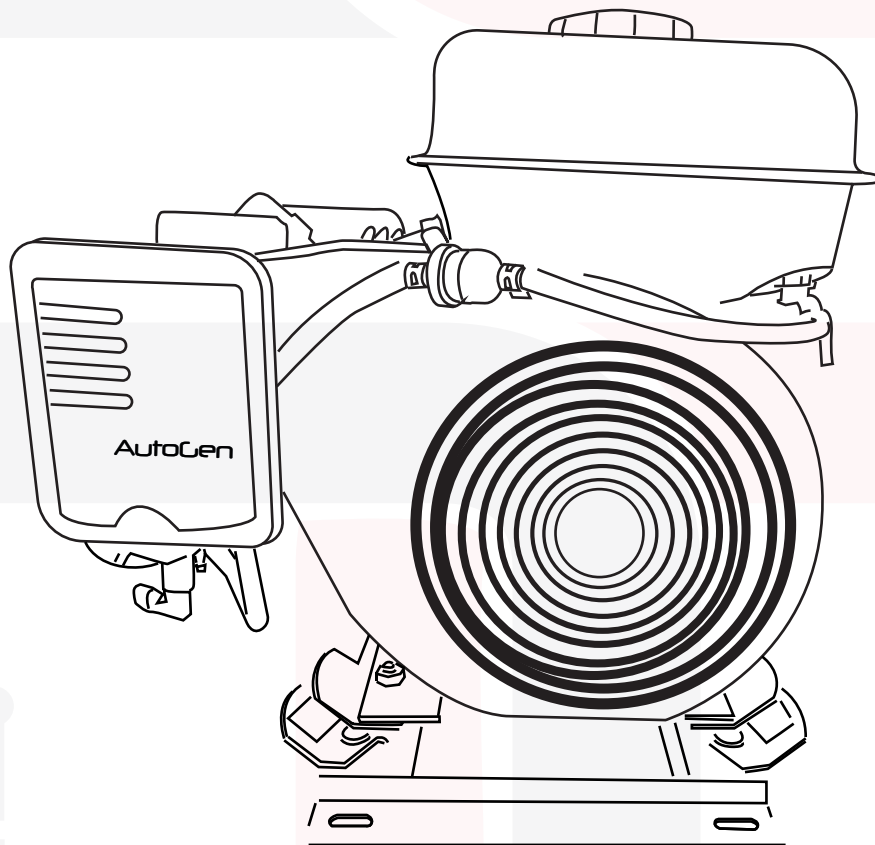# DC GENERATORS
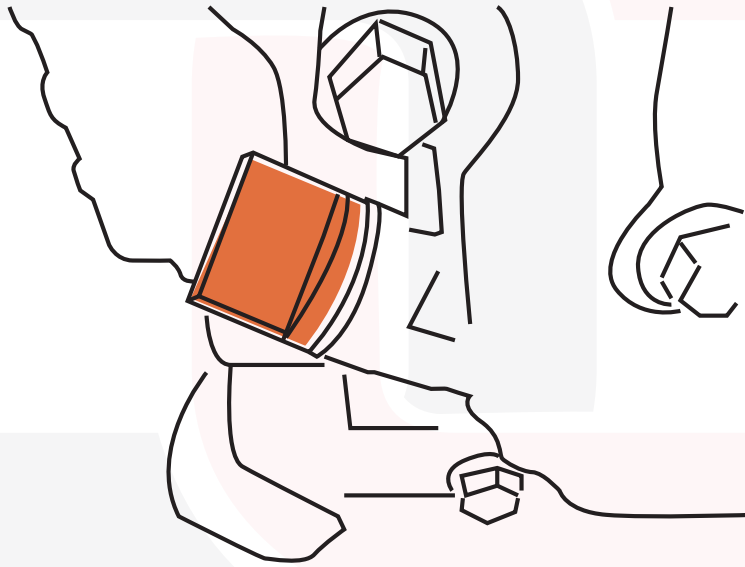
Manual Notes V5 – AUTOGEN 48v DC Generators
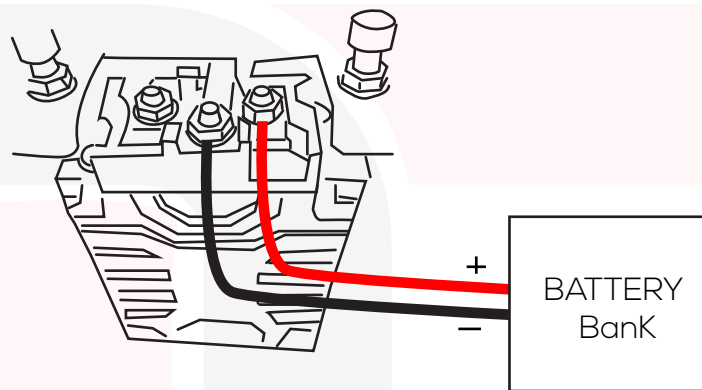***** Please view all notes before starting your new V5 AutoGen Generator. *****
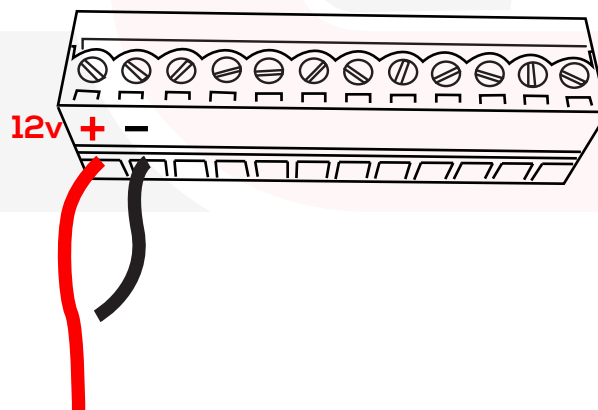
Add lubrication oil to crankcase by removing Orange screw plug.
Above 32°F, use SAE 30. Below 40°F and down to -10°F, use 10W-30. Synthetic 5W-30 can be used in all temperatures. Oil should be changed after the first 20-30 hours of operation and every 100 hours of run time thereafter.

