

SupaHelix
Installation Manual

SupaHelix™



Company Profile



In-house R&D development team

Manufacture to international quality standard ISO 9001:2008



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3. Icons Used in this Manual



This icon indicates tips and other information that could be useful during the installation.



This icon denotes variations and other aspects that should be considered during installation.



This icon indicates warning, caution or attention! Please take special note of critical aspects that MUST be adhered to in order to prevent injury.

IMPORTANT SAFETY INSTRUCTIONS

ATTENTION

To ensure the safety of people, it is important that you read all the following instructions.

Incorrect installation or incorrect use of the product could cause serious harm to people.



The installer, being either professional or DIY, is the last person on the site who can ensure that the operator is safely installed, and that the whole system can be operated safely.

Warnings for the installer

CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS before beginning to install the product.

- All installation, repair, and service work to this product must be carried out by a suitably qualified person
- Secure all easily accessed controls in order to prevent unauthorised use of the device
- Do not in any way modify the components of the SupaHelix
- Do not install the SupaHelix in an explosive atmosphere: the presence of flammable gasses or fumes is a serious danger to safety
- Explain these safety instructions to all persons authorised to use SupaHelix, and be sure that they understand the hazards associated with the SupaHelix system
- Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger
- Dispose of all waste products like packing materials, etc. according to local regulations
- Centurion Systems (Pty) Ltd does not accept any liability caused by improper use of the product, or for use other than that for which the automated system was intended
- This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the service life/operation of the product and/or be a source of danger
- Anything not expressly specified in these instructions is not permitted.

1. Glossary of Terms

- **Channel:** An electrical gateway implemented as a physical terminal on the SupaHelix that provides the external interface to input or output signals
- **Input:** A potential-free normally-open electrical signal that is linked to an appropriately configured channel to provide an action-inducing stimulus to the SupaHelix
- **Output:** A potential-free open collector electrical signal that is generated by an appropriately configured channel to trigger an external system
- **Open Collector Output:** A common electrical output that is generally potential-free and high-impedance when inactive, but provides a current path to system ground (negative) when active
- **Normally-open:** The contacts of the 'switch', being either a relay or an open collector output, are by default in an open state, i.e. current cannot flow between the contacts unless the switch is actuated
- **Normally-closed:** The contacts of the 'switch', being either a relay or an open collector output, are by default in a closed state, i.e. current perpetually flows between the contacts until opened by the switch action
- **Rising edge:** A rising edge describes the transition of a digital signal from low to high. In other words, the circuit becomes active when its clock signal goes from ground or 0V to a perceivable voltage
- **Falling edge:** A falling edge describes the transition of a digital signal from high to low. In other words, the circuit becomes active when its clock signal 'falls' from a voltage to ground
- **Log/logging:** Logging refers to the capturing of a transaction and the data associated with it
- **Firmware:** This is the product code, data and set of digital instructions unique to the SupaHelix Programming Console. Firmware can be updated to keep the SupaHelix up-to-date
- **Momentary:** A momentary output is an output that is only active while the activating signal is present, for example while a remote control button is being held down
- **Pulsed:** A pulsed output will remain active for a predefined time after the activating signal has occurred, for example after a remote button has been released
- **Latched:** A latched output remains in a certain state after the activating signal has been removed, and will only change state once the signal is applied again

2. General Description

The SupaHelix is a three-channel multi-user access control device capable of working with up to 10,000 unique CENTURION code-hopping remote control buttons, plus up to 10,000 GSM mobile phones¹ providing for a total of up to 20,000 possible users. Basic functionality can be field-programmed via an intuitive four-button interface and 2.4 inch back-lit LCD graphic display. More comprehensive programming can be carried out via the Internet via www.CentSys.com/gsm-devices/G-WEB¹.

Transmitters can be learned into up to 10,000 individual units, for example a house number, with each unit containing between one and 255 possible sub-units, for example individual tenants. While it is possible to delete sub-units individually, when learning a new remote control, the new remote control will fill the first available sub-unit. Mobile phone numbers are organised into individual units. Individual remote control buttons may be edited² if the remote control is present, or on G-WEB and synchronised back to the SupaHelix via the Internet¹.



Unit 0 is usually used for the SupaHelix system administrators.

The SupaHelix has three channels, each of which can be configured as either an input or an output (open collector). When learning new users, a mappable channel can be specified, and this channel can later be mapped to any of the available outputs (by default a learned-in transmitter points to Channel 1).

Outputs can be set as either momentary (active while the activating signal is present), pulsed (active for a preconfigured period of time after the activating signal has occurred. The preconfigured time is set up in increments of 0.5 seconds), or latched. Latched output states are also 'sticky' which means they remember the state they were in even if the power is cycled. The outputs can also be specified as normally-open or normally-closed.

- Outputs would typically be used to activate an external device, such as a gate motor or to arm an alarm panel

Inputs can be set to trigger on rising, falling or both edges, can have a filter (debounce) time applied (set in one second increments), and can be mapped to activate any of the output channels.

- Inputs are generally used for monitoring and data logging purposes. For example, an input can be connected to the door contact of a safe and used to track how many times the safe was opened during a given time period, or inputs can be used in conjunction with the GSM functionality¹ and used to send SMS alerts to learned-in users

An onboard Real Time Clock and Calendar (RTCC) allows time-stamped logging of the last one million transactions to a removable 2GB micro SD card. These logs (stored by month) can be viewed line-by-line on the built-in display, can be backed up to a USB flash drive for viewing on a PC using spreadsheet software, or uploaded to the user's online profile using G-WEB¹.

The SupaHelix firmware can be field-upgraded via USB flash drive, or over-the-air using a 2G GSM data connection¹.



If the SD card is removed, the system will not function at all

1. Requires the optional GSM Module and a SIM card enabled for voice and data.
2. Any editing needs the remote control to be present.

3. Specifications

Physical Dimensions

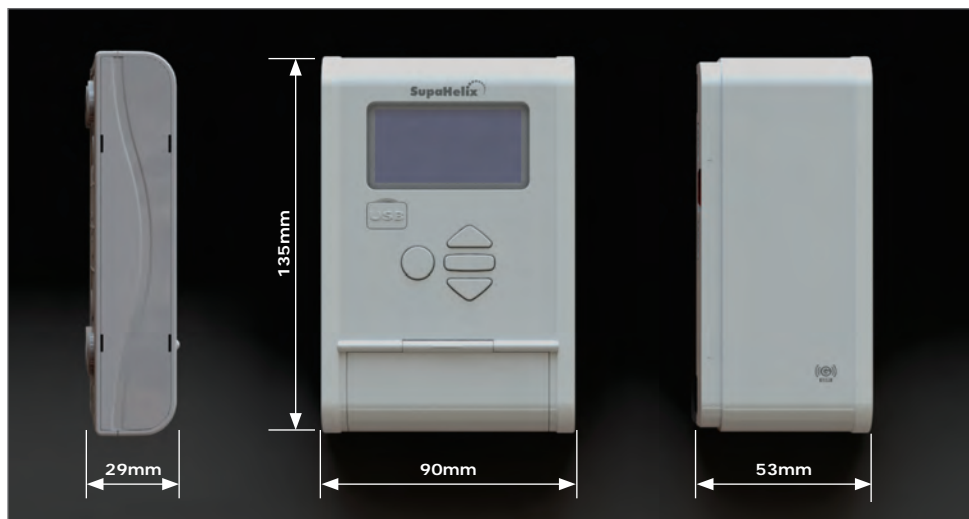


FIGURE 1. OVERALL DIMENSIONS FOR THE SUPAHELIX AND OPTIONAL GSM MODULE

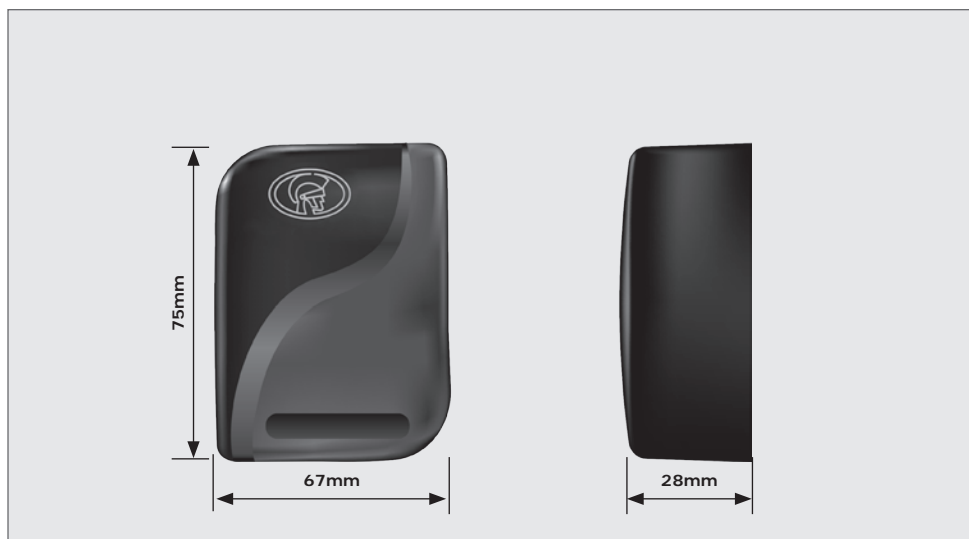


FIGURE 2. OVERALL DIMENSIONS FOR THE CP104 RECEIVER V3.1 (OR LATER)

Technical Specifications

	SupaHelix Programming Console
Supply voltage	10.5V - 30V DC
Standby current	12V 100mA (110mA ¹) 24V 70mA (80mA ¹)
Maximum current	12V 270mA (500mA ¹) 24V 230mA (400mA ¹)
Operating temperature	-20°C - +70°C
Output rating	Open collector - Max current 50mA per channel
Display	2.4 inch 128 x 64 transfective with backlight
Housing material	ABS
Degree of protection	Programming Console: IP50

	CP104 Receiver
Supply voltage	10.5V - 30V DC (powered through the SupaHelix)
CP104 operating frequency	433.92 MHz
Sensitivity	110 dBm
Degree of protection	CP104 receiver: IP65
Maximum distance between a Programming Console and receiver	250m

Functional Specifications

Memory capacity	10,000 individual buttons plus 10,000 mobile numbers ¹
Output pulse time range	0.5s - 9999s in 0.5s increments
Input activation	Rising edge, falling edge, both
Input filter	0 - 9999 seconds in 1 second increments
Network compatibility ¹	GSM 2G 850/900/1800/1900MHz
SIM card required ¹	Yes (with voice and data services enabled, and airtime)
Inputs/outputs	Maximum three (selectable as any combination of open collector outputs and/or switch-to-negative inputs)

1. With optional GSM Module fitted.

4. Product Identification



FIGURE 3. PRODUCT IDENTIFICATION

- 1. SupaHelix Programming Console.
- 2. LCD screen.
- 3. USB port.
- 4. Control interface.
- 5. Terminal cover.
- 6. Removable terminals.
- 7. CP104 receiver V3.1 (or later)
- 8. Optional GSM module.
- 9. Removable side panel.
- 10. Mounting slots.
- 11. Mounting bracket.

5. Required Tools and Equipment

- Screwdrivers – 3.5mm flat; pozi drive no.2
- Drill
- Side cutter
- Drill bits – 5mm masonry; 6mm drill bit
- Silicone sealant
- Fasteners (for plaster board or rawl plugs for masonry)
- Multi-core communication cable (number of cores and length of cable will vary depending on installation requirements)

6. Mounting Instructions

6.1. Important Considerations

- To prevent tampering and potentially compromising the integrity of the system, the SupaHelix Programming Console must be mounted in a secure location
- The SupaHelix Programming Console must be mounted in a location where it will not come into direct contact with the elements, preferably indoors or in a suitably sealed enclosure
- The enclosure of the CP 104 receiver is weather-resistant and thus it can be fitted outdoors in an optimal upright position



Ensure that there is enough space (>60mm) to the right of the SupaHelix Programming Console in case you want to add the Optional GSM Module later

6.2. Mounting the SupaHelix Programming Console

1. Find a suitable surface on which to mount the Console, open the terminal cover and unscrew the two M4 pan-head Pozi screws connecting the panel to the mounting bracket.

