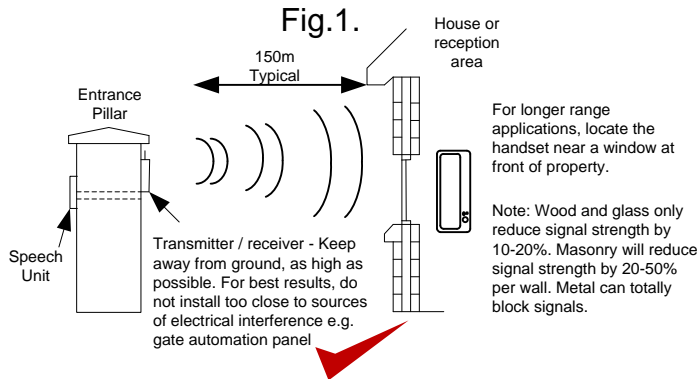# Installation Manual

for
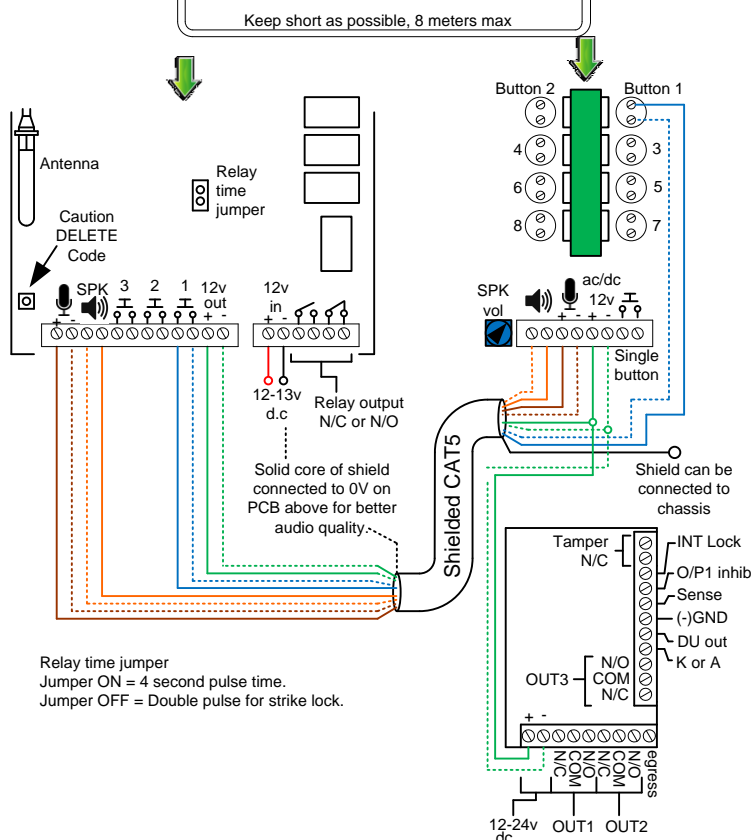## 702/AB & ABK Wireless Intercom System

Installation

Please read the entire instructions before installing.
Range test the system before installing items, or screwing items to walls, otherwise your refund value will be affected due to items being marked or not in new condition!

Fig.1.

150m Typical

House or reception area

Entrance Pillar

Speech Unit

Transmitter / receiver - Keep away from ground, as high as possible. For best results, do not install too close to sources of electrical interference e.g. gate automation panel

For longer range applications, locate the handset near a window at front of property.

Note: Wood and glass only reduce signal strength by 10-20%. Masonry will reduce signal strength by 20-50% per wall. Metal can totally block signals.

Wiring

Fig.2.

IMPORTANT: Do NOT drill holes in the top or near the top of the enclosure. Do NOT use silicone sealants!

Intercom Transmitter 702

Remove only the top screws for access. The front plate is hinged and will open downwards.

Keep short as possible, 8 meters max

Antenna

Relay time jumper

Caution DELETE Code

SPK 3 2 1 12v out

12v in

Relay output N/C or N/O

12-13v d.c

Solid core of shield connected to 0V on PCB above for better audio quality.

