Install Tekinno 3-Line Display for FMU-5000

Assumptions

This document assumes

- You are upgrading to an FMU-5000 for FM*Live* from a FMPlus unit that previously had a Tekinno 3-Line Display installed.
- You have physically removed your legacy unit from your facility (previously known as site).
- You have installed an FMU-5000 unit at your facility in range of the Tekinno 3-Line Display.

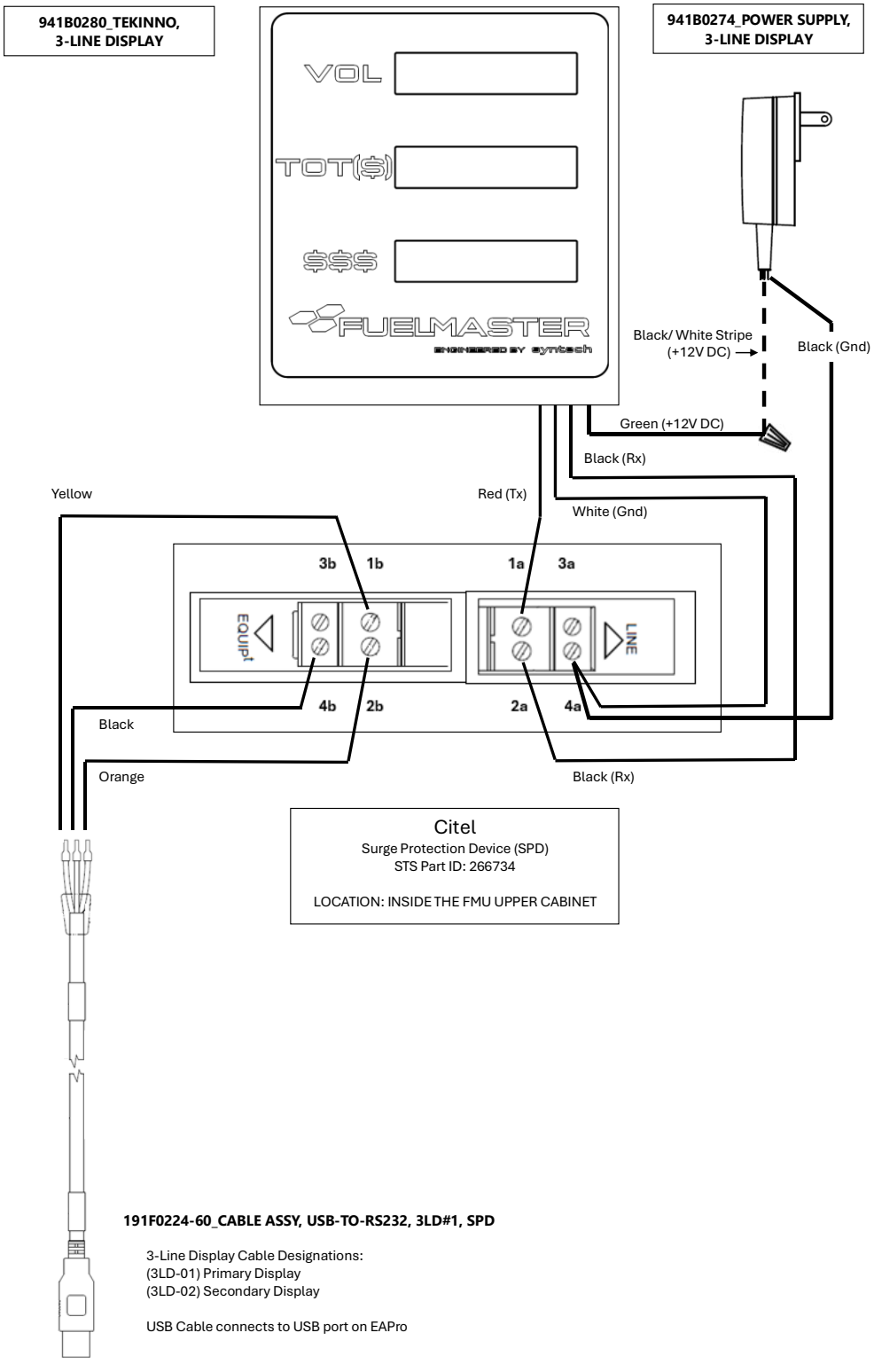
IMPORTANT You will need to install a Citel Surge Protection Device (SPD Module Part ID: 266734) and a USB to RS232 Converter Dongle (Part ID: 191F0224-60) in your FMU-5000 unit prior to installing the Tekinno 3-Line Display. See wiring instructions below.

