

RoboGuard HQ Manual

Mobile Headquarters

HQ

INTRODUCTION:

The HQ is an 8 zone decoder panel specifically designed to alert the end user of an intruder that has been detected by a Roboguard. The HQ also functions as a complete security system with a Roboguard remote transmitter.

- The HQ can monitor eight Roboguards with individual intruder detected, tamper detect and supervision LED's together with audible warning sounds.
- The HQ has five output switches to connect to other devices, one that can switch 1AMP the other four, 40ma. [siren, cell module, lights, burglar alarm, radio transmitter]
- The HQ also incorporates remote arming, disarming, panic and auxiliary via the Roboguard four button pendant transmitter.
- The HQ functions off its resident NiMH 6v battery and has fifty hours of autonomy with a twenty five hour charge cycle.
- Incorporated with the HQ is the battery charger, a removable cable for the output switches and an Allan key to disassemble.
- The HQ can monitor other devices via the Roboguard universal transmitter which will "mimic" the Roboguard (electric fence, burglar alarm, and other types of sensor).
- With the on board UHF receiver and resident speaker the mobile HQ is extremely flexible and can be used in many applications, it is in fact a complete and comprehensive security system.

OPERATION

Make sure your battery is connected (open the HQ with the allan key supplied) and connect it; then plug the charger in and charge the battery for 25 hours. This first charge cycle is very important for the lifespan of your battery.

Intruder

The HQ monitor eight Roboguards, they are divided into A, zone 1 to 4 and B, zone 1 to 4. If an intruder was detected in A, 1 to 4, the corresponding LED will flash and the speaker will beep the number of the zone i.e.: zone one, one beep, zone three, three beeps etc. If an intruder was detected in B, 1 to 4 the corresponding LED will flash and beep the number of the zone, followed by a low B tone indicating a B Zone. Once an intruder signal is received and the corresponding LED starts flashing to visually indicate this (as one may not be absolutely sure of the zone from the audible warning tones), A and B zones can be differentiated by pushing and releasing that zone button, an A zone will reset to solid (on) silently and a B zone will make a low soft tone.

Turning off zones

The zone LED's in operation will illuminate when the corresponding zone button is pushed. Intruder detected signals from the Roboguards can be switched off by pressing the corresponding button (the zone LED will extinguish). Pressing the button again will switch the Roboguard on (LED will illuminate). NOTE: Zones which do not have Roboguards will not function. Zones that are switched off (LED off) means the intruder detected signal is ignored, the tamper detected and auto test signal can never be off.

Tamper LED- RED- FLASHING

If a Roboguard is tampered with a tamper detected signal will automatically sent to the HQ, it will sound the speaker 10 times, flash the red tamper LED and activate one of the output switches. To establish which sensor was tampered with and to reset the tamper detect LED you must do the following:

1. Press and release the tamper button (LED on, HQ is now in tamper detected display mode)
2. The zone LED for the Roboguard that has been tampered with will be solid (on) for A zones and flashing for B zones.
3. Press and release all flashing and solid (on) LED's to acknowledge and reset the tamper display.
4. Press and release the tamper button (LED off) or do nothing as the HQ will time out and exit automatically.

Trouble (Automatic battery and radio strength test) LED-RED-FLASHING

The trouble auto-test routine is very important, as the HQ is portable, and could inadvertently be put in a 'blind spot' where it cannot receive radio signals from a particular Roboguard. 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 following:

1. Radio signal strength of each guard
2. Battery voltage of each guard

If either is low the HQ will indicate this by flashing the red 'trouble' LED and activate one of the output switches. To establish which Roboguard is reporting the trouble condition and to reset the trouble detect LED you must do the following:

1. Press and release the trouble button(LED on, HQ is now in trouble condition display mode)
2. The zone LED for the Roboguard that has been detected for trouble by the HQ will be solid(on) for A zones and flashing for B zones.
3. Press and release all flashing and solid(on) LED's to acknowledge and reset the trouble display.
4. Press and release the trouble button (LED off) or do nothing as the HQ will time out and exit automatically.

HQ HAS FOUR PROGRAMMING MODES, THEY ARE:

*** IN ALL PROGRAMMING MODES TROUBLE IS DELETE AND TAMPER IS ENTER**

A Roboguard A zone programming To enter A zone programming mode, hold down the tamper button until a beep is heard. The red tamper LED will now be on solid you are now in A zone programming mode. Zone LED's which already have Roboguards programmed into them will now be solid (on).

