FAMILY SHIELD PLUS

Photoelectric Smoke Alarm User Manual

PHOTOELECTRIC

p

CE 1008 1008-CPR-MC XXXXXXX

10 YEAR LONG LIFE BATTERY

Standards tested to:
EN14604:2005/AC:2008

HARCO
www.harco.co.nz

---

1 PRODUCT INTRODUCTION

Thanks for choosing FSP-170R photoelectric smoke alarm. In order to ensure your personal and household safety and achieve the best product performance, please read this manual carefully and completely before installing this device. Warnings and notes in this manual should be paid special attention to.

1. Product Description

The FSP-170R photoelectric smoke alarm detects fire by sensing smoke. When smoke in the room reaches a certain concentration, the alarm will send out sound and light. This alarm is applicable for residential houses.
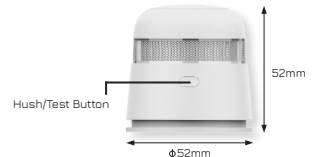
The effective lifespan of this smoke alarm is 10 years. Please replace this device every 10 years.

2

2. Product Features

This smoke alarm uses photoelectric technology, designed for detecting smoke in the air, not for sensing heat, gas, or flame. It cannot prevent or put out fires. This photoelectric smoke alarm is more effective at detecting slow smouldering fires such as cigarettes burning on couches or bedding.

Product size

Hush/Test Button

φ52mm

52mm

---

3 TECHNICAL PARAMETERS

1. Operating Voltage: DC3V (CR123A non-replaceable)
2. Battery Life: 10 Years (according to actual use, battery life may be shortened)
3. Alarm Indication: Sound + light
4. Alarming Sound Level: ≥85dB/3m
5. Sensor Type: Photoelectric
6. Working Temperature: -10°C ~ +55°C
7. Working Humidity: ≤95%RH (no condensation)
8. Dimensions: Ø52 x H52mm
9. Standard: EN14604:2005+AC:2008

---

4 ALARM STATUS

STATUS	LED LIGHT	ALARM SOUND
Normal	Red LED Flashes once every 40 seconds	None
Testing	Red LED flashes rapidly	3 Rapid beeps
Alarm	Red LED flashes rapidly	Full alarm
Hush Mode	Red LED flashes rapidly	None
Low Battery	Red LED flashes twice every 40 seconds	Beeps twice
Fault	Red LED flashes twice every 40 seconds	Two beeps every 40 seconds

---

5 TECHNICAL DATA

1. **Alarm Status:** When the smoke sensor detects that the smoke concentration exceeds the limit, the red LED flashes and the alarm will sound.

2. **Fault Condition:** When the internal circuit of the smoke sensor fails, the red LED flashes twice every 40 seconds, and the alarm beeps twice every 40 seconds.

3. **Hush Mode:** When cooking or vapour causes the smoke detector to alarm, press the hush button to silence the sensor. Once on hush mode, the alarm stops sounding. After 9 minutes, If the smoke concentration is still above the alarming point, the alarm will start to send out sound and light alarm again. Please check for potential risk.

4. **Low Battery:** When the battery voltage is lower than the normal working voltage, the red LED flashes twice every 40 seconds, and the alarm beeps twice.
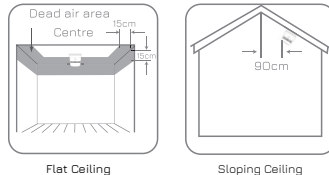
6 INSTALLATION ADVICE

1. This smoke alarm is designed for indoor and domestic use only. Do not install the sensor in a location with high temperature and humidity, or with large fumes.

2. Avoid installation in or adjacent to damp areas such as bathrooms or laundries. Avoid dusty areas such as attics or near air conditioners.

3. This smoke alarm is a household smoke sensor, which can give an audible and visual warning when a fire occurs, but it can not extinguish fires.

4. Smoke, heat, and burning products arising to ceilings will spread laterally. The installation of smoke alarms in the centre of the ceiling is the preferred location. Please maintain a distance of at least 30cm from the fixture or ornament. Keep at least 15cm away from walls and corners. If the hallway exceeds 12 meters, it should be installed at both ends of the hall.

7 INSTALLATION LOCATION

Dead air area
Centre
15cm
15cm

90cm

Flat Ceiling   Sloping Ceiling

Flat ceiling - The recommended location for a smoke alarm is at the centre of the ceiling where smoke accumulates.

Avoid installing the device in the dead air areas. Keep at least 30cm away from lights or other fixtures.

Sloped ceiling - Do not install in the top of a sloping ceiling. Install device at least 90cm from the highest point.

8 ADHESIVE PAD INSTALLATION

1. Rotate the alarm body anticlockwise to detach the base.
2. Place the mounting plate in the desired location and stick using the 3M adhesive pad or if using screws, drill.

3. Mount the alarm onto the baseplate.

4. Twist the alarm clockwise to lock the alarm onto the baseplate.
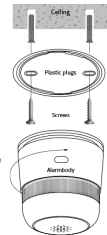
5. Press the test button to check if alarm operates normally.

9 SCREW FIXING INSTALLATION

1. Rotate the alarm body anticlockwise to detach the base.
2. Drill two holes with a diameter of 4 millimeters. (The distance between them is 32 millimeters)
3. Push the plastic plugs into the holes.
4. Insert the screws into the mounting plate, and tighten them firmly into the plugs.
5. Place the smoke alarm on the mounting bracket and rotate clockwise to fasten it.
6. Press the test button to check whether the smoke alarm operates normally.
7. Plastic plugs size: M4*20
8. Screw size: M2.6*20

Ceiling
Plastic plugs
Screws
Alarmbody

10 TROUBLE SHOOTING

Failure	Possible Reasons(s)	Measure(s)
Alarm immediately upon power on	A lot of smoke present	Power on the device again after smoke removed
	Internal circuit damage	Return the device
Beeps one time per 40s after powered on	Low battery voltage	Replace battery/alarm
Beep twice per 40s after powered on	Internal circuit damage	Return the device
No alarm when testing	Battery installed incorrectly	Check and install the battery again
	Low battery voltage	Replace battery/alarm
	Internal circuit damage	Return the device
No sound or low sound of buzzer	Low battery voltage	Replace battery/alarm
	Buzzer damaged	Return the device

Care and maintenance

Clear smoke alarms: Keep smoke alarms clean to prevent dust from accumulating. Clean smoke alarms at least once a year.

11 IMPORTANT INFORMATION

The instructions shown are for your reference only and are subject to change without notice.

This smoke alarm has a 10 year limited warranty to the original purchaser. This warranty does not cover damage resulting from accidents, misuse, lack of reasonable care, tampering or repair of the product.
Do not dismantle or tamper with this device. This will void your warranty.

In no case shall we be made liable for loss and/or damage, including incidental and/or if device was not used according to the instructions and/or consequential loss, arising from the fact the alarm from the device did not sound during smoke or fire.