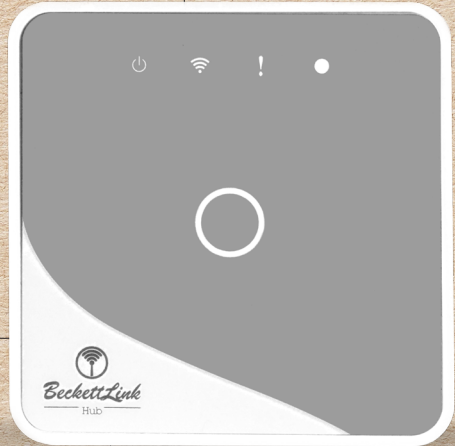# Beckett®

7650 BECKETTLINK® HUB
INSTALLATION AND INSTRUCTION MANUAL

Features & Benefits

- Provides reliable communications from Bluetooth®-based BeckettLink® sensors and controls to cloud-based applications.

- Hub can be placed where the WiFi signal is the strongest, up to 150 feet (46m) from BeckettLink® sensors and controls.

- Easily connects to existing WiFi networks using the BeckettLink® App.

- Four LED indicators to help with setup and troubleshooting.

7651A0001K BeckettLink® Tank Gauge Kit

Includes 7651A BeckettLink® Tank Gauge and 7650A BeckettLink® Hub. Connects to WiFi/Bluetooth® Internet Hub for Use with Other BeckettLink® Devices

Bluetooth®

Description The 7650 BeckettLink® Hub is designed to connect to an existing WiFi network and provides an internet link between other BeckettLink® products and cloud-based applications. The hub can process Bluetooth® input from multiple BeckettLink® wireless sensors or controls at the same time. The BeckettLink® Hub also includes a temperature sensor which can provide a warning through cloud applications if the room temperature falls below a preset temperature (low temperature warning).

Beckett®

Table of Contents

Table of Contents

General Information

7650 BeckettLink® Hub

· 33149-001 Power Supply

7650 BeckettLink® Hub and power supply is also included in the 7651A0001K BeckettLink® Connected Tank Gauge Kit.

Thank you for purchasing this Beckett product for use with your comfort system. Please pay attention to the Safety Warnings contained within this instruction manual. Keep this manual for your records and provide it to your qualified service agency for use in professionally setting up and maintaining your system.

If at any time the product does not appear to be operating properly, immediately contact your qualified service agency for consultation.

⚠ CAUTION   Frozen Plumbing & Water Damage Hazard

If using the Freeze Warning feature of the BeckettLink® Hub, the hub must be placed where it can accurately sense room temperature. Do not place the hub inside a cabinet or other enclosure. Do not place the hub near electronics or other heat sources. Inaccurate temperature readings could lead to failure to notify of freezing conditions and property damage.

Hazard Definitions

⚠ DANGER

Indicates a hazardous situation that, if not avoided, **will** result in **death or serious injury**.

⚠ WARNING

Indicates a hazardous situation that, if not avoided, **could** result in **death or serious injury**.

⚠ CAUTION

Indicates a hazardous situation that, if not avoided, **could** result in **minor or moderate injury**.

NOTICE

Used to address practices not related to physical injury.

SAFETY INSTRUCTIONS

Safety instructions signs indicate specific safety-related instructions or procedures.

Agency Approvals

· FCC Part 15.247, FCC ID: 2AHNM-MGW101

· Industry Canada RSS-24, Issue 1, IC ID:21398-MGW101

· UL 60065

· FCC PART 15, SUBPART B

· Industry Canada RSS-310, Issue 4

Additional information on BeckettLink® Products is available at: beckettcorp.com

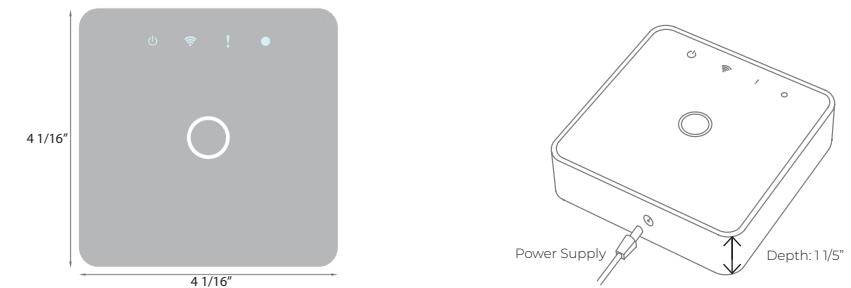**Las instrucciones en espanol estan disponibles en nuesto sitio web.**

Les instructions en français sont disponibles sur notre site Web
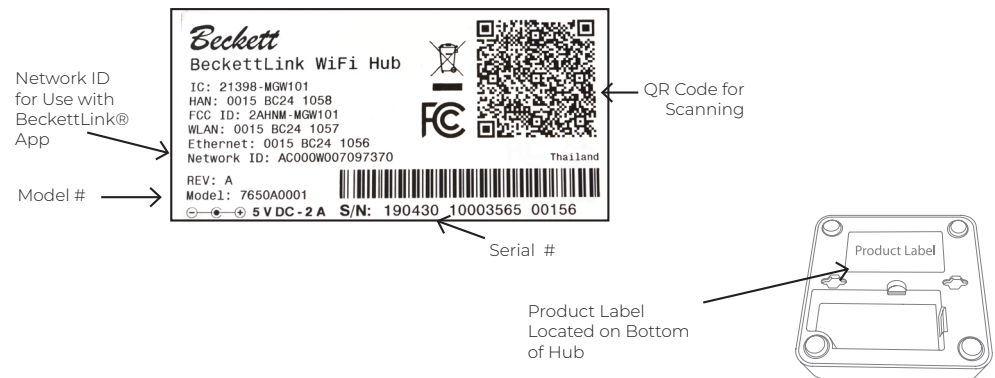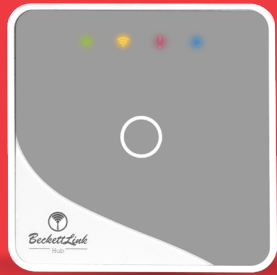
Technical Specifications

