

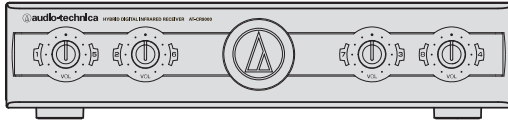


AT-CR9000

User Manual / Infrared Wireless Receiver

audio-technica

Thank you for purchasing this Audio-Technica product. Before using the product, please read through the Quick Start Guide, as well as this user manual when necessary, to ensure that you can use the product correctly.



- Channels available for up to 8 microphones*
 - * When two of this product are used at the same time
 - High performance in a compact body
 - Clear sound quality produced with digital processing
 - Using high-performance light receiving elements, this product features a reduced number of receiver unit installations and a low profile
- * This product must be used in combination with an Audio-Technica infrared wireless microphone (sold separately). Visit our web site for information on compatible models.

Check the contents of the package

Before using this product, please check that all of the following items are included in the package. If any shortage or damage is found in the contents of the package, contact your local Audio-Technica dealer.

- Infrared wireless receiver (AT-CR9000)
- Receiver unit (AT-SRX)
- AC adapter
- Wood screw × 2
- Receiver unit mounting fitting
- Connection cable × 2
 - RCA pin plug - 6.3 mm dia. monaural standard plug (L-shaped), 3.0 m
- Quick start guide
- Warranty card

Important information

Warning:

- To prevent fire or shock hazard, do not expose this apparatus to rain or moisture.

Caution:

- Do not expose this apparatus to drips or splashes.
- To avoid electric shock, do not open the cabinet.
- Refer servicing to qualified personnel only.
- Do not expose this apparatus to excessive heat such as that generated by sunshine, fire or other heat sources.
- Do not subject this apparatus to strong impact.
- This apparatus should be located close enough to the AC outlet so that you can easily grasp the AC adapter at any time.
- In case of emergency, disconnect the AC adapter quickly.
- Do not place any objects filled with liquids, such as vases, on this apparatus.
- To prevent fire, do not place any naked flame sources (such as lighted candles) on this apparatus.
- Do not install this apparatus in a confined space such as a bookcase or similar unit.
- Install this apparatus only in the places with good ventilation.
- The rating label is put on the bottom of this apparatus.

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 dry cloth.

- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 9) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10) Only use attachments/accessories specified by the manufacturer.
- 11) 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.



- 12) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13) 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.

FCC Notice

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.

Caution:

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this 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.

Notes on use

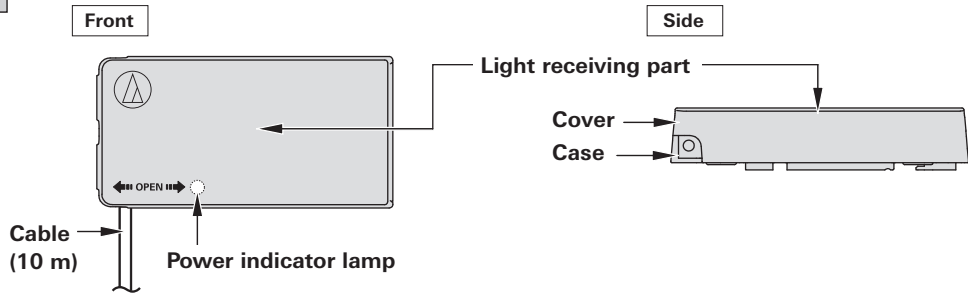
- Be sure to also read the connecting device's user manual before use.
- When installing a receiver unit on the ceiling, ensure that it is approximately 2 to 3 m away from any window or wall.
- When installing a receiver unit on a wall, avoid direct sunlight, spotlight, and incandescent light.
- Maintain a distance of at least 1.5 m between the microphone and the receiver unit during use. Otherwise malfunction and/or noise may occur.
- Do not place this product near any of the following objects. System malfunction or noise may occur. If such problems occur, move the product away from the object and install it in a place where proper operation is confirmed.

