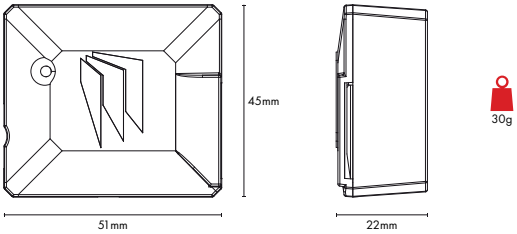
PYRONIXCLOUD CONNECT (PCC)

Part code: DIGI-PCC
SAP code: 361301946

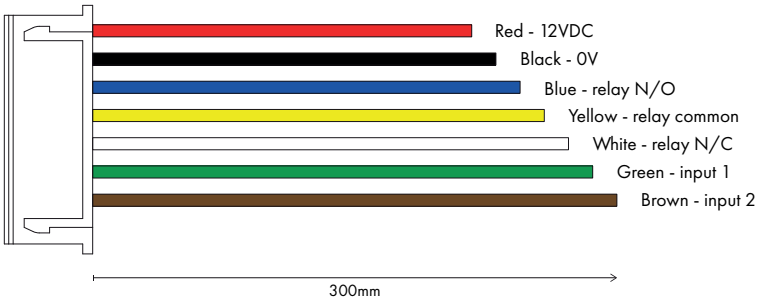
CONTENTS

SPECIFICATIONS



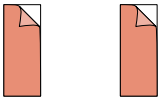
Specification	Value
Dimensions and weight (W x H x D)	51 x 45 x 20mm, 70g
Casing	Clear, 3mm ABS polycarbonate
Status LED colours	Orange, white, yellow, green, blue, cyan, and magenta.
Transmission method	Wi-Fi
Transmission frequency	2.4 GHz
Transmission range	Up to ~30m
Operating voltage	9-15VDC
Current consumption	Validation to confirm
Relay output	1A @ 30VDC
Contact resistance	100mΩ max.
Storage temperature	-40°C to +80°C
Operating temperature	-10°C to +40°C
Environmental class (EC)	II
Standards	CE marking LVD (Low Voltage Directive) • EN 62368-1: 2024+ A11:2024 • EN IEC 62311: 2020 EMC (Electromagnetic Compatibility) • EN301-498-17 V3.3.1 RED (Radio Equipment Directive) • EN 300 328 V2.2.2 RoHS (Restriction of Hazardous Substances) • EN IEC 63000:2018

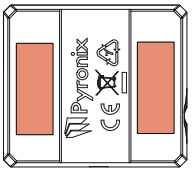
PRODUCT OVERVIEW

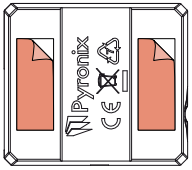


PIN	COLOUR	FUNCTION
1	Red	12VDC power supply
2	Black	0V / Ground
3	Blue	Relay Normally Open (N/O) – Relay contact that remains open until activated.
4	Yellow	Relay Common – The common terminal for the relay, shared between N/O and N/C outputs.
5	White	Relay Normally Closed (N/C) – Relay contact that remains closed until activated.
6	Green	Input 1 – First programmable input for detecting external signals or triggering events.
7	Brown	Input 2 – Second programmable input for connecting an additional external trigger or sensor.

INSTALLATION







1. Remove adhesive backing I

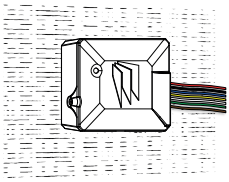
Peel off one side of the protective film from the 3M adhesive pads to expose the sticky surface for affixing to the device.

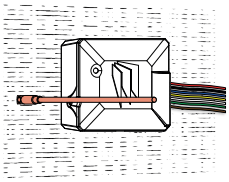
2. Apply adhesive pads

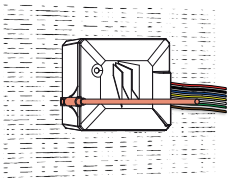
Attach the exposed side of the adhesive pads to the flat sections on the rear of the device, ensuring correct alignment.

3. Remove adhesive backing II

Peel off the remaining protective film from the adhesive pads to expose the mounting surface.







