Contents

IMPORTANT: Please Read before Continuing

A laptop is required to change the BACnet MAC address and baud rate settings in the i-Controller.

If the default address and/or baud rate need to be changed, please refer to **Step 2** of this document and CN-IC1-13 "i-Controller Firmware Update Using Windows 10 Ver.1" to update via a laptop.

Step 1: Connect BACnet cable to Flō i-Controller

The Flō i-Controller uses an RS485 3-wire network communication cable to communicate over the BACnet protocol. The BACnet communication cable will be connected to the 'Master Port of the i-Controller. Polarity must be maintained between BACnet devices.

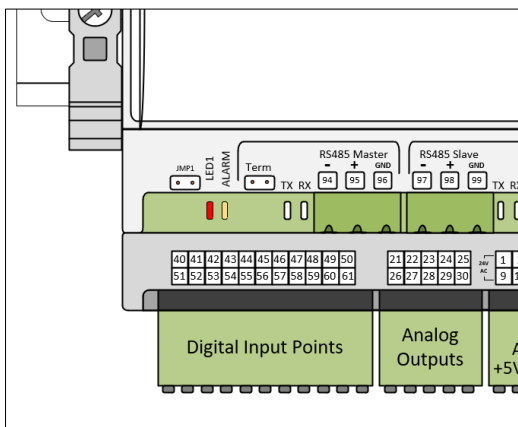1. Connect the RS485 (BACnet) cable to the i-Controller's RS485 Master port.

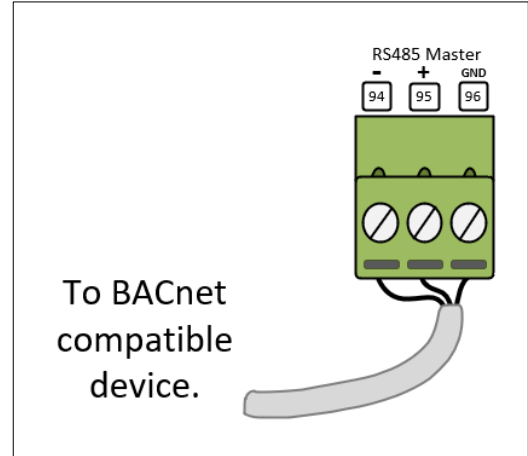*Figure 1. i-Controller Master Port Location*

Figure 2. BACnet Connections

Ensure i-Controller is configured for BACnet

1. On the Visograph display, navigate to the Network Info page by pressing number 5 on the Main Menu screen.

2. On the Network Info screen, "Bacnet Communication is Enabled" should appear if BACnet has been enabled in the i-Controller.

3. If the BACnet is not enabled on the i-Controller, please contact Flō Technical Support at 1-888-598-1198 Opt. 1.
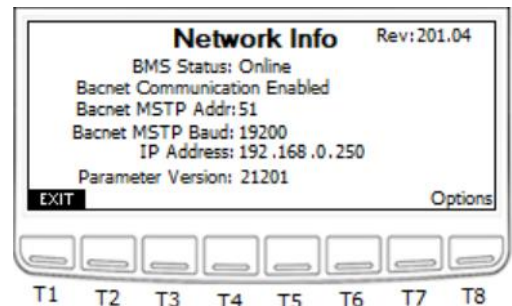

Figure 3. i-Controller Network Information Screen

Step 2: Adjusting BACnet MAC address via Visograph (*if required*)

By default, the i-Controller BACnet Baud Rate is set to 19.2Kb/s. The MAC address and device number is set to 51 for the first unit, 52 for the second, etc.

1. On the Visograph display, navigate to the Network Info page by pressing number 5 on the Main Menu screen. Then, press the options button.

2. Using the [up] and [down] buttons (T4 and T6, respectively) navigate to the value that you wish to change.

3. Once the value is highlighted, press the **ENTER** (T5) button and the value should blink.

4. Using the [up] and [down] buttons increase and decrease the value as desired.

5. Once the desired value has been reached press the **ENTER** button to set the value.

6. Once the BACnet address is changed, the controller must be rebooted. Use the [down] (T6) or [right] (T8) button to navigate to controller reboot option.

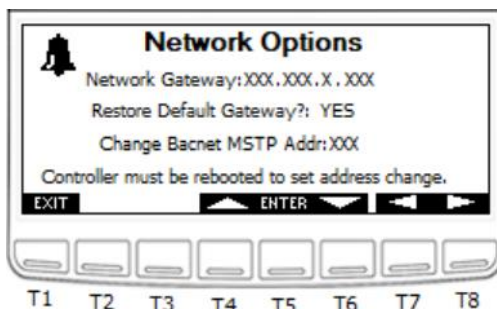7. Repeat steps 2-5 to reboot controller.

