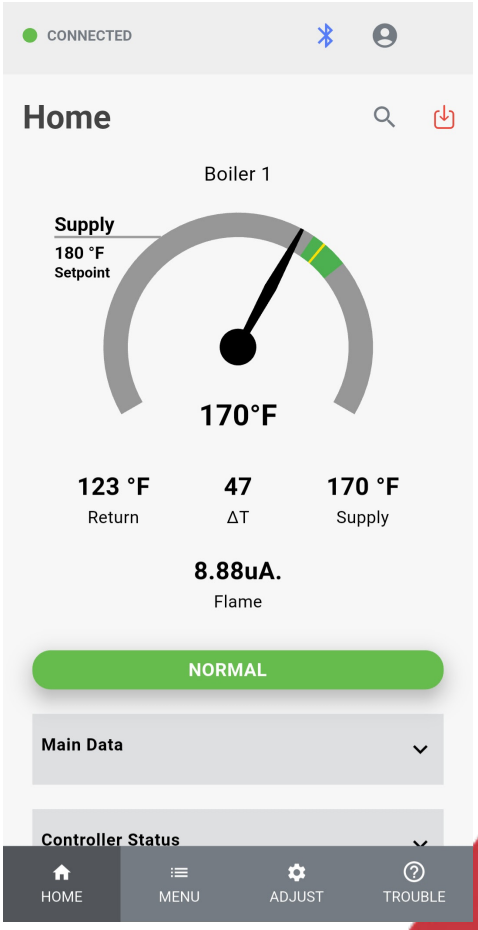
BOILER Connect

BLUETOOTH ADAPTOR

Instruction Manual

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DANGER

Before making any setting changes, installing or servicing this boiler, follow all instructions including DANGER, WARNING, CAUTION, and NOTICE hazard notifications found in boiler Installation, Operating and Service Instructions provided with boiler and available through Boiler Connect app.

NOTICE: Only use the Bluetooth Adaptor while on site. Never leave the Bluetooth Adaptor on site and connected to boiler.

Need help or have a question?
Contact Customer Support at (717) 239-7642

113361-02- 05/26

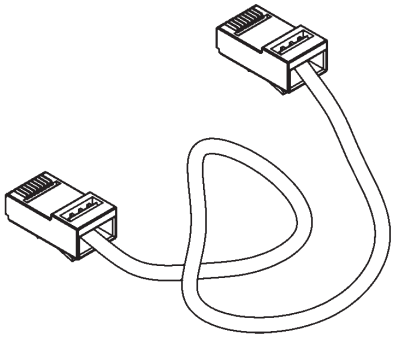
Introduction

Boiler Connect is a commissioning, diagnostic and service tool consisting of a Bluetooth Adaptor and mobile device app. Boiler Connect is a local service tool with portal data collection and live streaming to enable remote support.

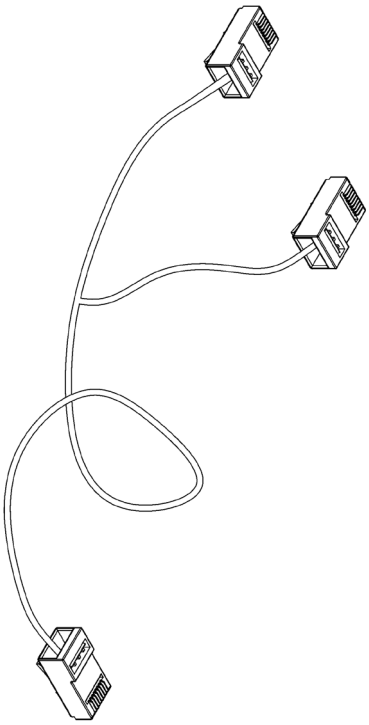
Included with the Bluetooth Adaptor:



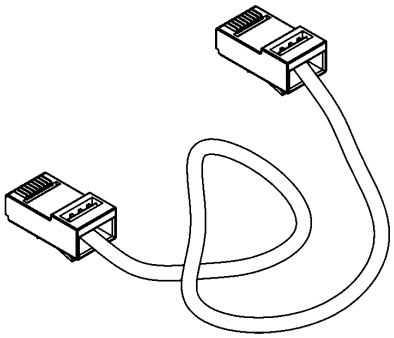
Boiler Connect Bluetooth Adaptor



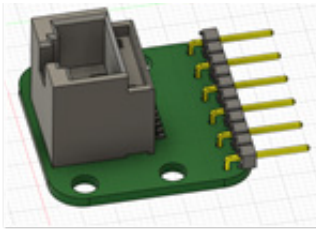
Cable 1
RJ12 Straight Cable,
36-inch, Silver



Cable 2
RJ45 Split Cable,
24-inch, Black



Cable 3
RJ45 Straight Cable,
36-inch, Blue



111640-01,
Sage J3 Terminals to
RJ45 Interface Board

Compatible Devices:

Apple device, an iPhone or iPad, running iOS version 13 or newer.
Android device, mobile phone or tablet, running Android version 10 or newer.

Compatible Boilers:

Alpine, Alta, AltaC, AMP, Aspen, AspenC, BFIT, Citadel, GHE II, K2WT, K2WTC, K2FT, Phantom, Phantom II, Phantom Combi, Phantom-X, Phantom XL, Raptor, Raptor Combi Shadow, VPM, VPMC, XC.

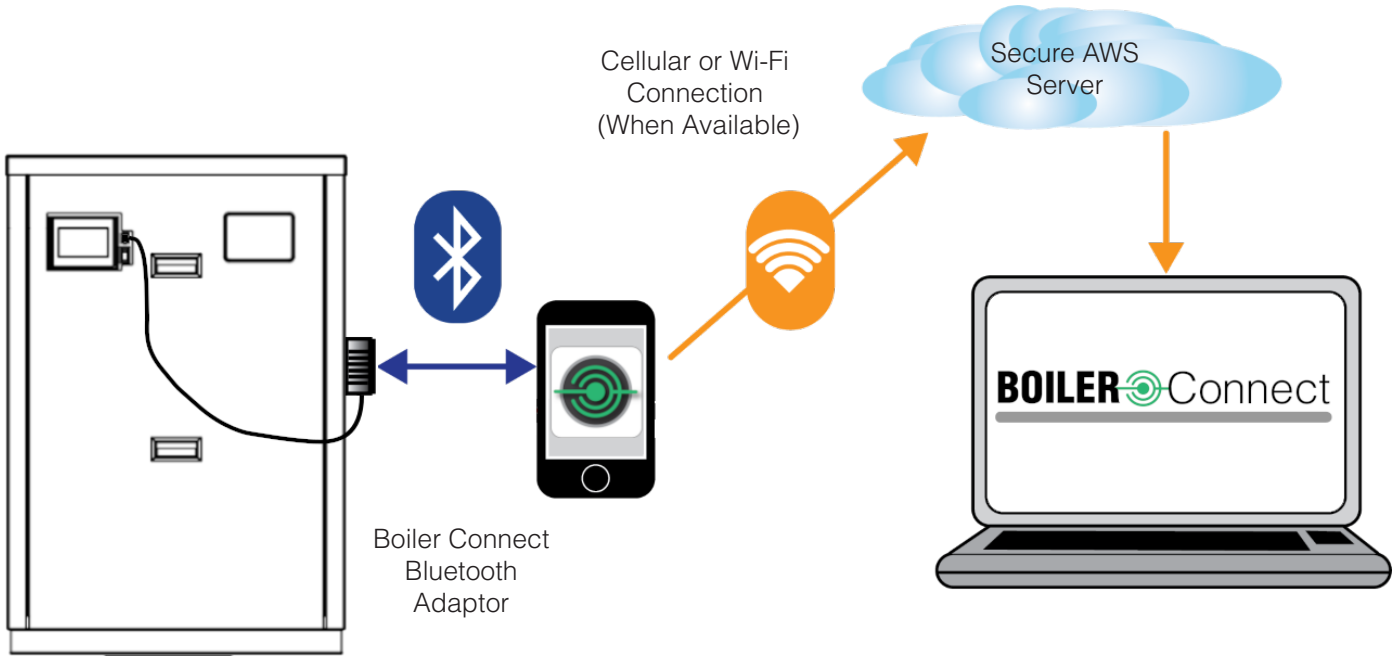
Introduction (continued)

Boiler Connect Features:

- Bluetooth Adaptor connects boiler to Boiler Connect App.
- English and Spanish Language.
- Start-up, Troubleshoot and Service Wizards.
- Data logs, Service & status reports sent to cloud.

Portal Features:

- Stores reports, data logs, site photos and alarm history.
- Real-time remote support when signal available.



