

## INTERPRETING YOUR HQ

1. The HQ is a mobile receiver that monitors 1 to 8 Roboguards.
2. The HQ has 4 Zone lights. Each Zone can report on 2 Roboguards. A Green Zone light identifies Active Zones. Each Zone has a button to activate or de-activate the Zone.
3. The HQ has 2 'monitor' lights, Tamper and Trouble. These will report on the status or health of every Roboguard.
4. Turn your HQ upside-down – there are two holes in the casing.
  - A. One hole towards the front of the HQ through which you can see a Red light – indicates your HQ is receiving Robo signals, and when connected to the Charger, a Green light as well – indicating the charger is correctly connected.
  - B. Through the other hole you can adjust the volume of the speaker with a small screwdriver. Default setting is full.
5. Active Zones are indicated by a solid green light. Press and release the zone button to turn the zone OFF – no light showing, press and release the zone button to turn the zone ON – green light showing. If no light comes on there is no Roboguard in that zone.
6. **GREEN ZONE LIGHT FLASHING:** Indicates intruder – the Roboguard(s) connected to that zone has been triggered. The flashing light is merely a visual indicator that the zone has been triggered and does not effect the operation of the system.
  - A. To re-set the light to solid green – press the zone button once to turn it OFF, and once again to turn it ON to solid green.
  - B. If the Roboguard is connected in Mode B, re-setting as above will cause the HQ to emit a short low tone bark.
7. **RED TAMPER LIGHT FLASHING:** Indicates the cover of your Roboguard has been removed. As this happens your HQ will emit 10 beeps and the tamper light will come on.
  - A. To see which Roboguard has been tampered with, press and release the Tamper Button.
  - B. The Tamper Light will burn solid red and the zone light of the Roboguard will be green (solid green for Mode A Roboguards, and flashing green for Mode B Roboguards).
  - C. Press and release the green light button, it will go out, press and release the red light button to re-set.
  - D. Check the Roboguard that has been tampered with.
  - E. A false tamper can be caused by a faulty loom or tamper switch and can be diagnosed if the guard goes into 'set up' mode (starts

beeping) when the signal is sent. Also check that the battery cover is correctly seated.

8. **RED TROUBLE LIGHT FLASHING:** Indicates your HQ is having trouble communicating with one or more Roboguards. The Roboguard sends an **'auto-test' radio signal** to the HQ every 20 minutes. From this silent test, the HQ is able to determine the radio signal strength and battery voltage of each guard. If either is low the HQ will indicate this by flashing the red 'Trouble' light. To establish which Roboguard is reporting the trouble condition and to reset the light, you must do the following:
- A. Press and release the Trouble Button.
  - B. The Trouble Light will burn solid red and the zone light of the Roboguard will be green (solid green for Mode A Roboguards, and flashing green for Mode B Roboguards).
  - C. Press and release the green light button, it will go out, press and release the red light button to re-set.
  - D. If your system is new, place the HQ in a different location to ensure it has good communication with the Roboguard.
  - E. If your system is a few years old, and the problem persists, change the batteries in the Trouble Roboguard.
  - F. A faulty TX PIR or CPU PIR can cause the trouble light to come on. To diagnose, switch the 'offending' TX PIR with another one from the existing installation to see if the problem persists with the same Roboguard or follows the TX to another Roboguard. Replace the 'offending' CPU or TX with a known working product. Always keep a spare set of known working PIR's (or a Demo Roboguard) with you for diagnostics.
  - G. If all else fails, it is possible you have a 'low range' HQ. Always keep a known, working HQ with you for diagnostics.

