

# G-ULTRA QUICK GUIDE



# Company Profile



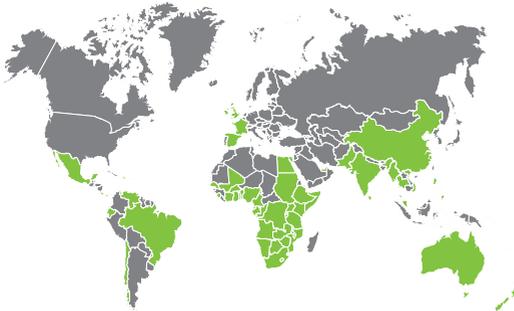
**In-house  
R&D  
development  
team**



**Manufactures to  
international  
quality standard  
ISO 9001:2015**

**After-sales  
multi-language  
Technical Support**

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**Technical Support  
Operating Times**

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08h00 to 16h30 GMT+2,

**Saturdays**  
08h00 to 14h00 GMT+2

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## 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.

# 1. Introduction

With the **G-ULTRA**, your entire world fits into the palm of your hand, giving you complete control at your fingertips. This is the evolution of GSM technology, designed to offer you the ultimate flexible, mobile-based access control and monitoring solution.

## 1.1. Important Safety Information



### **ATTENTION!**

**To ensure the safety of people and possessions, it is important that you read all of 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.**

**CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS before installing the product.**

- Do not install this product near DOSS sensor inside gate motor housing or near the remote receiver
- Do not install this product near any sensitive electrical components
- All installation, repair, and service work to this product must be done by a suitably qualified person
- Do not in any way modify the components of the system
- Do not install the equipment in an explosive atmosphere: the presence of flammable gas or fumes is a serious danger to safety
- 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, 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

## 2. Specifications

### 2.1. Physical Dimensions



FIGURE 1. G-ULTRA PHYSICAL DIMENSIONS

### 2.2. Technical Specifications

<b>Supply Voltage Range</b>	11-24V DC
<b>Maximum current draw</b>	300mA @ 12V DC
<b>Input/output current rating</b>	50mA (Open Collector)
<b>Relay contact current rating</b>	1A, 30V AC/DC (Resistive)
<b>Input sense voltage range</b>	0-24V DC (0-1.6V Low-input State, 5V-24V High-input State)
<b>SIM Card</b>	Nano-format e-SIM (South Africa Only)
<b>Number of configurable Input/Output channels</b>	4
<b>Number of relays</b>	2
<b>Memory capacity</b>	<ul style="list-style-type: none"> <li>• 5000 Event logs</li> <li>• 20 Access Profiles</li> <li>• 1 Custom Welcome SMS Message for New Access Numbers</li> <li>• 20 Custom Output Activation SMS Messages (From User to Device)</li> <li>• 30 Custom Input Notification SMS/Email Messages (From Device to User)</li> <li>• 100 Visitor Time-barring Windows (Windows are the periods between two dates)</li> </ul>

TABLE 1

## 2.2. Technical Specifications Continued

<b>Memory capacity (continued)</b>	<ul style="list-style-type: none"> <li>• 30 Generic Time-barring Windows (Windows are weekly recurring)</li> <li>• 10 Output Activation Schedules (Schedules are weekly recurring)</li> <li>• 3 Daylight Saving Periods</li> <li>• 4 Input to Output Mapping Configurations</li> </ul>	
<b>Frequency bands</b>	<b>LTE-FDD</b>	B1/B3/B5/B7/B8/B20/B28#
	<b>LTE-TDD</b>	N/A
	<b>GSM</b>	GSM/GPRS/EDGE 900/1800Mhz
<b>Network modes</b>	4G will be used whenever possible, 2G will be used only as a fallback <sup>1</sup>	
<b>Antenna</b>	<p>Internal GSM antenna with option to connect external for sites that so require.</p> <p><b>For Australia and New Zealand only:</b> Requires either Standard Antenna (WH-GHQ918D) or High-performance Antenna (WH-GSM05SMA2)</p>	
<b>Operating temperature range</b>	-40°C to +85°C	
<b>Degree of protection</b>	IP40	
<b>Mass of unit packed</b>	155g	
<b>Packaging dimensions</b>	80mm wide x 118mm deep x 38mm high	

