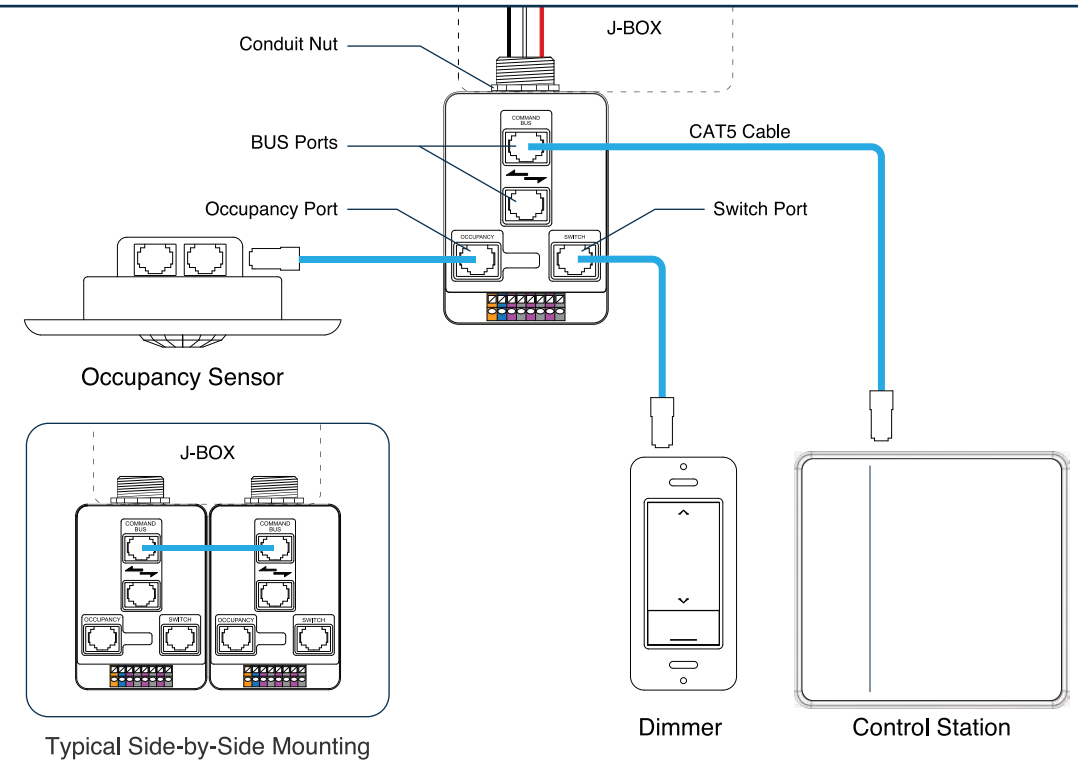


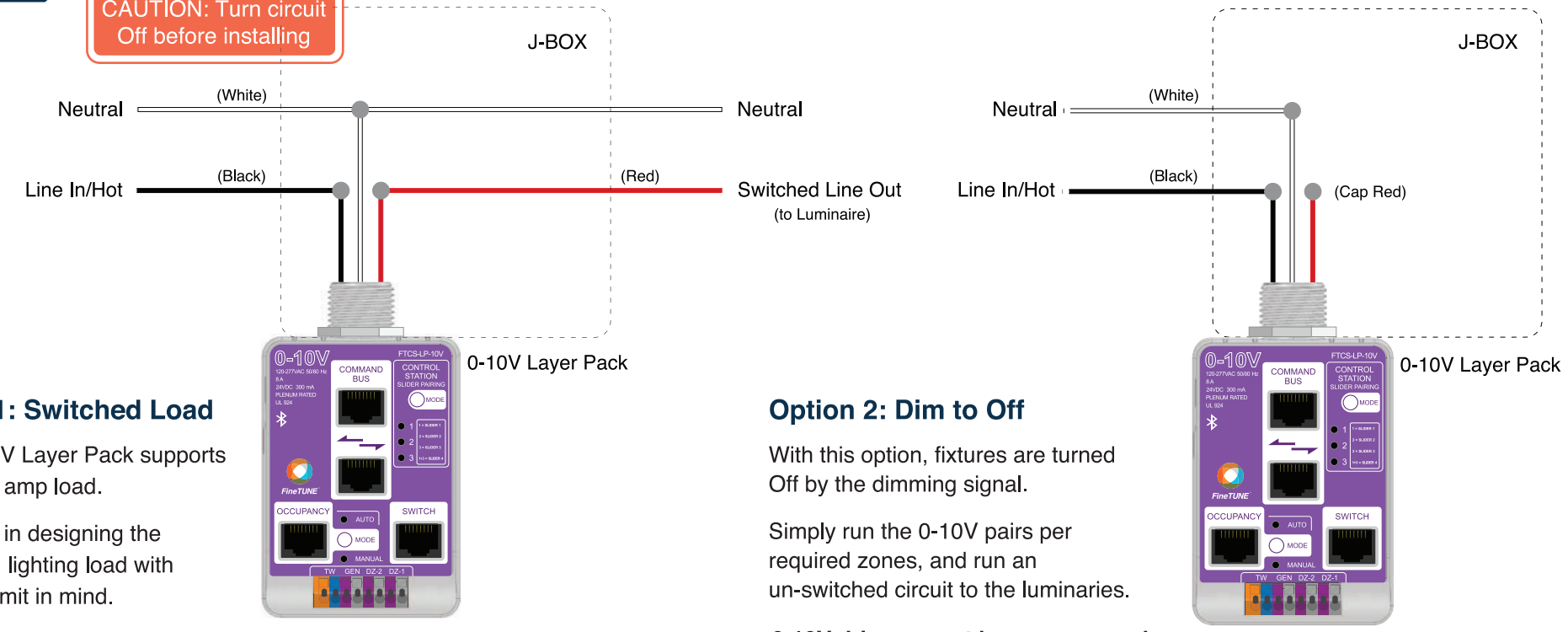
Specifications & System Diagram

- 120/277VAC ~ 50/60 Hz
- 8A Load Relay
- 24VDC Power Supply @ 300mA
- Plenum Rated (UL2043)
- Emergency Device (UL924)
- Sink Current - 25mA per 0-10V output
- 5 Year Warranty



Line Voltage

CAUTION: Turn circuit Off before installing



Option 1: Switched Load

Each 0-10V Layer Pack supports up to an 8 amp load.

Take care in designing the connected lighting load with this amp limit in mind.

Total load allowed @120V = 960 Watts
Total load allowed @277V = 2,216 Watts

Notes

- The Layer Pack can be installed in a junction box using the provided conduit nut.
- Please refer to local and national electric codes for proper installation.

Option 2: Dim to Off

With this option, fixtures are turned Off by the dimming signal.

Simply run the 0-10V pairs per required zones, and run an un-switched circuit to the luminaires.