## **INSTALLER SECTION:**

### **Setting up the HQ for the 1<sup>st</sup> Time**

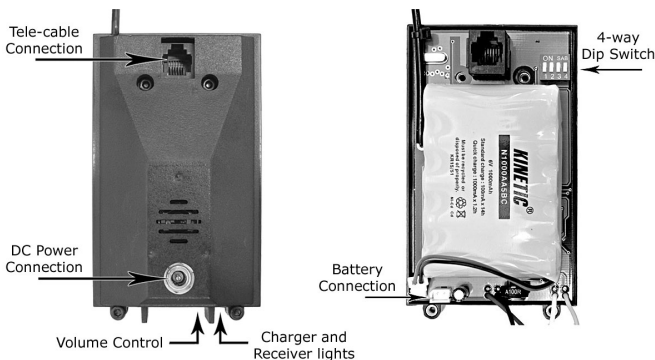
The HQ has 5 outputs, allowing a connection to a siren, to your alarm panel or other devices such as a cell module. These outputs are accessed via the 'Tele-cable' supplied.

The HQ is remote ready and its outputs can be remotely activated or de-activated using a Roboguard Remote.

## To program guards into the HQ, follow these steps:

1. Connect the Battery: **NOTE:** Your dealer may have done this already. This is also a good time to set your output ports – see program mode D.
2. Using the Allen key supplied, remove the 4 securing screws at the back of the HQ, locate the battery wire and clip it into the 2 pin box located on the bottom left of the PC board, (see picture below), close the back cover and replace the screws. Connect your HQ to the 12-Volt charger supplied and let it charge for 24 hrs to ensure long battery life.
3. **Your HQ is now in Standby Mode.** You can now program your Roboguards into the desired Zones on the HQ.
4. Program Modes A and B can each accept 4 Roboguards. If you have more than 4 Roboguards you will have to use both modes, if you have 4 or less then you can choose to use Mode A and/or Mode B.

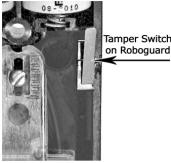
**NOTE: Roboguards that share a Zone in Mode A and Mode B will both be turned on and off together, so ensure that they are positioned adjacent to each other in your garden.**



### PROGRAM MODE A: (FIRST 4 ROBOGUARDS)

1. Press and hold the Tamper Button until you **hear a beep** then release. The Tamper light will burn solid red.

2. Press and release the desired Zone button on the HQ, it will burn solid green.



3. Press and release the Tamper Switch on your Roboguard. The Roboguard will sound 4 beeps and transmit a tamper signal, your HQ will emit 10 beeps, and all the lights will flash to indicate successful programming.
4. Press any Zone Button to return to Standby Mode (or the HQ will time-out in 20 seconds).
5. To program the next Roboguard, press and hold the HQ Tamper Button until you **hear a beep**. The Tamper light will burn solid red and the previously programmed Roboguard Zone (s) will burn solid green. Press and release the desired Zone button on the HQ, it will burn solid green and the other green lights will turn off.
6. Press and release the Tamper Switch on your Roboguard. The Roboguard will transmit a tamper signal, your HQ will emit 10 beeps, and all the lights will flash. Press any Zone Button to return to Standby Mode or let the HQ time-out.
- 7. When your Roboguard is triggered (intruder) in Mode A:**
  - A. The HQ will beep the corresponding number of times as the Zone. The HQ will beep once for Zone 1, twice for zone 2 and so on.
  - B. The green Zone light will start to flash for visual identification of the triggered Roboguard. The green Zone light will continue to flash until it is re-set. This does not affect the operation of your system.
  - c. To reset the flashing Zone light to solid green – press the Zone button twice. (Once to turn the Zone OFF –disarm, once to turn the Zone back ON – re-arm.)

## **PROGRAM MODE B: (ADDITIONAL 4 ROBOGUARDS)**

1. Press and hold the Trouble Button until you **hear a beep** then release. The Trouble light will burn solid red. (Press Tamper to exit early and effect no changes)
2. Press and release the desired Zone button on the HQ, it will burn solid green.
3. Press and release the Tamper Switch on your Roboguard. The Roboguard will transmit a tamper signal, your HQ will emit 10 beeps, and all the lights will flash to indicate successful programming.
4. Press any Zone Button to return to Standby Mode (or the HQ will time-out in 20 seconds).