- **Lighting system**
- **Projector (LCD, DLP, etc.), OHP, incandescent light bulb, etc.**
- **Mercury lamp, halogen lamp, inverter fluorescent lamp, black light**
- **Plasma display panel**
- **Remote control, infrared LAN and other infrared devices**
- **Dimmer**
- **Digital power amplifier, and other digital devices and their wiring (Speaker output, etc.)**

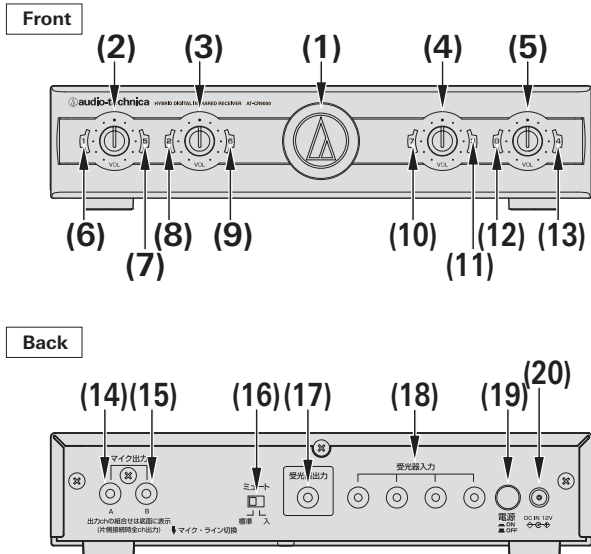
- Noise may occur if large electrical equipment is placed on the cable routing path. In this case, route the cable far enough away from the equipment so that no noise occurs.
- When routing cables, do not cut the cables and reconnect or graft them. It may cause noise.

Name of each part

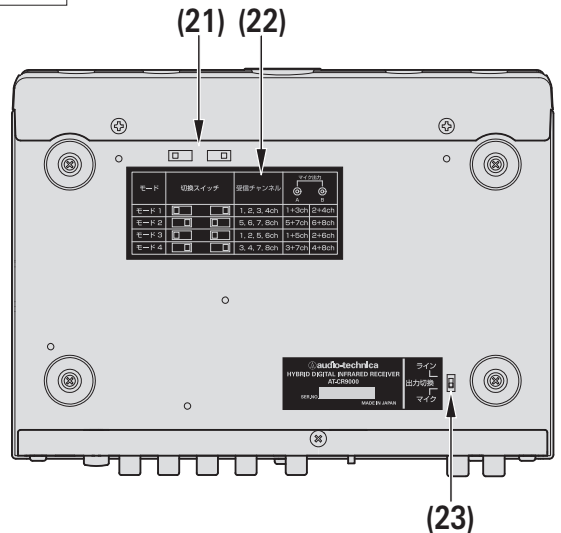
Receiver unit



Infrared wireless receiver



Bottom

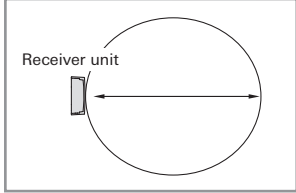


- (1) Power indicator lamp
- (2) 1, 5 channel volume
- (3) 2, 6 channel volume
- (4) 3, 7 channel volume
- (5) 4, 8 channel volume
- (6) 1 ch microphone indicator lamp (yellow)
- (7) 5 ch microphone indicator lamp (yellow)
- (8) 2 ch microphone indicator lamp (green)
- (9) 6 ch microphone indicator lamp (green)
- (10) 7 ch microphone indicator lamp (red)
- (11) 3 ch microphone indicator lamp (red)
- (12) 8 ch microphone indicator lamp (blue)
- (13) 4 ch microphone indicator lamp (blue)
- (14) Microphone output jack A (RCA pin jack)
- (15) Microphone output jack B (RCA pin jack)
- (16) Noise mute switch
- (17) Receiving device output jack
- (18) Receiving device input jack
- (19) Power button
- (20) External power supply input jack (12 V DC IN)
- (21) Mode control switch
- (22) Mode description sticker
- (23) Output control switch

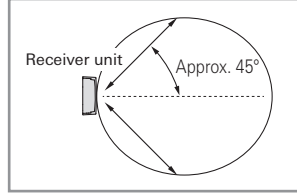
Reception range

- * The reception range may vary depending on the combination of products, settings, and/or room conditions.
- * The following example shows the reception range with the product combination below.
 - Receiver: AT-CR9000
 - Receiver unit: AT-SRX
 - Microphone: AT-CLM9000TX