Figure 4. i-Controller Network Information Screen

Step 3: Adjusting BACnet MAC address and Baud Rate using conf files (*if required*)

By default, the i-Controller BACnet Baud Rate is set to 19.2Kb/s. The MAC address is set to 51 for the first unit, 52 for the second, etc. Before proceeding, acquire the *bacnetMSTP.conf* and *bacnet.conf* files from Flō, or export the files from the i-Controller web server using a laptop.

To export files from the i-Controller:

1. Follow document CN-IC1-13 "i-Controller Firmware Update Using Windows 10 Ver.1" to connect your PC to the i-Controller.

2. On the "Files" tab, in the Configuration files drop down menu select "bacnet.conf" and press Export.

3. In the same Configuration files drop down menu, select "bacnetMSTP.conf" and press Export.

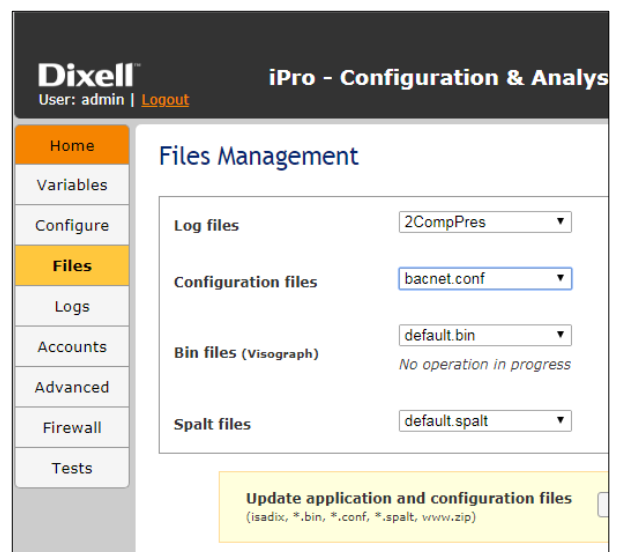4. The files will be saved in your PC's "Downloads" folder.

Figure 5. Export File Dialog

Adjusting MAC address and Baud Rate

1. Open the "bacnetMSTP.conf" file.

2. Adjust the MAC address to the desired value on the second line of the file next to "conf.BACNET_MSTP_MAC=".

   a. i.e. If changing the MAC address to 53, the second line of the file would read "conf.BACNET_MSTP_MAC=53."

3. Adjust the Baud Rate to the desired value on the third line of the file next to "conf.BACNET_MSTP_BAUD=".

   a. NOTE: i-Controller can only accommodate baud rates up to max of 19.2kbs.

4. Re-save the file, and ensure the file is named "bacnetMSTP.conf" exactly.
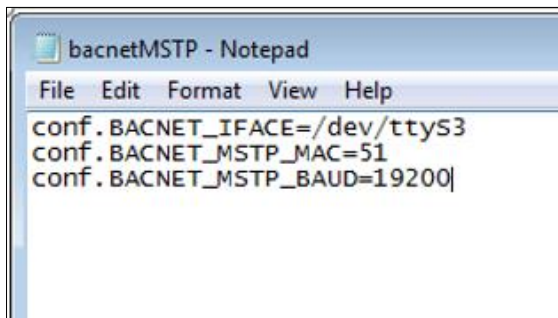

Figure 6. Saving Configuration

Adjusting the BACnet Device Number

1. Open the "bacnet.conf" file.

2. Adjust the Device Number to the desired value on the first line of the file next to "device.number=".

   a. i.e. If changing the Device Number to 2, the first line of the file would read "device.number=2."

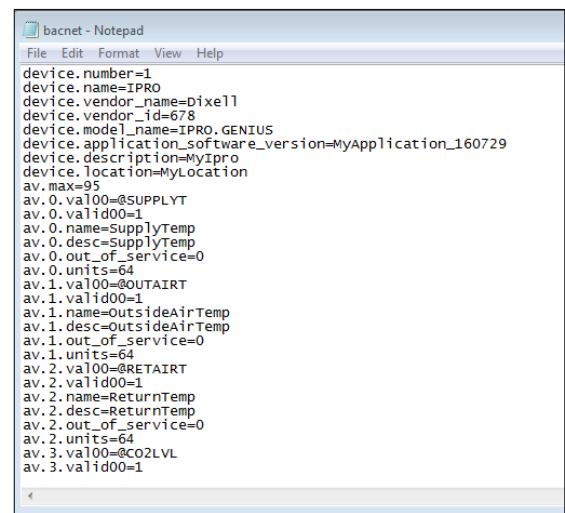3. Re-save the file, and ensure the file is named "bacnet.conf" exactly.

Figure 7. Saving Configuration File

Upload the modified BACnet files

1. Upload the modified "bacnet.conf" and "bacnetMSTP.conf" files to the i-Controller following the instructions in CN-IC1-13 "i-Controller Firmware Update Using Windows 10 Ver.1" to update via a laptop.