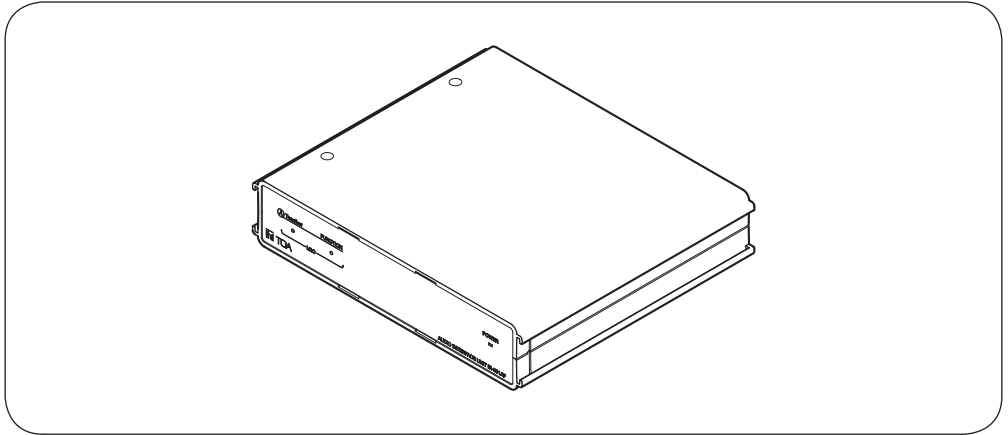


AUDIO INTERFACE UNIT
IR-801AF

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Thank you for purchasing TOA's Audio Interface Unit.

Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

1. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- Only use attachments/accessories specified by the manufacturer.
- Use only with the 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.



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

2. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

When Installing the Unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.

- Since the unit is designed for indoor use, do not install it outdoors. If installed outdoors, the aging of parts causes the unit to fall off, resulting in personal injury. Also, when it gets wet with rain, there is a danger of electric shock.

When the Unit is in Use

- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.

CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

- Be sure to follow the instructions below when rack-mounting the unit. Failure to do so may cause a fire or personal injury.
- Install the equipment rack on a stable, hard floor. Fix it with anchor bolts or take other arrangements to prevent it from falling down.
- Rack-mounting screws are not supplied with the unit. Prepare them that are appropriate for the equipment rack.

When Installing the Unit

- To avoid damage to the unit and/or connected equipment:
 - Never connect the IR-820SP or IR-802T connection terminal to a PC or LAN.
 - Never short-circuit the terminal to ground.

FCC Compliance

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 modifications made to this device that are not approved by TOA Corporation may void the authority granted the user by the FCC 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 with 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 the 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/television technician for help.

3. GENERAL DESCRIPTION

The IR-801AF is an Audio interface unit designed for exclusive use with TOA's Infrared wireless microphone system* consisting of the IR-310M Infrared Wireless Microphone, IR-802T Infrared Wireless Tuner, and IR-820SP Infrared Wireless Speaker.

The IR-801AF is equipped with a single channel wireless tuner having a fixed frequency. It provides a closed contact output for controlling external equipment, and audio signals from the IR-310M to be output to external equipment when receiving a control signal transmitted through the Function button operation of the IR-310M.

*A PA system designed for use in the school classrooms measuring about 10 m x 10 m (30 ft. x 30 ft.).

4. FEATURES

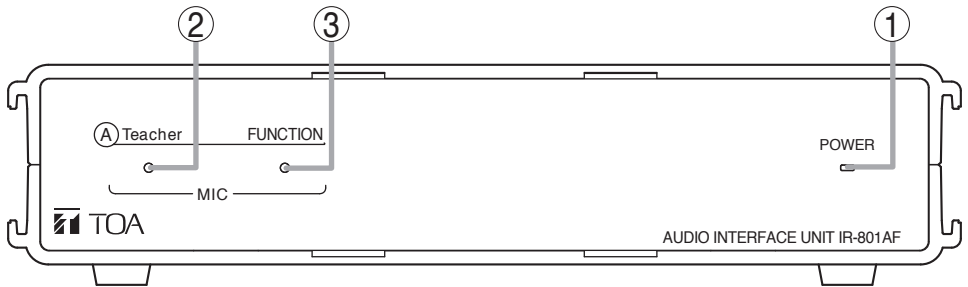
- Only a single CAT. 5 straight cable fitted with RJ-45 connectors for connections from the IR-801AF to each of the IR-802T and the IR-820SP.
- Provides outputs of audio signals from the IR-310M and a closed contact while the IR-310M's Function button is being pressed. (This function is enabled only when the IR-310M's transmitting frequency is set to Channel "A.")
- Power is supplied from the IR-802T.
- A half-rack-mount size. It can be mounted in a 19-inch EIA standard rack using the optional rack mount kit.