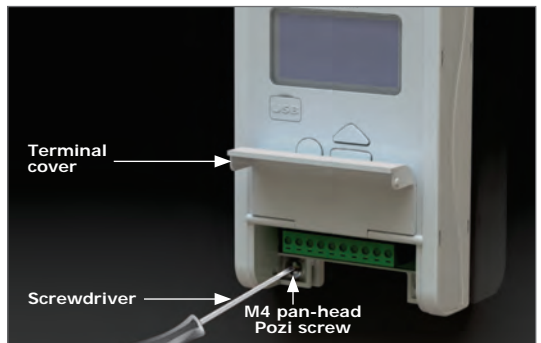


FIGURE 4.

2. Separate the mounting bracket from the SupaHelix Programming Console.

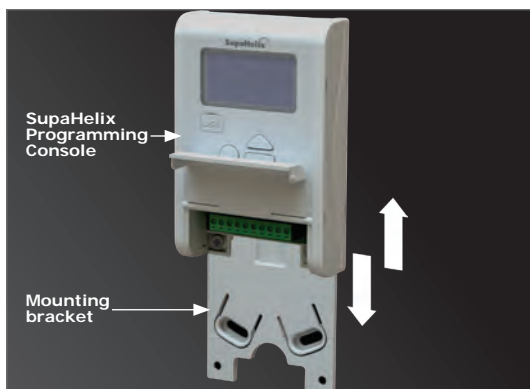


FIGURE 5.

3. Mark the position of the unit on the wall.
4. Use a 5mm masonry drill bit to drill the mounting holes in the wall (for plaster board mounting please follow the instructions provided with the plaster board fasteners).

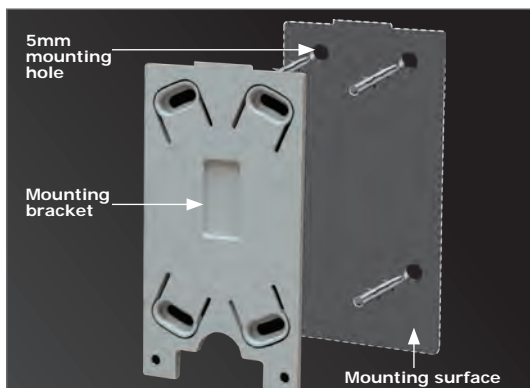


FIGURE 6.

5. Mount the bracket using the fasteners provided.

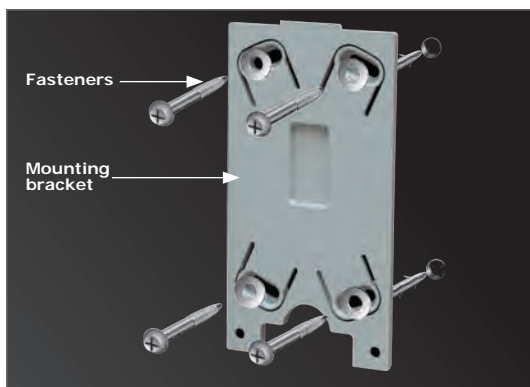


FIGURE 7.

- Slide the panel onto the bracket as shown.



The position of the unit can be adjusted according to the diagonal mounting slots in the bracket in the event that the surface is not completely even.

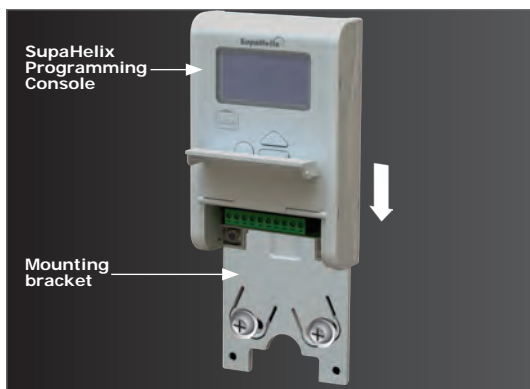


FIGURE 8.

- Replace the Pozi screws.

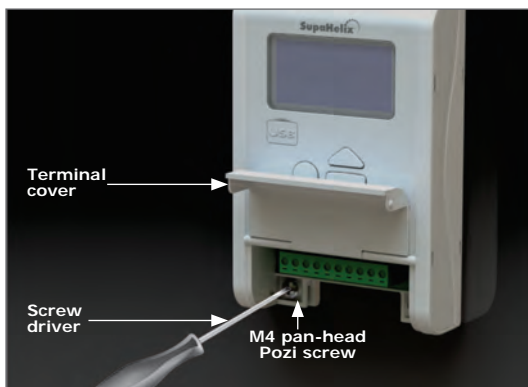


FIGURE 9.

6.3. Mounting the CP104 Receiver

- Remove the cover from the enclosure using a flat screwdriver.

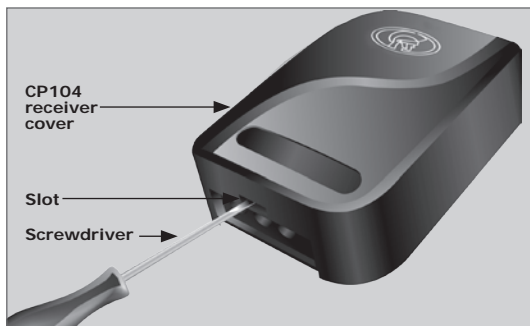


FIGURE 10.

- Remove the cover and unclip the circuit board from the retaining clips.



FIGURE 11.

- Mark the position of the unit on the wall.
- Using the 5mm masonry bit, drill a hole into mounting surface wall (for plaster board mounting please follow the instructions provided with the plaster board fasteners).

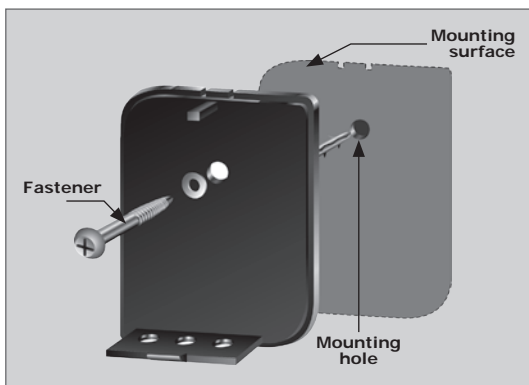


FIGURE 12.

- Mount the bracket using the fasteners provided.

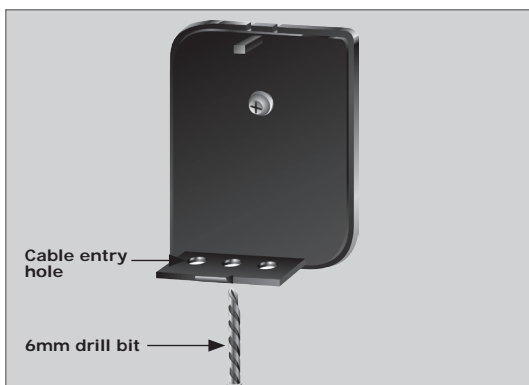


FIGURE 13.

6. Use a 6mm drill bit to open the required cable entry hole.
7. Fix the cable to the wall using cable saddles.
8. Seal all the holes with silicone sealant.
9. Re-insert the circuit board and ensure that the retaining clips are holding it in place.

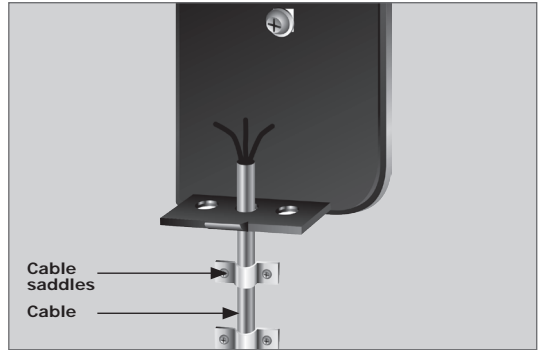


FIGURE 14.

6.4. Fitting the Optional GSM Module

- The Optional GSM Module has male connectors with ten pins that simply slot into the female connectors provided on the Programming Console, as shown below

Ensure that the SIM card used in the GSM Module is:

- Network-activated and -authorised
- CLID (Caller Line Identification) has been enabled on both the SIM and all learned in phones
- Has the PIN code disabled
- Has some airtime loaded
- Call forwarding must be disabled



Power MUST be removed from the Programming Console before attempting to fit the GSM Module!

1. Insert a screwdriver in the slot and remove the removable side panel as shown in Figure 15.

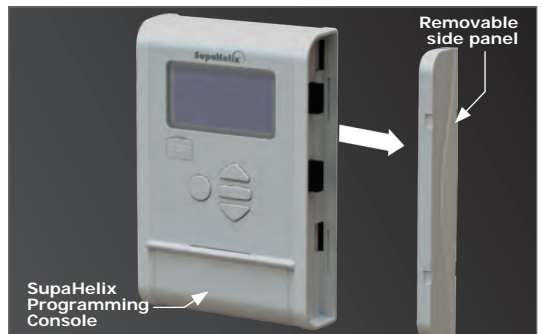


FIGURE 15.

2. Insert the SIM card into the GSM Module as shown in Figure 16 before you attach it to the SupaHelix Programming Console.

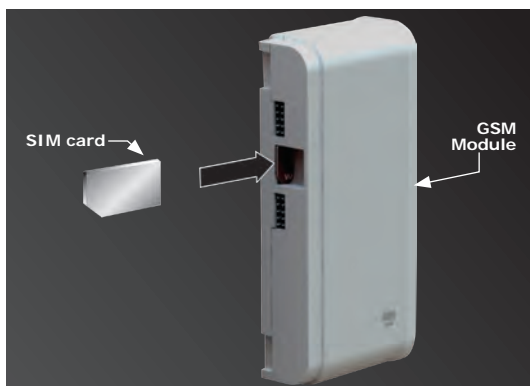


FIGURE 16.

3. Align the ten-pin GSM Module's male connectors to the SupaHelix Programming Console and slide it in.



It is easier to fit the GSM Module when it is angled back slightly.

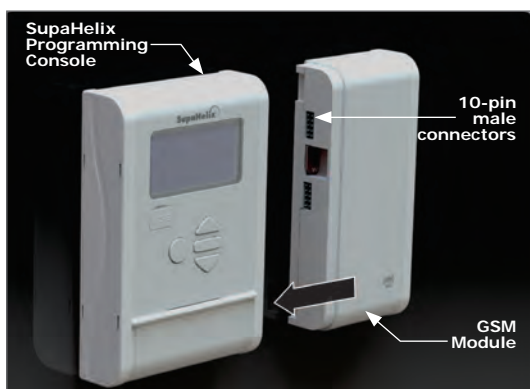


FIGURE 17.

4. Replace the removable side panel onto the GSM Module.

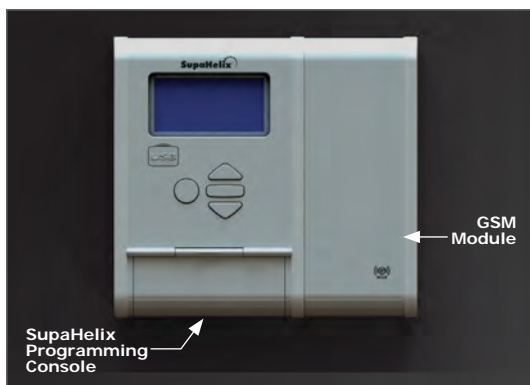


FIGURE 18.

