



NEXTGEN GENERATORS

Connecting and configuring with FieldPro app

Abstract

Commission a generator, adjust exercise settings, setup Emergency Stop button, etc...

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Introduction

The new style generator will be referred to as NextGen. The sizes are 10kW, 14kW, 18kW, 24kW, 26kW and 28kW. There is not a kW size badge on the outside of the generator to determine the size. The size of the generator can be determined by the label with the QR code inside by the controller. It has the generator size and generator serial number, the serial number should match the silver label after taking off the front panel.

There is an external communication module that is plugged in at the time of install. This communication module has Cellular (4G/5G), WIFI and Bluetooth. The WIFI is for when there isn't cellular service or to be used as a backup if cellular went down.

Since there is not a screen/display now, to configure, get status, etc... you will need the Generac FieldPro app. The app can be downloaded from Apples App Store or Googles Play Store. There are several screenshots below listed in order that are self-explanatory, but give you an idea of what is coming next. There is now more settings for the Exercise and the generator configuration, so please make sure that these are set appropriately and are also set to the settings we are using here at MEC at the time of writing.



Sign in to FieldPro

After downloading the FieldPro app, when first starting the app, you will be asked to sign in. You should have been sent login credentials. If you can't find them or have them, please see Ben.

SIGN IN

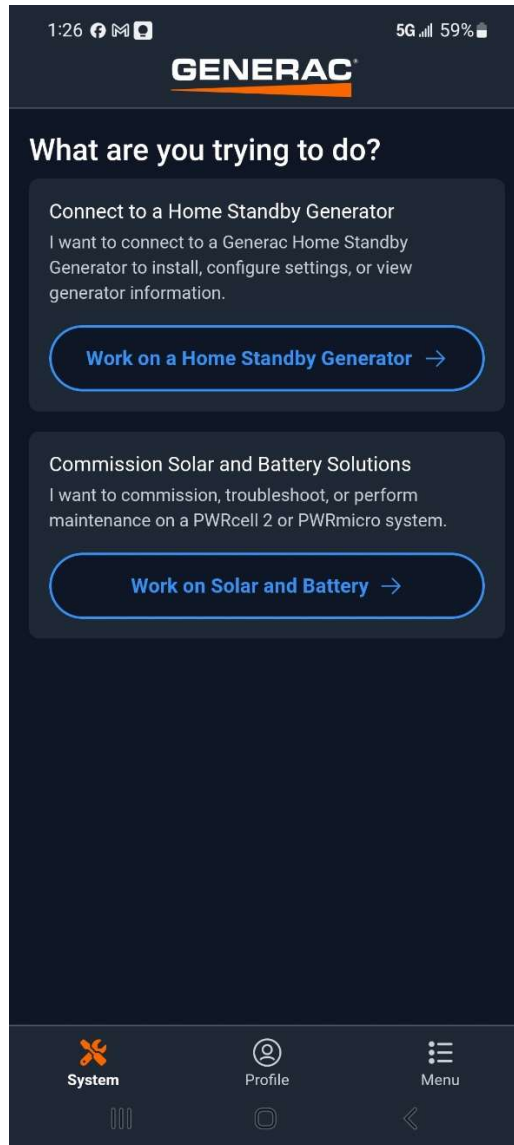


Once logged into the app, you will be asked what you would like to connect to, a generator or a Clean Energy system. The Service button on the generator must be pressed to enable the Bluetooth connection

Version 1.1

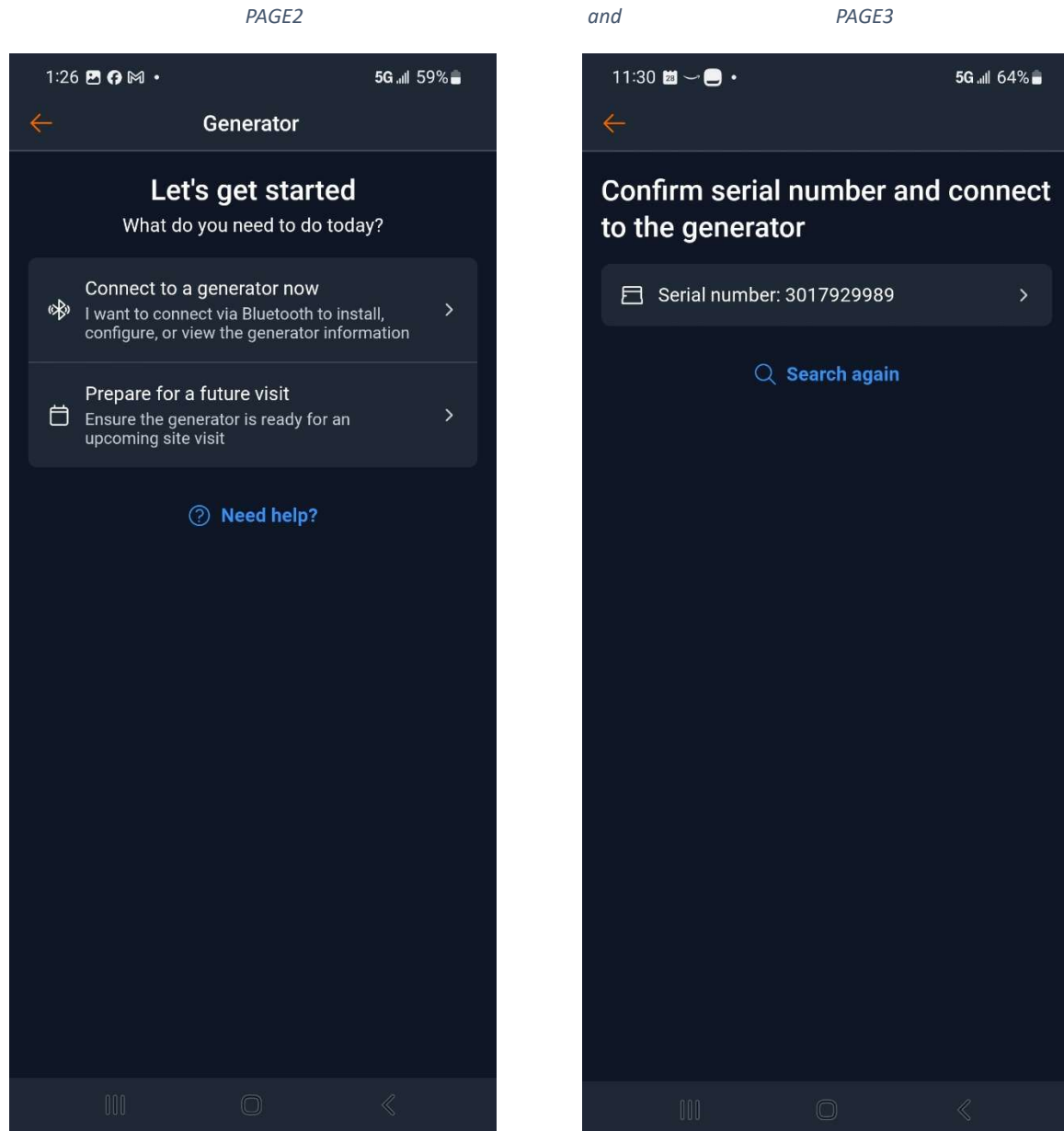
of the generator. This will also stop any Mobile Link messages from being sent out and set a blue light on the end of the generator. The FieldPro app can now connect to the generator.