BATTERY
BanK

Connect battery bank positive and negative leads to posts.
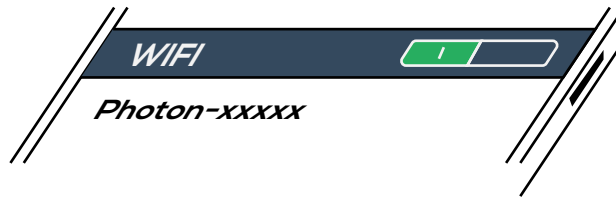

12v + −

3

To connect V5 AutoGen 48V controller to the internet, follow the steps below

To connect V5 AutoGen 48V controller to the internet, you will need to
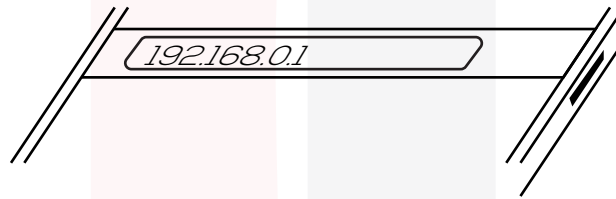
1. Notice the status led is blinking Blue

2. Navigate to your wifi settings from any smartphone and search for wifi with name **Photon-xxxxx**

WIFI

Photon-xxxxx

3. Connect to the **Photon-xxxx**. No password is required.

4. Open any web browser ( ) from your smartphone and navigate to 192.168.0.1 and follow the instructions on the page.

192.168.0.1

After scanning for the available networks and providing network password, the V5 AutoGen will restart and connect to the internet. Status led should now be breathing Cyan

4

To connect V5 AutoGen controller and link your unique QR Code to AutoGen app.
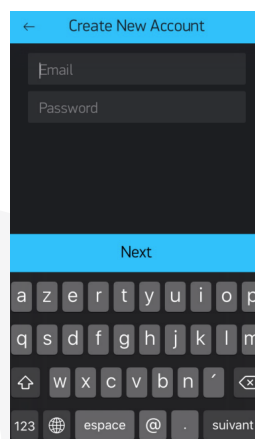
1. Download our app AutoGen .

