

601/602

Installation and User Guide



Compatible Equipment

625	Remote Keypad
9040	Internal Sounder
660	Speech Communicator

INTRODUCTION

The 601/602 Alarm Control Panel is a fully programmable six zone Alarm Control Panel designed specifically for domestic and small commercial installations.

A basic system comprises an Alarm Panel that houses the system electronics, power supply, battery, and speech communicator (if fitted). On the 601 a numeric keypad and row of Light Emitting Diodes (LEDS) allow the user and installer to operate the system. The 602 has no keypad or displays except for a Power LED. The user controls the system from a 625 remote keypad.

The 601/602 can work with all types of intruder alarm detectors.

In addition, the 601/602 control panels can take the **660 Speech Communicator**: a small digital recorder that can be fitted within the panel. The 660 can be programmed to call up to four telephone numbers in the event of an alarm, and deliver up to four recorded speech messages (refer to the 660 Installation and Programming Guide).

Remote Keypads. The 601/602 can support up to two 625 remote keypads. The keypads provide the same keys, displays and sounders as the main panel (see Figure 1). Note that you can disable the Personal Attack signal from the keypad during programming.

Note: The 602 is supplied complete with one 625 remote keypad.

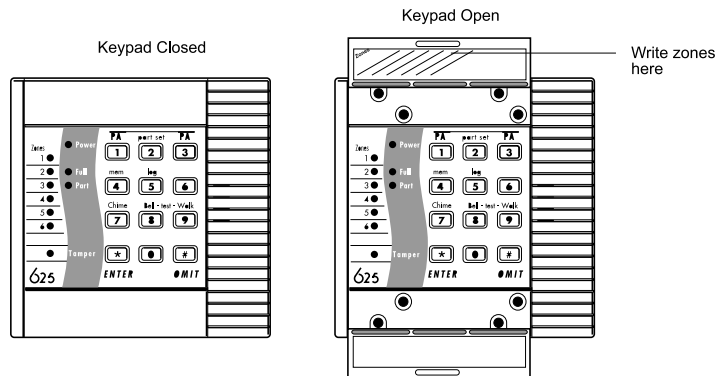


Fig 1. 625 Remote Keypad

Technical Specification

Zones	6 Fully programmable closed loop plus global anti-tamper.
Display	LED (on 601).
Keypads	601 On-board plus two 625 Remote keypads. 602 two remote keypads (one supplied).
Keyswitch	Full and part set keyswitch option.
Expansion	None.
Compliance	Security Standards: BS4737 Pt. 1: (Audibles only). EMC Standards: Products are tested to EN 50081-1 and EN 50082-1, and are CE marked accordingly.
Log	15 events.
Panel Siren	601 - Yes (80dB at 1m), 602 - not fitted.
Extn Sounder	1 x 9040 16 Ohm loudspeaker/sounder.
Battery	1.9 (2.1)Ah Lead acid gel type rechargeable.
12 volt power	Panel quiescent = 70mA. Keypad quiescent = 40mA.
Aux DC Power	230mA max at 12 V quiescent.
Dimensions	h x w x d = 212 x 212 x 68 mm.
Weight	1.2 Kg.
Communicator	PA + Burg + Open/Close outputs for 660 Speech Communicator.
Input	Line fault.
Outputs	Bell + Strobe (Negative applied (SAB)) giving a total of 500mA at 12V in alarm state. Transistorised OP1: programmable output for PIR Set Latch, Shock Sensor Reset, Internal alarm giving 150mA max. Armed and Ready LED outputs for use with keyswitch set.