**TABLE 1 CONTINUED**

1. No 2G network in Australia, limited 2G in New Zealand

### 3. Product Identification

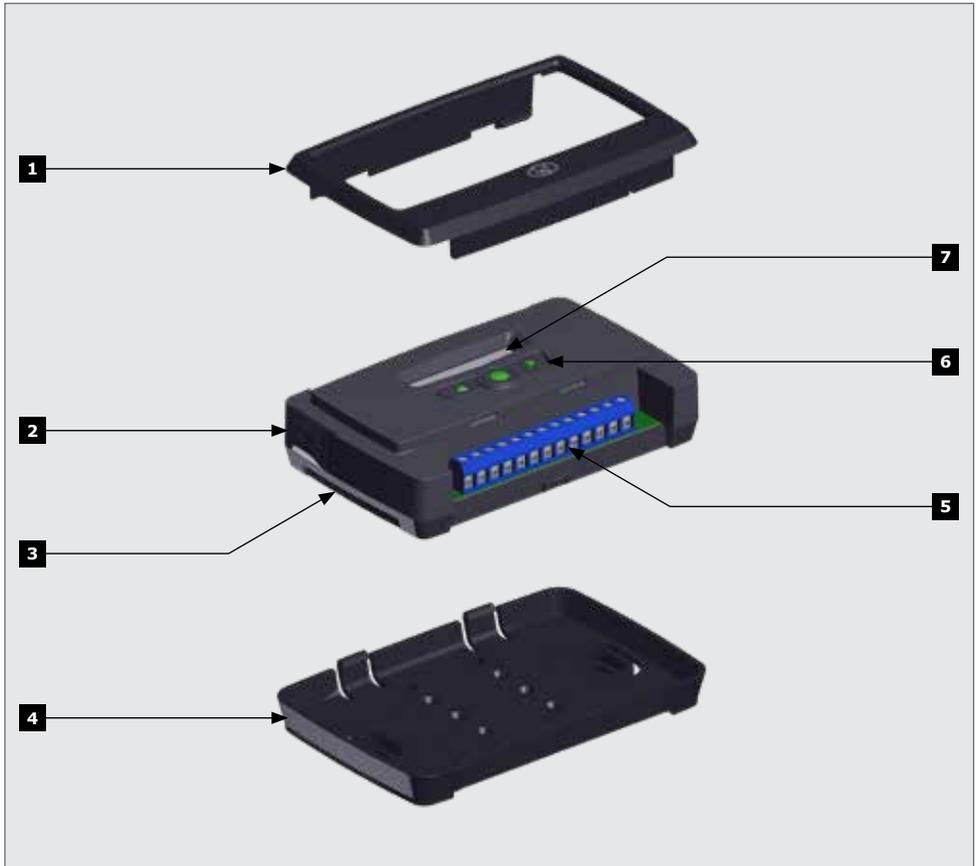
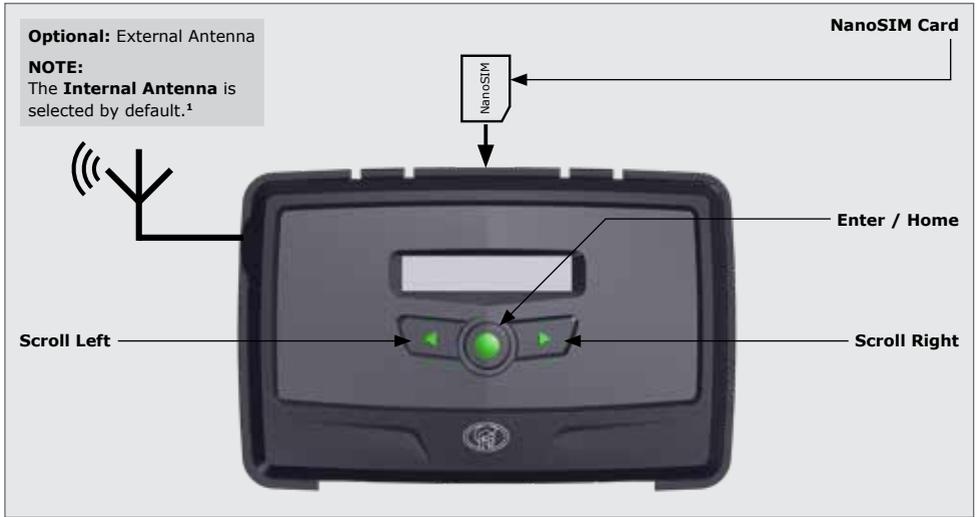


FIGURE 2. PRODUCT IDENTIFICATION

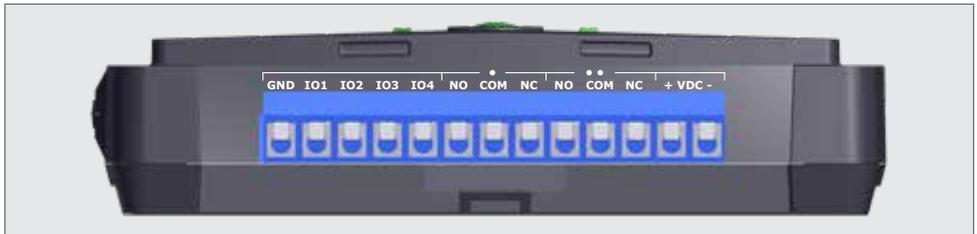
1. Fascia
2. External Antenna Cover
3. Main **G-ULTRA** unit
4. Mounting Plate
5. Terminal Blocks
6. Navigation Panel
7. LCD Screen

## 4. Device Layout and Wired Connections



**FIGURE 3. DEVICE LAYOUT**

1. **For Australia and New Zealand only:**  
Requires either Standard Antenna (WH-GHQ918D) or High-performance Antenna (WH-GSM05SMA2)



**FIGURE 4. WIRED CONNECTIONS**

<b>GND</b>	Ground
<b>IO1</b>	Input / Output 1 (Default: Output)
<b>IO2</b>	Input / Output 2 (Default: Output)
<b>IO3</b>	Input / Output 3 (Default: Output)
<b>IO4</b>	Input / Output 4 / Gate Status Input (Default: Output)
<b>NO</b>	Relay 1 Normally-open
<b>COM</b>	Relay 1 Common
<b>NC</b>	Relay 1 Normally-closed
<b>NO</b>	Relay 2 Normally-open
<b>COM</b>	Relay 2 Common
<b>NC</b>	Relay 2 Normally-closed
<b>+</b>	Positive of Power Supply 12-24VDC
<b>-</b>	Negative of Power Supply