For Android.
https://play.google.com/store/apps/details?id=cc.blynk.appexport.autogen

For IOS.
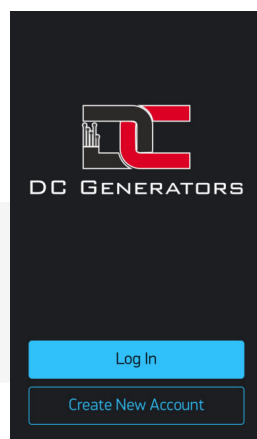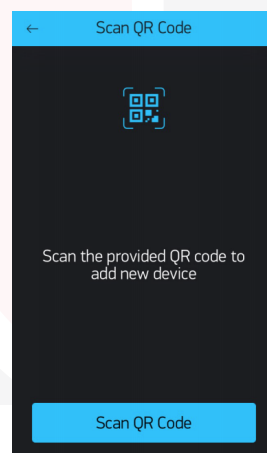https://apps.apple.com/gb/app/autogen/id1468312359

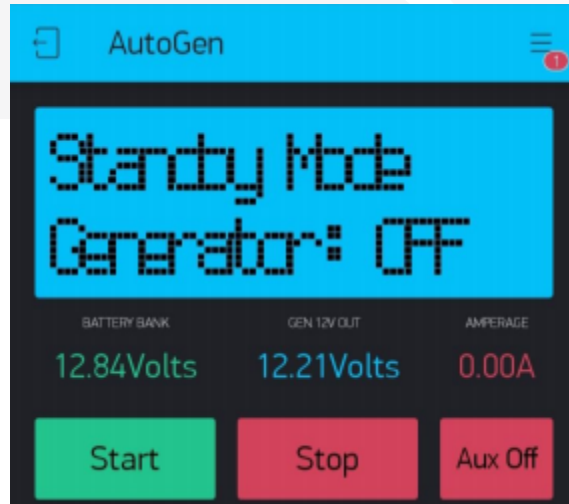**AutoGen**
DOWNLOAD ⇩

2. Create an account

3. Scan the qr code placed under the AutoGen controller.

Please confirm you are able to view the monitor once you have completed this step.
This is your monitoring software with remote start or stop.

Note: If you notice a Red indicator on top right hand screen of app, review step 3 as this means that the controller is unable to access the internet.

