

Building Management System (BMS) installation guidance

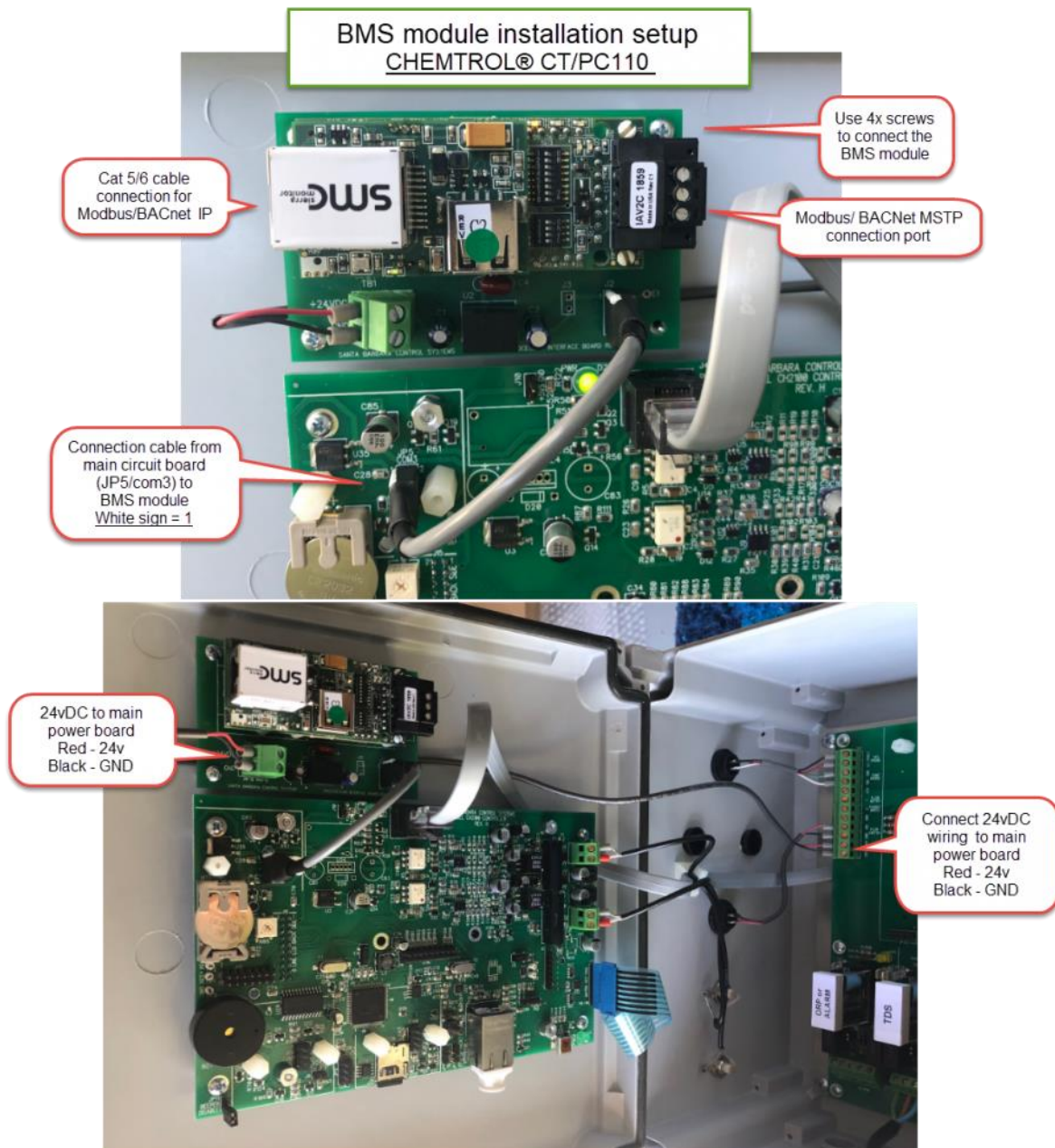
The CHEMTROL® programmable controller range is adaptable for communication using various open protocol languages. The most common languages in use today include: Modbus IP, Modbus RTU, BACnet IP, BACnet MSTP and LonWorks.

The controller can be configured with any of these languages.
To establish this connection, our BMS electronics module must be installed within the controller's cabinet. This smart electronics module converts the controller's digital outputs to the required protocol language.

Installation of the BMS electronics module:

1. **24vDC Power Connection:**
Run the two-wire cables (Red & Black) from the BMS module to the main power board terminal block. Connect the Red cable to the 24v terminal and the Black cable to the GND terminal.
2. **Modbus/BACNet IP, Cat-5/6 Connection:**
Plug in your customer cable connection to the designated port on the BMS module.
3. **Modbus/BACNet MSTP Connection:**
Utilize the 3-wire connection port for Modbus/BACNet MSTP.
4. **Grey Cable Connection:**
 - a. The grey wire comes pre-connected on the BMS module when shipped. Connect the other end of this wire to the CPU board at JP5/Comm3.
 - b. Pin 1 on each side of the cable is marked with white ink or a red line. When connecting the grey wire to the CPU board, ensure that this white ink or red line is connected to Pin 1 on the CPU board.

Note: Please refer to the attached picture for a visual guide on connecting the grey cable.



If any issues arise during installation, refer to the product manual or contact our customer support for assistance.

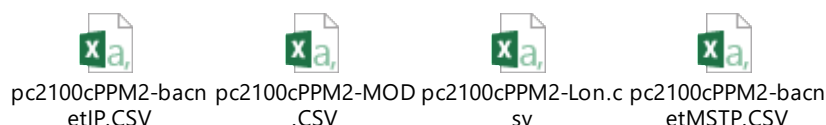
Network setup

1. Download and Install RUInet:

- Access RUInet by following this link: <https://store.chipkin.com/articles/fieldserver-how-to-download-configurations-and-firmware-using-ruinet>

2. Configuration File Setup:

- Rename the required configuration file to config.csv.
- Copy the file into the installation folder of the utility.
The default folder is C:\Program Files\FieldServer Utilities\config.



3. Connecting with a Laptop to the Processor/SMC Module:

- Use a Crossover cable for direct connection. Note that this is not the typical straight-through Ethernet cable.
- If a Crossover cable is unavailable, connect your laptop to the module using any Ethernet switch and regular Straight-Through Ethernet cables.

4. SMC Module Default IP Address:

- The default IP address for the SMC module is 192.168.1.24.
- Configure your laptop's Ethernet adapter with an IP address in the same range, such as 192.168.1.25, and a subnet mask of 255.255.255.0, to be on the same subnet.

5. Launch RUInet:

- Open RUInet; your laptop should detect the SMC module if the previous steps were completed correctly.

6. Config File Download:

- After detection, select "D" from the menu to download the config file onto the module.

7. Save and Restart:

- Select option "I" to save the configuration onto the module.
- Restart and reinitialize the module with the new configuration.

These steps provide a clear and concise guide for downloading, configuring, and connecting with the SMC module using RUInet. If you have any questions, feel free to reach out to our support team for further assistance at any time.