5. HANDLING PRECAUTIONS

- Install the unit as far as possible from fluorescent lights, digital equipment, PCs and other devices that generate high-frequency noise.
- When cleaning, be sure to first switch off the unit's power, then wipe with a dry cloth. If the unit is extremely dirty, use a cloth moistened in a neutral detergent. Do not use benzene, thinner, alcohol and chemically-processed towels, as they can discolor or deform the unit's exterior.

6. NOMENCLATURE AND FUNCTIONS

[Front]



1. Power indicator

Lights while DC Power is supplied from the IR-802T.

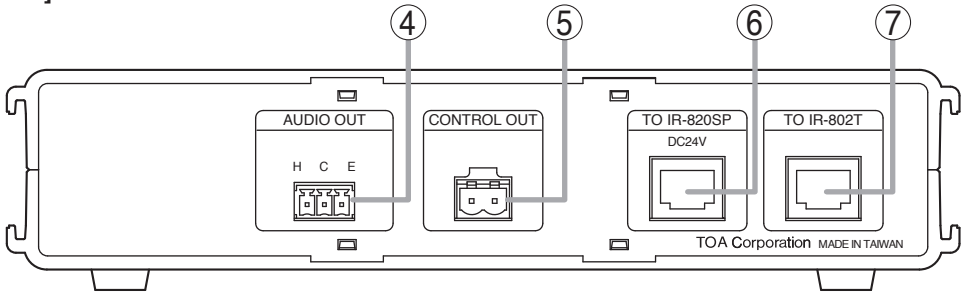
3. Function indicator

Lights during reception of control signal from the infrared wireless microphone.

2. Reception indicator (Channel A, Teacher)

Lights during reception of the infrared wireless microphone set to Channel A.

[Rear]



4. Audio output terminal

Outputs the Channel A's audio signals while the IR-310M's Function button is being pressed.

5. Control output terminal

Provides a closed contact while the IR-310M's Function button is being pressed.

6. IR-820SP connection terminal*

Connect this terminal to the IR-820SP Infrared Wireless Speaker using a Category 5 cable (straight type).

7. IR-802T connection terminal*

Connect this terminal to the IR-802T Infrared Wireless Tuner using a Category 5 cable (straight type).

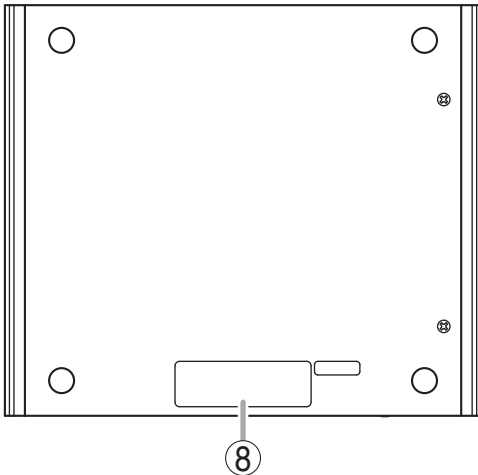
*** Notes**

- Use a Category 5 plenum cable (straight type) when routing the cable in locations where plenum-rated cable is required.
- Cross type cables cannot be used.

⚠ CAUTION To avoid damage to the unit and/or connected equipment:

- Never connect the IR-820SP or IR-802T connection terminal to a PC or LAN.
- Never short-circuit the terminal to ground.