Table 1 - Specifications

Storage Ambient Temperature:	-4°F to +158°F (-20°C to 70°C)
Operating Ambient Temperature:	+32°F to +104°F (0°C to +40°C)
Storage and Operating Ambient Humidity:	10% to 90% RH Non-Condensing
Ingress Protection Class:	IP 20
Installation Locations:	Indoors Only
Power Consumption:	1.2 W Typical, 25 W Maximum
Indoor Temperature Range Accuracy:	+/- 9°F (+/- 5°C)
WLAN:	2.4 GHz, 802.11B/G/N Protocol, -101dBm Sensitivity, +18 dBm Output Power
BLE:	2.4 GHz, BLE 5.0 Protocol, -94 dBm Sensitivity, +20 dBm Output Power
RoHS Compliant:	Yes
Network Router Ports Used:	80,443,53,55055,55056

Product Dimensions

4 1/16"

4 1/16"

Power Supply

Depth: 1 1/5"

Product Label & How to Read

Network ID for Use with BeckettLink® App

Beckett
BeckettLink WiFi Hub
IC: 21398-MGW101
HAN: 0015 BC24 1058
FCC ID: 2AHNM-MGW101
WLAN: 0015 BC24 1057
Ethernet: 0015 BC24 1056
Network ID: AC000W007097370   Thailand
REV: A
Model: 7650A0001
5 V DC-2 A   S/N: 190430_10003565_00156

QR Code for Scanning

Model #

Serial #

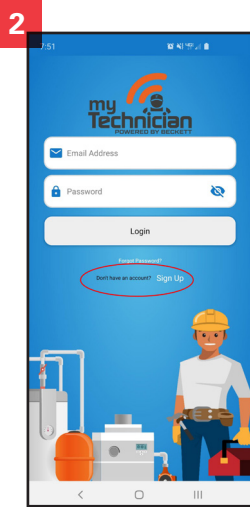Product Label Located on Bottom of Hub

LED Guide

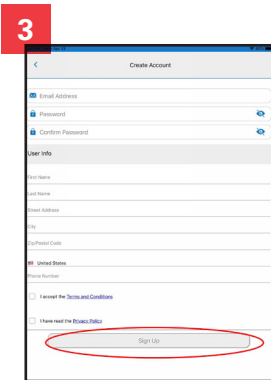**Green LED:** Power Indicator - solid on when powered - double flashes during booting.

Blue LED: Bluetooth® Indicator - solid on when operating normally.

Yellow LED: WiFi Connection indicator - solid on when connected to cloud and registered - flashing when connected to cloud but not registered - double flashes during registration - off when not connected to the internet.w

Red LED: WiFi Error Indicator - off during normal operation - flashes when error is detected in WiFi connection

Download the myTechnician™ App and Setup Account

The myTechnician™ App is needed to complete the installation of the BeckettLink® Hub. The app can be downloaded from the App Store (iOS 11.0 or later) or Google Play (Android 5.0 or later). Search "My Technician" or "RWB myTechnician" or scan the QR codes below.

App Store:

2

Note: Throughout the setup process, read the directions and suggestions in the app, they will help guide you through the setup process.

1. When the download is complete, open the myTechnician™ App and sign in or set up an account.

2 If setting up a new account, tap "Sign Up". If account is already set up, enter email and password.

3 For new accounts, enter email, password, first name, last name, address, country, zip or postal code, cell phone number for push notifications.

Passwords must be between 8 and 128 characters, include at least one number or special character as well as one uppercase letter and one lowercase letter.

4. Tap the "Sign Up" button at the bottom of the page when complete. You should receive a confirmation email quickly. Follow the instructions in the email to confirm the account setup.

5. Be sure to sign into the new account in the app using your email and password.

3
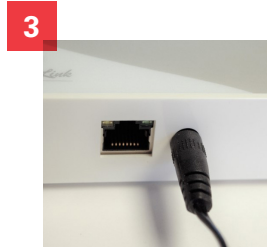
Note: The hub operates only with 2.4GHz WiFi networks. The hub cannot connect to a WiFi network using the 5.0 GHz frequency. Apple Phones (iOS) must be connected to the 2.4 GHz WiFi signal from the network you want to use for the hub. Android phones will list the available networks. Choose the 2.4 GHz network you wish to use.

The WiFi network password will be needed to complete hub installation.

7
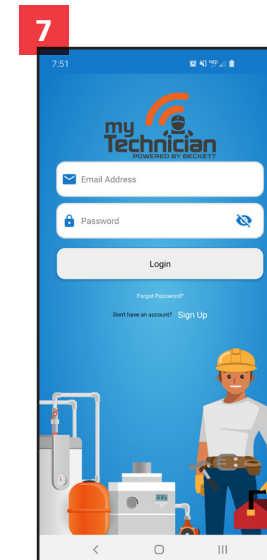
Hub Setup: Install Indoors Only

The BeckettLink® Hub is designed and rated for indoor installation only. Do not install where moisture or freezing temperatures can damage the hub.

