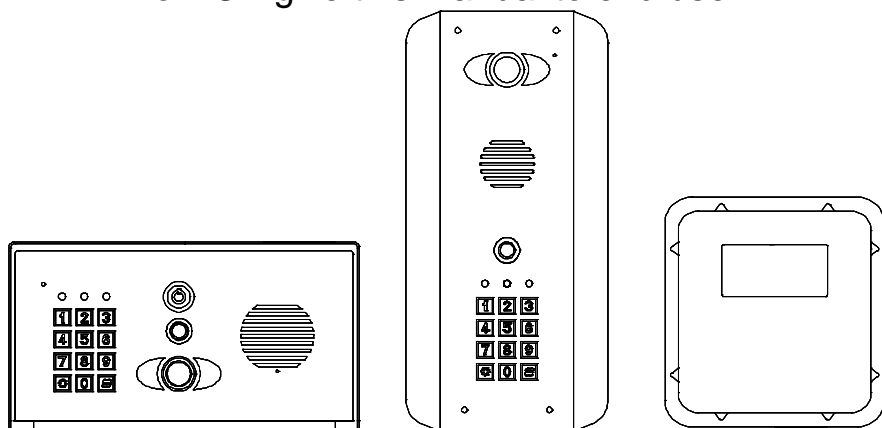# Installation Instructions

For

PRIME6-PROX-IMPK-PE-4GA

PROFESSIONAL INSTALL ONLY

Do NOT give this manual to end user!

Manual Version 1

The manufacturer cannot legally offer technical support to non-qualified gate or door installers. End users should employ the services of a professional install company to commission or support this product!

Tip: Site Survey BEFORE you begin. See Page 3!

AES GLOBAL

⚠️ **WARNING**
Do not power from the gate controller. Only use the provided UL power supply, otherwise damage may occur and warranty may be void.

Index

Site Survey

YES!

I have 4G signal at the gate with my phone! If not, STOP. You will need some! Try a different network provider.
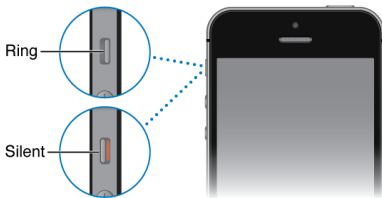
YES!

I have at least 1 Mb **UPLOAD** speed. If not STOP! This system may operate intermittently remotely or have delayed PUSH notifications.

Answering on Apple

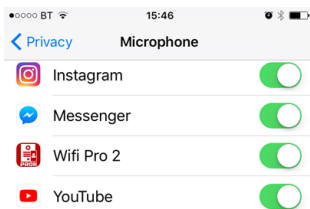| Swipe the notification left | Press "VIEW" | Phone will now launch app | Swipe green icon to answer |
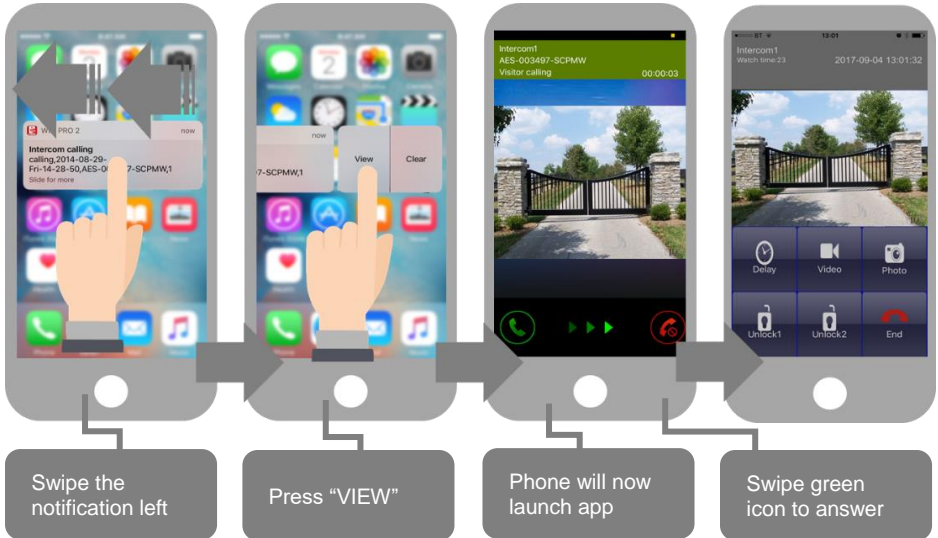
Note: Various versions of IOS and Android OS will have different notification acceptance techniques. Please refer to online support for your device if needed.

