



User Guide

MA-101ACT / MT-101ACT

DUAL-CHANNEL WIRELESS IR REMOTE CONTROL PA SYSTEM



MA-102ACT / MT-101ACT / MIC

DUAL-CHANNEL WIRELESS IR REMOTE CONTROL PA SYSTEM

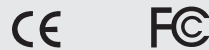


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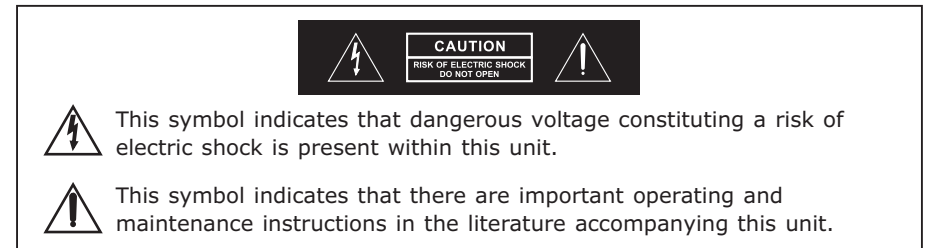
! IMPORTANT SAFETY INSTRUCTIONS !

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.



FC & IC - ID

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES AND RSS-123 ISSUE 2 OF CANADA. 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. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

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!



2005-08-13

WIRELESS IR REMOTE CONTROL PA SYSTEM

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RECHARGEABLE MULTI-FUNCTION TRANSMITTER MICROPHONE

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PRODUCT OVERVIEW

The day-to-day stress placed on a teacher's voice has come increasingly under the medical and legal spotlight. This convenient classroom PA system has been designed to take away the vocal strain and fatigue associated with long hours teaching or lecturing.

A classroom full of enthusiastic pupils can place an inordinate amount of stress on your vocal chords leading to possible long-term damage. This exciting and innovative PA system can be installed simply and easily. It is designed to allow each teacher to carry their own personal wireless microphone from classroom-to-classroom. Once the wireless amplified monitor speakers have been installed in each classroom, the teacher can then activate each individual system via their own wireless microphone. It allows them to remotely turn the system on & off as well as to adjust the volume wirelessly. An external audio source such as a CD, iPod, MP3, Cassette, DVD or MiniDisc player or a PC computer can also be connected to the same wireless microphone and heard through the monitor speaker system.

KEY FEATURES AND BENEFITS

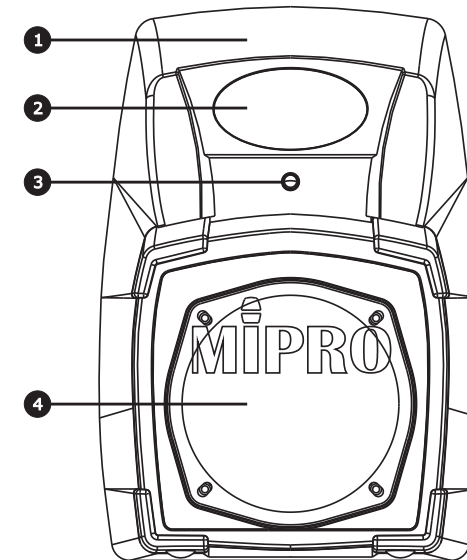
- Each fixed-install MA-101ACT/MA-102ACT system delivers a powerful 56-watt output.
- 97 built-in UHF frequencies allow different channels to be set up in every classroom for interference-free operation.
- Easy speaker mounting to wall or ceiling.
- Detachable receiver module design allows for simple frequency band change.
- Diversity reception for reliable and extended transmission.
- Featuring Industry's only all-in-one, versatile MT-101ACT transmitter microphone.
- Compact, ultra-lightweight design and powered via rechargeable or disposable alkaline batteries.
- Same MT-101ACT transmitter microphone can be used in up to 97 different rooms.
- Power on/off and volume loudness can be wirelessly remote controlled.
- MT-101ACT can be a handheld or worn as a neck lanyard for hands-free operation with an external headset microphone.
- Built-in 3.5mm (1/8") mini-jack line-input (mono) accepts other audio sources (CD / iPodMP3 / tape / mini-disc / computer) for amplification.
- Amazing 24 operating hours per fast charge.
- Ideal for teaching professionals and presenters in multiple classrooms, lecture halls and similar environments.
- One wireless handheld microphone is included for interactive communication between the speaker and listeners. (MA-102ACT)

The System Includes the Following Accessories:

- MA-101ACT Amplified Speaker ×1
- AC Switching Power Supply ×1
- Built-in Receiver Module ×1
- MT-101ACT Transmitter Microphone ×1
- MP-101ACT Battery Charger & DC Power Adapter ×1
- Neck Lanyard ×1
- User Guide ×1

PART NAMES AND FUNCTIONS

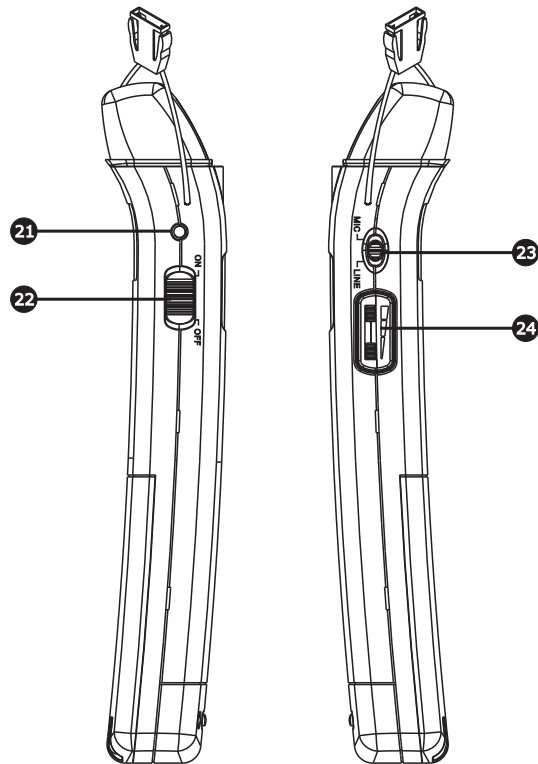
Front Panel:



(Figure 1)

- 1 Main Body:** Speaker cabinet houses internal speaker, amplifier and electronics.
- 2 ACT Port:** Receives infrared signal from transmitter to turn on (and off) receiver and syncs frequency back to transmitter.
- 3 Receiver Power Indicator:** Denote receiver power status. Still red indicator denotes the power is turned on Still green indicator denotes the system received signals from the transmitter microphone. Flashing indicator 4~5 times denotes incorrect receiver and transmitter frequency band used.
- 4 Speaker:** Built-in 5-inch full-range loudspeaker.

Side View



- 21 **Transmitter Power Indicator:** Determines current battery power level.
 - **Normal Battery:** Indicator illuminates and dims when turned on.
 - **Low Battery:** Indicator stays illuminate when turned on. Recharge immediately.
 - **Drained Battery:** Indicator does not illuminate when turned on. Recharge immediately.
 - **No Battery or Installed Incorrectly:** Indicator does not illuminate when turned on.
 - **Different Frequency Band:** Indicator flashes 4~5 times.
- 22 **Transmitter Power Switch:** Power ON to speak or amplification. The RF indicator on the receiver illuminates to denote it has received signals. Make sure transmitter is OFF position when not in use or during charging.
- 23 **MIC/LINE Switch:** Microphone/Line Switch.
LINE- For electric guitar.
MIC- For general condenser lavalier/headworn microphone or wired microphone.
- 24 **Volume Control:** Volume level adjustment.

OPERATING INSTRUCTIONS

To Power ON MA-101ACT Amplifier/Speaker:

- Ensure it is plugged into an AC outlet.
- Ensure MT-101ACT transmitter microphone is fully charged. Aim the bottom of transmitter towards the ACT Port of the MA-101ACT.
- Press and hold the ACT button on the transmitter for at least 1 second to power on.
- Still red Receiver Power Indicator denotes the power is on.
- Still green Receiver Power Indicator denotes the system received signals from the transmitter microphone.
- Receiver Power Indicator illuminates and dims denotes the power is not turned on successfully. Repeat above steps until still red indicator illuminates.
- Flashing Receiver Power Indicator 4~5 times denotes incorrect receiver and transmitter frequency band used.

To Power ON MA-102ACT Amplifier/Speaker:

- Ensure it is plugged into an AC outlet.
- Ensure the wireless handheld microphone is power off. If power on, potential interference may occur and interfere with power on MA-102ACT Amplifier/Speaker.
- Ensure MT-101ACT transmitter microphone is fully charged. Aim the bottom of transmitter towards the ACT Port of the MA-102ACT.
- Press and hold the ACT button on the transmitter for at least 1~2 second to power on.

NOTE:

- Still red Receiver Power Indicator denotes the power is on.
- Still green Receiver Power Indicator denotes the system received signals from the transmitter microphone.
- Receiver Power Indicator illuminates and dims denotes the power is not turned on successfully. Repeat above steps until still red indicator illuminates.
- Flashing Receiver Power Indicator 4~5 times denotes incorrect receiver and transmitter frequency band used.