PAGE 1



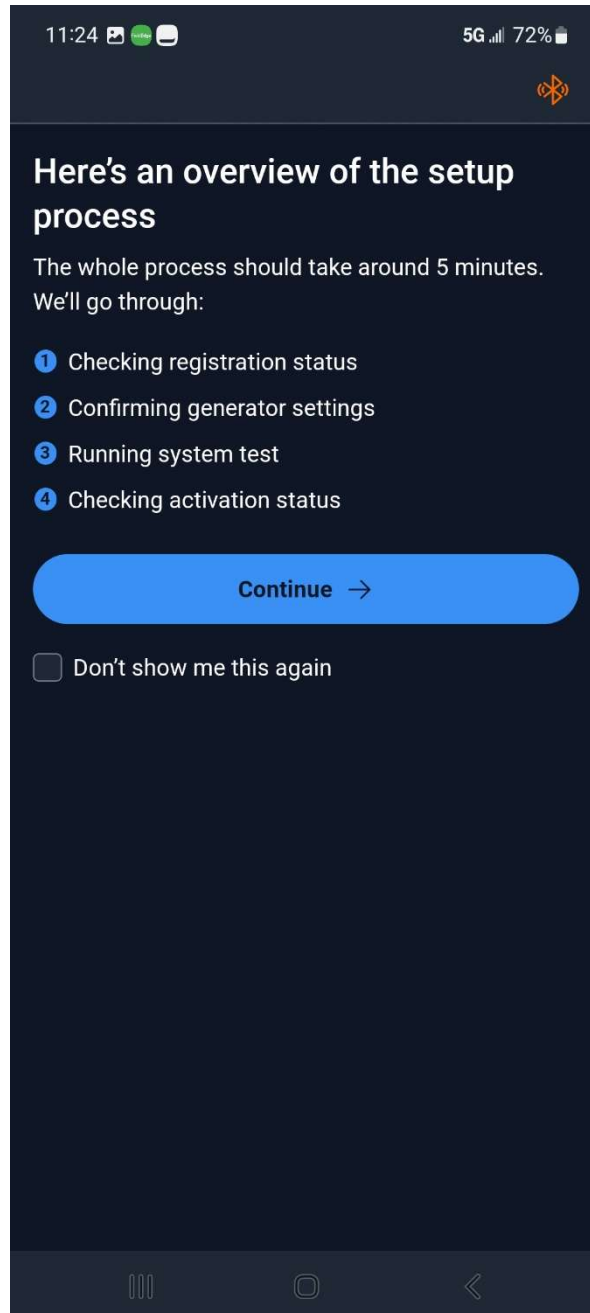
FieldPro Page 2 and 3

Page 2 gives the option to prepare for a visit in an area without network connectivity by downloading firmware as an example. Page 3 will scan for a generator and show the serial number of available generators. Typically will be one generator listed. Select the generator after verifying serial number and continue