Wiring Remote Keypads

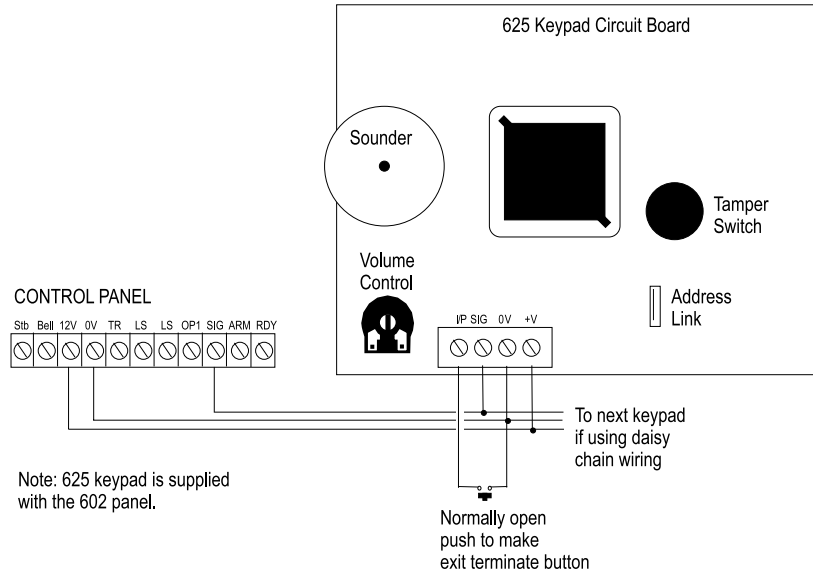


Figure 2. Connecting Remote Keypads

Notes: Wire the second keypad, if fitted, in parallel to the first. Connect the cable either at the first keypad (daisy chain) or at the panel (star). The maximum cable length is 100m.

Cut the address link in the second keypad to change its address.

If fitting an Exit Terminate button connect a Normally Open button to the terminals marked 0V and IP on the keypad.

Connecting Keyswitches

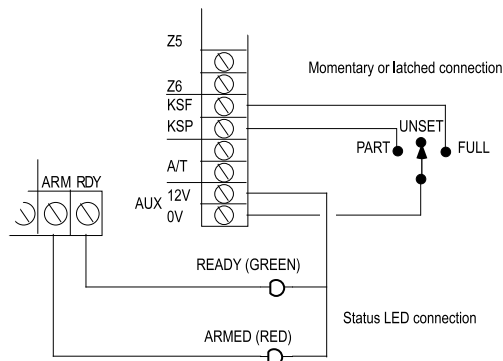


Figure 3. Keyswitch Connections

Fitting a Speech Communicator

Note: Disconnect the speech communicator wiring harness from the main pcb if you are NOT fitting a communicator.

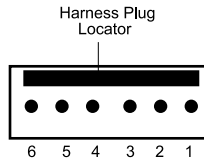


Figure 4. Speech Communicator Connections

Wire the communicator harness to the 660 as shown in the following table:

601	Function	Colour	660
Pin 1	PA output +ve removed in alarm.	Red	ST2
Pin 2	Line mon. input, 12V +ve applied for Line Fault.	Blue	LF
Pin 3	Burglar output +ve removed in alarm.	Yellow	ST3
Pin 4	Open/close output +ve removed in alarm.	Black	ST4
Pin 5	12V Supply.	Brown	12V
Pin 6	0V Supply.	Orange	0V

Programming

Initial Power Up

Before applying power to the panel make sure that:

- All used circuits are connected.
- The bell trigger is NOT connected to the external sounder.
- The battery or speech communicator (if fitted) is NOT connected.
- The global anti tamper circuit is closed and the tamper return (TR) is linked to 0V.

Note: The panel will not enter programming mode if the global anti tamper is open circuit, or if the negative tamper return is not present.

1. Close the 601 (or 602) lid or defeat the lid tamper.
2. Apply mains power to the 601/602.
The Power LED comes on.
3. Key in the default user code (1234) if there is an alarm. Ignore any LEDs that are lit at this stage.

4. **For a 601:**
 Key in 0 + ENTER + the engineer code (default 7890).
 The panel beeps once per second.
 Open panel lid or release the panel tamper.
 The panel beeps twice and all the LEDs flash.
You are now in Programming Mode.
5. **For a 602 with 625 keypad:**
 Key in 0 + ENTER + the engineer code (default 7890).
 The keypad beeps once per second.
 Open 602 end station lid or release the tamper.
 The 602 beeps twice if a 9040 sounder is fitted. (Keypad LEDs do not flash.)
You are now in programming mode.
6. Connect the battery and make any final wired connections (for example bell trigger to the external sounder, or communicator harness to main pcb).
7. Remember to remove any link between 0V and TR if you are fitting a SAB.

