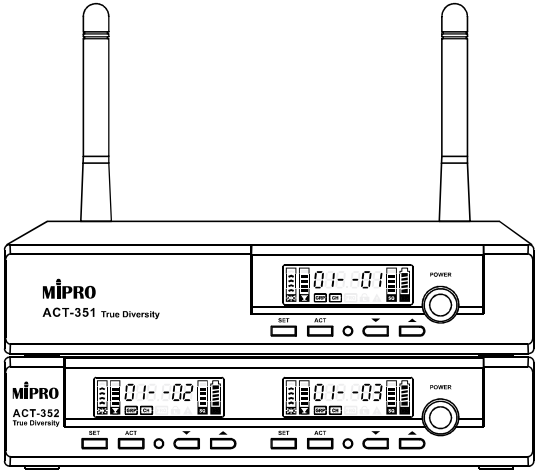
MIPRO

User Guide

ACT-351 UHF Analog Single-Channel Receiver

ACT-352 UHF Analog Dual-Channel Receiver



! IMPORTANT SAFETY INSTRUCTIONS !

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarised or ground plug: A polarised plug has two blades with one wider than the other. The wide blade is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, should be placed on the apparatus.
17. Use only with the battery which specified by manufacturer.
18. The power supply cord set is to be the main disconnected device.

WARNING

1. FOR OUTDOOR USE:
   To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
2. UNDER WET LOCATION:
   Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, such as vases should be placed on the apparatus.
3. SERVICE INSTRUCTIONS:
   CAUTION - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.





This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Disposal

Dispose of any unusable devices or batteries responsibly and in accordance with any applicable regulations.



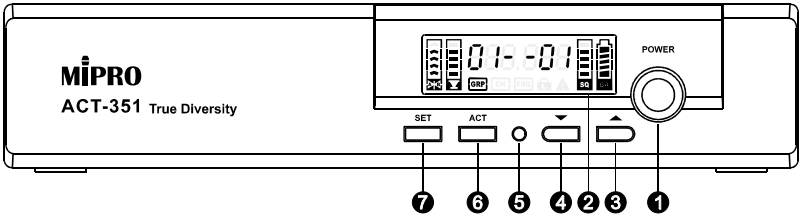
Disposing of used batteries with domestic waste is to be avoided!

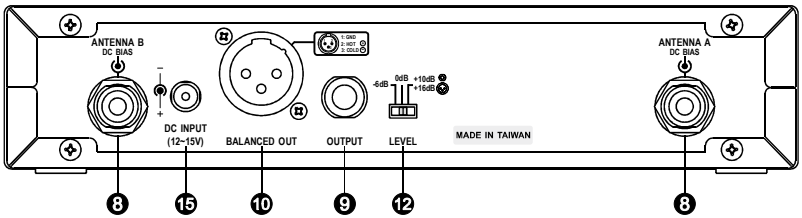
Batteries / NiCad cells often contain heavy metals such as cadmium(Cd), mercury(Hg) and lead(Pb) that makes them unsuitable for disposal with domestic waste. You may return spent batteries/ accumulators free of charge to recycling centres or anywhere else batteries/accumulators are sold.

By doing so, you contribute to the conservation of our environment!

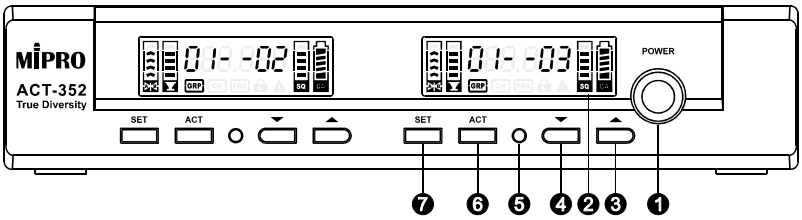
Parts Name

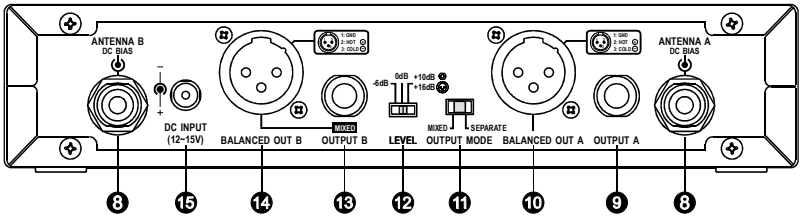
ACT-351 Single-Channel





ACT-352 Dual-Channel





Front Panel

❶ **Power Switch:** Turns the power on or off.

