Door Access
Proximity Open

Access within your coworking space is a top priority and we want to make your door access as simple and safe as possible.

Proximity Info Sheet no.02
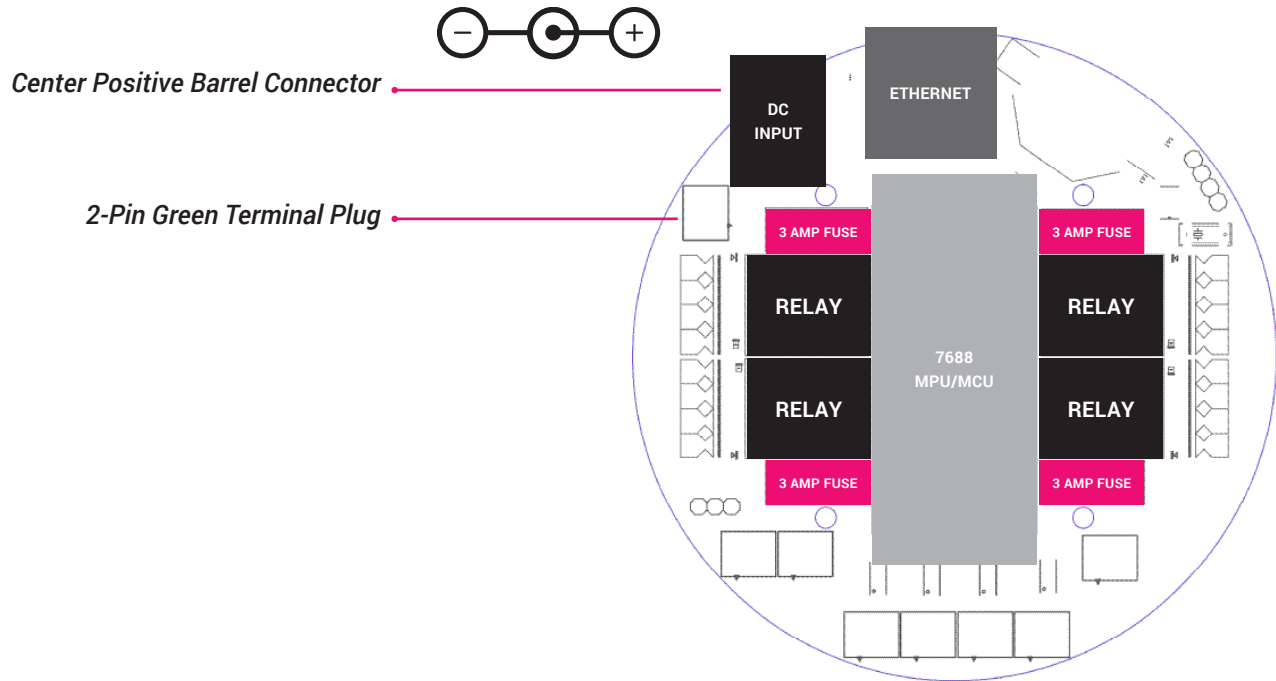
PROXIMITY

Start by calling a professional.

Depending on the structure of your door or situation in your coworking space contact either a locksmith, electrician, general contractor or security company to integrate Proximity Open into your space.

Power Input Options

The Proximity Open board has two DC Power Inputs that can accept 10-28v DC.

+ One center positive barrel connector
+ One two-pin terminal plug
Either of these may be used.

