YAMAHA

MICROPHONE ACCESS POINT
POINT D'ACCÈS POUR MICROPHONE

RM-WAP-8
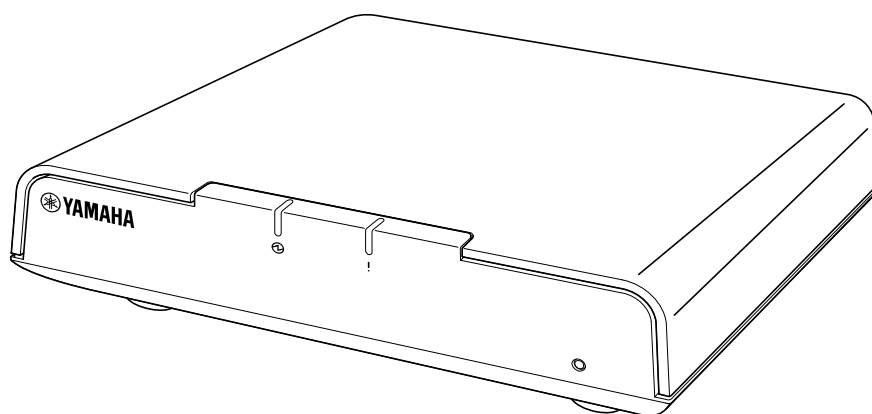
EN	Owner's Manual
DE	Benutzerhandbuch
FR	Mode d'emploi
ES	Manual de instrucciones
PT	Manual do Proprietário
IT	Manuale di istruzioni
JA	取扱説明書（保証書付き）

CONTENTS

The model number, serial number, power requirements, etc., may be found on or near the name plate, which is at the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.

> Yamaha cannot be held responsible for damage caused by improper use or modifications to the product, or data that is lost or destroyed.

⚠ *WARNING*

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Fire warning

- Do not place any burning items or open flames near the product, since they may cause a fire.

Wireless unit

- Do not use this product near medical devices or inside medical facilities. Radio waves from this product may affect electro-medical devices.
- Do not use this product within 15 cm (6 in) of persons with a heart pacemaker implant or a defibrillator implant. Radio waves from this product may affect electro-medical devices, such as a heart pacemaker implant or defibrillator implant.

Location

- Install in the manner instructed in the manual. Falling may result in injury or damage.
- Confirm that the finished installation is safe and secure. Also, carry out safety inspections periodically. Failure to observe this may cause devices to fall and result in injury.

⚠ *CAUTION*

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others. These precautions include, but are not limited to, the following:

If you notice any abnormality

- If any of the following problems occur, immediately disconnect the LAN cable from the product.
  - The LAN cable becomes frayed or damaged.
  - Unusual smells or smoke are emitted.
  - Some object, or water has been dropped into the product.
  - Cracks or other visible damage appear on the product.

  Then have the product inspected or repaired by qualified Yamaha service personnel.

Do not open

- This product contains no user-serviceable parts. Do not attempt to disassemble the internal parts or modify them in any way.

Water caution

- Do not expose the product to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings.

Location and connection

- When connecting this product with a PoE injector or a PoE network switch, use a LAN cable which supports PoE. If you connect a cable that does not comply with specifications, or connect a flat type or slim type cable, fire or malfunctions might occur.
- Do not damage the LAN cable. Failure to observe this precaution could result in fire, electric shock, or damage to the product.
  - Do not place heavy objects on the cable.
  - Do not process the cable in any way.
  - Do not use staples to fix the cable in place.
  - Do not apply excessive force to the cable.
  - Be sure to keep the cable away from anything hot.
- Do not place the product in an unstable position or a location with excessive vibration, where it might accidentally fall and cause injury.
- Keep this product out of reach of children. This product is not suitable for use in locations where children are likely to be present.
- Do not place the product in a location where it may come into contact with corrosive gases or salt air. Doing so may result in malfunction.
- Do not route a LAN cable where someone might trip over them, such as in a location where people pass. Tripping on a cable may cause a person or this product to fall down, resulting in personal injury or damage to the product.
- Before moving the product, remove the connected LAN cable.

Handling caution

- Do not rest your weight on the product or place heavy objects on it.

NOTICE

To avoid the possibility of malfunction/damage to the product, damage to data, or damage to other property, follow the notices below.