Auto Start/Stop Mode
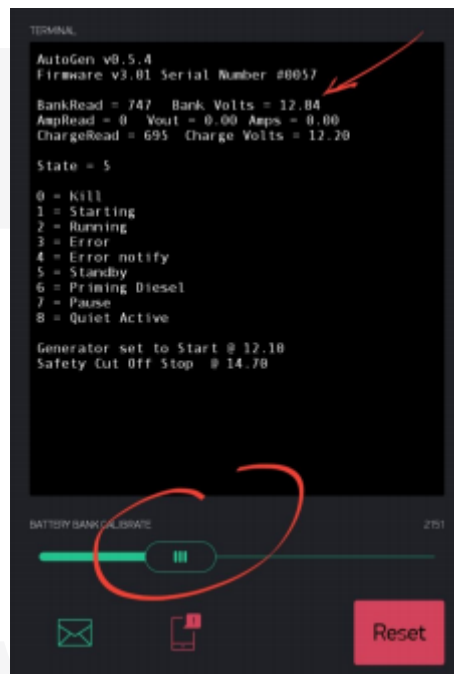
First step within the app is to scroll down to the bottom of the apps screen and adjust the battery bank calibrate slider as pictured below. Match the controllers Bank Volts with your other measuring equipment, multimeter etc.
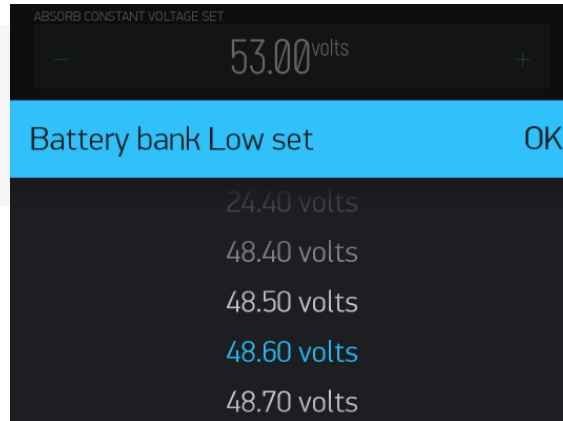
Set your low battery bank voltage for when the generator should start.
The V5 AutoGen controller will attempt to start the generator, when battery bank has reached Low Set threshold from within the app.

Note: Any other alterations to preset values, please email us with your request so we can alter via an update.
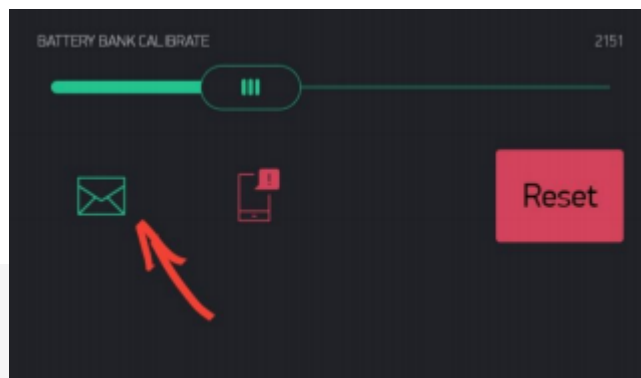
If the generator fails to start due to a malfunction, no fuel or for any other reason preventing startup, the V5 controller will enter an Error State and send a notification via email to inform of a startup error. Press the Green mail icon and enter your email address to receive any error notifications

Controller must be reset(via app) or power cycled(remote control switch) after inspection to continue Auto Start/Stop Mode after an error state.

Note: If the V5 AutoGen is not connected to the internet, remote monitoring via app will be inaccessible, but will continue to operate in Auto Start/Stop mode.
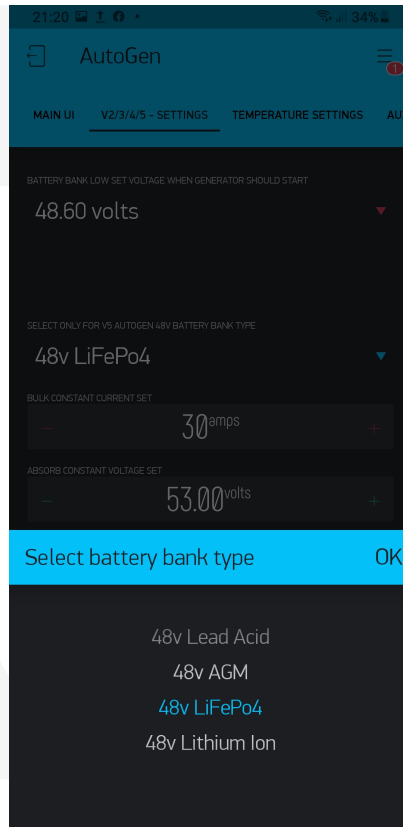
Select Battery Type.
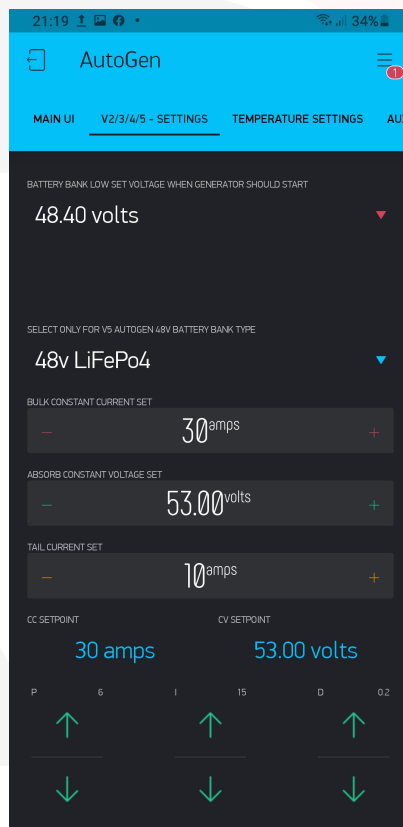These pre set values can be altered via an OTA update.