Center Positive Barrel Connector

2-Pin Green Terminal Plug

DC INPUT	ETHERNET
3 AMP FUSE	3 AMP FUSE
RELAY	RELAY
RELAY	RELAY
3 AMP FUSE	3 AMP FUSE

7688 MPU/MCU

Included Power Supply:

+ One 12v DC Wall Adapter

+ Provides up to 5 Amps

+ Can power four doors simultaneously

Any installation requiring larger current requirements can be wired to a new or existing power supply. Please contact us, or ensure larger power supply options when ordering.
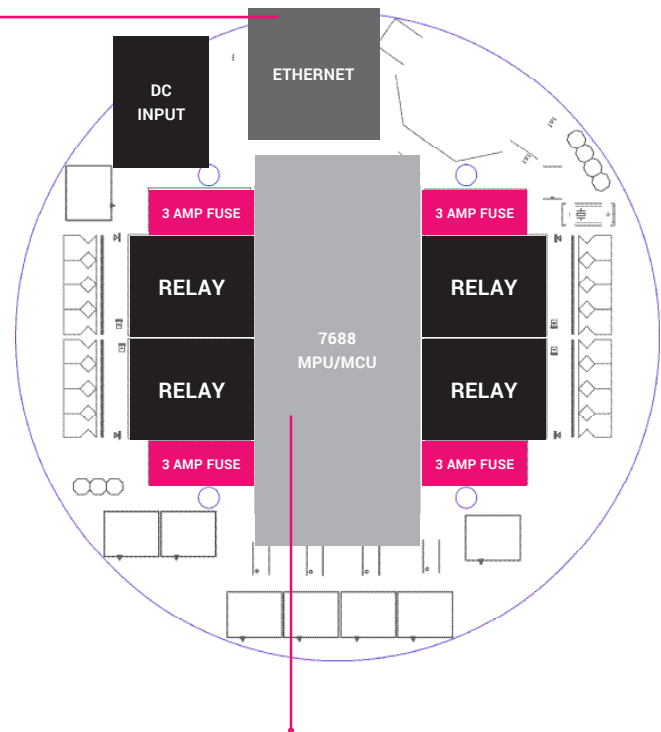
PROXIMITY

Connect to your Network

Proximity Open requires wired internet access

You can provide your Controller with wired ethernet from your switch or router.

+   *DHCP will be used to auto assign the controller an IP address on your Network.*

RJ45 Ethernet Jack

DC
INPUT

ETHERNET

3 AMP FUSE   3 AMP FUSE

RELAY   **RELAY**

7688
MPU/MCU

RELAY   **RELAY**

3 AMP FUSE   3 AMP FUSE

+   No special port forwarding is required

+   No IP assignments, or vLANs are required

+   Just wired internet access

The numbers written on the center of the controller represent the last 6 hexadecimal values of the controller's MAC address. This will help you identify the device on the network, if you need to configure your network to provide internet access.