Ring

Silent

TIP: Make sure ringer switch is ON and volume is turned up.

Notifications Wifi Pro 2

Allow Notifications

Show in Notification Centre

Sounds

Badge App Icon

Show on Lock Screen

Show alerts on the Lock screen, and in Notification Centre when it is accessed from the Lock screen.

ALERT STYLE WHEN UNLOCKED

None   Banners   Alerts

TIP: If you don't get notifications then check settings/notifications and select the app.

Privacy Microphone

Instagram

Messenger

Wifi Pro 2

YouTube

TIP: If there is no voice from the speaker at the gate, check the iphone microphone permissions in Settings/privacy/microphone

Installation

Intercom wall/pillar mounted

Mount the 4G modem as high as possible and away from obstructions such as vehicles, shrubs and trees to maximise signal strength.

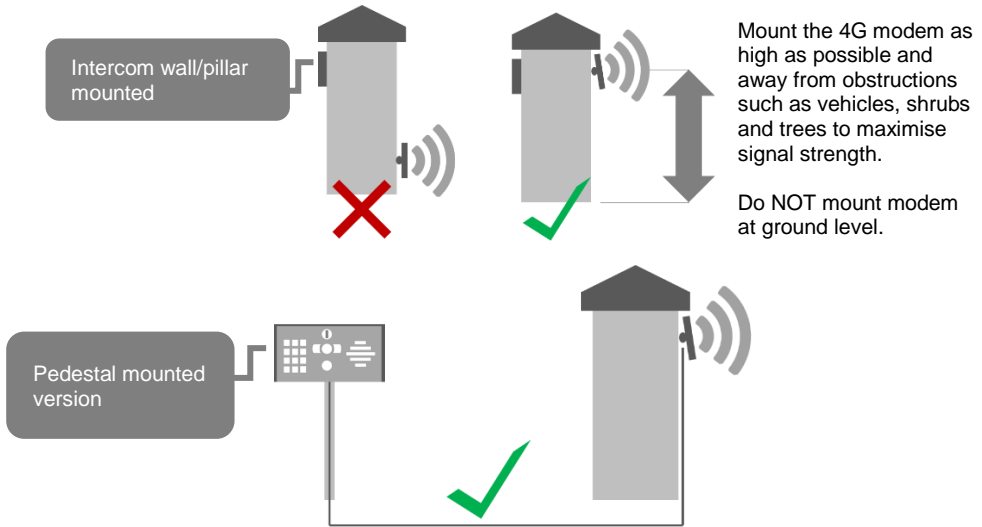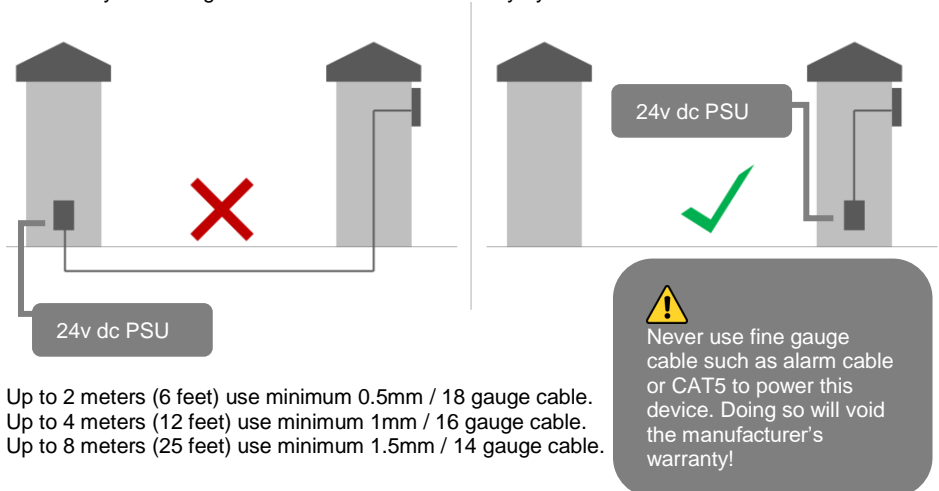Do NOT mount modem at ground level.