4. Position the unit

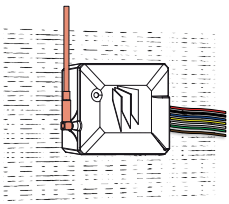
Place the device onto the desired surface and press firmly to ensure a secure bond.

5. Connect antenna I

Remove the antenna from its packaging in preparation for installation.

6. Connect antenna II

With the connector at a right angle to the unit, push the antenna into the MMCX port until secure.



7. Position antenna

Rotate and position the antenna in the optimal location to achieve the best possible signal strength.

WIRING THE UNIT

PCC ARM/DISARMING RELAY

4 Terminal Zones

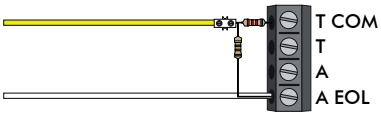
Double pole

- Yellow wire connects to A (alarm input) on the panel.
- White wire connects to A EOL (alarm return or zone negative) on the panel.
- Link out the T and T COM terminals at the panel with a wire link or programmed as not used.

Please note: Ensure that any onboard tamper switches are either physically bypassed or not active, depending on panel setup.

Double Pole

Double EOL



Double EOL

- Yellow wire connects into a terminal block along with:
  - » One end of the 2k2 resistor (EOL resistor).
  - » One end of the 4k7 resistor (alarm resistor).
- From the terminal block:
  - » The free end of the 2k2 resistor connects to T COM (tamper common).
  - » The free end of the 4k7 resistor connects to A EOL (zone return).
- White wire connects directly to A EOL as well (joins the zone return)

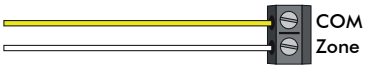
Tip: The terminal block acts as the junction point for the relay output (yellow common) and both resistors, allowing proper resistance paths for the Double EOL configuration.

2 Terminal Zones

Double pole

- Yellow wire connects to COM terminal on the panel.
- White wire connects to ZONE terminal on the panel.

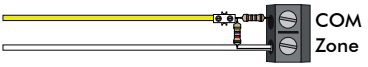
Double Pole



Double EOL

- Yellow wire connects into a terminal block, along with:
  - » One end of the 2k2 EOL resistor.
  - » One end of the 4k7 alarm resistor.
- Free ends of the resistors:
  - » Free end of the 2k2 resistor connects to COM.
  - » Free end of the 4k7 resistor connects to ZONE.
- White wire connects directly to ZONE (shares the terminal with the 4k7 resistor return).

Double EOL



Tip: The terminal block acts as the junction point for the relay output (yellow common) and both resistors, allowing proper resistance paths for the Double EOL configuration.

PCC INPUT WIRING

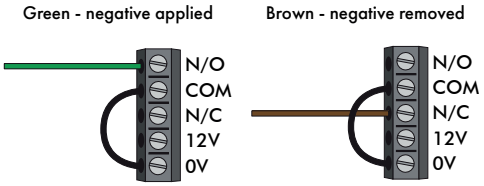
Control Panel Relay Outputs

Please note: Do not connect both PCC inputs to the same relay, as this will cause them to trigger simultaneously from a single event. This has only been done in the following example for illustrative purposes.

Negative applied or removed

Panel Relay terminal setup

- COM is connected to 0V (ground).
- Brown wire is connected to N/C (Normally Closed).
- Green wire is connected to N/O (Normally Open).



Negative triggers explained

- When the relay is inactive (not energised):
  - » The brown wire receives 0V, as it is connected via the N/C (Normally Closed) contact.
  - » The green wire is not connected.
- When the relay is active (energised):The relay switches, opening the N/C contact and removing 0V from the brown wire.
  - » At the same time, 0V is now applied to the green wire through the N/O (Normally Open) contact.

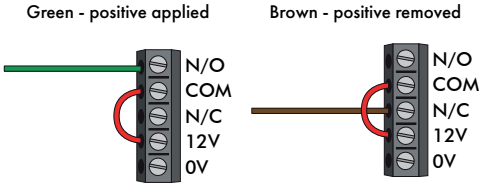
This setup allows you to use the relay for:

- 'Negative removed' detection on the brown wire (input sees 0V normally, which disappears on activation).
- 'Negative applied' detection on the green wire (input sees 0V only when the relay is active).