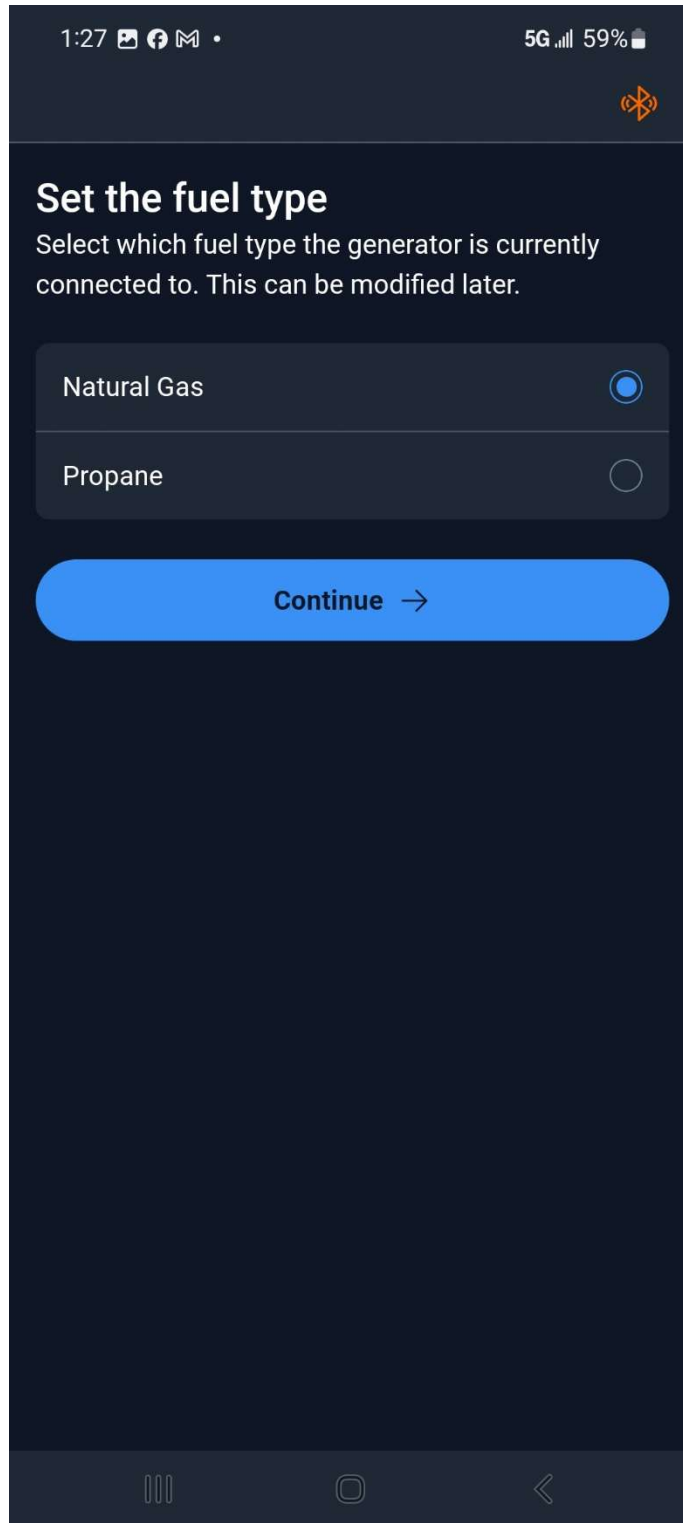
An overview of what will happen next that you can just Continue through.

PAGE 4



Setting Fuel type

PAGE 5



The screenshot shows a mobile application interface with a dark blue background. At the top, there is a status bar with the time '1:27', signal strength, 5G connectivity, and a 59% battery level. Below the status bar is a header area with a blue icon. The main content area is titled 'Set the fuel type' in white bold text, followed by a subtitle: 'Select which fuel type the generator is currently connected to. This can be modified later.' Below this, there are two radio button options: 'Natural Gas' with a selected blue radio button, and 'Propane' with an unselected white radio button. At the bottom of the main content area is a large blue button with the text 'Continue →'. The bottom of the screen features a dark blue navigation bar with three icons: a list icon, a home icon, and a back icon.

1:27 5G 59%

Set the fuel type

Select which fuel type the generator is currently connected to. This can be modified later.

Natural Gas ☒

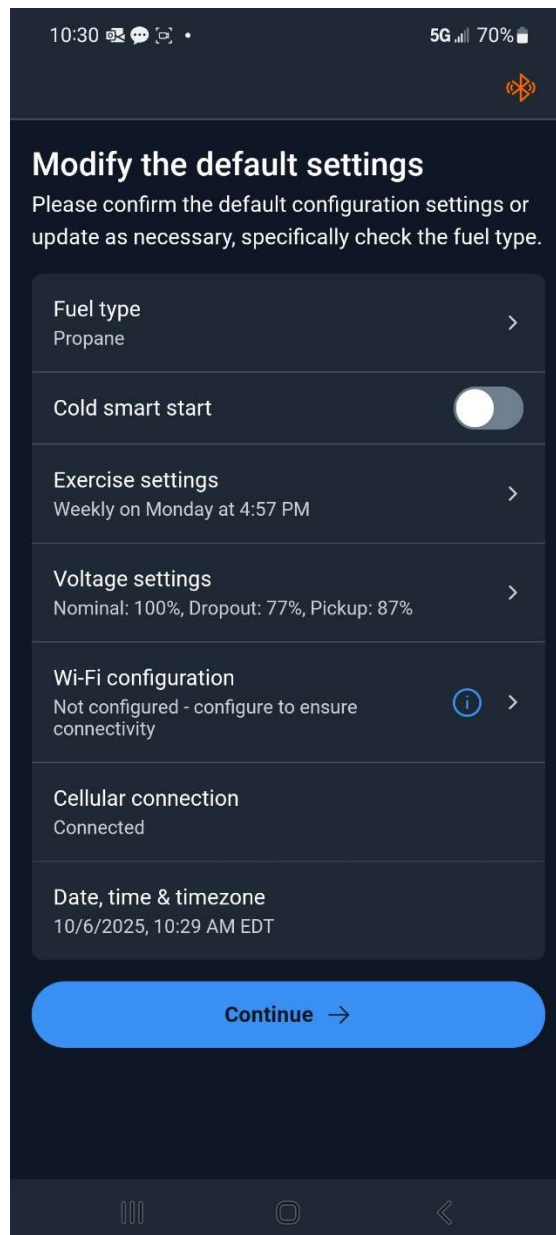
Propane ☐

Continue →

FieldPro Page 6 Default Settings

On Page 6 turn on the Cold Smart Start. Leave voltage settings alone. If there is cell service at the generator location, the generator will automatically attach to it. WIFI can be setup as a backup internet solution or be used as the primary if there isn't any cellular connection. See the Exercise Time page below for exercise settings, there are more options.