1. Locate hub indoors (+ 32° F, 0° C minimum) within 150 feet (46 m) of all BeckettLink® devices. Place hub where WiFi signal is strong.

2. Do not place the BeckettLink® inside cabinets or near other heat sources like electronic devices. This may prevent low temperature warnings from operating properly. **Do not connect an ethernet cable during the WiFi setup and registration process.** An ethernet cable may be used after completing setup.

3 Plug the power cable into the hub and connect to 120 volt outlet or surge protector.

4 All four LEDs will light briefly when hub is powered.

5 Green power LED will double flash during booting process (4-5 minutes).

6 Wait until Green and Blue LEDs are on solid to start using the BeckettLink® App for setup.

Note: The WiFi function on phone or tablet must be enabled before starting the hub setup process. Make sure airplane mode is off.

7 Open myTechnician™ App and login using email and password. App will open to dashboard page.
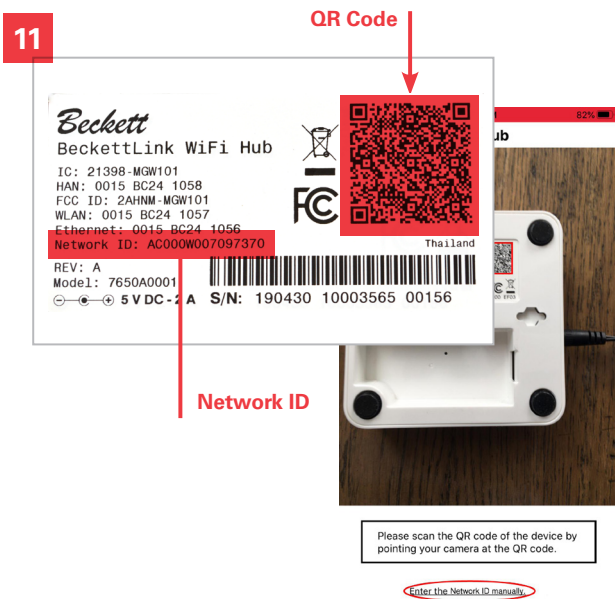
4

5

6
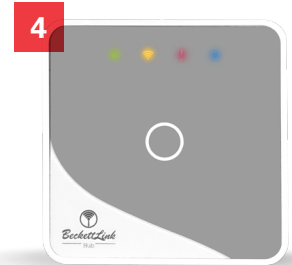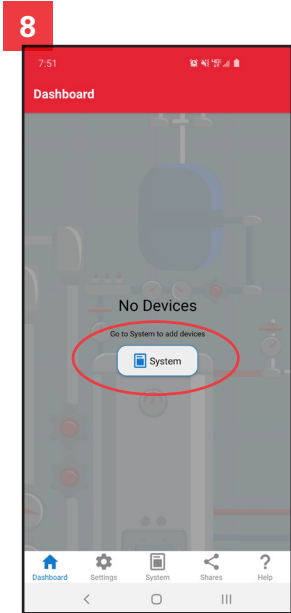
8

8 Tap "System" button to add a device. The hub must be added first before adding any other devices.

9 Tap "Add Hub" button. Tank Gauge or other device buttons will not work until hub is added and registered.
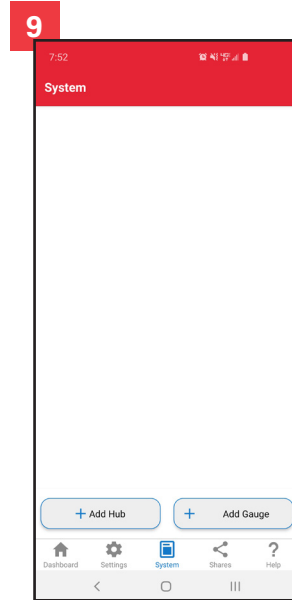
10 Make sure the Green and Blue LEDs on hub are on solid. Tap "Next".

11 Scan the QR code on the bottom label of the hub or enter the 15 character Network ID manually.
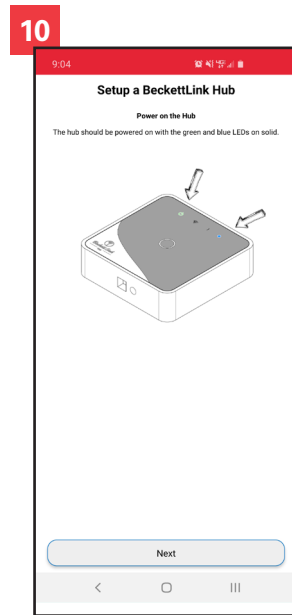
Note: Have the network password ready. If the yellow WiFi LED is on or flashing, see "Change WiFi Settings - WiFi Reset".
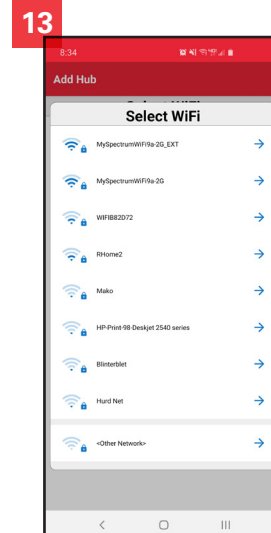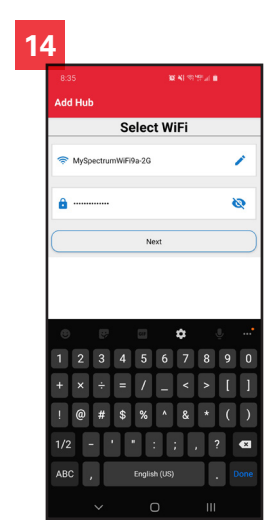
11