Handling and maintenance

- Use the product at a distance of at least 20 cm away from the human body. This product complies with international electromagnetic exposure limits set forth for a normal environment.
- Do not use the product in the vicinity of a TV, radio, or other electric products. Otherwise, the product, TV, or radio may generate noise.
- Do not use the product in the vicinity of a microwave oven. Otherwise, there is a risk of electromagnetic interference with wireless communication.
- Install the product in a location away from other electronic devices. Installing this product near other electronic devices may cause the quality of received radio waves to suffer and communication to become unstable.
- Do not install the product in a location where magnetic fields are strong. Otherwise, it might cause the product to malfunction.
- Do not expose the product to excessive dust or vibration, or extreme cold or heat, in order to prevent the possibility of disfiguration, unstable operation, or damage to the internal components.
- Do not install in locations where temperature changes are severe. Otherwise, condensation may form on the inside or the surface of the product, causing it to break.
- If there is reason to believe that condensation might have occurred, leave the product for several hours without turning on the power until the condensation has completely dried out, in order to prevent possible damage.
- Do not use a LAN cable that comes into contact with the product case or applies excessive force to the connector.
- Do not touch the interior of a port with your fingers or any metallic object.
- Do not place vinyl, plastic or rubber objects on the product, since this might cause alteration or discoloration.
- When cleaning the product, use a dry and soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths, since this might cause alteration or discoloration.
- Since the heatsinks (bottom) collect heat, do not directly touch them with your hands. In addition, do not allow heat-sensitive objects to come into direct contact with them.

INFORMATION

About functions/data bundled with the product

- Warning: This is a class A product. Operation of this product in a residential environment could cause radio interference.
- This product is compatible with the 1.9 GHz DECT standard. If the product is used in an environment where CS digital broadcasting is being received or PHS is used, radio waves may interfere with each other, affecting broadcasting and communication.
- This product uses Dante Broadway. Refer to the Audinate website (English) for details on the open-source licenses for the particular software.
  https://www.audinate.com/software-licensing
- Refer to the website below for the licensing terms of the open source software used in this product.
  U.S.A. and Canada
   https://uc.yamaha.com/support/
  Other countries
   https://download.yamaha.com/

About this manual

- This Manual uses the following signal words for the important information:

⚠ WARNING	This content indicates "risk of serious injury or death."
⚠ CAUTION	This content indicates "risk of injury."
NOTICE	Indicates content that you must observe in order to prevent the product from malfunctioning, being damaged, or operating incorrectly, and to avoid data loss.
IMPORTANT	Indicates content that you must know in order to operate and use the product correctly.
NOTE	Indicates information that is related to operation and use. Read this for your reference.

- The illustrations as shown in this manual are for instructional purposes only.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.
- Yamaha continuously makes improvements and updates to the software included in this product. You can download the latest software from the Yamaha website.
- Warning: Unauthorized copying of this document in part or in its entirety is prohibited.

About transfer/disposal

- If you transfer the product to a third party, pass this manual and accessories along with it.
- Before you transfer ownership or dispose of this product, initialize the product settings to default. If you transfer ownership or dispose of this product without initializing the settings, your personal data may be stolen by a third party.
- This product contains recyclable components. When disposing of this product, please contact the appropriate local authorities.

INTRODUCTION

Thank you for purchasing the Yamaha RM-WAP-8 microphone access point. This unit is a PoE-powered access point. It is compatible with the 1.9 GHz DECT standard and Dante, and can be used in combination with a dedicated wireless microphone. Be sure to read this manual before using the unit.

Included items

- Mounting bracket   : 1
- Owner's Manual (this document) : 1

Reference manuals

In order to use this unit, initial settings, such as pairing with a wireless microphone, are required. For details on the initial setting procedure, functions, and specifications, read the Reference Manual for the RM Series Wireless Microphone System. This publication is available on the Yamaha website.
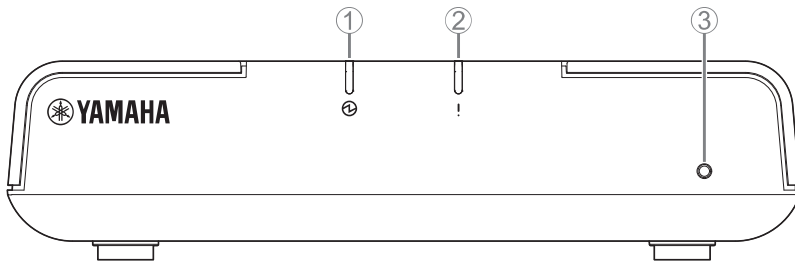
U.S.A. and Canada

