

HOUSE COMMANDER

User Manual



Product Highlights

- Cellular device works on any network
- Fully integrated all-in-one device
- Attractive IP67 enclosure
- Control / Monitor / Automate:
 - Geyser
 - Alarm system
 - Driveway Gate
 - Garage door
 - Power failures
 - Energy Metering



GSM Commander Heritage

The House Commander is based on the well-known GSM Commander product, and as such this manual must be read in conjunction with the GSM Commander device manual.

You can download the current GSM Commander manual at:

www.gsmcommander.com/downloads/GSM_Commander_Manual.pdf

Also download a copy of our smartsetup software here:

www.gsmcommander.com/downloads/setup_1281_V6_20.exe

Hardware Description

The House Commander is basically a GSM Commander that has been installed inside an enclosure to form a complete ready-to-mount product.

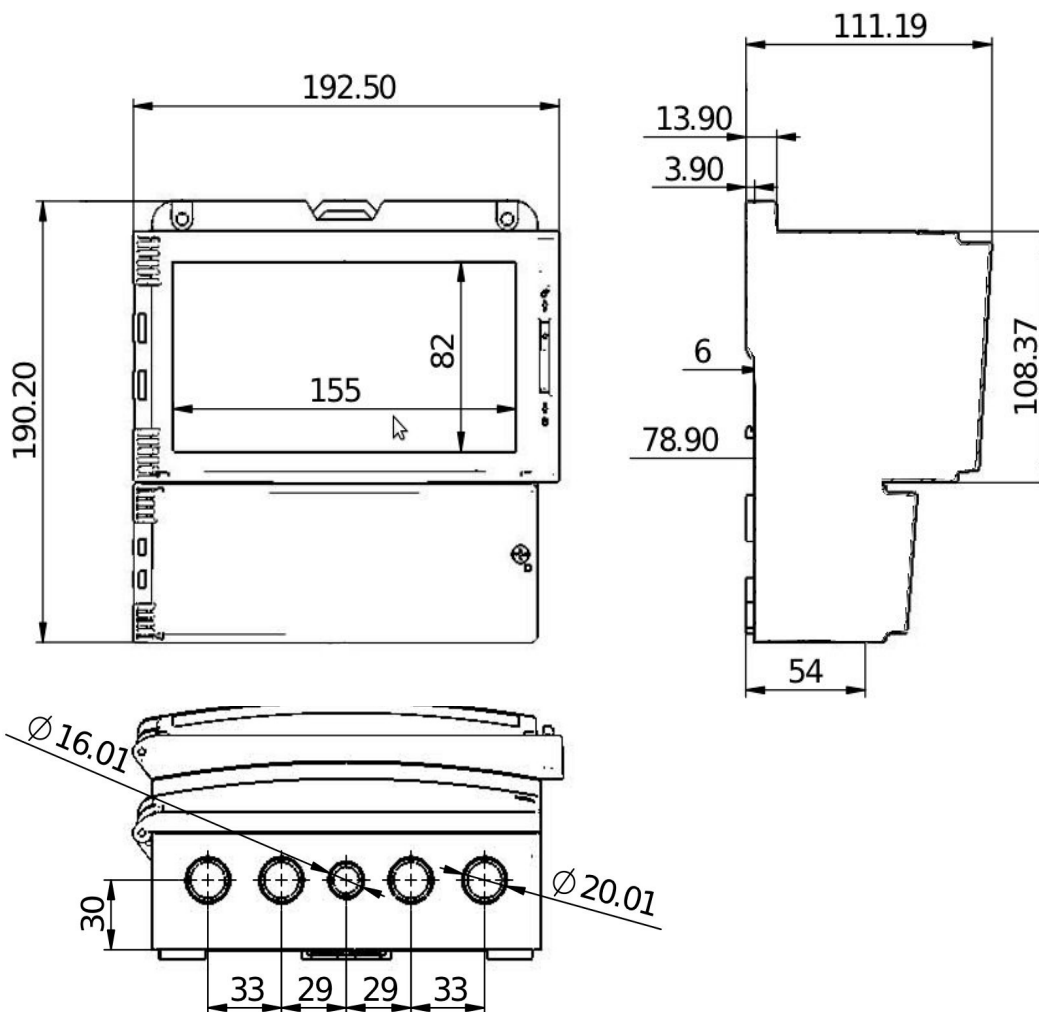
The House Commander contains the following hardware:

- GSM Commander (GC0321 or GC0641)
- Customized Expansion unit - similar to GX0505
- 1 x 30Amp relay (on output 1)
- 2 x Pulse stretcher inputs (on inputs 6 and 7)
- 500mA 14v PSU
- 12v, 1.2AH SLA Battery
- Battery protection module
- IP67 Enclosure

Specifications

GSM Commander options	GC0321 / GC0641 / GC1281
Dimensions	300 x 250 x 200mm
Mounting	Screw or DIN-rail
Weight	2kg
IP rating	IP67
Cable Entry	4 x Compression glands
Antenna	External antenna (0dBi antenna supplied)
Power input	220V AC 10W
Internal Battery	1.2AH (With protection circuit)
Inputs	6x Dry contact, 1x Isolated *Expandable up to 32 inputs.
Outputs	1x 30Amp relay , 6x 8A relay *Expandable up to 32 outputs.

Dimensions



Terminal Assignments

Terminal Marking	Type	Description
L	Large Barrier Terminal	220VAC LIVE Input
N	Large Barrier Terminal	220VAC NEUTRAL Input
OUTPUT1	Large Barrier Terminal	OUTPUT 1 LIVE OUT
COM.A	5mm Pluggable terminal	Common terminal for OUT2,3,4
OUT2	5mm Pluggable terminal	OUT2 Normally Open
OUT3	5mm Pluggable terminal	OUT3 Normally Open
OUT4	5mm Pluggable terminal	OUT4 Normally Open
COM.B	5mm Pluggable terminal	Common terminal for OUT5,6,7
OUT5	5mm Pluggable terminal	OUT5 Normally Open
OUT6	5mm Pluggable terminal	OUT6 Normally Open
OUT7	5mm Pluggable terminal	OUT7 Normally Open
+12V	5mm Pluggable terminal	+12v DC supply output
+12V	5mm Pluggable terminal	+12v DC supply output
IN1+	5mm Pluggable terminal	Input 1 positive Input
IN1-	5mm Pluggable terminal	Input 1 Negative Input
GND	5mm Pluggable terminal	Negative DC Supply output
GND	5mm Pluggable terminal	Negative DC Supply output
GND	5mm Pluggable terminal	Negative DC Supply output
IN2	5mm Pluggable terminal	Input 2 (active when low)
IN3	5mm Pluggable terminal	Input 3 (active when low)
IN4	5mm Pluggable terminal	Input 4 (active when low)
IN5	5mm Pluggable terminal	Input 5 (active when low)
IN6(s)	5mm Pluggable terminal	Input 6 (active when open)
IN7(s)	5mm Pluggable terminal	Input 7 (active when open)

ON/OFF Switch

Behind the clear lid that covers the integrated GSM Commander is also an ON/OFF switch. This switch will disconnect both the internal battery and the power supply, when set to the OFF position. Remember to switch the device OFF when changing the SIM card.

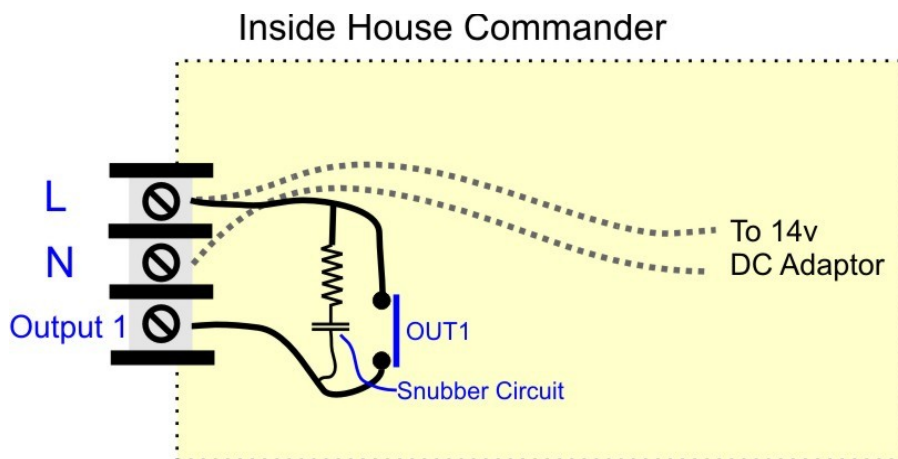
Terminal Descriptions

220VAC LIVE / NEUTRAL Input (Shock danger)

These terminals supply 220V AC power from outside to the internal 12V DC Power adapter.

