

# FMX Lighting Controllers

## Command BUS Ports

Connecting other devices using the BUS defines the installed space and allows for communication amongst all devices.

The following devices connect via the BUS:

- 0-10V Layer Packs**
- FMX Layer Packs**
- Daylight Sensor Packs**
- Control Stations**

## Occupancy Port

Plug an occupancy sensor into this port and all other Layer Packs sharing the same BUS will respond to its state. Daisy chain occupancy sensors using standard CAT5 cable. Using the MODE button, the installer can toggle between Auto Mode and Manual Mode (Vacancy).



## Control Station - Slider Pairing

If a Control Station is specified, using the MODE button, the installer can easily select the proper slider number to correspond with the Control Station and Layer Packs installed.

## Switch Port

A dedicated switch port allows for the installing contractor to easily match switches to the proper "layer of light" (control zone) they are needing to control. Five switch options are available. See switch tech sheet for more information.

## Product Information

The lighting control devices for the FineTune® Tailored Control System are called Layer Packs. Layer Packs use a BUS system to connect and communicate to each other and other system devices. An FMX Layer Pack has the capability to control three "layers of light" (control zones). FMX is a proprietary version of DMX that Finelite utilizes to achieve smooth tunable white transitions and ultra granular dimming down to 1%. FMX Layer Packs can be used in conjunction with 0-10V Layer Packs.

### Control Zones:

GEN = General Lighting Zone

DZ-1 = Daylight Zone 1

DZ-2 = Daylight Zone 2

DZ-1 and DZ-2 act as general lighting zones if no Daylight Sensors are applied.

For design purposes, each Layer Pack is a single switch leg with three sub zones (a, ad1, ad2). These three outputs should be considered one manual control zone.

For example, a FineTune TCS dimmer switch would turn all three zones On and Off together as well as adjust the intensity of each zone together. These three control zones cannot be manually controlled separately.

### Tunable White

Each output on the FMX Layer Pack has the ability to control intensity and color via a single FMX Layer Pack.

### Default Controller Settings

**High-End Trim** - No High-End Trim Applied (100% Light Output)

**Occupancy Mode** - Auto On / Auto Off

**Occupancy Partial On** - Lights turn On to 70% Light Output

**Demand Response** - 20% Light Reduction on ADR Event

## Ordering Information

Ordering Code	Description
FTCS - LP - FMX	<b>FMX Layer Pack — 120/277VAC ~ 50/60 Hz 24V Power Supply @ 300mA / UL2043 / UL924 / UL916</b> (Includes 6-inch CAT5 jumper cable in every box)

## Control Specifications

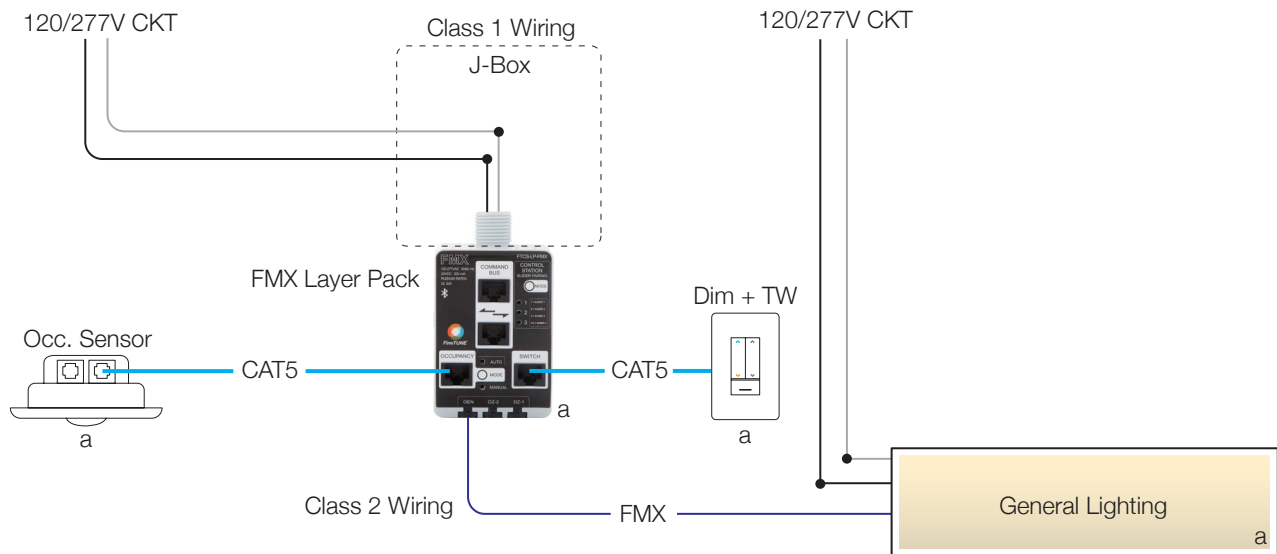
**120/277VAC ~ 50/60 Hz**  
**24V Power Supply @ 300mA**  
**UL2043** - Plenum Rated  
**UL924** - Emergency Device  
**UL916** - Energy Management Equipment  
**5-Year Warranty**

