# # Maxi GX manual
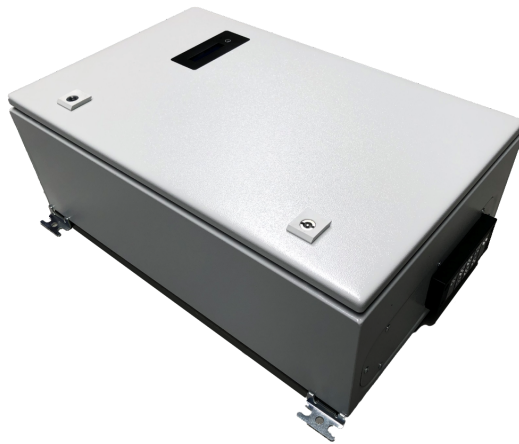
## 1. # Introduction

The Maxi GX is a member of the GX product family.

Intended for systems with many MPPT Solar Chargers with a VE.Direct port, it has a fast CPU and 25 VE.Direct ports.

Inside the steel enclosure is a power supply, a GX controller board, and various other components. This picture shows the complete insides.





## 2. # Installation

### 2.1. # Mounting

The Maxi GX is a steel IP67 enclosure made by Rittal, part number AE 1038.500.

Mount the unit using the four brackets.

Wire all the cabling through the water tight feed-through at the bottom. Open that feed-through by unlatching the top with a screw driver. It is not necessary to unscrew it.



Insert screw driver here to open.

## 2.2. # Power

Connect the battery to -Vin and +Vin on the bottom of the `Traco Power` power supply. 18 to 78 VDC. Leave the on/off terminal on the same block open.

## 2.3. # Communication cables

- Connect the VE.Bus to the MK3-USB, on the right. Do not use the single RJ45 socket at the top of the Controller board. Its non isolated, non functional, and connecting it will lead to a hardware failure.
- Connect ethernet to the socket labeled `ETH.` on the controller board.
- The dual RJ45 VE.Can socket on the bottom of the controller board can be used to connect to either a battery equipped with a Can-BUS BMS. Or to one or more Victron products equipped with a VE.Can port.
- Up to 25 VE.Direct devices can be connected to the available VE.Direct ports (1 on the controller board, and 24 divided between the two VE.Direct expanders on the left.

For more connection details, refer to the [CCGX Manual](#).

## 2.4. # Digital inputs and relays

## 2.4.1. # I/O module and terminals

On the white enclosure, right next to the MK3-USB, there are four digital inputs and two relays:

For both, the connector can be pulled free for easy wiring, and then re-insterted.

### 2.4.2. # Digital inputs

The Maxi GX has four digital inputs. The operate at 3v3 levels, and can withstand up to 5V input. Each input has an internal 10k pull-up resistor to 3v3. We recommend wiring it to a potential free relay or otherwise an open collector/optocoupler output.

The terminal block has four pairs of two terminals:
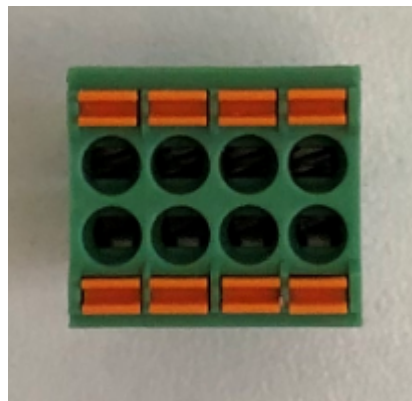


The two on the left are digital input one (open or short them), the next two are digital input 2, and-so-forth. Where upper row is signal and lower row is GND for all four inputs.

| D1 | D2 | D3 | D4 |
|---|---|---|---|
| GND | GND | GND | GND |

### 2.4.3. # Relays

Relay 1 can be used for auto-starting a generator, an alarm relay, and as a free to use remotely operable relay via the graphical interface. Relay 2 can be operated via a selection from graphical interface, but not used with the built in autostart generator or alarm relay features.

| Relay 1 | | |
|---|---|---|
| NO | COM | NC |
| | | |

| Relay 2 | | |
|:---:|:---:|:---:|
| **NO** | **COM** | **NC** |

## 3. # Accessing the device

In an installation with internet available; the simplest method is to connect the Maxi GX to the local network using an UTP cable; then verify on the front-display that it has been assigned an IP address (its default configured for DHCP). And then on a computer with internet go to our VRM Portal and follow the instructions in VRM Portal chapter of the CCGX Manual.

Alternatively, on the local network the device can be easily found with VictronConnect. This video shows how that is done:
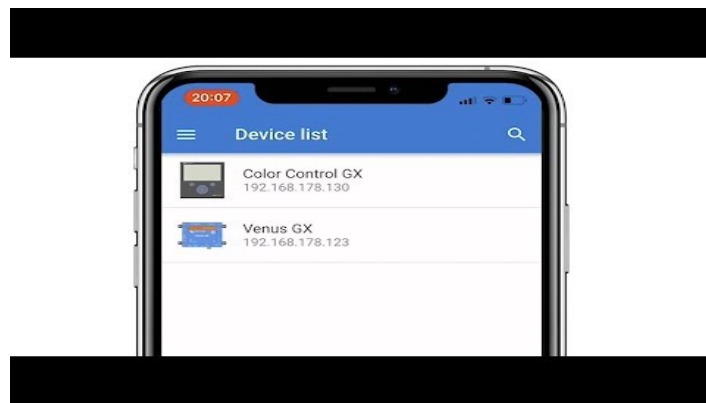


Use the push button to cycle to the LAN ip address page:



## 4. # Configuration and operation

Refer to the CCGX Manual.

## 5. # Troubleshooting

Below picture shows all the LEDs in the product:

- green power LED on the `Traco Power` power supply

- red power LED on the controller board (on the right)
- red power LED on the USB hub
- LEDs per USB connection on the USB hub



For other possible issues, refer to the CCGX Manual.