

E2 Setup with EM21 v72D Energy Meter Device for 527-0436

Quick Start Guide

This document contains information setting up, programming and commissioning the EM21 v72D Energy Meter Device in the E2 Controller.

STEP 1: Upload the Description File to the E2 Controller

Note: UltraSite32 Software should be installed before uploading the description file.

1. Connect to your E2 using UltraSite (refer to *UltraSite32 User's Guide P/N 026-1002*).
2. Log on to UltraSite, enter "USER" in the **Username** field and "PASS" in the **Password** field.
3. Double-click the Directory Level to view the Site Level. (Refer to *Figure 1*)
4. Right-click the Site Level and click **Connect**.
5. Double-click the Site Level and browse the E2 Unit location where EM21 v72D will be installed.
6. Right-click on the unit and select **Upload Description File**.

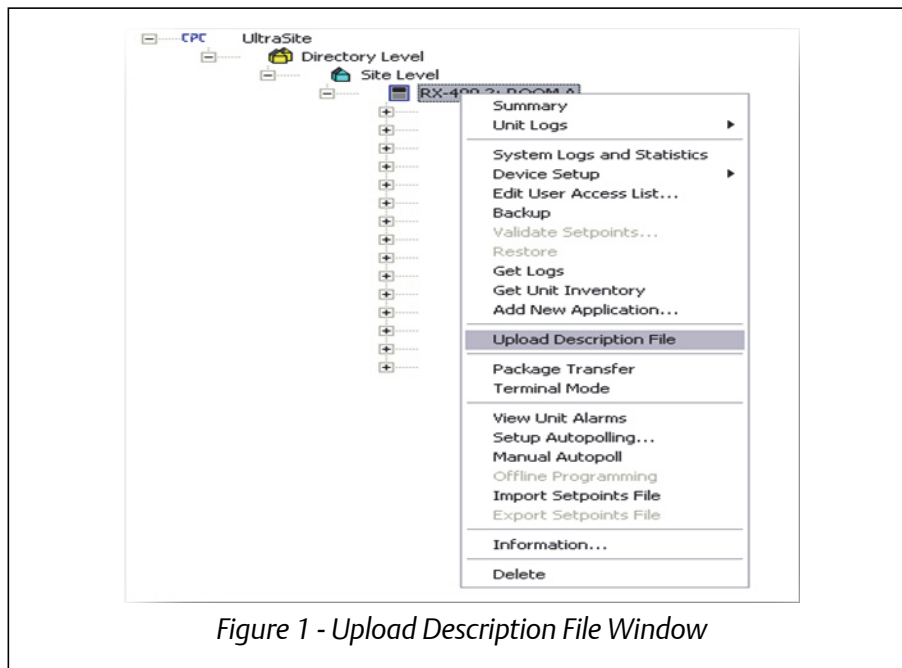
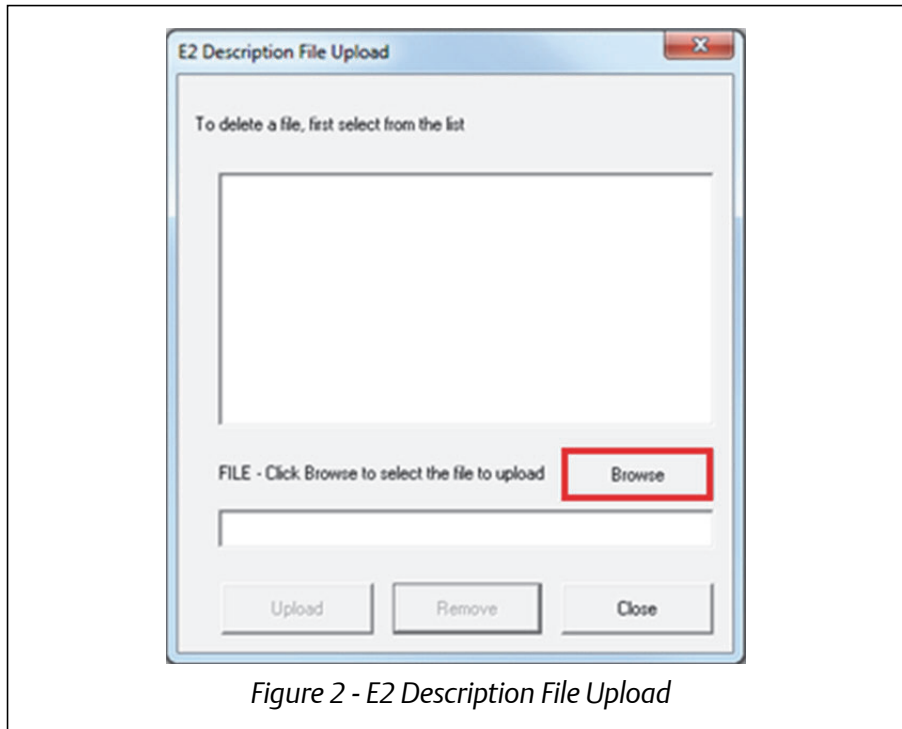
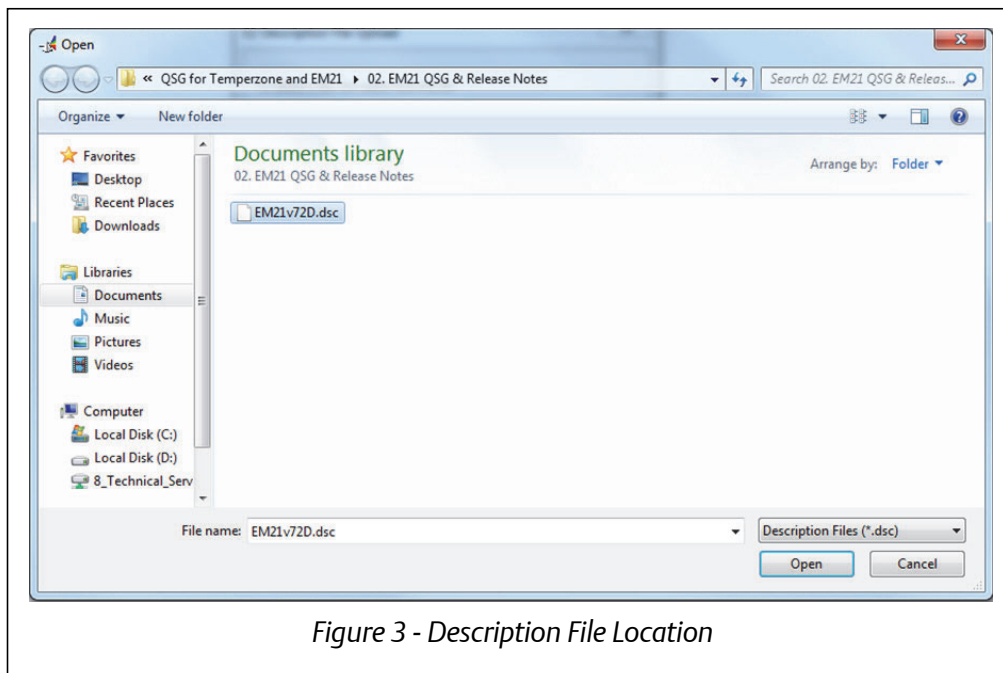