PROXIMITY

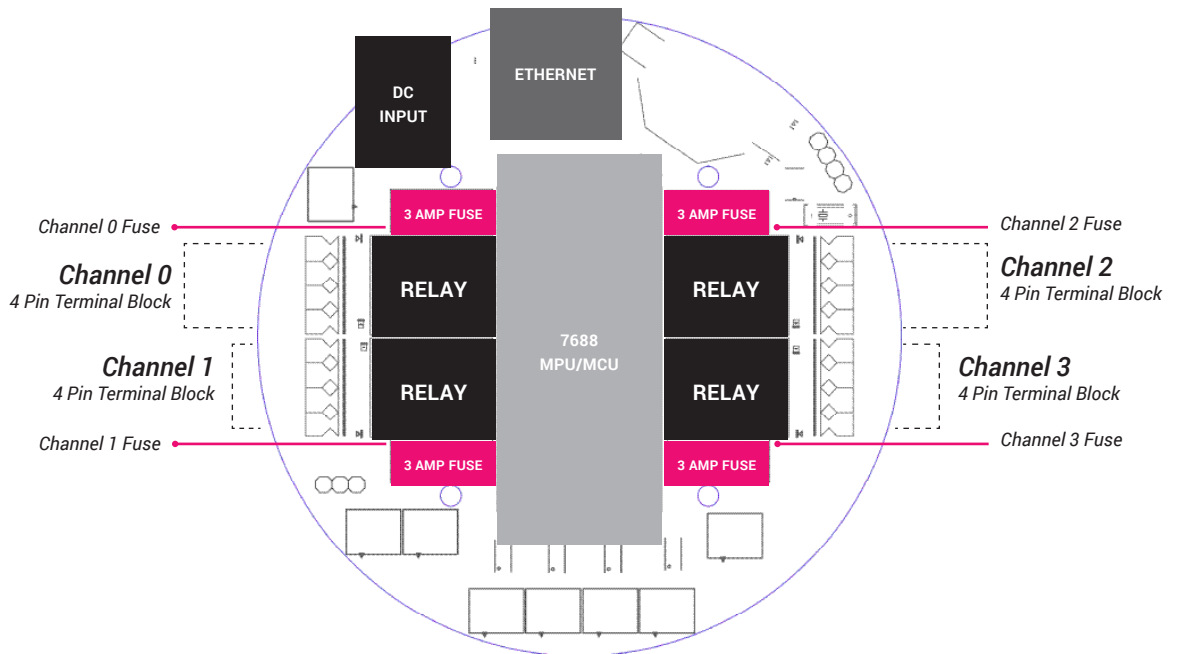# Door Connections/ Channel Layout

Proximity Open features four relay channels
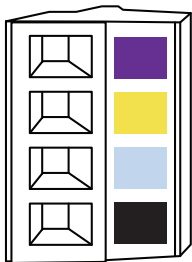### Each relay can function:

+ **without a fuse -** *the channel will operate as a dry contact*
+ **with a fuse -** *it can directly power and control an electronic lock, or a number of other devices.*

Door Controller:

+ Connect up to four doors, which may be controlled through the Proximity Mobile app

+ The first channel (Channel 0) can be used in combination with the Proximity Mobile app and keypad/RFID input

DC INPUT

ETHERNET

Channel 0 Fuse — 3 AMP FUSE

3 AMP FUSE — Channel 2 Fuse

Channel 0
4 Pin Terminal Block

RELAY

RELAY

Channel 2
4 Pin Terminal Block

7688 MPU/MCU

Channel 1
4 Pin Terminal Block

RELAY

RELAY

Channel 3
4 Pin Terminal Block

Channel 1 Fuse — 3 AMP FUSE

3 AMP FUSE — Channel 3 Fuse

Channel Terminal Plugs

Normally Open

Relay Common Pin; Power when bridge fuse is in place

Normally Closed
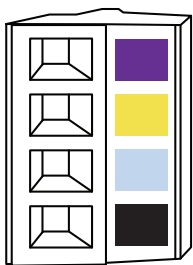
Ground

PROXIMITY

Relay Terminal Connection

Proximity Open features four relay channels

With **FUSE PRESENT** on Channel

+ Normally Open (NO) has positive voltage when channel/door is in the UNLOCK state.
Generally power for devices such as electronic door strikes.

+ Power Pin (PWR) Always has positive voltage.
Useful for connecting PIR motion and egress hardware.

+ Normally Closed (NC) has positive voltage when channel/door is in the LOCKED state.
General power for devices such as maglocks.

+ Ground (GND) Negative wire for any of your devices on this channel.

Channel 0
4 Pin Terminal Block

ETHERNET

DC
INPUT

3 AMP FUSE

RELAY

7688
MPU/MO

RELAY

Channel Terminal Plugs

Normally Open; Power in UNLOCK state

Relay Common Pin; Power when fuse is in place

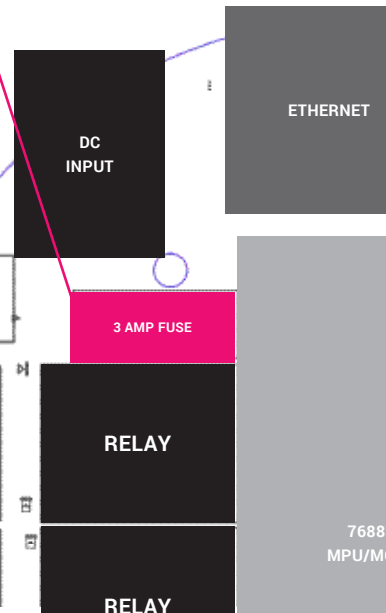Normally Closed; Power in LOCK state

Ground

Pin Labels on Board
Find these pin names; NO, PWR, NC, GND denoted with a channel prefix on the board to identify the channel number they belong with.