Pedestal mounted version

Power

This intercom comes with a 24v dc power supply. The intercom requires up to 2 amps peak demand at times, therefore power cable is of extreme importance.
It is preferred the 24v dc PSU is installed within close proximity of the intercom. However, on occasion this may be difficult to achieve. Please adhere to the cable thickness guide below or the device may be damaged and rendered out of warranty by the manufacturer.

24v dc PSU

24v dc PSU

Never use fine gauge cable such as alarm cable or CAT5 to power this device. Doing so will void the manufacturer's warranty!

Up to 2 meters (6 feet) use minimum 0.5mm / 18 gauge cable.
Up to 4 meters (12 feet) use minimum 1mm / 16 gauge cable.
Up to 8 meters (25 feet) use minimum 1.5mm / 14 gauge cable.

Intercom Module Wiring

WARNING
Mains electricity to be wired by qualified electrician only

110-250v mains in

24v DC PSU

+24v
GND
N/O
COM
N/C

Relay1   Relay2

Exit button

Keypad Module Wiring

Full/Auto

Relay2
N/C N/O

Advanced Connections

Relay3

N/C
COM
N/O

Egress

24vdc
(already
pre-wired)

Relay1   Relay2

Output Connections Example

Intercom board

N/O
COM

COM
N/C

Keypad board

COM
N/O

Electric Gates

Gate
Controller

12v DC
(Not supplied)

N/C

Other control
device

Magnetic
Lock

Modem Connections

POE Power Supply
RJ45 connection

Sim Card Holder
(DATA/IOT Sim only)

LAN RJ45
Connection

LED Indicators

S
I
M

RF (signal level)