Figure 1 - Upload Description File Window

7. Click **Browse** button.



8. Browse to the location where the description file of EM21 v72D is saved.



9. Click **Open**.

10. Click **Upload**. A window will appear confirming that the description file was imported click **OK** button.

11. The description (*.dsc) file location will generate inside the browse location box.

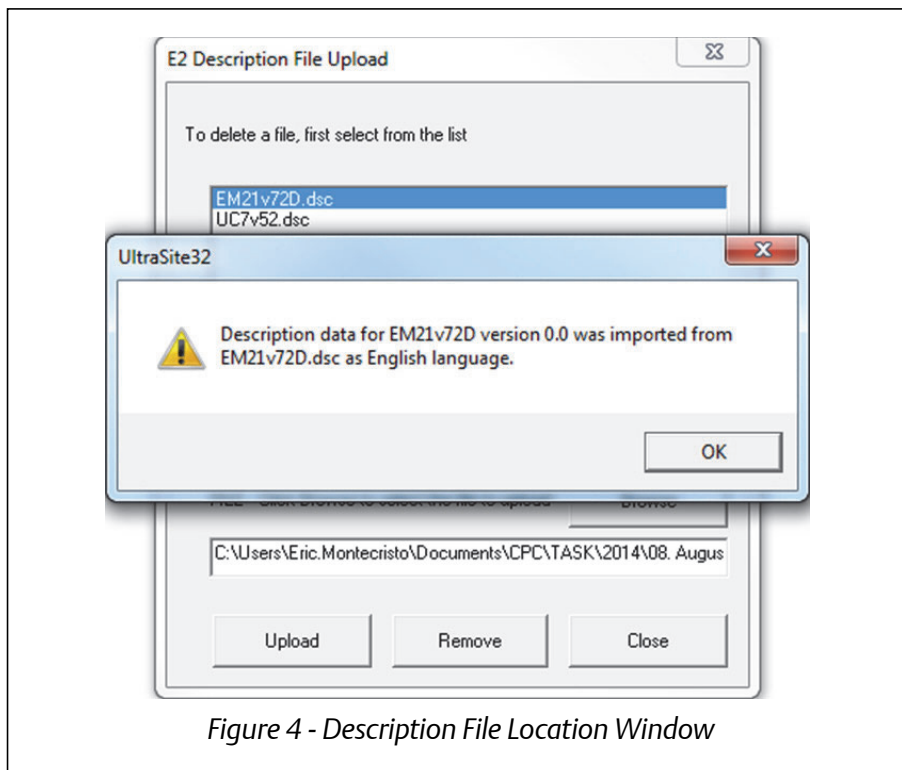







Figure 4 - Description File Location Window

12. Once the upload is complete, reboot the E2 controller.

STEP 2: Licensing the EM21 v72D Device

1. Log into the E2 controller. Press , ,  (Licensing).
2. Press  (ADD FEATURE) and enter the 16-digit license key. Press .

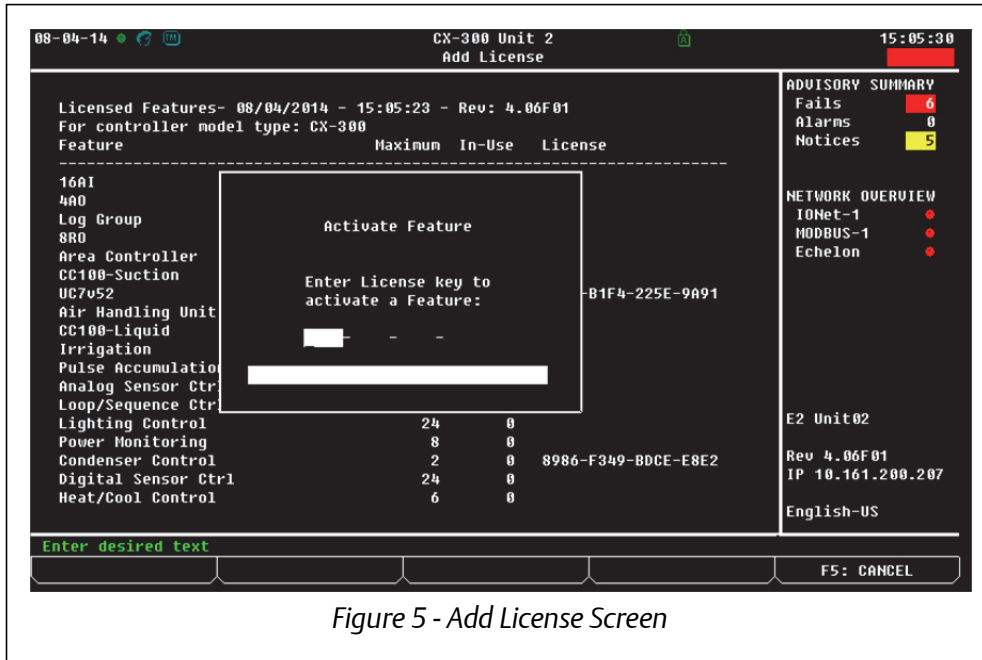








Figure 5 - Add License Screen

STEP 3: Setting Up the Device in the E2 Serial Port

1. Log on to E2 controller by pressing .
2. Enter USER in the **Username** field and PASS in the **Password** field.
3. Press , , ,  (*General Controller Info*).
4. Select  twice to go to the *C3: Serial* tab.