7. Wiring Diagrams

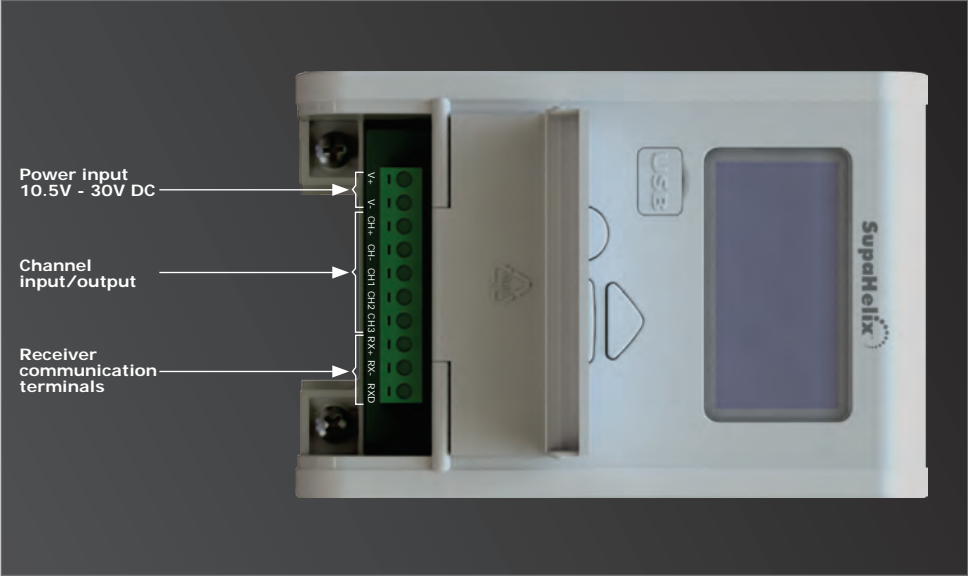


FIGURE 19. PROGRAMMING CONSOLE

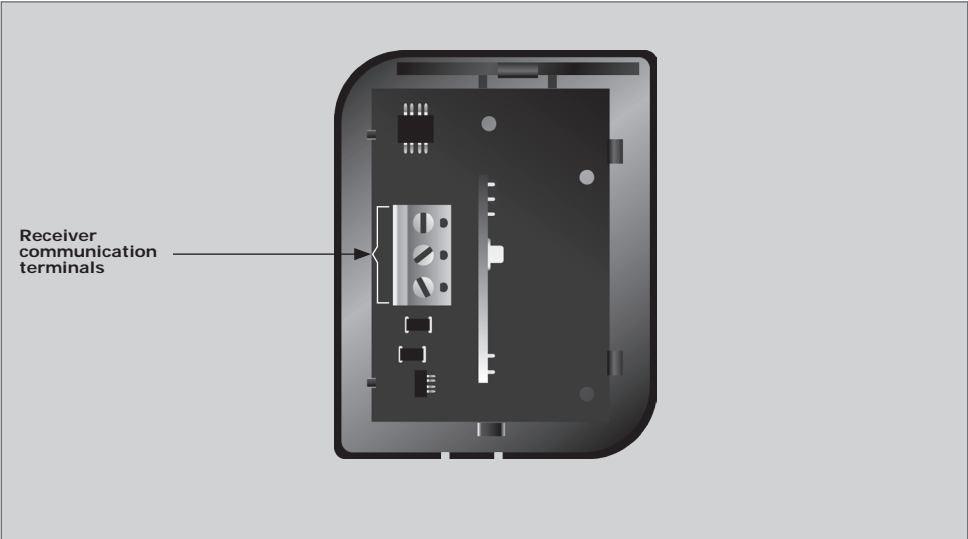


FIGURE 20. CP104 RECEIVER (V3.1 OR LATER)



A maximum distance of 250 metres between the SupaHelix Programming Console and the receiver is allowed, and it is recommended that shielded cable is used

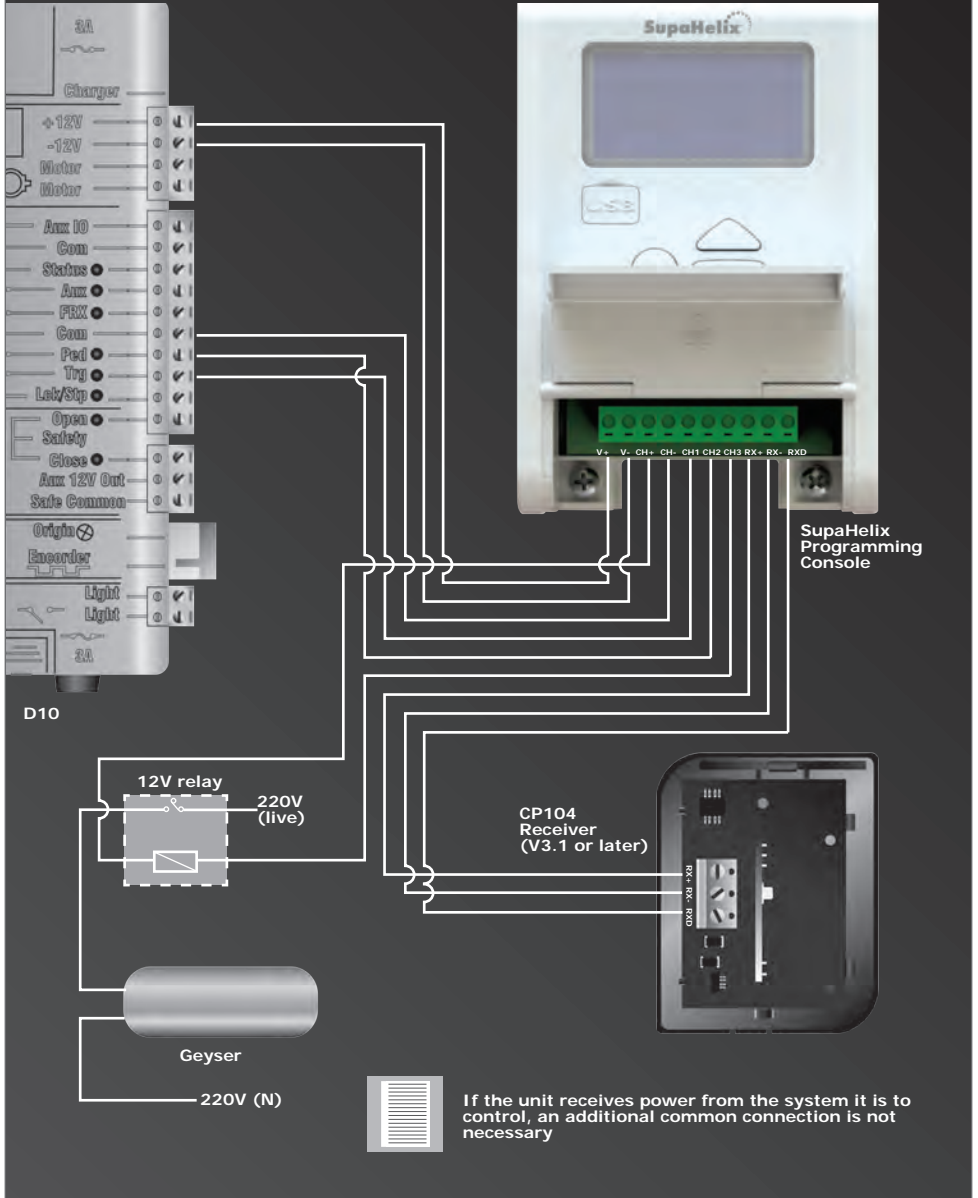


FIGURE 21. TYPICAL SUPAHELIX WIRING DIAGRAM TO D10 AND SWITCHING GEYSER

8. Electrical Setup



FIGURE 22.

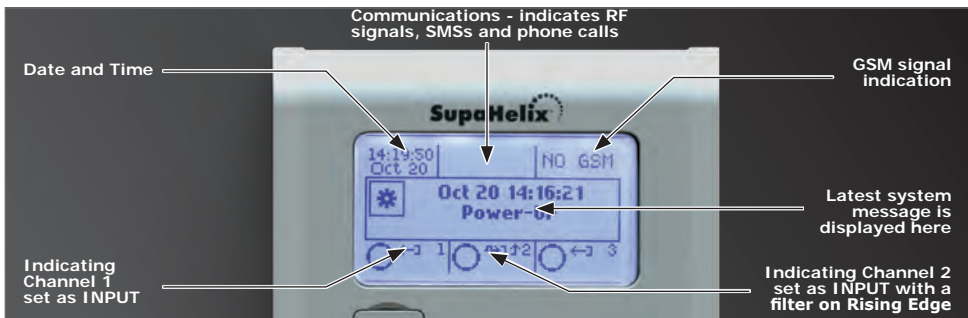


FIGURE 23.

While setting up the SupaHelix system via the LCD display, all the steps that have to be followed are clearly provided via the display. It is only necessary to note the following:

- To get into Setup Mode, press the enter (■) button for two seconds and follow the instructions provided from there
- The buttons on the Programming Console for navigating the system are not marked because at each step during the setup, the function of each button is shown on the display



FIGURE 24.

8.1. Menu Navigation Map

1. Remote Controls			
1.1.	Add New Remotes	1.1.1	Add Remote
		1.1.2	Template Add Remote
1.2.	Delete Remotes	1.2.1	Delete Remote Button
		1.2.2.	Delete Remote by Button
		1.2.3	Delete Remotes by Unit
		1.2.4	Delete All Remotes
1.3.	Edit Remote Button		
1.4.	Count Remotes		
2. Input / Output			
2.1.	Setup Channel 1		
2.2.	Setup Channel 2		
2.3.	Setup Channel 3		
2.4.	Change Mappable Output		
3. Date and Time			
3.1.	Set Date and Time		
3.2.	Time Zone		
4. General Options			
4.1.	Reset Options	4.1.1.	Restore Factory Defaults
		4.1.2.	Reset All
4.2.	Backup and Restore	4.2.1.	Backup ALL to USB
		4.2.2.	Restore from USB
4.3.	Available Memory		
4.4.	Delete Logs		
4.5.	Self Test		
5. G-SWITCH Options			
5.1.	Add New Phone Number		
5.2.	Delete Phone number	5.2.1.	Delete by Unit

5.2.2. Delete All in Unit

5.2.3. Delete All Phone Numbers

6. Display Options

- 6.1. Adjust Display Contrast
- 6.2. Adjust Backlight Intensity
- 6.3. Adjust Backlight Timeout

7. Security Options

- 7.1. Menu Locking

8. Logging Options

- 8.1. View Logs
- 8.2. Upload Logs
- 8.3. Delete Logs

9. Firmware Upgrade

Menu 1 – Remote Controls

The system is capable of learning up to 10,000 CENTURION code-hopping remote control buttons.

It is possible to artificially increase the number of buttons of a multi-button remote control by using a two-button combination.

One of the buttons is used as a shift button to allow the other buttons to be used again in combination with this button. In other words, the user will press and hold the shift button, before pressing one of the other buttons to create a new button.

The shift button cannot be used as a button on its own, it must always be used in combination with the other buttons.

Use of the shift button system allows a three-button remote control to gain an extra button and operate four channels (for example where two SupaHelix modules are installed on a site) and likewise a four-button remote control gains two extra buttons and can operate six channels.



FIGURE 25.

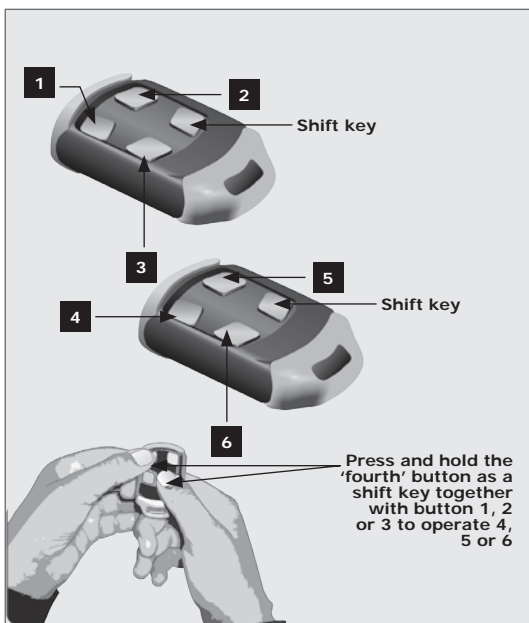


FIGURE 26.

