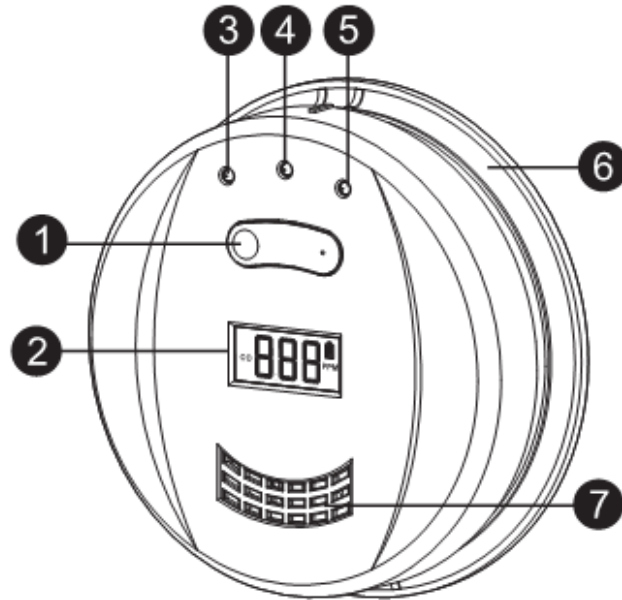
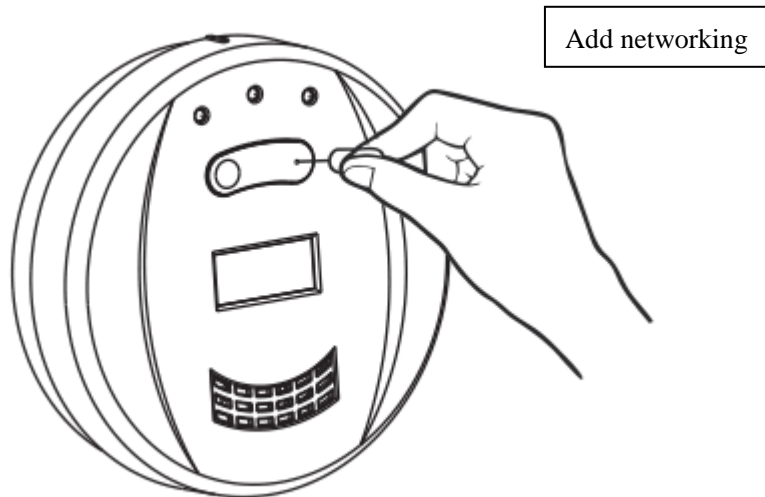


HM-723ESY-Z

Guide Document
Z-Wave Device



- ① Test Button
- ② LCD Display
- ③ Power Light
- ④ Alarm Light
- ⑤ Fault Light
- ⑥ Mounting Bracket
- ⑦ Alarm Horn



1-Device Preheat

Power the device on, a “Di” sound, then green LED, red LED, yellow LED flash alternately about 90 sec, enter into normal model, after that, the device will be able to be included into network.

2-Device Add for Inclusion

- Click [Add] icon in Z-Wave Controller.
- Press the Net_Button 3 times within 1.5s, Green LED is Blinking 3 times within 1 second.
- If Inclusion Process is successful, Green LED will turn off.

3-Device Remove for Exclusion

- Click [Remove] icon in Z-Wave Controller.
- Press the Net_Button 3 times within 1.5s
- If Exclusion Process is successful, Green LED is Blinking 6 times, then turn off.

4-Device test mode

Press Test_Button to test if the device is working normally, red LED quick flashing 4 times, and “Di-Di-Di-Di” sound when CO is detected.

5-Device detection mode

if Inclusion process is successful, the device will report alarm information if detect the status change of CO and no CO . Red LED flash 4 times every 5 seconds, and “Di-Di-Di-Di” sound when CO is detected.

Alarm conditon:

CARBON MONOXIDE CONCERNTRATION AND RESPONSE TIME	
Concentration, ppm	Response time, minutes
30 ppm	120 minutes
50 ppm	60~90 minutes
100 ppm	10~40 minutes
300 ppm	3 minutes

6-Device Factory Reset

Long press Net_Button at least 10 seconds in the product.

-Device Reset Locally notification is Transmitted.

-The green LED stays on for 2 seconds and then goes off.

Please use this procedure only when the network primary controller is missing or otherwise inoperable.