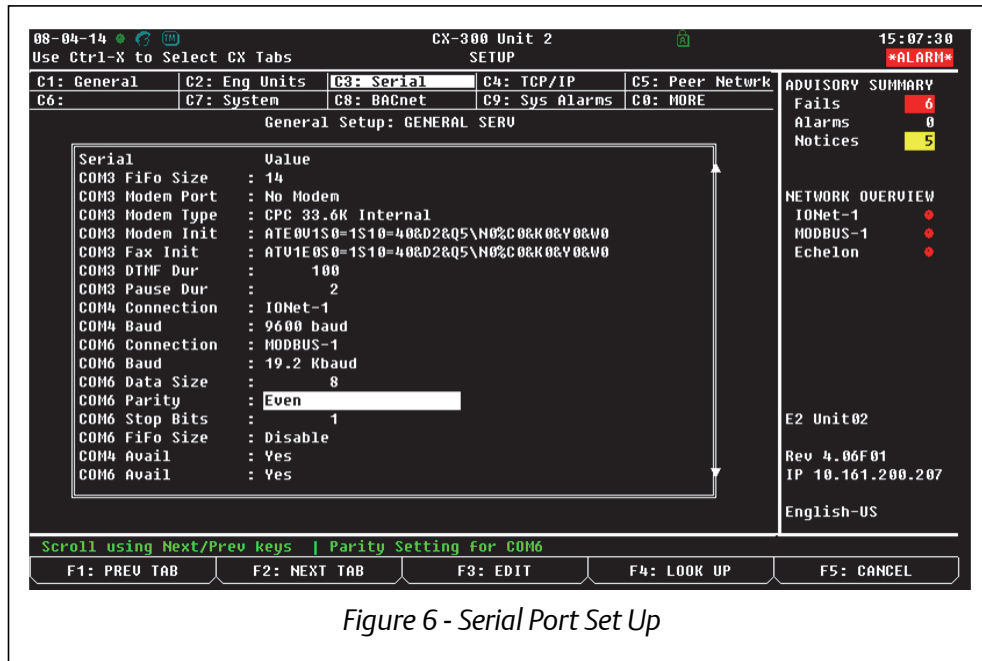






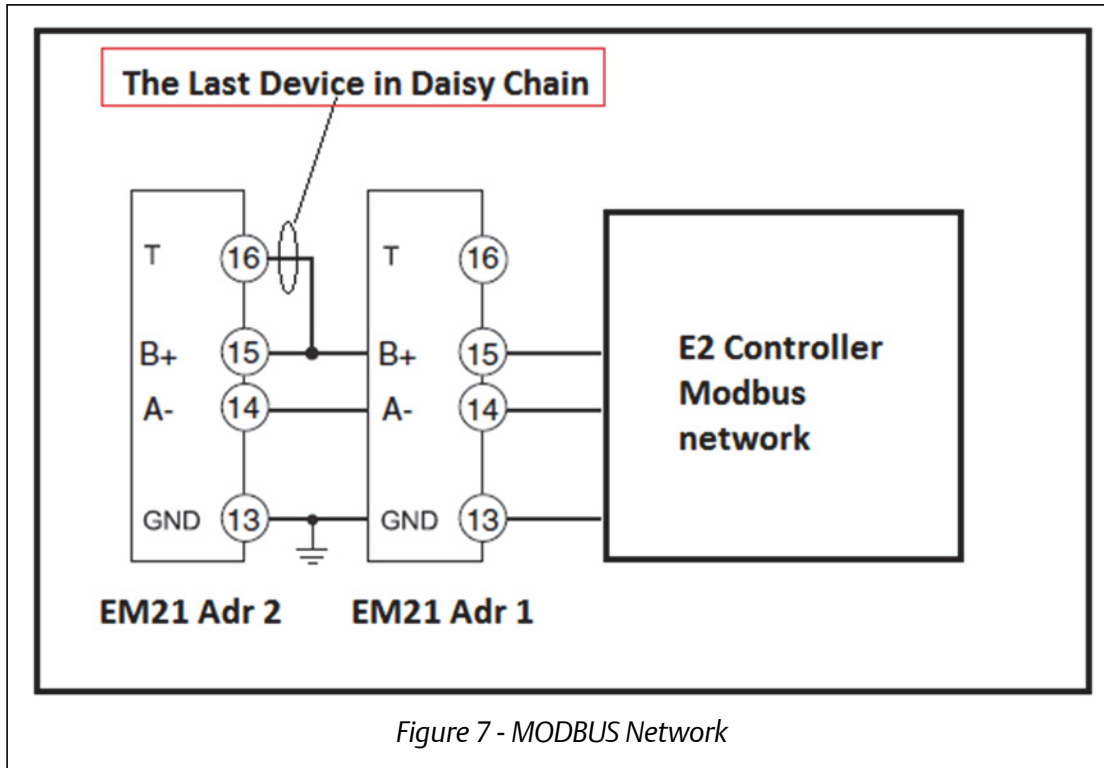


Figure 6 - Serial Port Set Up

5. Press the down arrow key to highlight **COM6 Connection** value:
 - a. Press  (*LOOK UP*) and select **MODBUS-1** (if **MODBUS-1** is being used, select **MODBUS-2** or **MODBUS-3** connection).
 - b. Press  to set configuration.
 - c. Set **MODBUS Connection** as follows: (Press  to select options and  to set configuration).
 - **COM6 Baud:** 19200
 - **COM6 Data Size:** 8
 - **COM6 Parity:** Even
 - **COM6 Stop Bits:** 1
6. Press  to save changes.
7. Press  to go back to the *Home* Screen.