S
Y
S

N
E
T
2
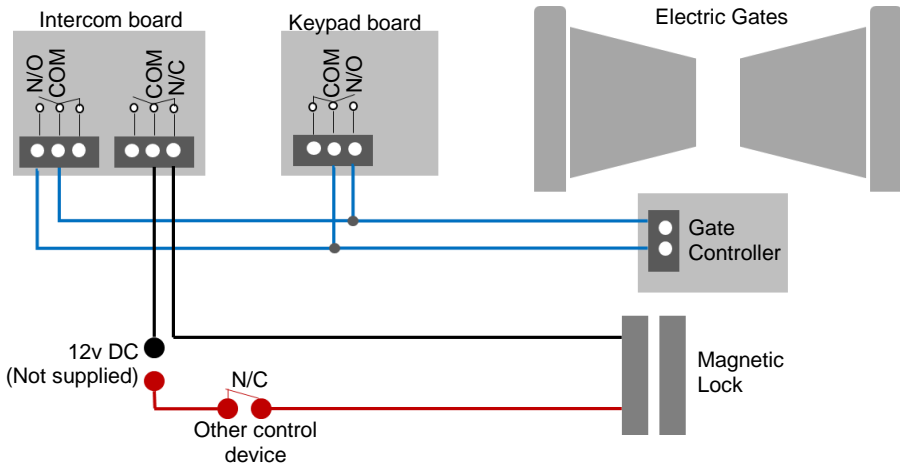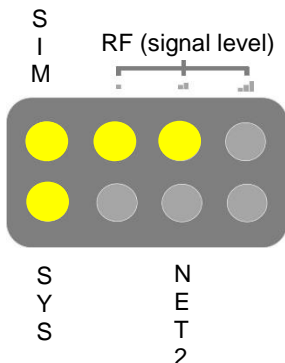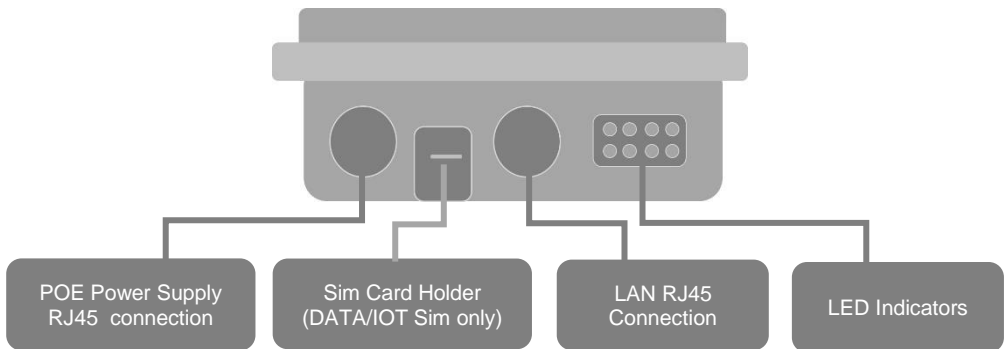
SIM – The sim LED will come on if there is a sim inserted.

RF – The first LED will flash if you have **low** 3G signal.
The first LED will stay solid if you have **low** 4G signal.

The second LED will flash if you have **medium** 3G signal.
The second LED will stay solid if you have **medium** 4G signal.

The third LED will flash if you have **high** 3G signal.
The third LED will stay solid if you have **high** 4G signal.

SYS – The system LED will flash when active, solid when inactive.

NET2– This LED flashes when active.

Adding Additional APP Users

Additional users MUST be added with individual user names. Do NOT use the same username.

ADMIN Phone   ADMIN Phone   ADMIN Phone   ADMIN Phone

Note how existing users can be deleted

Enter a NEW username & password

New Phone   New Phone   New Phone   New Phone

Be sure to enter NEW username & password as created by the admin phone.

Other Settings

Edit Intercom details

Ring tones

Check APP version

Add an intercom (can have up to 6 doors/gates calling one device)

Add/edit users

Change relay times (1-9 secs)

Turn off config mode (extra security)

Set time zone + (daylight saving adjust)

Set max monitoring time

Set max talking time.

Wifi settings & signal strength

Set max ringing time (from intercom)

Reboot intercom

Set sound option. Duplex, simplex1, simplex2.