A USB port will be utilized to connect the Tekinno 3-Line Display to the FMU.

This Product Bulletin will guide the reader on the following topics:

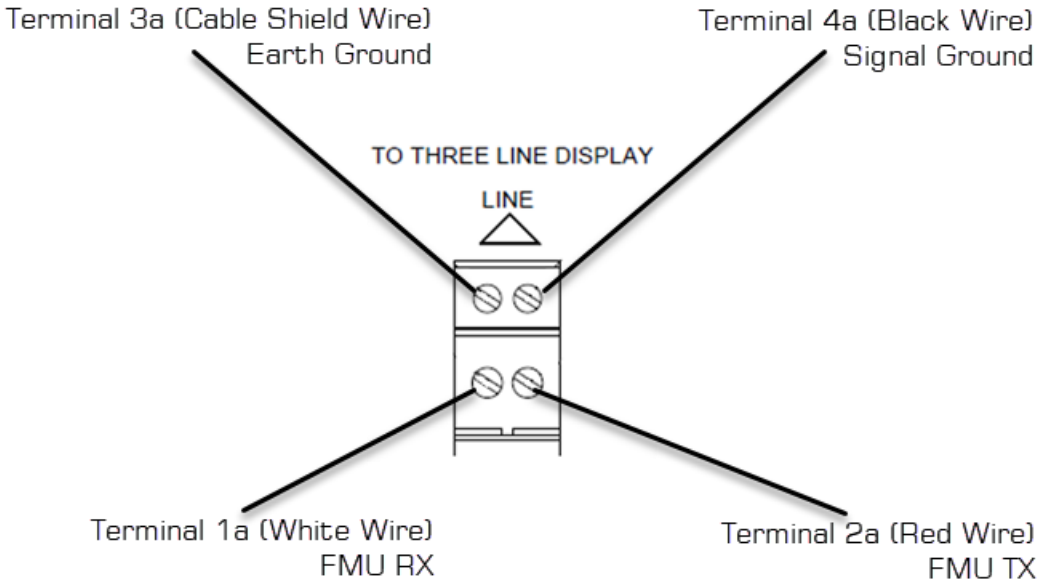
- **Tekinno 3-Line Display to FM*Live* - Connection Diagram**: This section gives a visualization for the wiring connections for Tekinno 3-Line Display to the Citel SPD and the Citel SPD to the FMU-5000.
- **Wiring Tekinno 3-Line Display to the Citel Surge Protection Device (SPD):** This section provides written steps for the wiring connections for Tekinno 3-Line Display to the Citel SPD.
- **Wiring Citel SPD to the FMU-5000 for FMLive:** This section provides written steps for the wiring connections from the Citel SPD to the FMU5000.
- **Configuring Tekinno 3-Line Display in FMLive:** This section provides written steps for configuring a Tekinno 3-Line Display in FM*Live*.

Tekinno 3-Line Display to FM*Live* - Connection Diagram



Wiring Tekinno 3-Line Display to the Citel Surge Protection Device (SPD)