**TABLE 2**

## 5. LCD Interface

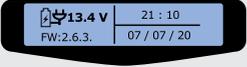
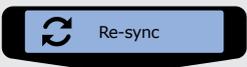
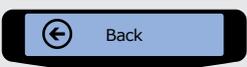
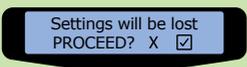
	<h3>Home Screen</h3> <p>Network Name or Phone Number Applicable to Incoming / Outgoing SMS or Call.</p> <ul style="list-style-type: none"> <li> Network Signal Strength</li> <li> Connected to Internet</li> <li> Connected to G-WEB</li> <li> Device has Error Condition</li> <li> Incoming SMS</li> <li> Outgoing SMS</li> <li> Incoming Phone Call Events</li> <li> Outgoing Phone Call Events</li> </ul>
	<h3>IO Status Screen</h3> <ul style="list-style-type: none"> <li> Input: Deactivated ("E" = Input event reached)</li> <li> Input: Activated (pulled to ground) ("E" = Input event reached)</li> <li> Output: Off</li> <li> Output: On (pulling to ground)</li> </ul>
	<h3>Output Status Screen</h3> <ul style="list-style-type: none"> <li> Relay X is Switched OFF and the Normally-Closed and Common Contacts are connected.</li> <li> Relay X is Switched ON and the Normally-Open and Common Contacts are connected.</li> </ul> <p>X= 1 or 2</p>
	<h3>Voltage/Firmware/Date &amp; Time Screen</h3> <ul style="list-style-type: none"> <li>• Supply Voltage</li> <li>• Time</li> <li>• Firmware Version</li> <li>• Date</li> </ul>
	<h3>Phone Number Screen</h3> <p>Device SIM Phone Number.</p>
	<h3>Airtime Balance Screen</h3> <ul style="list-style-type: none"> <li> Outgoing Call Credits</li> <li> Outgoing SMS Credits</li> </ul>
	<h3>GSM Antenna Selected Screen</h3> <ul style="list-style-type: none"> <li> Internal GSM Antenna Selected (default).</li> <li> External GSM Antenna Selected (connect own Antenna to SMA connector).</li> <li> Press Enter to change between Internal and External Antennas.</li> </ul>

TABLE 3

	<h3>Gate Status Screen</h3> <ul style="list-style-type: none"> <li> Gate Closed</li> <li> Gate Opening</li> <li> Gate Open</li> <li> Gate Status Warning</li> </ul>
	<h3>SIM Screen</h3> <ul style="list-style-type: none"> <li> SIM PIN OK</li> <li> SIM PIN Incorrect</li> <li> SIM Error</li> </ul>
	<h3>IMEI Screen</h3> <p>Displays the device's IMEI number</p>

TABLE 3 CONTINUED

## 5.1. Syncing and Factory Reset

	<p>From the main menu, scroll left using the direction buttons until "<b>Device Reset</b>" shows on the screen. Press the enter/home button to enter the sub-menus.</p>
	<h3>Re-sync (sub-menu)</h3> <p>Re-sync will refresh the connection of the device to G-WEB, and will not erase any settings. Push the enter/home button to confirm a re-sync, if the current settings are still desired.</p>
	<h3>Factory Reset<sup>1</sup> (sub-menu)</h3> <p>Factory reset will restore the device to factory settings. Press the enter/home button to confirm a factory reset.</p> <p><b>WARNING!</b>  <b>This will erase all settings, and restore the device to its original factory state!</b></p>
	<h3>Back (sub-menu)</h3> <p>Press enter/home button to return to main menu.</p>
	<h3>Confirmation screen</h3> <p>Confirm or decline proceeding with factory defaulting.</p>

1. Factory Reset can only be done when the device has a GWEB Connection.

TABLE 4

## 6. Configurations

### 6.1. Removing the Mounting Plate and Fascia

#### 6.1.1. Removing the Mounting Plate

Gently pull the two clips at the back, backward to release the main **G-ULTRA** unit, and lift the unit out of the mounting plate.

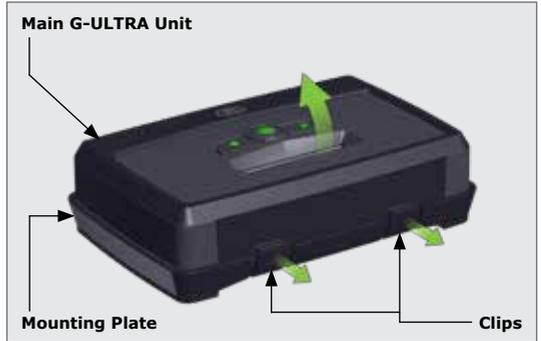


FIGURE 5

#### 6.1.2. Removing the Fascia

The fascia can be removed by inserting the tips of one's fingers into the slots (as shown in Figures 4 and 5), and pulling outward and upward.

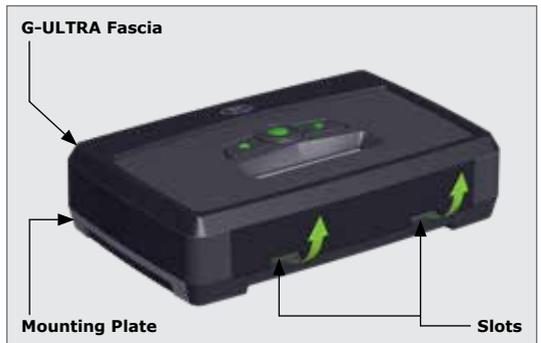


FIGURE 6

The fascia should pop off without effort.

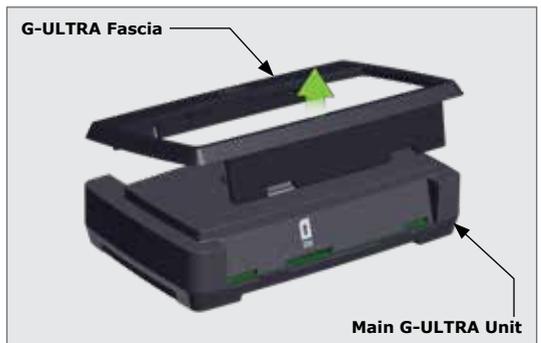


FIGURE 7



Reverse the procedure under Section 6.1 to re-assemble the **G-ULTRA**.

## 6.2. Installation

### 6.2.1. Wall Mounting

The Mounting Plate is used to mount the **G-ULTRA** device to a wall. Use four screws with wall anchors (not supplied) to secure Mounting Plate.