❷ **LCD Display:** Shows group, channel, frequency, audio and RF signal strength, and other information.

❸ ▲: Increases values.

❹ ▼: Decreases values.

❺ **ACT Indicator:** ACT (Automatic Channel Targeting) indicator.

❻ **ACT Button:** Activates the ACT automatic sync function to synchronize the transmitter frequency.

❼ **SET Button:** Used to select Group (GRP), Channel (CH), or manually set Frequency (FREQ), and save the settings after switching functions.

Rear Panel

❽ **Antenna A / B:** TNC connectors for connecting receiving antennas; provides DC bias to antennas.

❾ **Balanced Audio Output (XLR Jack):** Balanced audio output via XLR connector, providing independent audio output for balanced mode.

❿ **Unbalanced Audio Output (6.3 mm Phone Jack):** Unbalanced audio output via 6.3 mm (1/4") phone jack for independent audio output.

⓫ **Audio Output Mode Switch:** Switches between independent output (SEPARATE) and mixed output (MIXED).

⓬ **LEVEL Output Gain Switch:** Selectable output levels of -6 dB, 0 dB, or +16 dB for balanced output, and -6 dB, 0 dB, or +10 dB for unbalanced output.

⓭ **OUTPUT (Unbalanced Mixed Output):** 6.3 mm (1/4") phone jack for mixed audio output; use TS connector.

⓮ **Balanced Mixed Output (XLR Jack):** XLR connector for balanced mixed audio output.

⓯ **DC Input Power Jack:** Connect to an external DC power supply.
Input voltage: DC 12 – 15 V (use only the specified power adapter).

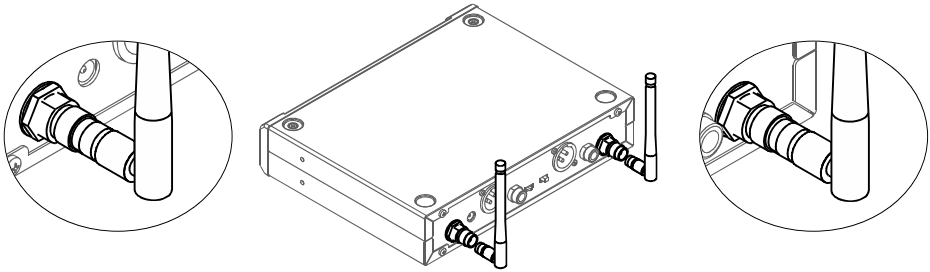
Receiver Installation

Installation Environment Recommendations

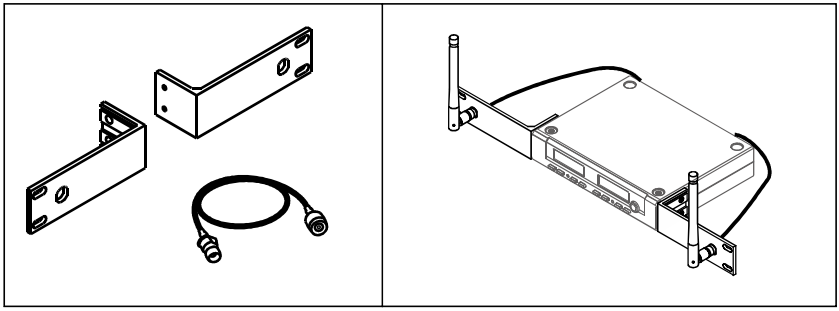
- Place the receiver in a well-ventilated location, away from heat sources and moisture.
- The receiver can be mounted in a standard 19-inch rack using the provided rack-mount brackets. Leave sufficient space around the unit for proper ventilation.
- Avoid placing the receiver near high-frequency devices or amplifiers to ensure stable reception quality.