Relay time jumper
Jumper ON = 4 second pulse time.
Jumper OFF = Double pulse for strike lock.

Button 2   Button 1

4   3
6   5
8   7

SPK vol

ac/dc 12v

Single button

Shielded CAT5

Shield can be connected to chassis

Tamper N/C — INT Lock
O/P1 inhib
Sense
(-)GND
DU out
OUT3 N/O K or A
COM
N/C

OUT3

+ -

egress

N/C N/O COM
N/C N/O COM

12-24v dc   OUT1   OUT2

Note: For keypad models, ensure to connect both the relays on the keypad and the intercom transmitter to the lock or gate controller.

For magnetic locks, relays should be connected in series, normally closed. For strike locks, relays should be connected in parallel, normally open.

Handset

Power connection (5v D.C)

Volume control (at rear)

Door / gate release

Channel button
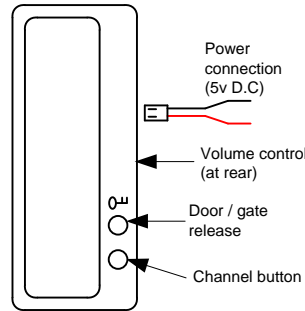
The handset can be desk top mounted or wall mounted, and comes complete with a wall mounting bracket.
Power is supplied by a 5v d.c. wall plug adaptor.
Volume control is behind the handset for ringing volume.

This system is capable of supporting up to 3 call buttons, and up to 3 handsets for each call button, totalling 9 handsets overall.

Notes

Once the system is installed and switched on, wait 30-60 seconds before testing. The handsets should already be coded for you.
Press a call button and check the handset rings. The call can be answered and pressing the lock release button should activate the relay on the door controller.
Should the system not operate at the required range, try re-locating the handset to a location which may have line of sight to the gate transmitter through a window. Alternatively, a high gain antenna can be purchased from your dealer to extend range.

Coding

Procedure 1 - Code handsets from scratch (for a button with no working handsets already coded)

Should you need to code a handset to the system, follow this procedure..
1) Clear the code from the new handset by shorting the pads on the back, near the power connections. The handset will bleep to confirm. Press and hold the appropriate corresponding push button on the speech panel for more than 5 seconds. Once you begin to hear bleeping, release the button.
2) Press and hold the unlock button on the handset until a bleep is heard and release.
3) Both devices should play a short melody if the procedure was successful.

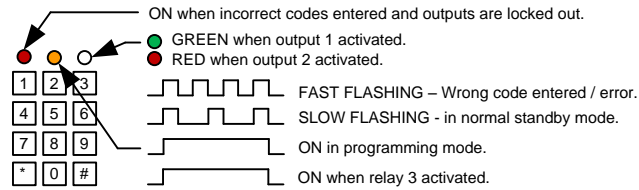**Procedure 2 - Code an additional handset in an apartment (where a handset already exists)**

1) Clear the code from the **new** handset by shorting the pads on the back, near the power connections. The handset will bleep to confirm.
2) Press and hold the unlock button on the **new** handset. After a few seconds you will hear a bleep. Keep holding until you hear a second and then a third, and release the button.
3) Press and hold the lock/unlock button on the **existing** working handset until the second bleep is heard.
4) Both handsets should bleep with a confirm tone if successful.
5) Now you need to tell the additional handset that it is a different handset number to the first handset. To do this, press and hold both buttons on the **new** handset until the first bleep is heard and release.
6) Then press the channel button once to select channel 2. Should you be adding a third handset, you would press the channel button again to select channel 3.
7) After a few seconds the procedure should be complete.
8) Press the call button on the intercom and check both handsets ring, and that each can be answered and voice is working.