PAGE 6 Default Settings

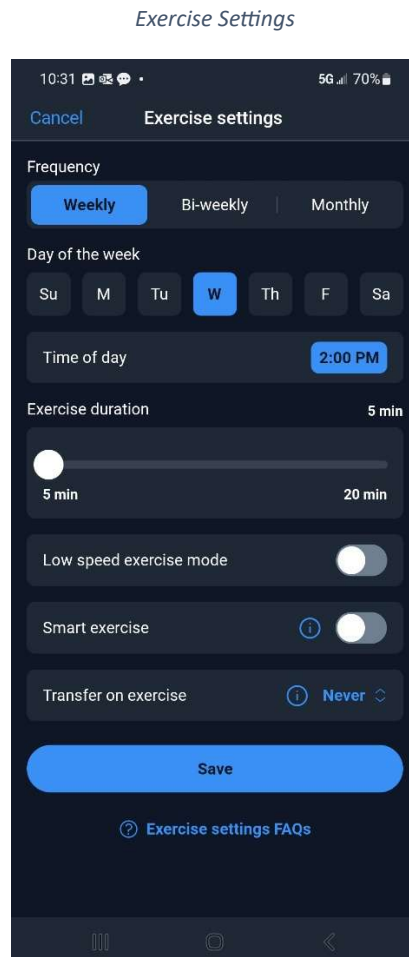


Exercise Settings

On Page 6 go into the Exercise Settings and set the settings to below:

1. Set the Exercise Time to Weekly and to the customer desired time or Wednesday at 2pm.
2. The duration of the exercise time can be adjusted between 5 and 20min, leave at the defaulted time of 5 minutes.
3. **Turn off** the “Low Speed Exercise”.
 - a. With this on, the generator runs at a lower RPM and causes customers to call in with generator not sounding right causing a needless Gentech truck roll.
4. **Do not** turn on the “Smart Exercise functionality”.
 - a. Smart Exercise will skip an exercise if the generator ran for an outage within the last 7 days. This will end up causing confusion with the customer and not needed phone calls and truck rolls.
5. **Leave** “Transfer on Exercise” to “**Never**” at this time.
 - a. Does exactly as it says, transfers load of house to the generator when the generator is exercising when enabled. MEM and BWB have discussed this function and this is the MEC preferred setting at this time.

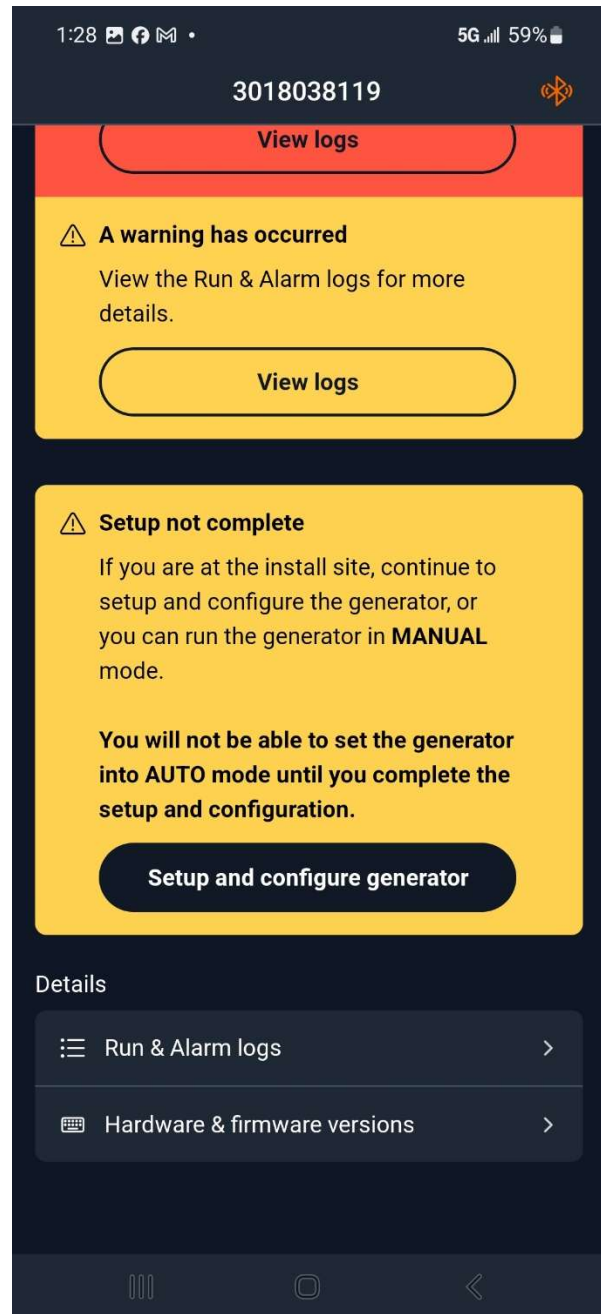
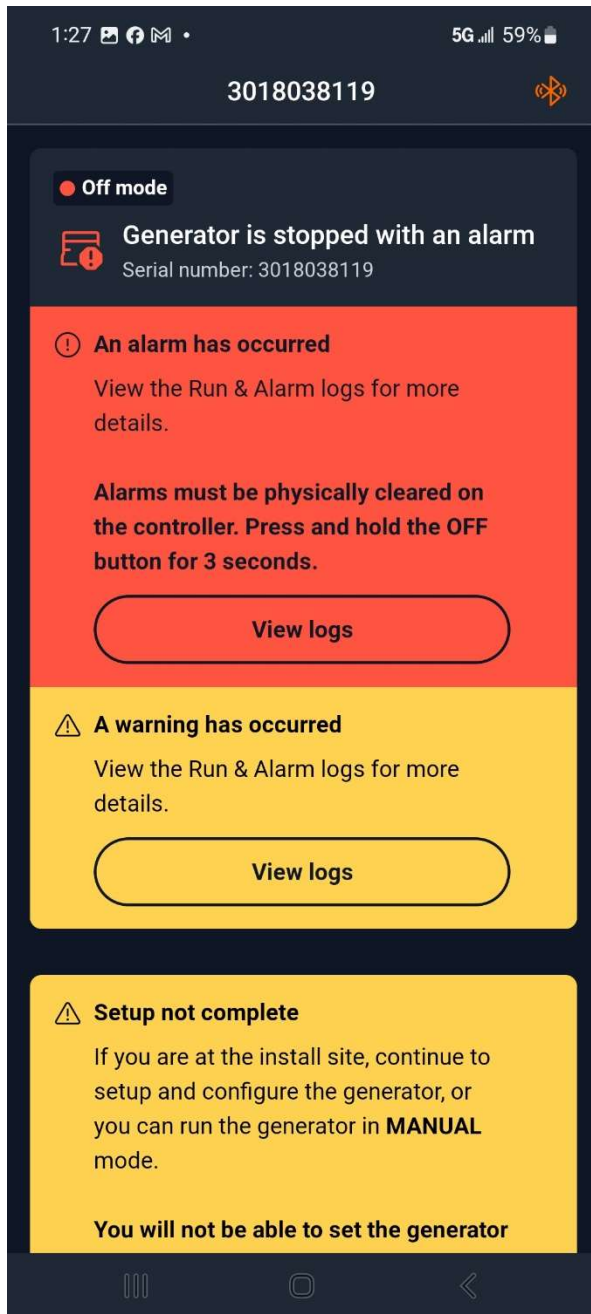
Click “Save” then “Continue” on the settings page



Run System Tests

Depending on if there are Warnings and or Alarms on you will get a page that may or may not have a yellow warning banner and or red banner. Find the “Setup and Configure generator” button and press.