0-10V drivers must be programmed to a 'Dim to Off' setting.

Sink Current - 25mA per 0-10V output.

- Once the Layer Pack is installed, turn the circuit back on.
- The connected fixtures will turn on to full brightness at 3500K.

0-10V Outputs

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.

TW - Tunable White Control

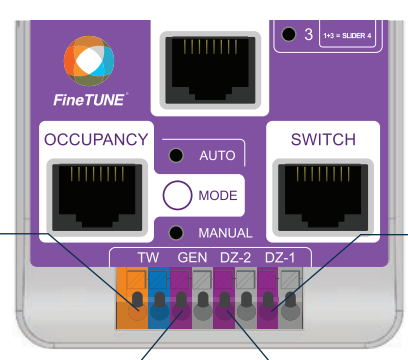
If luminaires have tunable white functionality, connect this 0-10V output to all fixture zones connected to this Layer Pack. An Orange (+) and Blue (-) will be provided out of each fixture.

GEN - General Lighting Zone

Connect this 0-10V output to the General Lighting fixtures. This zone is not affected by daylight.

Notes

- 0-10V outputs can be run as Class 1 or Class 2.
- Run 0-10V outputs to corresponding zones specified by project requirements.
- If fixtures were specified as tunable white (using 0-10V protocol), connect all fixtures together using Orange and Blue 0-10V output.