Adjust your Bulk .
Absorption and Tail Current settings

Manual Start/Stop Mode

Manual start via the app can only be accomplished when controller is in a Standby State observed on the apps lcd panel and whilst V5 is connected to the internet.

Status LED Indicator

An RGB led can be observed through status hole on microcontroller.
The colors, blinking and steady breathing patterns are as followed.

●	Blinking **GREEN**: Searching for wifi connection
●	Blinking **CYAN**: Attempting to connect to server
●	Breathing **CYAN**: Connected to internet and serve
●	Blinking **MAGENTA**: Updating firmware
○	Breathing White: Not connected to Access Point

Only when Breathing **CYAN** can you access the monitoring app.
If there is no connection to internet or server, the V5 AutoGen Controller will continue to run in auto start/stop mode.

If you require any further assistance please do not hesitate to ask.

DC Generators

Engine Specifications

|	
Engine type	4-stroke single cylinder OHV petrol engine 25° inclined cylinder horizontal shaft
Cylinder sleeve type	Cast iron sleeve
Bore x Stroke	68 x 45 mm
Displacement	163 cm³
Compression ratio	9.0 : 1
Net power	3.6 kW (4.8 HP) / 3600 rpm
Cont. rated power	2.5 kW (3.4 HP) / 3000 rpm 2.9 kW (3.9 HP) / 3600 rpm
Max. net torque	10.3 Nm (1.05 kgfm) / 2500 rpm
Ignition system	Transistorised
Starter	PM Alternator/Starter
Fuel tank capacity	3.1 Liter
Fuel cons. at cont. rated power	1.4 L/h - 3600 rpm
Engine oil capacity	0.6 Liter
Dimensions (L x W x H)	312 x 362 x 346 mm
Dry weight	21 kg