 https://uc.yamaha.com/support/

Other countries

 https://download.yamaha.com/

CONTROLS AND FUNCTIONS

Front panel

① ⊕ **Power indicator**

② ! **Status indicator**

Indicates the status of this unit using a color and flashing pattern. For details, refer to the Reference Manual.

③ **Reset button**

Use to reset the settings by long-pressing with a fine-tipped object, then releasing it.

| Long press	Status indicator	Reset target
4 seconds to less than 8 seconds	Flashes blue twice per second (during long-pressing/resetting)	Network-related settings (Automatically restarts after reset)
8 seconds to less than 12 seconds	Flashes blue three times per second (during long-pressing/resetting)	All settings (Automatically restarts after reset)

Rear panel
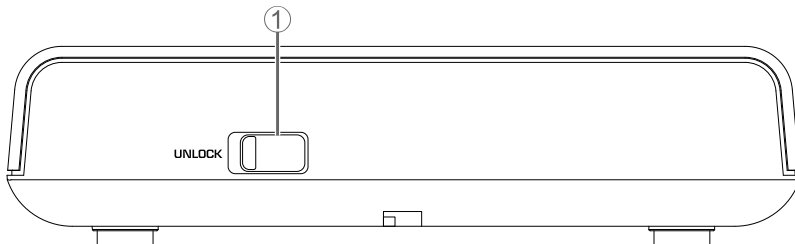
① **UNLOCK switch**

Use to remove this unit from the mounting bracket. For details, refer to page 13.

Bottom panel
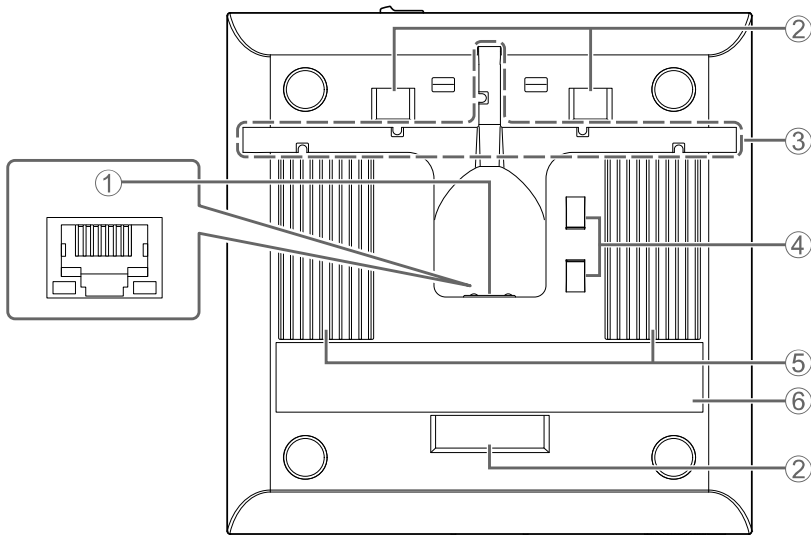
① **Dante/PoE port**

This is an RJ-45 port to which you can connect an LAN cable (CAT5e or higher) via an IEEE802.3af compliant a PoE injector or the PoE network switch to a Dante unit.

For details on injectors, refer to the Reference Manual.

NOTICE : Do not connect this product to a public Wi-Fi and/or Internet service directly. Only connect this product to the Internet through a router with strong password protections. Consult your router manufacturer for information on optimum security practices.

         : Do not connect any device here other than a Dante-compatible device or a device (including a computer) that supports gigabit Ethernet.

② **Mounting cutouts**

Use to hook onto the mounting bracket.

③ **Cable slots**

Use for routing the LAN cable if necessary.

④ **Safety wire mounting holes**

Use to attach a commercially available safety wire.

⑤ **Heatsinks**

Allow internal heat to escape.