### FineTune FMX Drivers

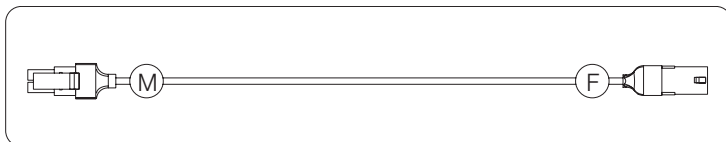
Finelite's proprietary FMX driver is a redesign on standard DMX drivers to repeat the DMX signal as it passes through a driver. This allows FineTune to improve the 32 device run limit. FMX enabled luminaires can be daisy chained as many times needed and does not require a terminator at the end of each run. Simply daisy chain the luminaires using the FMX cables and plug into the proper output of the FMX Layer Pack.

**Note:** The FMX Layer Pack does not work with other DMX luminaires or DMX devices.

## FMX System Diagram



### FMX Cables

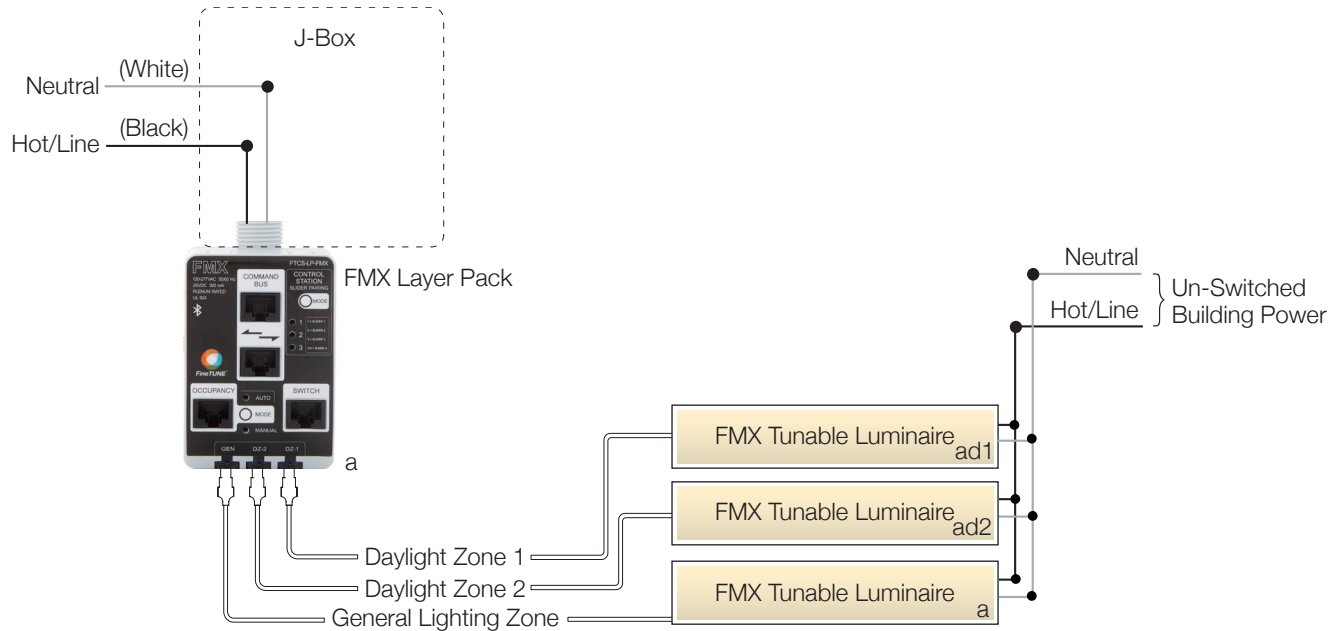


FMX cable used to daisy chain from FMX Layer Pack to other FMX luminaires. Available in 12', 30' & 50' lengths. FMX cables can be plugged together to create longer FMX cable lengths.

## FMX System Diagram

### Luminaire Wiring Shown

- FMX luminaires are daisy chained together in the “General Lighting Zone” or optional Daylighting Zones.
- Each luminaire has an In and Out connector to easily join luminaires together in the same zone.



## FMX Output

Only one controller is needed to control a general lighting zone and two daylighting zones. Run each output based on the space's zone requirements.



### GEN - General Lighting Zone

Connect this FMX output to the General Lighting luminaires. This zone is not affected by daylight.

### DZ1 - Daylight Zone 1

Luminaire connected to this FMX output will respond to the Daylight Sensor connected to DZ1 of the "Daylight Sensor Pack".

