

ESPRIT 629

**Control Panel/
Access Control
Keypad**



Installation Guide

Version 4.0

P ▲ R ▲ D O X
S E C U R I T Y S Y S T E M S

IM629 970129-0000

The versatile **Esprit 629** keypad is designed for installations requiring access control or a security activation device. It reports or generates an alarm following unauthorized entry/exit through a monitored door (in the absence of a required code entry or Paradoor detection signal), or supervise access in high security areas by reporting traffic through a monitored entrance. It can also be programmed to activate/deactivate any device or function that can be controlled by a security code. This can be anything from a computer network to a garage door.

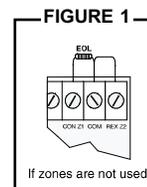
This fully programmable keypad also offers all of the features of a normal security keypad, and can be used to operate any Esprit control panel. It provides 2 onboard zones. When necessary, these two keypad operation modes can be combined. Several reporting options are available in the **629** which enhance its "access control" capabilities.

INSTALLATION AND OPERATION

(1) Stand-alone" mode: (no panel connection)

In "stand-alone" mode, the **629's** code-activated relay output can control door latches or any other low-voltage devices (max. 1.5A/30VDC), when used in combination with a door contact and Paradoor motion detector. It can also function as an "on/off" relay. The period of time a controlled door will remain open following code entry is programmable.

If you do not want to use the following "request for exit" or "door contact" zones, install a 1K ohm EOL resistor on the door contact zone and short the detector to common as shown in Figure 1.



"Access control":

The "request to exit" feature is provided by adding a motion detector with an NC relay output to the installation. Connect the NC relay output to the keypad's **REX** input.

If a Paradoo detector is used, set its detection time at 2-3 seconds. The Paradoo will monitor traffic through the protected area door and release the door lock or magnet to permit exit. The lock or magnet will remain energized as long as the detector's contact stays open. The **REX Z2** zone does not require an eol resistor.

To shorten "open door" time and to provide "open door warnings", install a door contact. Connect it to the **CON Z1** zone terminal with a 1k Ω eol resistor. Following code entry, the keypad timer will shut off as soon as the door contact closes (as long as the motion detector is not activated.) A warning beep can be programmed to sound every 120 seconds if a controlled door is left open (see "Program 7, key **[3]** "on" Door open warning beep enabled" on page 7, and, in the case of a panic alarm (access without code), all keys can be programmed to flash simultaneously (see "Program 7, key **[1]** "off" "Zone reports only"" on page 6 and "Program 8, key **[2]** "on", key **[3]** "off"." on page 9).

"Device activation":

In "device activation" mode, enter a code to activate the relay. Re-entering the code deactivates the relay. The **REX** input can be used in this mode. (Do not use "Device activation" mode when the keypad is connected to a control panel.)

(2) "Regular" keypad mode:

In "regular" mode, when the keypad is connected to an Esprit panel, it can program and activate all of the panel's security

features. If access control is not required, any reporting devices can be connected to the **629**'s two onboard zones but make the appropriate connections. Please note that the two zones are supervised. See Figure 1 on page 1.

Various reporting and panel display options are programmable, as explained in the Keypad Programming section of this manual.

Keypad/panel Connection

When connected to a control panel, the **629** keypad can simultaneously be used as an access control device. The **CON Z1** zone can be defined as a "**regular control panel**" zone, an "**access control**" zone or an "**access control panic**" zone. The keypad can also be programmed to send alarm activation signals when a controlled area is entered without the required access code, or generate a continuous "panic" alarm beep on the keypad (program #7, key **[1]** "off").

Keypad reset:

There are two ways to restore all keypad-programmable settings to factory default:

- 1) Press **[CLEAR]** and **[ENTER]** simultaneously for 2 seconds when powering up.
- 2) In programming mode, enter program #6 and press **[STAY]**.

All keypad default program settings will be reset. To find out about disabling keypad reset, see "Program "5":" on page 6.

KEYPAD PROGRAMMING:

To begin programming:

Press **[ENTER]** + programming code. (default 0000).The left row of

control keys and the [ENTER] key will flash, indicating you are in keypad programming mode. (Panel programming mode is indicated by a flashing [ENTER] key.) Program each code by pressing a one digit program key from 1 to 8, followed by the required value. To save your entry, press [ENTER]. Press [CLEAR] to return to the previous step without saving.

When you have programmed all the required data, press [ENTER] or [CLEAR] to exit programming mode.