Note: If the coding procedure is not done correctly or fails, and the system is not coded correctly, it is advised to completely delete all codes and start again from scratch to code in the handsets. The overall procedure to do this is as follows..
1) Press code button on the door / gate transmitter to delete the code on it.
2) Delete the code on all handsets by shorting the pads as described above.
3) Code the first handset for each button as shown in procedure 1.
4) Code any additional slave handsets in each apartment as per procedure 2 shown above.
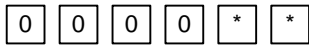
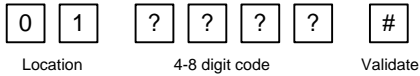# Keypad Programming (only ABK models)

LED indicators

ON when incorrect codes entered and outputs are locked out.
GREEN when output 1 activated.
RED when output 2 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.
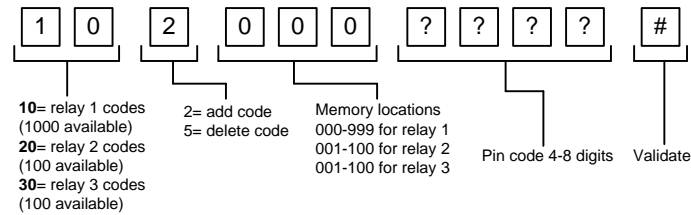
Enter Programming mode

| 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.*

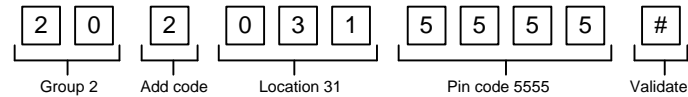## Enter new programmers code

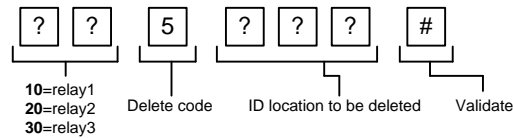| 0 | 1 | ? | ? | ? | ? | # |

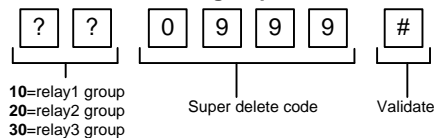Location — 4-8 digit code — Validate

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
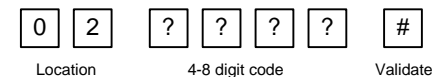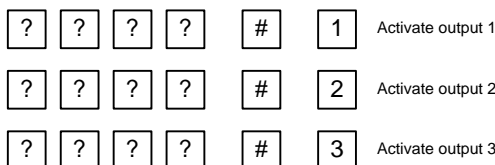
Validate
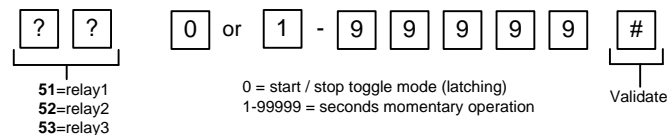
Programming SUPER user code

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.

Restoring defaults

While in programming mode, enter the following to delete all codes and settings apart from the Master code.. (this can take up to 2.5 minutes)...

| 9 | 9 | 9 | 9 | # |

When the master code is forgotten….

1) Wire a push button (or replicate with wire link) across the EG IN 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.

Additional keypad information – *Note: These features are not commonly used.*

EG IN (EGRESS INPUT)
Connect a push button between this terminal and (-)GND. When Egress button is pressed, output 1 will be activated for the programmed delay. Egress button is usually located inside a building and used as a push to exit.

K or A. (KEYPAD ACTIVE OUTPUT)
An NPN transistor open collector output. It switches to (-) ground for 10 seconds on each key touching. This can be used to turn on lights, CCTV camera, or buzzer to notify a guard. The rating of this output is: Ic max: 100mA sink, Vc max: 24VDC

DU OUT (DURESS OUTPUT)
An NPN transistor open collector output. It switches to (-) ground after the Duress Code is entered. Use it to trigger an alarm zone, or turn on a buzzer to notify a guard. Ic max: 100mA sink. Vc max: 24VDC

DOOR SENSE
N/C connected to (-)GND, to be connected to a normally closed door contact. It can be used to generate a door open alarm or door forced open alarm.

O/P 1 Inhibit
Normally open. When closed, this disables all codes for relay group 1 except super user and duress codes.

Interlock Output
NPN transistor output, open collector, max power 24v dc, 100mA sink. Used to operate a door in conjunction with another keypad, or prevent two doors being opened at the same time.

Tamper N/C
Normally closed tamper switch. This can be used in conjunction with a tamper switch on a box or enclosure to prevent tampering. This can be connected to an alarm system.