QR Code

Beckett
BeckettLink WiFi Hub
IC: 21398-MGW101
HAN: 0015 BC24 1058
FCC ID: 2AHNM-MGW101
WLAN: 0015 BC24 1057
Ethernet: 0015 BC24 1056
Network ID: AC000W007097370

REV: A
Model: 7650A0001
5 V DC-2 A S/N: 190430 10003565 00156

Thailand

Network ID

Please scan the QR code of the device by pointing your camera at the QR code.

Enter the Network ID manually.
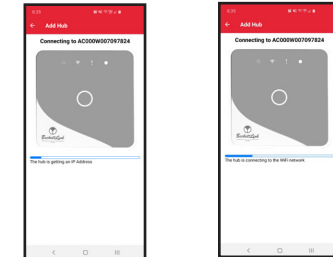
9

10

12

12 "Allow Joining"

13 Tap to select the WiFi network you want to use.

14 Enter password for WiFi network. Tap Next

15 "Allow to Join Network"

Note: The phone will alternate between direct connection to the hub and using WiFi during the setup process

13

14

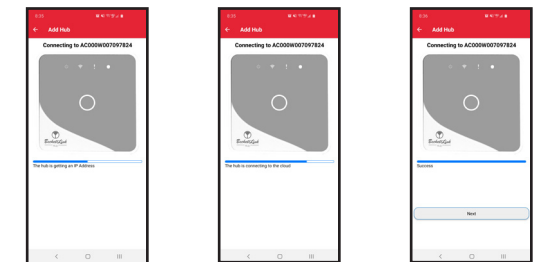**15**

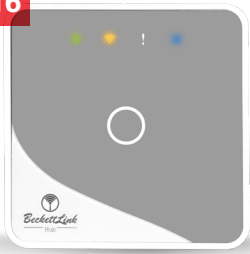The hub is getting an IP address

The hub is connecting to WiFi network

Installation Continued

16

16 Tap"next. The WiFi LED on the hub will continue flashing until registration is complete.

17 Enter name for hub and tap "Done".

18 When the hub is successfully connected to WiFi and the registration is complete, the green, yellow and blue LEDs will be on solid.

17

18

Waiting for hub to appear to cloud	Waiting for hub registration
successfully connected	Done
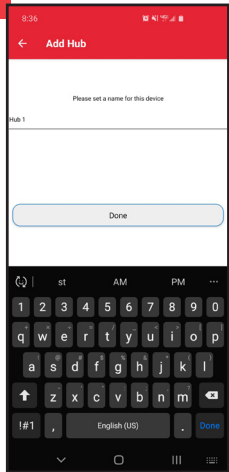
Complete Installation

To complete setup, tap the "System" button. The hub should appear on the System page. To add a BeckettLink® Connected Tank Gauge or other compatible device, tap the matching button at the bottom of the System Page. Follow the instructions in the device manual and the myTechnician™ app to complete installation of additional devices.

Usage
Dashboard

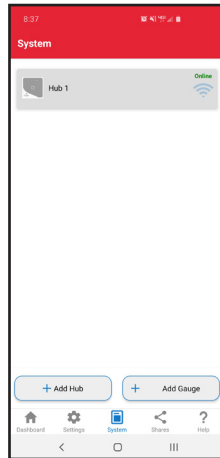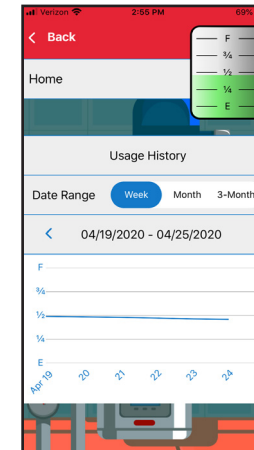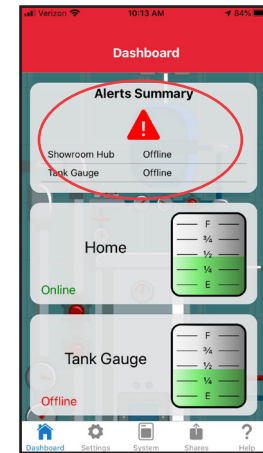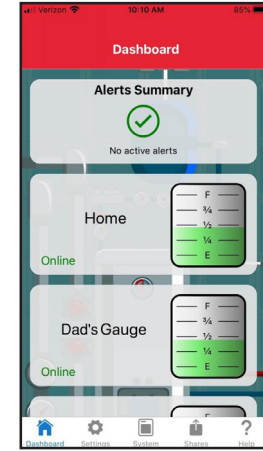The Dashboard provides a quick status overview of the devices on your account or devices shared with you.

Any system alerts will be displayed at the top of the Dashboard page.

Tap the devices shown to see more detailed information. For example, tap the gauge display to view tank levels by week, month or for the last three months.