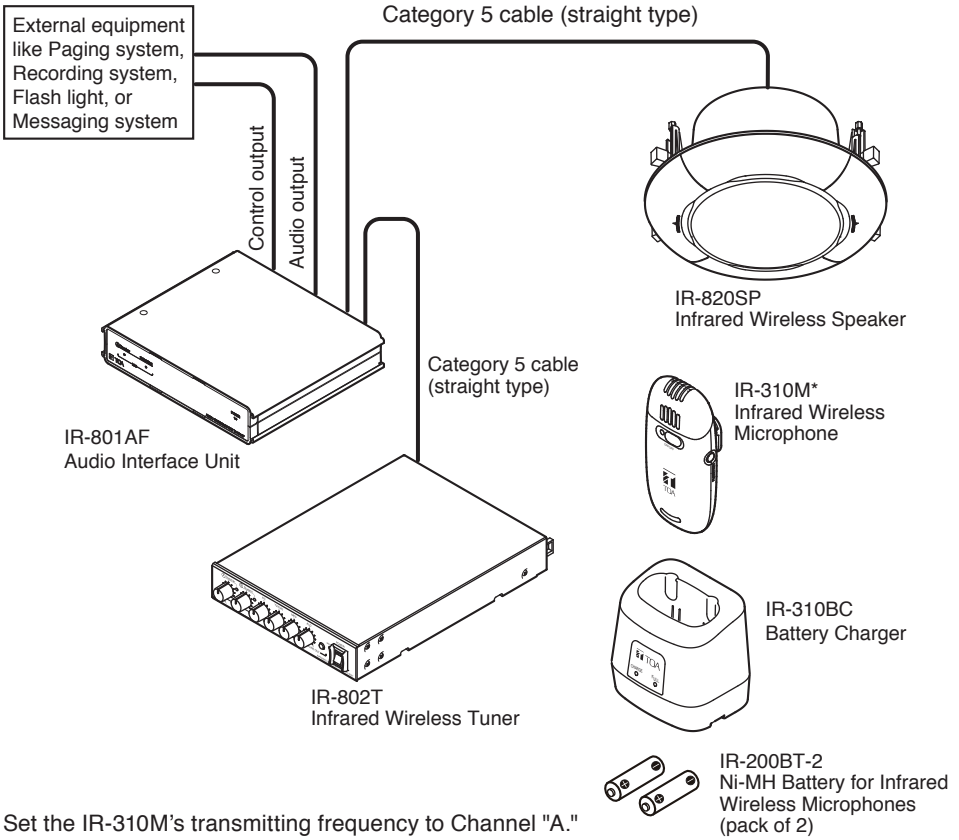
[Bottom]



8. Marking plate

Shows the Manufacturer's name, Model name, and Electrical rating.

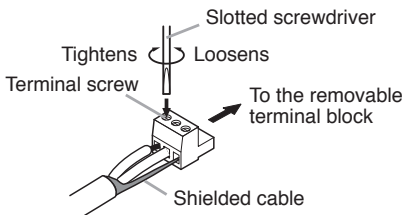
7. SYSTEM CONFIGURATION



8. CONNECTIONS

8.1. Removable Terminal Plug Connection

Wire the removable terminal plugs for Audio output and Control output as follows:



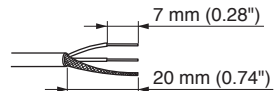
[Cable size and width to strip]

• Size: $\phi 0.5 - 2$ mm (AWG 24 – AWG 12)

