# Installation Manual

Installation

1) Before you install this equipment, please read this full manual. This manual assumes the installer will be a competent, qualified professional access control installation engineer, therefore warranty will be void if damage is caused by unqualified personell.

Speech Unit

4-5 feet minimum

Communication cable

Entrance Pillar

Side View

Remove screws

Optional keypad module

Hinge front door

Side View

70mm

Handset will click and lock onto 2 x raised head screws after connecting of wires.

Make connections for handset pig tail cables inside wall before fitting handset.
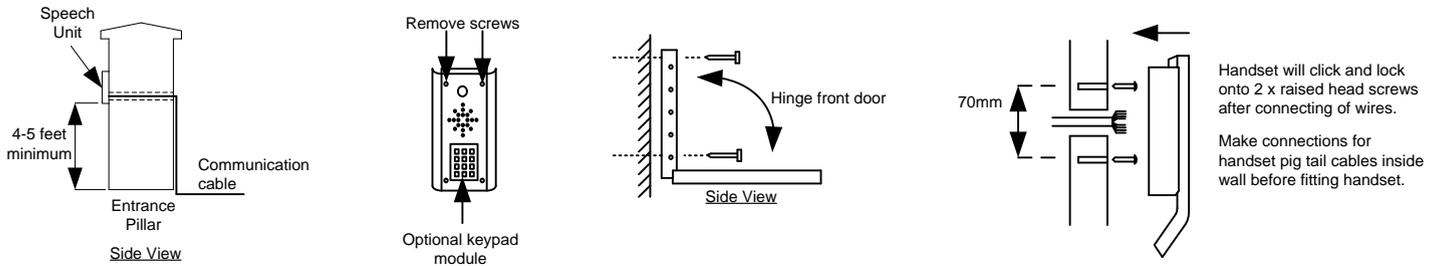
Wiring

2) Wiring can be configured in 2 ways. Firstly, for automatic gate entrances, it is useful to have the power supply at the gate. For longer distances than 150 meters, it is advisable to use 12v dc power source both at the gate and at the handset as shown.

SPEECH PANEL

Note: for long range applications, double up on power wires to reduce volt drop. Alternatively move power supply to this point. Keypad models will need separate power supply at gate/door in this case.

HANDSET

Power LED

Lock or gate & door release button

Internal call button (call other handsets)

+12v
0v
Audio
Audio
Switch
Switch

Recommend screened CAT5 or other twisted pair cable

Tamper N/C
INT Lock
O/P1 inhib
Sense
(-)GND
DU out
K or A

OUT2 Relay Select
N/C NO

OUT3
N/O
COM
N/C

+ -

egress
Data I/O
N/C
COM
N/O
N/C
COM
N/O

OUT1 OUT2

Connect an output to gate controller or electric lock

- +
12v d.c from PSU

To gate controller or electric lock. Volt free output.

Generic Notes:

Max 3 handsets can be connected in parallel connection.
Audio COM connections are not polarised, so they can be connected in any configuration.
Power connection polarity MUST be observed.

Cabling Tips:

Screened cable provides better audio performance over longer distances greater than 50 meters.
Solid conductors provide better audio performance over any distance.
Larger conductors = more distance.
Recommended minimum cable thickness = 24 AWG
Recommended maximum distance for install = 150 meters using appropriate cable.

Additional wiring tips for Locks

(Door locks should be fitted by competent company, in accordance with local electrical, fire and security regulatory standards)

DC Magnetic lock
(Break power to release lock)

Exit Button

C & N/O

eg in

GND

C & N/O

C & N/C

C & N/C

Emergency break glass

Recommend diode fitted here

Magnetic Lock

+
12v PSU
-
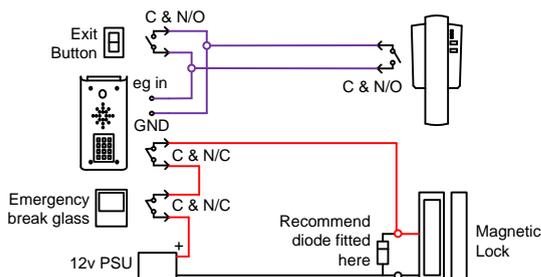
Note:
If non keypad version fitted, then EG in function will not be available.
Substitute this with a separate timer relay module.

AC or DC strike lock
(Switch on power to release lock)

Exit Button

C & N/O

eg in

GND

C & N/O

C & N/O

12v PSU
ac or dc
(depends on lock type)

Strike lock with mechanical / emergency override
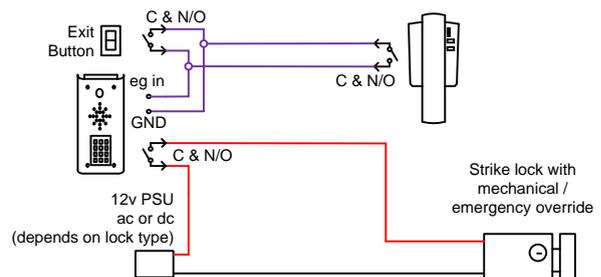
Note:
If non keypad version fitted, connect all N/O contacts in parallel with lock, so each device sends power to lock when activated.