STEP 4: MODBUS Connection



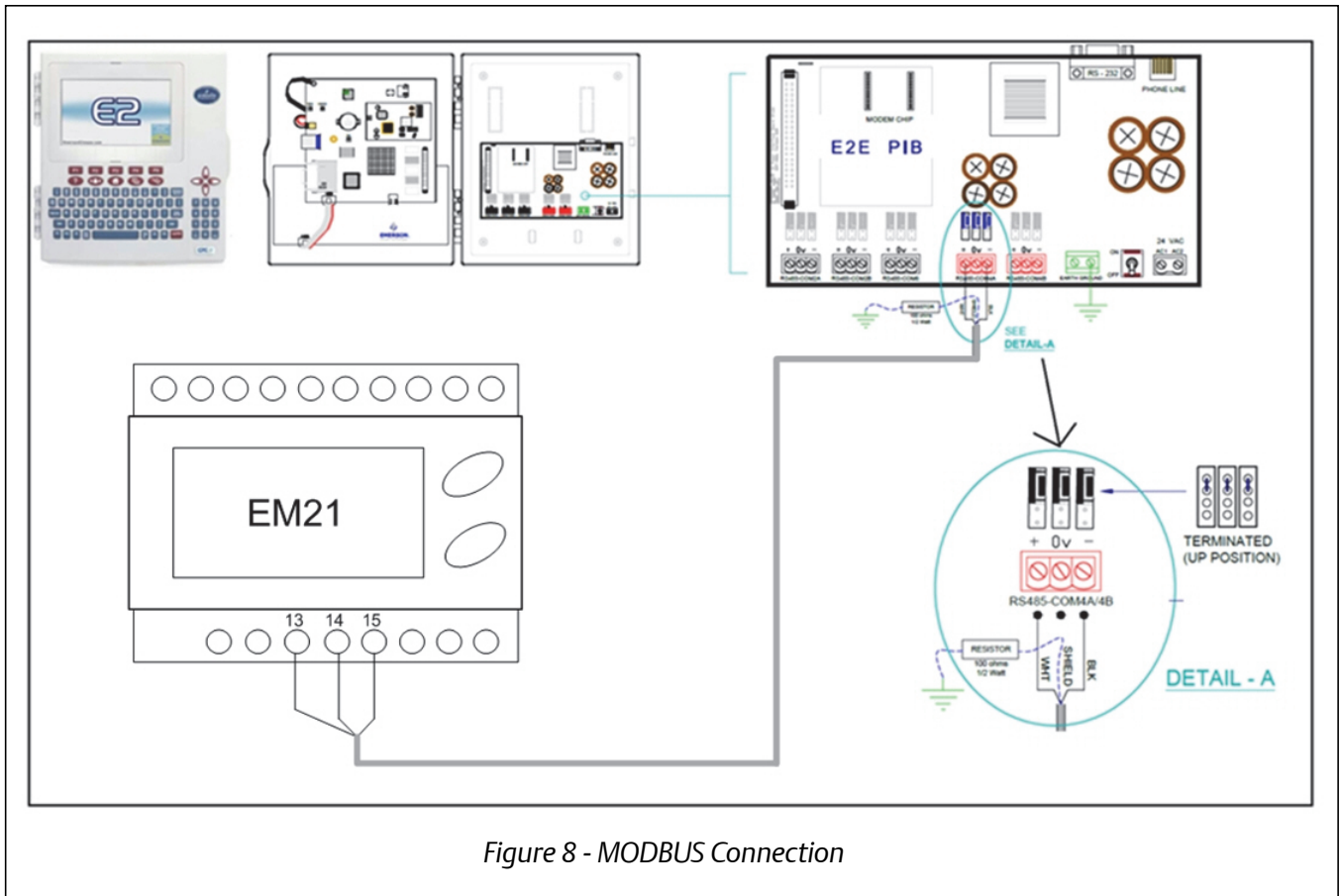







Figure 8 - MODBUS Connection

Note: The polarity of the MODBUS connection of E2 controller and EM21 v72D Energy Meter is reversed.

STEP 5: Adding the EM21 v72D Device on the E2 Controller

1. Press , , ,  (Connected I/O Boards and Controllers).
2. Press  twice to move to the C4: Third Party tab. Highlight the **EM21 v72D** device and enter the desired number of devices under **Quantity**.

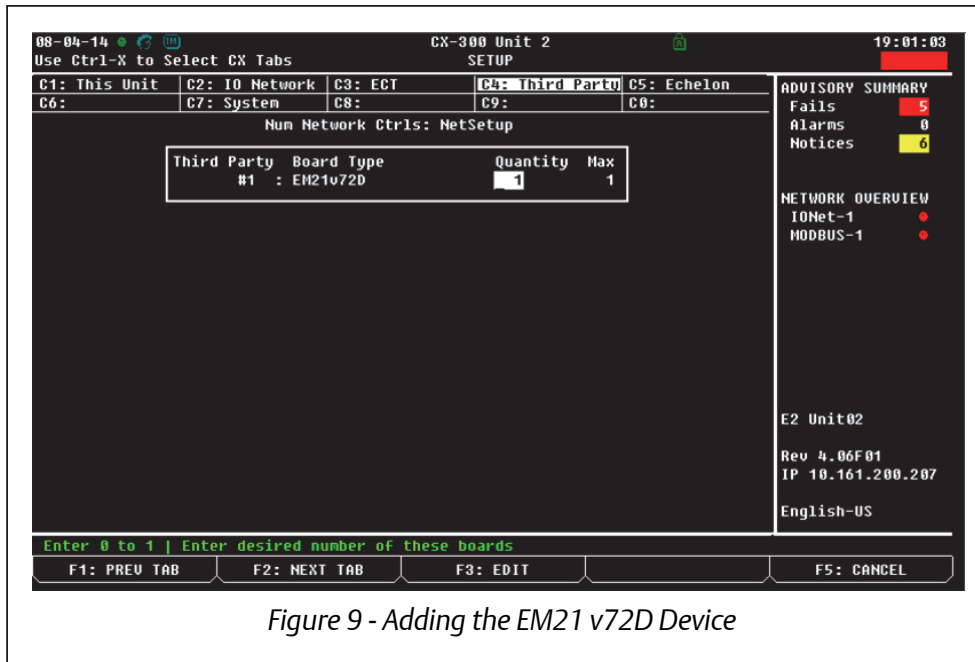




Figure 9 - Adding the EM21 v72D Device

3. Press  to save changes.
4. Press  to go back to the Home screen.

STEP 6: Commissioning the EM21 v72D Device

1. Press **Menu**, **7**, **7**, **1** to open the *Network Summary* screen.
2. Highlight the **EM21 v72D** device to be commissioned by pressing the down arrow key and press **F4**.