Menu 1.1. Add New Remotes

Menu 1.1.1. Add Remote

- Any button can be set to control one or more of the three channels provided by the SupaHelix system. When adding remote controls, it is recommended that a record be kept of the ID number allocated by the system to each respective remote control and the person to whom the remote control is given. This is necessary should selective deletion be required at a later stage, or for the analysis of logging reports
- Together with the traditional single-press Learning, two secure Learning Modes have been added for remote controls. These are intended to prevent unwanted remote controls from being learned into the system during the remote learning process. The first is '**Double Press**' Learning, where the new button must be pressed twice in order to be learned in, and the second is '**Press for Three Seconds**' Learning, where the new button must be pressed and held for a period of three seconds in order to be learned in

Menu 1.1.2. Template Learning of Remotes

- This function drastically reduces the time spent learning in new remotes when multiple remote control buttons per remote control are being used in the system. An existing remote control is used as a template remote control – and then all subsequent remote controls will be learned as 'clones' of the template remote control. When requested, press any button on the template remote control. All new remote controls can now be learned with just one press of any button, and will inherit all the functional settings of the template remote
- To add a new remote button, follow these steps:
 1. Press and hold the oblong button for a period of two seconds in order to enter the menu.
 2. The very first menu item will be **Remote Controls**. Momentarily press the oblong button – now acting as an enter key – to confirm your selection of this menu item.
 3. Select sub-menu **Add New Remotes** by pressing the oblong (enter) button.
 4. Select sub-menu **Add Remote** by pressing the oblong (enter) button.
 5. Select your preferred learning method; either Single Press, Double Press or Press for 3 Seconds.
 6. Specify a unit number to which you would like the remote control to be assigned.
 7. Specify which output the button should activate when pressed.
 8. Press the remote button you wish to learn into the system. How many times it needs to be pressed and how long it needs to be pressed for will depend on the learning method selected in Step (5).
- You can now either:
 1. Add additional remote buttons to the same unit by pressing the button(s) on the respective remote control(s),

2. or you can scroll to select a different unit to add remote control buttons to and press the respective remote control button(s) to learn them in to the newly selected unit, or
3. Exit the Add New remotes menu.

Menu 1.2. Delete Remotes

Remote controls can be deleted at any stage according to one of the following methods:

Menu 1.2.1. Delete Remote Button

- The operation of a single button of a particular remote control can be cleared. For example, the SupaHelix allows the activation of Channel One set on one remote button to be cleared, without affecting the other operations that the same remote control performs. The remote control is required for this operation

Menu 1.2.2. Delete Remote by Button

- This menu options allows you to delete all remote control buttons from a particular remote control by simply pressing any of the buttons on that remote control. Use this procedure to remove the remote control from the system. All button functionality will be removed. The remote control is required for this operation

Menu 1.2.3. Delete Remotes by Unit

- This procedure removes all remote controls allocated to a specific unit, or unit sub-number. For example, all remote controls learned to Unit 15 can be removed from the system's memory without affecting remote controls assigned to other units. This is convenient for instances where a household or all the occupants of a flat or townhouse terminate their tenancy. The remote controls are not required for this operation
- To delete a remote or remote button from the system's memory, follow these steps:
 1. Press and hold the oblong button for a period of two seconds in order to enter the menu.
 2. The very first menu item will be **Remote Controls**. Momentarily press the oblong button – now acting as an enter key – to confirm your selection of this menu item.
 3. Use the directional arrows to scroll to sub-menu **Delete Remotes**, and enter using the oblong button.
 4. Next, select whether you wish to delete a remote button, delete a remote by button, delete all the remotes associated with a specific unit number, or delete all the remotes stored in the system's memory, and confirm your selection by pressing the oblong button.
 5. The next action will depend on which method of deleting a remote has been selected in the previous step:
 - a. If deleting a specific remote button, the button that is to be deleted must now be pressed and released.

- b. If deleting a remote by button, any button on the remote that is to be deleted must now be pressed and released.
- c. If deleting all the remotes associated with a specific unit number, use the directional arrows to select the unit number (between 0 and 10, 000) and confirm your selection with the oblong button.
- d. If deleting all remotes, it is simply necessary to confirm your selection using the oblong button.

Menu 1.2.4. Delete All Remotes

- Clears the entire memory of learned-in remotes. All remote controls will be removed from the system

Menu 1.3. Edit Remote Button

- Change the group of a button, or the output(s), that a button activates to another output(s), or other Outputs. For example, Button One activates Output 2. To change this, use the Edit Remote Button function, select Outputs 2 and 3, and button one of the same remote will now activate both Outputs 2 and 3 upon being pressed

Menu 1.4. Count Remotes

- Displays the number of remote control buttons learned into the system¹.

1. This is the number of individual buttons, not remote controls.

Menu 2 – Input/Output

The system is capable of learning up to 10,000 CENTURION code-hopping remote control buttons.

Menu 2.1. Setup Channels 1,2 and 3

Menu 2.1.1. Set Direction of Channel (Input/Output)

- Each channel can be configured as either an input or an output. Inputs are used for monitoring purposes, for example to send users an SMS notification when an alarm is activated (when used together with the Optional GSM Module), or to log how many times a safe has been opened. Outputs are used for controlling electrical devices, for example to trigger a gate motor or to turn a pump on and off. The channel direction will be indicated visually on the display as shown in Figure 27

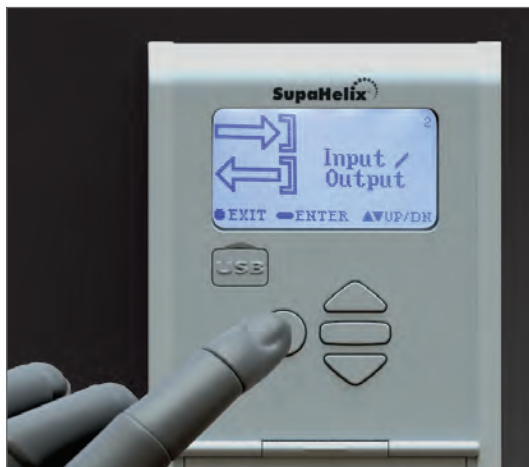


FIGURE 27.

The following additional functionality can be programmed per channel:

1. Set Mode

The output mode can be either:

- Momentary:** The output will be activated when the remote control button is pressed, remain activated while the button is held in and deactivate once it is released.
- Pulsed:** When the remote control button is pressed, the output will be activated and remain in this state after the button has been released for the pre-set pulse time. The pulse time can be set from 0.5 seconds to 9999 seconds in 0.5 second increments.
- Latched:** The output will be activated when the remote control button is pressed and remain activated until the same button is pressed again.
- The output state is 'sticky', and will be remembered if power is cycled.

2. Set Contact Type

The output contact type can be configured as either a normally-open or a normally-closed open collector output. The default contact type is normally-open.

The following additional functionality can be programmed per input:

- Trigger On:** The input can be set to trigger on a rising edge, a falling edge, or both.
- Input Filter Time:** (Applicable to both rising and falling edges if set). Sets the time for which a signal must be present before activating the input. For example, an input can be set to only activate if power on the input device has been absent for a period of 60 seconds. The filter can be set from 0 seconds ('filter disabled') to 9999 seconds in one second increments.
- Basic Function:** This feature allows one or more outputs to be triggered upon the activation of the specific input. For example, Input 1 can be configured to activate Outputs 2 and 3 when activated. This is useful in instances where the user wants to create a feedback loop within the system. The SupaHelix automatically calculates which outputs are available.

Menu 2.1.2. Change Mappable Output

- This operation changes the default output that new remote controls are programmed to activate. It is a dynamic output that can be changed at any stage should the need arise, and all remote control buttons that have been assigned to the 'Mappable Output' will then be moved to the newly chosen output. For example, if Output 1 is currently being used to open the gate fully, and it later becomes necessary to use the output to perform a different function, the Mappable Output can simply be changed to Output 2 for example, and all remote controls learned to the mappable output will automatically be transferred to Output 2. This obviates the need for relearning or editing each individual remote control button. Certain functionality may require additional interface devices, such as relays, isolators, etc.

Menu 3 – Date and Time

Menu 3.1. Set Date and Time

- Sets the current date and time in the format yyyy-mm-dd for the date and hh:mm:ss for the time. It is important that the date and time be configured if the unit is to be used for data logging applications. The onboard Real Time Clock and Calendar will retain the date and time information for a period of one week without power

Menu 3.2. Time Zone

- This function allows you to select the time zone and major cities associated within that time zone where the SupaHelix is being installed. Daylight savings are automatically applied to the city selection where applicable

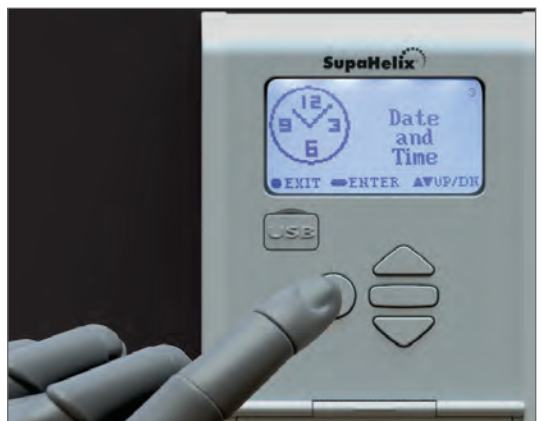


FIGURE 28.

Menu 4 – General Options

Menu 4.1. Reset Options

The controller settings can be reset through the factory Reset Options menu. Two reset options are available:

- **Restore Factory Defaults:**
All settings will be restored to factory default values indicated in the following table overleaf
- **Reset All:** Clears and defaults the system completely. The unit will be reset to the Factory Default settings, in addition to clearing all remotes and phone numbers



FIGURE 29.



This function will erase all controller settings, learned- in remote controls, phone numbers and log files and it will restore the unit to the factory default settings. It is highly recommended that a backup of the system is performed (see Menu 4.2) before you do this action.

Parameter Description	Unit	Minimum	Default	Maximum
Channel direction	Input; Output		Output	
Mode	Pulsed; Latching; Momentary		Momentary	
Mappable channel	Channel 1; 2; 3		Channel 1	
LCD backlight brightness	%	0%	50%	100%
LCD backlight timeout	Mm:ss	00m:01s	00m:15s	01m:00s
LCD contrast	Level	1	30	50

Menu 4.2. Backup and Restore

Menu 4.2.1. Back up ALL to USB

- Allows all controller settings, remote controls and phone numbers to be backed up onto a USB device via the Programming Console's USB host



A USB memory stick (flash drive) is required to perform this function



FIGURE 30.

To back up the system's memory, follow the steps documented below:

1. Insert a USB memory stick (flash drive) into the Programming Console's onboard USB host.
2. Press and hold the oblong button for a period of two seconds in order to access the menu.
3. Using the directional arrows, scroll to Menu 4: General Options, and press the oblong button to enter.
4. Press the down arrow once and use the oblong button to enter the Backup and Restore sub-menu.
5. The first option will be Backup All to USB. Again press the oblong button to confirm your selection.
6. The system will prompt you as to whether you wish to proceed. Press the oblong button to continue with the backup procedure.
7. Once all settings, logs, remotes, actions and mobile data have been copied across to the memory stick, the words 'DONE. Backup Complete' will be displayed on the screen.

Menu 4.2.2. Restore from USB:

- Allows all controller settings, remote controls and phone numbers that have previously been backed up, to be restored
- If a backup has been created on a USB memory stick, the following procedure will allow the user to restore the system data to the SupaHelix:
 1. Insert the USB memory stick (flash drive) containing the backed up system data into the Programming Console's onboard USB host.
 2. Press and hold the oblong button for a period of two seconds in order to access the menu.

3. Using the directional arrows, scroll to Menu 4: General Options, and press the oblong button to enter.
4. Press the down arrow once and use the oblong button to enter the Backup and Restore sub-menu.
5. Press the down arrow again and use the oblong button to enter the Restore from USB sub-menu.
6. The system will prompt you as to whether you wish to proceed. Press the oblong button to continue with the restore procedure.
7. Once all settings, logs, remotes, actions and mobile data have been restored, the words 'DONE. Restore Complete' will be displayed on the screen. Menu.

