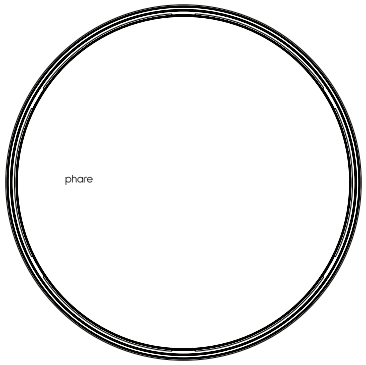


Phare®

C1 / C1 Core / C1 Pro

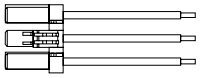
Intended Use

Phare is intended for indoor, ceiling or wall-mounted installation in residential properties. It must be installed in compliance with local building codes and regulations. For best performance, follow installation guidelines.

Wiring

⚠ **WARNING:** Mains voltage presents serious hazards; therefore, install the smoke alarm and all related wiring in strict compliance with the applicable national electrical installation regulations.

Ensure compliance with regional electrical standards when installing the device. Use professional installation for safe wiring. No earth connection is required as this is a Class II device.



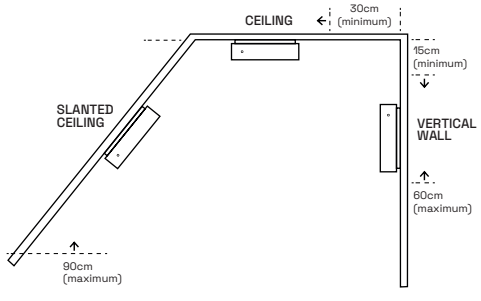
White / Blue	NEUTRAL
Orange	Smoke alarm Interconnect
Black / Brown	LIVE

Recommended wire gauge is 14 AWG - 16 AWG (1.5-2.5 mm²). Use inline splicing connectors (or an equivalent) between the power connector and the building wiring to secure and isolate the connection.

Placement Guidelines

Installing on the ceiling is recommended. For ceiling placement ensure the device is installed at least 30 cm (12 in) away from walls. For sloped, peaked or cathedral ceiling, position at least 90 cm (35 in) from the highest point. For wall placement position the device between 15 and 60 cm from the ceiling.

Follow local regulations and recommendations regarding distances from kitchens, bathrooms, and other sources of smoke or moisture.



Installation Steps

1. **Prepare for install –** Turn off power at the circuit breaker. Choose the location to install the alarm. Follow instructions below on how to select the best location for the device.
2. **Prepare plate holes –** Ensure existing screw holes on the ceiling or box match the plate openings to secure it. On a new installation, use the plate to mark the location of the screw holes and then drill them. Add wall anchors if needed based on the ceiling type.
3. **Install Plate** – Pass the mains cables through the plate central hole and screw the plate to the ceiling. It needs to be placed with the "phare" logo visible, the marking **"THIS SIDE TO THE WALL" shouldn't be visible once installed.** Secure the mounting plate to the ceiling with appropriate screws for the ceiling or wall type.
4. **Connect the power connector** – Wire the connector to mains following the diagram on the left side. Ensure it is wired correctly as wiring it in the wrong order can damage the device.
5. **Install the device** – Plug the connector into the device. Place the device on the mounting plate, rotate it counterclockwise until it falls into place, then rotate the device clockwise until it clicks.

Turn on power at the circuit breaker after installation is complete. The device should now be powered, with a green LED light visible.

Smoke Alarm Interconnect

The connection with the 9V smoke alarm interconnect is optional. It is recommended to not exceed 20 interconnected smoke alarms in a single network. If not used, it should be properly terminated for safe operation.

All Interconnected smoke alarms should be hardwired and share the same live and neutral lines with mains. The interconnect cable in each should be only wired between alarms, with no other external devices or sources of power wired to it. If in doubt, contact support.