Step 1: Install App

IOS

Go to App store

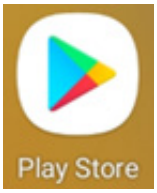


Download Boiler-Connect



Android

Go to Play store

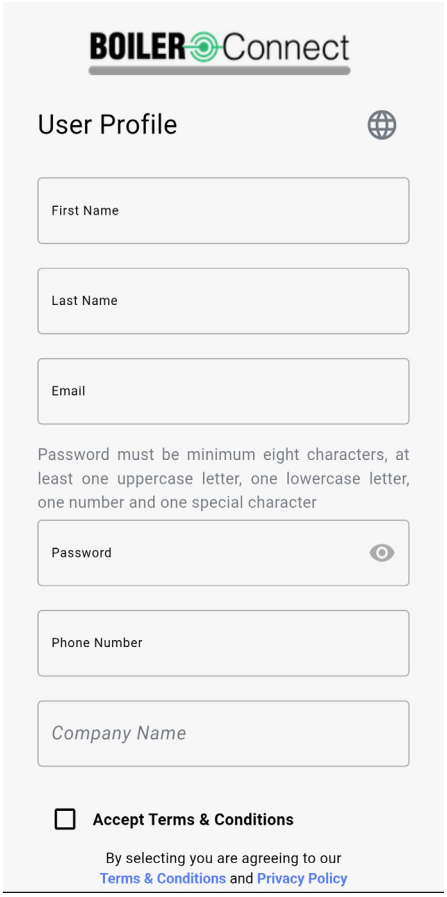


Download Boiler-Connect

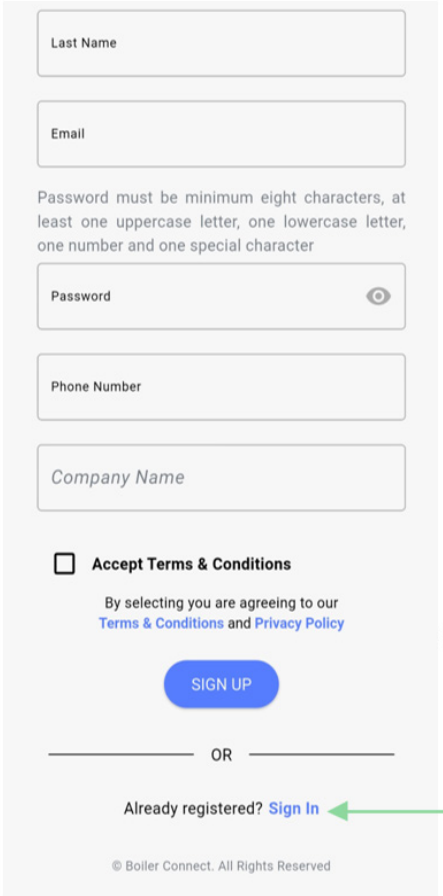


Step 2: Create User Account

Fill out profile and review and accept Terms and Conditions, Privacy Policy:

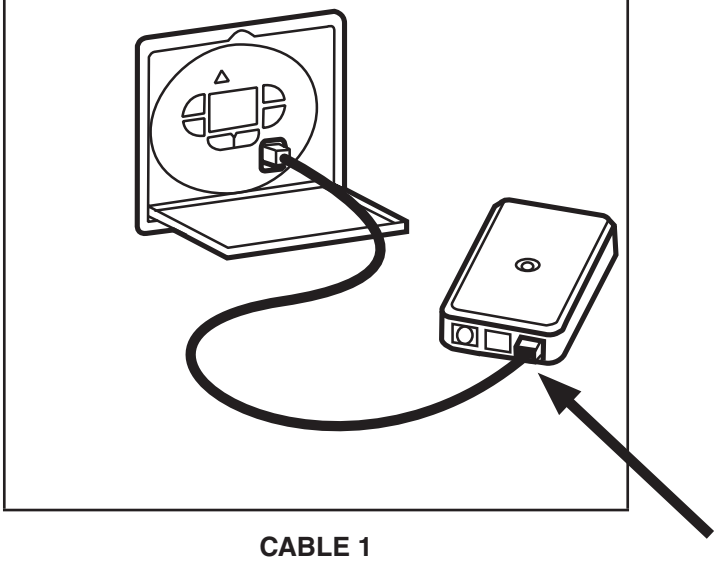


Existing User select Sign In:



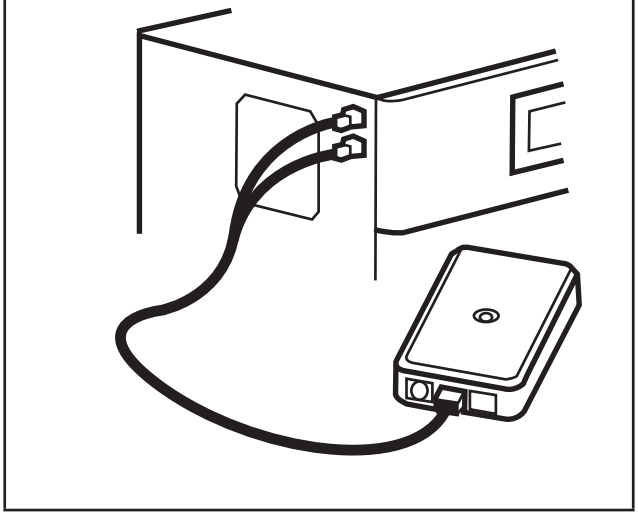
Step 3: Connect Bluetooth Adaptor

Connection Method 1



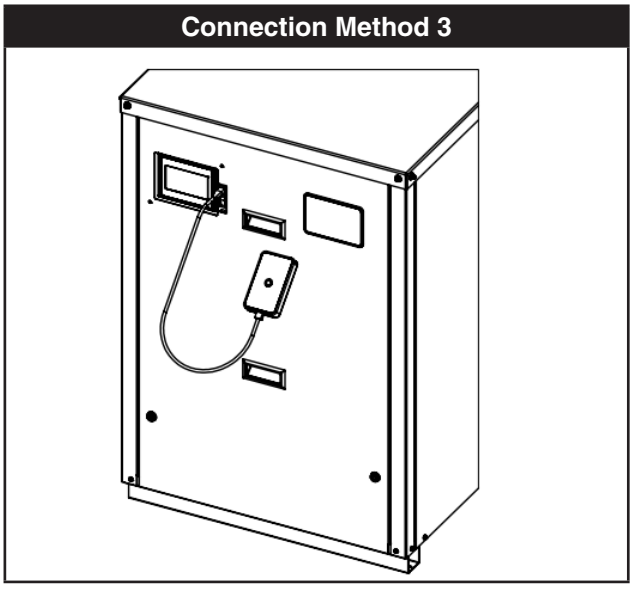
CABLE 1
RJ12 Straight Cable,
36-inch, Silver

Connection Method 2



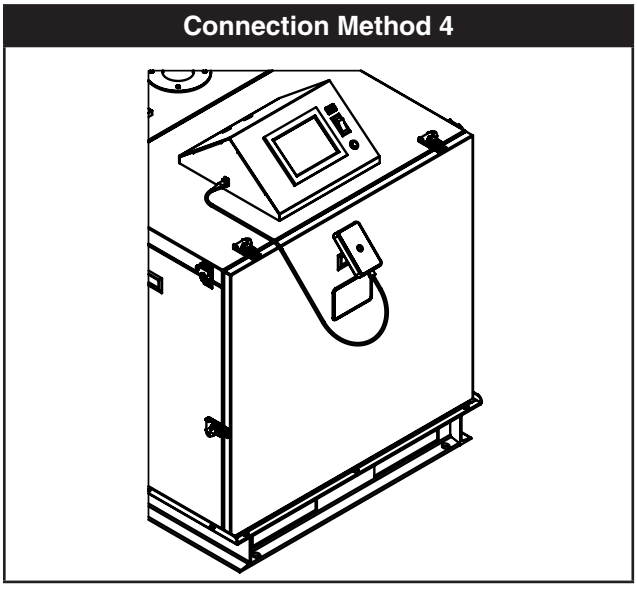
CABLE 2
RJ45 Split Cable, 111662-01
24-inch, Black

Connection Method 3



CABLE 3
RJ45 Straight Cable,
36-inch, Blue

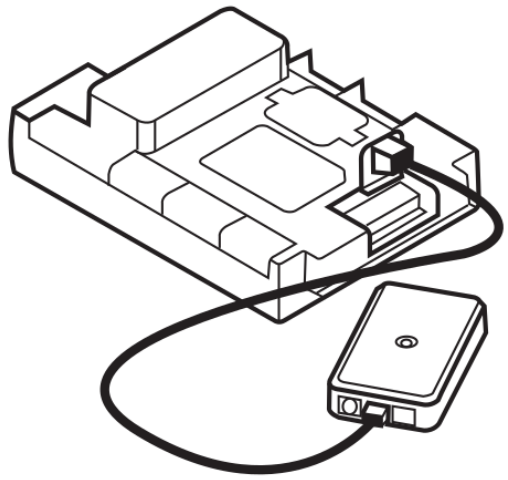
Connection Method 4



CABLE 3
RJ45 Straight Cable,
36-inch, Blue

Step 3: Connect Bluetooth Adapter (continued)

Alternative Method 1



CABLE 3
RJ45 Straight Cable,
36-inch, Blue, plus Sola J3
Terminals to RJ45 Interface Board 111640-01,
For Direct Connection to Sola Controller