Positive applied or removed

Panel Relay terminal setup

- COM is connected to 12V (positive supply).
- Brown wire is connected to N/C (Normally Closed).
- Green wire is connected to N/O (Normally Open).



Positive Triggers Explained

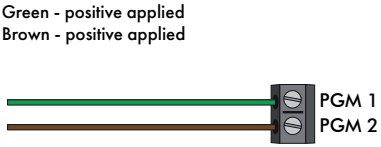
- When the relay is inactive (not energised):
  - » The brown wire receives 12V, as it is connected via the N/C (Normally Closed) contact.
  - » The green wire is disconnected.
- When the relay is active (energised):
  - » The relay switches, opening the N/C contact and removing 12V from the brown wire.
  - » At the same time, 12V is now applied to the green wire through the N/O (Normally Open) contact.

This setup allows you to use the relay for:

- 'Positive removed' detection on the brown wire (input sees +12V normally, which disappears on activation).
- 'Positive applied' detection on the green wire (input sees +12V only when the relay is active).

Panel Transistorised Outputs

Transistorised outputs such as PGM1 and PGM2 are typically open collector outputs, meaning they operate by applying 0V (negative) when activated. These outputs do not provide voltage themselves; instead, they act as a switch to ground.



When wiring to these outputs:

- Connect either the green wire or the brown wire to the required output, depending on which input you wish to trigger.
  - » Alternatively, both wires can be connected to separate outputs, such as green (input 1) to PGM1 and brown (input 2) to PGM2, as shown in the example
- Inputs should be held high (to 12V), within the control panel.
- When PGM1 activates, it pulls the green wire to 0V, this is a 'negative applied' trigger for input 1.
- When PGM2 activates, it pulls the brown wire to 0V, this is a 'negative applied' trigger for input 2.

POWER CONNECTION

To power the device, connect the red and black wires to the auxiliary 12V output from the control panel:

- Red wire to the panel's AUX 12V terminal (positive supply).
- Black wire to the panel's AUX 0V terminal (ground/negative).

Tip: Ensure the panel's AUX output has sufficient current capacity to support the connected load, especially if multiple devices share the same supply.

ZONE AND OUTPUT PROGRAMMING

Please note: This section is intended as a general guide and is not definitive. Some control panels may not include the exact zone or output types listed here, so the closest available match should be selected based on the panel's capabilities.

CONTROL PANEL ZONE TYPES

This refers to the input or zone that the relay of the PCC is connected to. It should be configured so that the relay arms and disarms the panel when energised. Look for input types with names similar to:

- Keyswitch latched
- Keyswitch pulsed
- Keyswitch momentary
- Moment key
- Latch key
- KeyArm

CONTROL PANEL OUTPUT TYPES

Inputs 1 and 2 on the PCC can each be connected to outputs on the control panel, allowing two separate events to be communicated. The specific configuration may vary depending on the installation, but common output types include:

- Intruder alarm – e.g. Intruder, Instant, Unconfirmed, Burglar
- Confirmed signal – e.g. Confirmed, Verified, Double zone alarm
- External bell active – e.g. Bell, Siren, SAB
- Fire event – e.g. Fire
- Arm/disarm status – e.g. Final Set, Armed, Partition Armed

RECOMMENDED PROGRAMMING

Zone - keyswitch pulsed

If supported, use keyswitch pulsed input types for arm/disarm via relay. Set the relay to give a 2 second pulse on activation.

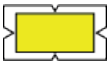
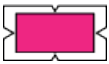
Output connected to input1 - bell/siren

This will signal an alarm regardless of whether the issue is fire, unconfirmed, or a panic alarm. It is the most versatile option, ensuring the user is alerted to a range of potential issues. Although the exact nature of the event may not be confirmed until the system is checked, the user will still receive a prompt notification..

Output connected to input 2 - final set any

This will activate only when the system has fully set, regardless of which partition or area is armed. It provides a clear signal that the system is now in a secure state, reliably confirming to the user that the system is armed or disarmed.