App and account setup

Once the device is installed and powered, it is ready to be setup to access alerts and data remotely and in real time. You can either download the Phare Protect app for iOS and Android, or use the webapp for desktop at **https://app.pharelabs.com**

GET IT ON Google Play

Download on the App Store

Actions and Interaction

The entire front surface of the device is a button. Use it to:

Smoke alarm silencing – Single click

Smoke alarm silencing for 10 minutes (horn and interconnect stop, LED ring will continue to glow as long as smoke is being detected).

End of Life (EOL) silencing – Single click

When End of Life (EOL) signal is active, EOL signal is silenced for 48h.

Pairing Mode – Double click

Pairing Mode enables the provisioning of Wi-Fi credentials to the device.

Emergency Shut down – Long press (hold for 10s)

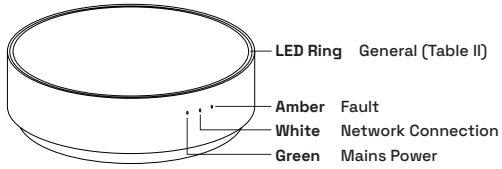
Emergency stop, it powers down the device. It requires the device to be unplugged from mains power before, running on batteries.

Firmware Version – 5 clicks

Shows the current firmware version using beeps for numbers and white led ring blinks in between (i.e. v1.3.1 would be 1 beep + 1 light blink + 3 beeps + 1 blink + 1 beep).

Alerts and Signals

There are 3 LED indicators on the side of the device, and a main LED ring, as shown in the illustration.



Visual indicator		Reason
Green	ON	Successfully powered from mains
White	ON	Successfully connected to the default network
White	Blink	Trying to connect to the network
Amber	1 Blink every 10s	Low Battery warning (while no mains present)
	2/3 Blinks every 2s	Fault warning, contact support

Table I – Side LEDs Alerts and Signals

Find below a quick summary of how to interpret the different alerts and signals on the Main LED Ring in the front of the device.

Visual & audible indicator	Reason
4 Yellow Pulses / 45s 2 chirps / 45s	End of Life (EOL) signal, will trigger 30 days before the 10 year end.
Red continuous pulsing 3 beeps	Smoke detected
Orange continuous pulsing 4 beeps	Carbon Monoxide (CO) detected
Orange → Red Loading Circle Chirp pattern	Early Fire Warning (more detail below)

Table II – Main Ring LED Alerts and Signals

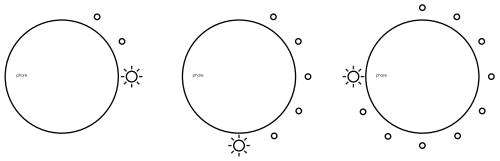
Fire Alarm and Early Fire Warnings

What to Do When the Smoke Alarm Sounds

If the fire alarm sounds, alert everyone in the home and leave immediately, closing doors behind you and staying low if there is smoke. Do not stop to collect belongings. Go to your meeting point outside, call the emergency services, and follow their instructions. Do not re-enter the building until the fire service says it is safe.

Early Fire Warning

When the device detects a signal approaching the fire alarm condition, it will display an early fire warning. This is meant to give you time to investigate (for example steam or light smoke) while smoke is still below the level that triggers the full alarm and prevent a full alarm or a fire.



As smoke increases, more of the ring lights up illuminating clockwise, the colour moves toward red, and the pulse on the last LED becomes faster, filling up the whole ring in red right before the fire alarm goes off.

When the warning reaches level 6/12 and 9/12, a sound pattern (3 chirps twice) will be emitted to grab users' attention. The pattern will repeat again once every minute as long as the level stays between the 9/12 threshold and a full fire alarm.

Safety and Compliance

Do not disassemble or modify the device, as this can lead to electric shock or device malfunction. Ensure installation follows local electrical codes and is performed by a qualified professional. Do not paint over the device as it could damage the sensitive sensors contained within and permanently damage the performance of the alarm.

Phare meets hazard-based safety requirements for audio/video, IT, and communication technology equipment as per IEC 62368-1 standards. Users must adhere to safe handling and installation practices to maintain compliance.