Example:

Channel 0 consists of:
NO.0, PWR.0, NC.0 and GND.0
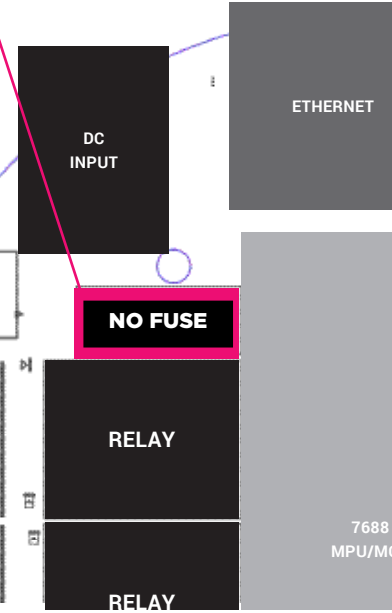
Channel 1 consists of
NO.1, PWR.1, NC.1 and GND.1

PROXIMITY

Relay Terminal Connection
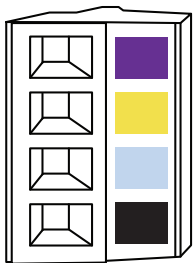
Proximity Open features four relay channels

With **FUSE REMOVED** from Channel

+ **Normally Open (NO)**

+ **PWR is your Common Relay Pin (with fuse removed)**

+ **Normally Closed (NC)**

+ **Ground (GND)**

ETHERNET

DC
INPUT

NO FUSE

Channel 0
4 Pin Terminal Block

RELAY

7688
MPU/M0

RELAY

Channel Terminal Plugs

Normally Open

Relay Common Pin
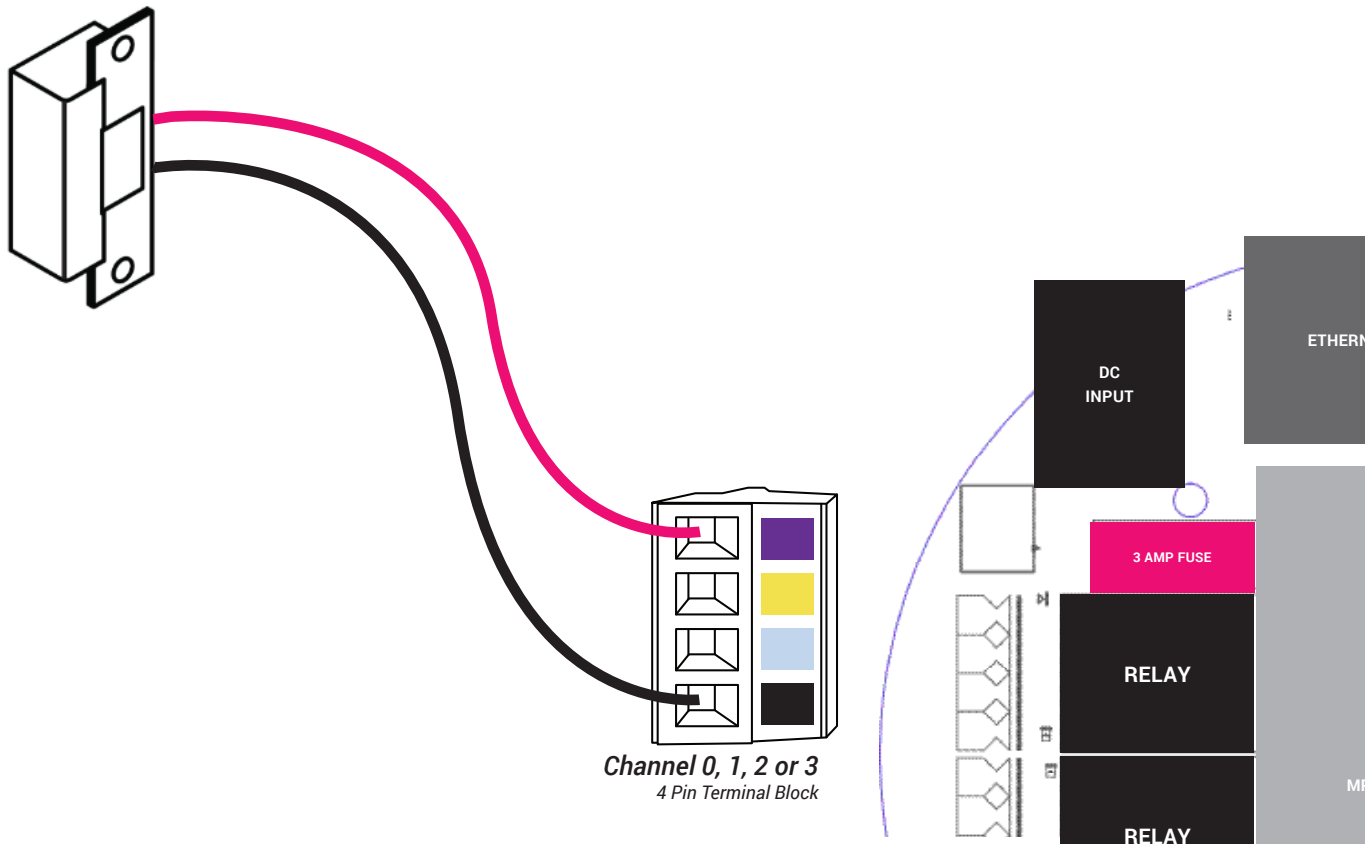
Normally Closed

Ground

Pin Labels on Board
Find these pin names; NO, PWR, NC, GND
denoted with a channel prefix on the board to
identify the channel number they belong with.

Example:

Channel 0 consists of:
NO.0, PWR.0, NC.0 and GND.0

Channel 1 consists of
NO.1, PWR.1, NC.1 and GND.1

PROXIMITY

Typical Door Strike Connection

**DC
INPUT**

ETHERN

3 AMP FUSE

RELAY

RELAY

MF

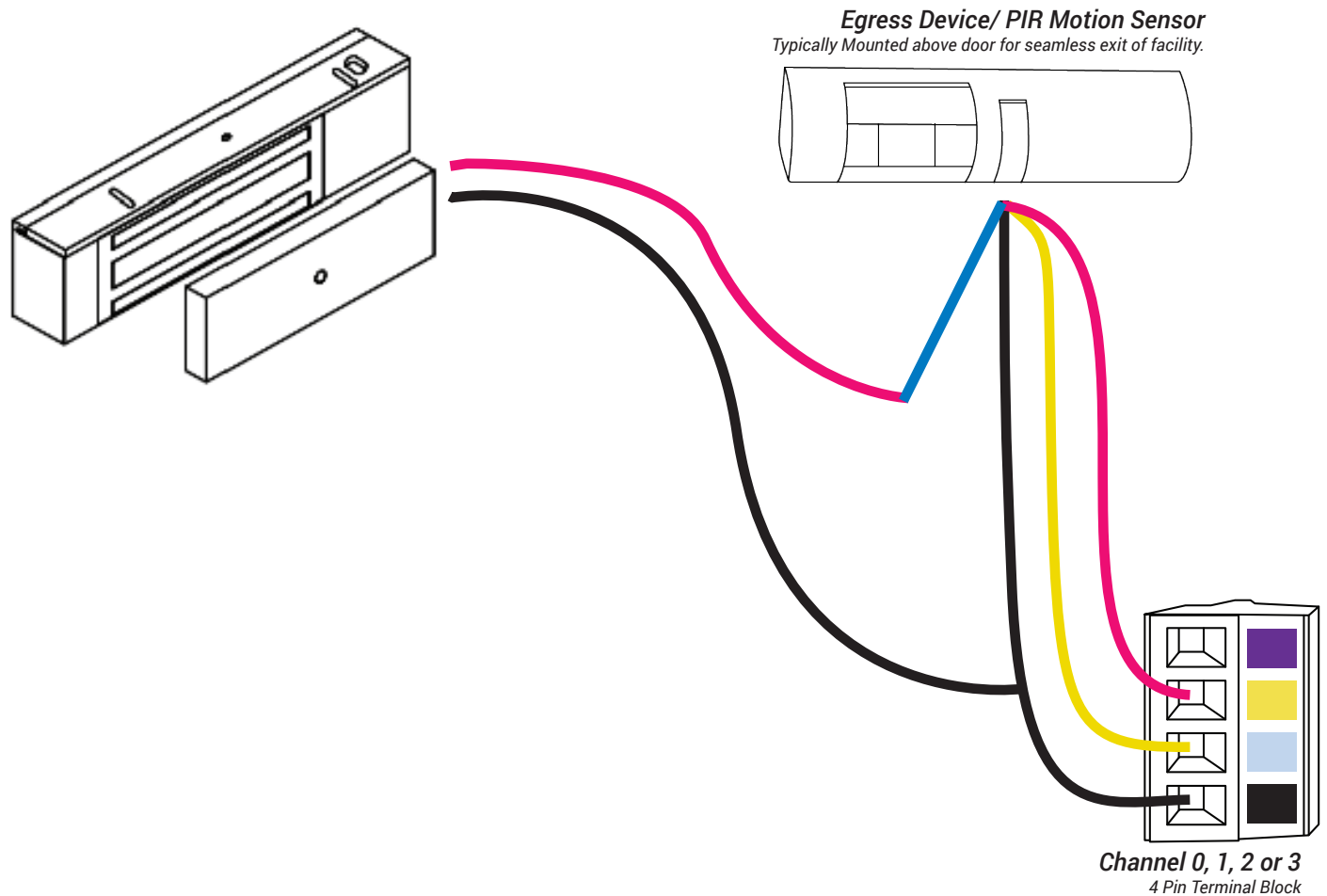### *Channel 0, 1, 2 or 3*
4 Pin Terminal Block

A door strike typically takes power when a lock is to be released.

A12v compatible door strike is all you need to get things connected
+ Connect the 12v + wire from the door strike to the desired channel of your controller using the pin labeled NO (**Normally Open**).
+ Connect the ground wire from your door strike to the same channel's GND pin.

PROXIMITY

Typical Door Maglock Connection

Egress Device/ PIR Motion Sensor
Typically Mounted above door for seamless exit of facility.

Channel 0, 1, 2 or 3
4 Pin Terminal Block

## Installed maglock with Bosch Egress Motion Sensor
(DS150i/DS151i)

We recommend using Fail Safe mode to comply with safety requirements for egress doors.

+ Ensure Dip Switch 2 is ON
+ Connect **NC** from Proximity Open board to **COM** "yellow wire 3" on Bosch DS150i
+ Connect **NC** "blue 5" wire from Bosch DS150i to maglock positive wire
+ Connect maglock negative wire to **GND** on Proximity Open board
+ Connect Bosch harness black wire to **GND** on Proximity Open board
+ Connect Bosch harness red wire to **PWR** on Proximity Open board

PROXIMITY

Keypad/ RFID Reader

+ The keypad can control **one door only on Channel 0**

+ All Channels are accessible using the Proximity Mobile App and Web App.