Sound, Volumes and Speech

This intercom is capable of full duplex speech, which means two people can have a conversation and appear to speak at the same time. Since various manufacturers of android phones, iphones and tablets all differ in acoustic performance, and different users may require varying levels of volume on their own ha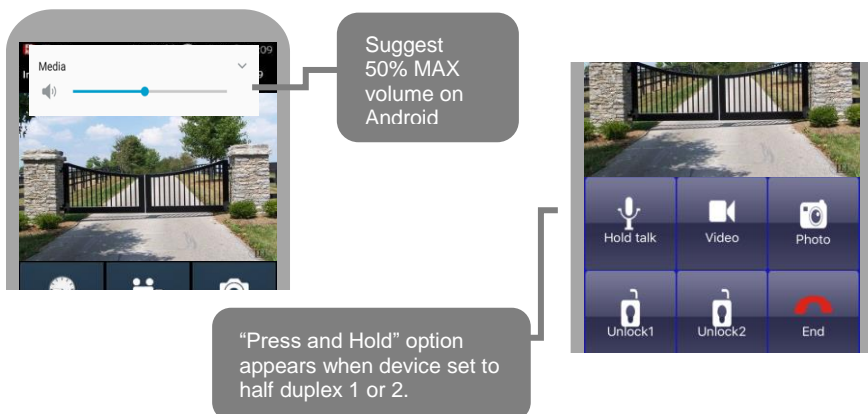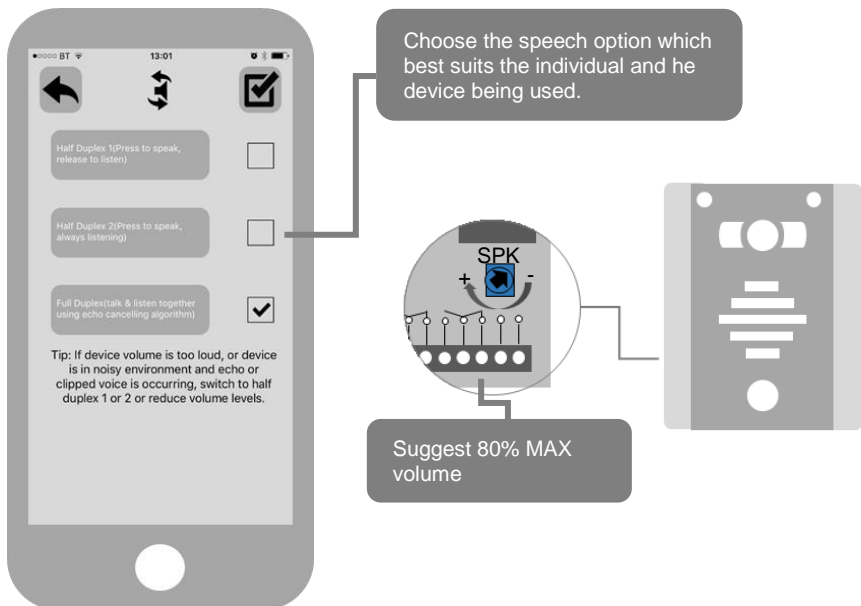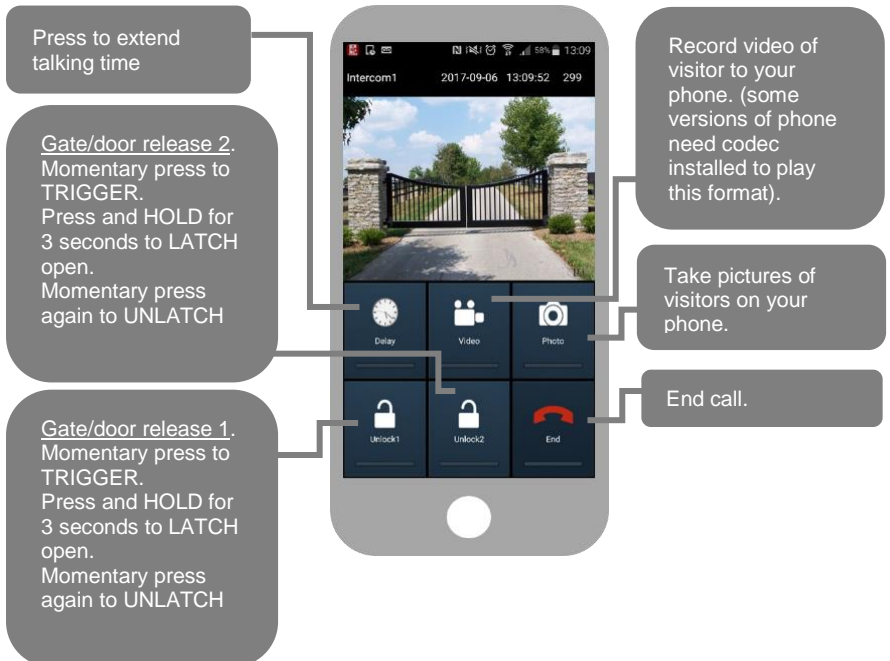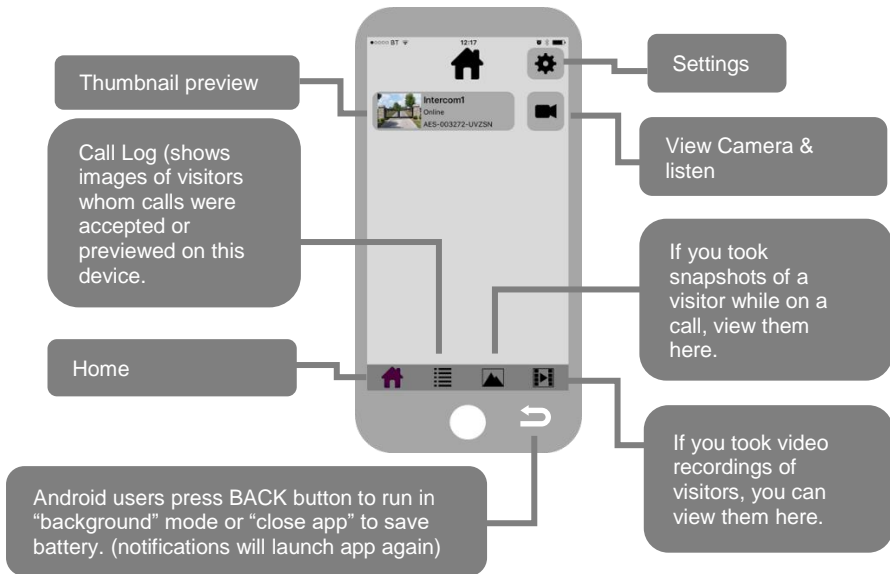ndset, it may be possible to setup some devices in full duplex mode but others may need to be set in half duplex mode (phone user will press to talk). This may also be required if a phone is in a particularly noisy environment, or the intercom is located near a busy main road with high levels of traffic noise.