PAGE 7

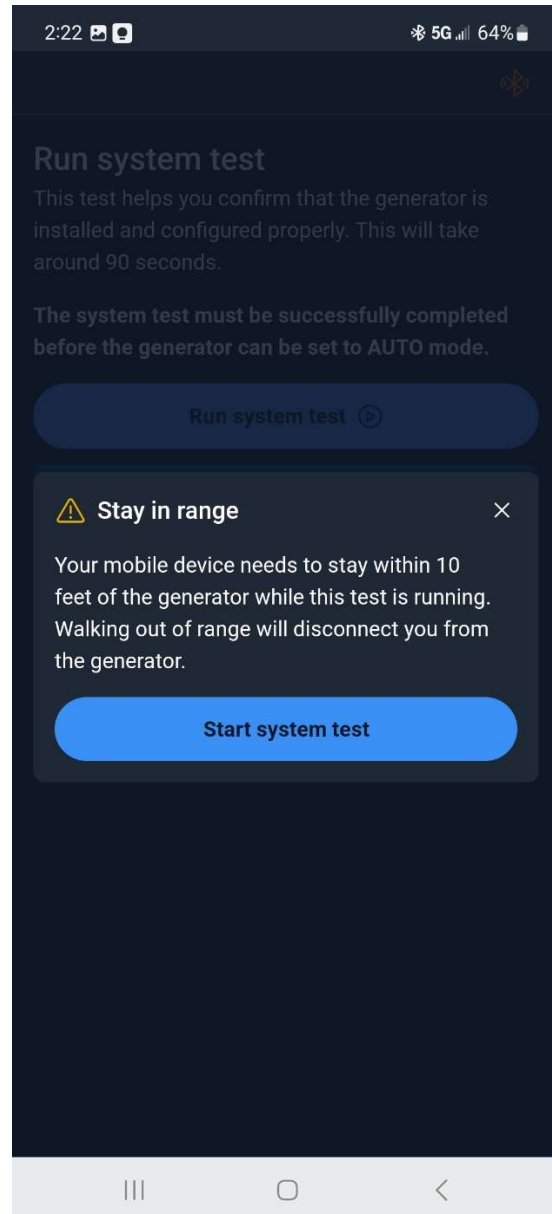
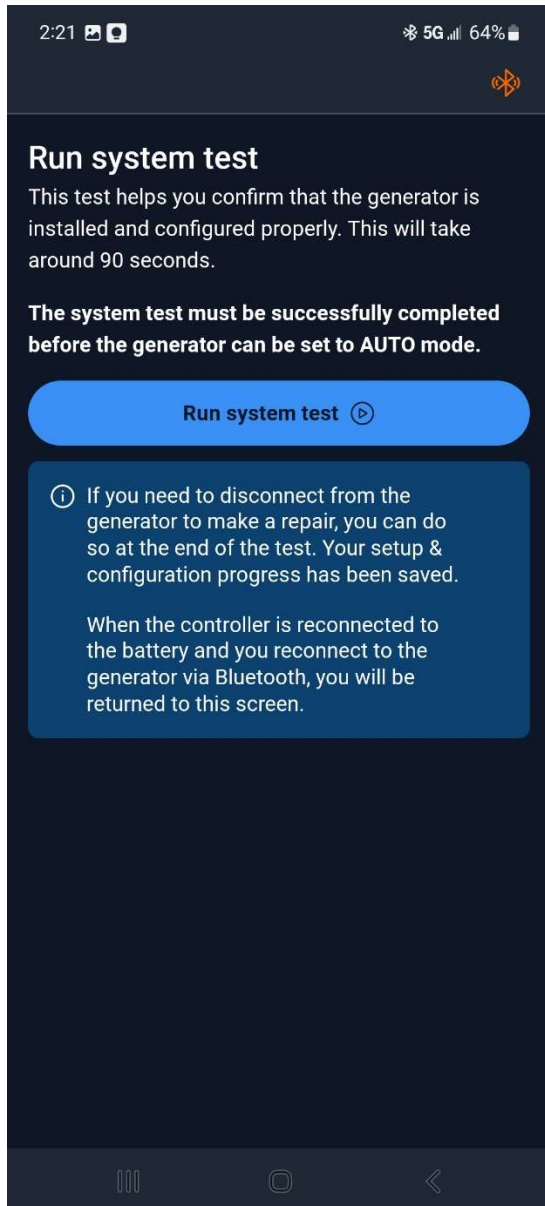


A System test needs to be done. This is done automatically. Press the “Run System Test” button. Then another page will show up to start the tests. This will go through 4 tests.