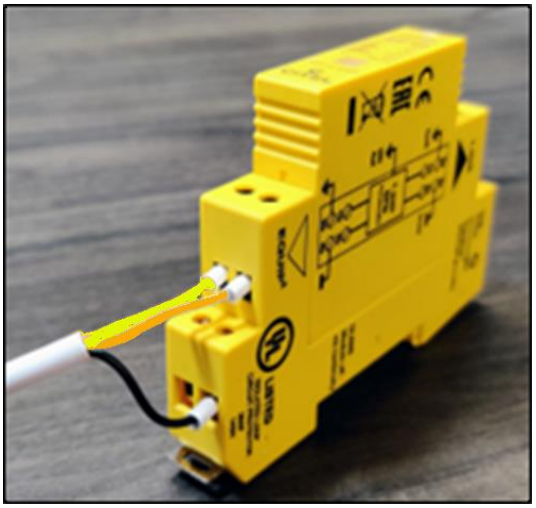
1. Locate the pigtailed end of the -255114 cable coming from the Tekinno (MFG Part #: HW40102208). This end will wire into the *Line* side of the Citel SPD.
2. Insert the wires into the Citel SPD in the following configuration (Wire Color: Terminal) on the Line side:
   a. Connect the White wire to terminal 1a.
   b. Connect the Red wire to terminal 2a.
   c. Connect the cable shield to terminal 3a.
   d. Connect the Black wire to the terminal 4a.



NOTE	For additional information regarding the Citel Surge Protection Device (SPD), refer to product bulletin PB-261: Installation of the RS-232 Citel Surge Protection Device.

Wiring Citel SPD to the FMU-5000 for FM*Live*

1. Plug the USB end of the USB-to-RS-232 cable (191F0224-60) into an available USB port on the EAPro (inside the unit head).
2. Locate the other end of the USB to RS-232 cable. This end will wire into the *EQUIP*^{t} side of the Citel SPD.
3. Insert the conductors in the following configuration (Wire Color: Terminal) on the EQUIP^{t} side:
   a. Yellow Conductor: Terminal 1b
   b. Orange Conductor: Terminal 2b
   c. Black Conductor: Terminal 4b



4. Plug Tekinno Power Supply into a power source.

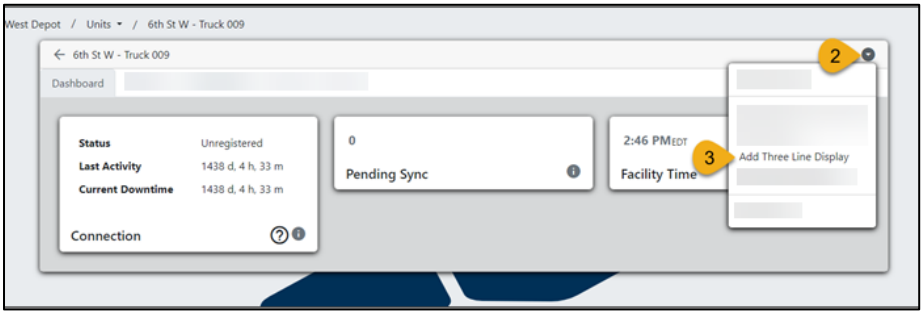
Configuring Tekinno 3-Line Display in FM*Live*

Assumptions

This tutorial assumes:

- You have installed a 3LD and connected it to theFMU.
- Your Organization has been configured.
- You have created a Unit in FM*Live.*
- You have added Fueling capability to the Unit.
- You have configured fueling positions for the Unit.
- You are a Facility Manager.

1. Navigate to the unit where you would like to add a 3LD.
2. Select the **dropdown** at the top right corner of the Unit Dashboard.



3. Select **Add Three Line Display**. The Three Line Display configuration modal will display.
4. Select **Wired Tekinno** for the **Display Type** field.



5. Populate the following fields:

Wired Tekinno 3LD

a. **Display Type**: the brand of the three-line display you are configuring.

b. **Interface**: the serial device the 3LD will use to communicate with our FMU.