GENERATOR

BATTERY
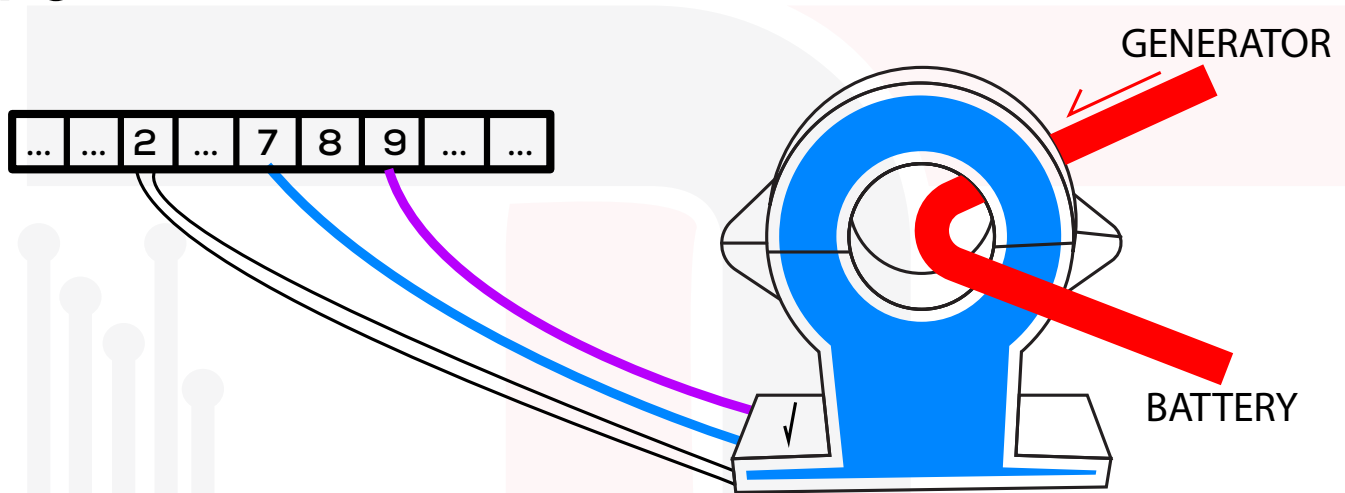
Connector **2** is -0v (white wire) to number **2** of Current Sensor
Connector **7** is +5v (blue) to number **1** of Current Sensor
Connector **9** is Signal (purple) to number **3** of Current Sensor

OHV

LPG inlet
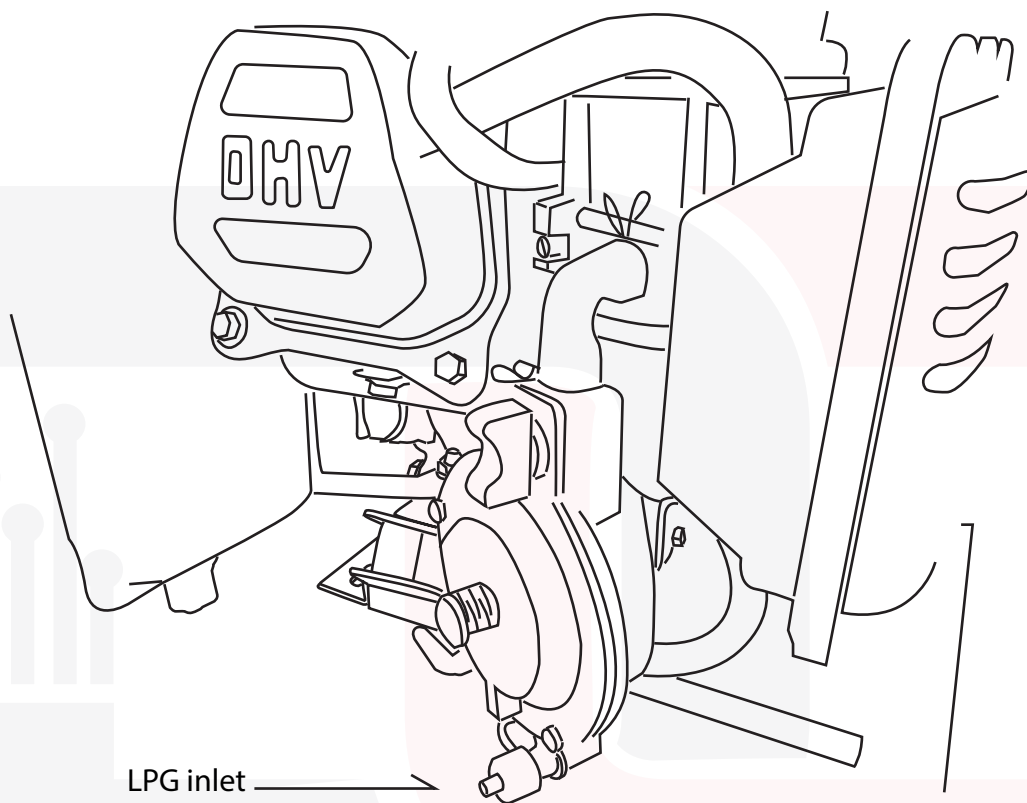
If your V5 is equipped with an LPG kit, connect your hose here.
Note : Never run the V5 with LPG and Petrol at the same time.