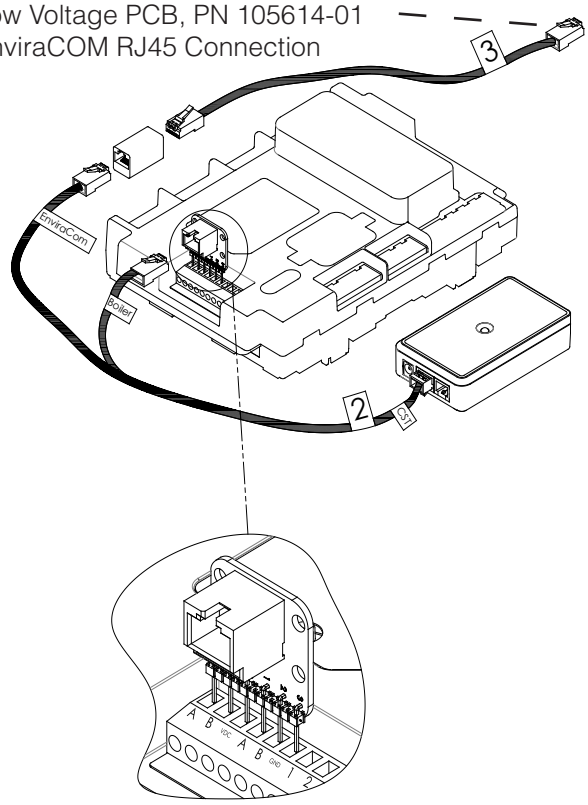
NOTICE

Use if PCB-14 Modbus Multiplexer is not functioning and internal Sequence Master is **not used**.

To use Direct-to-Sola method, disable Sequence Master using Concert™ display, and disconnect Peer-to-Peer boiler network cable from Low Voltage PCB or PCB-06 (model dependent) prior to connecting Bluetooth Adaptor.

Alternative Method 2

To Boiler's
Low Voltage PCB, PN 105614-01
EnviraCOM RJ45 Connection



NOTICE

Use if internal Sequence Master **is used**.

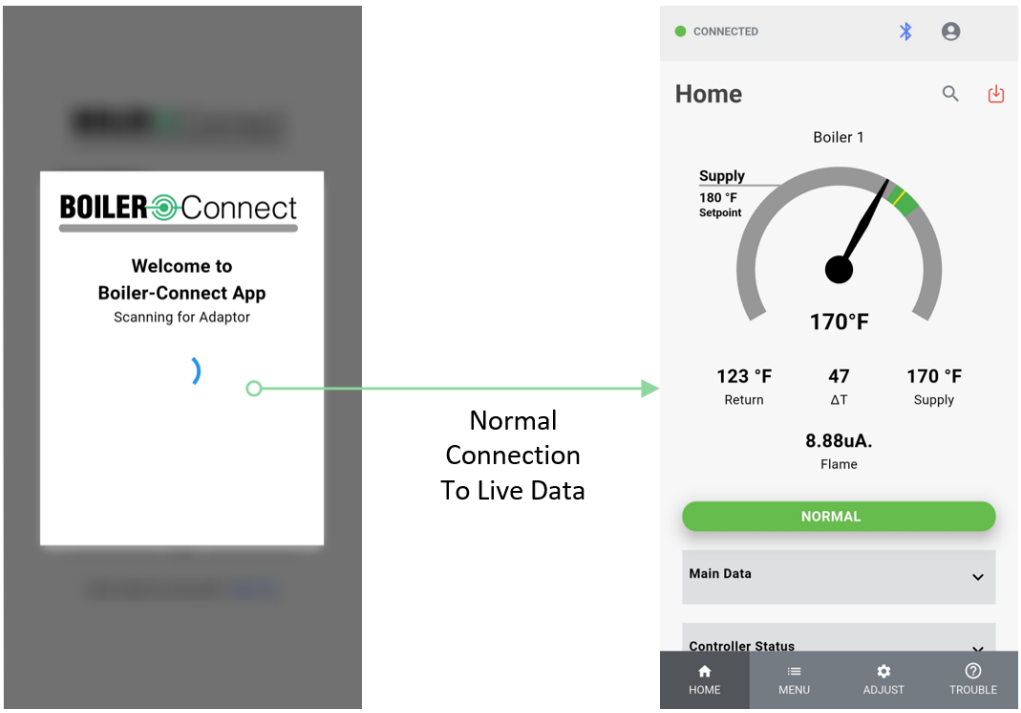
To use Direct-to-Sola method, with Sequencer Master enabled, disconnect Panasonic display (by disconnecting green terminal at back of display) prior to connecting Bluetooth Adaptor.

CABLE 2, CABLE 3,
RJ45 Interface Board 111640-01,
and "Ethernet Cable Extender F/F Inline RJ45 coupler Connector" (Supplied by others)

Step 4: Using App

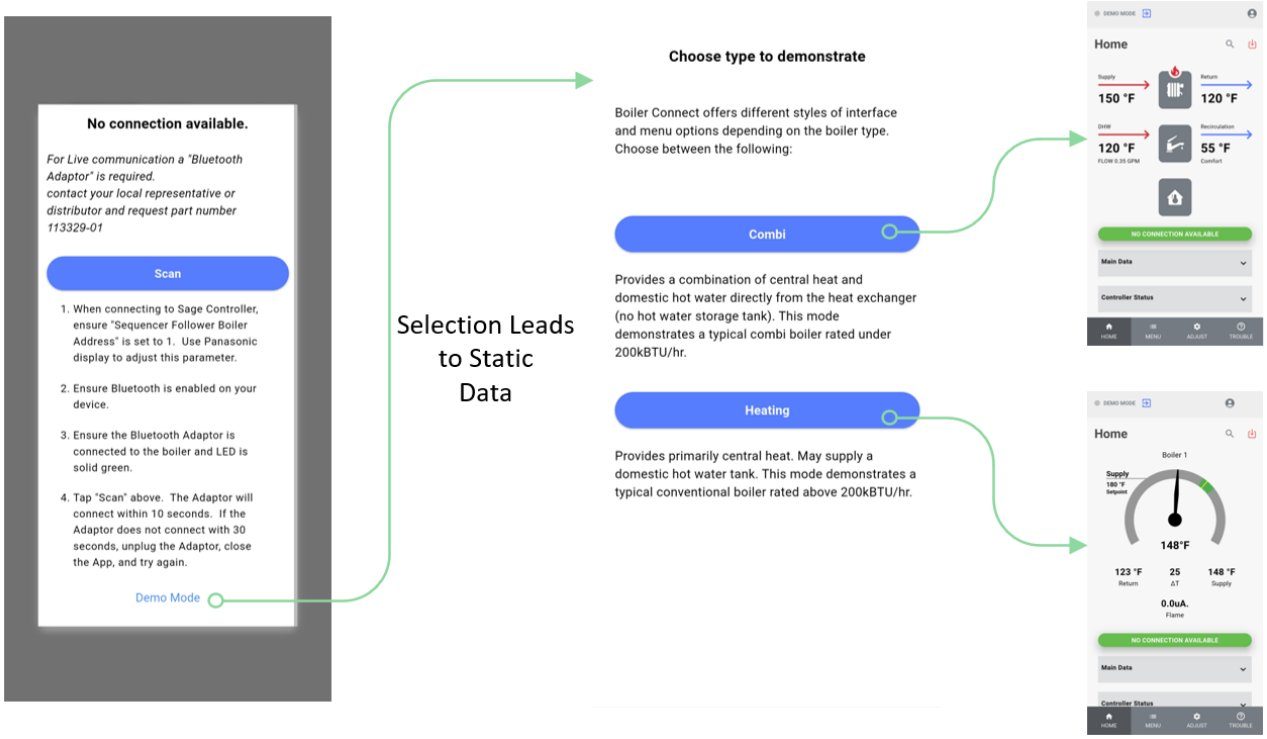
Launch App

Before opening the App, connect Bluetooth Adaptor and wait for LED light to turn solid green.



Demo Mode

When not near a boiler or Bluetooth Adaptor a user may view a Combi or Heating Boiler Demonstrator Mode to review available options, manuals, and alarm descriptions.