Settings

Use Settings to access account information, activate login requirements and enable the use of fingerprint or other biometrics authentication. Select standard US or Metric units.
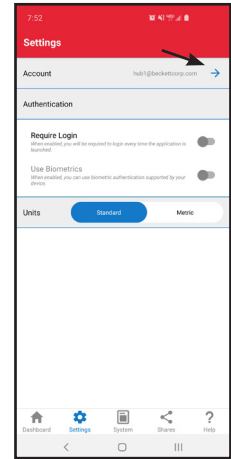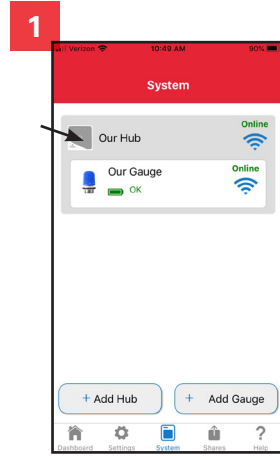
Usage
Settings

To update Account Information, Tap "Account". From the "Account" page you can Change Email Address, Change Password, Logout or Delete Account by tapping the matching button.
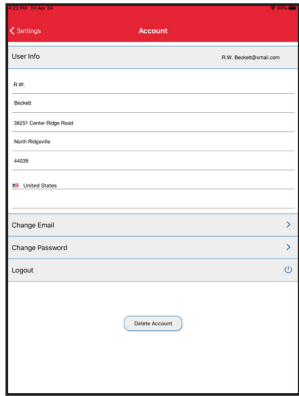
System

Use System to access additional information about the devices in your system. The system page shows basic information on the devices in your system such as Online/Offline Status, Signal Strength, Battery Status (gauge) and devices shared with you by others Tap the matching card to see details on a specific device.

1 To view hub details tap the hub card to see Signal Strength, IP Address, Online Status, Hardware and Software version, as well as the time and date of the last update

2. Use Signal Strength information to help choose hub location.

Setting Alerts

1 From the Hub Details page, Tap "Edit" to set up offline and low temperature alerts.

2 Use the sliders to turn the alerts on or off. Be sure to hit "Save" after making any changes to the alert settings.

3 Use "+" or "-" to adjust the low temperature warning setting. The range for the low temperature warning is 40-60°F. (4-15°C). *Because the temperature reading in the hub is an estimation, Beckett recommends setting the low temperature warning no lower than 45°F (7°C)*

Usage
Low Temperature Warning

A temperature sensor in the BeckettLink® Hub provides an <u>estimated</u> room temperature (+/- 9° F, +/- 5°C). When enabled, the Low Temperature Warning will provide a push notification through the phone and an email if the room temperature falls below the temperature chosen in the app.

A temperature alert will appear in the app only when the estimated temperature drops below the setting chosen.

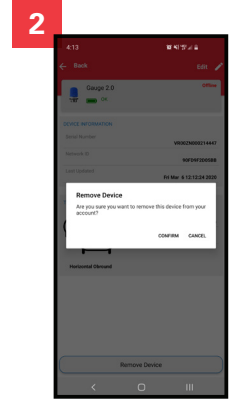## Hub Detail Page

Remove or Change Hub

To replace an existing or faulty hub, tap "Remove Device" at the bottom of the hub details page. Removing the hub will also remove all the devices associated with the hub.

If a BeckettLink® Connected Tank Gauge is installed with the hub, you will need to un-pair the tank gauge before re-pairing the tank gauge to the new hub.

Un-pair the tank gauge using the button next to the battery (under the cover of the tank gauge). Hold the button down for 5 seconds, release, and hold button for another 5 seconds.
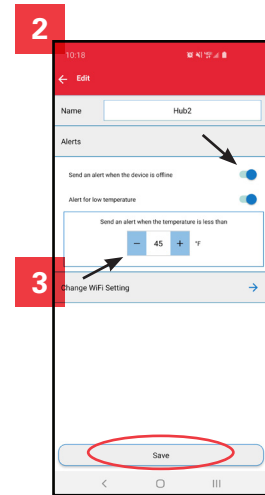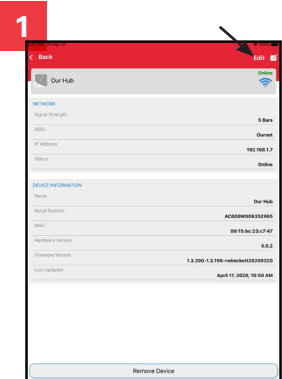
To Remove the hub:

1 Tap Remove Device

2 Tap Confirm

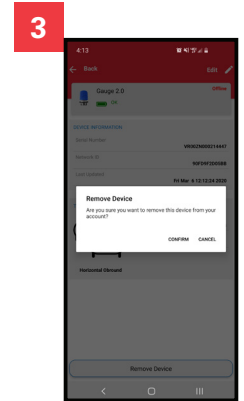**3** You will need to setup and reconnect all devices to the new hub.

1

"Are you sure you want to remove this device from your account?"