NOTICE : Since the heatsinks collect heat, do not directly touch them with your hands. In addition, avoid direct contact with heat-sensitive objects.

⑥ **Product label**

Provides information about this unit and marks of conformity with various standards.

INSTALLING ON A WALL OR CEILING

This unit can be mounted on a wall or ceiling by using the mounting bracket.

Prepare the following.

• This unit
• Mounting bracket (included)
• Commercially available screws × 4
• Commercially available safety wire

⚠ **CAUTION** : Be sure to use screws and safety wires that are appropriate for the material of the wall or ceiling.
Using inappropriate hardware may cause the unit or mounting bracket to fall, resulting in injuries or malfunctions.

1. Attach the mounting bracket to the wall or ceiling with four commercially available screws.

The diameter of the screw holes is five mm.

⚠ **CAUTION** : When attaching to a wall, make sure that the side marked "UP" is at the top.
If it is at the bottom, the unit may fall, causing injuries or malfunctions.

Screw
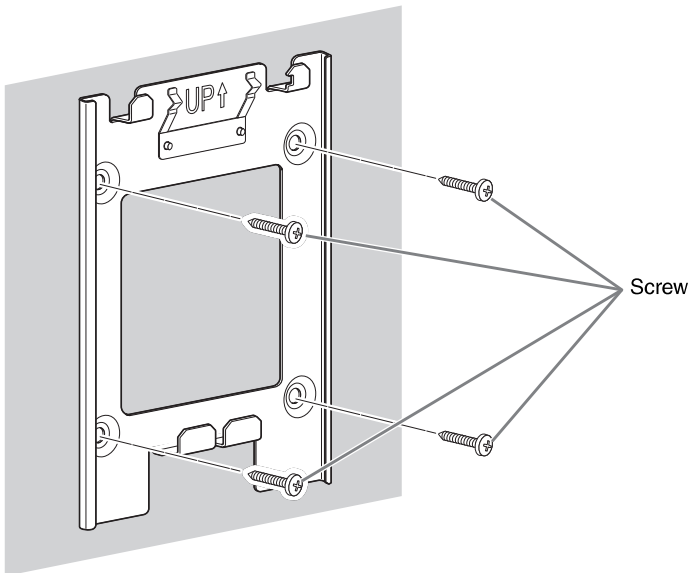
2. Plug the LAN cable into the Dante/PoE port.

NOTICE : Use STP (Shielded Twisted Pair) cable to prevent electromagnetic interference.

: When disconnecting the LAN cable from the Dante/PoE port, wait at least five seconds before reconnecting the cable. Otherwise, damage or malfunctions may result.

NOTE : We recommend using single-pair Ethernet cables in order to stabilize power supply via PoE.

: If necessary, route the LAN cable through the cable slots.

3. Attach a commercially available safety wire.

4. Align the hooks on the mounting bracket with the mounting cutouts (holes) in this unit.


Hook

Mounting cutouts
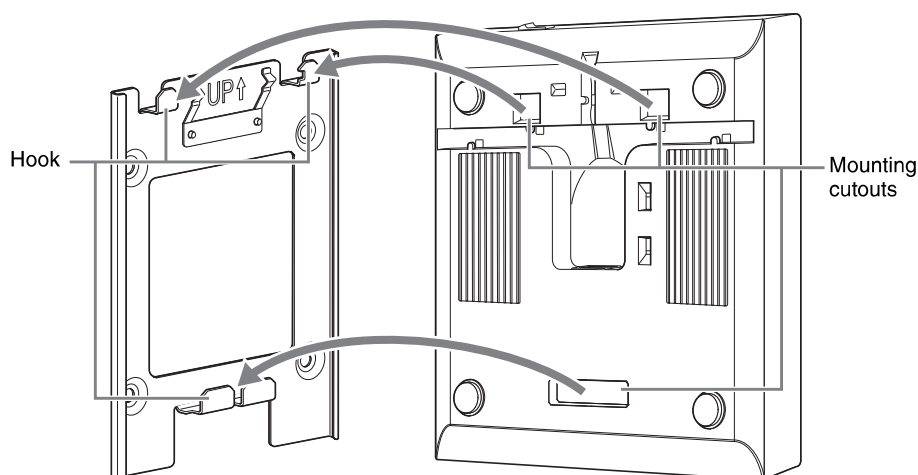
5. **Slide this unit to engage the hooks.**

