HEATCRAFT
Worldwide Refrigeration

Remote Refrigeration Control

- ### Installation
- ### Start Up
- ### Troubleshooting
- ### Operation

For Technical Support please call 1-800-321-1881

For Replacement parts, visit InterLink™
Commercial Refrigeration Parts at
http://rrc.heatcraftrpd.com

For access to RRC and System data, visit
rrc.heatcraftrpd.com

RRC normally connects to all DHCP IP internet
connections. If your site is Static IP, Mohave, or is
highly secure, IT personnel may be required to be on site.

Table of Contents

General

Read this guide and any instruction(s) packaged with separate kit(s)/component prior to installation. Guide to be left in the possession of owner with clear explanation of device functions. Retain installation guide for future reference. This guide provides instructions for installing, wiring and configuring the Remote Refrigeration Control (RRC) to the Beacon II or QRC system.

Safety Information

⚠ **DANGER**

The following instructions are written as a guide to qualified service personnel for proper installation, adjustment, and operation of this RRC system. Read instructions thoroughly prior to attempting system installation and/or modification. Failure to follow the outlined instructions can result in improper installation and/or modifications, possibly resulting in fire, electrical shock, property damage, personal injury or death.

⚠ **DANGER**

Before beginning any modification, be sure main disconnect switch is in the "off" position. Failure to do so can cause electrical shock resulting in property damage, personal injury or death. Tag disconnect with an appropriate warning tag. NOTE: There may be more than one power source.

⚠ **CAUTION**

Static sensitive components. Discharge any static electrical charge by touching the bare metal inside the control box prior to carrying out any work. Never unplug cables, printed circuit board terminal blocks, or power plugs while power is applied to the unit.

⚠ **WARNING**

Devices not provided by Heatcraft shall NOT be connected to the Beacon II smart controller WITHOUT written factory approval.

Inspection

a. Responsibility should be assigned to a dependable individual at the job site to receive material. Each shipment should be carefully checked against the bill of lading. The shipping receipt should not be signed until all items listed on the bill of lading have been accounted for. Check carefully for concealed damage. Any shortage or damages should be reported to the delivering carrier. Damaged material becomes the delivering carrier's responsibility, and should not be returned to the manufacturer unless prior approval is given to do so.

When uncrating, care should be taken to prevent damage. Heavy equipment should be left on its shipping base until it has been moved to the final location. Check the serial tag information with invoice. Report any discrepancies to your Heatcraft Refrigeration Products Sales Representative. SELLER makes no warranty, express or implied, of fitness for any particular purpose, or of any nature whatsoever, with respect to products manufactured or sold by seller hereunder, except as specifically set forth above and on the face hereof. It is expressly understood and agreed that SELLER shall not be liable to buyer, or any customer of buyer, for direct or indirect, special, incidental, consequential or penal damages, or for any expenses incurred by reason of the use or misuse by buyer or third parties of said products. To the extent said products may be considered "consumer products," as defined in Sec. 101 of the MagnusonMoss Warranty – Federal Trade Commission Improvement Act, SELLER makes no warranty of any kind, express or implied, to "consumers," except as specifically set forth below and on the face hereof.

Warranty Statement

a. Seller warrants to its direct purchasers that products, including Service Parts, manufactured by SELLER shall be of a merchantable quality, free of defects in material or workmanship, under normal use and service for a period of one (1) year from date of original installation, or eighteen (18) months from date of shipment by SELLER, whichever first occurs. Any product covered by this order found to

Seller's satisfaction to be defective upon examination at Seller's factory will at SELLER's option, be repaired or replaced and returned to Buyer via lowest common carrier, or SELLER may at its option grant Buyer a credit for the purchase price of the defective article. Upon return of a defective product to SELLER's plant, freight prepaid, by Buyer, correction of such defect by repair or replacement, and return freight via lowest common carrier, shall constitute full performance by SELLER of its obligations hereunder. SELLER shall have no liability for expenses incurred for repairs made by Buyer except by prior, written authorization.