"Device successfully removed"
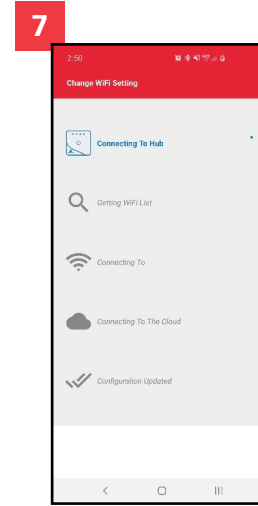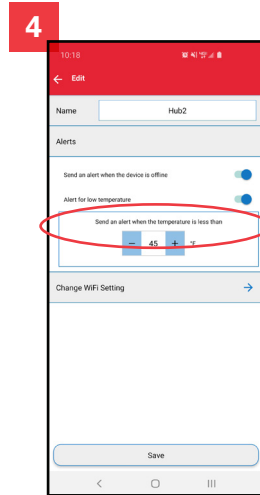
Usage
Change Wifi Settings
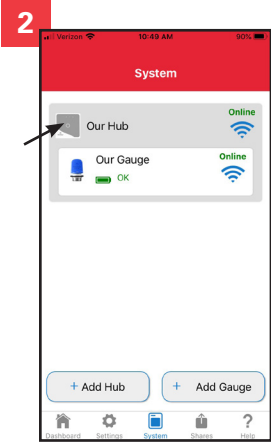
To update to a new WiFi router or change WiFi password, use "Change WiFi Settings" button on the Alert Setup page.

1. Tap "System" button

2 On the System page, tap the "Hub".

3 From the Hub Detail page, tap "Edit".

4 Tap "Change WiFi Setting"

5 Hub must be powered. Green and Blue LEDs must be on. Yellow WiFi LED may or may not be on.

6 Push pinhole button on bottom of hub once, using paperclip or pen. Yellow WiFi LED will flash rapidly, turn on. Wait for Yellow LED to turn off, then tap "Next".

Change Wifi Settings
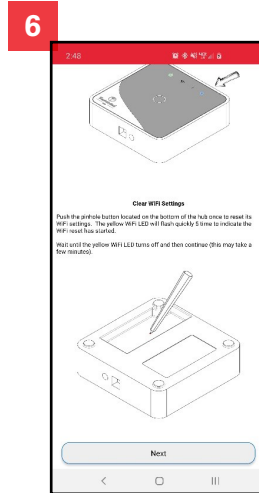
7 Connecting to Hub.

8 Getting WiFi List.

9 Select WiFi

10 Connecting to WiFi

11 Enter WiFi password.
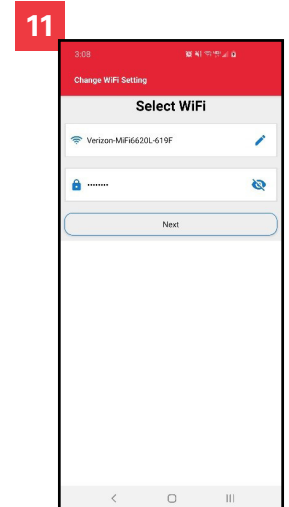
Usage
Change Wifi Settings Continued

12 Connecting to Cloud.

13 WiFi is updated. Tap OK.

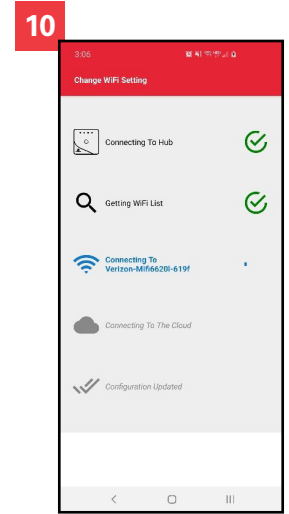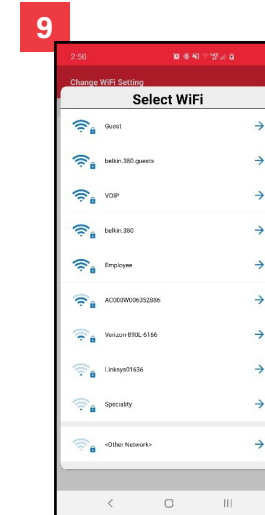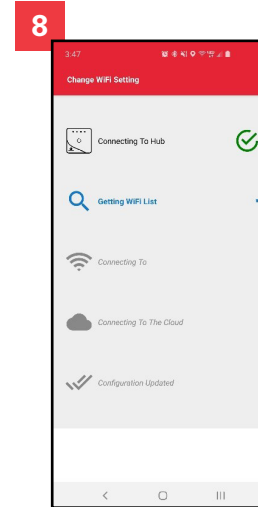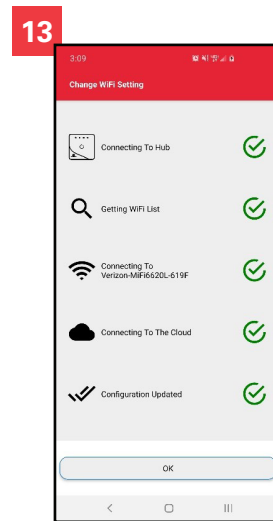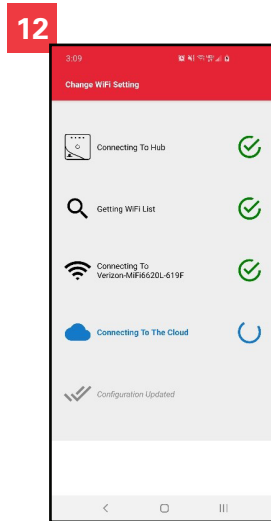**WiFi setup can also be used to reset the WiFi settings if the yellow WiFi LED continues flashing, which means registration of the hub was not successful.**

Usage
Shares

Use the shares page to share system information with family, friends or servicing dealers. The myTechnician™ app can help identify local servicing dealers using the myTechnician™ system to monitor BeckettLink® or compatible devices.
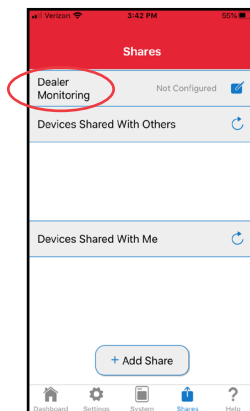
Usage
Sharing with Servicing Dealer

Use System to access additional information about the devices in your system. The system page shows basic information on the devices in your system such as Online/Offline Status, Signal Strength, Battery Status (gauge) and devices shared with you by others Tap the matching card to see details on a specific device.

