

quick start guide

E2 Setup with Veeder-Root TLS-350 MODBUS Device for 527-0370

This document will guide you through setting up and commissioning the Veeder-Root TLS-350 (Automatic Tank Gauging System) MODBUS Device in the E2 controller.

Note that this device requires E2 firmware version 3.01 or higher.

STEP 1: Upload the description file to the E2 controller.

1. From UltraSite, connect to your E2 controller.
2. Right-click the E2 icon and select **Description File Upload**.
3. Browse to the location of the description file and click **Upload**.
4. After uploading, you will need to reboot the E2 controller.

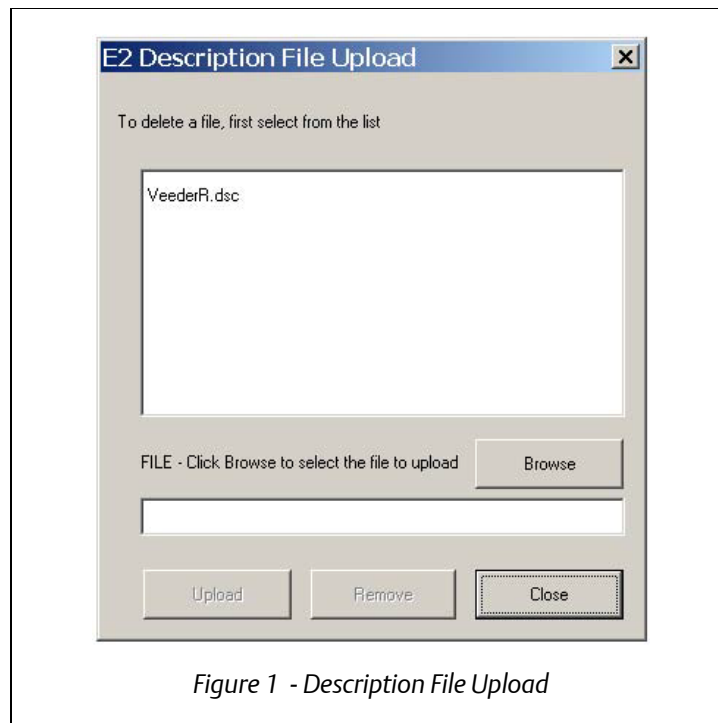

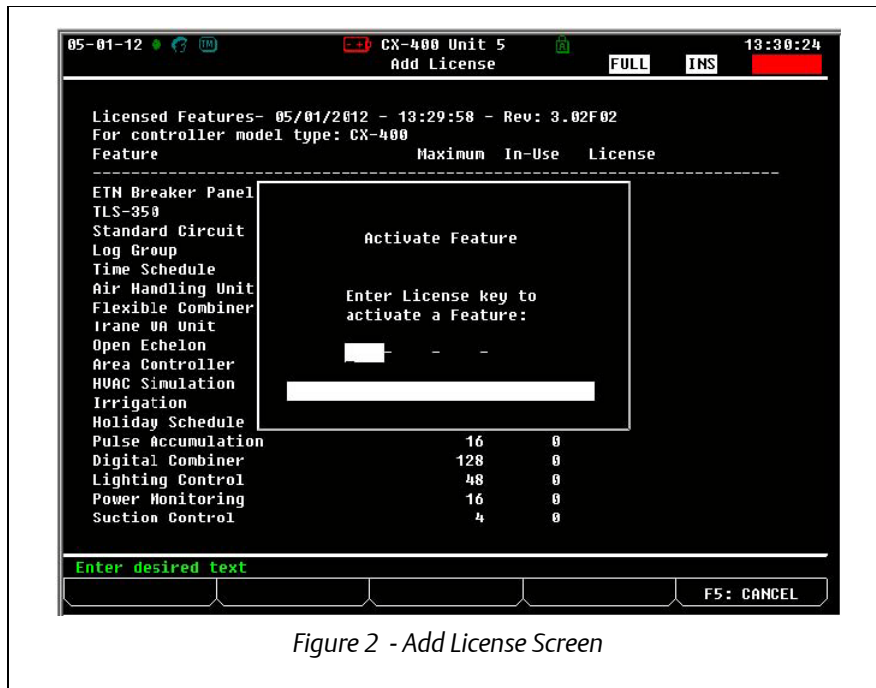