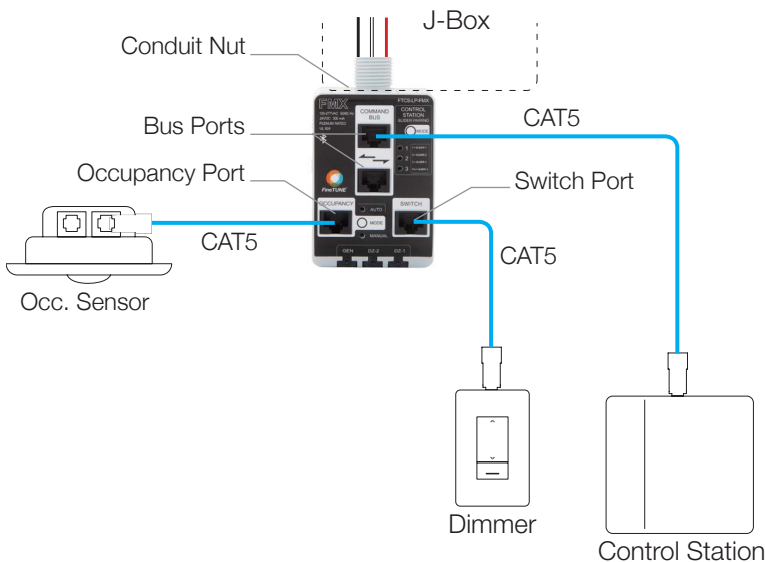
### DZ2 - Daylight Zone 2

Luminaire connected to this FMX output will respond to the Daylight Sensor connected to DZ2 of the "Daylight Sensor Pack".

**Note:** Run FMX outputs to corresponding zones specified by project requirements.

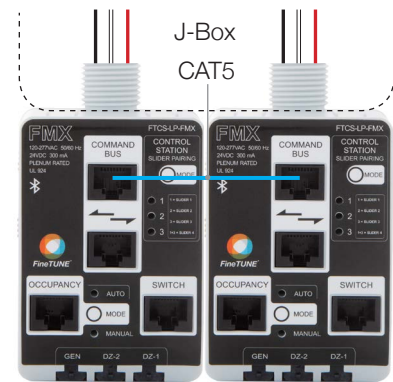
## Connection

### Connection Overview



### Connect Multiple Layer Packs

Daisy chain system components using the BUS to define the installed space.



Typical Side-by-Side Mounting

Visit our website for complete FMX Layer Pack instructions:

[www.finelite.com/downloads/instructions/TCS/FL\\_FMX\\_Layer\\_Pack\\_Instructions.pdf](http://www.finelite.com/downloads/instructions/TCS/FL_FMX_Layer_Pack_Instructions.pdf)

## Download the FineTune® TCS Mobile App

### Connect to the space you want to modify

**Blink** A “Blink” button will flash the lights to confirm you are connecting to the right space.

Add the name of the space and choose from options below.

### Operational Hours / Sweeps

1. Apply operational hours to everyday or weekdays and weekends
2. Select an “enable On” time
3. Select an “Off” time
4. Press “Save” to complete

### Add Tunable Schedules

Select from Finelite’s factory designed schedules

**OR** customize your own:

1. Select a time
2. Choose a transition time
3. Select a CCT (2700K - 6500K)
4. Repeat and “Save” when complete

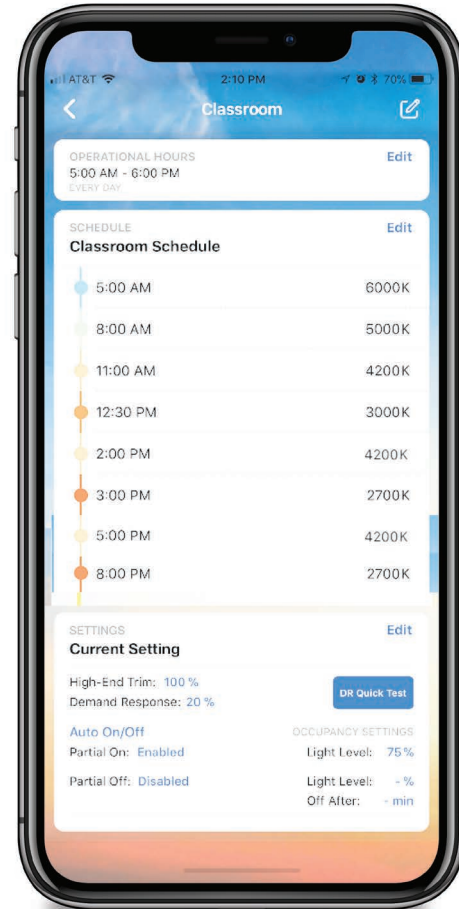
### Adjust System Settings

- Set High-End trim to all luminaires in a space
- Adjust Demand Response reduction level
- Select Occupancy functionality:
  - Auto On / Off (Default)
  - Manual On / Auto Off (Vacancy)
  - Set a Partial On (Auto On / Off only)
  - Set a Partial Off

**Note:** Custom settings and scheduling can be created On or Off site. These setting are saved and can easily be uploaded to other spaces.



FineTUNE TCS



FineTune® TCS App



iOS



ANDROID

(coming soon)



Bluetooth