• Frontal direction



• Diagonal direction (Approx. 45°)



		Noise mute switch	
		標準	入
Output control switch	HI	Approx. 16 m	Approx. 9 m
	LO	Approx. 12 m	Approx. 7 m
ECO	Approx. 10 m	Approx. 5 m	

		Noise mute switch	
		標準	入
Output control switch	HI	Approx. 11 m	Approx. 6 m
	LO	Approx. 8 m	Approx. 5 m
ECO	Approx. 7 m	Approx. 3 m	

- * Switching the microphone's output control switch setting (HI / LO / ECO) or switching this product's noise mute switch setting (標準 / 入) will change the reception range.
- * As the receiver unit has the maximum sensitivity on the front, it is more effective to install it on a wall than on the ceiling.
- * Entry of direct sunlight, or light from a spotlight or incandescent light into the receiver unit significantly reduces its reception range.

Reception frequencies

This product supports the following channels (frequencies).

* Channels other than the following are not supported.

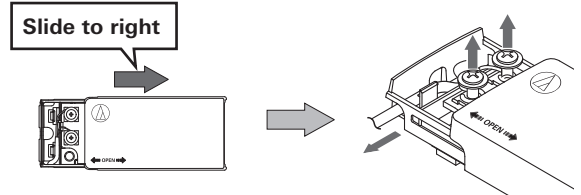
1 ch	2.06 MHz	5 ch	2.34 MHz
2 ch	2.56 MHz	6 ch	2.84 MHz
3 ch	3.20 MHz	7 ch	2.98 MHz
4 ch	3.70 MHz	8 ch	3.48 MHz

Changing the receiver unit cable

Follow the procedure below to change the cable of the receiver unit.

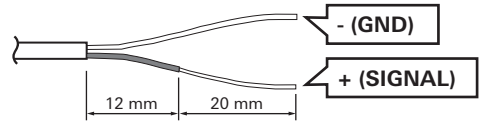
- * Always unplug the cable from the receiver before removing the cable. Performing this procedure without disconnecting the cable will cause a short circuit, which can result in fire or malfunction.
- * Always use the dedicated cable for this product. Using a different cable may cause noise or other reception problems.

- (1) Slide the cover off, and loosen the two screws that are holding the cable in place to release the cable.**



* Make sure that the screws do not fall off.

- (2) Cut the cable into the appropriate length and peel the coating off the tip to the appropriate length as shown in the figure below.**



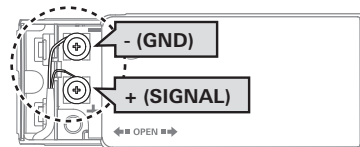
* When installing multiple receiver units, unifying the cable lengths improves the reception sensitivity.

- (3) Push the cable into the position shown in the figure to secure it.**



* Use the back of a pair of tweezers to push it in completely.

- (4) Route and connect the cable correctly according to the polarities and tighten both screws.**



- * Attach the + (SIGNAL) side first and then attach the - (GND) side.
- * Check the polarities before attaching the cable.
 - (GND) side: Shielded (thick conductor)
 - + (SIGNAL) side: Core (thin conductor with yellow coating)
- * Any contact between the wires (including contact with other parts) can cause a short circuit, which may result in a malfunction.

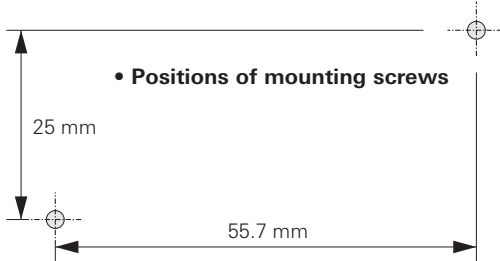
- (5) Slide the cover and fit it firmly on the receiver unit. Check for any gaps.**