+ **The keypad is not intended for use on a regular basis**.
If a location decides to purchase and install a battery backup, it may also facilitate entry when both power and internet outages occur. Spaces may support members without a smart phone by using this method of entry as well.
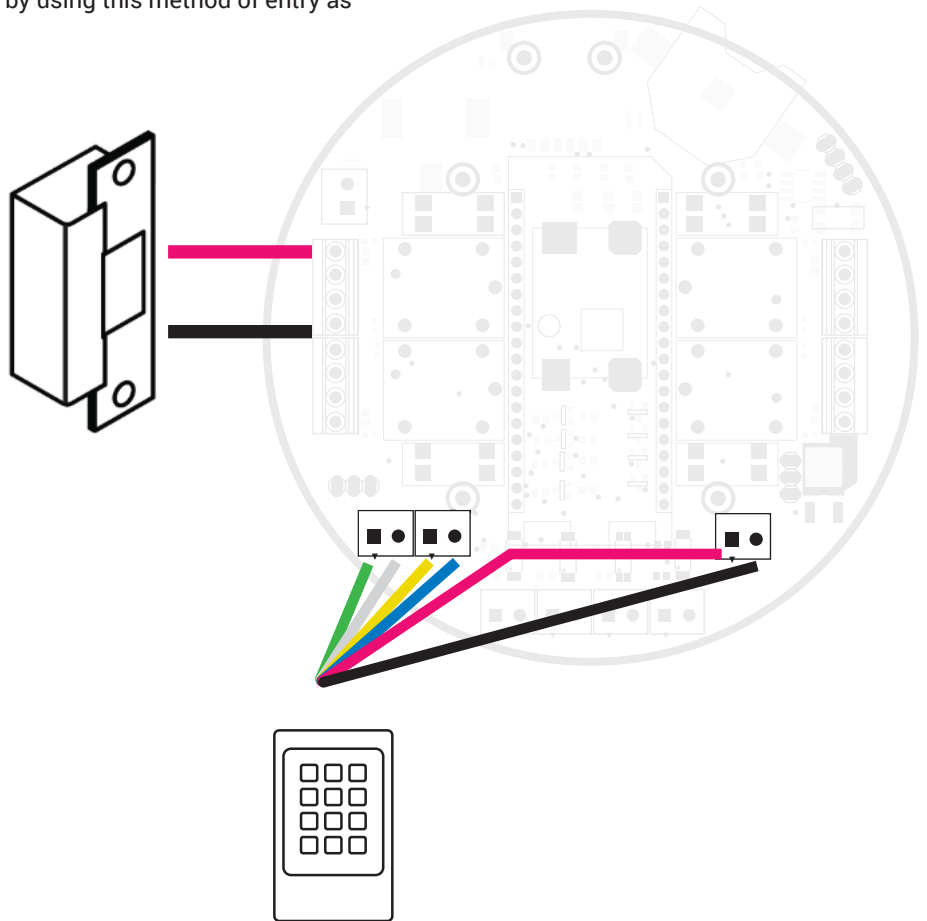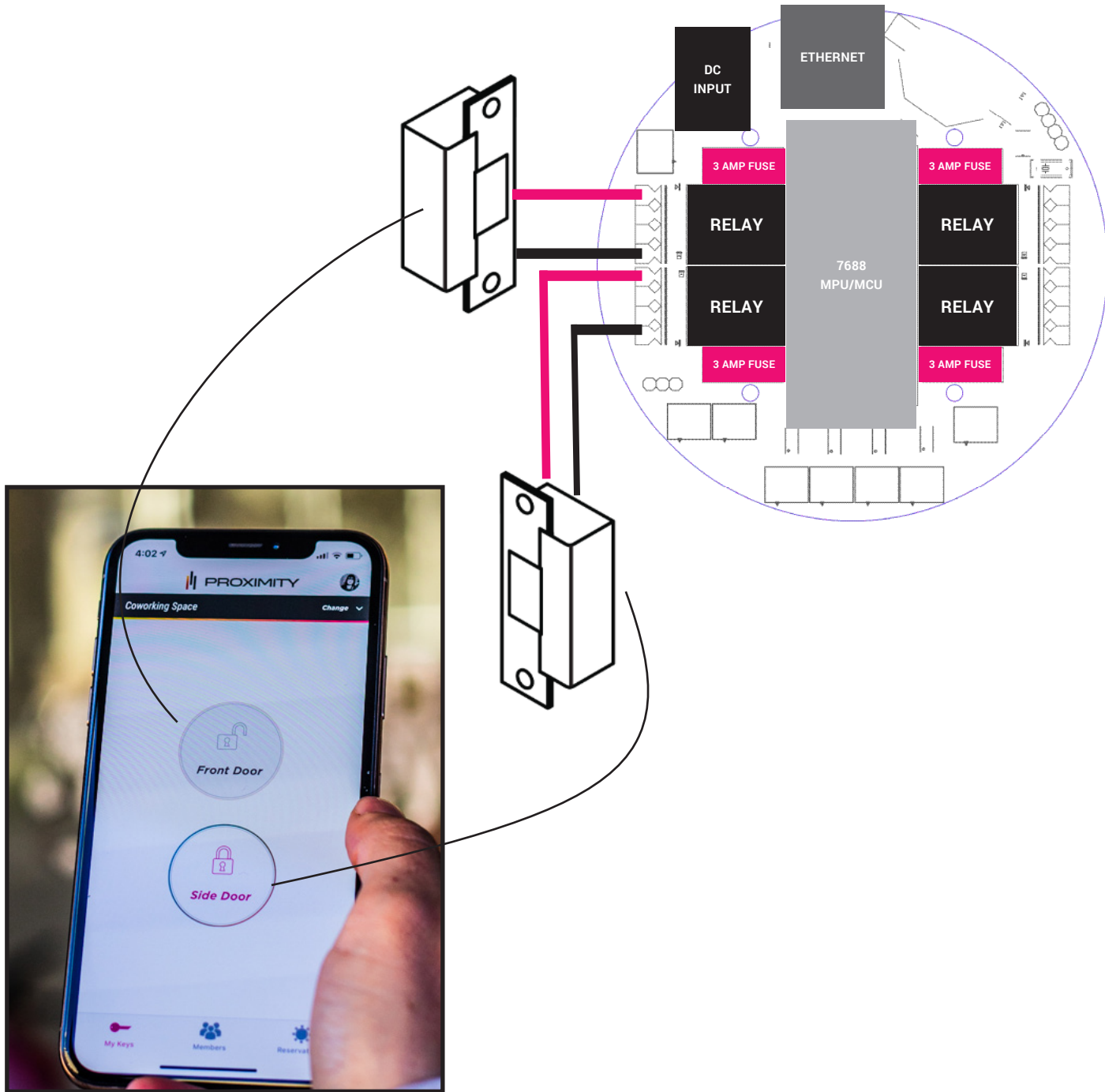