• Width to strip:
Solid cable and stranded cable



Shielded cable



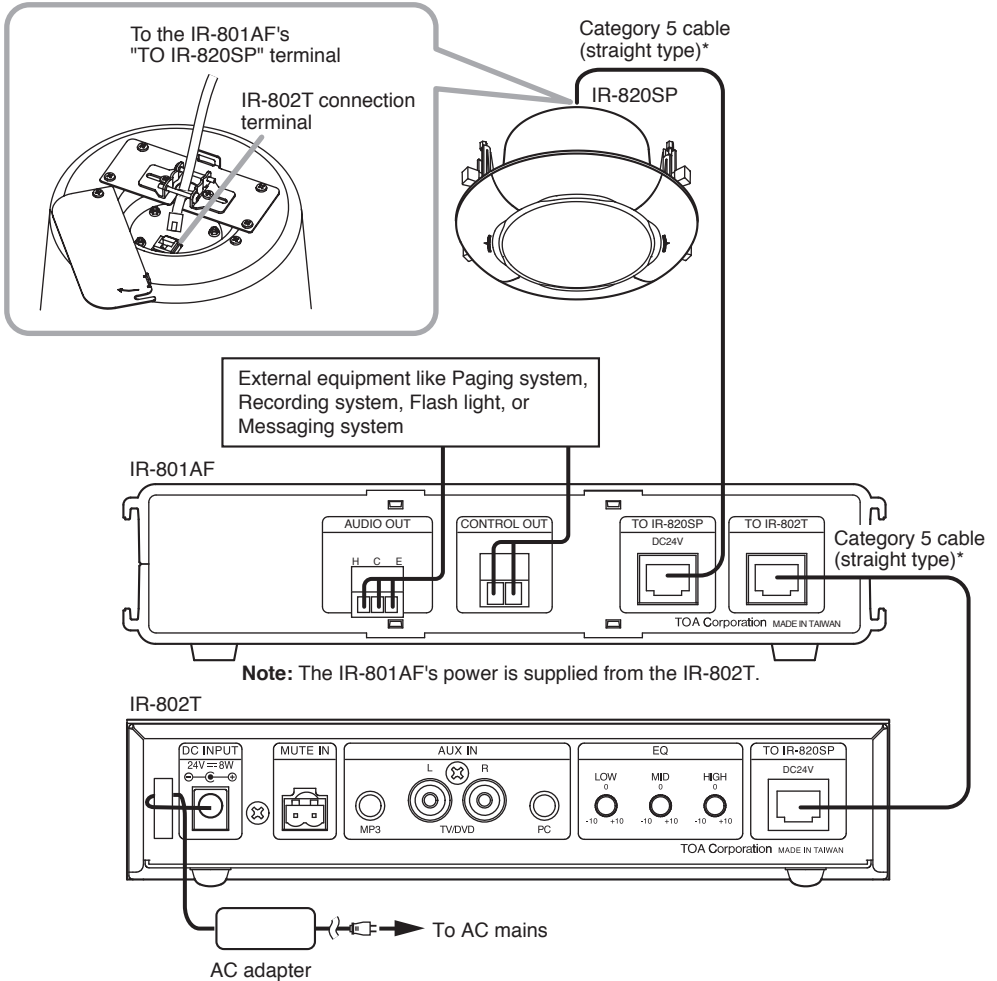
Note: Avoid soldering stranded or shielded cable.

8.2. Terminal Connections

CAUTION

To avoid damage to the unit and/or connected equipment:

- Never connect the IR-820SP or IR-802T connection terminal to a PC or LAN.
- Never short-circuit the terminal to ground.

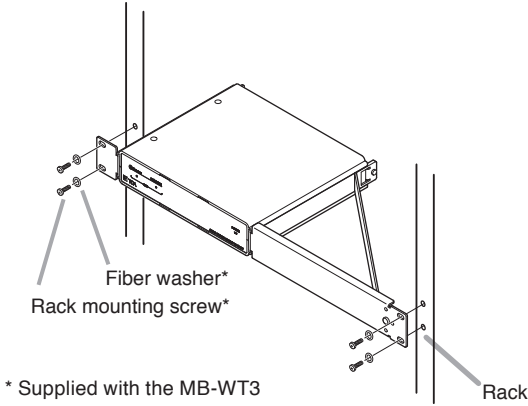


* Notes

- Use a Category 5 plenum cable (straight type) when routing the cable in locations where plenum-rated cable is required.
- Cross type cables cannot be used.

9. RACK MOUNTING

To mount one unit in an equipment rack, use the optional MB-WT3 Rack Mount Kit.



Note

For the mounting methods, refer to the MB-WT3 instruction manual.

10. SPECIFICATIONS

Power Source	24 V DC (Supplied from IR-802T)
Infrared Frequency Channel	Channel A: 3.100 MHz
Contact Output	Relay contact output, contact capacity: 30 V DC/2 – 500 mA, removable terminal block (2 pins)
Audio Output	-20 dB*, electronically-balanced, removable terminal block (3 pins)
Operating Temperature	-10 to +50 °C (14 to 122 °F)
Operating Humidity	90 % RH or less (no condensation)
Finish	Control section: ABS resin, Black
Dimensions	210 (w) x 44 (h) x 181 (d) mm (8.27" x 1.73" x 7.13")
Weight	560 g (1.23 lb)

* 0 dB = 1 V

Note: The design and specifications are subject to change without notice for improvement.

• Accessories

Removable terminal block (3 pins) 1 Removable terminal block (2 pins) 1

• Optional product

MB-WT3 Rack Mount Kit