Choose the speech option which best suits the individual and he device being used.

Half Duplex 1(Press to speak, release to listen)

Half Duplex 2(Press to speak, always listening)

Full Duplex(talk & listen together using echo cancelling algorithm)

Tip: If device volume is too loud, or device is in noisy environment and echo or clipped voice is occurring, switch to half duplex 1 or 2 or reduce volume levels.

SPK
+ -

Suggest 80% MAX volume

Suggest 50% MAX volume on Android

Media

"Press and Hold" option appears when device set to half duplex 1 or 2.

Hold talk   Video   Photo

Unlock1   Unlock2   End

Using the APP

Thumbnail preview

Settings

Call Log (shows images of visitors whom calls were accepted or previewed on this device.

View Camera & listen

If you took snapshots of a visitor while on a call, view them here.

Home

Android users press BACK button to run in "background" mode or "close app" to save battery. (notifications will launch app again)

If you took video recordings of visitors, you can view them here.

Press to extend talking time

Record video of visitor to your phone. (some versions of phone need codec installed to play this format).

Gate/door release 2. Momentary press to TRIGGER. Press and HOLD for 3 seconds to LATCH open. Momentary press again to UNLATCH

Take pictures of visitors on your phone.

End call.

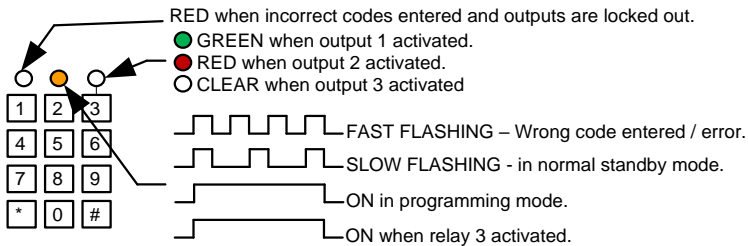Gate/door release 1. Momentary press to TRIGGER. Press and HOLD for 3 seconds to LATCH open. Momentary press again to UNLATCH

Keypad overview

This keypad has 3 outputs, all independent from the intercom/app relays. The diagram below shows the LED indicators which indicate programming and relay status information.