This completes the installation. For safety, make sure that the unit does not come off the mounting bracket, even when a force is applied to the unit.
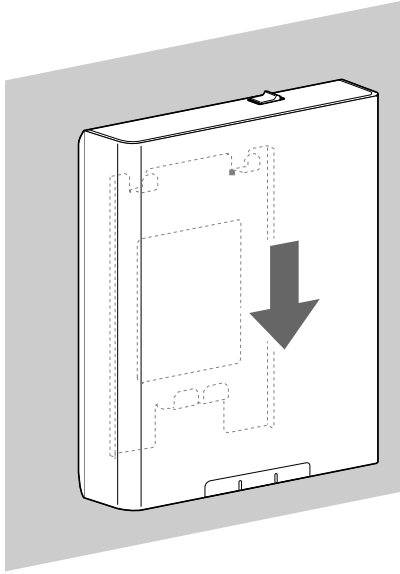
NOTE : To remove this unit from the mounting bracket, slide the unit in the opposite direction of installation while moving the UNLOCK switch on the rear panel (top edge in the illustration above) in the direction shown below.

UNLOCK switch
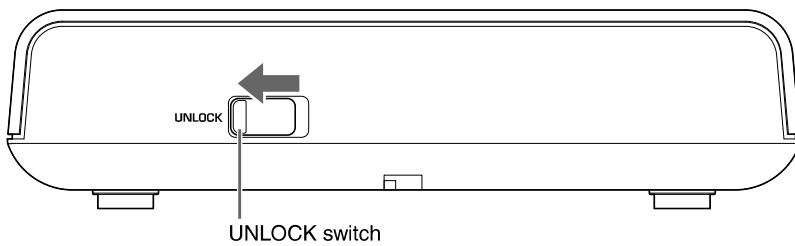
NOTE : This unit can also be placed on a flat surface. Install it on an open area such as a desk or shelf. Do not install it inside a shelf or where airflow is blocked by obstructions and do not place it on heat-sensitive objects.

MAIN SPECIFICATIONS

General specifications

Dimensions		W 171.2 mm × D 172.5 mm × H 42.8 mm
Weight		650 g (including mounting bracket)
Power requirements		PoE (IEEE802.3af), 48 V DC
Maximum power consumption		48 V, 0.2 A
In operation	Temperature	0 °C – 40 °C
	Humidity	20% – 85% (no condensation)
Storage	Temperature	–20 °C – 60 °C
	Humidity	10% – 90% (no condensation)
Indicators		• Power • Status • Network port
Accessories		• Mounting bracket : 1 • Owner's Manual (this document) : 1

Network specifications

| Dante/PoE port	• Dante audio/Dante control • External control • PoE • Cable requirements: CAT5e or higher, STP

Wireless specifications

Supported standard	1.9 GHz DECT standard
Radio frequency	• USA/Canada: 1920.0 MHz – 1930.0 MHz • Europe/Northern Europe/UK/Australia/New Zealand: 1880.0 MHz – 1900.0 MHz • Japan: 1893.5 MHz – 1906.1 MHz
Maximum output power (EIRP)	• USA/Canada: 23.5 dBm • Europe/Northern Europe/UK/Australia/New Zealand/Japan: 26.5 dBm
Antenna (built-in)	Supports space diversity
Use	• Audio communication and control between access point and microphone • Control between access point and charger
Maximum coverage distance	50 m (depends on the usage environment)
Encryption method	AES (256-bit)