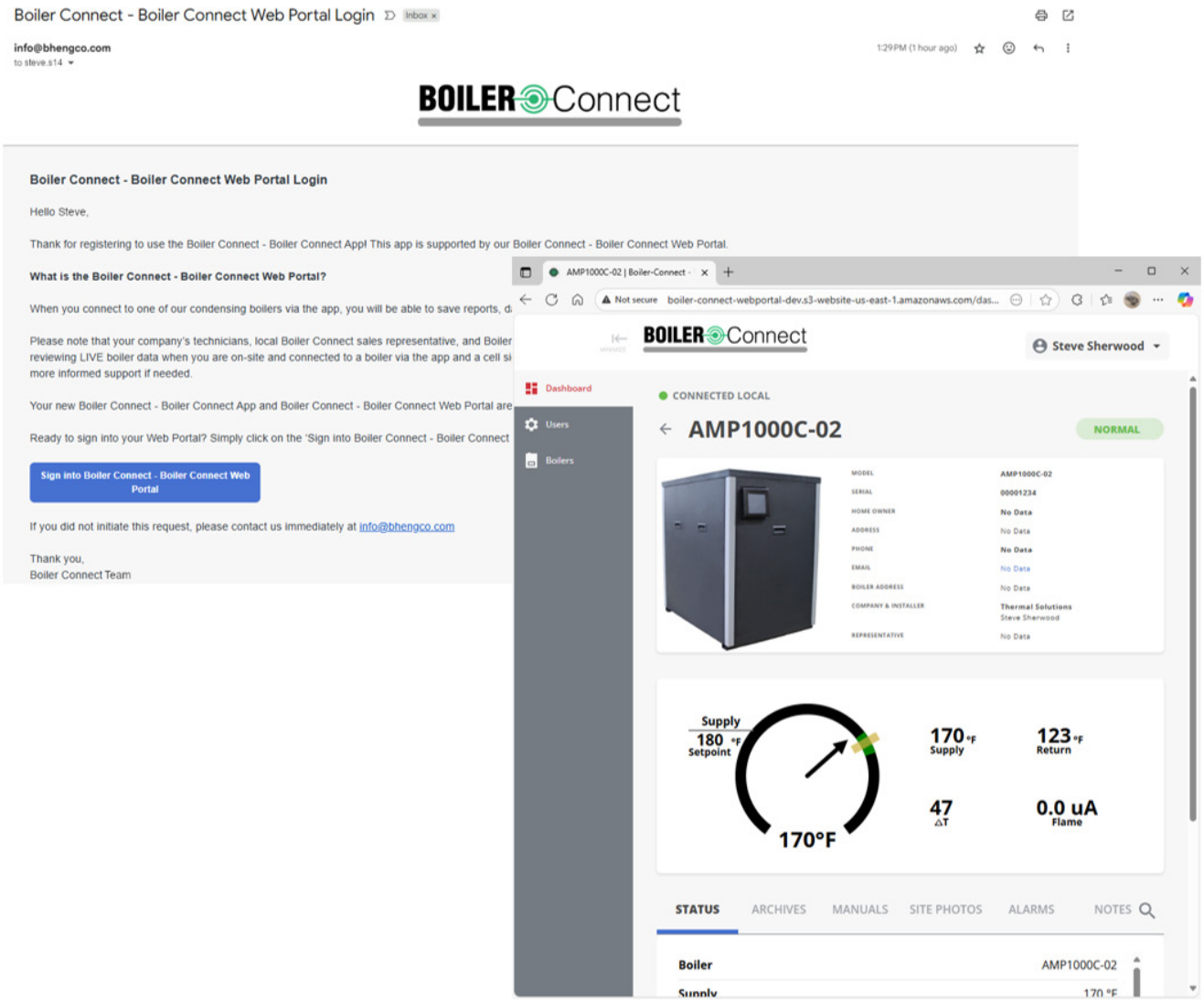


If having trouble connecting, see **Appendix**, Specification for Bluetooth Adaptor LED blink codes and Troubleshooting Tips.

Step 5: Sign into Boiler Connect Web Portal

After you have completed your profile using the Boiler Connect App, customer service will send you an invitation to sign into the web portal where you can view status, service reports and live data when a cell signal is available.

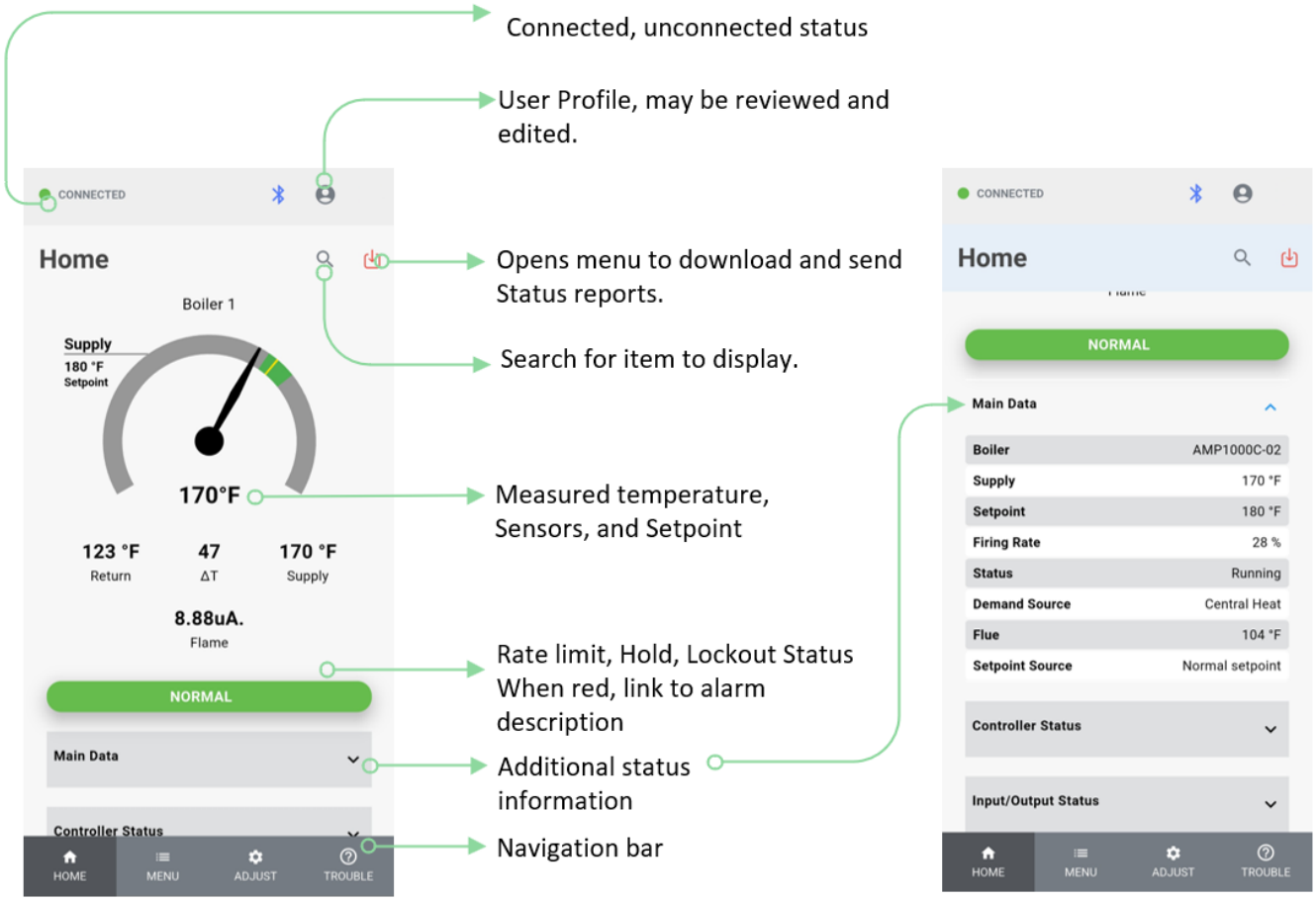
Web Portal
www.boiler-connect.com



If you do not receive an invitation email, call customer service at (717) 239-7642.

On Site

Home screen provides water temperatures supplied to and returning from heating elements. At a glance the user is aware of the current modulation sensor and setpoint. Additional information is available from Main Data, Controller Status, Input/Output Status, as well as Sequencer Status when used.

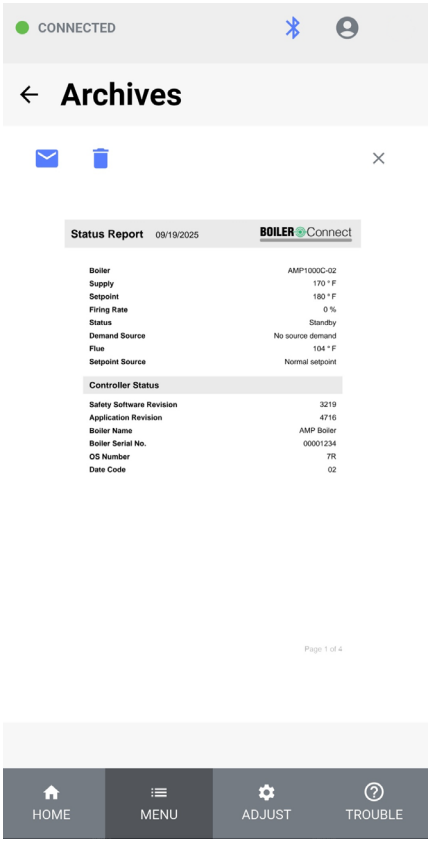


Remote Support

App offers reports, site photos and data logging to document boiler performance and aid remote support. Reports, site photos, and logs may be email and/or stored on devices as pdf or csv files. All files are archived at portal.