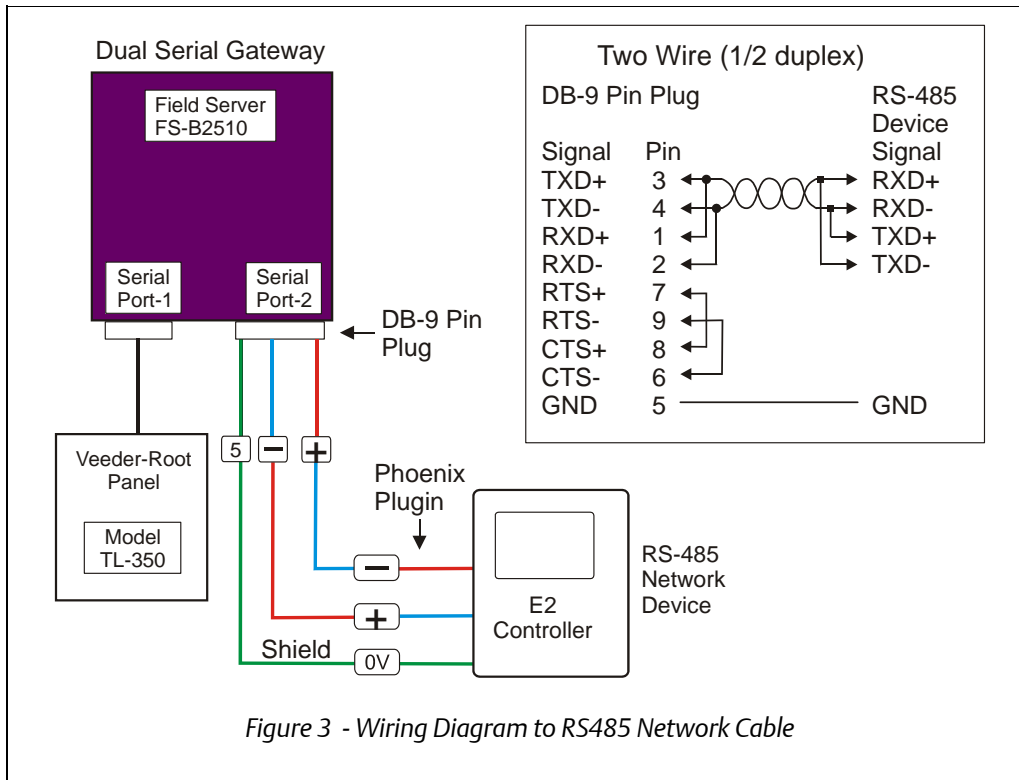
Figure 1 - Description File Upload

STEP 2: Activate the license of the device.

5. From the E2 front panel (or via the Terminal Mode), press , **7** (System Configuration), and **9** (Licensing).
6. Press **F1** (ADD FEATURE) and enter your license key.

**STEP 3: Terminate the RS485 communication cable.**

7. Connect the DB-9 Pin Serial Communication Cable Plug **(3)TXD +** and **(4)TXD -** as shown in *Figure 3*.
8. Ensure that communication polarity is reversed when connecting to the E2.



STEP 4: Configure the MODBUS serial port.

- From the E2 front panel (or via Terminal Mode), select **Menu**, **&7**, **#3**, **1** then toggle the **F2** key to C3: Serial tab and set up as shown.