The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.
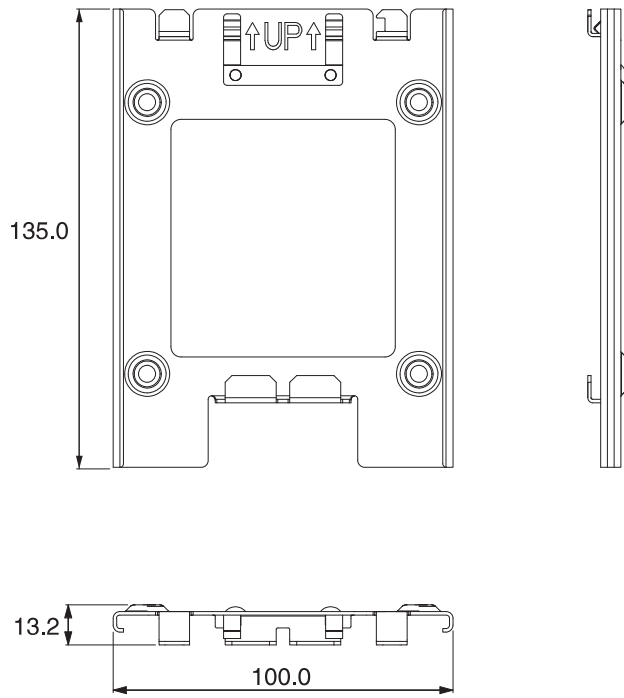
Dimensional diagram

This unit

172.5

42.8

171.2
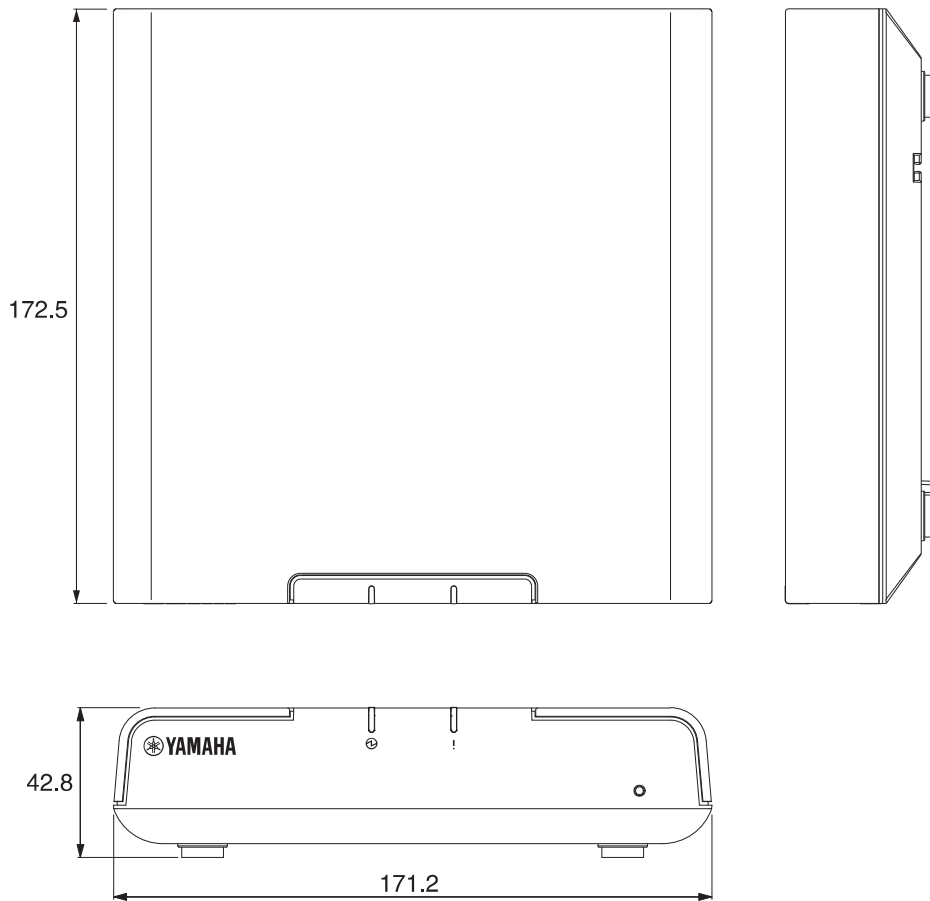
Units: mm

Mounting bracket

135.0

↑UP↑

13.2

100.0

Units: mm

Information for users on collection and disposal of old equipment:

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

For business users in the European Union:
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union:
This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

COMPLIANCE INFORMATION STATEMENT
(Supplier's declaration of conformity procedure)

Responsible Party: Yamaha Unified Communications, Inc.

Address: 144 North Rd, Suite 3250 Sudbury, MA 01776

Telephone: 800-326-1088

Type of Equipment: Microphone Access Point

Model Name: RM-WAP-8

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following 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.

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE:
DO NOT MODIFY THIS UNIT!**
This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. **NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.