1 To share your system information with a servicing dealer, tap "Dealer Monitoring".

2 Select your dealer from the dealer list. Be sure to select the correct location. Some dealers have multiple locations. If no dealer list appears, no dealers are currently available in your zip or postal code.
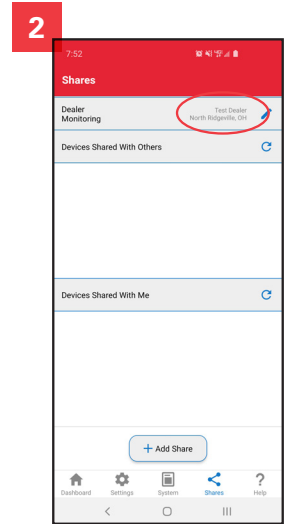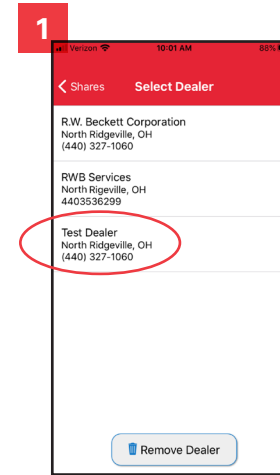
Sharing with Family and Friends

To share your system information with family or friends, they must first download the myTechnician™ app and set up an account. Their email address will be needed to set up the share. The share will not be accepted unless the email address is for a valid myTechnician™ account.

1 Tap the "+ Add Share " button.

2 Type in the email address for the person with whom you wish to share. They must have the myTechnician™ app and a myTechnician™ account for the share to be accepted.
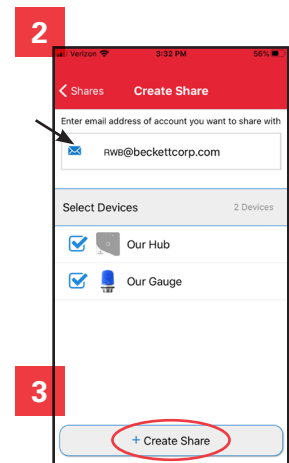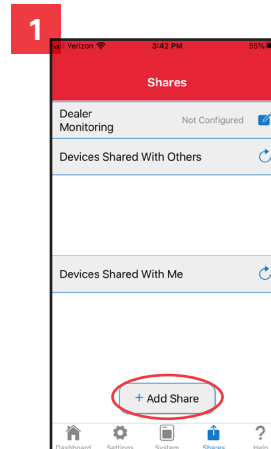
3 Check the boxes for devices you wish to share and tap "Create Share."

Usage
Sharing with Family and Friends Continued

4 Devices will appear under "Devices Shared with Others."

5 To remove a device from sharing, tap the trash can next to the name.
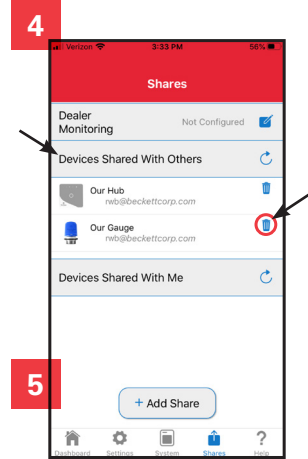
Alerts

The BeckettLink® system will provide push notifications to the myTechnician™ app and email warnings for many events. Some notifications will also appear in the Alert Summary on the dashboard page. Push notifications will appear only on the phone or tablet used to registered the BeckettLink® device.

Other BeckettLink® products, such as the BeckettLink® Tank Gauge, will provide additional alerts including low fuel level and low battery alerts.

BeckettLink® Hub Alerts			
Status	**Email**	**Push**	**Dash-board**
Hub Connection Lost	X	X	X
Hub Connection Restored	X	X	X
Low Temperature	X	X	X
Sign up Confirmation	X		
Password Reset	X		
Shares	X		

Usage
Using the Help Menu

Manuals and Guides

Includes items such as BeckettLink® Quick Start Guides and Manuals.

Usage
Using the Help Menu

Videos

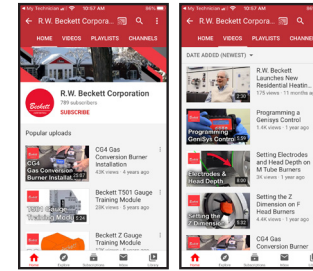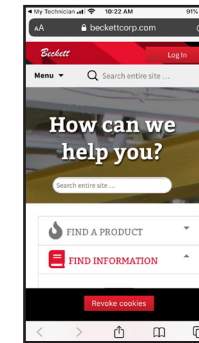Provides links to helpful information on a variety of Beckett products. The Video tab includes "How To" videos on BeckettLink® products.

Support

The Beckett Support Page provides access to information on a variety of Beckett products including oil and gas burners, controls, igniters and other connected products as well as tutorials, product warranty and troubleshooting guides.