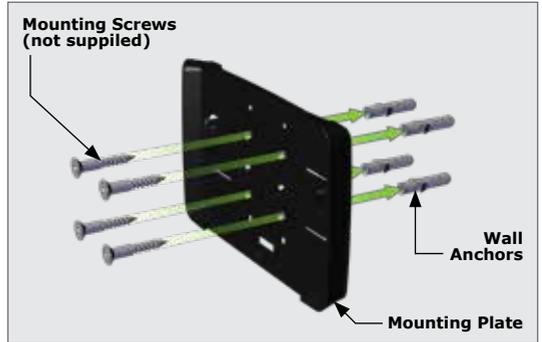


FIGURE 8

Clip the **G-ULTRA** main unit into the Mounting plate after it has been secured to the wall; a 'click' will be heard if done correctly.

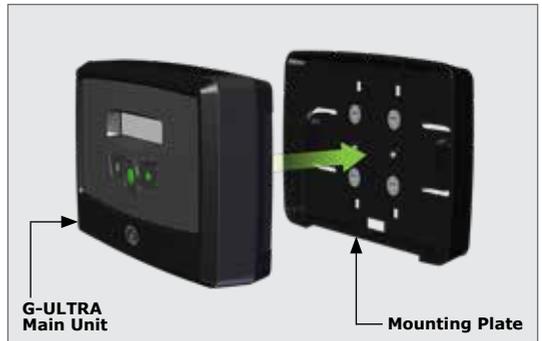


FIGURE 9

### 6.2.2. DIN-Rail Mounting

Should the **G-ULTRA** need to be mounted onto a DIN-rail, a DIN-rail mounting kit is available. Ask at Centurion Systems (Pty) Ltd for more information.

Secure the DIN-rail clips to the back of the mounting plate using four (4) screws.

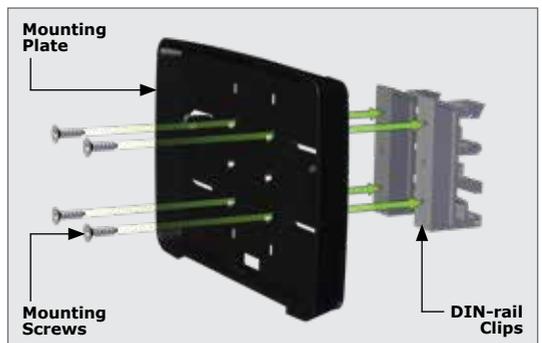


FIGURE 10

Position the bottom of the DIN-rail clips onto the rail, and clip the top end into position(A). A 'click' will be heard if it has been done correctly(B).

Clip the **G-ULTRA** main unit into the Mounting plate after it has been secured to the wall; another 'click' will be heard if done correctly.

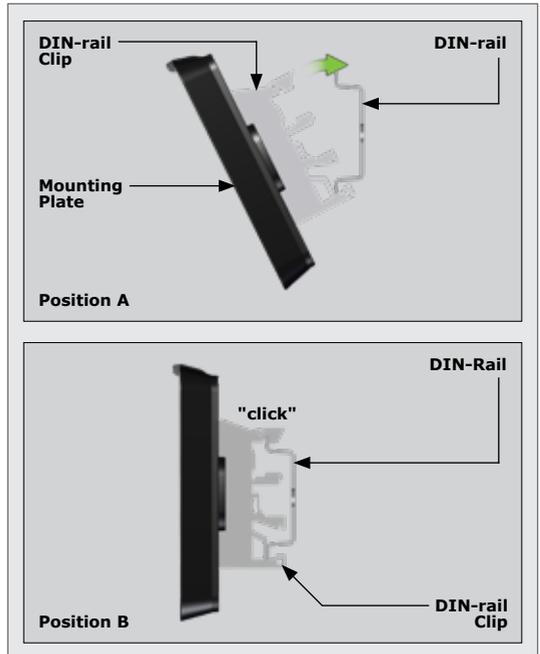


FIGURE 11

To remove the unit from the DIN-rail, remove the **G-ULTRA** main unit from the mounting plate as described in Section 6.1. Insert a small flat screwdriver into the hole(s) shown in Figure 12, and gently pry the clips from the rail.