Installing the receiver unit

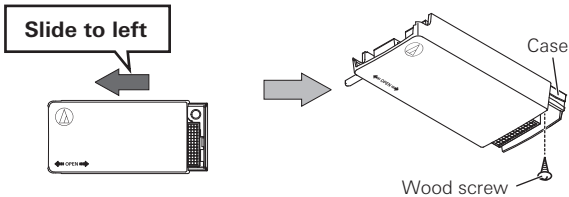
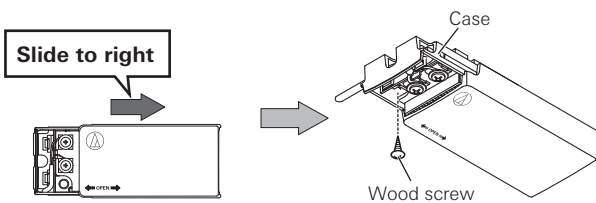
Installing the receiver unit on the ceiling or wall by drilling holes

- * Prepare a Phillips-head screw driver and the supplied wood screws.
- * Install the receiver unit in an open location free of obstruction while ensuring that the microphone will have a direct line of sight to the receiver unit.

(1) Choose the mounting location for the receiver unit, and mark the screw hole positions using a pencil.



(2) Slide the cover of the receiver unit. Pass the wood screw through the case and attach the receiver unit to the ceiling or wall.



(3) Slide the cover on and fit it firmly on the receiver unit. Check for any gaps. Connect the receiver unit cable to the receiver's receiving device input.

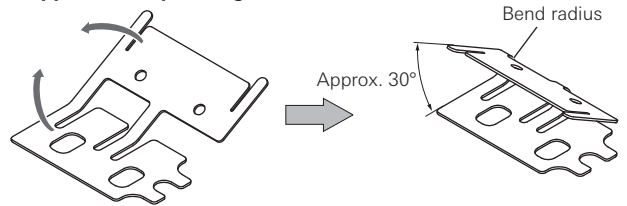
⚠ CAUTION

- When fixing this product's cable on a wall, do not use excessive force in order to prevent wire breakage.
 - Make sure that the material, strength, and thickness of the installation location are sufficient.
- Audio-Technica is not responsible for any accidents or damage resulting from the product falling due to the installation location's lack of strength or incorrect mounting upon installation.

Wall-mounting the receiver unit using the supplied fitting

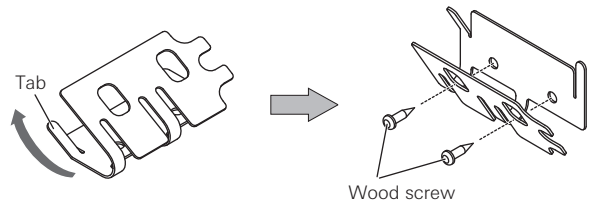
- * The fitting is for wall mounting only.
- Note that the fitting cannot be used on the ceiling.

(1) Hold the receiver unit mounting fitting using both hands and bend the center part. The bending angle should be approximately 30 degrees.

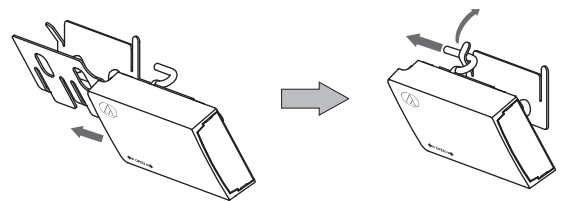


- * Use caution to avoid injuries when bending the fitting. It is recommended that you wear gloves to protect your hands.
- * Do not bend it more than necessary. The fitting may deform or break.
- * If the bend radius is too small, the fitting may break. A natural bending radius is recommended.

(2) Bend up the tab the cable is going to pass under. Pass the supplied wood screws through the two round holes, and attach the fitting to the wall.

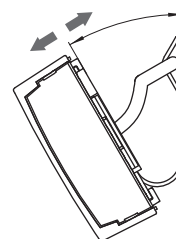


(3) Insert the receiver unit, and pass the cable coming out from the receiver unit under the bent tab. Hold the cable in place by bending back the tab.



- * Applying strong holding force may cause breakage in the wire or coating.
- * Leave slack in the cable to relieve excess force.

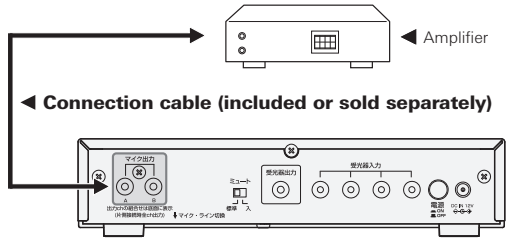
(4) Adjust the angle.