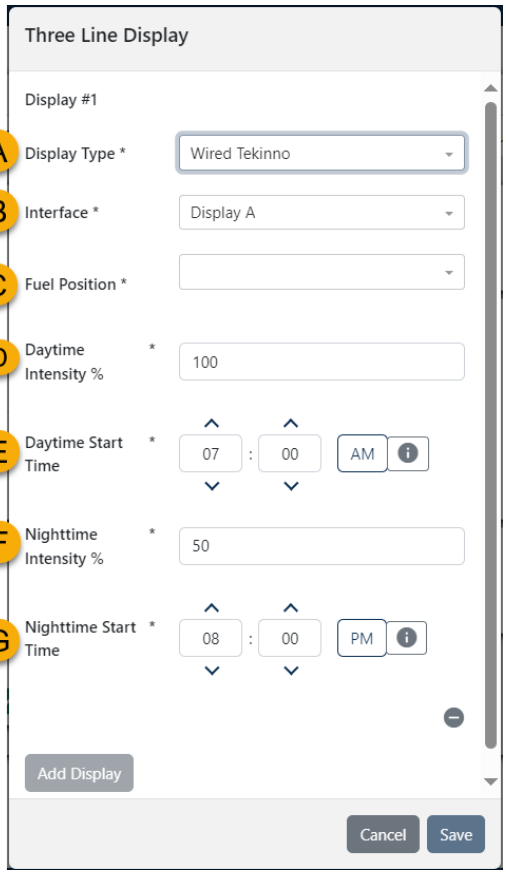
c. **Fuel Position**: the fueling positions authorized to display on the 3LD; users may select more than one fueling position to show on the display.

d. **Daytime Intensity %:** the percentage for how bright (or intense) the LEDs will display on the 3LD, based on the Daytime Start Time.

e. **Daytime Start Time:** The time used to specify when the display should use the Daytime Intensity %.

f. **Nighttime Intensity %:** the percentage for how dim (or weak) the LEDs will display on the 3LD, based on voltage coming from the solar panel.

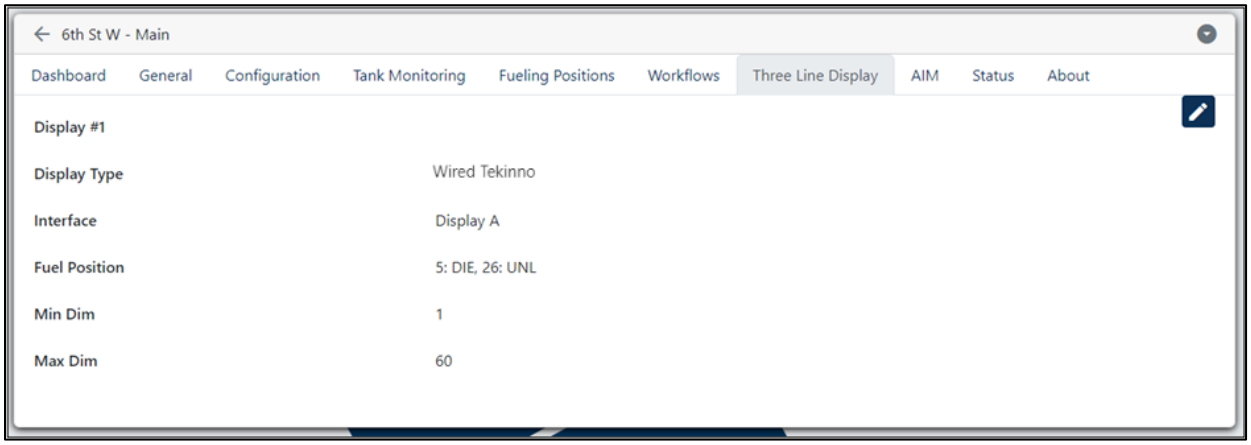
g. **Nighttime Start Time:** The time used to specify when the display should use the Nighttime Intensity %.



NOTE	Users can add up to two 3LDs to be controlled by a single unit. To add a second 3LD, select **Add Display** and repeat steps 4 and 5.

WARNING	If two Tekinno devices are being used at one FMU, one must use Display A for the Interface fields, and the other must use Display B. Programmed FTDI USB-to-serial cables are used to uniquely identify our serial devices. Two different cables are needed since we will support up to two 3LD devices for one unit. The first FTDI USB to Serial cable will be programmed as **3LD-01**, the second FTDI USB to Serial cable will be programmed as **3LD-02.** **Misconfiguring serial cables will result in the 3LD not working.**

6. Select **Save**. The *Three Line Display* tab will display on the unit configuration.



TIP	If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at 1-800-888-9136, ext. 2, or email support@myfuelmaster.com.