PAGE8

and

PAGE9

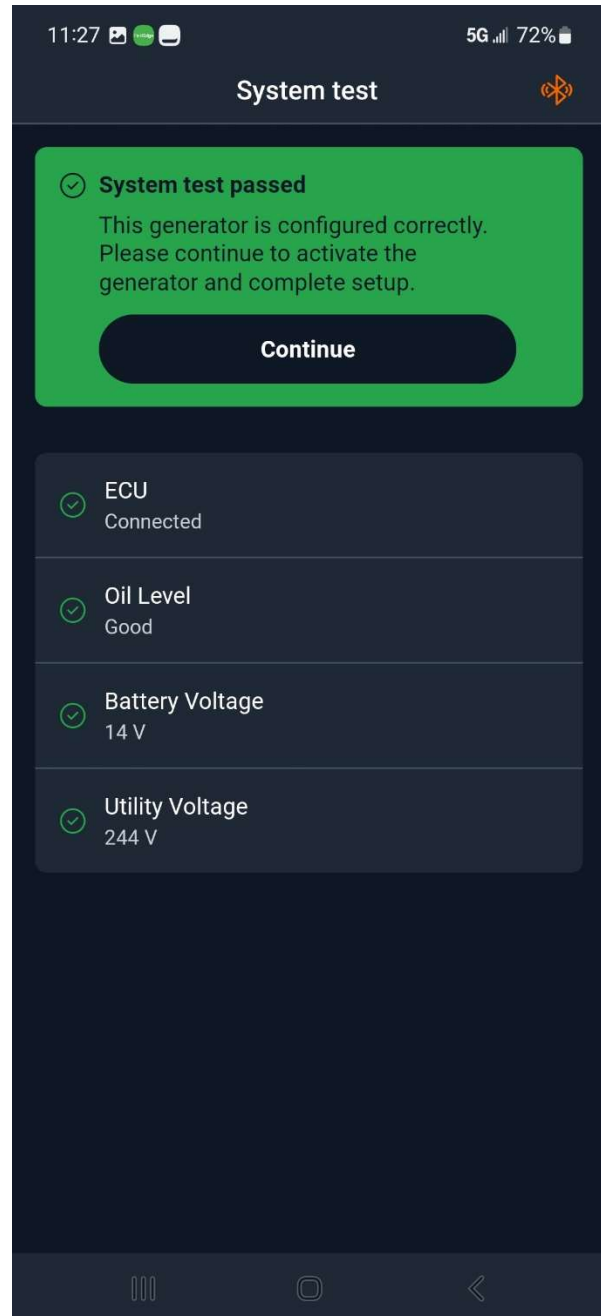
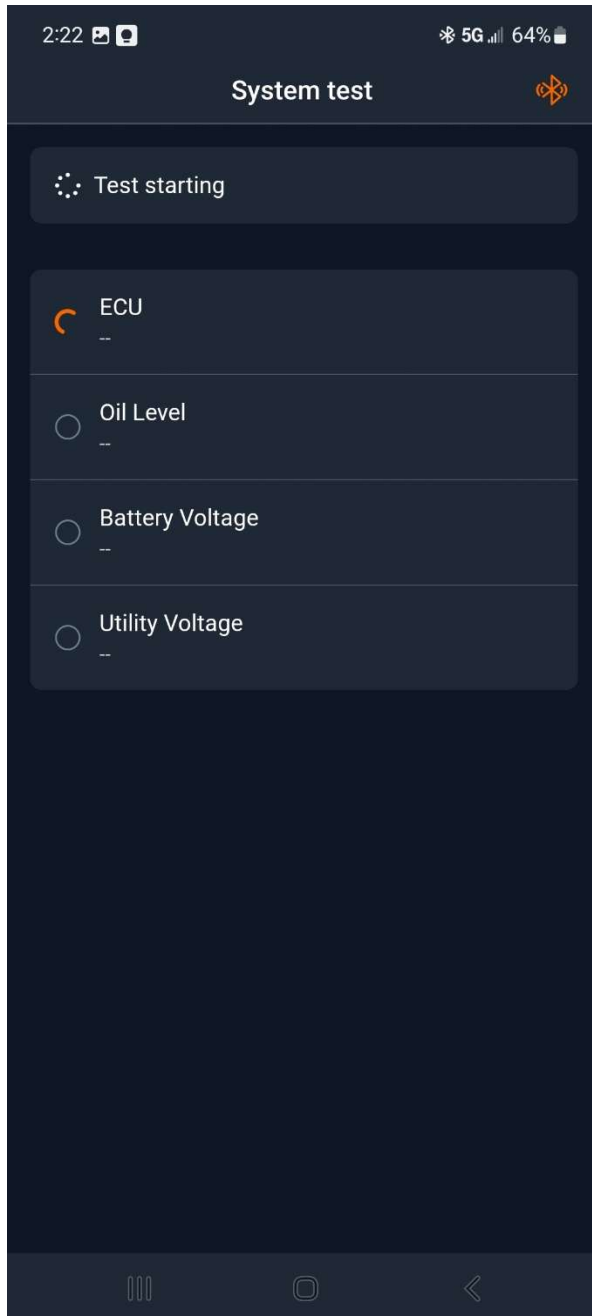