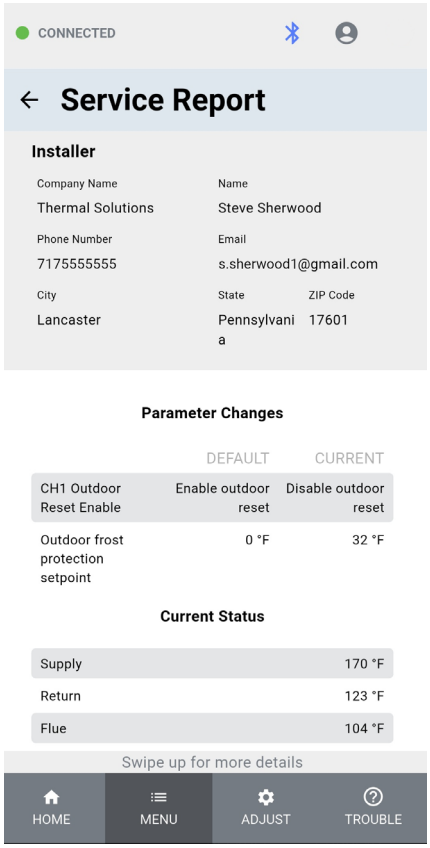
Status Report

Current boiler status, “snapshot”.



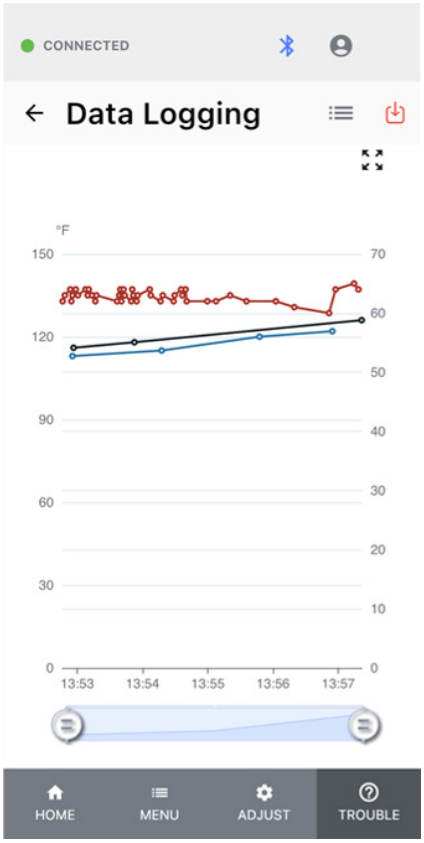
Service Report

Status, cycle & alarm history and actions taken.



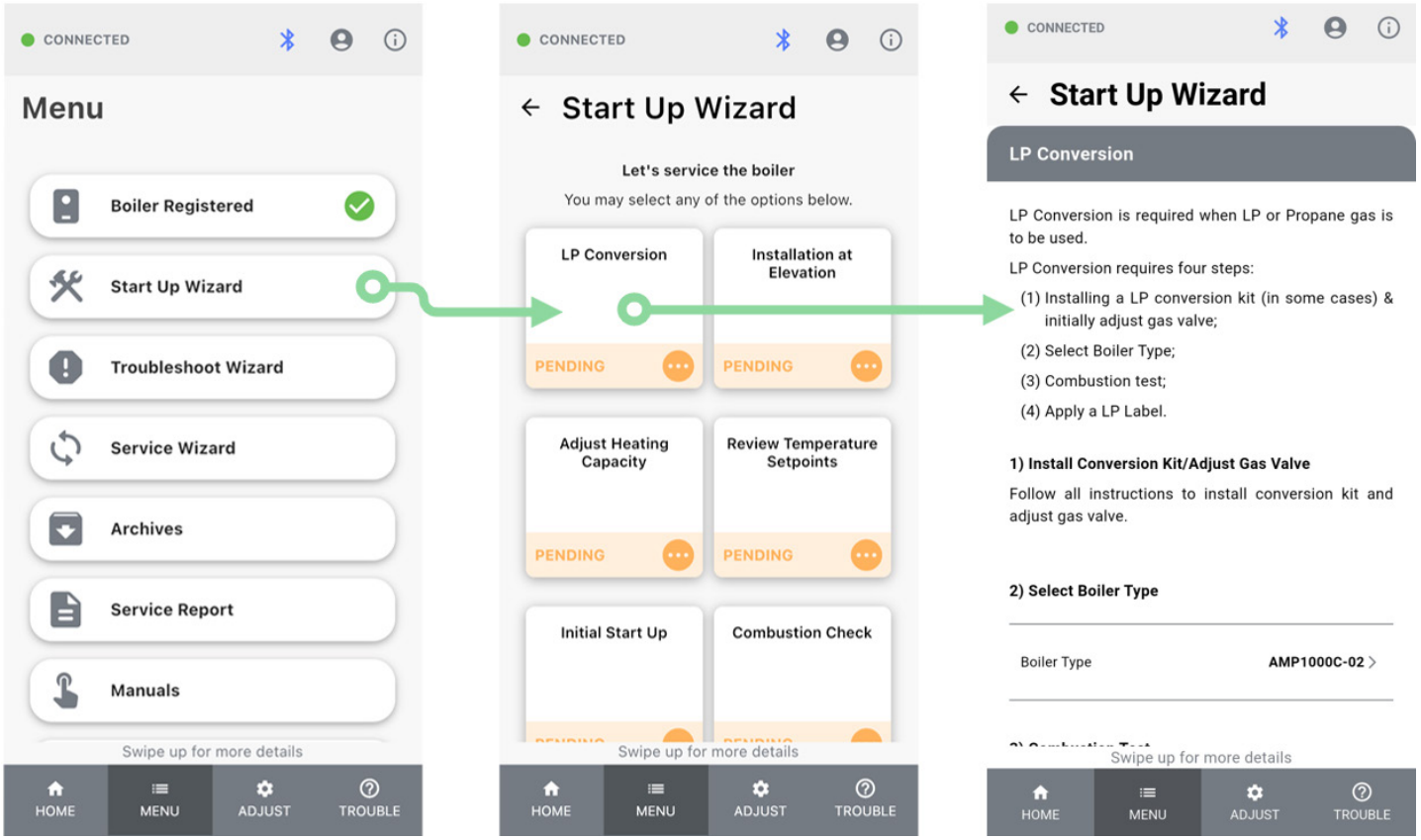
Data Logging

Data is sorted while Bluetooth adaptor is connected.



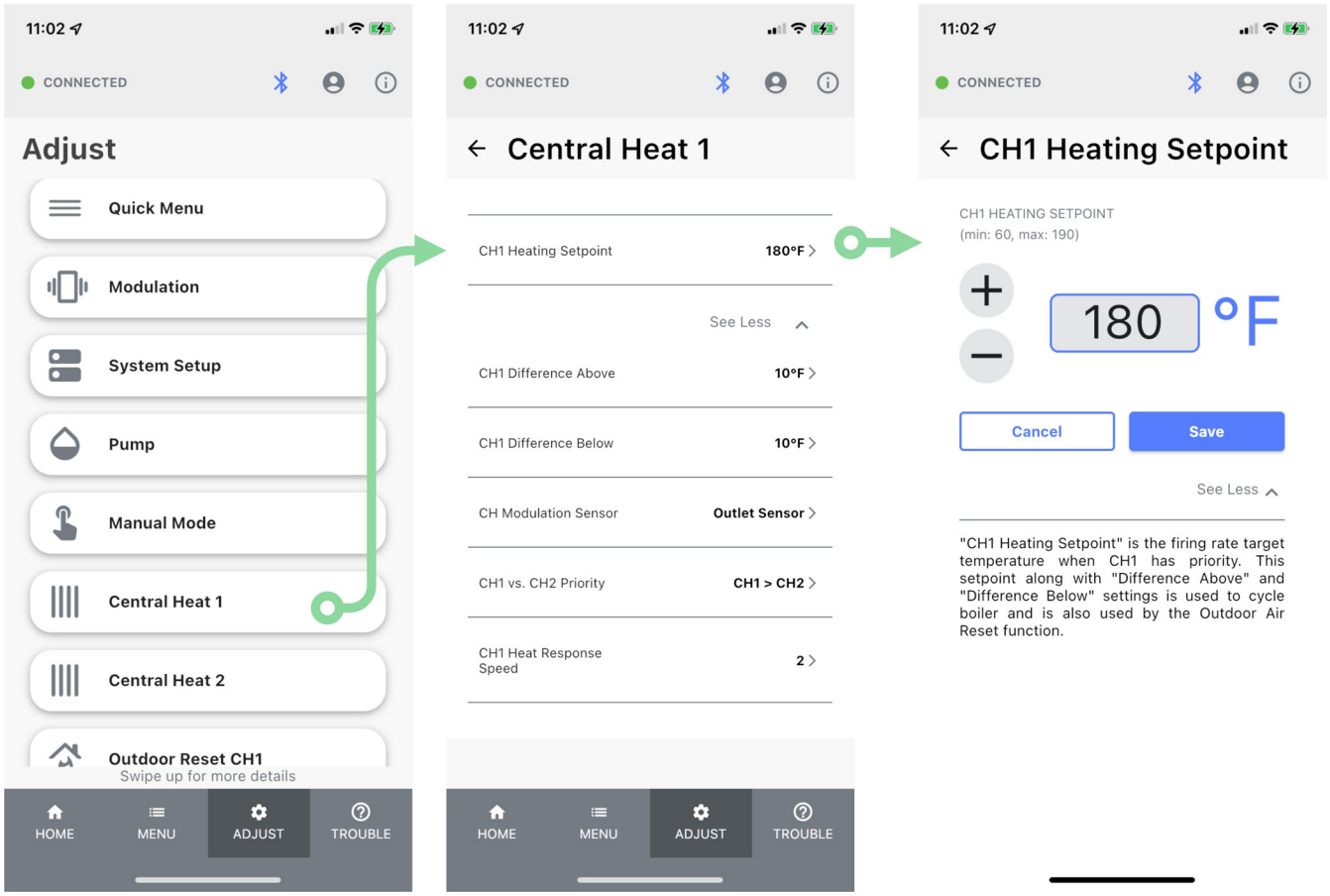
Start Up Wizard is provided to walk users through most common setup tasks.