No alarm can detect every possible emergency condition. Users should have additional safety measures in place. Smoke, fire, or CO detection can be affected by environmental factors such as closed doors or high airflow areas. Avoid exposure to water or extreme humidity, which can impact sensor performance. Individuals with hearing impairments should ensure supplementary alert systems, such as visual or vibrating alarms, are in place.

Phare C1 / C1 Core / C1 Pro have not been certified as carbon monoxide (CO) detectors. The device provides CO monitoring and alerts as a supplementary safety feature only. It must not be relied upon to meet any legal or regulatory requirement for a certified CO detector. Where such a requirement applies, a separately certified CO detector must be installed.

If the alarm fails to operate correctly, the advice of Phare Labs should be sought.

Maintenance, Testing and Disposal

Regular Testing

It is recommended to perform a test monthly, pressing the device button or via any of the other methods provided. Automatic sensor and battery status self-checks occur periodically without the need to trigger them manually. After the test finishes (1 alarm cycle of 3 beeps and 3 red glows) the LED ring should display a green glow indicating a successful test, otherwise contact support.

Non-replaceable battery

The device contains an enclosed, non-replaceable, rechargeable battery that automatically recharges with the power coming from the mains. The user shall not disassemble the device nor replace the built-in battery inside. If a fault warning – from the battery or another module – is emitted, please contact support immediately to troubleshoot. If a low battery warning signal is emitted (1 chirp every 60s) it means that the device has no mains power and the device should be connected back to mains to recharge the battery before it drains completely.

End-of-Life (EOL)

The device will signal EOL with its corresponding signal, and optionally an alert or notification via other methods when set up.

Recyling should follow local electronic waste regulations. The device contains lithium-ion batteries. Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery; leaving a battery in an extremely high temperature surrounding environment; or subjecting it to extremely low air pressure; can result in an explosion or the leakage of flammable liquid or gas.

Cleaning

Use a soft, dry cloth; avoid chemicals or sprays near the sensors.

Prop65 Declaration

⚠ **WARNING:** This product can expose you to chemicals including lead and lead compounds, bisphenol A (BPA), and nickel (metallic), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

REACH Declaration

EU REACH (Regulation (EC) No 1907/2006) — SVHC Declaration: This product contains lead (Pb, CAS 7439-92-1) in a concentration above 0.1% w/w in certain articles (e.g. solder joints, internal electronic components). Lead is listed on the Candidate List of Substances of Very High Concern (SVHC) due to its toxicity for reproduction. The product is safe to use as intended. For more information, contact Phare Labs at support@pharelabs.com

FCC Declaration

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; (2) this device must accept any interference received, including that which may cause undesired operation; (3) any modifications not approved by Phare Labs may void the user's authority to operate this device.

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 to 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 receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the manufacturer for support.

CE Declaration of Conformity (DoC)

Hereby, Phare Labs Inc declares that the radio equipment type Phare C1 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

https://www.pharelabs.com/legal/eu-doc

Radio Equipment Directive (RED)

The following are the maximum radio-frequency power transmitted and the frequency band(s) in which the radio equipment operates.