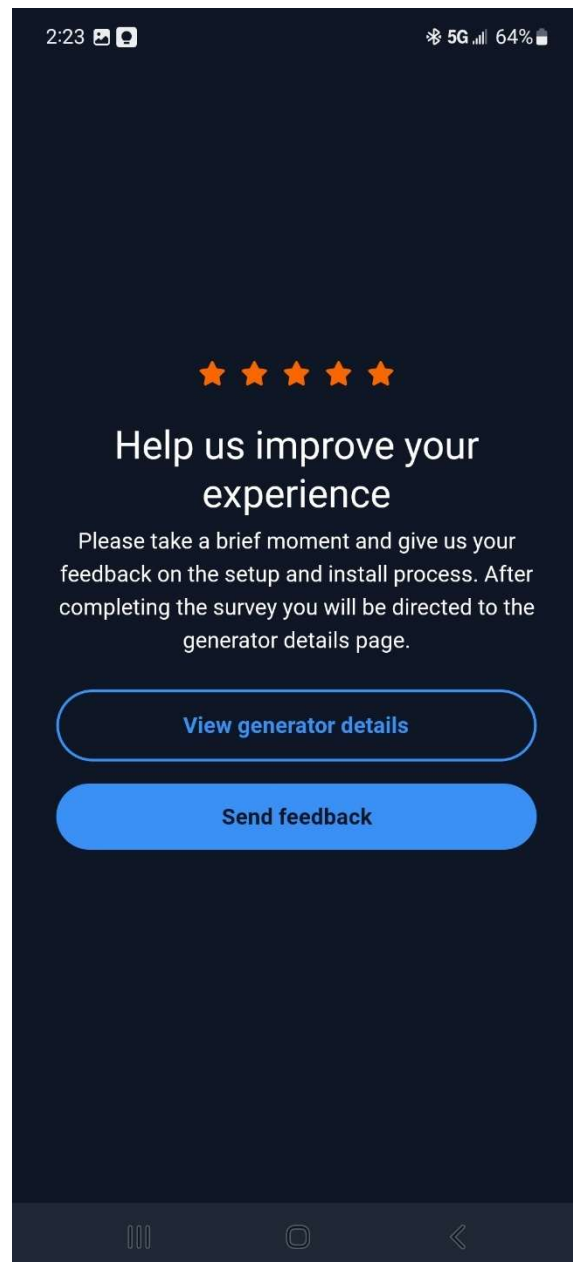
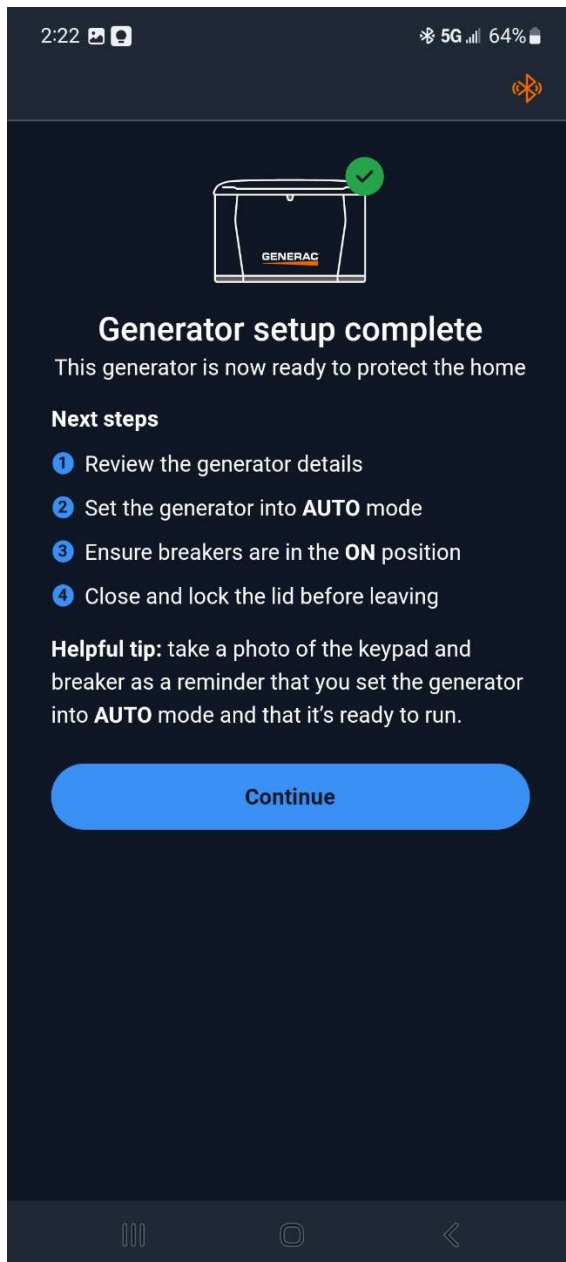
After an item is tested, there will be a small pause, then it will move on to the next item until all 4 tests are done. Need to have 4 green checkmarks for a pass. Once done press Continue.