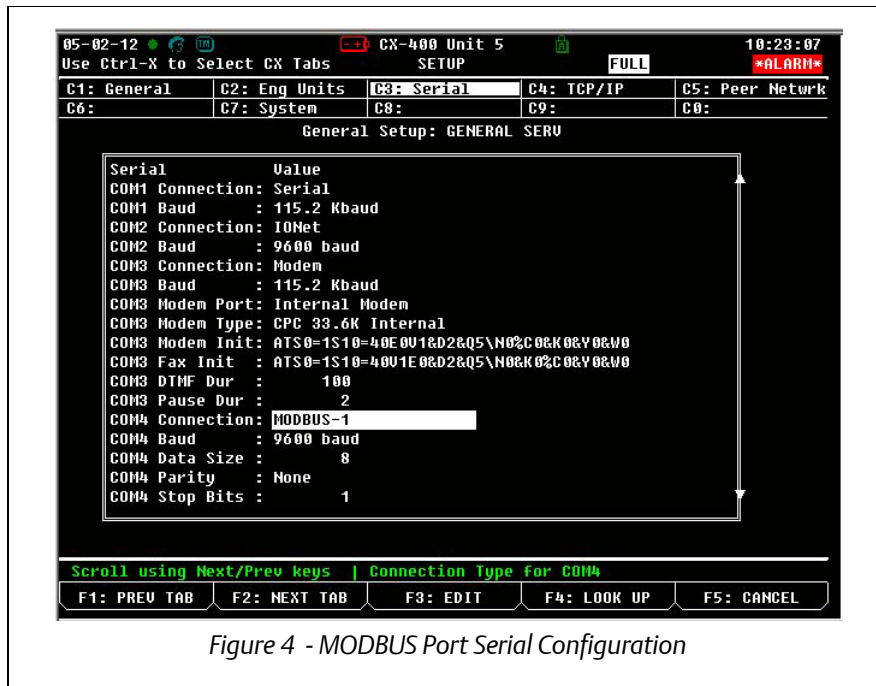
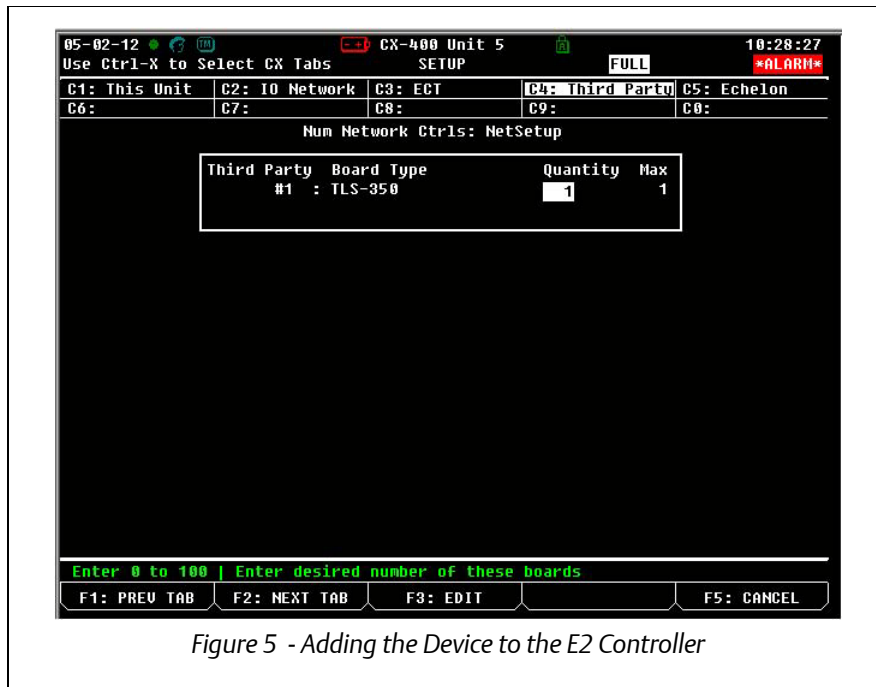


Figure 4 - MODBUS Port Serial Configuration

- COM4 Connection: **MODBUS-1**
- COM4 Baud: **9600 baud**
- COM4 Data Size: **8**
- COM4 Parity: **None**
- COM4 Stop Bits: **1**

STEP 5: Once the license is activated, add the device to the E2 controller.