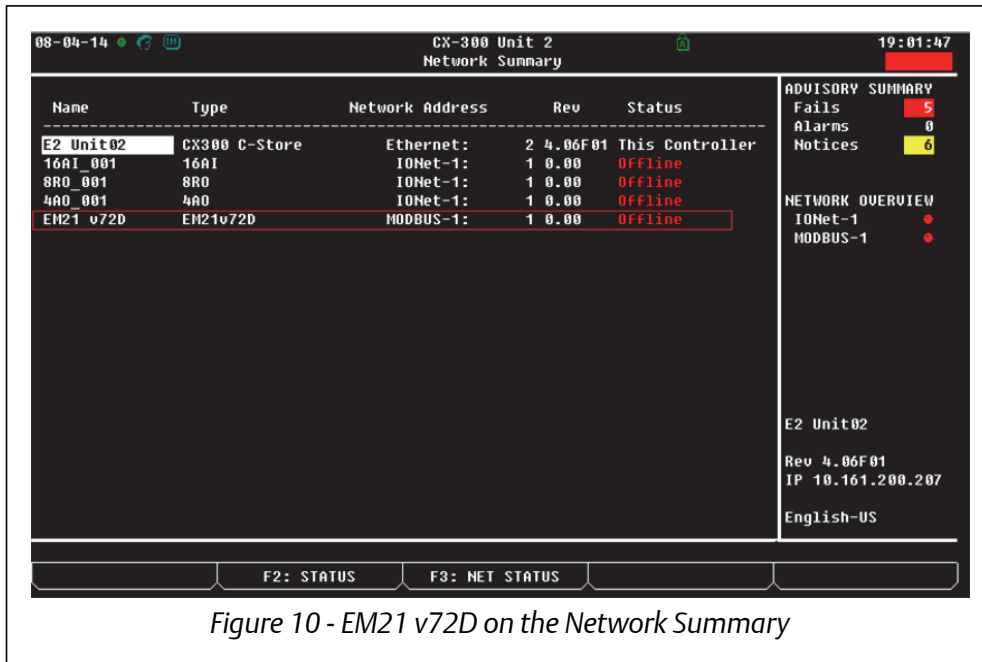


Figure 10 - EM21 v72D on the Network Summary

3. If a Select Network box appears, select the MODBUS number where you configured the device and press **Enter**.
4. Select the address for the device and press **Enter**.

Note: The MODBUS device address must be the same as the address assigned on the device.