5. To program the next Roboguard, press and hold the Trouble Button until you **hear a beep**. The Trouble light will burn solid red and the previously programmed Roboguard Zone (s) will burn solid green.
6. Press and release the desired Zone button on the HQ, it will burn solid green and the other green lights will turn off.
7. Press and release the Tamper Switch on your Roboguard and continue as above.

### **8. When your Roboguard is triggered (intruder) in Mode B:**

- A. The HQ will beep the corresponding number of times as the Zone followed by a low tone.
- B. The green Zone light will start to flash for visual identification of the triggered Roboguard. The green Zone light will continue to flash until it is re-set. This does not affect the operation of your system.
- C. To reset the flashing Zone light to solid green – press the Zone button twice. (Once to turn the Zone off –disarm, once to turn the Zone back on – re-arm.)

**To Remove a Roboguard from a Zone:** Enter program mode A or B, select the Zone to be removed and press the **Trouble** button.

- **Note:** When re-setting a Zone that has been triggered in Mode B the HQ will emit a short low-tone bark. This allows you to hear the difference between a Mode A trigger and a Mode B trigger.

## **PROGRAM MODE C: REMOTE CONTROL PROGRAMMING**

**Remote Programming:** The remote is only required if you want to use the arm/disarm, panic and silent panic functions. As a default setting, the HQ will trigger its own siren and/or another alarm panel via the 'Tele-cable' provided, for every intruder and/or tamper signal received. A remote programmed in can remotely activate/de-activate these triggers (except siren on a tamper).



### **To enter Remote Programming Mode:**

Press and hold both Tamper and Trouble Buttons until you hear a beep. Release the buttons, both Tamper and Trouble Lights will be burning solid red. Any

function already programmed will burn solid green for the activated zones. Every zone in this mode has a different function:

**Zone 1: ARM/DISARM** – will only activate/de-activate the connection to the siren or panel.

**Zone 2: PANIC** – will activate the siren and a panel connection.

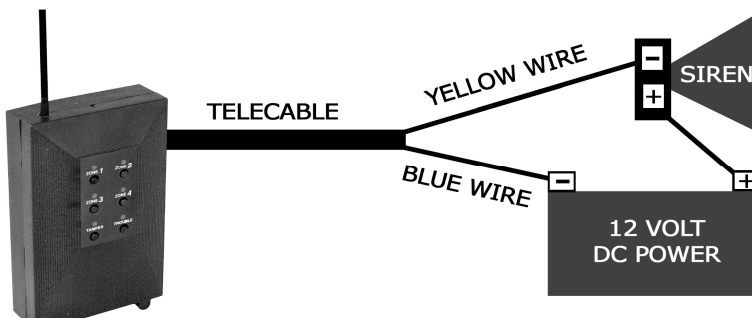
**Zone 3: SILENT PANIC** – no siren, panel connection only.

**Zone 4: AUXILLARY** - HQ emits a series of tones, used as a summons for Medical, Doorbell or for testing remotes.

Select the appropriate zone. The zone light will burn solid green. Press and hold the button on your remote that you wish to use for this function. Any button on the remote can be used (we recommend white - arm/disarm, red- panic). The HQ will emit 10 beeps and all the lights will flash. Press any zone to revert to Standby Mode or let the HQ time out. Repeat the steps above to add more remote functions. **To remove a button programmed in:** Enter C programming mode, select the zone, and press trouble.

- On Remote ARM both Trouble and Tamper will burn solid RED.
  - Whichever Zones were ON/FLASHING on the HQ (green lights) will be armed. Zones that were OFF will not be included. To turn zones ON or OFF, the HQ must be disarmed.
  - Arming the HQ - your Siren will emit 1 Bark.
  - Disarming the HQ - your siren will emit 2 Barks.
  - If triggered, disarming the HQ - your siren will emit 3 Barks.
  - If the siren is running it can be turned off with the arm/disarm button on your remote, or by pushing any Zone button on the HQ.
- Your system is still active** and the siren will continue to be triggered by active Roboguards until disarmed by remote.
- The siren will trigger a maximum of 5 times, until re-set.
  - An LED UNIT (visual indicator) is available (sold separately) for switching an external LED-light ON/OFF to indicate alarm status.