10. Press , (System Configuration), (Network Setup), (Connected I/O Boards & Controllers).
11. Press **F2** (NEXT TAB) to go to C4: Third Party tab. You should see the device in the list. Enter the number of devices to add and press the button to save your changes.

**KEY POINTS:**

- The FieldServer FS-B2510 is a Gateway Protocol Translator that enables data transfer between the E2 controller and the Veeder-Root TLS-350.
- RS485 Network Cable used -> (BELDEN 8641-24 AWG 2 Conductor Shielded Cable) or equivalent.

STEP 6: Commission the device.

12. Press **Menu**, **7** (System Configuration), **7** (Network Setup), **1** (Network Summary).
13. Press **F4** (COMMISSION) and select the MODBUS port that you will be assigning the device to and then select the MODBUS device address.

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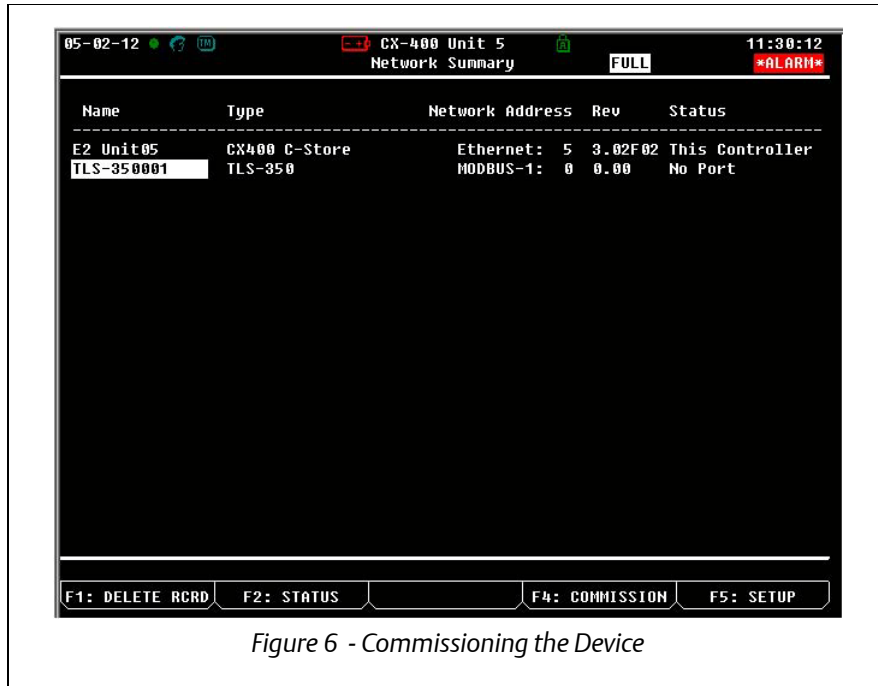