Wi-Fi – 2412–2484 MHz / 20.5 dBm

Bluetooth LE – 2402–2480 MHz / 20.0 dBm

802.15.4 – 2405–2480 MHz / 20 dBm

24GHz Radar[1] – 24.00–24.25 GHz / 10 dBm

LTE-M / NB-IoT[2] – Frequency bands below / 23 dBm
B1: 1920–1980 MHz (TX) / 2110–2170 MHz (RX),
B2: 1850–1910 MHz (TX) / 1930–1990 MHz (RX)
B3: 1710–1785 MHz (TX) / 1805–1880 MHz (RX)
B4: 1710–1755 MHz (TX) / 2110–2155 MHz (RX)
B5: 824–849 MHz (TX) / 869–894 MHz (RX)
B8: 880–915 MHz (TX) / 925–960 MHz (RX)
B12: 699–716 MHz (TX) / 729–746 MHz (RX)
B13: 777–787 MHz (TX) / 746–756 MHz (RX)
B17: 704–716 MHz (TX) / 734–746 MHz (RX)
B18: 815–830 MHz (TX) / 860–875 MHz (RX)
B19: 830–845 MHz (TX) / 875–890 MHz (RX)
B20: 832–862 MHz (TX) / 791–821 MHz (RX)
B25: 1850–1915 MHz (TX) / 1930–1995 MHz (RX)
B26: 814–849 MHz (TX) / 859–894 MHz (RX)
B28: 703–748 MHz (TX) / 758–803 MHz (RX)
B65: 1920–2010 MHz (TX) / 2110–2200 MHz (RX)
B66: 1710–1780 MHz (TX) / 2110–2200 MHz (RX)
B85: 698–716 MHz (TX) / 728–746 MHz (RX)

[1] Only applicable to C1 and C1 Pro
[2] Only applicable to C1 Pro

The details for the CE mark, as required, can be found below.

CE 26 CB 0123	Phare Labs Inc 251 Little Falls Drive Wilmington, Delaware 19808 United States of America	26 XXX-XXXX-XX EN 14604:2005+AC:2008 Smoke Alarm Devices Model – Phare C1

Warranty and Support

Warranty

Phare C1 / C1 Core / C1 Pro are covered under warranty for 1 year or the mandatory warranty based on regulations of the country where it was sold, whichever is longer. During this time, Phare Labs guarantees that the device is free from defects in materials and workmanship under normal usage conditions. The warranty includes repair or replacement of the device if it is found to be defective due to manufacturing faults. Any repairs will be conducted using new or refurbished parts, and replacements will be of equal or greater value. It does not cover damages resulting from misuse, accidental damage, unauthorized modifications, or improper installation. It also does not extend to normal wear and tear, cosmetic damages, or issues caused by power surges, exposure to extreme environmental conditions, or failure to follow the installation and maintenance guidelines outlined here.

Data Privacy

Phare C1 collects and processes data for safety monitoring and performance optimization. Personal data is stored securely. For full details, visit the Privacy section in our website: https://www.pharelabs.com/

Countries of use

Users must ensure the device complies with local regulations, standards and building codes before installing the device. If in doubt please reach out to support.

Customer support

www.pharelabs.com/
support@pharelabs.com

Manufacturer Information

Phare Labs Inc
251 Little Falls Drive, Wilmington, New Castle County, Delaware, 19808, USA

Phare Labs Limited
71-75 Shelton Street, WC2H 9JQ, London, England, United Kingdom

Device Markings Meaning

The device contains a series of marking on the back side that ensures compliance with the appropriate standards. These include, among others:

Unique Device ID, used to identify the device and set it up.

Replacement date, 10 years after the manufacturing date. The device firmware also records this and will alert the user before that time comes.

The device FCC ID, a unique code assigned to electronic devices by the FCC in the United States, which is used to identify and certify that the device meets the necessary regulatory standards for wireless communication, and the FCC IDs contained within.

Safety warnings, preventing the user from replacing the built-in battery.

Power rating, the rated input power type, voltage, current and frequency.

Model, shown as Phare C1, refers to both Phare C1 and its variants (Pro and Core).

it also includes the following icons, whose meaning can be found below.

Class II Electrical Equipment
A Class II or double insulated electrical appliance uses reinforced protective insulation in addition to basic insulation. Hence, it has been designed in such a way that it does not require a safety connection to electrical earth (ground).

WEEE (Waste from Electrical and Electronic Equipment)
The product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.

FCC (The Federal Communications Commission)
The product complies with U.S. regulations governing radio-frequency (RF) emissions and electromagnetic compatibility (EMC) as defined in Part 15 of the FCC Rules. This ensures the device will not cause harmful interference to other electronic equipment and will operate reliably in typical environments.