Connecting the product

Also read the user manual for the device to be connected.

- (1) Connect the AC adapter included in the package to the external power supply input jack (12 V DC IN) of this product and plug it into an outlet.**
- (2) Use the supplied connection cable (3.0 m) to connect the microphone output jack of this product with the input terminal of a connecting device such as an amplifier.**



• Connecting to the connecting device's microphone input

Use the supplied connection cable (RCA pin plug - 6.3 mm dia. monaural standard plug (L-shaped), 3.0 m). Connect the RCA pin plug to one of the microphone output jacks of this product. Connect the 6.3 mm dia. monaural standard plug (L-shaped) to the connecting device's microphone input.

• Connecting to the connecting device's line input

Use the separately sold connection cable (RCA pin plug - RCA pin plug). Connect one of the plugs to either of this product's microphone output jacks and the other plug to the connecting device's line input.

* When a cable is connected to only one of the microphone output jacks, the output will be a mix of microphone output A and microphone output B. If you do not want to use mixed output, connect cables to both microphone output jacks.

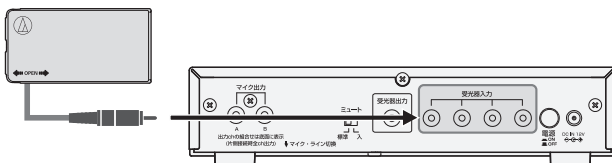
(3) Switch this product's output control switch setting.

* If the product is connected to the connecting device's microphone input, set this to the "マイク" side and if connected to the line input, set this to the "ライン" side.



* Set to "マイク" by factory default.

(4) Connect the cable coming out from the receiver unit to the receiving device input of this product.



(5) Place the receiver on a rack.

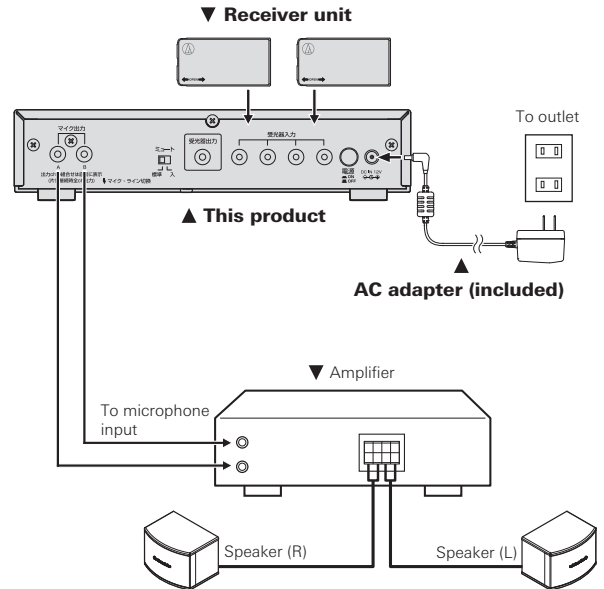
⚠ CAUTION

- Make sure that you are connecting the microphone output, receiving device output, and receiving device input correctly. Incorrect connection may result in fire or malfunction. (The microphone output is white while the receiving device output and receiving device input are black.)
- Always use the dedicated cable for this product. Using a different cable may cause noise or other reception problems.

Connection example

* This product is supplied with one receiver unit.

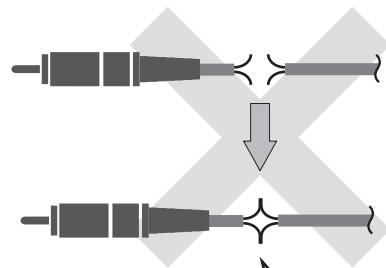
* Up to 4 receiver units can be used.



Cable routing

When routing cables inside walls or ceilings, do not cut the cables and reconnect or graft them.

Noise or other reception problems may occur.