Figure 6 - Commissioning the Device

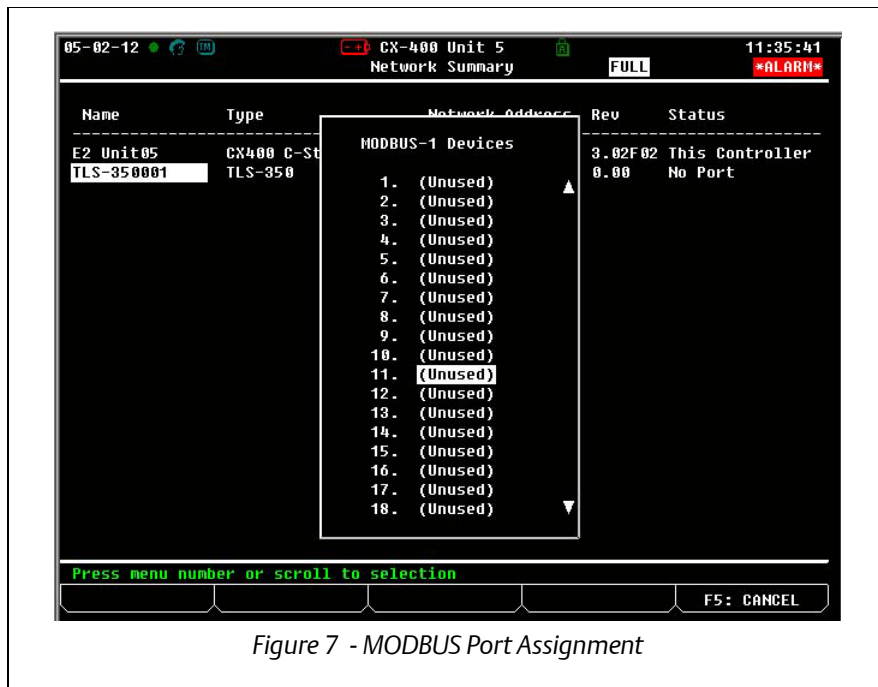


Figure 7 - MODBUS Port Assignment

Once the MODBUS Physical Address is commissioned, this window will appear:

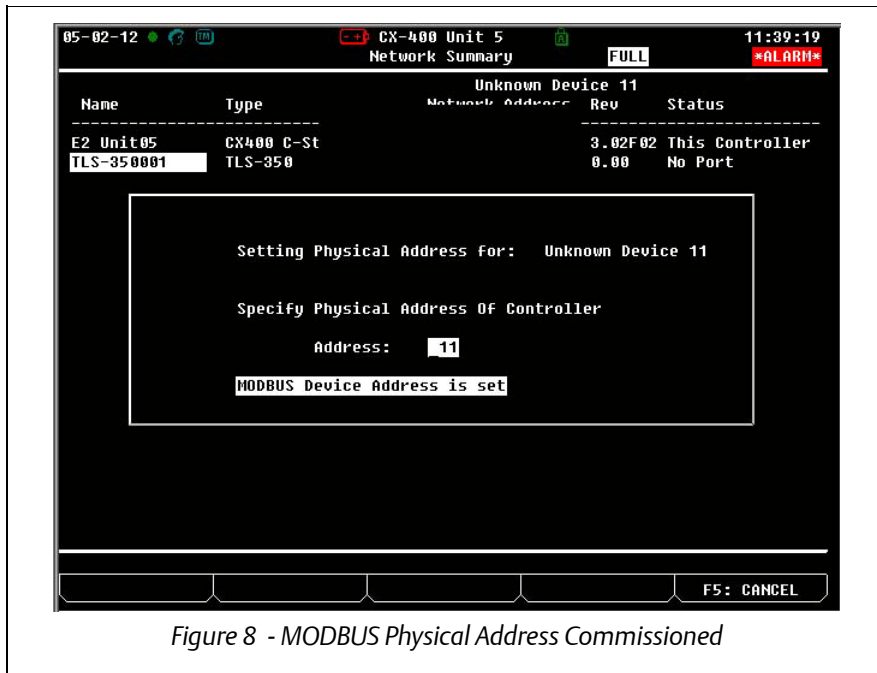


Figure 8 - MODBUS Physical Address Commissioned

After the MODBUS Port Address has been initiated, the Network Summary window will appear (Figure 9).