Wiegand Support

+ One Wiegand reader of any type (keypad/ RFID/ NFC reader) which operates in 4, 26, 32, or 64 bit style may be used to operate physical access for Channel 0.

+ Using this interface requires your site to allow PIN or RFID numbers for your space member(s).

+ Cards that use prefixed site codes may be used, but numbers on card may not always match up with numbers read into software.

+ 64-bit Wiegand can be used to read Card Serial Numbers (CNS) of NFC tags with special readers. This can be useful for hotel/resort situations, enabling the use of a single NFC card badge across multiple management systems.

PROXIMITY

Easy Relay Access Via App

Each door is configured to a channel, accessible via the Proximity Mobile App and the web app.
If a member has been granted access, a button in their app will appear for the corresponding channels on the controller.

DC INPUT

ETHERNET

3 AMP FUSE

RELAY

3 AMP FUSE

RELAY

7688 MPU/MCU

RELAY

RELAY

3 AMP FUSE

3 AMP FUSE

PROXIMITY

Door Sensors for typical door installs

+ There are many styles of door sensors that can connect to your door. The door sensor included with Proximity Open is a generic type of sensor and may not be ideal for all circumstances.

+ If you have a door sensor installed, you can choose to integrate it with the Proximity software in order to see when your door is open and closed right from your dashboard.

+ Send alerts to space owners when doors that should be locked have remained open for a pre-determined period of time.

+ For advanced control types such as garage, gate, and motor controls, a single door may use multiple sensors to detect proper open and closed states. Typical door installs use a single contact per door.

Optional Contact Sensors 0, 1, 2, and 3

Door Contact
(Channel 0)