Antenna Installation and Placement

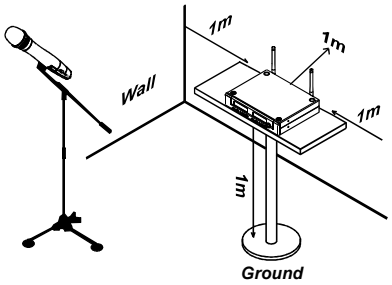
- The antennas should be installed on the receiver's rear antenna connectors.



- When the antenna cable extension exceeds 10 meters, use an antenna booster to compensate for signal loss.
- The antenna connector provides DC bias voltage; avoid long-term short-circuiting.
- If the receiver is installed inside a rack, it is recommended to use antenna extension accessories to relocate the antennas to the front panel to prevent signal attenuation caused by obstructions.



- For best reception performance, place the receiver at least 1 meter above the ground, and keep a distance of 1 meter or more between the receiver antennas and the transmitter. Avoid strong electromagnetic fields or other sources of interference.

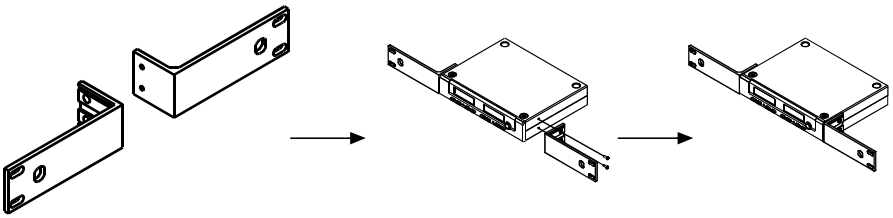


Recommendations for Multi-Receiver System Use

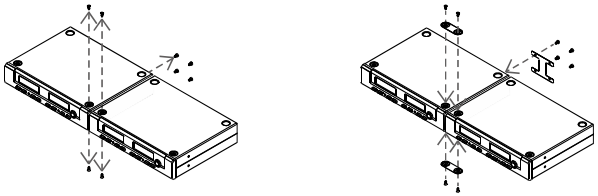
- When multiple receivers are used simultaneously, select channels within the same group that do not interfere with one another to avoid intermodulation interference.
- It is recommended to use an antenna distributor (such as the AD-708). Using a pair of high-quality antennas through a distributor helps enhance receiving performance.
- For long-distance or professional applications, high-gain antennas or booster amplifiers may be used to improve signal stability and reception reliability.

Receiver Installation Methods

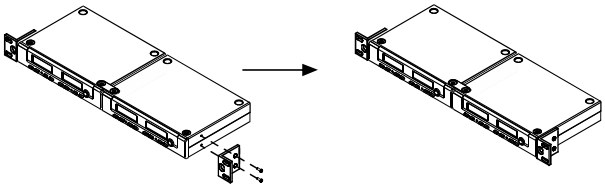
- **Half-rack installation or standard 1U rackmount installation:** Attach the rack-mount brackets (optional accessories) to the receiver with screws, then secure the unit inside a standard 19-inch equipment rack.



- Dual Half-U Receiver (9.5-inch) Combined Installation:Use the optional joining bracket to connect and combine two half-U receivers into a single 1U receiver unit.

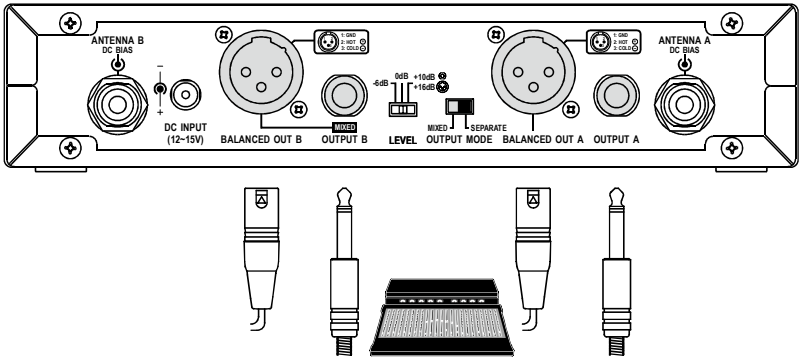


- Secure the left and right 1U rack-mount brackets with screws, then install the receiver directly onto the front frame of a standard 19-inch rack.

