and the transmitter.
No sound (Status: RF display normal, AF display normal)	Check that the volume knob of the receiver is in the minimum position. Check that the connection between the receiver's volume and the amplifier is normal.
No sound (Status: RF display normal, AF display abnormal)	Check if the transmitter power supply is normal Swap transmitter pickup mics if necessary.
Turn on the transmitter and receive a signal with noise or interference from outside voices	Check that the battery is securely installed Eliminate nearby sources of RF interference If using a guitar or other musical instrument, check the connections Two transmitters may be using the same frequency, locate and turn off one of them Signal may be weak, reposition the antenna as close to the transmitter as possible Change to another channel
Receiver noise when transmitter is turned off	Troubleshooting RF noise sources Reposition the receiver or antenna
Occasional loss of sound during the movement of transmitter performance venues	Reposition the receiver and perform a "walk-through" test, observing the RF monitor. If you notice a loss of sound, mark the spot and avoid it during the show.
Unable to turn on the transmitter.	Replacement of the transmitter battery

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