

1 QUICK START GUIDE

1.1 CHANGING THE PROGRAMMING OPTIONS

Default Installer PIN	012345
Default User PIN	1234

First you have to enter Programming mode.

Command	Key1	Key2	Key3	Key4	Key5	Key6	Key7	Key8	Key9
Enter Programming Mode			Installer Pin				*	0	#

When you have entered Programming mode you can begin to enter the following options to configure you Z14 or Z14R Security Energiser. Default Values are highlighted in grey.

Command	Key1	Key2	Keys 3 and 4			Key5
Change The Installer PIN 6 Digits	0	0	Enter the new 6 digit Installer PIN			#
High Power Mode Power Level	0	1	Enter the value in Hundreds of Volts Example: to set 8.2kV, use 82 for keys 3 and 4. Default is 85 (8.5kV)			#
Low Power Mode Power Level	0	2	Enter the value in Hundreds of Volts Example: to set 1.3kV, use 13 for keys 3 and 4. Default is 11 (1.1kV)			#

Command	Key1	Key2	Keys 3 and 4							Key5			
Return Fence Alarm Voltage For High Power Mode	0	3	Enter the value in Hundreds of Volts Example: to set 3.8kV, use 38 for keys 3 and 4. Default is 40 (4.0kV)							#			
Return Fence Alarm Voltage For Low Power Mode	0	5	Enter the value in Hundreds of Volts Example: to set 0.8V, use 08 for keys 3 and 4. Default is 05 (0.5kV)							#			
Bad/Missed Pulse Count Before Alarm Triggers	0	6	Enter the number of Missed Pulses Example: to set 14 counts, use 14 for keys 3 and 4. Default is 03							#			
Battery Alarm Voltage (olts). Alarm Value Shown, Reduced Power is 1V less	0	7	00	01	02	03	04	05	06	07	08	09	#
Siren On Time (S=Seconds, M=Minutes)	0	8	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	#
Siren Off Time (S=Seconds, M=Minutes)	0	9	10S	30S	1M	2M	3M	4M	5M	20M	45M	130M	#
Siren Cycles	1	0	00	01	02	03	04	05	06	07	08	09	#
			0	1	2	3	4	5	6	7	8	9	#

Command	Key1	Key2	Keys 3 and 4								Key5		
			00	01	02	03	04	05	06	07		08	09
Gate Entry/Exit Delay (S=Seconds, M=Minutes)	1	3	00	01	02	03	04	05	06	07	08	09	#
			0S	30S	1M	2M	3M	4M	5M	6M	7M	8M	
Chime Mode	1	4	01	02	03	04	05	06	07	08	09	#	
			None	Door Chime	Siren	Fence Alarm					Gate Beeps Plus Siren		
Combined Options 1 (add up the options you want. e.g. for Max Power and Limit output: 2 + 4 = 6 Therefore enter 06 for keys 3 and 4	1	6	+2	+4	+8	+16	+32						#
			Maximum Power at all times	Limits output to 2.5J per Zone	Enables IR Tamper.	Stop slaves on comms fail	Stop Energiser sending alarm memory						
Anti Bridging Threshold	1	7	Enter in the percentage difference required to trigger the Anti-Bridging alarm. e.g. if you require a 10% change in return voltage to trigger the alarm, enter 10 for keys 3 and 4. Default is 00 (Disabled)										#