Keypad Programming (only keypad models)

LED indicators

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

FAST FLASHING – Wrong code entered / error.

SLOW FLASHING - in normal standby mode.

ON in programming mode.

ON when relay 3 activated.
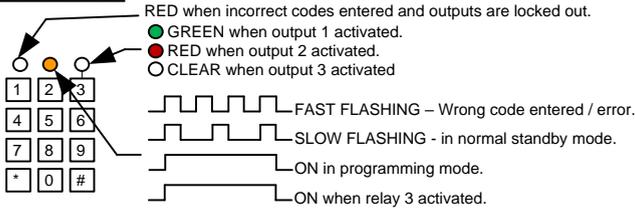
Note: Programming can only begin 60 seconds after power on.

Enter Programming mode

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

The unit is now in programming mode. Amber LED will remain ON. 0000 is default programmers code.
*Note: Pressing ** again will exit programming mode.*
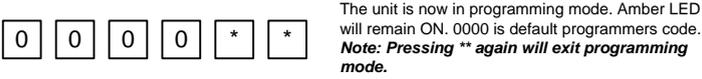
Enter new programmers code

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

Location   4-8 digit code   Validate
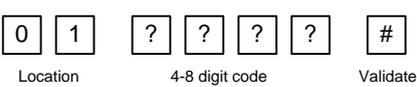
Record or Delete user codes

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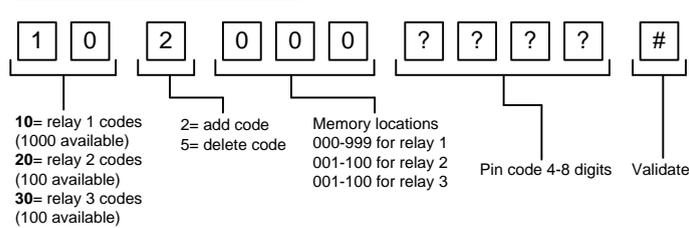
Example: Add user 31 to have access code 5555 operating relay 2….

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

Group 2   Add code   Location 31   Pin code 5555   Validate

Delete a code

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

10=relay1
20=relay2
30=relay3
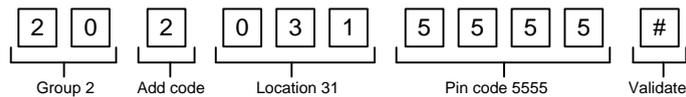
Delete code   ID location to be deleted   Validate
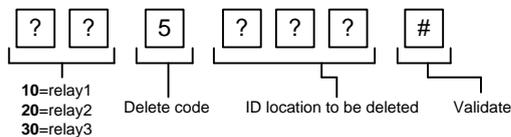
Delete all codes in a group

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

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

Super delete code   Validate
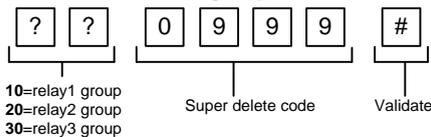
Programming Relay output times & modes

| ? | ? | | 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
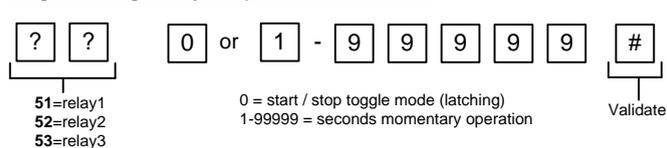
Programming SUPER user code

Super user code is an optional feature which allows the same code to operate outputs 1, 2 or 3.

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

Location   4-8 digit code   Validate

Using super user code

| ? | ? | ? | ? | | # | | 1 | Activate output 1

| ? | ? | ? | ? | | # | | 2 | Activate output 2

| ? | ? | ? | ? | | # | | 3 | Activate output 3
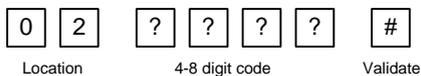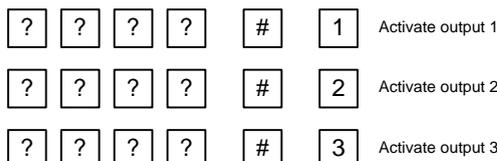
Using standard user code

To use standard code, simply enter the 4 digit code.
Note: Remember to exit programming mode with ** before testing user codes.

Fault finding & FAQs

Q. The door unit will not ring the handset.
-Check wiring again and ensure proper connections.
-Check cable distance is not excessive.
-Wire door unit and handset on a bench with 3 feet of cable. If this works, then check previous points again.

Q. The Keypad will not program properly.
-Restore default programming as per instructions and start again.
-Ensure keypad is powered locally, not taking power from the handset location.

Q. Interference can be heard on the call.
-Check proper cable has been used. Screened cable like CAT 5 is preferred.
-Check cable distance is not more than 150 meters.
-Check cable is not routed near sources of electromagnetic interference like power cables, communication wires etc.

Q. Illumination is dim or off on the speech panel.
-Check the wiring, and that the call point is powered locally for longer cable runs.