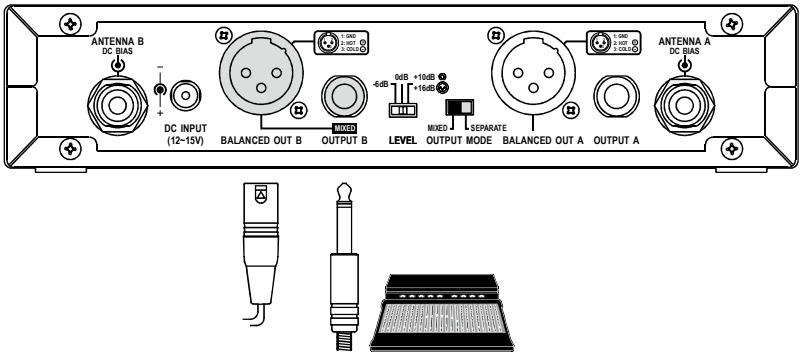


Audio Output Connections

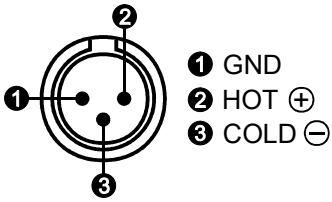
- **Independent Output:** When the output mode switch is set to SEPARATE, each channel provides its own independent XLR (balanced) and 6.3 mm (unbalanced) output.Either connector may be used, and the signal can be routed to mixers or recording equipment.



- **Mixed Output:** When the output mode switch is set to MIXED, an additional mixed audio output is available, including both XLR (balanced) and 6.3 mm (unbalanced) connectors. Either connector may be used, and the output contains the mixed audio of all channels.



- **XLR Pin Configuration:** 1 = (GND), 2 = (HOT+), 3 = (COLD-)



LEVEL Switch Setting Recommendations

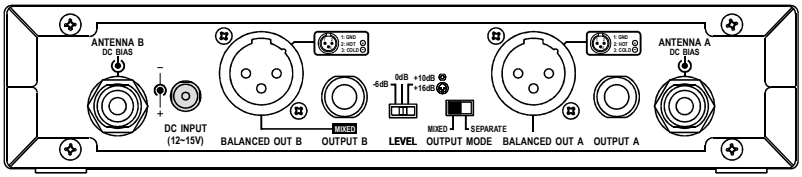
Adjust the LEVEL switch on the rear panel of the receiver according to the type of audio equipment connected.

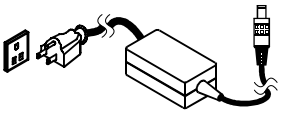
Input Equipment	Recommended Setting
Professional Mixer (MIC IN or LINE IN)	0 dB, +10 dB, or +16 dB (It is recommended to start with the 0 dB setting)
Power Amplifier (MIC IN)	– 6 dB or 0 dB (Avoid excessive output that may cause distortion)

** Since the input sensitivity of each device varies, it is recommended to start testing from the lowest output setting and adjust according to actual requirements.

Power Connection

- Use the original power adapter supplied by the manufacturer.Insert the DC plug into the power jack on the rear panel of the receiver (center positive), and connect the other end to an AC outlet to power the unit.
- Please refer to the model label to confirm the input voltage range (DC 12–15V).