To programme in a new Roboguard

1. Press and release the button for the desired zone to be programmed (zone LED solid on).
2. Depress and release the tamper lever (see diagram of parts in the Roboguard manual) on the Roboguard to send a tamper signal to the HQ.
3. The HQ will extinguish all the LED's momentarily, and then enter the 'start-up' routine, i.e. 10 beeps will sound and all the LED's will flash.
4. Press any zone button to return to standby mode.

To delete a Roboguard select it in programme mode as above (1) then press and release trouble

B Roboguard B zone programming To enter B zone programming mode, hold down the trouble until a beep is heard. The red trouble LED will now be on solid you are now in B zone programming mode. Zone LED's which already have Roboguards programmed into them will now be solid (on).

To programme in a new Roboguard

1. Press and release the button for the desired zone to be programmed (zone LED solid on).
2. Depress and release the tamper lever (see diagram of parts in the Roboguard manual) on the Roboguard to send a tamper signal to the HQ.
3. The HQ will extinguish all the LED's momentarily, and then enter the 'start-up' routine, i.e. 10 beeps will sound and all the LED's will flash.
4. Press any zone button to return to standby mode.

To delete a Roboguard select it in programme mode as above(1) then press and release trouble.

C Roboguard remote programming To enter C Roboguard remote programming mode, hold down the tamper and trouble button together until a beep is heard. The red tamper and trouble LED's will now be on solid, you are now in C Roboguard remote programming mode. To programme in the Roboguard remote select the desired function (zone buttons as below) and transmit using the button of your choice.

- 1 **Remote arm/disarm:** Allows one to arm/disarm the output switches for the selected zones (Zone LED's off for isolated zones). A siren (or light) is required to be connected to the yellow output switch to indicate status. 1 "Bark" for armed, 2 "Barks" for disarm. * If any output switches have been triggered between arming and disarming then disarming status would be indicated by 4 "Barks".
- 2 **Panic:** Is 24/7 and will trigger the output switches 24/7 (see programming chart below).
- 3 **Silent panic:** Same as panic (see below)
- 4 **Auxiliary:** also 24/7, sounds off a series of strange sound(used as a medical or doorbell channel).

To erase a remote, enter C Roboguard remote programming mode select the function you wish to erase then press and release the trouble button.

D HQ output switch programming (Telephone connection with 6 wires) To enter D HQ output switch programming mode, disconnect the power and battery of the HQ. Hold down the tamper and trouble buttons and whilst holding down the two buttons re power the HQ. The red tamper and trouble LED's will now both be flashing, you are now in D HQ output switch programming mode. Select your desired output switch configuration from programming charts A and B by pressing the desired zone (green light on). Press Tamper Button once to register the selection. All LED's will flash and the unit will beep 10 times.

In *Programming Chart A*, each intruder from a Roboguard (zone1-4(A and B)) is set to trigger the corresponding output switch represented by their colours. Although trouble and tamper aren't assigned to a specific output port on this programming option they are still monitored via the keypad LED's and buzzer.

In *Programming chart B*, all the intruders are set to trigger output switch 1 and 4, tamper and trouble are set to trigger switch 2 and 3 respectively. The *output switches*, trouble, tamper and intruder will keep on triggering without being reset.

The keypad output switches use *a transistors* rated at a maximum of 20mA which is sufficient to switch a relay, timer board or alarm panel. To check the switching put your multi-meter Ohms, and measure the resistance between ground (blue wire) and the desired switch 1: white etc.

PROGRAMMING CHART A						PROGRAMMING CHART B					
	White	Black	Red	Green	Yellow N/O		White	Black	Red	Green	Yellow N/O
Peak					✓	Peak				✓	✓
Silent Peak						Silent Peak				✓	
Trouble						Trouble			✓		
Tamper					✓	Tamper		✓			✓
Zone4				✓	✓	Zone4	✓				✓
Zone3			✓		✓	Zone3	✓				✓
Zone2		✓			✓	Zone2	✓				✓
Zone1	✓				✓	Zone1	✓				✓
For N/C select Zone 3						For N/C select Zone 4					
For N/O select Zone 1						For N/O select Zone 2					

The blue wire is common and should always be used when wiring up to anything that has its own power source.

The yellow is generally connected to a siren (ground (positive to external power)), it is always N/O and is controlled by option switches no 1 (1 off = 30 sec, 1 on = 3 min). The siren will only trigger 5 times.

NB: Do not connect power to any output switches (strictly ground switching).