Site Installation Instructions for ION-9503 Remote Burner Monitoring Kit

Version 1.0 – 12/1/2016

Prior to beginning installation, please scan the QR code to the left, or download and print the most current instructions from our site here: http://www.ionitnetworks.com/pdf/ion-9503-install-guide.pdf. Then, please **read through the entire set of instructions** and verify that you have all of the items needed for installation.

Intended Use of Equipment

The IONIT Networks Burner Network Module kit is designed to provide remote monitoring capabilities of the Beckett 7505 GeniSys controller.

Components Included in ION-7500 Kit

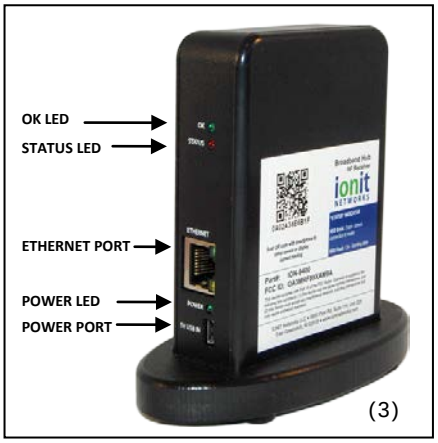
(1) ION-7500 Burner Network Module (BNM)
(2) ION-7500 BNM magnetic mounting bracket assembly
(3) ION-7500 BNM interface cable for use with Beckett 7505 controller
(4) ION-9401 Broadband Internet Hub Receiver, power supply, Ethernet cable

Tools and Optional Test Equipment

- ☐ Screw driver (Philips or Slotted)
- ☐ Smart phone with Internet connectivity
- ☐ Electrical grease

Installation Steps

Install Hub: Find a suitable location for the IONIT Hub. Connect the USB power supply securely to the Hub, and plug the AC cord into an un-switched AC outlet. The OK (top) and Power (bottom) LED indicators on will light green and the Status (middle) LED will flash red to indicate that the device is ready (figure 3).



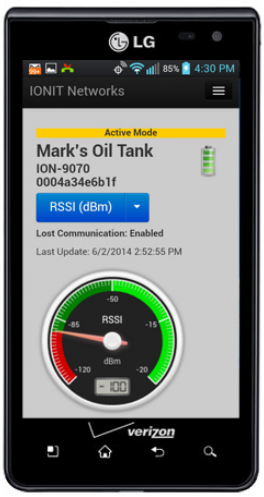
(3)

1. **Setup Hub:** Using your smart phone, scan the QR code on the Hub. When prompted log into your IONIT Networks account (click "Remember Me"). Click '+Device Configuration' button, then scroll down. Next, click 'Get Current Location' (figure 4) to use your phone's GPS to get your position (ensure your GPS is turned on). Next, enter any other details that uniquely identify this device for this customer (e.g. Customer ID or a Customer Label such as Mr. Jones House). Lastly, click the 'Set Device Configuration' button to save all your inputs.

(4)

2. **Mount the BNM:** Locate the BNM so at least the top half of the enclosure reaches above the boiler enclosure. This will help optimize the signal transmission from the BNM to the hub. Prior to mounting the BNM magnets to the boiler enclosure, apply a very thin layer of silicone RTV to the surface where the magnets will attach and let it cure for ~15 minutes. This will help ensure that the BNM stays put and doesn't shift around over time.

3. **Route the Interface Cable:** Carefully route and secure the cable where it won't come into contact with any hot surfaces, won't get snagged or be in the way of the service technician, and looks like the installer takes pride in their work.



(5)

4. **Connect Interface Cable:** Apply oxidation barrier grease to the BNM-Beckett adaptor 4-pin 0.100" (J4) socket receptacle, filling the receptacle holes. Insert the adaptor into the "COMM1" connector on the Beckett control observing the 'This Side UP' label on the adaptor board. Liberally apply oxidation barrier grease to the 1/8" plugs on the cable and insert the plugs into the adaptor board and BNM.

5. **Set up the BNM:** Using your smart phone, scan the QR code on the BNM and assign the device to the customer site.

6. **Verify Signal Strength:** Press the "Fast Report Mode" button the on the BNM to observe RSSI on the mobile app to ensure strong signal (Figure 5). The gauge will display the signal strength between the BNM and the Hub. Ensure the 'Last Update' date and time is current. If the time is not current, or the signal strength is not in the green zone (between -100db and -20 db), then you do not have good signal and will need to move the Hub or install a repeater to increase the range of the signal. Be careful where you place the Hub. Obstructions like metal filing cabinets and other objects can reduce the signal strength. Once the RSSI indicator is in the green zone, place the Hub there.

7. **Test-Fire the Boiler:** Test-fire the boiler through two cycles to verify operation. Test cycles can be as short as 30 seconds each.

8. **Verify Install:** Using your smart phone, scan the QR code found on the BNM can confirm the readings are current by observing the Last Update time.

Installation has been successful!

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Technical Specifications

The VisiTank® system by IONIT Networks is designed to operate under the following environmental conditions:

9401 Hub:

Risk of electrical shock

The Hub is for indoors only, and is powered by a UL listed Class 2 power supply. The Hub connects to the consumer's broadband Internet router with a standard RJ45 connector. Replacement power supply (#9421) is available from IONIT Networks.

7500 Sensor:

The Sensor is for indoor and outdoor use, with operating temperature range of 14°F to 140°F (-10°C to 60°C), at 15% to 95% relative humidity. It is powered by the Beckett controller and contains a 3V DC Lithium cell battery, CR2430, which should last 5+ years under normal circumstances. Note that sustained exposure to temperatures over 68°F (20°C) may reduce battery life.

IMPORTANT INFORMATION

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.

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.

Do not change or modify the device. Any modifications will void your authority to operate the equipment.

NOTE: The images of the devices and smart phone screens shown herein may differ slightly in reality from the actual products.