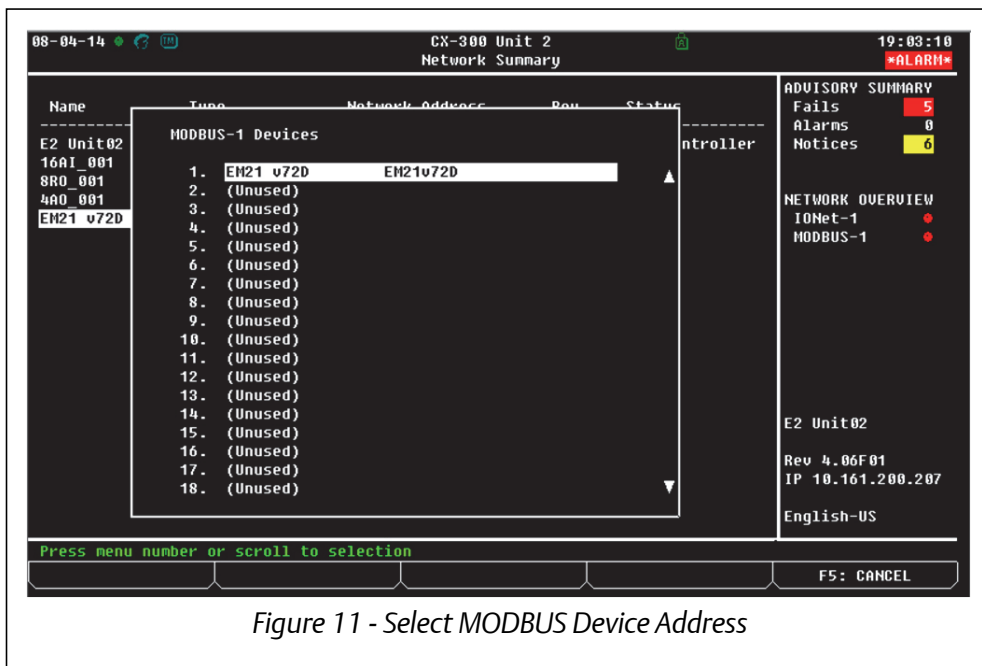



Figure 11 - Select MODBUS Device Address

5. A window for setting the physical address appears. Press  to continue.

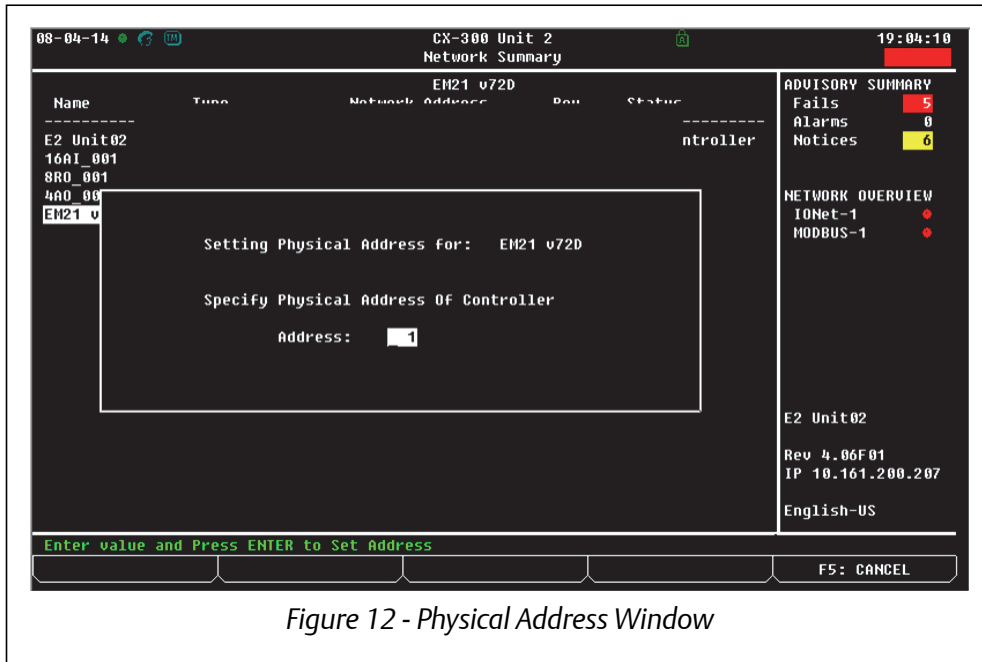














Figure 12 - Physical Address Window

6. Press  to save the assigned address.
7. Press  button to return to the Home Screen.