Menu 4.2.3. Available Memory

- Displays the amount of memory available on the unit's 2GB removable micro SD card. This is expressed as a percentage

Menu 4.2.4. Delete Logs

- This function allows you to delete log files stored in the unit. You can select to delete specific log files or all log files



It is highly recommended that you back up the system (see Menu 4.2) or, if you have a GSM Module installed, synchronise the log files to your G-WEB profile (refer to the G-WEB section in this manual for further details) before you perform this action

Menu 4.2.5. Self Test



For safety purposes all inputs and outputs must be disconnected prior to performing the Self Test

- When selected, this option initiates a series of diagnostic tests to query the system's health and operation of the following system components:
 1. All three input/output channels.
 2. The up, down and 'back' buttons.
 3. The receiver.
 4. The onboard buzzer.
 5. The backlight.
 6. The USB host.
 7. The EEPROM.
 8. The operation of the GSM Module.
- To perform the Self Test please follow the onscreen prompts. At the end of the Self Test, a diagnostic report will be displayed indicating which operations passed, which failed, and what tests were skipped

Menu 5. G-SWITCH Options

- With the optional plug-in GSM Module fitted, the system is capable of learning up to 10, 000 individual phone numbers which can be used for both activations of outputs, for example open an entrance gate and to receive SMS notifications from the SupaHelix system

Menu 5.1. Add New Phone Number

- Any valid phone number can be authorised to activate one or more of the three outputs provided by the SupaHelix system, and can also be configured to receive SMS notifications of events

To learn in a new phone number using the graphic interface, follow these steps:

1. Press and hold the oblong button for a period of two seconds.
 2. Using the directional arrows, scroll to menu 5: **G-SWITCH Options** and confirm your selection by pressing the oblong (enter) button.
 3. Select sub-menu 5.1 **Add New Phone Number**.
 4. Specify which output(s) the phone number is to activate.
 5. Specify the unit number.
 6. The unit will now await a Missed Call from the phone number that is to be learned into its memory.
- Alternatively, access numbers can be added to the system using the free¹ G-WEB online user interface. User and device settings such as access holder names, output settings, input notification text strings, etc., can also be edited via G-WEB. This is discussed in more detail in the relevant section.

Menu 5.1.1. Delete Phone Number

- Phone numbers can be deleted at any stage according to one of the following methods:
 1. **Delete by Unit:** This feature allows a single phone number saved to a unit to be deleted. For example, if a single tenant residing at Unit 1 loses his phone or changes his number, it is possible to delete only that number using the Delete by Unit feature. If this option is selected, a list of numbers stored in the selected unit will be displayed, and the administrator must, using the arrow keys, select the number(s) to be deleted.
 2. **Delete All in Unit:** This feature allows the administrator to delete all phone numbers learned to a specific unit number. For example, say that the tenants of Unit 23 terminates their tenancy and vacates the property, it is possible to delete all phone numbers learned to Unit 23 using the Delete by Unit feature.
 3. **Delete All Phone Numbers:** This option, when selected, deletes all phone numbers in all units stored in the system's memory.

- It is also possible to selectively delete numbers using the G-WEB online user interface. This is discussed in more detail in the relevant section.
 1. The G-WEB online user interface is free to use. In order to synchronise your SupaHelix synchronisation credits are required. 10 credits are supplied free of charge with every SupaHelix unit registered to your G-WEB profile. Multiple settings, and administration changes can be transferred to (and from) the G-WEB to the SupaHelix in a single synchronisation. If necessary, additional synchronisation credits may be purchased (please see www.CentSys.com/GSM-Devices/G-WEB for further details).

Menu 6 – Display Options

Menu 6.1. Adjust Display Contrast

- Alters the contrast between the LCD background and the text and graphics. The contrast is adjusted between one and 50 in increments of one, up to a maximum of 50. The default value is 30

Menu 6.2. Adjust Backlight Intensity

- Sets the brightness of the backlight. This can be set from 0% ('disabled') to 100% in 1% steps



FIGURE 31.

Menu 6.3. Adjust Backlight Intensity

- Sets the amount of time for which the backlight will remain on after the last action has been performed. This can be set from one second to 60 seconds in one second steps. The default Backlight Timeout is 15 seconds.

Menu 7 – Security Options

Menu 7.1. Menu Locking

- Various options are available to limit access to the menu and help prevent tampering of the unit and unwanted altering of the settings
 1. **No security** – the menu is accessible to anyone.
 2. **Any remote in the system** – Any remote learned into the system's memory can unlock the menu and access settings.
 3. **Any remote in Group 0** – Any remote learned to Unit 0 can access the menu.



FIGURE 32.

Menu 8. Logging Options

Menu 8.1. View Logs

- Allows the system administrator to select a log file to view. The user can scroll through the available logs by using the directional arrows and select them using the oblong (◻) button

Menu 8.2. Upload Logs

- Sets the brightness of the backlight. This can be set from 0% ('disabled') to 100% in 1% steps



FIGURE 33.

Menu 8.3. Delete Logs

- Allows the administrator to either delete all log files or select a specific one to be removed from the system's memory. The user can scroll through the available logs by using the directional arrows and select them using the oblong (◻) button.



It is important to note that all logs that may have been saved to the same USB device with the same name will be overwritten on the USB device with this action

Menu 9. Firmware Upgrade

- The administrator can bootload the unit with the latest firmware file either by downloading it from the Centurion Systems website and transferring it to the unit via a USB device, or the file can be bootloaded over-the-air(OTA) via the G-WEB online interface if the optional GSM module has been connected



After the new firmware has been installed, the SupaHelix will request a confirmation SMS to be sent to it. The confirmation SMS needs to have the SupaHelix's own phone number in the body of the SMS.



FIGURE 34.

9. Diagnostics

The SupaHelix system provides useful visual diagnostic feedback of the overall system health via a series of diagnostic screens which are easily accessible from the main screen by pressing either of the directional arrows.

The following three diagnostic screens and related diagnostic indicators are provided:

- **Supp Voltage:** This is the current supply voltage read by the system as provided by the power source
- **Pup:** The date and time that the device was last powered up
- **Pdn:** The date and time that the device was last powered down
- **Stat:** Displays important messages related to the system health



FIGURE 39.

- **Lang File Version:** The version number of the current language file on the SD card
- **Micro Version:** The version number of the current language file on the micro controller
- **GUID:** Globally Unique Identifier. The SupaHelix uses this unique number to be identified on the G-WEB portal as a valid device
- **GSMFW:** This is the manufacturer's firmware version currently loaded on the SupaHelix GSM device



FIGURE 40.

- **Hardware Version:** Denotes the version number of the physical components, electronics, etc., used in the construction of the unit
- **Device Firmware:** The version number of the current product code and persistent memory loaded to the system
- **Firmware Revision:** This is the actual repository firmware for the application segment of the product code
- **Bootloader Version:** The repository firmware for the bootloader segment of the product code
- **Serial Number:** A unique eight-digit number allocated to each manufactured unit



FIGURE 41.

10. G-WEB

G-WEB is a free¹ online user interface that allows users to effortlessly administer several of Centurion Systems' GSM-based products, including SupaHelix (if the optional plug-in GSM Module has been fitted) from any PC or laptop with an internet connection. It is therefore possible to take care of administrative duties such as adding and deleting remotes and access numbers, editing input and output settings, updating firmware and viewing detailed transaction logs from the comfort of your home or office.

1. The G-WEB online user interface is free to use. In order to synchronise your SupaHelix synchronisation credits are required. 10 credits are supplied free of charge with every SupaHelix unit registered to your G-WEB profile. Multiple settings, and administration changes can be transferred to (and from) the G-WEB to the SupaHelix in a single synchronisation. If necessary, additional synchronisation credits may be purchased (please see www.CentSys.com/GSM-Devices/G-WEB for further details)

10.1. Accessing G-WEB and Administering SupaHelix

- The Centurion Systems G-WEB interface can be accessed by navigating your internet browser (Internet Explorer, Google Chrome, Mozilla Firefox, etc.) to the following URL, <http://www.CentSys.com> and clicking on either the Register Your Product link if you have not previously created a user profile, or on User Login if you have previously registered

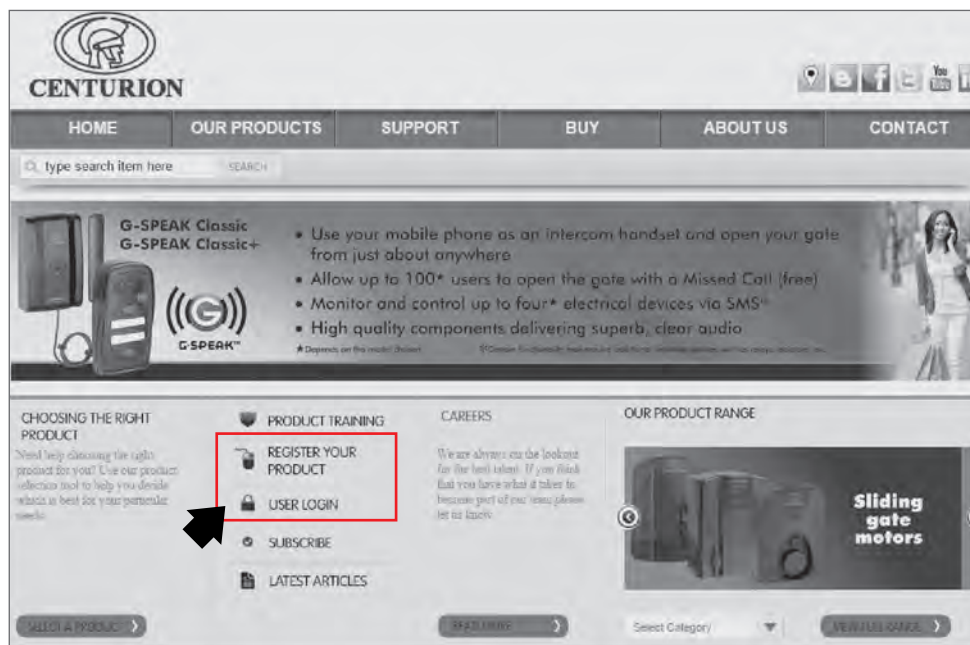


FIGURE 42.

- Once you have created your profile and logged in, you will be redirected to the Members Home page. On this page, you will be presented with several options pertaining to the management and administration of CENTURION products

- Click on the SupaHelix link as shown below

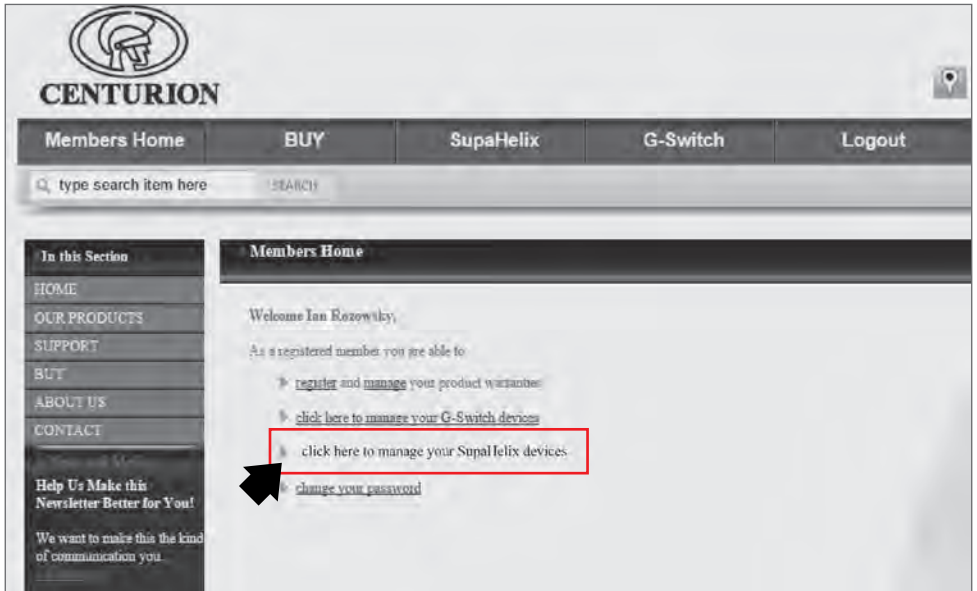


FIGURE 43.

10.2. Adding a New Device

- To assign a new SupaHelix device to your profile, simply click on the Add New Device button shown in the screenshot below

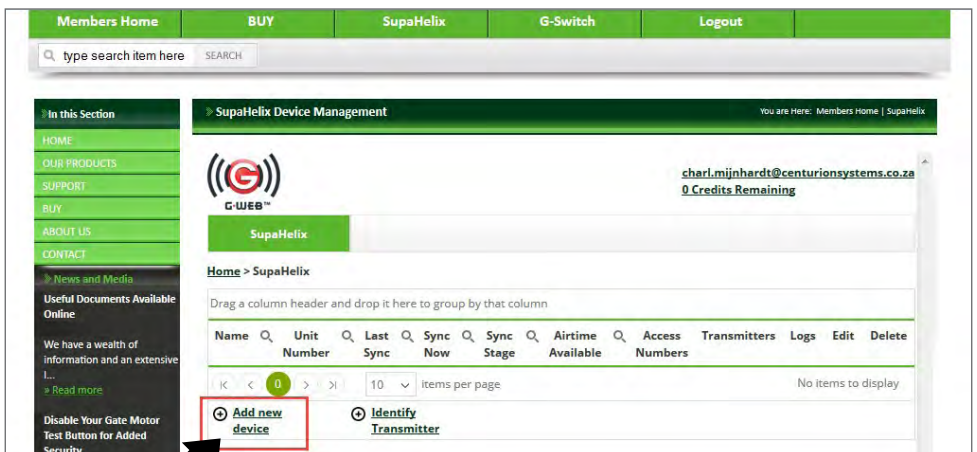


FIGURE 44.