Ethernet Connection

Once the hub and other BeckettLink® devices have been registered, if the WiFi signal is not providing a reliable connection, an ethernet cable can be used to connect the hub to the internet. This can only be done once the registration process has been completed.

Additional Hub
Factory Reset

If the hub has not been able to connect to the internet or if the system stops operating properly, a factory reset may help restore normal operation. A factory reset is different from the WiFi reset described earlier. The WiFi reset clears only the WiFi settings. A factory reset restores all settings in the hub to the original factory settings.

1. Use a pen or paperclip to hold down the reset button as indicated in the drawing. Hold the button down for approximately 10 seconds.

2. Release the pen when the green power LED on the front panel starts to flash continuously.

3. The system will reboot in 3-4 minutes and the hub should return to normal operation.

4. The WiFi network connection will need to be set up again. Any devices previously connected must be reconnected (added) to the hub after a factory reset.

FCC Statement

Changes or modification to the equipment 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 device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with part 15 of the FCC Rules. Operation is subject to the two following 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.

IC Statement

English

This device complies with Industry Canada's Licence-Exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and

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

Français

Le présent appareil est conforme aux CNR d'Industrie 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.

ISED Statement

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B).

Troubleshooting

Visit **www.beckettcorp.com** for additional Information, videos and Frequently Asked Questions

Issues	Suggestions
No LEDs on	Check power at the outlet and make sure power cable is connected to hub.
Can't connect hub to WiFi Hub registration keeps failing	Keep the phone close to the hub during the registration process. Move hub closer to WiFi router. Make sure the WiFi is enabled on the phone or tablet. Check yellow WiFi LED on hub, if flashing, use paperclip to push reset once. Make sure you are connecting to a 2.4 GHz WiFi network. The network name may contain a reference to 2.4 GHz. If the WiFi network has anti-spoofing protocols enabled, whitelist SSiDs that start with "AC000W. Make sure these network ports are open or whitelisted on your router: 80,443,53,55055,55056. WiFi LED will be on solid when hub is registered. Only iOS version 11.0 or later is supported by the BeckettLink® Hub Only Android version 5.0 or later is supported by the BeckettLink® Hub
No available WiFi networks	Make sure WiFi is enabled on the phone. Makes sure phone is not in "airplane" mode.
Yellow WiFi LED flashing	Hub is connected to internet, but hub is not registered in cloud application. Use paperclip to push reset button once, continue WiFi setup process.
Not receiving any updates from BeckettLink® devices	Use myTechnician™ App to check WiFi signal strength on hub detail page. Move hub closer to router if signal is 1 or 2 bars. Check Bluetooth® signal strength on device detail page in myTechnician App. Move hub closer to device (gauge) if signal is 1 or 2 bars.
QR Scan doesn't work	Enter Network ID manually. ID is on label on bottom of hub.
I keep receiving hub connection lost alerts. WiFi signal continues to drop out	Move hub closer to WiFi router. Consider using an ethernet cable to connect the hub to the router. Hub must be registered to cloud before using ethernet cable.
Power and Bluetooth® LEDs are on, but WiFi LED is off.	Check WiFi router to make sure it is powered and broadcasting a signal. Remove then restore power to hub. Allow hub to reboot. WiFi LED will not be powered if using ethernet cable connection
Hub is offline	Check WiFi router to make sure it is powered and broadcasting a signal. Remove then restore power to hub. Allow hub to reboot. Check app for signal, if still no signal, from hub detail page, touch edit. From Edit Hub Settings, touch Change WiFi settings and follow instructions.
Installed tank gauge or other device but have not received update or reading	Try moving the device closer to the hub temporarily and check signal s trength. With the tank gauge, it may be necessary to push the button next to the battery holder in the tank gauge once to generate an update. With some devices, like the tank gauge, it could take up to 4.5 hours for the hub and app to receive an update.

Limited Warranty Information

The R. W. BECKETT CORPORATION ("Beckett") warrants to persons who purchase its "Products" from Beckett for resale, or for incorporation into a product for resale ("Customers"), that its equipment is free from defects in material and workmanship. To qualify for warranty benefits, products must be installed by a qualified service agency in full compliance with all codes and authorities having jurisdiction, and used within the tolerances of Beckett's defined product specifications.

To review the complete warranty policy and duration of coverage for a specific product, or obtain a written copy of warranty form 61545, please choose one of the following options:

1. *Visit our website at: www.beckettcorp.com/warranty*
2. *Email your request to: rwb-customer-service@beckettcorp.com*
3. *Write to: R. W. Beckett Corporation, P. O. Box 1289, Elyria, OH 44036*

NOTE: Beckett is not responsible for any labor cost for removal and replacement of equipment.

THIS WARRANTY IS LIMITED TO THE PRECISE TERMS SET FORTH ABOVE, AND PROVIDES EXCLUSIVE REMEDIES EXPRESSLY IN LIEU OF ALL OTHER REMEDIES, AND IN PARTICULAR THERE SHALL BE EXCLUDED THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL BECKETT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE OF ANY NATURE. Beckett neither assumes, nor authorizes any person to assume for Beckett, any other liability or obligation in connection with the sale of this equipment. Beckett's liability and Customer's exclusive remedy is limited to the cost of the product.

Before Calling Beckett . . .

Before contacting us about your hub, please review the installation instructions. Additional information, videos and Frequently Asked Questions can be found on our website at www.beckettcorp.com.