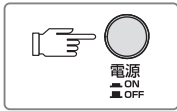


Reconnection or grafting after cutting

Using the product

Power

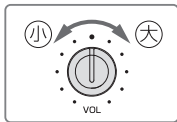
Push the power button to turn on and off the power.
When you turn on the power, the receiver's power indicator lamp lights up white while the receiver unit's power indicator lamp lights up blue.



* When a microphone signal is received, the microphone indicator lamp for the corresponding channel lights up.

Volume

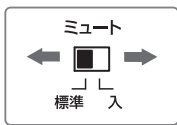
Turn the volume knob for each channel to adjust the volume.



Noise mute setting

If there is interruption or noise during use, turn on the noise mute switch (to the "入" position).

While the reception range decreases, noise can be reduced.



* Set to "標準" by factory default.

Reception frequencies and microphone output

Align the mode control switch as indicated on the mode description sticker to switch the reception frequency and microphone output settings.

モード	切換スイッチ	受信チャンネル	マイク出力	
			A	B
モード 1	<input checked="" type="checkbox"/> <input type="checkbox"/>	1, 2, 3, 4ch	1+3ch	2+4ch
モード 2	<input type="checkbox"/> <input checked="" type="checkbox"/>	5, 6, 7, 8ch	5+7ch	6+8ch
モード 3	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	1, 2, 5, 6ch	1+5ch	2+6ch
モード 4	<input type="checkbox"/> <input checked="" type="checkbox"/>	3, 4, 7, 8ch	3+7ch	4+8ch

Example: モード1 settings

- ・ Reception channels: 1, 2, 3, 4 ch
- ・ Microphone output A's output: 1, 3 ch
- ・ Microphone output B's output: 2, 4 ch

* Set to "モード1" by factory default.

* When a cable is connected to only one of the microphone output jacks, the output will be a mix of microphone output A and microphone output B. If you do not want to use mixed output, connect cables to both microphone output jacks.

Wireless system

• When using multiple microphones at the same time, use microphones that correspond to the channels supported by this product.

• Up to 8 microphones can be used simultaneously by using two of this product at the same time.

* Four infrared wireless microphones can be simultaneously used with one of this product.

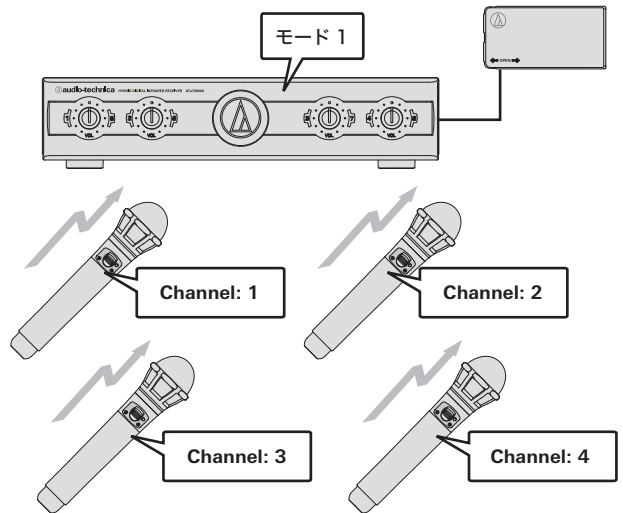
* Wireless systems set to the same channel cannot be used at the same time.

* Maintain a distance of at least 1.5 m between the receiver unit and the microphone during use.

Otherwise malfunction and/or noise may occur.

* Use this product away from any nearby TVs or other digital equipment. Otherwise transmission may be affected by radio waves and/or noise.

■ Example of use



Shared use of receiver unit

Up to 6 receiver units can be shared for use by using two of this receiver simultaneously.

When a receiver unit is shared, each of the receivers sharing the receiver unit can receive the channel set on the receiver.

When sharing a receiver unit, connect the receiving device output of one of the receivers and the receiving device input of the other receiver using the separately sold cascade cable.

* Always use the separately sold cascade cable (RCA pin plug - RCA pin plug). Using a different cable for this purpose may reduce reception sensitivity and/or cause noise.