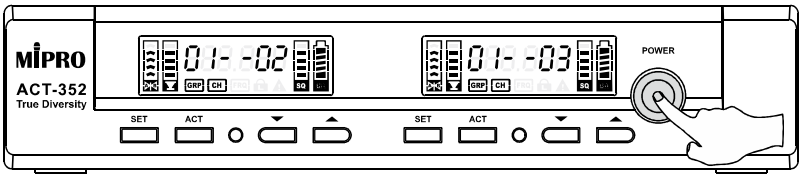




• Note: Power adapter illustration is for reference only; actual product may vary.

Power-On Procedure

- Switch the receiver's power switch to the ON position.
- The LCD backlight turns on and displays frequency, group, channel, and other information.
- If the LCD does not light up, please check whether the power supply and DC plug connection are correct.



LCD Backlight Display Behavior

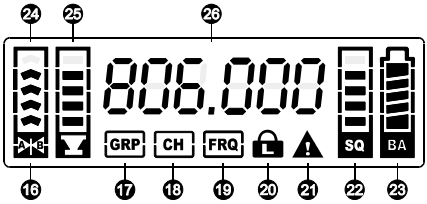
- When navigating the LCD menu, once any setting is completed, if no operation is performed for more than 5 seconds, the system will automatically exit the menu.
- If no valid signal from a transmitter is detected for more than 10 seconds, the system enters standby mode and the LCD will dim to a half-brightness state.
- After powering on the receiver:
  - If the LCD remains at full brightness, the receiver has not entered standby mode.
  - If the LCD dims to half brightness, it indicates the unit has entered standby mode.
- When a valid transmitter signal is detected or a front-panel button is pressed, the LCD returns to full brightness.

Post-Installation Inspection Steps

- Before turning on the receiver, set the mixer or amplifier volume to the minimum level to avoid sudden loud noises.
- Turn on the corresponding transmitter and bring it close to the receiver to check the LCD display
  - The RF indicator should light up when the transmitter is turned on.
  - The AF indicator should vary in response to the microphone's audio input level.
- If the RF or AF indicators do not respond, it indicates a system malfunction. Please check all connections and settings.
- Adjust the microphone volume on the mixer or amplifier; no further adjustment is required on the receiver.

LCD Display and Function Description

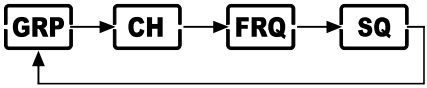
Display Information



16 Antenna Auto Selection Indicator
17 Group
18 Channel
19 Frequency
20 Panel Lock Indicator
21 Interference Warning Indicator
22 Receiving Sensitivity Indicator
23 Transmitter Battery Level Indicator
24 RF Receiving Signal Strength Meter
25 Audio Output Level Meter
26 Operating Frequency Display

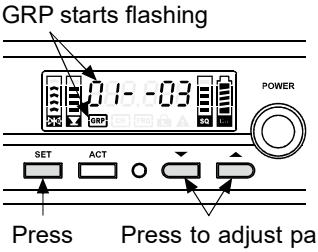
SET Button Functions

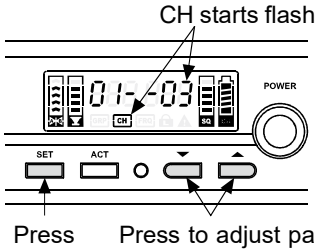
- Press the SET button to select or save a setting. Use ▲ or ▼ to change values.
- When using the SET button, the LCD function menu will cycle through the following order:



Group & Channel Setting (GRP / CH)

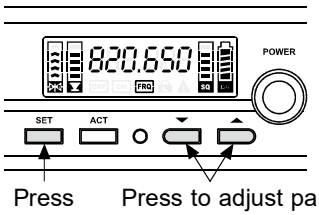
- Press the SET button to switch functions. When the frame is flashing, press the ▲ or ▼ button to adjust the value.
- The channel (CH) setting has an automatic interference detection function. If interference is present, it will continue stepping down to the next channel until an interference-free channel is found.
- After adjustment is completed, press the SET button again to save the setting.