Access codes:

The 629 accepts two programmable, 4-digit codes: a user code for device activation or access control and a programming code to program all keypad functions.

If the 629 is used alone, both codes can be the same but if the 629 is connected to a control panel, do not use the same codes. If they are identical, the system will be armed/disarmed each time the access/activation code is used.

PROGRAM "1 ":

Programming code: 4 digit code (default 0000)
(not for access control/device activation).
___/___/___/___

Example: to change programming code from 0000 to 1234:
Press [ENTER] + 0000 + [1] + 1234 + [ENTER]

PROGRAM "2":

User Code: Access control/device activation only
4 digit code (default 0000)
___/___/___/___

PROGRAM "3":

"Open door" timer

Enter a value from 00-99 seconds to set the required code-activated "door latch release" time. When a Paradoor motion detector is connected to the keypad, detection by the Paradoor will keep the door latch open even if the programmed time has elapsed. To avoid this, set the Paradoor timer for a shorter period than the time programmed on the keypad. If "00" is entered, the relay will be in device activation ("On/Off") mode. Entering a user code will activate the relay; re-entering the code will then deactivate it.

Timer programming

Enter value from 00 - 99 (seconds) (default 30 sec.)

Door latch stays unlocked for this period after code entry or Paradoor detection (00 = relay is set in device activation ("On/Off") mode***) ___/___ (seconds)

***Do not use the relay in "device activation" (on/off) mode when the 629 is connected to a control panel.

PROGRAM "5":

"Reset lock"

If this feature is enabled, the keypad cannot be reset to its default settings. If you lose or forget a new programming code when the "reset lock" is enabled, you will not be able to return to programming mode. In this case, return the keypad to Paradox Security Systems for programming code reset (there is a service charge for this.)

Enter 29 to enable lock, any other value to disable.
___/___

PROGRAM "6":

Keypad Reset: Resets keypad to default program settings. Press [STAY]
Keypad will not reset if "reset" lock is enabled (program #5).

PROGRAM "7":

Keypad options: Keypad Display and Panel Access
("key-select" programming) (default = "off")

KEYPAD DISPLAY AND PANEL ACCESS

In any of the following display modes, relay activation ("door open") is indicated by the flashing green led.

Program 7, key [1] "off" "Zone reports only"

In this mode, the keypad cannot arm/disarm or be used for control panel programming. It can only be used to report onboard zone activity to the panel. The red led indicates that the controlled door is locked, while the green led indicates that it is unlocked. If "access without code" is programmed to generate a panic alarm (program #8, key [2] "on"), all keys flash and an alarm beep sounds.

Program 7, key [1] "on" "Zone reports and panel operation"

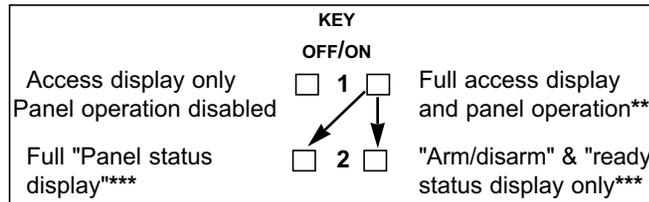
The keypad has full access to control panel features and functions, and can also report onboard zone activity to the panel. Flashing green led indicates relay is activated (door is open).

Program 7, key [2] "off" "Full panel status display"

All keys on the keypad are functional and full zone and panel status are displayed. Flashing green led indicates relay is activated (door is open). To use this function, Key [1] **MUST be ON**.

Program 7, key [2] "on" "Arm/disarm and access display"

Only "ready" and "armed" status are displayed, and only regular, "stay" and "away" arming can be carried out from the keypad. [BYP], [TRBL], [MEM] and [2ND] keys are deactivated. Flashing green led indicates relay is activated (door is open). To use this function, Key [1] **MUST be ON**.



*** Key [2]'s functions can only be selected when Key [1] is "on".

In any of these three display modes, relay activation ("door open") is indicated by the flashing green LED.

Program 7, key [3] "off" Door open warning beep disabled

Program 7, key [3] "on" Door open warning beep enabled

If key [3] is "on", and a controlled door is left open, the keypad will beep every 120 seconds.

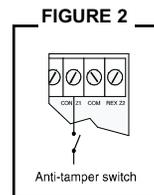


Keypad zones

The keypad has 2 onboard zones:

(1) a door contact zone and (2) a motion detector zone. By default, when control panel reporting is activated, the door contact zone is reported as zone 8 on the 727 control panel, and as Keypad 2 on "Series 8" control panels.