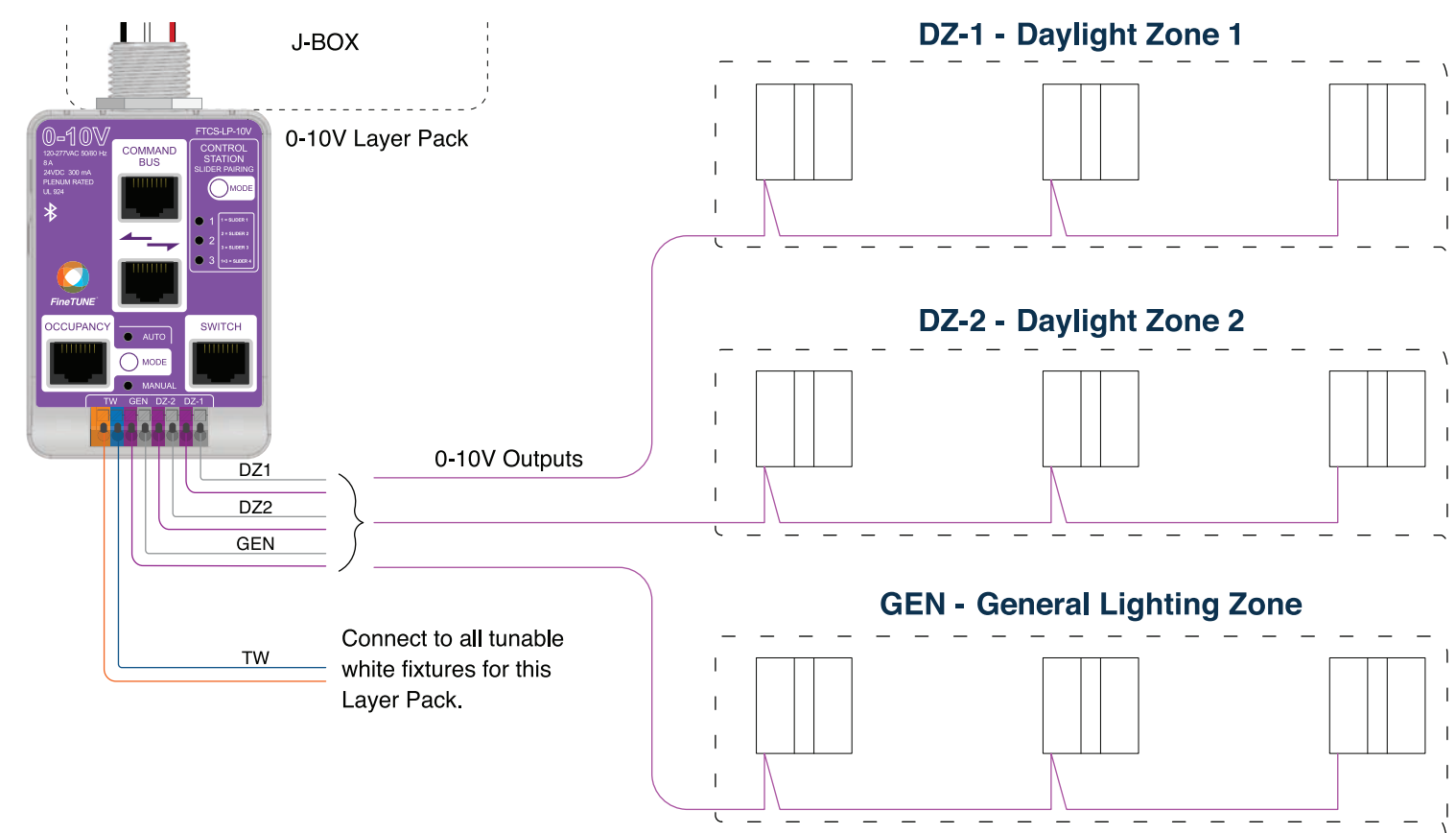


DZ1 - Daylight Zone 1

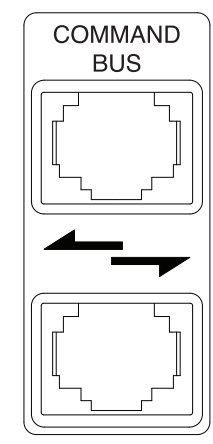
Fixtures connected to this 0-10V output will respond to the daylight sensor connected to DZ1 of the 'Daylight Sensor Pack'.

DZ2 - Daylight Zone 2

Fixtures connected to this 0-10V output will respond to the daylight sensor connected to DZ2 of the 'Daylight Sensor Pack'.