Programming Commands

To change the factory default program, use the commands listed in this section as follows:

1. Enter the command number.
2. Enter one or more digits to give the new program.
3. Press ENTER.
 The panel will give a double beep to show that it has accepted the command. If you enter the command incorrectly the panel gives a single tone.

Default Settings

When delivered from the factory, the panel is programmed as follows:

Zone 1, Entry/Exit, Chime, active in Part Set.	01 489
Zone 2, Entry Route, active in Part Set, Omit allowed.	02 39 OMIT
Zone 3, Normal Alarm, active in Part Set, Omit allowed.	03 19 OMIT
Zone 4, Normal Alarm, active in Part Set, Omit allowed.	04 19 OMIT
Zone 5, Normal Alarm, Omit allowed.	05 1 OMIT
Zone 6, Personal Attack.	06 5
User 1 code	1234

User 2 - 8 code
Duress code

0001 to 0007 * (inactive)
OMIT OMIT OMIT OMIT
(inactive)

* The default code for user two is "0001", for user 3 it is "0002" and so on up to user 8, which is "0007". Refer to the 601 User Guide for instructions on changing the user codes.

Engineer Program Commands

To change	Key in:	Then:	Notes	Default
Zones 1-6	01-06	0 ENTER	Not used	
Example: Select one zone type from 0 to 7. Choose which attributes you require from 8, 9 and OMIT. The press ENTER.		1 ENTER	Normal Alarm	
		2 ENTER	24 Hour Alarm	
		3 ENTER	Entry Route	
		4 ENTER	Entry/Exit	
		5 ENTER	PA	
		6 ENTER	Fire Alarm	
		7 ENTER	Technical Alarm	
		In addition:		
		8 ENTER	Chime	
		9 ENTER	Active in Part Set	
	OMIT ENTER	Omit Allowed		
Programmable Output 1	12	18 ENTER	PIR Set Latch (+ve applied when active)	✓
Example: To select Shock Sensor Reset key in 12 28 and then press ENTER.		28 ENTER	Shock Sensor Reset (+ve removed when active)	
		49 ENTER	Strobe (-ve switched)	
		59 ENTER	Internal Alarm (+ve applied when active)	
Engineer Access	20	Any 4 digit code		7890
Key Switch Operation	21	0 ENTER	Momentary	✓
		1 ENTER	Latched	
PA	30	0 ENTER	Audible Alarm	✓
		1 ENTER	Silent Alarm	
System Reset	31	0 ENTER	Customer Reset	✓
		1 ENTER	Engineer Reset	
2-Ply Entry Timer	32	0 ENTER	Disabled	✓
		1 ENTER	Enabled	
Keypad PA	33	0 ENTER	Disabled	
		1 ENTER	Enabled	✓
Set/Part Set Display	34	0 ENTER	LEDs ON when set and part set	
		1 ENTER	LEDs OFF when set and part set	✓
Exit Mode	35	0 ENTER	Timed or Terminated	✓
		1 ENTER	Final Door Set	