The motion detector zone is reported as Keypad 1 on "Series 8" panels. (The motion detector zone is not reported on the 727.) If your keypad is equipped with an anti-tamper switch, the anti-tamper is connected in series to the door contact zone (con z1). See Figure 2.



"Swap zones"

If necessary, these zone assignments can be reversed by activating the "swap zones" feature during keypad programming (Program #8, key [5] "on"). The door contact zone will then be reported as Keypad 1 on "Series 8" control panels. (It will not be reported on the 727.) The motion detector zone will be reported as Keypad 2 on "Series 8" control panels. This feature is useful when two keypads are connected to the same control panel, and only door contact (or only motion detector) zone information is to be sent to the panel.

"REX 2" reporting

"REX 2" reporting (detector zone signal transmission) must be activated if "open zone" signals are to be sent to the control panel from the detector zone. This feature is activated during programming by selecting program #8, key [4] "on".

"Door contact" zone definition/zone signal transmission options

There are 4 possibilities for door contact zone definition and

reporting options when con z1 reporting is enabled at program #8, key [1] "on". Select the required option by determining the "on/off" status of keys [2] and [3] at program #8.

Program 8, key [2] "off", key [3] "off".

(1) **Contact zone always reports to panel:** Zone signals will be sent to the panel whenever the door contact zone is opened. An access code does not have to be entered. All door contact zone activity is reported.

Program 8, key [2] "off", key [3] "on".

(2) **Access without code = zone report:** When access control is activated, and entry/exit takes place without code entry or detection from a Paradoor, (or if a door is left open after entry/exit delay expires) a zone report signal will be sent to the panel.

Program 8, key [2] "on", key [3] "off".

(3) **Access without code = Panic 1 report:** When access control is activated, and entry/exit takes place without the proper code or detection from a Paradoor, (or if a door is left open after entry/exit delay expires), a Panic Zone 1 signal can be sent to the control panel. All keys will flash and a panic alarm will be generated if access display is enabled at program #7, key [1] "off". Enter a valid access code to stop the flashing.

Program 8, key [2] "on", key [3] "on".

(3) **Access without code = Panic 1 report:** When access control is activated, and entry/exit takes place without the proper code or detection from a Paradoor, (or if a door is left open after entry/exit delay expires), a Panic Zone 1 signal can be sent to the control panel. All keys will flash and a panic alarm will be

generated if access display is enabled at program #7, key [1] "off". Enter a valid code to stop the flashing. (Whether or not an access code is used, all contact zone activity will be reported.)

Program "8":

Zone signal options

("key-select" programming) (default = "off")

TRANSMISSION OF ZONE SIGNALS TO PANEL			
KEY			
OFF/ON			
CON z1 zone reports disabled	off	<input type="checkbox"/> 1	<input type="checkbox"/> on
			CON z1 zone reports as per key [2] and [3] selection
		See Table A <input type="checkbox"/> 2	<input type="checkbox"/> See Table A
		See Table A <input type="checkbox"/> 3	<input type="checkbox"/> See Table A
REX z2 zone reports disabled	off	<input type="checkbox"/> 4	<input type="checkbox"/> on
			REX z2 zone reports enabled
"Normal" zone assignment	off	<input type="checkbox"/> 5	<input type="checkbox"/> on
			"Swap" zone assignment

TABLE A

Key [2]	Key [3]	
OFF	OFF	Contact zone always reports to panel (no panic zone reports)
OFF	ON	Access without code = zone report*** (no panic zone reports)
ON	OFF	Access without code = Panic 1 REPORT*** (no contact zone reports)
ON	ON	Access without code = Panic 1 REPORT*** (with contact zone reports)

*** All keys on the keypad flash if access display is activated (program #7, key [1] "off"). Enter valid access code to stop flashing.

WARRANTY

Warranty conditions may vary from country to country. Please consult your local dealer for complete warranty information. In all cases, the warranty does not cover malfunctions arising from installer error or failure to follow installation/operation instructions, nor does it apply to damages due to causes beyond the control of Paradox Security Systems, such as lightning, excessive voltage, mechanical shock or water damage.

LIABILITY

Under no circumstances shall Paradox Security Systems be held liable for any direct or indirect damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation, operation or failure of this product.

WARNING

This security system should undergo frequent testing. However, despite regular testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.