PAGE 10

and

PAGE 11



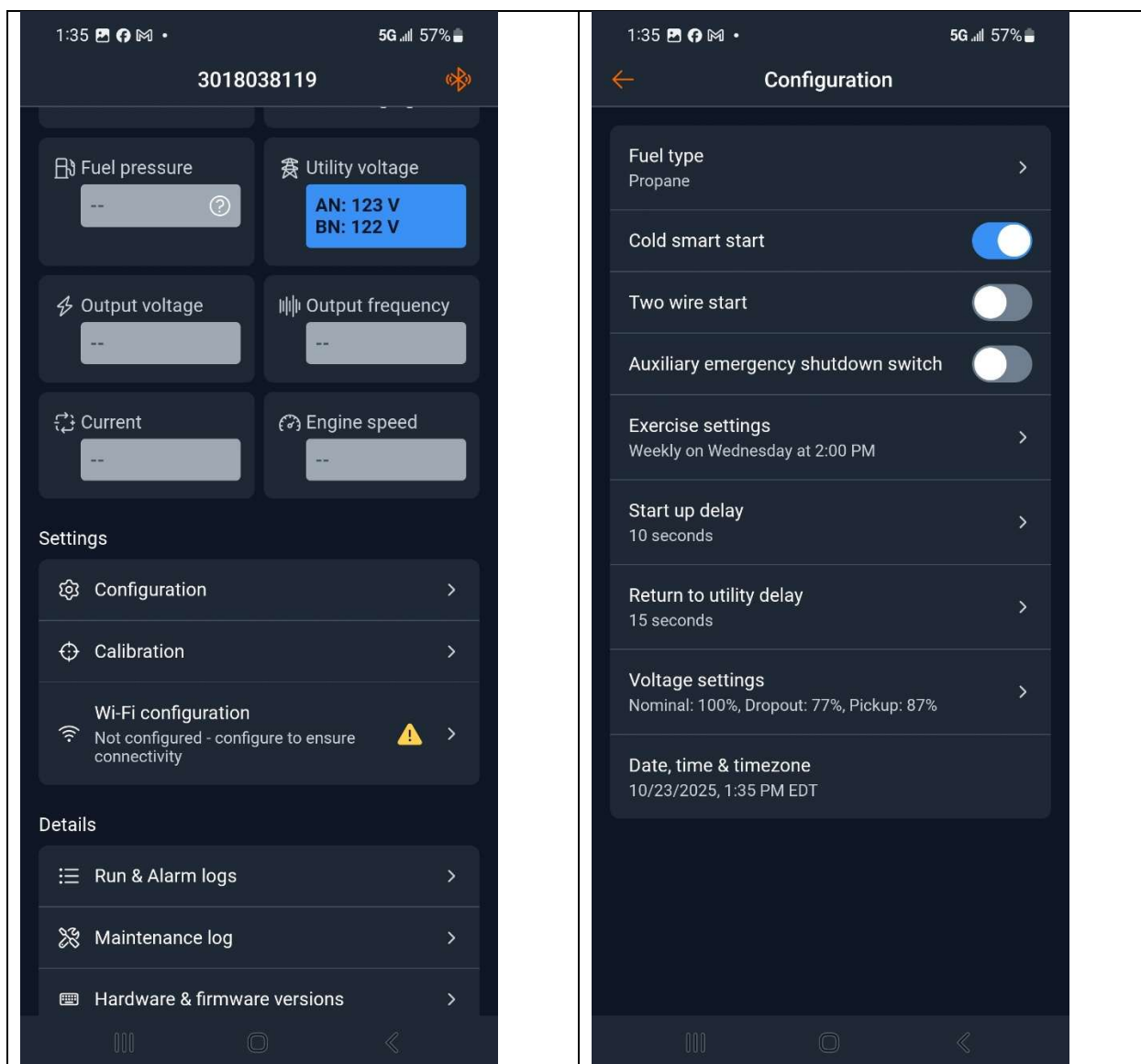


Dashboard and Configuration

Now you should be at the dashboard. Down near the bottom of the page find the “Configuration” selection and go in.

1. Make sure “Cold Smart Start” is on.
2. If there is an Emergency Shutdown button added to the system by the meter/Transfer switch, Turn on the “Auxiliary Emergency Shutdown Switch”.
3. Leave “Two Wire Start” set to Off.
4. Leave all the delays to default.

Dashboard and Configuration



LEDs

| Red LED | |
|--------------|-----------------------------------|
| Solid Red | Generator is Off |
| Flashing Red | Generator is Off and has an Alarm |

| Yellow LED | |
|-----------------|-------------------|
| Flashing Yellow | Warning/ Maint |
| Solid Yellow | Running in Manual |

| Green LED | |
|-------------------------------------|---|
| Solid Green | Generator is in Auto and ready to run |
| Flashing Green (2 second intervals) | Generator is running in Auto for Utility Loss and is waiting the delay countdown |
| Flashing Green (1 second intervals) | Generator is running in Auto for Utility Loss and transfer switch has transferred |

| Other LED Sequences | |
|--|---|
| Blue | Service button has been pushed and generator is in Service Mode. Generator will not send out Mobile Link messages and FieldPro app can attach to the generator through Bluetooth. |
| All lights flashing counterclockwise (Red-Green-Yellow-Blue) | Controller Firmware Update in Progress |
| All lights Flashing clockwise (Red-Blue-Yellow-Green) | ECM Firmware Update in Progress |

Notes

Note 1: Fuel Pressure, Output Voltage, Output Frequency, Current, and Engine Speed will be grayed out until the generator is running.

Note 2: There is a software bug currently that will have the external yellow light blinking and show a yellow banner during the setup. This can not be cleared until after setup. Once setup is completed and are at the dashboard. Remove all powers from the controller, pull the controller fuse and disconnect T1. Let sit for 30 to 60 seconds then re-apply T1, then plug the fuse back in. The blinking yellow light should be gone now.

Note 3: If there is an alarm. Set the generator in the Off position and then press and hold the Off button for 3 to 4 seconds.

Note 4: The generator must be activated at the office first like normal and receive the OK from there before starting the commissioning process. The generator will go to the network and check to see if it is activated and will move forward with the commissioning process. Sometimes you will get an Activation Failed screen with a Retry button. Sometimes it may take multiple Retries to get it to go through.

Note 5: If the controller is rebooted and try to go back in too quickly connecting with the FieldPro App, the cellular connection may not be connected yet and will try to get you to setup the WIFI. Wait a little longer and the cellular will connect and things will progress normally.

Note 6: The Calibration of voltages can only be done by a certified/trained Gentech. There may be other settings as well that only a Gentech can access.

Note 7: At time of writing of this document, web browser access to the customers Mobile Link account is limited. Can not see the generator status, Run Hours and so on, but the Notifications can still be setup. This option is typically used for customers that have flip phones, don't use apps, etc... The Mobile Link web browser site is <https://app.mobilelinkgen.com> .

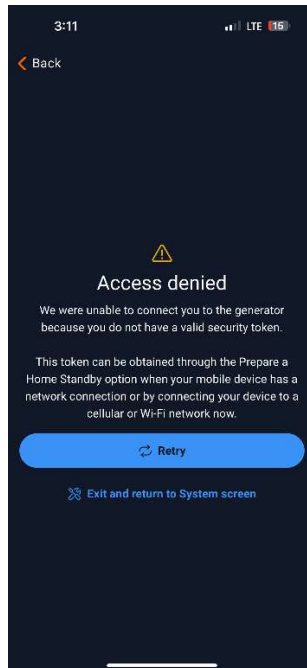
Note 8: Make sure enclosure plugs are installed on back of generator. Without them it is a direct access to the inside of the generator for rodents.

Note 9: If the generator is connected to Cellular and the customer is all setup with their Mobile Link, they can setup the cellular connection from their end.

Note 10: Must be within 10ft of the generator for the connection of the app. If have to walk away, you will lose connection, but will be given an option to re-connect.

Note 11: Any issues seen during the process grab screenshots and notify Ben.

Note 12: If you get the Access Denied Screen when trying to attach to the generator with the app, delete the app and re-install.



Note 13: If you get this screen where most all the self-tests fail, it is due to the battery being low. Will need to change the battery and find out why it is low, missing or bad T1 fuse, controller fuse was left out, etc...