### SIREN CONNECTION



## PROGRAM MODE D: OUTPUT PORT PROGRAMMING

The HQ can be connected to your alarm panel using the 'Tele-cable' provided with your purchase. You can change the HQ outputs to the panel depending on the number of panel zones available to you.

Output Format 1: Monitor all Roboguards separately.

Output Format 2: All Roboguards report to a single panel zone.

Both Output Formats can be selected to trigger either NORMALLY OPEN or NORMALLY CLOSED circuits.

### To enter the programming mode:

1. Disconnect 12Volt power and the battery after opening the HQ.
2. Hold down both the Tamper and Trouble buttons and connect the 12Volt power supply until you hear a beep. Release the buttons. Both red lights will flash and the default Setting 3, ON.
3. Select a Setting 1,2,3,4 from the two tables.
4. Press and release the Tamper button to accept. HQ will beep 10 times and all the lights will flash. Reconnect the battery and replace the cover.

OUTPUT FORMAT 1			
	Setting 1= N/O	Setting 3 = N/C (Default)	
<b>White</b>	Zone 1		
<b>Black</b>		Zone 2	
<b>Red</b>			Zone 3
<b>Green</b>			Zone 4

OUTPUT FORMAT 2			
	Setting 2= N/O	Setting 4 = N/C	
<b>White</b>	Zone1234		
<b>Black</b>		Tamper	
<b>Red</b>			Trouble
<b>Green</b>			Panic/Silent

The HQ output wires (**white to green**) use transistors rated at a maximum of 40mA which is sufficient to switch a relay, timer board or alarm panel. For most alarm panel connections (usually N/C), the HQ zone wire is connected through the in-line resistor of the spare panel zone. **The blue is common and should always be connected to the battery –VE or common** of anything that has its own power source.

To check the switching put your multi-meter on Ohms, and measure the resistance between ground (blue wire) and the desired wire (white

etc). The resistance should change from 0ohm N/C to open circuit N/O or vice-versa. The **yellow** wire is always N/O, rated at 1Amp and is connected to the siren -ve (generally about 12 Watt, siren positive to external power).

### **Optional Features: (OFF = Default)**

There is a 4-way DIP switch on the inside of the HQ that provides you with the following optional settings:

**Switch 1: ON** = 3min, **OFF** = 30sec. (**Timing** on the siren wire)

**Switch 2: ON** = Future use, **OFF** = at all times

**Switch 3: ON** = Future use, **OFF** = at all times

**Switch 4: ON** = **entry delay** of 30sec, **exit delay** of 1min 10sec allowing one to exit the property. Only works with remote arm/disarm. When arming the HQ a regular beep will be sound on the speaker followed by a siren bark to indicate armed. If the Remote arm button is pressed for a second time the HQ will arm instantly.

On entry, if a Roboguard is triggered the speaker will beep, but after 30 sec the siren and output switches will be triggered if not disarmed.

### **Additional Info:**

If the HQ is connected to a siren via the yellow wire it will always trigger the siren for Tamper, whether the HQ is armed or not.

For siren connections longer than 10 metres use a relay to drive the siren.

To avoid the 5-trigger limit on the yellow wire, set your HQ to Setting 2, output format 2. Connect the white wire to a timer relay to drive the siren every time intruder is triggered. To be able to hear the unit arm and disarm via the siren bark, the yellow wire should be connected to the output side of the timer relay.

Never put your HQ anywhere near a 'Remote Blaster' (normally used to change DSTV channels from the bedroom). These items have a large area of electro-magnetic interference around them and they can prevent communication with some or all roboguards.

Always carry a known, working HQ with you to diagnose problems.