Command	Key1	Key2	Keys 3 and 4								Key5		
			+1	+2	+4	+8	+16	+32	+64	+128			
Combined Options 2 (like Combined Options 1)	1	8	+1	+2	+4	+8	+16	+32	+64	+128	#		
			Siren Chirp on Arm	Enable Entry Exit Gate	4800 Baud	9600 Baud	Equine Low Power	Equine Disarm	Low Power to Bite	Bite to Low Power			
Auto Re-arm Time	2	0	00	01	02	03	04	05	06	07	08	09	#
			0S	30S	1M	2M	3M	4M	5M	6M	7M	D	
S=Seconds, M = Minutes, D=Disabled			Options Explained under "1.1.1 Relay Functions" Default is 08										
Relay 1	2	1	Options Explained under "1.1.1 Relay Functions" Default is 09										
Relay 2	2	2	Options Explained under "1.1.1 Relay Functions" Default is 00										
Relay 3 (Z14R only)	2	3	Options Explained under "1.1.1 Relay Functions" Default is 02										
Relay 4 (Z14R only)	2	4	Options Explained under "1.1.1 Relay Functions" Default is 07										
Relay 5 (Z14R only)	2	5	Options Explained under "1.1.1 Relay Functions" Default is 07										
Group Mode	2	6	00	01	02	etc	15	#					
			No Group	Master	Slave 1	Slave 14							
Input 1	2	7	Options Explained under " " Default is (Momentary Arm)										
Input 2	2	8	Options Explained under " " Default is 06 (N/O Gate 1)										
Exit Programming Mode	*	#											

1.1.1 Relay Functions

The table below is for use for the relay programming options mentioned in the table on the previous page.

Keys 3 and 4	Function	Description
00	Fence	Triggers when Zone 1 is Armed and Return Voltage is below the Threshold Voltage
01	Fence or Off	Triggers when Zone 1 is Disarmed or Return Voltage is below the Threshold Voltage
02	Armed	Zone 1 is Armed
06	Fence Bi-Polar	Triggers when energiser is Armed and the fence Return Voltage on either Bi-Polar return line has fallen below the Threshold Voltage
07	General	Triggers on AC Fail, Tamper, Low Battery/Bad Battery, Gate Alarm or Internal error. Latched (internal errors only)
08	Siren	Triggers on Fence Alarm, Gate or Tamper. Will time out after the Siren Time Out time. Latched
09	Strobe	Triggers on Fence alarm, Gate or Tamper. Only turns off on Energiser Disarm. Latched
10	AC Fail	Triggers on AC Fail
11	Low/Bad Battery	Triggers on Low or Bad Battery
12	Tamper	Triggers when the case has been opened and J3 has been fitted (Z14R only)
14	Gate	Triggers on Gate Alarm
15	Siren Caused by Gate	behaves like siren, only for Gate Alarms
16	Armed - Low Power Mode	Triggers when Armed in Low Power mode

Keys 3 and 4	Function	Description
17	Group Armed	Triggers when group is Armed. Only configurable on group master.
18	Group general	Triggers on group general Alarm. Only configurable on group master.
20	Host Control	This Relay is completely controlled from a Host system such as Perimeter Patrol or a Keypad. If the Host system is disconnected from the Energiser for more than 30 seconds, the Relay will automatically change to the Alarm State
21	Host Control - Not Fail Safe	This Relay is completely controlled from a Host system such as Perimeter Patrol or a Keypad. If the Host system is disconnected then the Relay will maintain its current state until the Host re-connects and requests the relay to change state.

Key3	Input Trigger	Key4	Input Function
0	Normally Open (Active when Closed)	0	Arm when Active / Disarm otherwise
1	Normally Closed (Active when Open)	1	Arm when Active / Disarm otherwise
2	Momentary Toggle (Toggle between states)	2	N/A
3	NO Pulse Extend (Extend a short Close signal by 3 seconds)	3	Low Power when Active / High Power otherwise. Requires Energiser to be Armed
4	NC Pulse Extend (Extend a short Open signal by 3 seconds)	4	Low Power when Active / High Power otherwise. Requires Energiser to be Armed
		5	N/A
		6	Gate is Open when Active / Closed otherwise
		7	N/A
		8	Tamper Alarm triggered when Active
		9	Pass Through input signal to other device

1.2 JUMPERS

Jumpers quickly allow you to turn on and off different features, or reset the device to defaults. For more information on how to use the configuration jumpers and what each one does refer to “7.4 Jumpers” on page 38.

