

## TROUBLESHOOTING

### List of potential "gotcha" situations, causes, and solutions

**During Installation of the RED BOX System, MAKE SURE THE LOUVER AND/OR PISTON SAMPLER ARE WIRED AS PER THE INCLUDED INSTRUCTIONS!**

Problem	Possible Cause(s)	Possible Solution(s)
<b>To avoid delays out in the field, please charge the included tablet and install the relevant app(s) (e.g., Chrome) <u>before</u> heading out to the field to install the RBS Retrofit Kit.</b>		
<b>TABLET ISSUES</b>		
The tablet is not connecting to the Red Box.	(1) The tablet is connecting to a different network, and/or (2) The tablet may not be connected to the correct Red Box SSID/Network.	(1) Make sure the tablet is <u>NOT</u> set up to automatically connect to networks <u>other</u> than the Red Box, and that the tablet <u>is</u> set up to automatically connect to the Red Box network only. (2) Connect the tablet to the Red Box SSID/Network using the information on the label on the bottom of the Red Box.
The tablet falls asleep and the Dryer shuts off	(1) The tablet is not plugged into a power supply, or (2) the tablet has not been set up to not go to sleep after a period of inactivity.	(1) Plug the tablet into a power source, and make sure there is a clean connection (e.g., no dirt or other debris on the connection). (2) On the tablet, enable the "Developer Options" menu and enable the "Stay Awake" feature on the tablet (as shown in Step 6 of the <i>Galaxy Tab Setup Instructions</i> document).
The graphical user interface (GUI) is acting sluggish or displaying data that doesn't look correct.	(1) The GUI is out of sync with the Red Box.	(1) Refresh the GUI by using the "pull down" gesture from near the top of the screen of the tablet.
The Red Box and the Tablet/Device are not communicating.	(1) The antennas are not installed on the Red Box, causing there to be little or no wireless signal. (2) The Tablet/Device is not connected to the correct SSID (i.e., not connected to the correct wireless network). (3) The Tablet/Device is out of range of the Red Box wireless signal.	(1) Install the provided antennas onto the Red Box. (2) Connect the Tablet/Device to the correct SSID. (3) Bring the Tablet/Device back into wireless range (i.e., within 30-50 feet from the Red Box).
The "Dryer Config" menu is greyed out and inaccessible.	(1) The tablet was recently refreshed	(1) To access the Dryer Config menu, press the <b>red</b> (Outlet/Dry) moisture or temperature numbers on the Dashboard 5 times within 5 seconds.
<b>RED BOARD ISSUES</b>		
The red LED on the Red Board (on Dryer Panel) blinks on and off.	(1) The Dryer Panel power supply is oscillating due to insufficient load.	(1) Install the power supply "Load PCB" assembly on the Dryer Panel power supply.

RED BOX ISSUES		
The Red Box is not communicating with the Dryer Panel, even though the "Ready" light on the Red Box is blinking. For Example: Repeatedly pressing "Start" on the tablet does not light up the "Quantum Ready" light on the Dryer Panel.	(1) If the Dryer Panel is powered on <u>after</u> the Red Box is powered on, in some rare instances, there can be an RS-485 bus collision that prevents communication. (This is a protection feature built into the Communication System of the RED BOX to prevent damage.)	(1) Reboot the Red Box.
The Red Box will not operate after either importing settings or updating software.	(1) The USB flash drive was left plugged into the Red Box after importing or updating.	(1) Remove the flash drive and then reboot.
Performing an "Import Settings" operation causes the Red Box to crash.	(1) The RS-485 cable is not disconnected, or the Dryer Panel is not powered off, during the Import.	(1) Disconnect the RS-485 cable or power off the Dryer Panel <i>before</i> importing settings.
The Red Box and Red Board are not communicating.	(1) The RS-485 wires are installed in a reversed manner between the Red Box and Red Board. (2) The RS-485 comm chip inside the Red Box is locked up due to a tripped protection circuit (possibly caused by a current surge).	(1) Reverse the RS-485 communication wires. (2) Reboot the Red Box by unplugging the power supply for 20 seconds and plugging it back in.
The Red Box is not operable when powered on (e.g., the green LED is not blinking).	(1) The Red Box did not boot up correctly, or there was a software lockup issue with the Red Box.	(1) Reboot the Red Box by unplugging the power supply for 10-20 seconds and plugging it back in.
During the startup process for the Dryer, the Fans are running, however the Pilot lighting sequence will not begin (e.g., the Dryer will not begin the Purge phase).	(1) This is a known quirk that happens every once in a while.	(1) Try disabling and then re-enabling the Burner. If that does not work, then Stop the Dryer and Restart.
The Red Box crashes after setting the Date and/or Time.	(1) The Date/Time cannot be set on the Red Box while the Dryer is running.	(1) Set the Date/Time while the Dryer is OFF (i.e., not running).
The Controller Ready (sometimes labeled as "Quantum Ready" on some legacy systems) LED did not turn on after pressing the START button on the Tablet/Device.	(1) There was a communication issue between the Red Box and the Red Board.	(1) Press START again on the Tablet/Device. If that does not work, then hold STOP on the Tablet/Device to reset the Red Board and then press START again on the Tablet/Device.
INTERNET ISSUES		
The Red Box does not boot up at all when the Ethernet-to-USB adapter is plugged into the Red Box.	(1) The network configuration is not set up correctly to allow the Red Box to fully connect to the Internet.  (2) There is a software bootup error.	(1) First, try power cycling the Red Box and see if the problem fixes itself.  (2) To get the Red Box to boot up so that the user can at least run locally, power OFF the Red Box, <u>unplug</u> the Ethernet-to-USB adapter from the USB slot, and power ON the Red Box.  (3) Set up the network so that the Red Box receives a DHCP (i.e., dynamic) address.  (4) Make sure no firewalls are preventing access to/from the Red Box.

<p>The website at <b>https://myredbox.live/[License Number]</b> (no brackets) is not populating data.</p>	<p>(1) The Red Box is not connected to the Internet.</p> <p>(2) The “s” in the “https” at the beginning of the URL address is missing.</p>	<p>(1) Make sure the network (ethernet) cable is plugged in, and that the network is functional.</p> <p>(2) Include the “s” in the URL address. This provides a secure connection and allows the Red Box to transmit and receive data securely.</p>
<p>The Red Box does not seem to be connected to the internet.</p>	<p>(1) The USB-to-Ethernet adapter was plugged in after the Red Box was turned on.</p>	<p>(1) Before booting up the Red Box, make sure the USB-to-Ethernet adapter is plugged into the USB port of the Red Box.</p>