LED COLOURS

LED COLOUR	DESCRIPTION
 Blue	• The device is in Bluetooth Setup Mode. This allows the Wi-Fi SSID and password to be entered via HomeControl2.0.
 Yellow	• Performing network and server negotiations.
 Magenta	• Flashes when DHCP and IP address settings have been successfully received by the device. • Performing an OTA update.
 Green	• Device is connected and operating normally.
 White	• Flashes during activity, such as transmitting data.
 Cyan	• Flashes when the relay changes state.
 Orange	• Wi-Fi is disconnected.

INITIALISING THE DEVICE

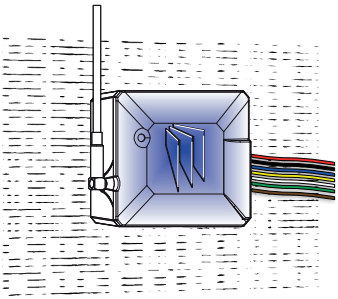
INSTALLER

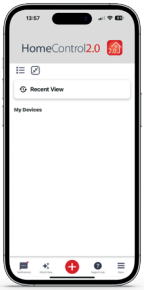
Please note: This section assumes that the installer has already downloaded HomeControl2.0, has an active PyronixCloud installer account, and is currently logged in on HomeControl2.0.

Connecting to the Network

1. Power up the device

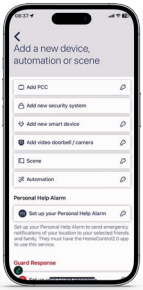
On initial power-up, the device will momentarily flash orange before remaining solid blue. This indicates that the device is in '**Bluetooth Setup Mode**' and is ready to connect to HomeControl2.0.





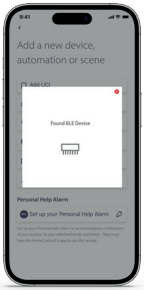
2. Tap '+'

Tap the **'+' icon** in the **bottom navigation bar** to begin the setup procedure.



3. Select 'Add PCC'

From the list of available options, select **'Add PCC'** (PyronixCloud Connect).

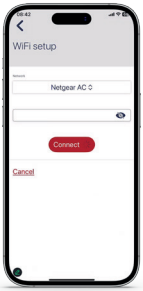


4. Link to the device

HomeControl2.0 will now search for a PCC in '**Bluetooth Configuration Mode**' and establish a connection.

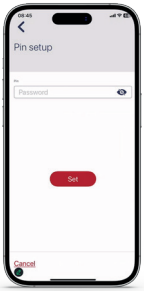
5. Assign to an estate and user

Select an **estate** you previously set up in InSite ProCloud, enter an **system reference**, and add your **customer's email address**.



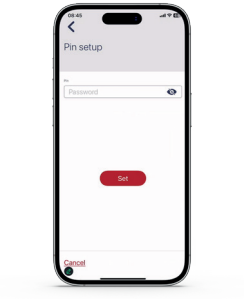
6. Enter Wi-Fi credentials

Select the network from the dropdown list that you want to connect the device to, and enter the network password.



7. Create a customer PIN

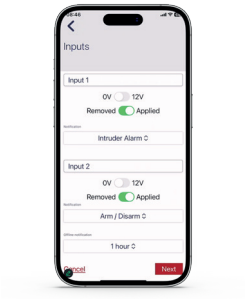
Create a pin that must be entered by the customer when connecting to the device.

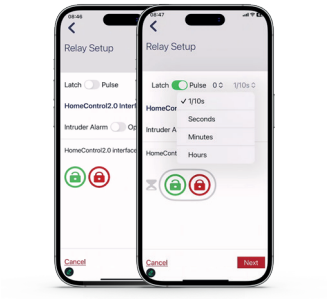


8. Create a customer PIN

Create a pin that must be entered by the customer when connecting to the device.

Configuring the Inputs and the Relay





9. Configure the Inputs

Using the toggles, configure each of the two input triggers as either positive or negative, and to specify whether the trigger is applied or removed. For wiring guidance, please refer to the "Input Wiring" section on page 6.

Each trigger can also be assigned a notification type, which determines the push notification text and the alert tone when the notification is delivered.