Start-up Wizard collects instructions, status, and key parameter adjustment together to allow required actions to be as easy and successful as possible.



Commissioning/Setup (continued)

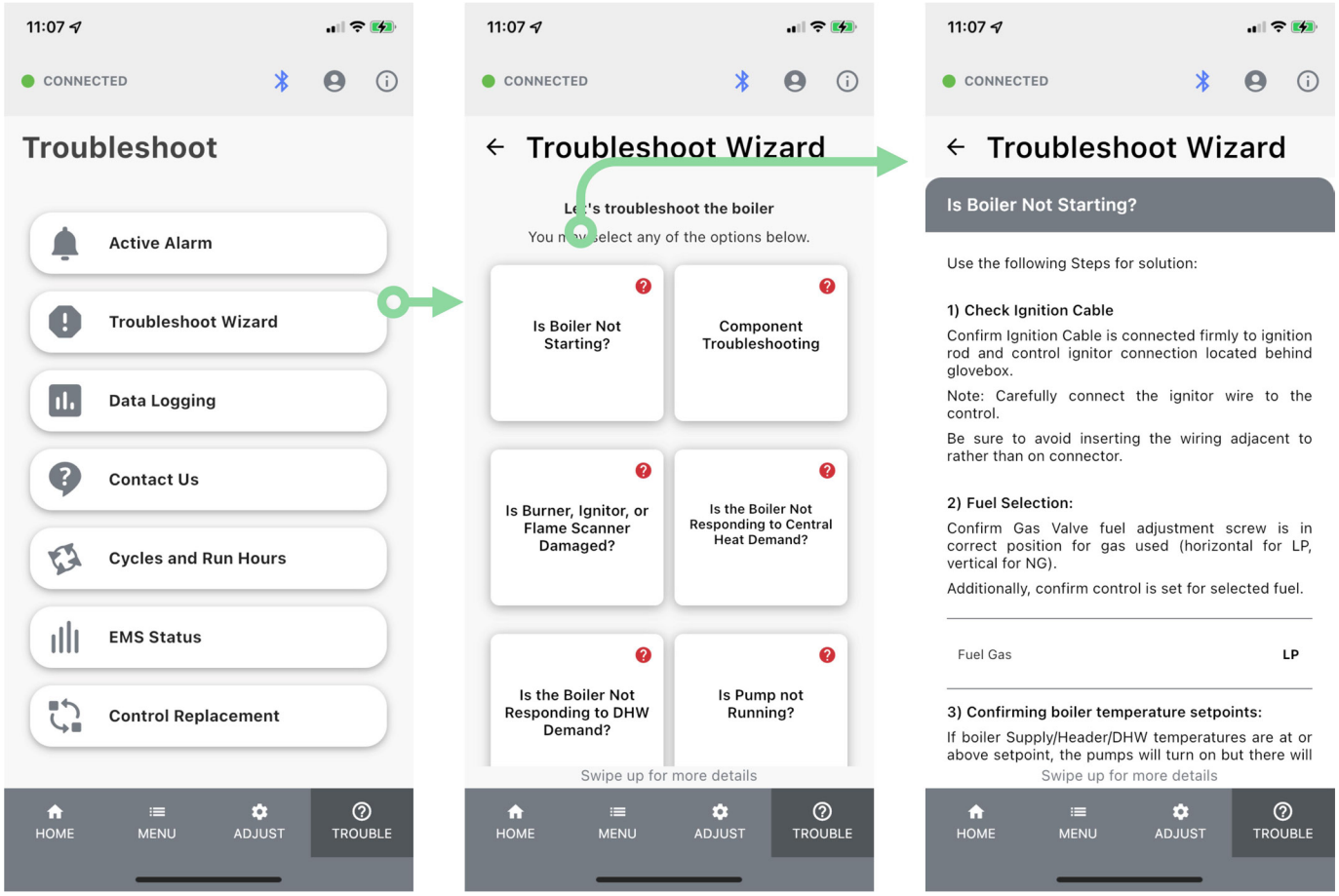
Adjust menus provide opportunity to adjust advanced settings. Each setting is provided with adjustable range and detailed explanation.



Troubleshooting

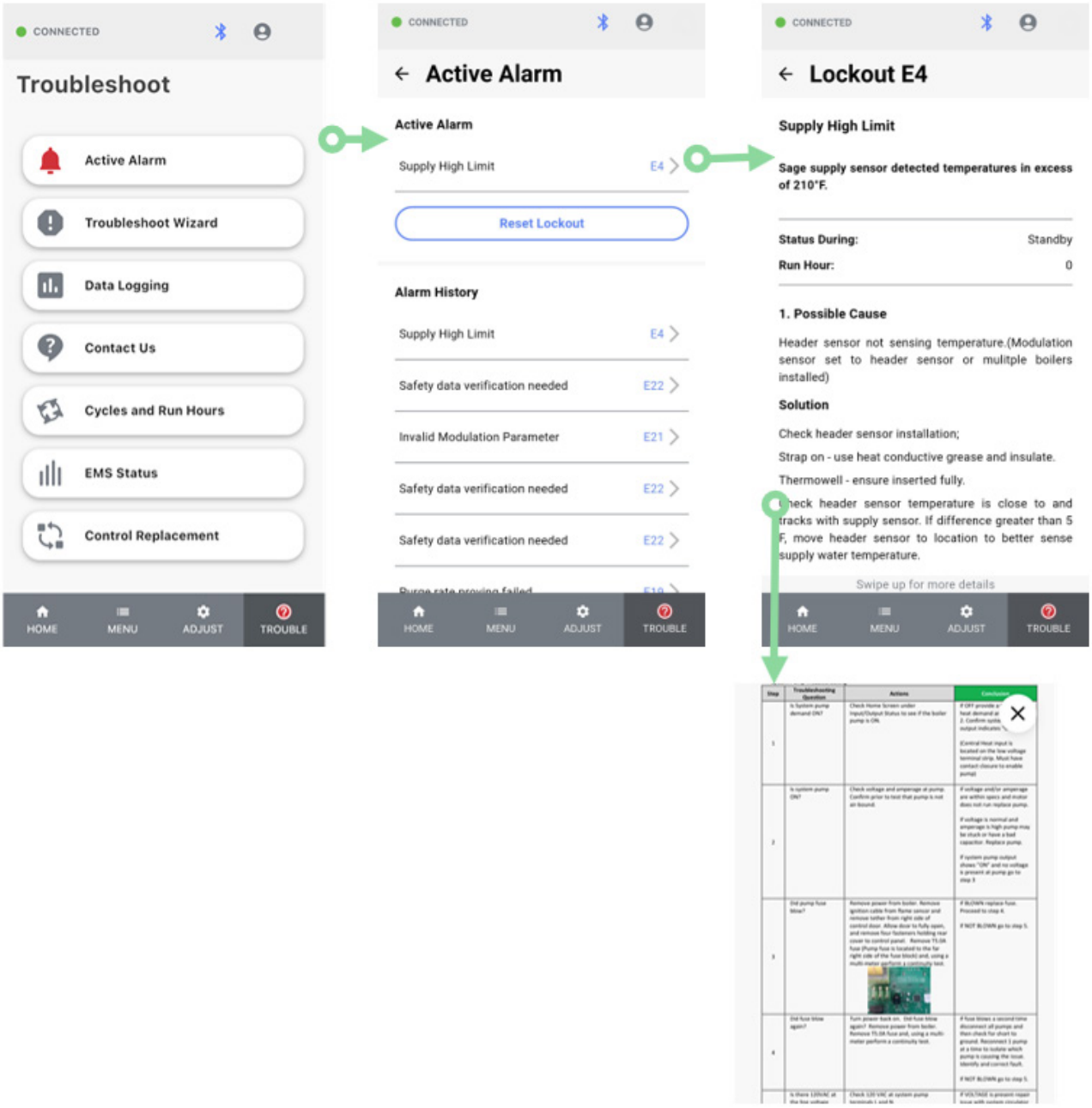
Troubleshooting Wizard is provided to walk users through solving common issues.