Every claim on account of breach of warranty shall be made to SELLER in writing within the warranty period specified above; otherwise such claim shall be deemed waived. Seller shall have no warranty obligation whatsoever if its products have been subjected to alteration, misuse, negligence, free chemicals in system, corrosive atmosphere, accident, or if operation is contrary to SELLER's or manufacturer's recommendations, or if the serial number has been altered, defaced, or removed. Seller makes no express warranties except as noted above. All implied warranties are limited to the duration of the Express Warranty. Liability for incidental and consequential damages is excluded. The forgoing is in lieu of all other warranties, express or implied, notwithstanding the provisions of the uniform commercial code, the Magnuson-Moss Warranty - Federal Trade Commission Improvement Act, or any other statutory or common law, federal or state. The following conditions should be adhered to when installing this unit to maintain the manufacturer's warranty: (a) the power supply to the unit must meet the following conditions: A. Single phase must be within +10% or -5% of nameplate ratings. B. Phase imbalance cannot exceed 2%. b) All control and safety switch circuits must be properly connected according to the wiring diagram. (c) The factory installed wiring must not be changed without written factory approval. (d) All equipment is installed in accordance with local, state and national electrical code specified minimum clearances.

Getting Started:

a. RRC overview

i. The Heatcraft Remote Refrigeration Control provides monitoring and control of up to four refrigeration systems. When used in conjunction with the Beacon II Smart Controller, the RRC continuously monitors and logs data points, allowing system monitoring and troubleshooting over any internet connection, with the option to remotely adjust system parameters.

b. RRC Install

Parts included:

Parts included:	
1. Heatcraft RRC Internet Gateway (qty.1)	
2. 12' Ethernet Cable (qty. 1)	
3. 24v Power Supply (qty. 1)	
4. Ribbon Cable (10 pin serial to DB9) Connector (qty. 1)	
5. #4-40 screws (qty. 4)	
6. RRC I/O Manual	
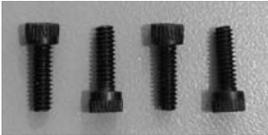
NOTE: The power cord is 6' long and the Ethernet cable is 12' long. The ribbon cable is 3' long. Locate the RRC as near as possible to the Beacon II Smart Controller. **The RRC should be mounted outside of your walk-in cooler/ freezer, not inside.**

ii.   Additional Requirements:

   1. Wall mounting hardware (screws and/or anchors)

   2. Screwdriver for wall mount

   3. 3/32" Hex key (Allen wrench) for #4-40 screws

   4. A 115V power outlet is needed to power the RRC device

   5. The RRC device needs access to internet via ethernet port (router, LAN, etc.)

iii.   Install Steps:

   1. Locate the Beacon II Smart Controller.

   2. Remove the Beacon II Smart Controller cover by pinching on its upward area and lifting up. The Smart Controller cover should come off with very little effort.

   3. Locate the Blue RS232 connector toward the bottom of the Smart Controller board and press fit the ribbon cable connector into place.

   4. Choose a mounting location for the RRC near the Smart Controller within reach of the ribbon cable, power supply, and Ethernet port. **The RRC should be mounted external to the cooer/freezer.**

   5. Secure the RRC to wall using the two tabbed mounting holes.

   6. Remove silver hex-screws from the DB9 end of the ribbon cable
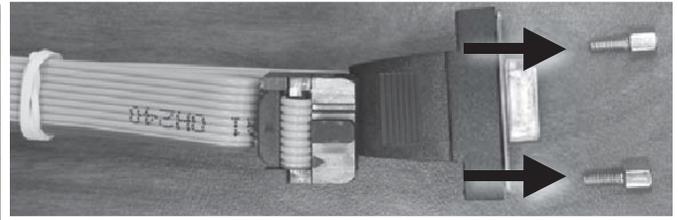
   7. Connect ribbon cable to the RRC, and secure using the provided #4-40 connector screws with 3/32" hex key.
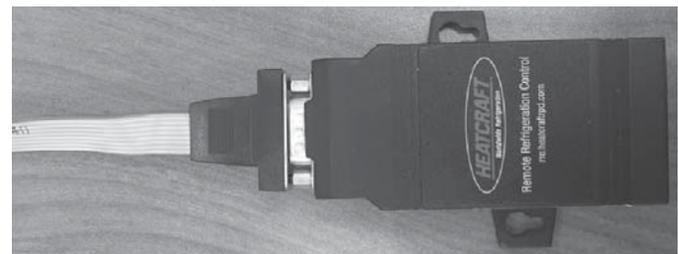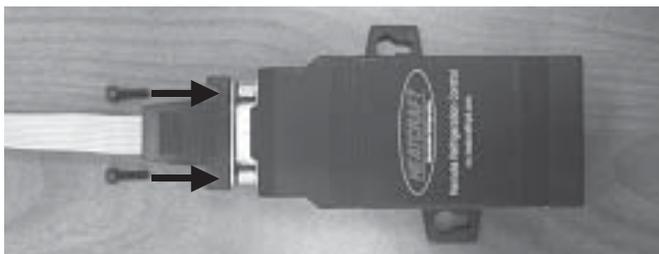
8. Connect one end of the Ethernet cable to the Gateway and the other to an internet connection. This connection could be made to a router that is connected to the internet or a local area network that has an internet connection.