To Power ON MT-101ACT Transmitter Microphone:

- Once Receiver Power Indicator illuminates red, transmitter microphone is now ready to be turned on.
- Ensure MT-101ACT transmitter microphone is fully-charged.
- Turn on the Transmitter Power Switch.
- Speak into the microphone directly for amplification.
- Adjust the side Volume Control for desired loudness.
- Turn off the microphone when not in use to conserve battery power.

MT-101ACT Transmitter Microphone Battery Status:

- **Normal or Fully Charged Battery:**
Red indicator illuminates and dims when Transmitter Power Switch is turned on.
- **Low Power Battery:**
Red indicator stays illuminate when Transmitter Power Switch is turned on.
- **Drained Battery:**
Red indicator does not illuminate when Transmitter Power Switch is turned on.
- **No Battery Inside or Battery Installed Incorrectly:**
Red indicator does not illuminate when Transmitter Power Switch is turned on.

To Power ON the additional Wireless Handheld Microphone:

- If interactive communication is needed between the speaker and listeners, simply turn on the wireless handheld microphone. Ensure the microphone has fresh disposable alkaline batteries and installed correctly.
- Speak into the microphone directly for amplification.
- This microphone has no remote-control volume feature, thus, volume loudness is fixed and not adjustable.

Note:

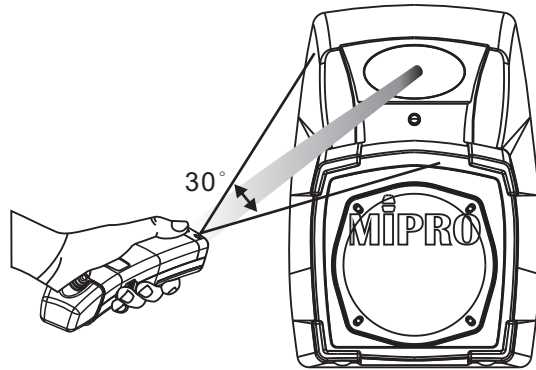
- Still green Receiver Power Indicator is lit once wireless handheld microphone or MT-101ACT transmitter microphone is turned-on denoting the system has received signals.
- Turn off the microphone when not in use to conserve battery power.

To Power OFF MA-101ACT/MA-102ACT Amplifier/Speaker:

- Aim the bottom of transmitter towards the ACT Port of the MA-101ACT/MA-102ACT.
- Press and hold the ACT button on the transmitter for at least 1 second to power off.
- A dim red LED Receiver Power Indicator denotes the power is off.

TIPS IN OPERATING INFRARED REMOTE CONTROL

Power On & Off Operation:



- The infrared (IR) has an approx. 30-degree trajectory angle for optimal reception.
- The optimal operating range of the infrared remote control is approx. 10-meter/33-feet.
- Press and hold the ACT button for at least 1 second. Ascertain Receiver Power Indicator stays illuminated (power is on) before moving away.
- If Receiver Power Indicator illuminates and dims (power is not on). Wait until it dims completely (few seconds) before another attempt to power on the receiver by pressing the ACT button again.

Different Transmitter and Receivers Frequency Bands:

- Each receiver and transmitter has an attached coded frequency label.
- Ensure that both the transmitter and receiver are operating on the same frequency band in order to power on & off both receiver and transmitter.
- A flashing 4~5 indicator denote incorrect receiver and transmitter frequency band was used.
- MIPRO's innovative design allows the versatile transmitter to sync any receiver frequency within the same frequency band.

Unable To Power ON MA-102ACT Amplifier/Speaker:

- Ensure it is plugged into an AC outlet.
- Ensure the wireless handheld microphone is power off. If power on, potential interference may occur and interfere with power on MA-102ACT Amplifier/Speaker.
- Ensure MT-101ACT transmitter microphone is fully charged. Aim the bottom of transmitter towards the ACT Port of the MA-102ACT.
- Press and hold the ACT button on the transmitter for at least 1~2 second to power on.
- If Receiver Power Indicator illuminates and dims it denotes the power is not turned on successfully. Repeat above steps until still red indicator illuminates.
- Re-check MT-101ACT transmitter microphone, as battery power maybe extremely low or drained and, thus, unable to send transmitting signals.

NOTE:

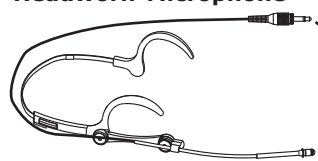
- Once the MA-102ACT Amplifier/Speaker is powered-on, indicated by a lit red Receiver Power Indicator , either the MT-101ACT or wireless handheld microphone can now be powered-on for audio amplification. A Still green Receiver Power Indicator denotes the system received signals from the transmitter microphone.