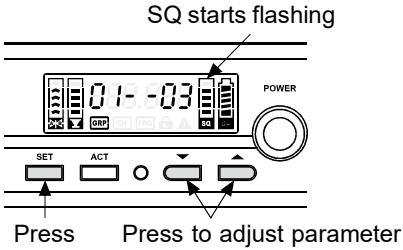
Frequency Setting (FREQ)

- Only the last group allows manual frequency selection; all other groups use preset combinations.
- Press the SET button to switch functions. When the frame is flashing, press the ▲ or ▼ button to adjust the value.
- The frequency can be adjusted in 25 kHz or 1 MHz increments.
- After adjustment is completed, press the SET button again to save the setting.



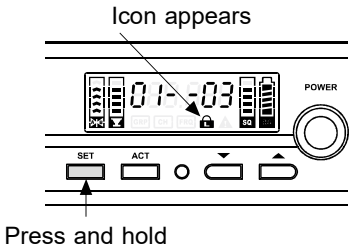
Squelch Level Setting (SQ)

- Press the SET button to switch functions. When the SQ frame begins flashing, press the ▲ or ▼ button to adjust the value.
- The higher the setting, the more effectively the receiver suppresses weak interference signals. When SQ is set to the maximum level, the system enters forced channel-selection mode.
- The SQ setting does not affect the receiver's actual RF sensitivity.



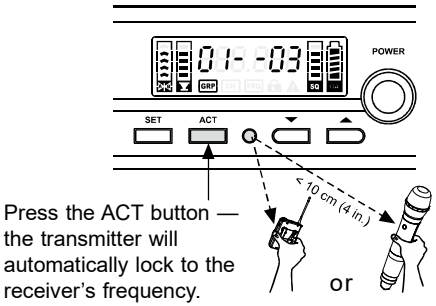
: Panel Lock / Unlock

- Press and hold the SET button until the lock icon appears, then release. This indicates the panel is locked, and all parameter settings cannot be changed.
- To unlock the panel, press and hold the SET button again until the icon disappears. Once unlocked, all settings can be modified normally.



ACT Synchronization Operation

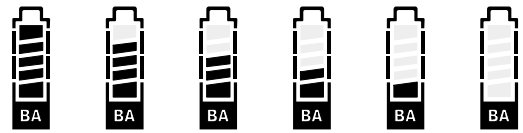
- Turn on the transmitter power and bring it close to the receiver's ACT sensing area. The distance should not exceed 10 cm.
- Press the receiver's ACT button; the LCD will display the group, channel, or frequency number and begin flashing while synchronization is in progress.
- If synchronization is successful within 10 seconds, the transmitter's LCD will automatically update to the same group and channel as the receiver.
- At the same time, the receiver's RF signal strength meters will display the transmitter's signal level.
- If synchronization fails, move the transmitter slightly and press the ACT button again.



Battery Level Indicator

- The receiver display shows the transmitter's battery level in real time.
- When the battery level drops to 1–2 bars, it is recommended to replace or recharge the batteries to avoid unexpected shutdown.

** The actual battery capacity corresponding to each bar may vary depending on the transmitter model. Please refer to the transmitter's user manual for details.



Common Malfunctions and Troubleshooting

Phenomenon	Possible Cause	Recommended Solution
No audio output	The transmitter is not matched to the receiver frequency, volume too low, or audio cable not properly connected	Check the frequency pairing and connection status, adjust the mixer volume
RF signal present but no AF response	The receiver output is not properly connected, or the mute function is enabled	Check the audio connection or disable mute
Audio dropouts or noise	Antenna obstruction, excessive distance, or interference from the same frequency	Adjust antenna angle or change to another frequency
AF overload	Input level too high causing distortion	Adjust transmitter volume or switch to lower LEVEL setting
Display shows ERR01	Internal data error	Restart the unit; if the problem persists, contact service center

** If the problem still cannot be resolved, please contact an authorized service center or your dealer for technical support.

Notes

- Specifications are subject to the actual product.
- The carrier frequency range, output power, and maximum deviation comply with the radio regulations of each respective country.
- To avoid damaging the microphone, do not spray alcohol or liquid cleaners directly onto the microphone capsule. Damage caused by improper cleaning is not covered under the warranty.

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