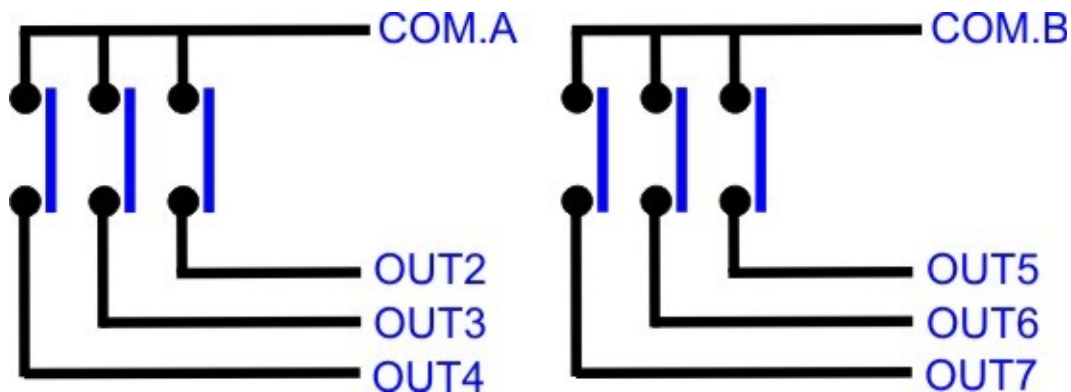
OUTPUT 1 LIVE OUT (Shock danger)

Output 1 from the GSM Commander has been pre-wired to switch an integrated 30Amp relay to provide for applications where high-power loads need to be switched. The Common terminal of the relay contacts has been pre-wired to the LIVE terminal, and the Normally Open terminal of the relay contacts is made available at this terminal. When the GSM Commander switches on its output 1, this terminal will supply 220V AC (LIVE). The 30Amp relay contacts have on-board "snubber" protection circuits to protect the device from inductive loads, and as such this terminal will never be completely zero, and is never safe to touch, regardless of the state of output 1.



COM.A / COM.B and Outputs 2-7

To conserve space in terms of IO terminals, the outputs are grouped in two groups. Each group (A and B) are sharing a common terminal as in the drawing below.



Each group will thus be limited to switch similar voltages. (You cannot use Output 2 to switch a 12v device on and off, and then use Output 3 to switch a 220VAC device on and off). A good example will be to use Group A (Output 2,3,4) to control gate controllers and alarm arm/disarm signals, and then use Group B (Output 5,6,7) to switch 220VAC-powered devices in the home. Please contact our technical support team if you need help with this. (technical@gsmcommander.com)

+12v / GND Terminals

These terminals supply 12v to outside devices. Please note you may not draw more than 100mA from these terminals.

IN1+ / IN1 - Terminals

Input 1 is opto-isolated. As such it may be switched on by signals that are not referenced to the House Commander supply. The input will be activated if a voltage of 5-12V DC is supplied to these terminals. These terminals are typically used to connect to the siren terminals on an existing alarm system. When the alarm panel switches the siren on, the House Commander can detect voltage at those terminals and trigger accordingly. If you need to use a dry contact to activate input 1, you can simply connect one of the +12v terminals to the IN1+ terminal and connect the contact between IN1- and GND. This is identical to the inputs on the GSM Commander (as described in the GSM Commander manual)

IN2,3,4,5 Input Terminals

Inputs 2,3,4,5 are all "active low" inputs and are activated when they are connected to GND. You can use the inputs to monitor devices like door switches, movement sensors or remote control receivers (to name a few).

IN6,7 Input Terminals

These inputs are "active low" inputs, but are special in that they can be used to monitor very short pulses. Normal GSM Commander inputs require an input state to be constant for at least 100ms before it will reliably register. Certain devices such as KWH meters give out extremely short pulses that can not normally be detected. These inputs each have a "pulse stretcher" internally connected such that if the input is activated for an extremely short period (as short as 1 microsecond) the corresponding input on the House commander is activated for 0.5 seconds.