Troubleshooting Wizard collects instructions, status, and key parameter adjustment together to allow contractors to investigate efficiently, step by step.



Troubleshooting (continued)

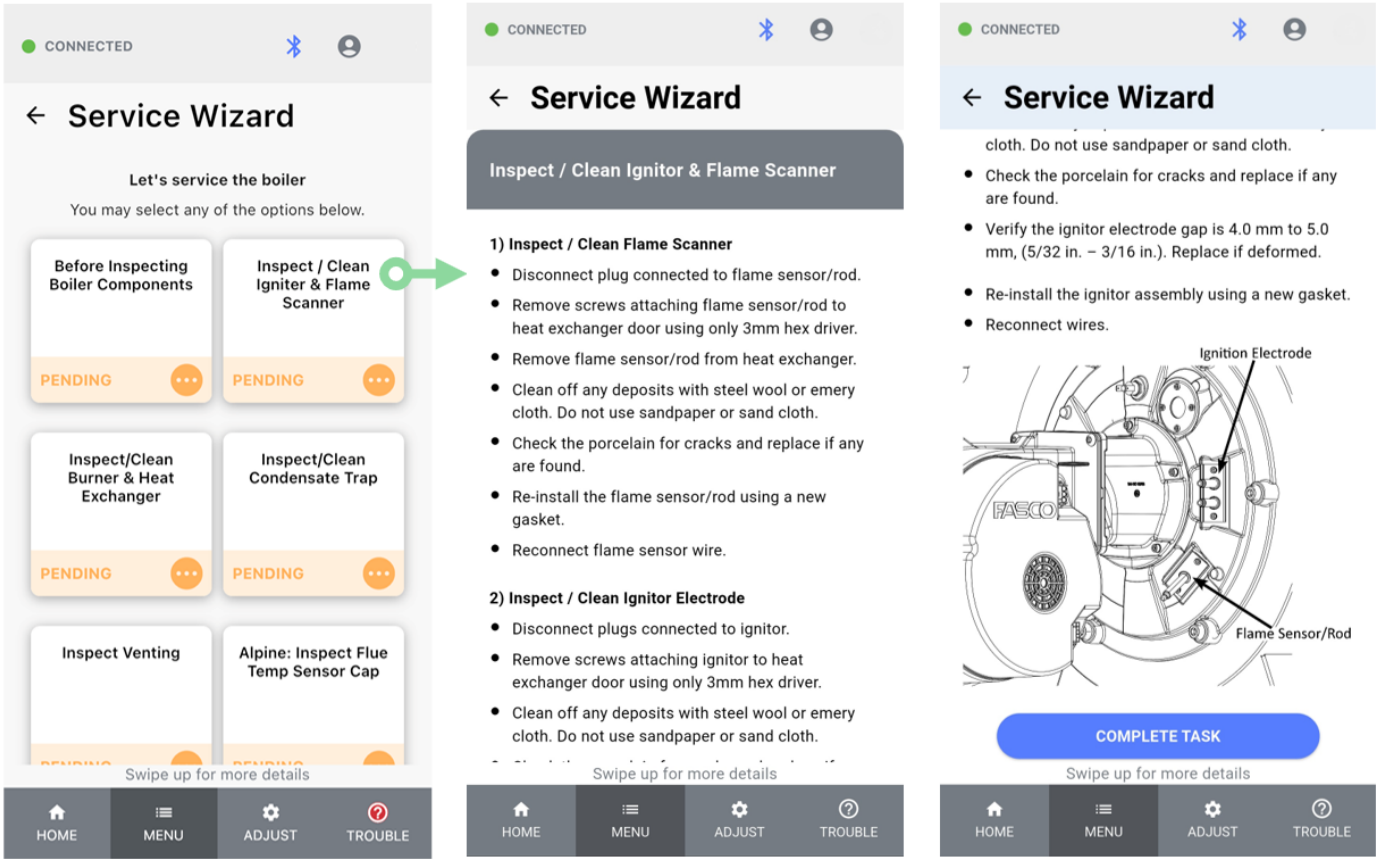
Active Alarm provide detailed explanation, possible cause and solution to every alarm.



Service

Service Wizard is provided to walk users through most common service tasks.

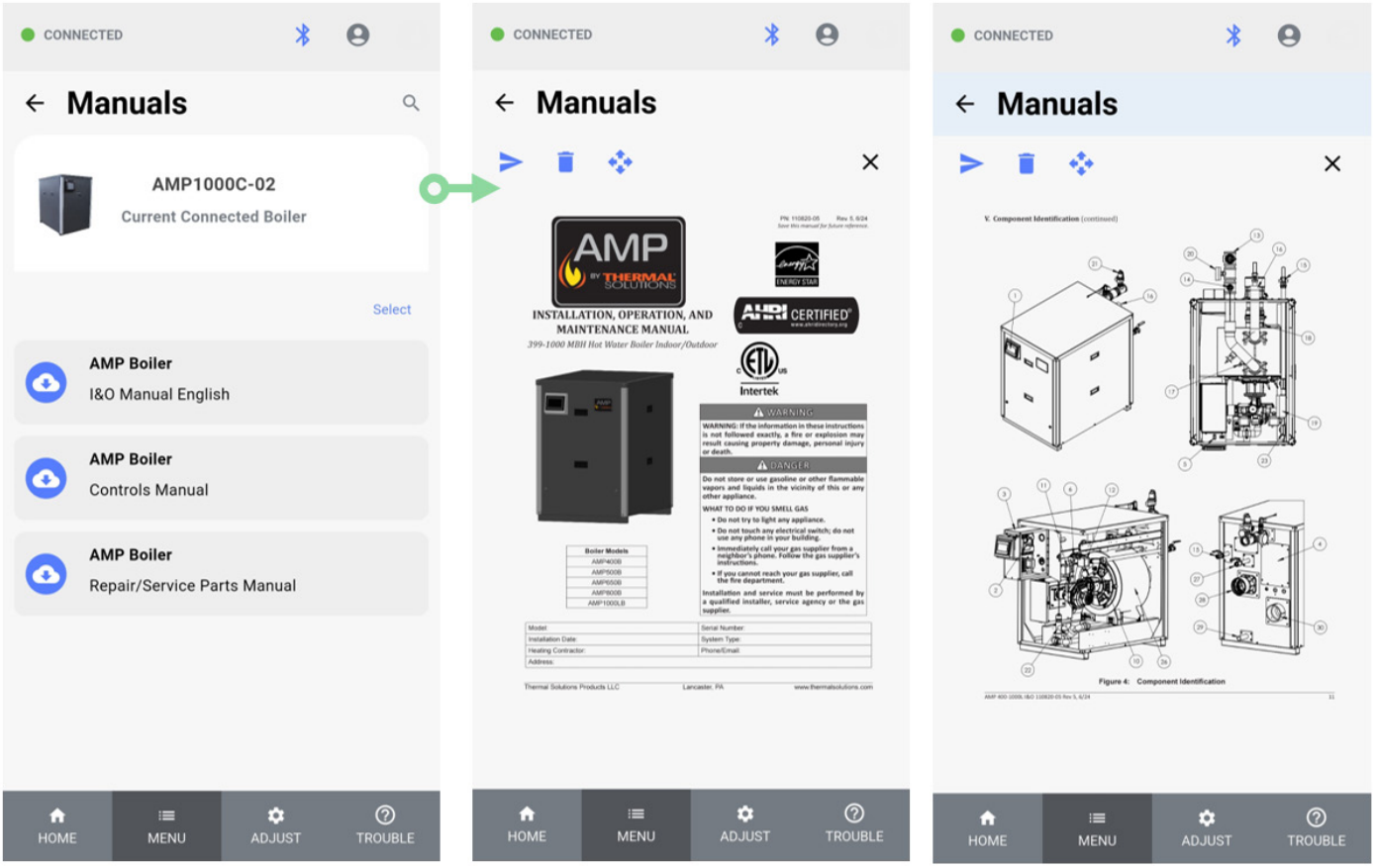
Service Wizard provides instructions to allow required actions to be as easy and successful completed.



Resources

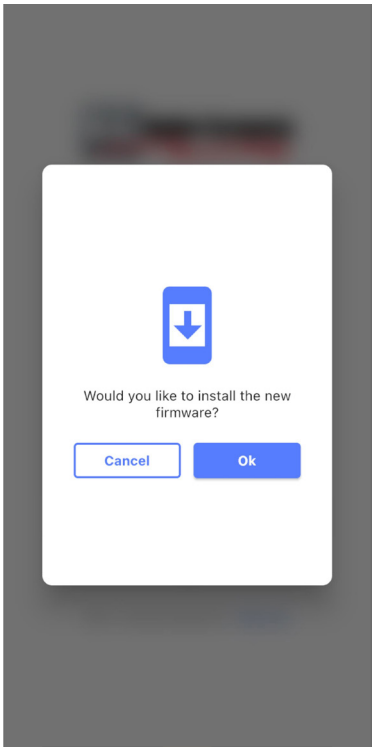
Manuals are provided to ensure the user always has complete and the latest information.