9. Plug in the power connector to the gateway.

10. Place the cover back over Beacon II. Press gently into place (mind the ribbon cable).

11. Plug in the power transformer into an available 115V outlet. A RRC with power, Ethernet, and a ribbon cable are shown below:

Ethernet
Cable

Power
Cable

Serial
Ribbon
Cable

12. Call 1-800-321-1881 to set up RRC on the rrc.heatcraftrpd.com web interface.

13. The device should now be fully installed; note that the RRC device uses the internet connection at the site to communicate system information out to the internet. As a result, IT assistance may be needed on site to ensure proper device communication and data flow. See 'Troubleshooting' for tips and instructions to diagnose any local network/communication issues.

c.   **RRC network setup**

   i. On an internet connected device browse to rrc.heatcraftrpd.com where you will see a log in screen where you will input your username and password. If you have not been assigned a username or password contact your Heatcraft representative.

   ii. Once you have been logged in you will see a list of all locations that are under your account.

   iii The site could take up to 30 minutes before the initial information from the Beacon II or QRC system begins to appear.

   • If you have questions, please contact Customer Service at 1-800-321-1881.

Troubleshooting:

a. If you have completed the device setup and are not seeing data populate to the rrc.heatcraftrpd.com website, consider the following:

Test	Description	Result/Response 1	Result/Response 2
Physical Connections Red LED: solid light indicates power is applied. Flashing light indicates data is being transferred	Confirm serial and Ethernet cables have solid connections. Green LED should be solid; Yellow LED may be flickering showing data transfer through network connection.	Improper/faulty connection found: •Adjust connection or replace faulty cable	No bad connections found: •Proceed to next test with the assistance of local IT
Outgoing Network	Use windows command prompt on a computer that is connected to the same network as the RRC to execute the following command: **ping google.com**	"Request Timed Out" OR "No connection found" •Indicates a poor network connection; need to ensure device is receiving a proper internet signal through Ethernet	Response is as follows "Reply from…" •Proceed to next test
Communication to my.idigi.com	Check local network access to data server. Use windows command prompt on a computer that is connected to the same network as the RRC to execute the following command: **ping my.idigi.com**	Request Timed Out OR "No connection found" •Indicates network cannot access my.idigi.com (the server that hosts data)	Response is as follows "Reply from…" •Proceed to next test
Open ports 3197 and 3199	The RRC uses a TCP to communicate. Request that IT open outgoing ports 3197 and 3199 to my.idigi.com	If ports 3197 and 3199 are closed, then the RRC will not be able to push data to my.idigi.com and data will not populate at rrc.heatcraftrpd.com	If both ports are open, proceed to next test
Network firewall	Request that IT make a firewall exception for my.idigi.com and the RRC's IP address	If a firewall is blocking my.idigi.com then data will not be passed.	Call Heatcraft tech support at 1-800-321-1881

b. Local Network Connectivity, setting an IP address

1. The RRC will receive its IP address settings via DHCP by default

2. The RRC can be set to a static IP address if necessary by the following procedure:

   a. Open a web browser and navigate to the RRC's current IP address on your internal network.

   b. You will be prompted for a Username and password:

      i. User: root

      ii. Password: Netsilicon

   c. You will be taken to the device's home screen. Click on the "Network" link in the upper left hand side of the screen.

d. You may then select "Use the following IP address" and fill out the fields as appropriate.

e. Select "Apply".

f. Power Cycle the RRC to apply the changes by unplugging the RRC for 10 seconds and then plugging it back into its power source.

NOTE:

RRC normally connects to all DHCP IP internet connections. If your site is Static IP, Mohave, or is highly secure, IT personnel may be required to be on site.

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This guide is designed to provide only general information. If you need advice about a particular product application or installation, you should consult your Heatcraft representative. The applicable specification sheets, data sheets, handbooks, and instructions for Heatcraft products should be consulted for information about that product, including, without limitation, information regarding the design, installation, maintenance, care, warnings relating to, and proper uses of each product.

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