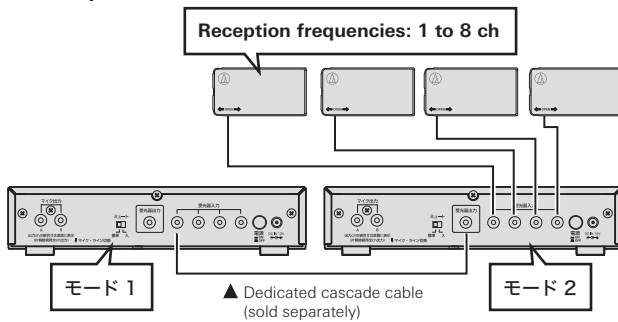
* Set the receiver modes to either of the combinations “モード1 and 2” or “モード3 and 4.”

* Connect the receiver units to the receiver that has the cable connected to the receiving device output.

If the receiver units are connected to the receiver with the cable connected to the receiving device input, the receiver units cannot be shared for use.

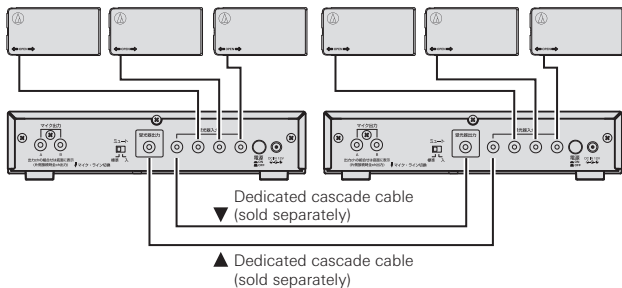
* Microphone output cannot be shared. Each receiver will use its own microphone output.

■ Example of use



When using 5 or more receiver units, you must connect the receivers with two cascade cables (sold separately).

In this case, connect receiver units to both of the receivers.



* If you need to connect this product and a different receiver, please contact your local Audio-Technica dealer.

* Sensitivity may be reduced when a non-AT-SRX receiver unit is used.

* Be sure to connect the receiving device output and the receiving device input.

Connecting to the wrong jack may result in reduced reception sensitivity or cause noise or damage to the speaker.

Troubleshooting

Use the following tips as a reference.

If the problem persists, please contact your local Audio-Technica dealer.

Q. The product does not turn on.

A1: Check whether the AC adapter is connected.

Q. There is no voice output.

A1: Check whether the output control switch is set to the correct output.

A2: Check whether the volume of the connected device is set to an audible level.

A3: Check whether the receiving device input jack and the microphone output jack are correctly connected.

Q. Receiver is not responding / Noise in sound / Sound cuts out

A1: Check for any obstruction between the receiver unit and the microphone.

A2: Check the distance between the receiver unit and the microphone to make sure that they are not too far apart.

A3: Check for any digital devices and other possible sources of noise nearby.
For more information, refer to “Notes on use.”

A4: Check for any reconnection or grafted connection in the cable after being cut near the cable plug during routing.
For more information, refer to “Connecting the product.”

A5: Check whether the dedicated cable for this product is used.
Using a different cable may cause noise or other reception problems.

A6: Check for any contact between the wires (including contact with other parts) near the terminals inside the receiver unit.

A7: When two receivers are used and connected at the same time, ensure that the cables are correctly connected.
For details, refer to “Wireless system.”

Specifications

Channels	: 4 (up to 8 channels when 2 receivers are used)
Reception frequencies:	1 ch (2.06 MHz), 2 ch (2.56 MHz), 3 ch (3.20 MHz), 4 ch (3.70 MHz), 5 ch (2.34 MHz), 6 ch (2.84 MHz), 7 ch (2.98 MHz), 8 ch (3.48 MHz)
Output level	: Microphone: -45 dBV (VOL MAX) Line: -30 dBV (VOL MAX)
Power supply	: 12 V DC, 500 mA (use the included AC adapter)
Power consumption	: Approx. 4.0 W (when 4 receiver units are connected)
Dimensions	: 48 (H) × 210 (W) × 151 (D) mm
Weight	: Approx. 930 g
Accessories	: Receiver unit (AT-SRX, cable length: 10 m) : AC adapter (AD-SA1205AA) : Wood screw × 2 : Receiver unit mounting fitting : Connection cable (RCA pin plug - 6.3 mm dia. monaural standard plug (L-shaped), 3.0 m) × 2

The product is subject to modification without notice for product improvement.