7-Association & Association Group Information

- Lifeline between controller and device

- Supported command classes

Battery report, Notification report, and Device Reset Locally notification.

- Association Group description

Association group 1: Lifeline association group

- Maximum supported node is 5.

Include command classes: Battery report, Notification report, and Device Reset Locally notification,

Association group 2: Root Device group(Basic set)

- Maximum supported node is 5.

The Sensor sends a Basic Set command to directly trigger devices (like a light, switch, etc.) in response to events. The value of the Basic Set command (e.g. Siren trigger) is configured using CO or no CO

This parameter sets the value sent by the BASIC_SET command to Association Group for CO event		
BASIC_SET Level	0xFF	Turn On Device
This parameter sets the value sent by the BASIC_SET command to Association Group for no CO event		
BASIC_SET Level	0x00	Turn Off Device

-Basic command class version is 2.

8-Notification Report

-Press or release test_button, or CO status is changed(CO detected or no CO detected) ,

Notification Report is transmitted

Notification Type	Event
CO Alarm (0x02)	Previous Events cleared (0x00)
	Carbon monoxide detected, Unknown Location(0x02)

9-Battery Report

- Battery Report is transmitted when power on the device.

- Battery Report is transmitted once a day.
- Battery Report is transmitted when the battery falls less than 10%
-

Battery Voltage	Battery Level
2.6V ~ 3.0V	0~ 100 (%)
Under 2.6V	0xFF

10-Wake up Notification

- Wake up Notification is transmitted every 24 hours by default.
- Wake up Notification is transmitted when power is turn on.
- Wake up Notification is transmitted when the Press **Net_Button** is Pressed and then released .

11-Devices from multiple manufacturers in one network

- This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applicants. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

12-Z-Wave Specifications

12.1-Device Type : Sensor - Notification

12.2-Role Type : RSS (Reporting Sleeping Slave)

12.3-Command Class Support/Control

12.3.1-Z-Wave plus InfoVersion 2

12.3.2-Notification Version 8

12.3.3-Association Version 2

12.3.4-Association Group Info Version 1

12.3.5-Transport Service Version 2

12.3.6-Version Version 3

12.3.7-Manufacturer Specific Version 2

12.3.8-Device Reset Locally Version 1

12.3.9-Powerlevel Version 1

12.3.10-Battery Version 1

12.3.11-Security 2 Version 1

12.3.12-Supervision Version 1

12.3.13-Wake Up Versi on 2

12.3.14-Multi Channel Association Version 3

12.4-The below listed Command Class are all Supported the Security S2

12.4.1-Notification Version 8

12.4.2-Association Version 2

12.4.3-Association Group Info Version 1

12.4.4-Version Version 3

12.4.5-Manufacturer Specific Version 2

12.4.6-Device Reset Locally Version 1

12.4.7-Powerlevel Version 1

12.4.8-Battery Version 1

12.4.9-Wake Up Version 2







12.4.10-Multi Channel Association Version 3

13-Indicate LED statues description-

status	LED status	Alarm sound
Preheat	Green LED, red LED, yellow	“Di” sound once
Normal	Green LED flash 1 time every 30 seconds	No sound
Test mode	Red LED flash 4 times	“Di-Di-Di-Di” sound loudly
Alarm	Red LED flash 4 times every 5 seconds	“Di-Di-Di-Di” sound loudly
Low battery	Yellow LED flash 1 time every 30 seconds	“Di” sound every 30 seconds
Fault	Yellow LED flash 2 times every 30 seconds	“Di” sound twice every 30 seconds

-LCD display indication

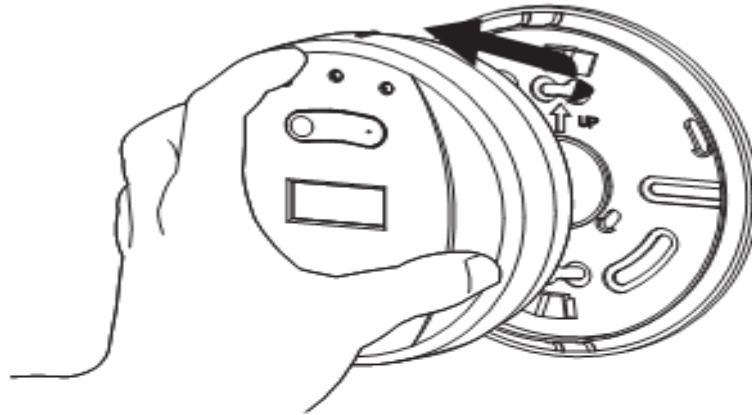
NOTE: “DISPLAY” item only covers the model with digital display.