To change	Key in:	Then:	Notes	Default
Rearm	40	0 ENTER	Never	
		1 ENTER	Once	
		2 ENTER	Twice	
		3 ENTER	Three times	✓
		4 ENTER	Always	
External sounder delay	41	0 ENTER	Nil	✓
		1 ENTER	1.5 minutes	
		2 ENTER	3 minutes	
		3 ENTER	5 minutes	
		4 ENTER	10 minutes	
		5 ENTER	15 minutes	
Ext. sounder duration	42	0 ENTER	Nil	
		1 ENTER	1.5 minutes	
		2 ENTER	3 minutes	✓
		3 ENTER	5 minutes	
		4 ENTER	10 minutes	
		5 ENTER	15 minutes	
Entry Time	43	1 ENTER	1seconds	
		2 ENTER	10 seconds	
		3 ENTER	15 seconds	
		4 ENTER	20 seconds	✓
		5 ENTER	30 seconds	
		6 ENTER	60 seconds	
Exit Time	44	0 ENTER	Continuous	
		1 ENTER	1 seconds	
		2 ENTER	10 seconds	
		3 ENTER	15 seconds	
		4 ENTER	20 seconds	✓
		5 ENTER	30 seconds	
Part Set Entry/Exit	60	0 ENTER	Starts Entry Timer	✓
		1 ENTER	Instant Alarm	
Part Set Entry Route Zone Response	61	0 ENTER	As Entry Route	
		1 ENTER	Start Entry Timer	✓
Part Set Exit Mode	62	0 ENTER	As Full Set	✓
		1 ENTER	Silent Set	
		2 ENTER	Instant Set	
Part Set Alarm Response	63	0 ENTER	Local (No comms)	✓
		1 ENTER	Full	

Restoring Factory Default Settings (Command 98)

If you want to restore all the programming to the original factory defaults, then:

1. Key in 98 + ENTER.
The panel erases all programming the user or previous engineers have entered, and restores the original factory defaults.

Leaving Programming Mode (Command 99)

1. Close panel lid.
2. Key in 99 ENTER.
The panel bleeps twice and the Power LED glow steadily. The panel is now in user mode.

To Re-enter Programming Mode

1. Key in 0 + ENTER + (engineer access code)
The panel starts bleeping once per second.
2. Open the panel lid.
The panel bleeps twice and on the 601 all the LEDs flash. The panel is now in programming mode.

Restoring Default Engineer and User Codes

If you want to remove any programmed Engineer and User codes (perhaps to reuse the panel with another user) then:

1. Remove Mains supply.
2. Open 601/602 lid and remove Battery supply.

Note: Leave the lid open and make sure the Lid Tamper switch does not close, or this procedure will not work.

3. **On the 601:** hold down OMIT and 9 and reconnect battery supply.
4. **On the 602:** short together the two RST pins on the main pcb with a small screwdriver and reconnect battery supply. Remove the screwdriver after three seconds.
5. Close lid and key in 1234.
6. Follow normal programming procedure as described in "Initial Power Up".

Testing

Once the panel is installed, connected and programmed, there are several programming commands that can be used to test it while in Programming Mode. These are listed below (Press ENTER to stop any test.):

To Test	Key in:	Then:
Engineer Log	90	4 see earlier events. 5 to see more recent events. ENTER to quit log. (15 events max.)
External Sounder	91	ENTER to stop test.
Strobe	92	ENTER to stop test.
Internal Sounder	93	ENTER to stop test.
Output 1	95	ENTER to stop test.
Walk Test	97	ENTER to stop test.

Fault Finding

Power LED flashes continuously

- Mains supply has failed, panel operating from battery only.
- Check mains connection and fuse.

Sab will not stop ringing

- SAB not receiving power.
- Check 12V supply present.
- Check tamper switch on external sounder.
- Ensure cover on external sounder is secure.

Alarm activated, tamper light flashing rapidly after user code entered

- Check negative tamper return present.
- Check global anti tamper is closed circuit.
- Check lid tamper is properly closed.

Alarm activated, tamper light pulses every two seconds

- Check for telephone line failure.

After entering engineer code the sounder bleeps every second, but when lid tamper opened system will not enter into programming mode

- Check that the global anti-tamper terminals are closed circuit.
- Check the negative tamper return is present.
- If lid tamper is already open, close and open it again.

User Commands

Full Set/Unset	User code
Part Set	2 + ENTER + User code
Omit zone	User code + OMIT + zone number + (repeat OMIT and zone number for other zones to be omitted)
Chime On/Off	7 + ENTER + User code
Panic Alarm	1 + 3 together. Panel does not give any indication of alarm
Read Log	5 + Enter + User code press 4 to read earlier events press 6 to read later events
Change User code	4 + ENTER + User code + current User code + new User code
Walk Test	9 + ENTER + User code press ENTER to end test
Bell Test	8 + ENTER + User code