Doing so will produce a pop-up page prompting you to select the international country code for where the SIM card is registered and enter the device's mobile number (without the first zero), as well as the product's GUID number. If you do not know the GUID number, or you are not in the vicinity of the SupaHelix device, you can obtain the number by sending an SMS containing the following text to the device: P.xxxx.CO.GUID, where xxxx represents the password for the SupaHelix device (the default password is 1234)



Ensure that your Internet browser allows pop-ups for this site.

- Once you have populated the form with the device's details, click on the Next button
- A new pop-up will appear prompting you as to whether the system has detected the correct mobile operator. If it has, click on Yes. If not, click on No, Previous or Cancel. If you click on No it will prompt you to select the country and operator that the SIM card is associated with
- Finally, click on Finish. The newly-added SupaHelix will now appear on your profile

10.3. Editing SupaHelix Device General Settings

- The device settings can be changed by the system administrator using the G-WEB online interface

10.4. Changing the Device Name

- To change the display name of the SupaHelix device, follow the steps below:

1. Either click on the current name of the device under the Name column on the SupaHelix Device Management page, or on the pencil (edit) icon shown in the screenshot below. You will be redirected to an extension of this section containing several of the SupaHelix's important settings, including the device's display name.
2. Click in the box next to the Device Name field, and enter the name you wish to assign to the device, for example 'Complex 1 Front Gate'.

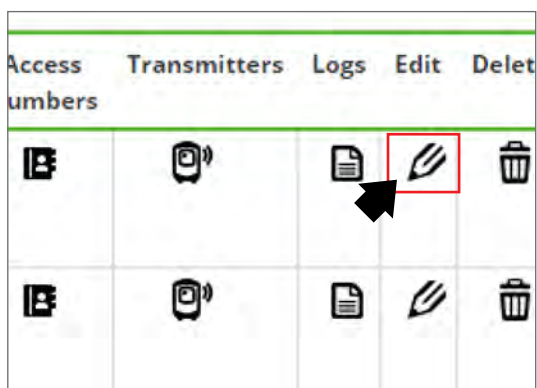


FIGURE 45.

- If you wish to effect changes to other general settings on this page, make the changes and then click on Save. You will see a notification momentarily flash on the screen that says 'Edited successfully!'

10.5. Changing Other General Settings

- The following general settings can be edited from the Device Settings - General Settings Page, accessible by clicking on the device name or the pencil icon from the main page:
 1. The mobile number of the SIM card in the SupaHelix GSM Module.
 2. The device name (discussed in detail in the previous section).
 3. The system password.
 4. The PIN number of the SIM card currently in the SupaHelix GSM Module.
 5. Whether the PC or the module wins contention during synchronisation.
 6. Whether the uploading of transaction logs should be allowed.



Whenever changes to a unit are affected using the G-WEB online user interface, a synchronisation must be initiated to apply the same changes to the physical GSM Module.

10.6. Editing SupaHelix Device Advanced Settings

- The following advanced settings appear on the Device Settings - Advanced Settings page, and should only be edited by the administrator of the system:
 1. **IP Address:** This is the numerical network label assigned to Centurion Systems' server. It is fixed and cannot be changed by the user.
 2. **Port:** The port used by Centurion Systems' server. This is fixed and cannot be changed by the user.
 3. **Allow Sending Service Messages:** The SupaHelix system is capable of sending messages pertaining to system health, for example when the power source falls below the threshold voltage, to the administrator of the system. This option either disables or enables the sending of service messages.
 4. **Keep Alive SMS Interval:** The SupaHelix GSM Module will periodically send SMSs to itself to ensure that it is still registered on the mobile network – this will only happen if there has been no activity on the SIM card for a specified number of hours. This setting specifies how many hours should elapse between sending Keep Alive SMSs.
 5. **Please Call Me Key Text:** This is the personalised text that appears in Please Call Me messages, and aids the SupaHelix system in differentiating between SMSs and Please Call Me messages and also helps to overcome certain linguistic barriers. For example, if the word 'CALL' is specified (default value) as the key text and a Please Call Me containing this text is sent to the unit, the SupaHelix will recognise the message as a Please Call Me and activate the output(s) associated with the sender's mobile number. Most network operators do not charge for Please Call Me SMSs.
 6. **Administrator Number:** Specifies which number will receive service messages, etc.

10.7. Input and Output Messages Text

- The text for up to 20 pre-defined messages can be specified on the Device Settings - Messages page. This text will be sent to subscribed access numbers upon activation of an input, or alternatively it can be sent in the form of an SMS to the SupaHelix device and used to activate one or more of its outputs.
- To specify text, click on the Edit button next to the location you wish to assign the message to, and enter the text in the field provided. Once done, click on Update.

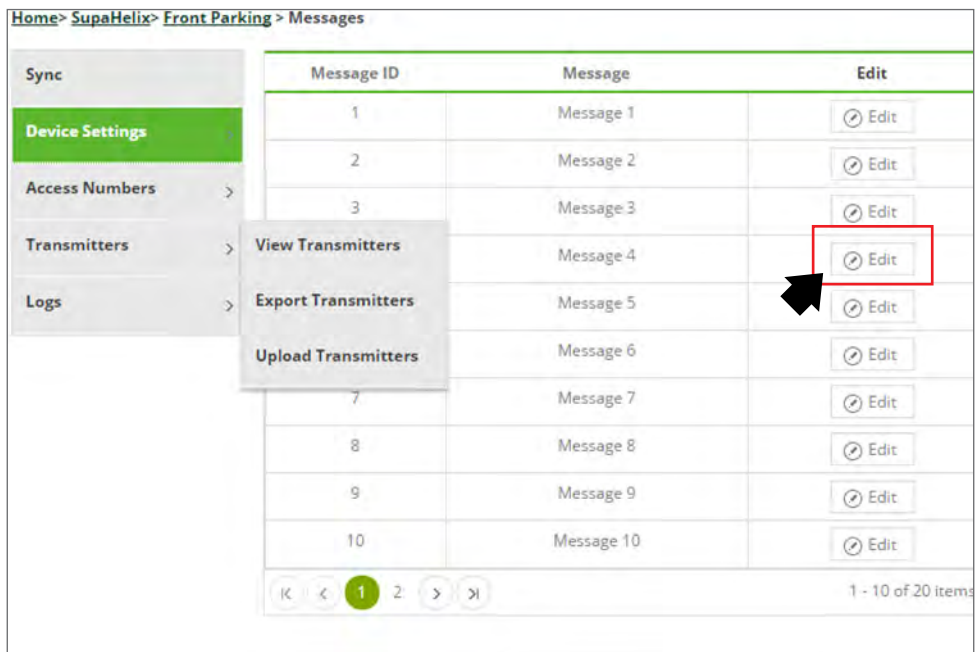


FIGURE 46.

10.8. Adding, Editing and Deleting Access Numbers

- To add, edit and delete access numbers, click on the phonebook icon on the main page

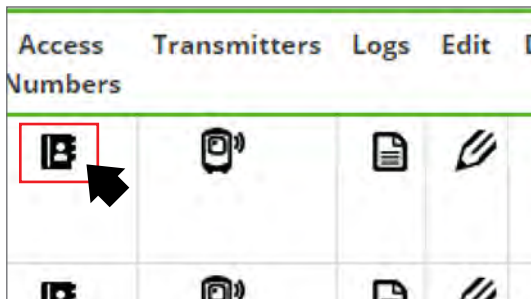


FIGURE 47.

- Numbers can be individually added by clicking on Add Access Number (see screenshot below), and completing the pop-up form with the access holder's phone number, name and unit number. Once the access holder's details have been entered, click on Create to add the number to the unit's phonebook



FIGURE 48.

- To delete a single access number, simply click on the trashcan icon to the right of the screen. Multiple numbers can be deleted by checking the boxes next to the numbers you wish to delete, and then clicking on Delete Selected
- The settings associated with access numbers, such as which outputs they are to activate, which inputs are to receive notifications etc., can be edited by clicking on the pencil icon next to the number the settings of which you wish to edit
- The settings of each number is divided into General Settings, Advanced Settings and IO Settings

10.9. View Access Numbers

- To view all access numbers stored on a specific SupaHelix device:
 - Click on the name of the SupaHelix device you wish to query.
 - Move the mouse cursor over the Access Numbers button to the left of the screen; a dropdown menu will now appear.
 - Click on View Numbers.

Access Numbers	>	View Numbers	102
Transmitters	>	Upload Numbers	111
Logs	>	Export Numbers	176
		<input type="checkbox"/>	27833011370
		<input type="checkbox"/>	27827823866
		<input type="checkbox"/>	27828144891
		<input type="checkbox"/>	27827706324
		<input type="checkbox"/>	27825747162

FIGURE 49.

- The website will generate a table containing all learned-in access numbers, associated house numbers, the names assigned to the access numbers as well as additional text and descriptions.

10.10. Uploading Access Numbers

- It is also possible to upload multiple access numbers by importing them from a spreadsheet. It is recommended that the upload template available for download from the website is used when uploading access numbers in bulk. The following fields are provided in the template:
 1. **Access number:** the mobile or landline number of the access holder.
 2. **Name:** the name associated with the access number, e.g. John Smith.
 3. **Output function:** specifies which output the access number is able to activate with a missed call.
 4. **House number:** the house or unit number to which the access number belongs; e.g. Unit 33.
 5. **Miscellaneous text.**
 6. **Limited uses enabled:** specifies whether the access number should only be able to activate the SupaHelix's outputs a limited number of times.
 7. **Limited uses counter:** specifies how many times the access number should be able to activate the SupaHelix device's outputs.
 8. **Can initiate sync.**
 9. **Input messages enabled:** the access number will receive notifications of input events.
 10. **Output messages enabled:** the access number is able to activate the SupaHelix device's outputs via SMS or Please Call Me.
 11. **IO1 rising edge message:** specifies the text message to be sent to the access number in the event that IO1 rises.
 12. **IO1 falling edge message:** specifies the text message to be sent to the access number in the event that IO1 falls.
 13. **IO2 rising edge message:** specifies the text message to be sent to the access number in the event that IO2 rises.
 14. **IO2 falling edge message:** specifies the text message to be sent to the access number in the event that IO2 falls.
 15. **IO3 rising edge message:** specifies the text message to be sent to the access number in the event that IO3 rises.
 16. **IO3 falling edge message:** specifies the text message to be sent to the access number in the event that IO3 falls.

10.11. Exporting Access Numbers

- Access numbers stored on a SupaHelix device can be exported to a spreadsheet by following the steps below:
 1. Click on the name of the SupaHelix device you wish to query.
 2. Move the mouse cursor over the Access Numbers button to the left of the screen; a dropdown menu will now appear.
 3. Click on Export Numbers.
 4. Click on the Export button.





Access Number	Message	Action
1	Message 1	 Edit
2	Message 2	 Edit
3	Message 3	 Edit
4	Message 4	 Edit
5	Message 5	 Edit
6	Message 6	 Edit
7	Message 7	 Edit
8	Message 8	 Edit
9	Message 9	 Edit

FIGURE 50.

- Indicate whether you wish to Open or Save the generated spreadsheet on your hard drive.

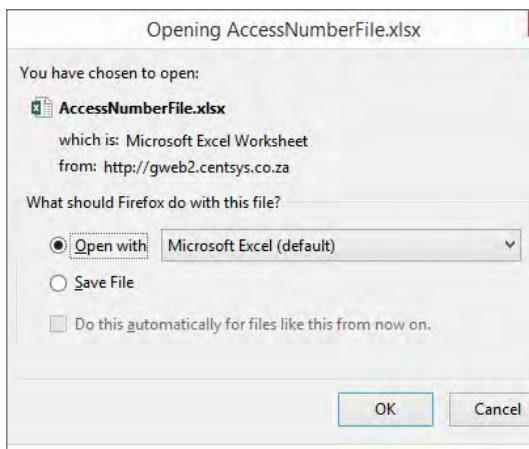


FIGURE 51.