CONDITION	OPERATION	LED	HORN	DISPLAY
Power up and Warm-up	Install 2 * AA battery correctly to power the alarm on. Warm-up lasts approx.100 seconds LCD backlight will be on for 5 seconds. LCD will display from 0 to 9 in sequence. When completed, LEDs and backlight turn off.	The red/yellow/green LEDs flash alternatively.	One short beep	
Stand-by condition	After warm-up period, the alarm turns to standby condition.	The green LED flashes every 30 seconds.	None	None
Test condition	Press Test/Hush Button every 5 seconds to check whether the alarm horn, LEDs and the display work properly. The audible alarm shall be 85 dB at 1m	Green and yellow LEDs turn off. Red LED flashes four times.	The alarm sound four beeps.	
Alarm condition	The presence of carbon monoxide.	Red LED flashes every 5 seconds.	Four beeps every 5 seconds	Display Number from 25-999
Low battery	None	Yellow LED flashes every 30 seconds.	One beep every 30 seconds	
Malfunction	None	Yellow LED flashes twice every 30 seconds.	Two beeps every 30 seconds	
End of unit life	None	Yellow LED flashes twice every 30 seconds.	One long beeps and one short beep every 30 seconds	
Exceed CO measuring range	None	Red LED flashes every 5 seconds.	Four beeps every 5 seconds	

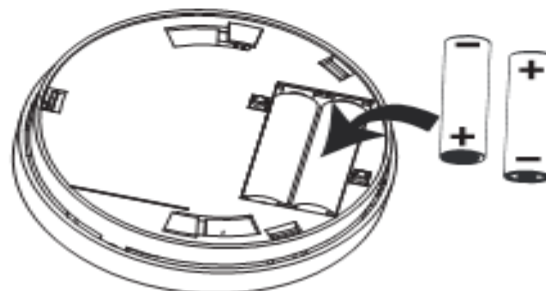
14-How to replace the batteries

To install or replace the batteries in this CO alarm, please perform the following steps:

- (1) Slide open the bracket to expose the battery compartment.



- (2) If replacing batteries, remove the old batteries and properly dispose of them as recommended by the battery manufacturer. If install 2 new AA batteries. Note the polarity illustration in the battery compartment. When batteries are correctly installed, the alarm horn sounds one beep.



(3) Screw the alarm into the bracket.

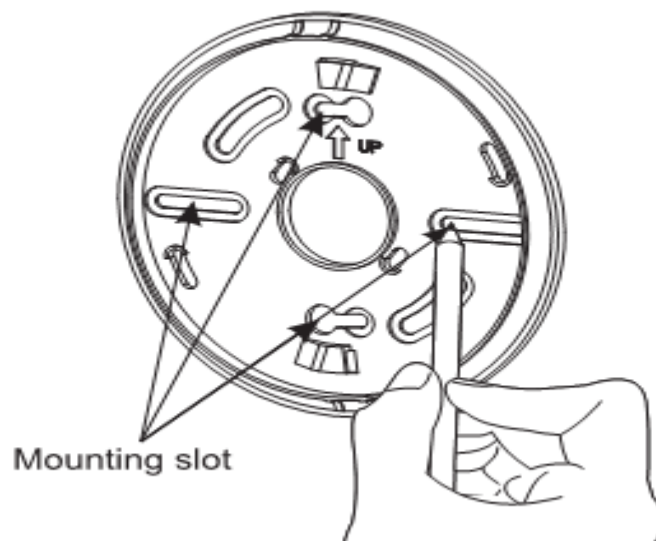
IMPORTANT: Constant exposures to high or low humidity may reduce battery life. After installing or changing the batteries, reinstall your alarm. Test your alarm by using the test button.

7.2 MOUNTING

For wall mounting or ceiling mounting, follow these steps:

- (1) Draw a horizontal line 6 inches (10 cm) long on the area of walls where this CO alarm is intended to locate.
- (2) Locate the mounting bracket in your chosen position. Align the two longest mounting slots with the line. Draw a mark in the center of each slot.