RED when incorrect codes entered and outputs are locked out.
GREEN when output 1 activated.
RED when output 2 activated.
CLEAR when output 3 activated

1	2	3
4	5	6
7	8	9
*	0	#

FAST FLASHING – Wrong code entered / error.
SLOW FLASHING - in normal standby mode.
ON in programming mode.
ON when relay 3 activated.

TIP: After power up, as a security precaution, the keypad cannot be programmed for 60 seconds. Once this time elapses, you may begin.
TIP: Flashing amber LED is normal standby mode!

Keypad Programming

Quick start guide

1) Enter programming mode (amber LED should be ON)

| 0 | 0 | 0 | 0 | * | * |

2) Enter a new user code...

| 1 | 0 | 2 | 0 | 0 | 0 | ? | ? | ? | ? | # |

3) Exit programming mode

| * | * |

4) Enter the new user code to check the relay clicks.

Tip: The engineer code must be the same length as user codes. If using a 6 digit engineers code, then user codes must also be 6 digits long etc.

Full Keypad programming

Enter programming mode..

| 0 | 0 | 0 | 0 | * | * |

The unit is now in programming mode. Amber LED on the keypad should remain permanently on. 0000 is the default programming passcode.

Exit programming mode..

| * | * |

The unit should exit programming mode and the amber LED should start flashing again.

Enter a new ENGINEER/INSTALLERS code…
Go into programming mode firstly then enter the following sequence…

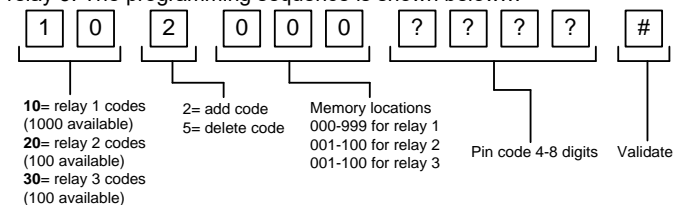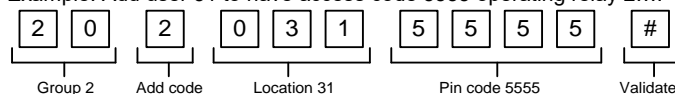| 0 | 1 | ? | ? | ? | ? | # |
| Location | | 4-8 digit code | | | | Validate |

Replace ???? with your new ENGINEERS code.
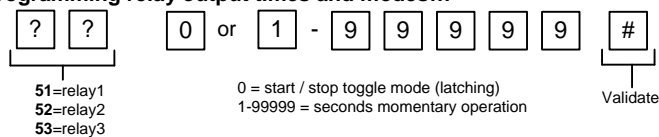
Enter or delete new user/Homeowner codes

There are 3 groups of user codes. Group 10 for relay 1, group 20 for relay 2, and group 30 for relay 3. The programming sequence is shown below…
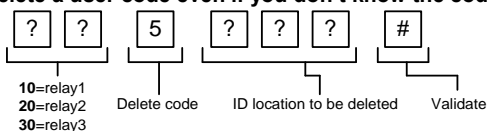
| 1 | 0 | | 2 | | 0 | 0 | 0 | | ? | ? | ? | ? | | # |

10= relay 1 codes (1000 available)
20= relay 2 codes (100 available)
30= relay 3 codes (100 available)

2= add code
5= delete code

Memory locations
000-999 for relay 1
001-100 for relay 2
001-100 for relay 3

Pin code 4-8 digits

Validate

Example: Add user 31 to have access code 5555 operating relay 2….