Note: Download the manual to ensure it is available when there is no cell service and to enable zooming.



Bluetooth Adaptor Update

When new Bluetooth Adaptor firmware versions are available, the user will be alerted with an option to download the new firmware. Select “Ok” and allow the firmware download to complete. After download is complete disconnect and then reconnect Bluetooth Adaptor power and close App and reopen once Bluetooth Adaptor LED is solid green.

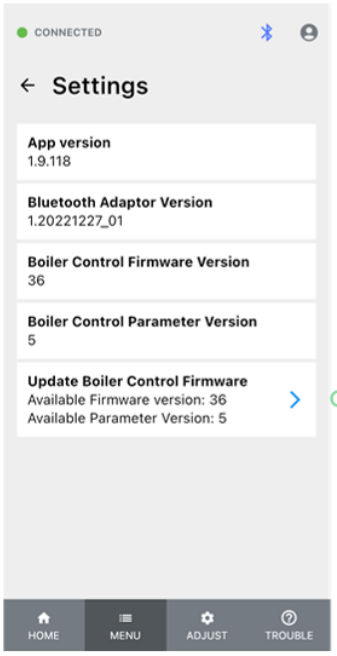


New Bluetooth Adaptor Firmware Update Indication

Boiler Control Updates

The latest Controller firmware and default parameters are made available to the App. When necessary Controller Firmware or default parameters may be downloaded in the field. Feature available for the following boiler series: Alta, GHE II, Phantom II, VPM.

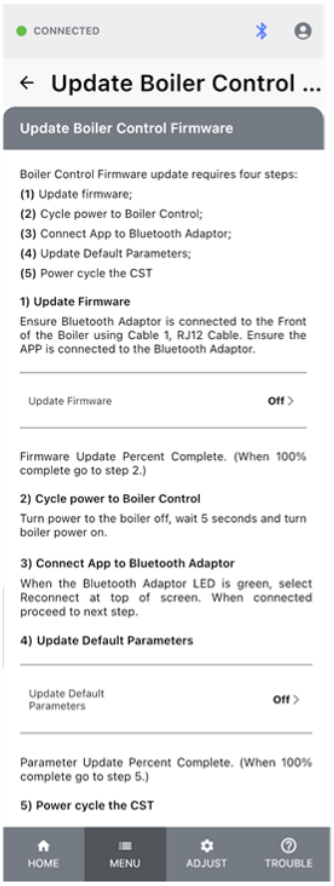
Select Settings on the MENU tab



Firmware and default parameter update

Use MENU to navigate to the Settings menu.

Only update the Boiler Control Firmware when the Available Firmware Version is higher.
Only update the Boiler Control Parameters when the Available Parameter Version is higher.





Recover Control
In the unlikely event of a Firmware download failure (local display is off and Bluetooth Adaptor LED is Red) , the User may select, “Recover Control” and navigate to the Update Boiler Control Firmware function and re-do the firmware load procedure.

Appendix

Specifications

Power
24 VDC via DC Barrel Jack:
-Power supply: AC 100-240V, 50/60Hz input, DC 24V 0.3A output
24 VDC via RJ12:
-Power supply: DC 24V 0.04A input
24 VAC via RJ45:
-Power supply: AC TBD input

Environmental and Regulatory:
- Model: Boiler Connect
- Hardware Version [HVIN]: E3
- Environmental protection: IP10 (Nema 1)
- Flammability: UL94-V0
- Working humidity range: 0-95% (non-condensing)
- Working temperature range: -50°F - 104°F (10°C to 40°C)

Bluetooth Adaptor Blink Codes - Initial Power Up

LED	Description
Off	No power connected
Light Blue	Initializing
Yellow	Device Firmware Upgrade (DFU) Mode is active (waiting for update file)
Purple	DFU Mode is active (receiving update file)

Bluetooth Adaptor Blink Codes - Running Mode

LED Modbus Connection between Boiler to Adaptor Status	Description (Shown in 1st 1/2 second)
Green	Boiler to Adaptor Communication Detected
Red	Boiler to Adaptor Communication NOT Detected

LED Bluetooth Connection between Adaptor to Smart Devise Status	Description (Shown in 2nd 1/2 second)
Blue	Bluetooth Connection between Adaptor to Smart Device
Off	No Bluetooth Connection between Adaptor to Smart Device

For example: “Green-Blue” Modbus and Bluetooth communicating.

Appendix (continued)

FCC Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Appendix (continued)

IC Statement

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique

Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;

2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

Repair Parts

1. Boiler Connect Bluetooth Adaptor Kit----------P/N: 113329-01
   Boiler Connect Bluetooth Adaptor (Portable Tool, Connects Boiler Connect App and Portal to: AMP, BFIT); Carry case, information card; CST Sola Controller J3 Terminals to RJ45 Interface Board (111640-01); Cable 1, RJ45 Straight Cable.
2. Connected Service Tool Sola J3 Terminals to RJ45 Interface Board----------P/N: 111640-01
   Connected Service Tool Interface Board, used to connect Sola Controller J3 screw terminals to Bluetooth Adaptor or Remote Support System using an ethernet cable.
3. Cable 1, RJ12 Straight Cable----------Show Me Cables P/N: 15-302-003S
   Standard RJ12 Line Cord, 24AWG, stranded copper conductors, 6 conductors, straight through, PVC jacket, Silver, Standard Boot, 36-inch length.
4. Cable 2, RJ45 Split Cable----------P/N: 111662-01
   Custom cable has two RJ45 connections on one end and single RJ45 on opposite end. Used to connect Bluetooth Adaptor to Sage equipped boiler's Boiler to Boiler and Enviracom RJ45 connections, Black, Standard Boots, 24-inch length.
5. Cable 3, RJ45 Straight Cable----------Show Me Cables P/N: 530-03 BL
   Standard Cat5e Ethernet Patch Cable, 24AWG, stranded copper conductors, 8 conductors, straight through, PVC jacket, Blue, Standard Boot, 36-inch length.

Appendix (continued)

Troubleshooting Tips

Indication	Possible Cause	Corrective Action
App Will Not Accept New User Account	Cell signal not available.	App requires a cell signal to accept a new user profile. User can log in without cell signal after initial acceptance.
Bluetooth Adaptor LED is OFF	Cables not connected properly.	Cable 1 is not connected. Cable 1 is connected to the Bluetooth Adaptor center connection, should be to the right side connection, see page 5 and 6.
		Cable 2, connections to boiler are reverse. Switch RJ45 connections, see page 5 and 6.
		Cable 3, connection to board is loose, or PCB-14 is not powered. See page 5, 6 and 7.
	Wrong Cable.	Cable 1, 2 and 3 must be “straight through” cables.
	Boiler is not powered.	Power up boiler.
Bluetooth Adaptor **LED is Red**	Sola Control Fail to Connect.	Connection Method 3 or 4: PCB-14 PWR light is green, STAT light is solid red, and CTL light is off. Wiring from Sola to PCB-14 is disconnected. Ensure cable is firmly plugged in to both devices and no wires have come loose. See page 7.
		Alternate Conection Method 1: Wiring to Boiler RJ45 boiler connection are disconnected. To fix this use: “CST Sage J3 Terminals to RJ45 Interface Board”, PN: 111640-01. See page 6.
		Alternate Connection Method 2: Sola Slave Address is not set to 1, Panasonic Status screen should show “Boiler 1”. If not, go to Panasonic display/Adjust Menu/Sequencer Slave and adjust Boiler Address to 1. Cycle power to Bluetooth adaptor. See page 6.
	PCB-14 Failure	PCB-14 PWR light is green and STAT light is off. To fix this use: “CST Sola J3 Terminals to RJ45 Interface Board”, PN: 111640-01. See page 6.
	Failed Cable or connection.	Check cables and cable connection pins. Replace cables if necessary.
Erratic number updates or bad data	Bad connection	Reboot Bluetooth Adaptor and open App after Bluetooth Adaptor LED has turned green.
App will not connect	Bad connection	Reboot Bluetooth Adaptor and open App after Bluetooth Adaptor LED has turned green.
	Failed to close & reopen App after connection to different Bluetooth Adaptor.	When two Bluetooth Adaptors are on site, close App and reopen when connecting to next Bluetooth Adaptor.
App will not connect to Sola Controller	Sola Controller firmware too old.	Sola controllers older than 2012 (revision 1967, 3212 and 3220) are not compatible with the App.
	Boiler model not compatible	Not all boilers/water heaters with a Sola controller are compatible withw the App. If App connects to Bluetooth Adaptor, but home screen is blank, this model is not compatible.
	Sola Controller with multiple boilers in a peer-to-peer network.	Connection Method 2: Sequencer Master must be disabled. To keep the Sequence Master enabled, use Alternate Connection Method 2 (see page 6)