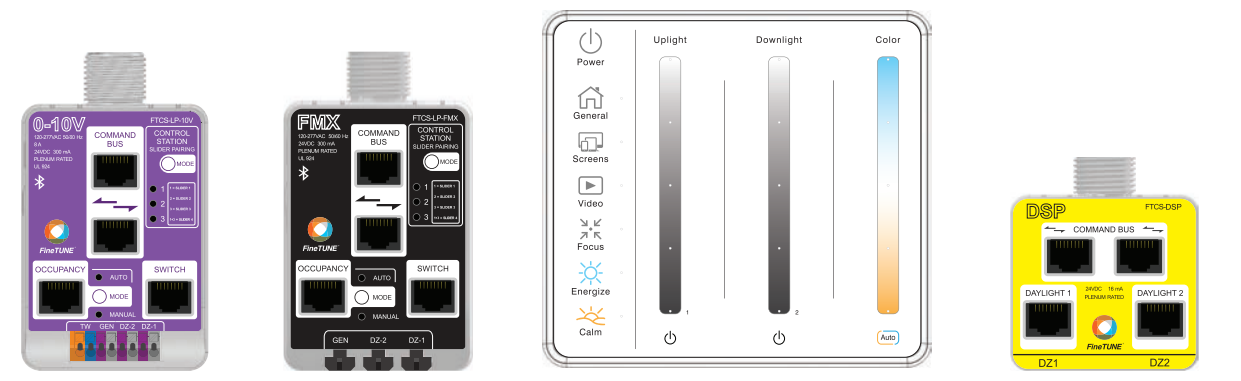
Command BUS



There are four hardware devices that connect to the Command BUS (shown to the right).

All devices have two BUS ports to allow for easy topology free connections.

Many combinations of device are possible. Connecting these devices together on the Command BUS defines the installed space. The BUS would not go to any other space. Each space becomes its own "stand alone" system.



0-10V Layer Pack PN: FTCS-LP-10V FMX Layer Pack PN: FTCS-LP-FMX Control Station PN: Specific to Order Daylight Sensor Pack PN: FTCS-DSP

Hardware Guidelines

BUS Hardware Devices
Any combination of the four hardware devices can be on the same shared Command BUS. This defines the 'installed space' and the overall system.
Important: All devices in the 'installed space' shall be bussed together. The BUS shall never cross into a separate space.

Occupancy Sensors
Up to (4) Dual Tech occupancy sensors per Layer Pack.
Up to (8) PIR occupancy sensors per Layer Pack.

Control Stations
Up to (2) 'Control Stations' per system (shared BUS).

Daylight Sensors
Only (1) 'Daylight Sensor Pack' shall be used on a system (shared BUS).
This accounts for (2) 0-10V daylight sensors to apply to all Layer Packs daylight zones (DZ1 & DZ2).

Switch Connections

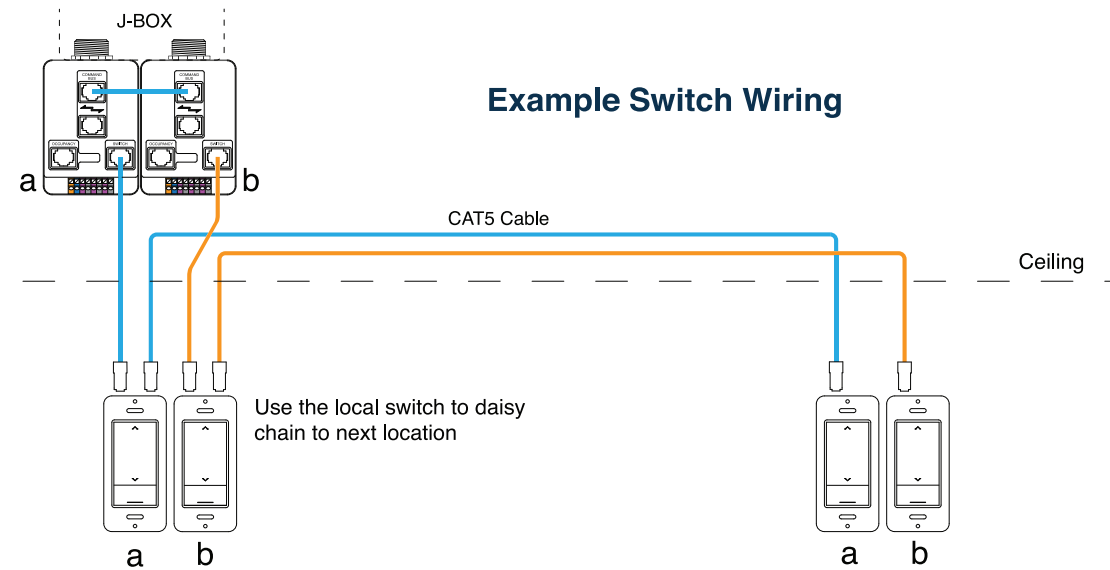
Switches connect into the "SWITCH" port of the Layer Pack(s). There are two types of switches that can connect to this system.