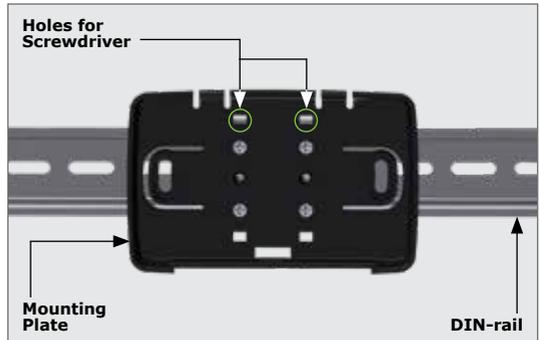


FIGURE 12



## 7.2. G-ULTRA to 12V D5-Evo SMART Controller

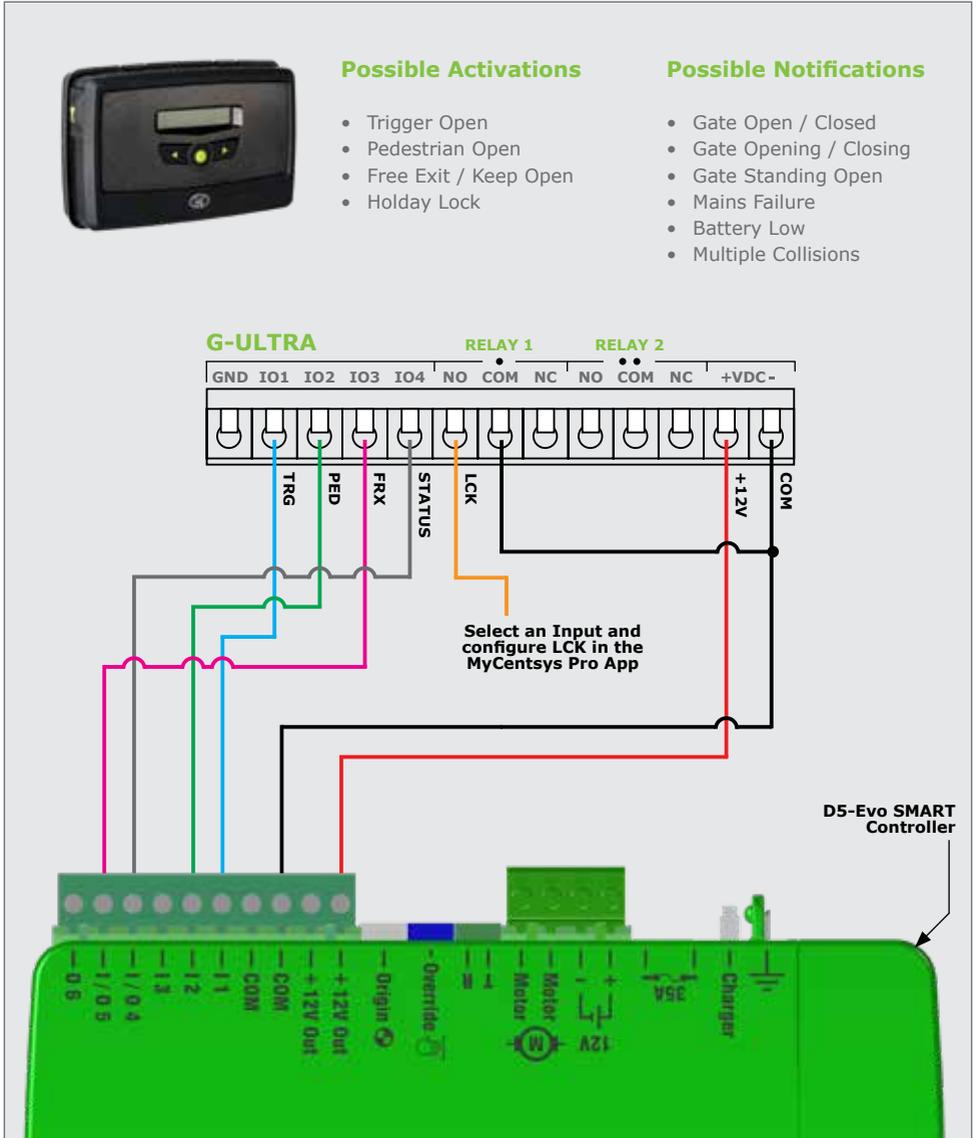


FIGURE 14

### Configurations in MyCentsys Pro Mobile Application;



TRG (I1),  
 PED (I2),  
 GATE STATUS (IO4), or  
 FRX (IO5)

### 7.3. G-ULTRA to 12V Vx Series SMART Controllers



#### Possible Activations

- Trigger Open
- Pedestrian Open
- Free Exit / Keep Open
- Holday Lock

#### Possible Notifications

- Gate Open / Closed
- Gate Opening / Closing
- Gate Standing Open
- Mains Failure
- Battery Low
- Multiple Collisions

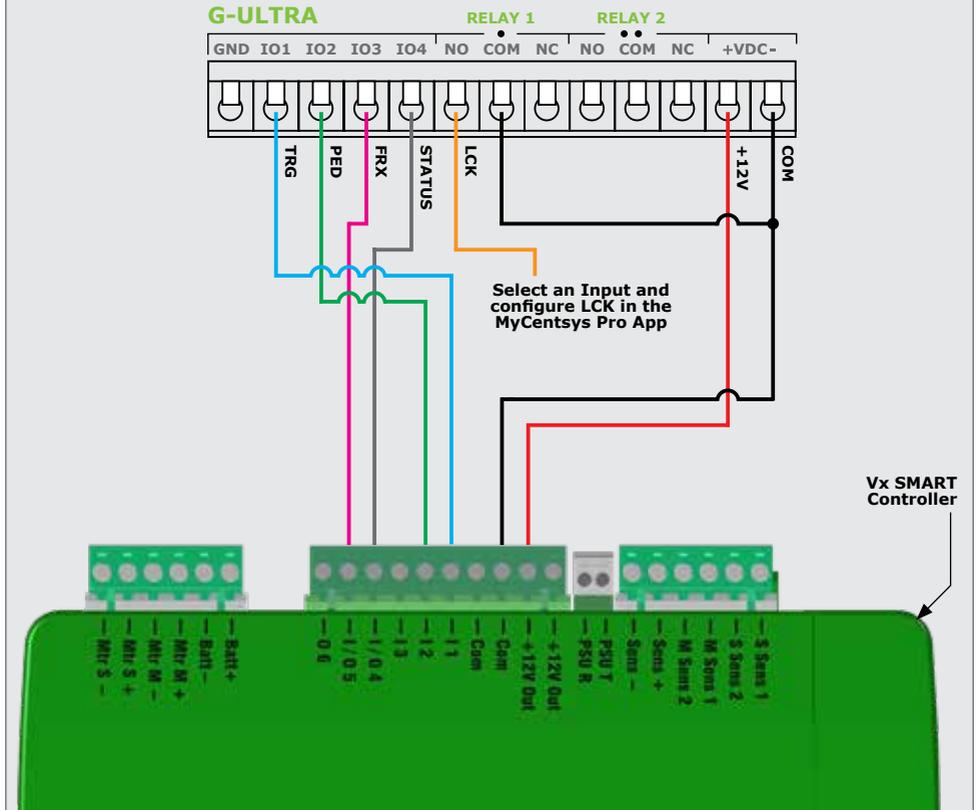


FIGURE 15

#### Configurations in MyCentsys Pro Mobile Application;

TRG (I1),  
PED (I2),  
GATE STATUS (IO4), or  
FRX (IO5)