10. Program the Relay

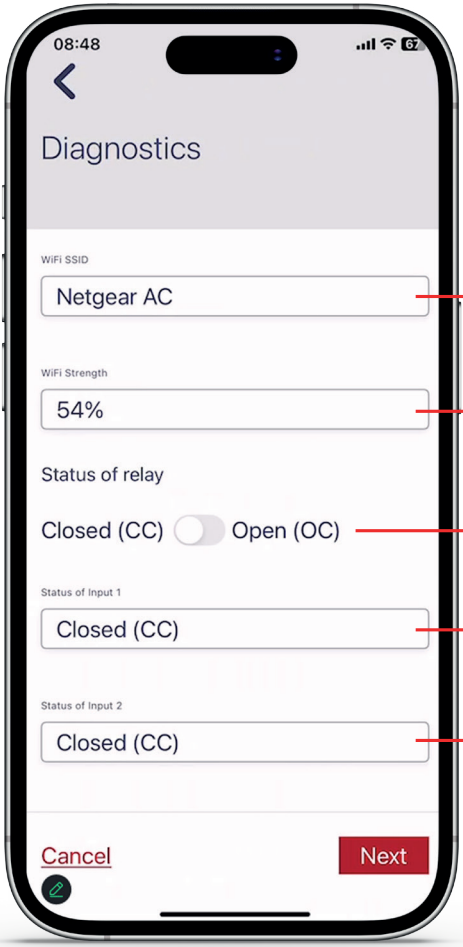
Use the toggle to configure how the device's relay operates when triggered - either as latched or pulsed.

- **Latched:** When activated, the relay remains energised until it is manually deactivated.
- **Pulsed:** When activated, the relay remains energised for a pre-set duration (e.g. 10 seconds). This duration can be selected from the dropdown menu next to 'Pulse'.

The interface can also be adjusted to display either lock/unlock symbols or door open/close icons, depending on which best suits the device's relay function.

Diagnostics

The final step of the initialisation process presents a diagnostics screen that displays the current network status along with the relay and input statuses.



Wi-Fi SSID
Name of the network the device is currently connected to.

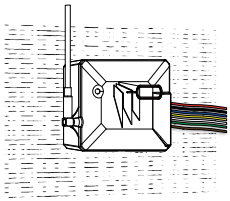
Wi-Fi Signal Strength
Strength of wi-fi signal between PCC and network router.

Status of PCC Relay
Displays the current status of the PCC relay, whether it is closed or open.

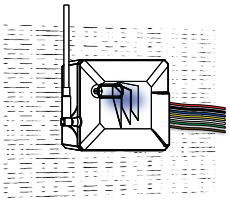
Input 1 Status
Displays whether input 1 is in a closed state or an open state.

Input 2 Status
Displays whether input 2 is in a closed state or an open state.

BUTTON PRESS FUNCTIONS



Using the pin tool provided, insert it through the hole on the front of the device's case to press the button on the PCB.



Briefly press, or press and hold the button to access the required function.

SEND STATUS UPDATE

Short press – Sends status information to the server (white flash). Useful for forcing an immediate update when already connected. If in Wi-Fi configuration mode, returns to normal operation when released (if Wi-Fi credentials are stored).

ENTER WI-FI CONFIGURATION MODE

Press and hold for 5 seconds – Enters Wi-Fi configuration mode (blue LED on). If not provisioned within 5 minutes, automatically exits and resumes normal operation, reconnecting to the server.

CLEAR WI-FI CREDENTIALS

Press and hold for 10 seconds or more– . Holding for 10 seconds or more clears stored Wi-Fi credentials (indicated by a short white flash while the blue LED is on). Without credentials, the device remains in Wi-Fi configuration mode indefinitely (default shipping state).

PRODUCT WARNING INFORMATION

For electrical products sold within the European Community: at the end of the product's life, it should not be disposed of with household waste. Please recycle where suitable facilities exist. Check with your local authority or retailer for recycling guidance specific to your country.

To prevent possible damage to components, eliminate any static charge on your body before touching the inside of the unit. This can be done by touching a grounded (earthed) metallic conductor, such as a radiator or metal pipework, immediately before touching product.

WARRANTY

This product is sold subject to our standard warranty conditions and is warranted against defects in workmanship for a period of 2 years. In the interest of continuing care and design, Pyronix Ltd reserves the right to amend specifications, without giving prior notice. For further information visit: www.pyronix.com/uk/terms-conditions-sales/