- The generated spreadsheet will contain the following information:
 1. **Access number:** the mobile or landline number of the access holder.
 2. **Name:** the name associated with the access number, e.g. John Smith.
 3. **Output function:** specifies which output the access number is able to activate with a missed call.
 4. **House number:** the house or unit number to which the access number belongs; e.g. Unit 33.
 5. **Miscellaneous text.**
 6. **Limited uses enabled:** indicates whether the access number is only able to activate the SupaHelix's outputs a limited number of times.
 7. **Limited uses counter:** indicates how many times the access number is able to activate the SupaHelix device's outputs if Limited Uses has been enabled.
 8. **Can initiate sync:** if enabled, this setting allows the access number for which it has been set to initiate a synchronisation between.
 9. **Input messages enabled:** indicates whether the access number will receive notifications of input events.
 10. **Output messages enabled:** indicates whether the access number is able to activate the SupaHelix device's outputs via SMS or Please Call Me.
 11. **IO1 rising edge message:** specifies the text message to be sent to the access number in the event that IO1 rises. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO1 rising message' field will produce a dropdown menu containing all saved messages.
 12. **IO2 falling edge message specifies:** the text message to be sent to the access number in the event that IO1 falls. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO1 falling message' field will produce a dropdown menu containing all saved messages.
 13. **IO2 rising edge message:** specifies the text message to be sent to the access number in the event that IO2 rises. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO2 rising message' field will produce a dropdown menu containing all saved messages.
 14. **IO2 falling edge message:** specifies the text message to be sent to the access number in the event that IO2 falls. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO2 falling message' field will produce a dropdown menu containing all saved messages.

15. **IO3 rising edge message:** specifies the text message to be sent to the access number in the event that IO3 rises. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO3 rising message' field will produce a dropdown menu containing all saved messages.
16. **IO3 falling edge message:** specifies the text message to be sent to the access number in the event that IO3 falls. Up to 20 individual messages can be defined by clicking on the sheet named 'Dictionary' on the downloaded template. Clicking on the arrow in the 'IO3 falling message' field will produce a dropdown menu containing all saved messages.

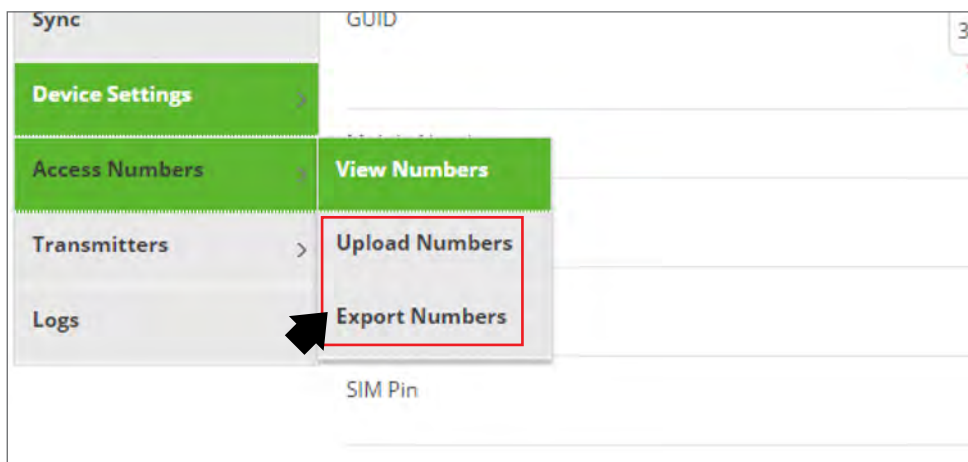


FIGURE 52.

10.12. General Settings

- On the General Settings page of an access number, it is possible to edit the name, phone number and unit number associated with a particular user. Additionally, the administrator can set which output(s) a missed call or SMS from the number in question will activate by selecting the output(s) from a dropdown menu

10.13. Advanced Settings

- On this page, the administrator can set whether a particular access number should only be valid for a certain number of activations, as well as what that number should be (between 0 and 255 uses). This is useful for allowing limited-uses access to security companies, gardening services, etc. This page also allows administrators to select if the access number can initiate synchronisation of the SupaHelix unit with the G-WEB portal

10.14. IO Settings

- The IO Settings page is where the administrator will specify whether the access number is subscribed to any of the inputs, and whether it is able to activate any of the outputs via an SMS text message. Once the Input/Output Messages Enabled boxes have been ticked, a new set of options will be presented and the administrator will be able to specify which messages should be sent to the access number upon input activation, and which messages sent from the access number should activate outputs
- The text used for input notification and output activation messages is specified on the Messages page, and is discussed in detail in the Input and Output Messages Text section

10.15. Transmitters

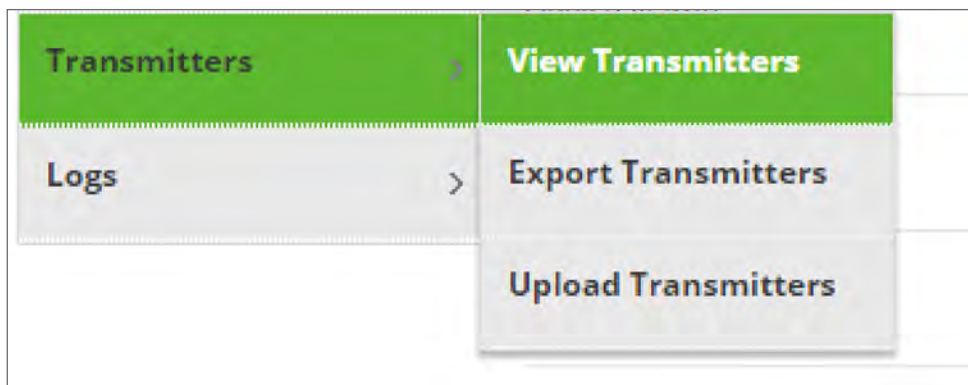


FIGURE 53.

10.15.1. Adding, Editing and Deleting Transmitters

- A useful feature of G-WEB is the ability to add CENTURION code-hopping transmitters via G-WEB. The transmitters that need to be added, as well as a special RF Dongle available from Centurion Systems and a PC or laptop with Internet access, are the only devices necessary to perform offsite adding of transmitters



The Centurion Systems RF Dongle is required to add transmitters using the G-WEB interface.

10.16. Installing the USB RF Dongle

- In order to utilise the CENTURION RF Dongle, it is necessary to first install the device drivers on your PC or laptop. This must be done prior to connecting the RF Dongle
 1. Enter the following URL into your browser's address bar: www.CentSys.com/transmitters/usb-uploader.

- Click on the file named 'CENTURION RF Dongle Setup File'.
- Select 'Save as...' and select a location on your computer's hard drive where the file will be saved.
- Open the folder containing the executable file (setup.exe), and double click on the file name.
- The following pop-up window will appear. Click on 'Next'.

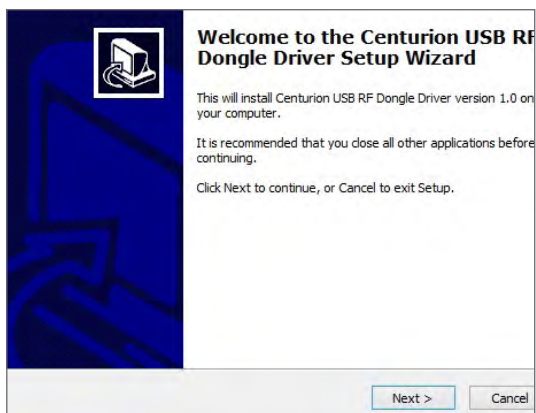


FIGURE 54.

- Click on 'Install'.

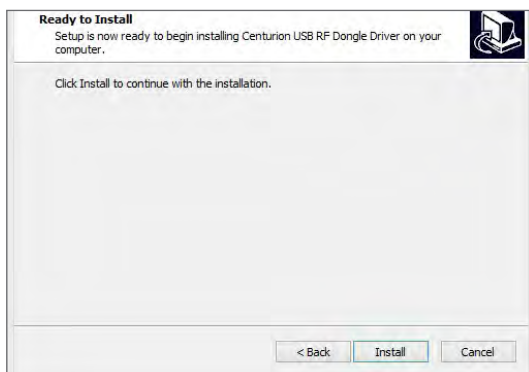


FIGURE 55.

- Click on 'Next' when the following window appears.

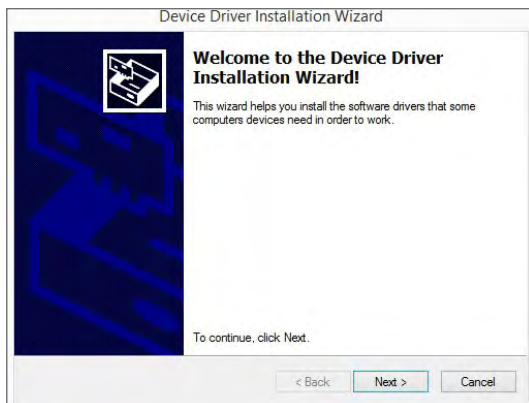


FIGURE 56.

8. The device drivers will now be installed.

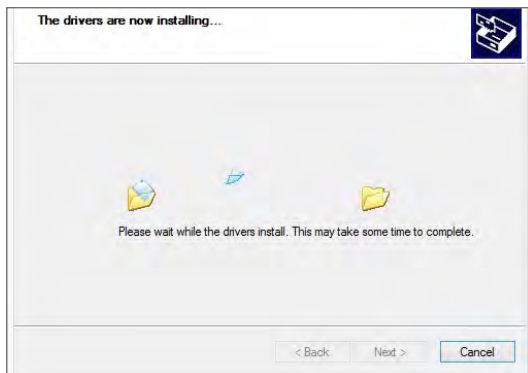


FIGURE 57.

9. The following windows indicate the successful installation of the RF Dongle Drivers and the device drivers respectively. In both instances, click on 'Finish'.

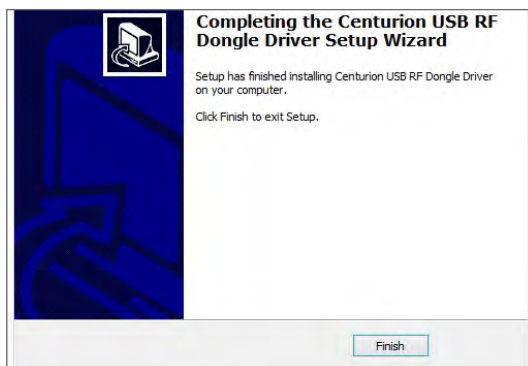


FIGURE 58.

10. To complete installation please verify that the latest version of Java™ is installed on your PC or laptop. Enter the following URL into your browser's address bar: www.java.com/verify.
11. Please note that some browsers will ask you whether you want to 'allow' or 'activate' Java™. Please answer in the affirmative.
12. Click on 'Agree and Continue'

Verify Java and Find Out-of-Date Versions

Check to ensure that you have the recommended version of Java installed on your Windows computer and identify any versions that are out of date and should be uninstalled.

Agree and Continue

FIGURE 59.

13. Should you receive the out-of-date message please click 'Download Java Now' and continue to step 14. If your Java™ is correctly installed and up-to-date, then you may start using your RF Dongle by browsing to www.CentSys.com.



Your Java is Out of Date

A newer version of Java is available
Your Java version: Version 7 Update 65
Latest Java version: Version 7 Update 71

Please click the Download Java Now button to get the recommended and secure version of Java for your computer.

Download Java Now

FIGURE 60.



Java Versions on Your Computer

 **Congratulations!**
You have the recommended Java installed
Version 7 Update 71

No out-of-date versions of Java were found.

[Return to the Java.com home page](#)

FIGURE 61.

14. Select 'Windows Online (32-bit)'. Run the 'Online' installer.



FIGURE 62.

15. Close any open browsers and click on 'Install'.



FIGURE 63.

16. Click 'Close' when installation is finished. To verify installation restart from step 10.



FIGURE 64.