### 7.4. G-ULTRA to 12V D-Series Controllers



#### Possible Activations

- Trigger Open
- Pedestrian Open
- Free Exit / Keep Open
- Holday Lock

#### Possible Notifications

- Gate Open / Closed
- Gate Opening / Closing
- Gate Standing Open
- Mains Failure
- Battery Low
- Multiple Collisions

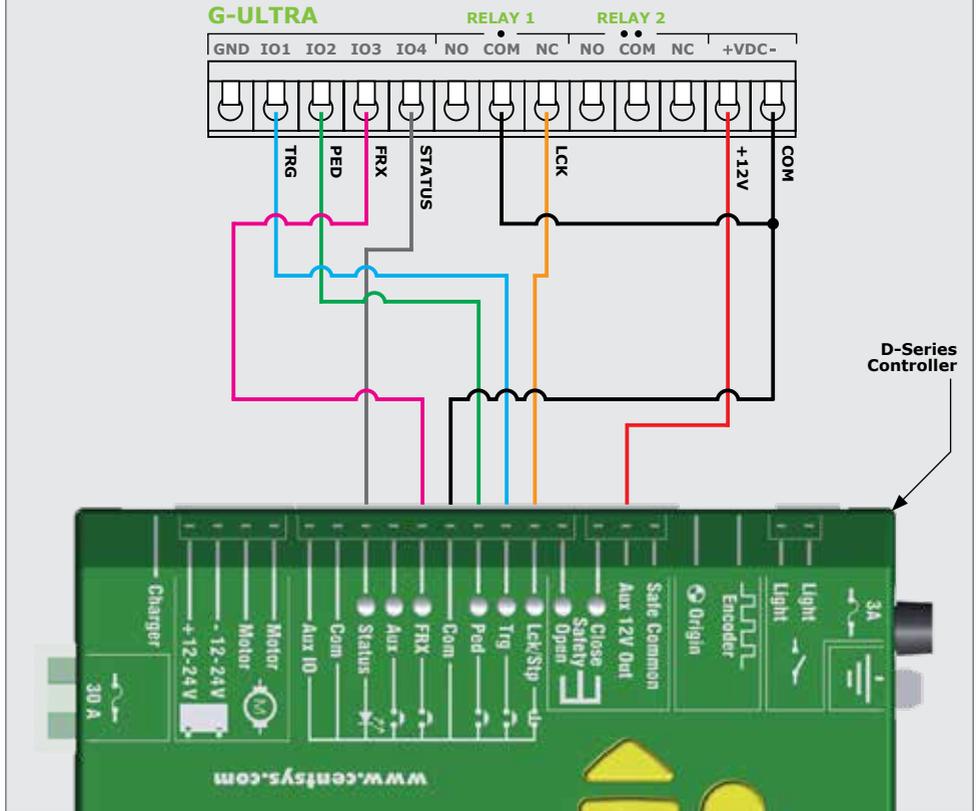


FIGURE 16

## 7.5. G-ULTRA to 12V V-Series Controllers



### Possible Activations

- Trigger Open
- Pedestrian Open
- Free Exit / Keep Open
- Holday Lock

### Possible Notifications

- Gate Open / Closed
- Gate Opening / Closing
- Gate Standing Open
- Mains Failure
- Battery Low
- Multiple Collisions