To enter safe mode and listening mode you will need to follow the below steps:
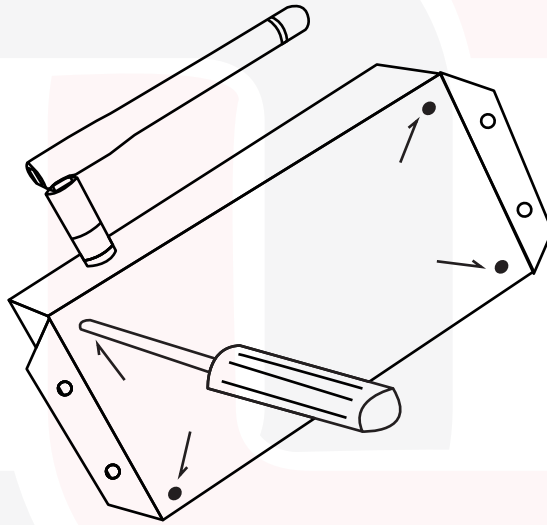
1. Remove the 4 screws of rear panel. Carefully open box not to dislodge the external wifi antenna cable.
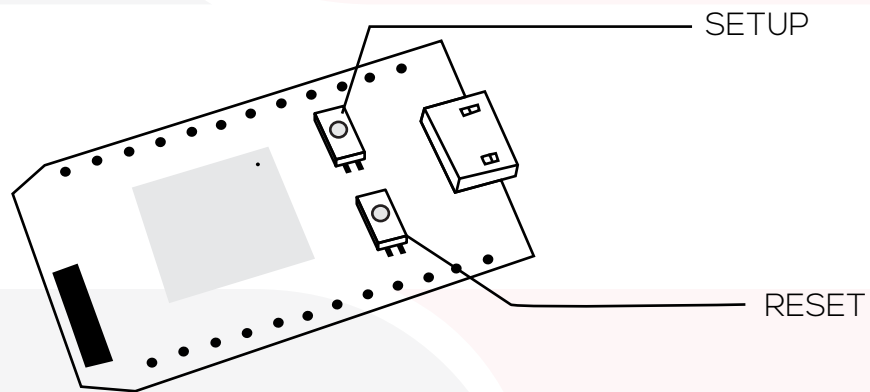
SETUP

RESET

2. Whilst connected to power, enter Safe Mode of onboard microcontroller
   To put your device in Safe Mode:
   1) Hold down BOTH buttons
   2) Release only the RESET button, while holding down the SETUP button.
   3) Wait for the LED to start blinking magenta
   4) Release the SETUP button

3. Now enter Listening Mode
   To put your device in Listening Mode:
Hold the SETUP button for three seconds until the LED begins blinking blue, then continue to hold it down for about ten seconds longer, until the LED blinks blue rapidly, then release.

If you require any further assistance please do not hesitate to ask.

dcautogen.com

DC Generators

Wiring Diagram

1. +12vdc
2. -12vdc(ground)
3. START relay(internally grounded)
4. AUX1 relay +12vdc
5. AUX2 relay +12vdc
6. +3.3vdc
7. +5vdc
8. N/A
9. Current Sensor
10. +48v Battery bank
11. N/A
12. +12vdc trigger from external source

1	2	3	4	5	6	7	8	9	10	11	12

*PLEASE READ ALL INSTRUCTIONS CAREFULLY PRIOR TO CONNECTIONS