JUMPER	FUNCTION
J3 (Z14)	Inhibit AC fail error.
J3(Z14R)	Tamper disable.
J4	Factory default jumper Off to return programmable options to factory defaults on power up.
J5, J6 & J7	Supplies +12V to the Common terminal of Relay 3, 4, 5.

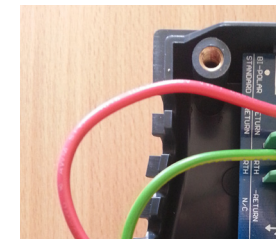


Jumpers located on the top right hand side of the board

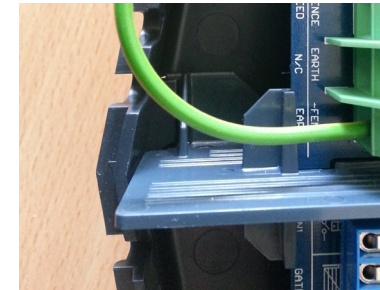
1.3 QUICK TEST OF CONFIGURED UNIT

Now that the Z14/R is configured to your fences requirements, it is a good idea to test the configuration before connecting the Z-Series energiser to a fence. The reason for this is that you could get spurious results if you test on the final fence and you will never be certain whether the issue lies with the fence, the Z-Series energiser, or the configuration of the unit itself.

To test your unit it is best to connect your Z14/R with a test fence, this is done by connecting cables as shown in the picture below.



Power the Z14/R and then Arm it. The unit should begin pulsing and not show any alarms. Disarm the Z14/R and remove the fence cable as shown in the picture below.



Arm the Z14/R once again, after 3 pulses (unless you configured it otherwise) the unit should go into alarm as the fence will appear to be cut. Check that any sirens, strobes or relays correctly activate as you expect.

If your site consists of multiple Z-series test each energiser one at a time as shown in the above photographs. Following that each energiser should be assigned a unique group ID with only one Z-Series device as the master unit (For more information see “13 Appendix A: Group Simultaneous Pulse Feature” on page 92). After that each Z-Series device can be connected together via the keypad bus and tested using group Arm and Disarm commands, they should all pulse in unison when armed.



By disconnecting each Z-Series Energiser in turn from the keypad bus (shown in the above diagram) you can check to see how each Z-Series device behaves under comms fail conditions. This way, you can test to see that the relays have been configured correctly for comms fail. Once you are satisfied that each Z-Series device is configured correctly you can begin to wire them to the real fence.

1.4 CONNECTING YOUR Z14/R TO THE FENCE

This is covered under “5.3 Examples of Fence (High Voltage) Wiring Diagrams” on page 30. In depth installation instructions begin on page 28. After the Z14/R has been wired up you can begin to protect your perimeter.

1.5 MOST FREQUENTLY USED LCD KEYPAD COMMANDS

For a full list of all keypad commands please see “10.8 Summary Of Keypad Functions” on page 68.

Default Installer PIN	012345
Default User PIN	1234

First you need to connect the Z-Series LCD keypad to the Z-Series device, for more information refer to “10.3.1 Wiring up your Z-Series LCD Keypad” on page 61. Once you have a keypad connected you can refer to the table below to control the Z-Series device.

Command	Key1	Key2	Key3	Key4	Key5	Key6	Key7	Key8	Key9
Arm/Disarm		User PIN			#				
Silence alarm	1	4	7	0	#				
Enter Programming Mode		Installer PIN							
Exit Programming Mode	*	#							
Arm All Zones		User PIN			*	1	0	#	
Arm Specific Zone (up to Zone 15)		User PIN			*	1	Zone Number		#
Disarm all Zones		User PIN			*	2	0	#	
Disarm Specific Zone (up to Zone 15)		User PIN			*	2	Zone Number		#
Clear alarm memory	*	1	#						