8. Press , , ,  to open the Network Summary screen.
9. Wait for a few seconds then the EM21 v72D should appear online.

STEP 7: Viewing the Status

1. Press , , ,  +  or use the down arrow key to highlight EM21 v72D and press .

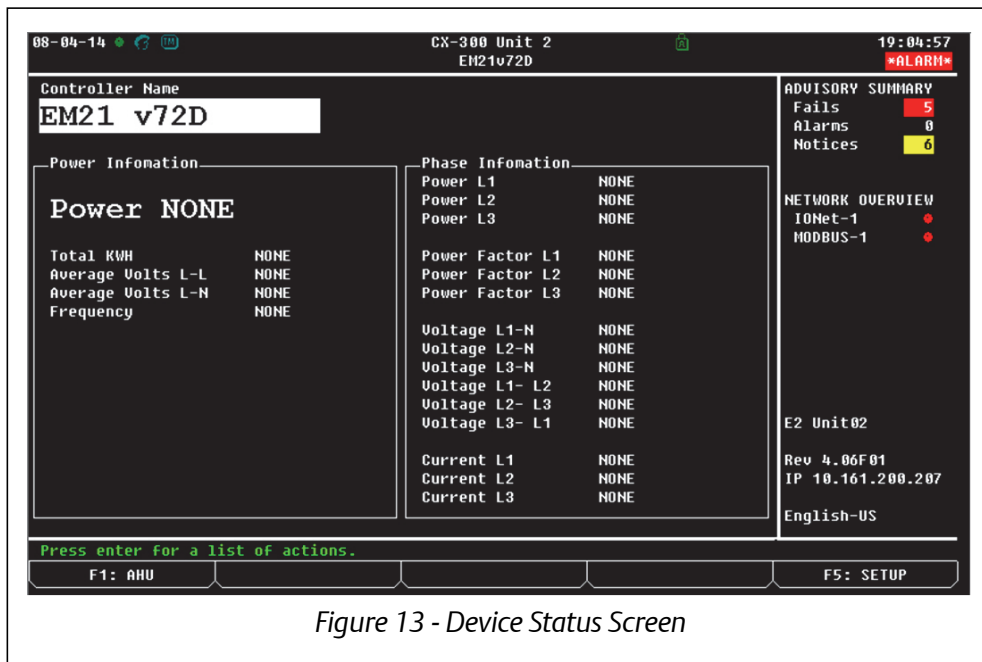


Figure 13 - Device Status Screen

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