Local Switches

These types of switches connect only to the Layer Pack they are going to control. These switches can daisy chain to other locations throughout the space (see image).

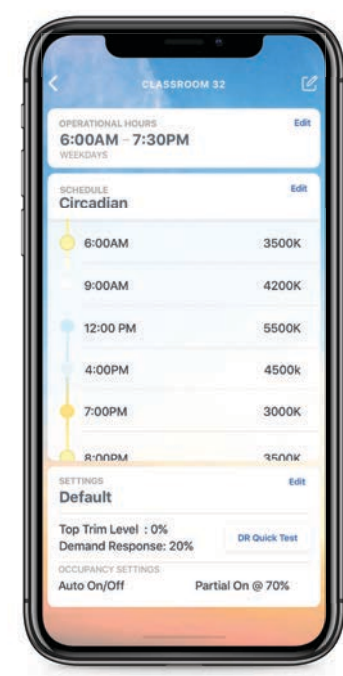
Master Switches

Unlike Local Switches, Master Switches control all the Layer Packs on the same BUS. These switches can connect to a Layer Pack or to any 'Local Switch' to control all the Layer Packs on the same BUS (see switch instructions).



See Instructions in Finetune switch packaging for more details.

Mobile Applications



Download the FineTUNE® TCS Mobile App



- **Connect to the space you want to modify**
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 Partial Off

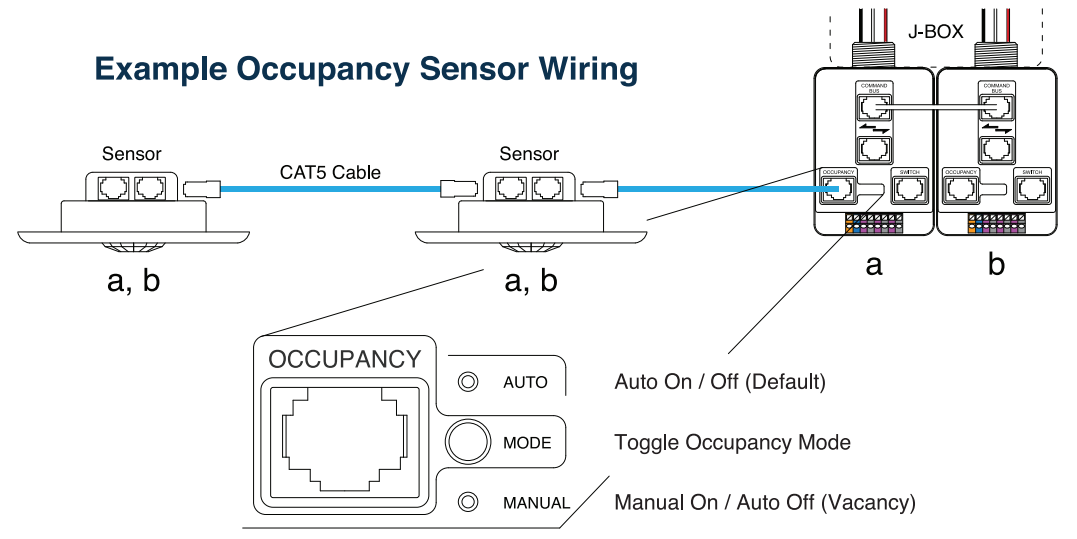
Note: Custom settings and scheduling can be created On or Off site. These settings are saved and can easily be uploaded to other spaces.

Occupancy Sensors

Occupancy sensors provided with the Finetune System will have CAT5 ports to daisy chain throughout the space (see image).

Plug an occupancy sensor or sensors into any Layer Pack's "OCCUPANCY" port and it will communicate the state of the occupancy sensor to all Layer Packs sharing the same BUS.

Once any occupancy sensor is plugged into a Layer Pack, the occupancy "MODE" can be manually selected. Auto On / Off is the default mode, or Manual On / Auto Off (Vacancy).



See Instructions in occupancy sensor box for more details.

Advanced Application References

Also See Packaging for:

- Control Station Instructions
- Daylight Sensor Pack Instructions
- Switch Instructions
- FMX Layer Pack Instructions

Please visit our website for full list of instructions: finelite.com/products/finetune-tcs