- To add a new transmitter or transmitter button, follow the steps below:
 1. Insert the RF Dongle into any available USB slot in your PC or laptop, having first installed the drivers detailed in the section 'Installing the USB RF Dongle'.
 2. Click on the Transmitters icon.

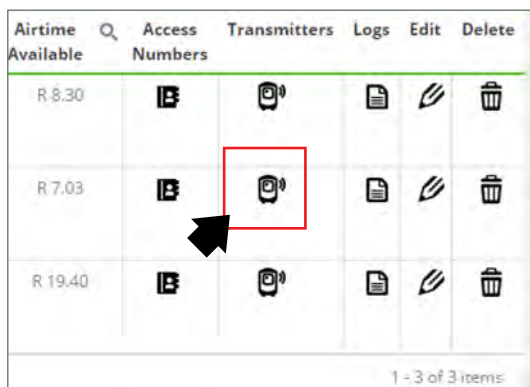


FIGURE 65.

- All learned-in transmitters will be displayed on this page, not only the ones programmed using G-WEB. Click on Add Transmitter; the Add New Transmitter screen will appear and the system will attempt to find the RF Dongle. Ensure that it is plugged into a USB port. If the dongle is not detected even though it has been connected to the PC or laptop, click on Find RF Dongle.
- Press a valid transmitter button. If the transaction is read by the RF Dongle, the button's ID will appear in the topmost field as shown below.

Add New Transmitter

Transmitter Number **Transmitter read OK** *

[Find RF Dongle](#)

Transmitter Description

Unit Number (Between 0 - 9999)

Output Function

FIGURE 66.

- Enter a description for the transmitter button, for example 'Johan Button 2'.
- Enter the unit number to which the button belongs.
- Specify which output(s) the button should activate when pressed using the dropdown menu.
- If you want to learn more buttons, click on Save and Continue or, to leave the Add New Transmitter Page, click on Save.

10.17. Identifying Transmitters

- If a lost transmitter is picked up and it is not known to whom it belongs, the Identify Transmitter feature can be used to identify it, provided that the button exists in the SupaHelix's database

To identify a transmitter:

1. From the SupaHelix main page, click on Identify Transmitter.



FIGURE 67.

2. The Identify Transmitter screen will appear and the system will attempt to detect the RF Dongle.
3. Once the dongle has been detected, press a button on the transmitter and then click on Identify Transmitter.
4. If the transmitter exists in the system, the SupaHelix device that the button is associated with as well as a description of the transmitter (if this has been specified) will be displayed on the screen . If the transmitter has not been learned in, the user will be given the option to program it from the Identify Transmitter page.

10.18. Deleting Transmitters

- Transmitters can be deleted either individually or in bulk.

To delete a single transmitter, from the SupaHelix main page:

1. Click on the Transmitters icon. You will be redirected to the Transmitters page.
2. Click on the trashcan icon next to the transmitter you wish to delete. To delete multiple transmitters simultaneously, simply check the boxes next to all the transmitters that are to be removed from the system's memory, and click on Delete Selected.

Name	Unit Number	Last Sync	Sync Now	Sync Stage	Airtime Available	Access Numbers	Transmitters	Logs	Edit	Delete
Front Parking	27796230692	2014-11-05 06:56:10	↕	Sync Completed	R 8.30	Ⓕ	📱	📄	✎	🗑️
Back Parking	27763708105	2014-11-10	↕	Sync Completed	R 7.03	Ⓕ	📱	📄	✎	🗑️

FIGURE 68.

- The transmitter will be removed from the SupaHelix's memory subsequent to the next successful synchronisation.

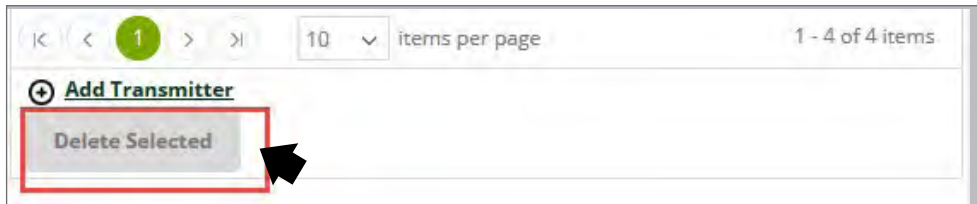


FIGURE 69.

10.19. View Transmitters

- To view a list of transmitters currently stored on a particular SupaHelix device, click on the name of the SupaHelix device that you wish to query, move the mouse cursor over the Transmitters button to the right of the screen and click on View Transmitters
- The following data will be displayed on the View Transmitters page:

- The unit number that the transmitter is associated with.
- A description of the transmitter.
- Which output(s) the transmitter is able to activate.
- The current battery status of the transmitter.
- It is also able to edit transmitter functionality from this page by clicking on the pencil icon.

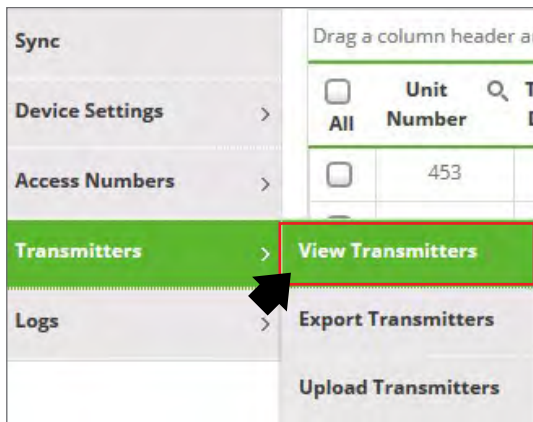


FIGURE 70.

10.20. Exporting Transmitters

- Transmitters stored on a SupaHelix device can be exported to a spreadsheet by following the steps below:
 1. Click on the name of the SupaHelix device you wish to query.
 2. Move the mouse cursor over the Transmitters button to the left of the screen; a dropdown menu will now appear.
 3. Click on Export Transmitters.
 4. Click on the Export button.

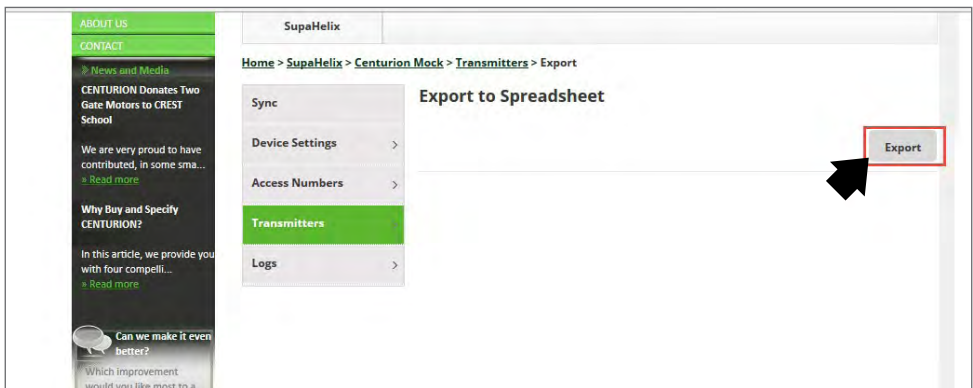


FIGURE 71.

5. Indicate whether you wish to Open or Save the generated spreadsheet on your hard drive.
- The generated spreadsheet will contain the following information:
 1. The transmitter ID.
 2. A description of the transmitter.
 3. The output(s) that the transmitter is able to activate.
 4. The unit number that the transmitter is associated with.

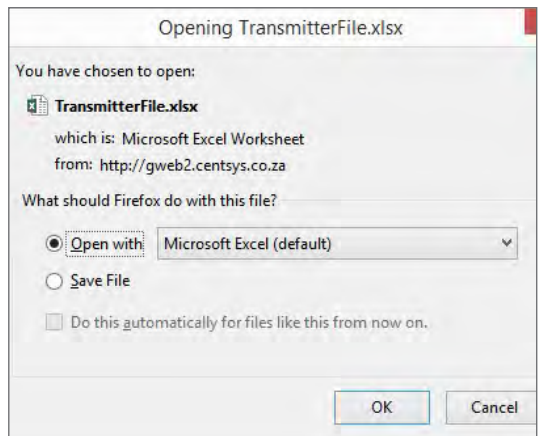


FIGURE 72.

10.21. Logs

- The SupaHelix system logs each transaction entered into between the device and access holder transmitters and/or phone numbers. Once a SupaHelix has been synchronised with the logging information included, these detailed logs can be viewed on the G-WEB portal at the administrator's leisure and contain the following information:
 - The logging transaction ID.
 - The time and date of the transaction.
 - The access holder's name (if recorded).
 - The unit number of the access holder (if recorded).
 - A description of the transaction (e.g. GPRS connected, Remote received, etc.)
- To view logs, simply click on the appropriate icon as depicted in the screenshot below:
 - It is also possible to export logs into an Excel spreadsheet. Hover the mouse cursor over the Logs button in the left sidebar menu; this will produce a dropdown menu containing two items, namely View and Export. Click on the Export menu item.
 - Using the built-in calendar buttons, select the date range between which you wish to export logs and click on Export. An xlsx file will be generated containing logs captured between the dates specified. Select where you want to save this file to and save it. You can then view the file in a suitable spreadsheet application.

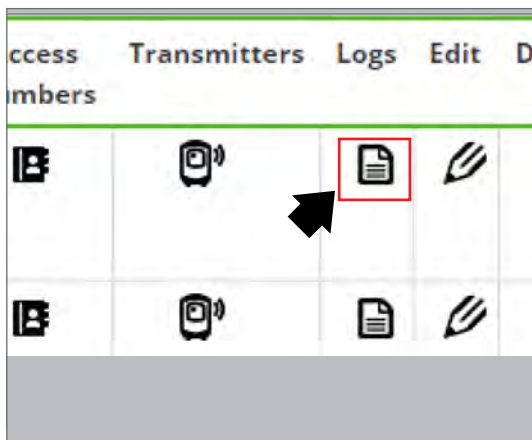


FIGURE 73.

11. 24 Month Carry Product Warranty



You can register your product(s) online at www.CentSys.co.za, which will assist you in keeping a record of your date of purchase or installation, serial numbers, etc.

This information may come in handy for future reference to help you in the event of a warranty claim, or to remember your installer's details, or for any other future reference needs that may arise.

All products are manufactured with extreme care, thoroughly inspected and tested. All products are warranted against faulty materials and workmanship for a period of 24 months from the invoice date of the product or 26 months from the manufacturing date (as shown on the serial number label of the operator), whichever expires first.

The carry in warranty will cover the repair or replacement, at the discretion of Centurion Systems (Pty) Ltd, of such faulty materials or parts free of charge provided that the equipment is returned to our workshop. The workmanship of the installation of the products carried out by any third party is specifically not covered under this warranty (please consult with your installer about their workmanship warranty terms and conditions). For equipment not of Centurion Systems' manufacture the warranty as supplied by the original manufacturer will apply.

No claims whatsoever will be recognised under the terms of this warranty which pertain to damage, injury, cost or expense, suffered by persons and / or to property, which either directly or indirectly arise out of any one of the following occurrences:

1. Failure to install the product in accordance with the installation instructions provided by Centurion Systems (Pty) Ltd.
2. Failure to abide by the safety instructions provided by Centurion Systems.

This warranty will not apply to any equipment which:

1. Has not been installed in accordance with the installation instructions provided.
2. Has been subject to misuse or which has been used for any purpose other than that designed for by the manufacturers.
3. Has damage caused as a result of handling during transit, atmospheric conditions (including lightning), insect infestation, power surges or other forces outside of the control of Centurion Systems.
4. Has been repaired by any workshop and / or person NOT previously authorised by Centurion Systems (Pty) Ltd.
5. Has been repaired with components not previously tested, passed or authorised by Centurion Systems (Pty) Ltd.

12. Installation Handover

Once the installation has been successfully completed and tested, it is important for the installer to explain the operation and safety requirements of the system.

NEVER ASSUME THE USER KNOWS HOW TO SAFELY OPERATE THE SUPAHELIX DEVICE

Centurion Systems (Pty) Ltd does not accept any liability caused by improper use of the product, or for use other than that for which the automated system was designed.

Ensure that the customer is in possession of the User Guide and that you have completed the installation details in the back of the User Guide.



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