

# GenController



## Generator auto start module

## USER GUIDE



## teip electronics

### 1 ABOUT THIS MANUAL

#### 1.1 Purpose

This manual describes the introduction, installation and operation of the GenController auto start generator module.

Please read this manual carefully and keep it for future reference.

#### 1.2 Scope

This manual provides safety and installation guidelines as well as information on wiring.

#### 1.3 Safety Instructions

 **WARNING:** This chapter contains important safety and operating instructions.

- Before using the module, read all instructions and cautionary markings on the module and all appropriate sections of this manual.
- Do not disassemble the module.
- CAUTION - Only qualified personnel can install this module.
- Be very careful when using metal tools on or around batteries. The potential risk exists to drop a tool to spark or short circuit batteries or other electrical parts and could cause an explosion or fire.
- Please strictly follow the installation procedures.
- This module should be installed indoors and kept dry, away from potentially getting wet from rain or water leaks.

### 2. INTRODUCTION

The GenController is an automatic backup generator starter unit for solar battery systems. It works with generators fitted with two wire starting systems. The module will start the generator when the battery reaches the “Battery low” voltage setting. It will keep the generator running until the “Battery high” voltage setting is reached, or if the run timer’s time has expired.

Low battery voltage, high battery voltage and run timer’s time are fully customisable.

Battery voltage and generator status can be monitored with a web browser via wifi.

#### 2.1 Product overview



## 2.2 Specifications

Minimum voltage 12VDC - Set according to battery minimum voltage.

Maximum voltage 72VDC - Set according to battery maximum voltage.

## 3. INSTALLATION

### 3.1 Unpacking and Inspection

Description	Picture
User manual	
Auto start module	
Battery cable (1.5m)	

### 3.2 Connecting

Connect battery cable making sure red wire is connected to battery's positive terminal and black wire is connected to battery's negative terminal.

Connect 2Wire cable supplied with your generator to the two 2Wire terminals on the module. The 2Wire cable wires can be connected either way.

Make sure the battery connection switch on the module is in the off position (indicator dot in the out position) then plug the battery cable into the battery connection point. Turn the switch on.



## 4. SETTINGS

### 4.1 Menu

Press the "Menu/Set" button once and scroll up or down through the menu items using the up and down buttons. Press "Esc" button to go back to battery monitor screen.

### 4.1 Change settings

Press the "Menu/Set" button once. Scroll down to the setting that needs to be changed. Press and hold the Menu/Set button for a few seconds. "Menu set" shows on the LCD screen and a "\*" character shows after the menu item. Use the Up and Down buttons to change the setting. Press the "Menu/Set" button and the setting will be saved. After settings has been changed press the "Esc" button to return to the battery monitor screen.

## 4.2 Menu items

- Battery low - Battery voltage at which the generator will start. The generator will start when the battery voltage goes equal to or below this voltage for 5 seconds. It is recommended the the voltage is to 1 volt above the batteries battery low setting.
- Battery OK - Battery voltage at which the battery is equal or above nominal voltage.
- Battery high - Battery voltage at which the generator will stop. The generator will stop when the battery voltage goes equal to or higher than this voltage 10 seconds.
- Time - Time setting for the run timer. Example 2.50 means generator will run for two and half hours before stopping. If battery high voltage is reached before timer's time the generator will be shut down.

## 5. LED INDICATORS

- Red - Battery low voltage has been reached.
- Yellow - Battery voltage below the battery nominal voltage.
- Green - Battery voltage at or above battery nominal voltage.

## 6. MANUAL START/STOP

The Start/Stop button enable the user to start or stop the generator manually.

- When the "Start/Stop" button is used to start the generator the generator will run for the time that the run timer is set for or if battery high voltage reached.
- When the "Start/Stop" button is used to stop the generator the run timer will reset.

While generator is running the red LED next to the Start/Stop button while be on.

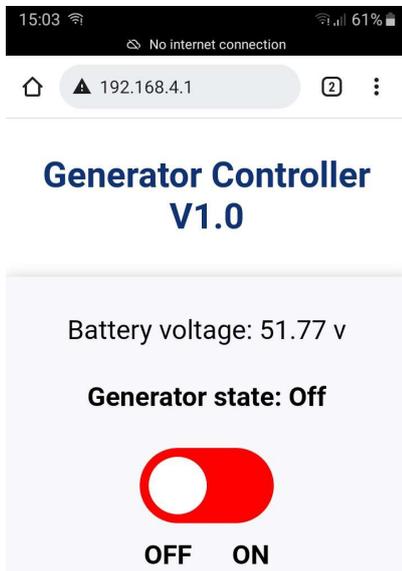
## 7. WiFi MONITOR

The battery voltage can be monitored with a web browser.

When in range of the module's wifi signal, log onto the "GenController" wifi server.



On your web browser's address bar type: **192.168.4.1**



The generator can also be manually started or stopped using the slide button on the web page. The button has the same operation as the Start/Stop button on the auto start module.