Accepts an External Microphone:

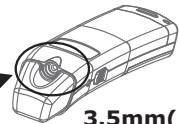
- A headworn or lavalier microphone with a 3.5mm mini-jack connector can be connected to the transmitter, worn by a neck lanyard and use as a bodypack transmitter.



Headworn Microphone



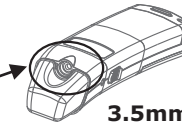
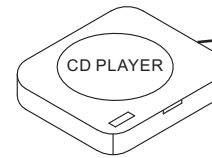
Lavalier Microphone



3.5mm(1/8") Mini-Jack Input

Accepts an External Portable Audio Player:

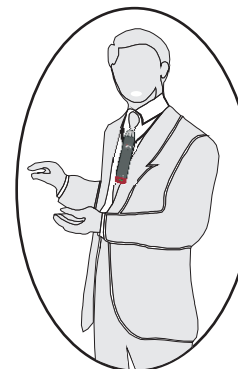
- CD, iPod, MP3, cassette or other audio signals can be connected to the transmitter via its 3.5mm(1/8") mini-jack connector to amplified sound. Make sure to switch to "LINE" when playing



3.5mm(1/8") Mini-Jack Input

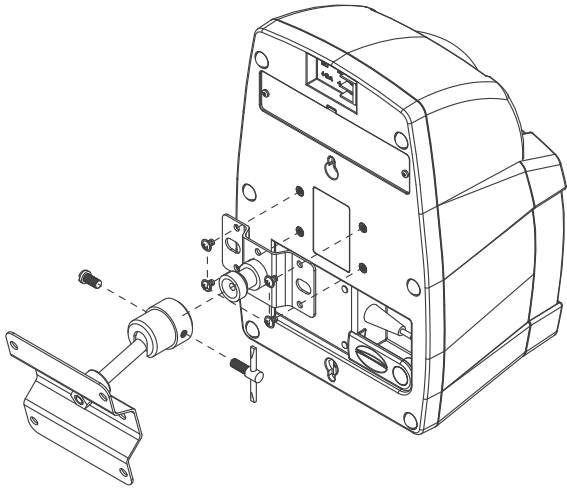
Wearing a Neck Lanyard:

- Wearing a lanyard frees your hands during presentation or performance. Adjustable strap for ideal length and minimizes the distance needed for optimal sound quality between the microphone and speaker's mouth. Minimize the volume to reduce chances of feedback.



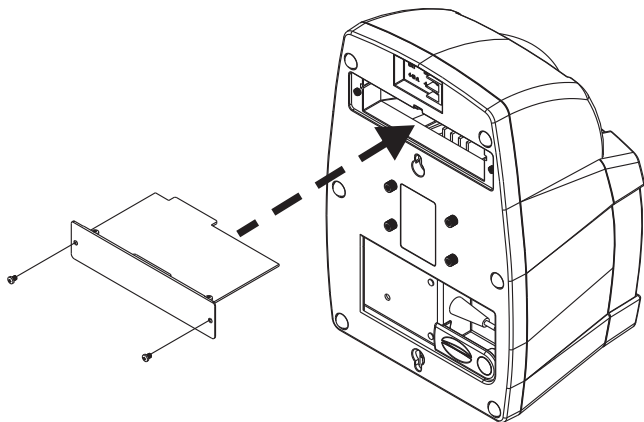
Wall or Ceiling Mount:

Install the optional MIPRO MS-11 wall-mounting bracket. See below illustration for installation.



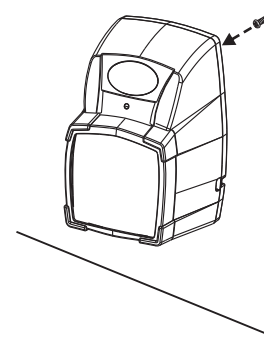
Changing Receiver Module:

Remove the two screws. Detach, replace with a new receiver module and fasten screws back in place.