| 2 | 0 | | 2 | | 0 | 3 | 1 | | 5 | 5 | 5 | 5 | | # |

Group 2   Add code   Location 31   Pin code 5555   Validate

Programming relay output times and modes…

| ? | ? | | 0 | or | 1 | - | 9 | 9 | 9 | 9 | 9 | | # |

51=relay1
52=relay2
53=relay3

0 = start / stop toggle mode (latching)
1-99999 = seconds momentary operation

Validate

Delete a user code even if you don't know the code…

| ? | ? | | 5 | | ? | ? | ? | | # |

10=relay1
20=relay2
30=relay3

Delete code

ID location to be deleted

Validate

Delete an entire group of codes

| ? | ? | | 0 | 9 | 9 | 9 | | # |

10=relay1 group
20=relay2 group
30=relay3 group

Super delete code

Validate
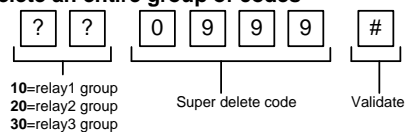
Programming super user codes…

A super user code can activate any of the 3 relays

| 0 | 2 | | ? | ? | ? | ? | | # |

Location   4-8 digit code   Validate
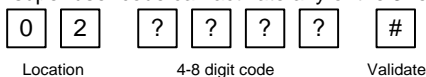
Restoring defaults

When in programming mode, you can enter the following sequence…

| 9 | 9 | 9 | 9 | | # |
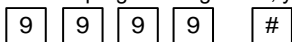
When the engineers/installers code is forgotten….
1) Wire a push button (or replicate with wire link) across the Egress terminal and (-)GND.
2) Switch off power for 1 minute.
3) Switch ON power.
4) during the first 60 seconds, press the EG button once to enable the function.
5) Enter the following code..

8	0	8	0		*	*

The keypad should now be in programming mode, ready to accept new data. Change the installers/engineers code now as per instructions above.

Using the keypad

Using the standard codes…
Once you have exited out of programming mode, simply enter the user code.

Using super user codes

?	?	?	?		#		1	Activate output 1

?	?	?	?		#		2	Activate output 2

?	?	?	?		#		3	Activate output 3

Troubleshooting

It is worth remembering that when you install this intercom, you are literally only supplying 25% of the overall system. The other 75% already exists with the customer. Namely the router, the wifi network, and the phones or devices.

Anything can go wrong with any part of that entire system. Therefore, it is a useful exercise to attempt to prove to the customer that the intercom hardware is working and operational before attempting to diagnose the root cause, especially when connected wirelessly to a network.

If the intercom is connected via wifi to the network, it is very useful to press and hold the code button on the board, then connect the phone DIRECTLY to the BELL wifi network (must be within wifi range of intercom). Open the app, and show the customer that when the phone is connected directly to the intercom, there is video and two way speech. The job is then to find out what part of the installation or overall system is causing the problem since the intercom hardware has been proven as operational.

We can say without doubt that when we do get hardware failures, the above process will not work and you will not get video and voice to the phone in a direct connection like thi

Below are the most common causes of problems with installs, starting with the most common first.

Problem/error	Symptoms caused	Solution
Wrong power cable (too thin) installed from 24v adaptor to the intercom, or power adaptor too far from intercom.	Delayed push notifications, video lag, voice problems, freezing, relays not opening the gate.	Change the power cable to specifications shown within this manual.

Additional user added incorrectly.	Can randomly display status "id already in use"	When an additional user was being added, the process was done incorrectly. Additional users MUST be added by the admin device first, with separate usernames created for each. The new usernames and passwords must be used by the new devices as shown in this manual to logon to the intercom.

Change History

Top version	Panel version	PCB version	Firmware version	IOS app version	Android app version
1	2	1.0	4.11.12.21.20171121	1	1

FCC warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

NOTE: 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 interferenceto 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 dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.