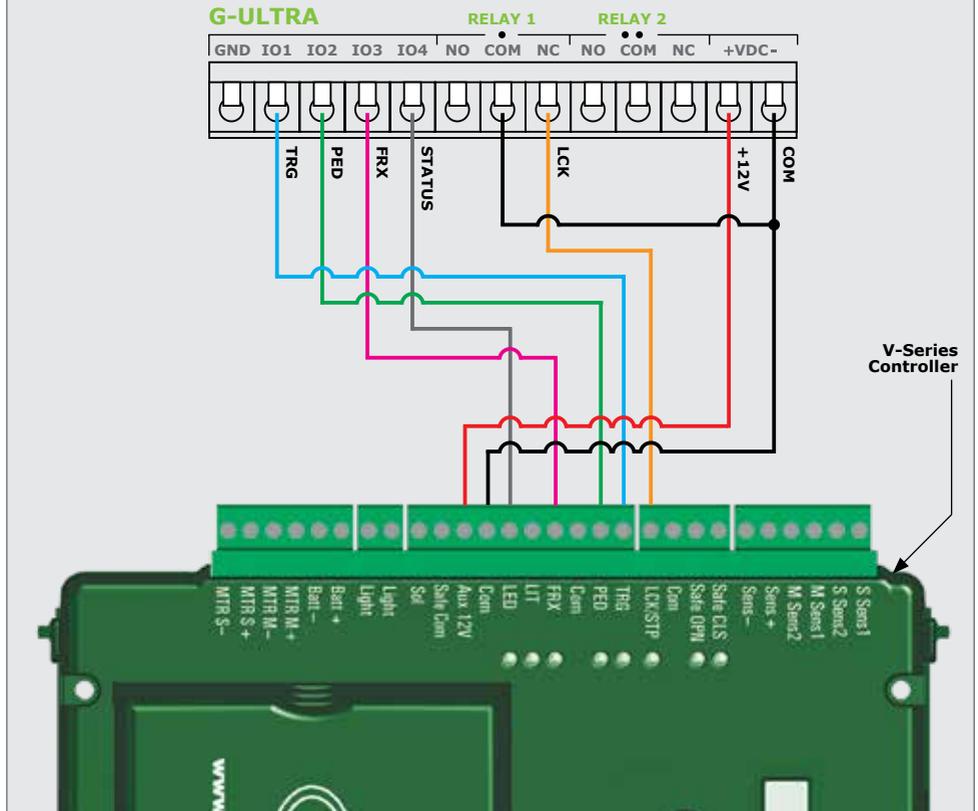


FIGURE 17

## 7.6. G-ULTRA into an Electric Fence Controller

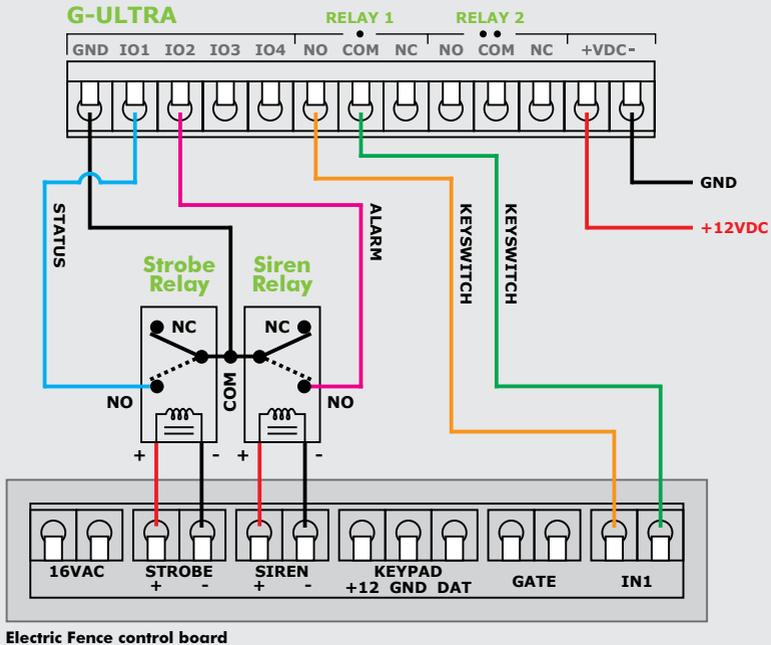


### Possible Activations

- Arm / Disarm

### Possible Notifications

- Arm Status
- Alarm Notifications



### To program the Strobe to Status:

#### JVA Keypad, Press:

1. "INSTALLER PIN"\*0#
2. 2202#
3. \*#

#### Nemtek Keypad, Press:

1. "INSTALLER PIN"\*0#
2. 101# **OR** 0011# (Model Dependant)
3. \*#

FIGURE 18

- The Status and alarm inputs must have three seconds filter time configured on the **G-ULTRA**
- The strobe output on the energiser needs to be programmed for the armed status notification to be sent via the **G-ULTRA**
- Using "IN1" via the **G-ULTRA** will bypass the key-switch function on the energiser



## 7.7. G-ULTRA into an Alarm System

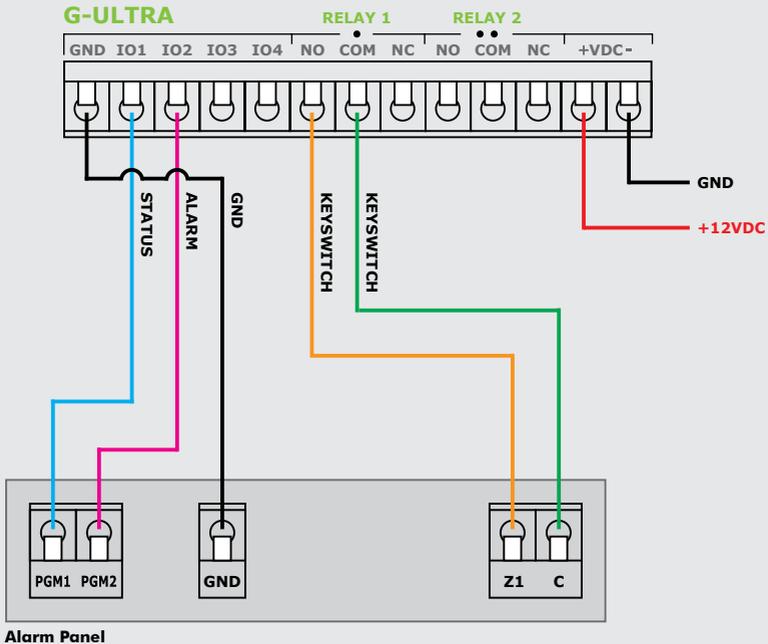


### Possible Activations

- Arm / Disarm

### Possible Notifications

- Arm Status
- Intruder / Siren



### Alarm programming:

- PGM1: Armed Status  
 PGM2: Siren Follow  
 Z1: Keyswitch Latched Arm / Disarm

FIGURE 19



The Alarm Panel PGMs must activate to "GND". However, if the Alarm Panel only supports positive activations, then relays must be used between the Alarm Panel and the **G-ULTRA** to change the activation to "GND".