Note: The arrow marked in the bracket shall be placed upwards for wall mounting.



(3) Screw the alarm into the bracket.

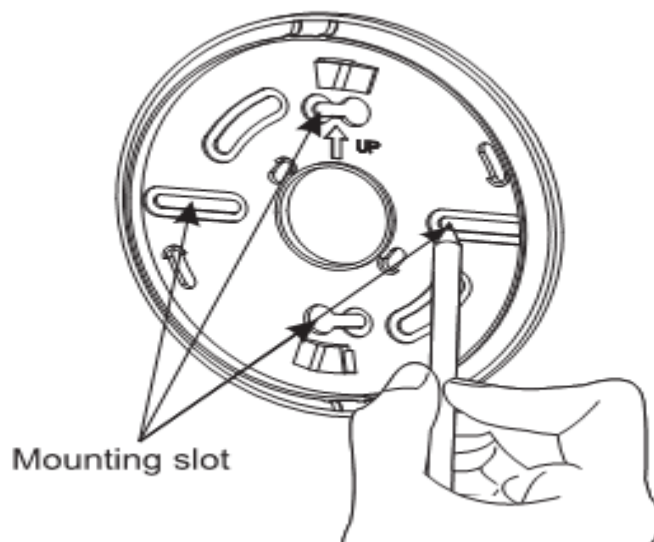
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MOUNTING

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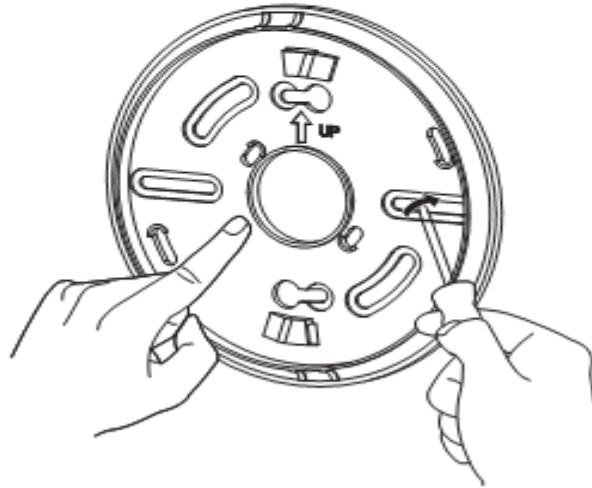
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Note: The arrow marked in the bracket shall be placed upwards for wall mounting.

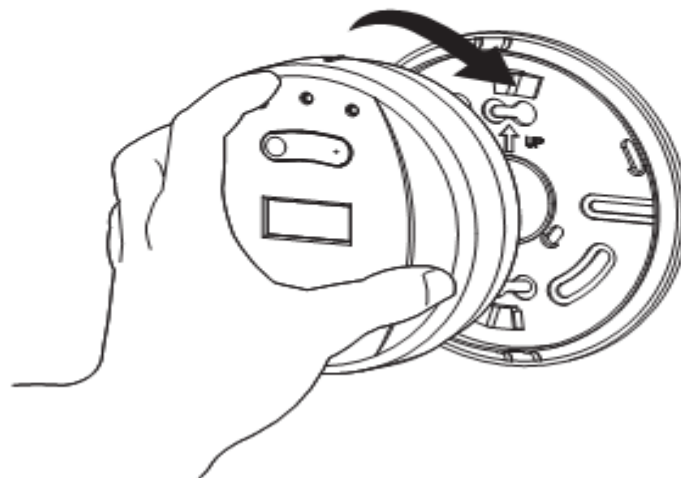


(3) Drill the holes at the marks with a 3/16-inch (5mm) drill.
Note: Keep CO alarms away from getting plaster dust when you drill the holes.

(4) Insert the anchor plugs and screw the mounting bracket to the chosen position. **DO NOT OVER-TIGHT THE SCREWS**, this will distort the mounting bracket.



(5) Hook the CO alarm over the screws and onto the keyholes in the back mounting bracket of the alarm. After the mounting bracket is secured to the wall, Screw the alarm into the mounting bracket until it snaps into place.



Model No.	HM-723ESY-Z
RF frequency	868.40- 869.85 MHz
RF operating distance	Up to 100m outdoor line of sight Up to 40m indoor
Powered by	2 x AA
Temperature	-10°C ~ 50°C
Humidity	95% max