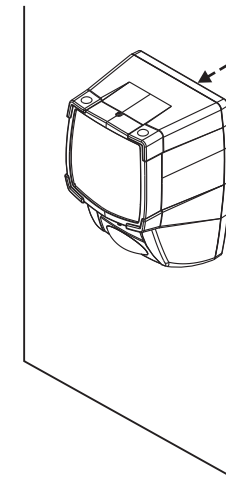


Conventional Wall Hanging:

Hanging in upright position



Hanging in upside down position

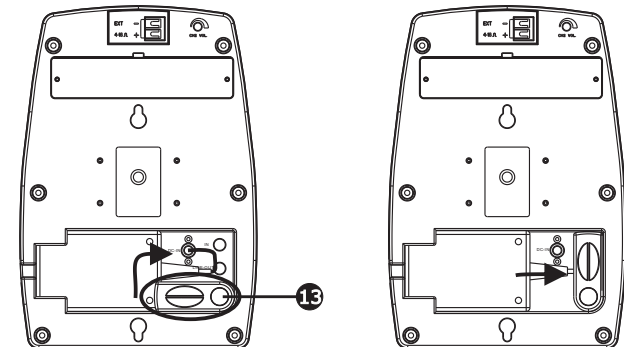


Changing AC Switching Power Supply:

Loose screw, adjust clip upward.

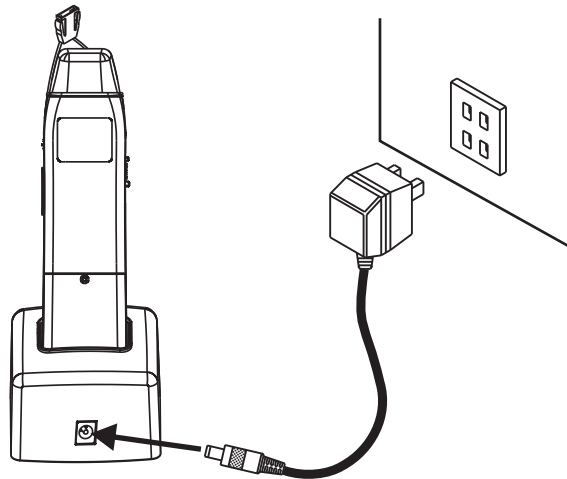
Gently push the power supply to the right to dismount.

Reserve above steps for insertion.



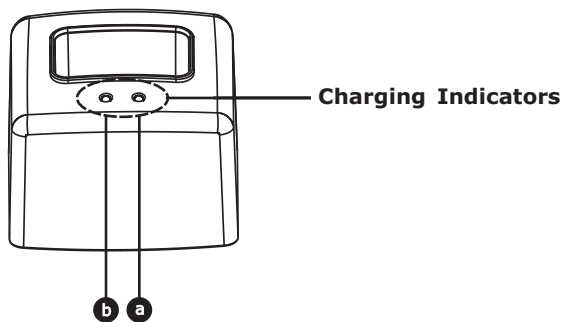
Charging the Transmitter Microphone:

- Plug into an AC power outlet and the end into the charger itself.
- Insert the transmitter into the battery charger. There are built-in contact points on both sides of the battery charger. Therefore, either front or back side insertion will charge the transmitter accordingly.



Battery Charger Indicators:

- a Red Indicator (illuminate):** Charging in progress.
- b Green Indicator (illuminate):** Fully charged. A fast charge takes approx. 3 hours then continuous trickle charges.



Battery Charger Troubleshooting:

- Use the attached MIPRO 12v/500mA DC power adapter to avoid insufficient current, voltage irregularity or damaging the equipment.
- Ensure the transmitter is fully charged before and after use.
- Ensure the transmitter is turned off before placing into the battery charger.
- Check the battery contacts for corrosion or wear. Clean the contacts with dry cloth only. Water or chemicals can damage the contacts.
- For potential risks and dangers always use the attached MIPRO battery charger only for charging. Do not place the transmitter in any other unauthorized battery chargers.
- The battery has a limited life. The amount of play time will decrease as the battery ages or after many recharge cycles. The battery needs to be replaced when play time becomes too short or when it can no longer be charged.
- Do not place the transmitter into the charger if there is visible battery leakage. Replace with a new transmitter.

When to Replace the Rechargeable Batteries:

- Only a few hours of operation after a fully-charged.
- No longer holding a charge. (no battery voltage).
- Short operating distance after a fully-charged.
- Power indicator does not illuminate when pressed.
- After 1 or 2 years depending how often it is used. Battery life is determined by temperature, depth and rate of discharge, and the number of charges and discharges (called cycles).
- Excessive wear and tear.
- Extreme weather conditions.

How to Change a Battery:

If a new battery replacement is needed, open the battery compartment by removing the two screws. Insert two rechargeable batteries or disposable alkaline batteries into the battery compartment with correct polarity placement.

Optional Accessories

MA-101AXP: Passive extension speaker for MA-101ACT.

MS-11: Wall-mounting Bracket for MA-101ACT.

MP-101ACT: Battery charger for MT-101ACT.