### 7.8. G-ULTRA into a Striker Lock



#### Possible Activations

- Lock / Unlock

#### Possible Notifications

- Lock Status

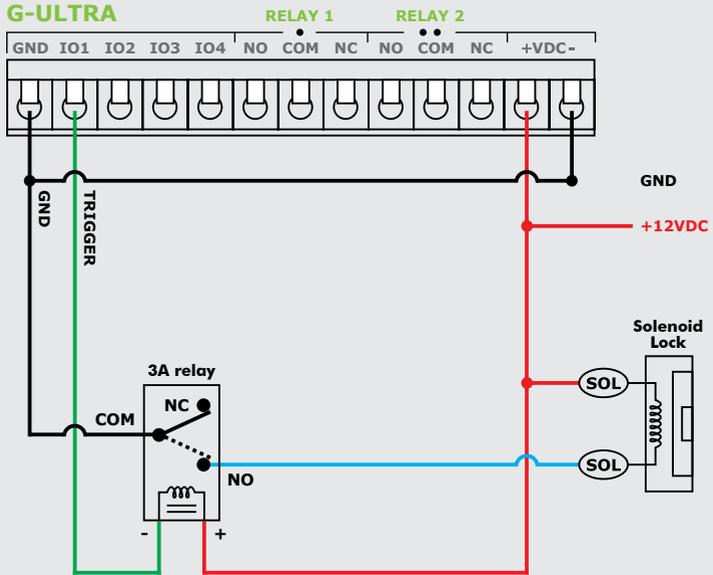


FIGURE 20

## 7.9. Completing the Installation

### 7.9.1. G-WEB

All features – both basic and advanced – can be easily, and remotely, configured via the G-WEB online interface. By simply logging into G-WEB using any Internet-enabled device, one can add and delete devices, specify text for input and output notifications and activations, modify device characteristics and a plethora of other features, all from the comfort of one's home or office. Note that it will be necessary to register if you have not previously done so.

1. Complete the wiring of the unit as per Section 4 and 7 of this document.
2. Power up the device and verify that the device connects to the G-WEB platform by referring to the LCD home screen.
3. Navigate your Internet browser to <http://www.gweb.co.za> (or [www.g-web.com.au](http://www.g-web.com.au) for Australia and New Zealand) and login to your existing profile or, alternatively, register a new profile.
4. On the My Devices page, select Add New **G-ULTRA** Device and follow the onscreen instructions to associate the device to your profile.
5. Configure the device with the desired settings using your online portal.

### 7.9.2. G-WEB Mobile App

To download the G-WEB Mobile installer app, simply scan the QR code on your mobile device to be taken to the SMART mobile website.

The G-WEB app gives you on-the-go access to a multitude of configuration and admin settings.



FIGURE 21

#### Quick Add:

To instantly associate a device to your online profile, scan the QR code using your mobile phone or any universal QR scanner mobile application (Figure 21). Note that the G-WEB Mobile app has a built in QR scanner.



### 7.9.3. MyCentsys Remote

Download the MyCentsys Remote mobile app now for free by scanning the QR code on your mobile device. MyCentsys Remote lets you remotely control your GSM devices from your phone and receive push notifications for systems that are being monitored.

Download on the  
**App Store**

**Minimum Requirements:**

- BLE-enabled mobile phone
- iPhone 6s and above
- iOS13

EXPLORE IT ON  
**AppGallery**

Get it on  
**Google play**

**Minimum Requirements:**

- BLE-enabled mobile phone
- Android 8.0. (Oreo)

FIGURE 22

## 8.10. SMS Commands

The table below lists the optional basic SMS commands available on the **G-ULTRA**. All basic and advanced configurations can be done via the G-WEB online portal.

SMS Command	Description
P.XXXX <sup>1</sup> .STATUS	<p><b>Device Status Request to</b> which the device will respond with the following information:</p> <ul style="list-style-type: none"> <li>• IMEI</li> <li>• Supply Voltage</li> <li>• Signal Strength</li> <li>• Device date &amp; time</li> <li>• I/O Status</li> <li>• Firmware Version</li> <li>• Relay Status</li> </ul>
P.XXXX.AP.Number	<b>Add New Phone Number</b> which will by default pulse Relay 1 by missed call
P.XXXX.DP.Number	<b>Delete a specific access number</b> from the G-ULTRA's memory
P.XXXX.OUT.Y.ON	<p><b>Switch output ON</b> where Y is the corresponding output number</p> <p>IO1 Y=1, IO2 Y=2, IO3 Y=3, IO4 Y=4, RELAY1 Y=5, RELAY2 Y=6</p>
P.XXXX.OUT.Y.OFF	<p><b>Switch output OFF</b> where Y is the corresponding output number</p> <p>IO1 Y=1, IO2 Y=2, IO3 Y=3, IO4 Y=4, RELAY1 Y=5, RELAY2 Y=6</p>

**TABLE 5**

## 9. Warranty Information



You can register your product(s) online at [www.centsys.com](http://www.centsys.com), which will assist you in keeping a record of your date of purchase or installation, serial numbers, etc.

All of our products are manufactured with extreme care, thoroughly inspected and tested.

The goods supplied by us shall be subject to the provisions of sections 55 to 57 of the Consumer Protection Act (68/2008) except where the provisions of the warranty contained in our product documentation are more favourable to the purchaser.

Subject to the warranty contained in our product documentation, if applicable, our products are warranted for a period of twenty-four months after delivery.

However, it is expressly noted that batteries carry a six month warranty due to the nature of these products being such that they are subject to possible misuse. Please note that warranties will be honoured on a carry-in basis; in other words, the product in question must be taken in to one of our branches, or to the authorised reseller that the product was purchased from, for assessment and, if necessary, repair. For equipment not of our manufacture, the warranty as supplied by the original manufacturer will apply if such warranty is more favourable to the purchaser than the relevant provisions of the Consumer Protection Act (Act 68/2008 of South Africa), or any other applicable law as so required in different countries in which the product was sold.

Such warranty is valid only once full payment has been received for such goods.

### **Australian customers:**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure

### **Any warranty may be voidable on 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), corrosion of metal parts, insect infestation, power surges or other forces outside of the control of the manufacturer.
4. Has been repaired by any workshop and / or person NOT previously authorised by the manufacturer.
5. Has been repaired with components not previously tested, passed or authorised by Centurion Systems (Pty) Ltd, South Africa or one of its subsidiary companies.

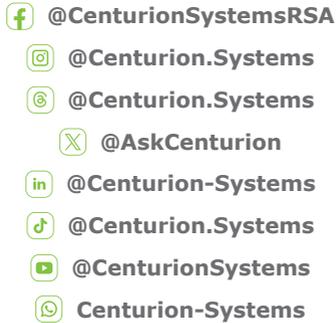








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