Sapphire System

Trouble Shooting Guide

The purpose of this document is to provide possible solutions for common issues that can be encountered with the Sapphire system. The guide will be broken down into various sections. To use the guide, select the issues closest to your situation and then follow the steps to help resolve it.

If the issue cannot be resolved after following the steps, please contact the support team at +1 844-275-2801 or send an email to support@gemone.com

Issue: Screen turns OFF immediately as the key is turned to the off position

Troubleshooting Steps:

1. Ensure the red wire (constant power) is connected to a power source that always has voltage. This source will have power when the key is On, Off and even when the emergency stop button is pressed.

2. If a power source is coming from a DC-DC converter, ensure the converter does not have an isolated ground.

Issue: Equipment cannot be used after logging in

Troubleshooting Steps:

1. There are two sets of spades on the black and grey connectors. Ensure these are connected together.

2. Measure continuity of the drive inhibit wires. The relay should be closed after logging in.

3. On internal combustion equipment, ensure the drive inhibit wires are not connected to an area that has high ampere.

4. On battery electric equipment, ensure there are not any error codes after logging into the equipment.

Issue: Operator does not get logged out of the session

Troubleshooting Steps:

1. Ensure the yellow wire (ignition sense) is connected to a keyed power source. This source will have power when the key is On and will not have power when the key is Off or when the emergency stop button is pressed.

Issue: Touch screen has suddenly stopped working

Troubleshooting Steps:

1. If a touch screen stops responding to touch, the first step is to do a reboot of the display. This can be achieved by pressing the UP, DOWN, and RED button simultaneously for 10 seconds.

2. The next step is to ensure the system powers up and down properly. The screen should remain On when the key is turned to Off.

Issue: Screen does not power OFF at all

Troubleshooting Steps:

1. Log into the screen and then go into the diagnostics page. Note down the firmware version and then call the support team at +1 844-275-2801.

2. Support team will verify the firmware version and then send the corresponding command to shut down the screen.

Issue: Screen powers OFF and then powers ON immediately

Troubleshooting Steps:

1. When the key is turned to the Off position, ensure there is no voltage at the yellow wire when the key is Off. If there is voltage, the screen will power ON and the situation will loop continuously.

Issue: Screen restarts upon crank

Troubleshooting Steps:

1. Assuming the equipment is 12-24V, ensure the equipment does not have a 36-80V junction box. This will cause the screen to restart upon crank.

2. Measure the voltage at crank. If it falls below 9V at crank, the battery will need to be replaced as it is not enough to power the screen during crank.

Issue: Operators cannot log into the screen

Troubleshooting Steps:

1. Ensure the operator has been set up on the website with access to relevant equipment.

2. Ensure the operator does not have an expired license date.

3. Contact the support team for additional steps to troubleshoot at the equipment .

Issue: Override code does not work

Troubleshooting Steps:

1. Ensure the access type is set to Override.

2. Ensure the code has been set up as an override on the Sapphire portal.

3. Contact the support team to either check or set up an override code.

Issue: Screen does not turn ON when key is turned to On

Troubleshooting Steps:

1. Ensure the Sapphire system is not going through a DC-DC converter as it could introduce issues with isolated grounds.

2. Ensure the correct interface box is installed on the correct equipment.

3. If installation appears to be OK, note down the make, model, and serial number of the equipment and then contact the support team.

Issue: Screen does not connect in

Troubleshooting Steps:

1. Ensure the antenna is connected to the MDM port rather than GPS.

2. On AF50 (AT&T) displays - contact the support desk for additional steps on how to check the APN.

Issue: RFID Scanner was picking up cards and now it does not

Troubleshooting Steps:

1. If an RFID scanner was working and then it suddenly stops, complete a hard reboot by pressing the UP, DOWN, and RED button simultaneously for 10 seconds.

Issue: Impact alarm keeps going off

Troubleshooting Steps:

1. Ensure the alarm or lockout level is not set too low.

2. Check the mounting of the interface box. Ensure is bolted to the chassis and not attached using cable ties, double sided tape, or velcro.

Issue: Can be driven without logging in

Troubleshooting Steps:

1. Check what is on the screen right after the system boots up. If it is the "driver home" page, the constant power is being cut when the key is Off and needs to be moved to a constant power source.

2. Ensure the equipment is not bypassed at the equipment by checking the drive inhibit wires. It should be connected to either the starter relay coil (internal combustion) or operator presence switch (battery electric).

Issue: GPS location cannot be seen on the website

Troubleshooting Steps:

1. Ensure the GPS antenna is connected to the GPS port.

2. Contact the support desk to ensure the GPS command has been sent to the module. The serial number of the display is required here. This can be found at the back of the display on the white sticker.

Issue: BMS information is not coming up on the display

Troubleshooting Steps:

1. Ensure the BMS is connected to the interface box via the 6 pin connector.

2. Contact the support team to ensure the BMS command has been sent to the module. The serial number of the display is required here. This can be found at the back of the display on the white sticker.

Issue: Scale is not displaying any weight

Troubleshooting Steps:

1. Ensure the transducer is receiving the correct voltage and it has been installed in the correct position.

2. Contact the support team to ensure the scale command has been sent to the module. The serial number of the display is required here. This can be found at the back of the display on the white sticker.

Issue: Weight on scale page is jumping

Troubleshooting Steps:

1. Increase the debounce feature under the setting page. A high value (10%) will hold the voltage longer which allows the screen to stabilize the weight.

2. Change the measuring "point" to be at a higher point whilst still being within site safety requirements.