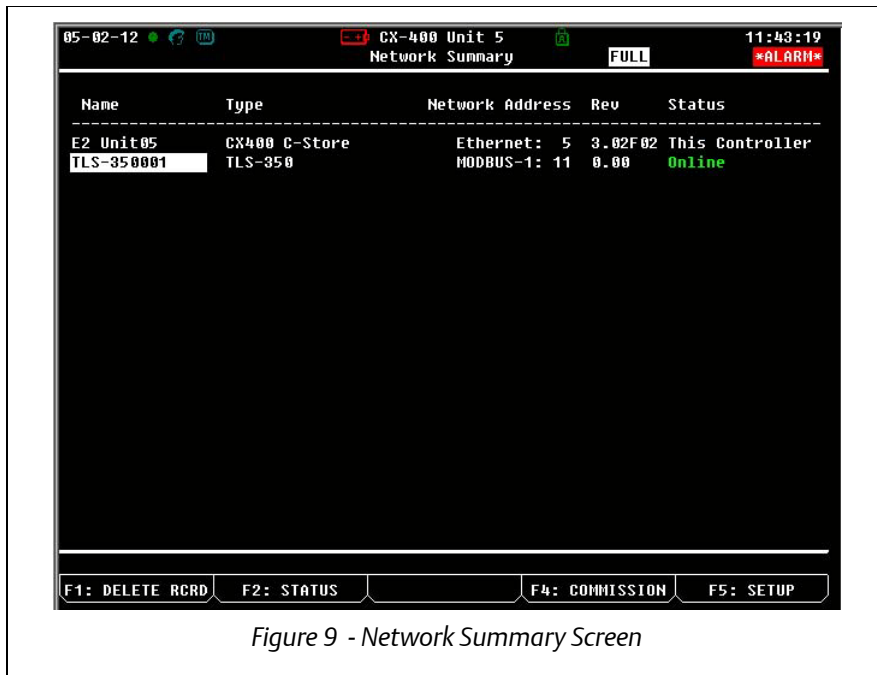


Figure 9 - Network Summary Screen

Once the device is online, it will display the status screen as shown:

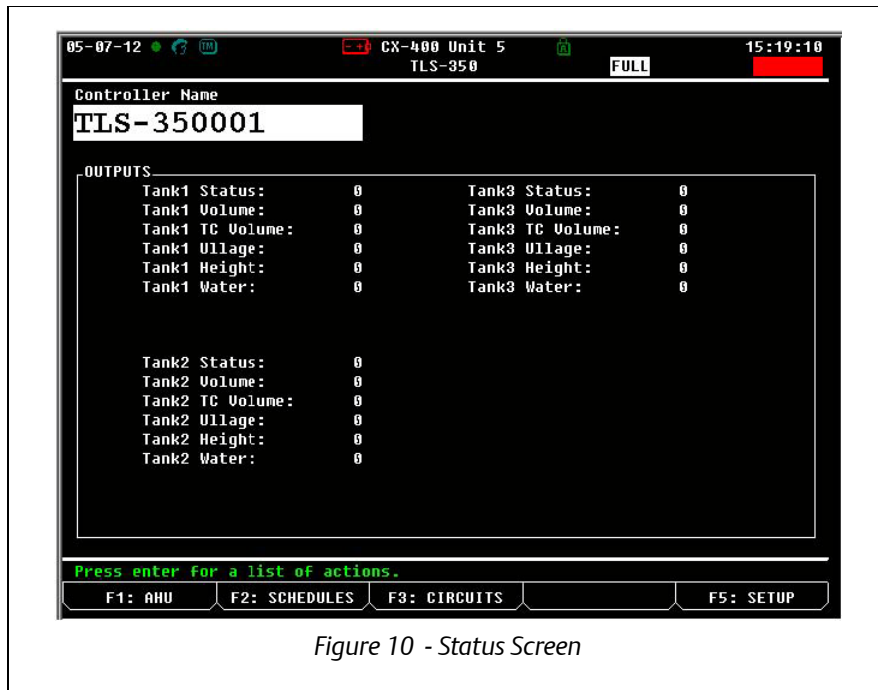


Figure 10 - Status Screen