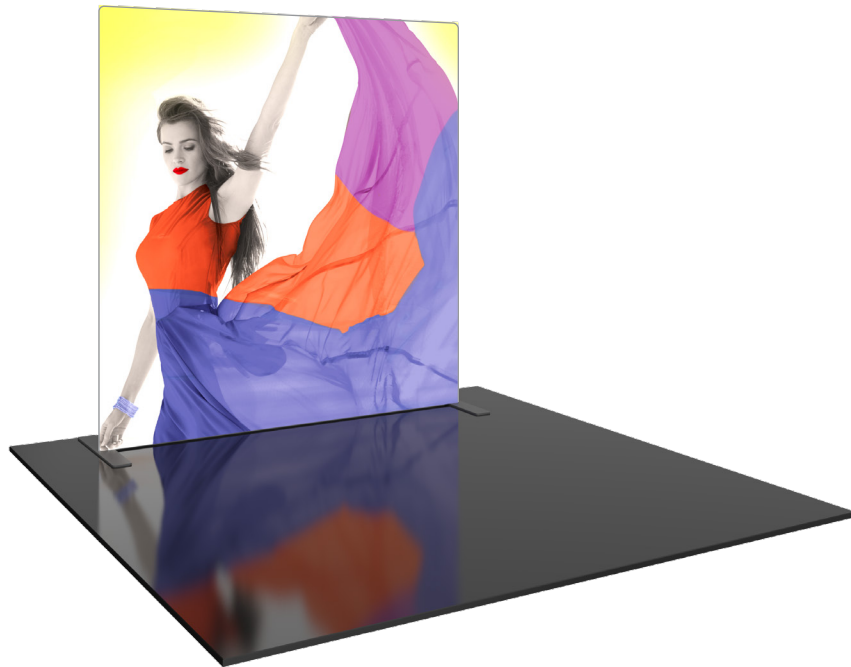# Formulate Master 8ft Dynamic Backlit Display

FMLT-DYCL-WS8-01

The Formulate® 8' Dynamic Backlit Display adds visual intrigue to any event by coupling programmed LED light curtains with an aluminum tube frame and captivating fabric graphics. Assembly is simple with light curtains that easily hook into the top and bottom of the frame and zipper pillowcase fabric graphics. The light pattern and timing is customized to bring the display to life. Stock animations are also an option.

This product may include the following materials for recycle:

aluminum, select wood, fabric, cardboard, paper, steel, and plastics.

features and benefits:

- State-of-the-art 50mm aluminum tube frame with bungee and snap-button assembly
- Dynamic LED light curtains easily attach to the frame at the top and bottom
- Single sided pillowcase fabric graphic is printed on backlit textile and includes an opaque backer

- Custom and standard animation options available
- Kit includes: one frame, one single sided dye-sublimated zipper pillowcase graphic, three light curtains, two transformers, one controller, and one wheeled OCE molded storage case
- Easy to store and ship
- Lifetime frame warranty against manufacturer defects
- 90 day electronic component warranty

dimensions:

Hardware	Graphic
Assembled unit: 92.94"w x 92"h x 25.59"d 2361mm(w) x 2337mm(h) x 650mm(d) Approximate weight without case: 62 lbs / 29 kg	Refer to related graphic template for more information. One year warranty. Visit: https://www.theexhibitorshandbook.com/download-graphic-templates

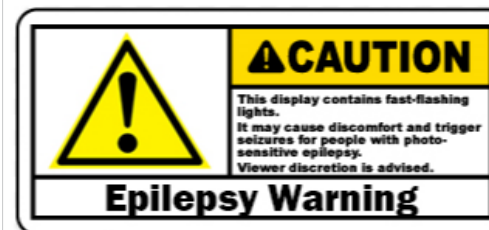| Shipping	additional information:
Packing case(s): 1 OCE Shipping dimensions: OCE: Expandable case length (l) may vary 40"-66" h x 18"l x 18"d 1016mm-1677mm (h) x 458mm(l) x 458mm(d) Approximate total shipping weight: 91 lbs / 42 kg	Graphic material: Dye-sublimation zipper pillowcase fabric - Backlit textile with opaque backer

additional information:

Graphic material:
Dye-sublimation zipper pillowcase fabric - Backlit textile with opaque backer

Transformer 1 Power Requirements:

Watts:	Amps:	Volts:
187.2W	2.1A	100-240V

Transformer 2 Power Requirements:

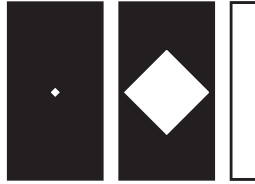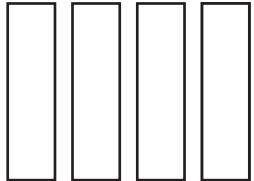| Watts:	Amps:	Volts:
600W	12A	115-230V

When included in a larger order, a different packaging solution will be provided to accommodate all contents of the order. Individual packaging may no longer be provided.
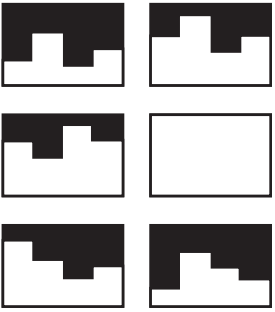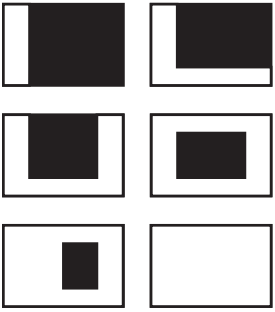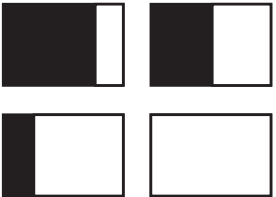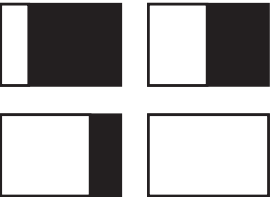
⚠CAUTION

This display contains fast-flashing lights.
It may cause discomfort and trigger seizures for people with photo-sensitive epilepsy.
Viewer discretion is advised.

Epilepsy Warning

02/25/2020

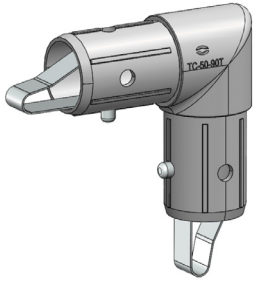# Standard Animation Options

DYN-STOCK-DESIGN-

Applies to all sizes

Cascade
CASCADE

Lift Off
LIFTOFF

Diamond
DIAMOND

Firework
FIREWORK

All Lights
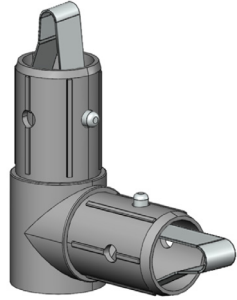**ALL-LIGHT-ON**

Applies to 8' / 10' sizes only

Noise
NOISE

Snake
SNAKE

Wave Left
WAVE-L

Wave Right
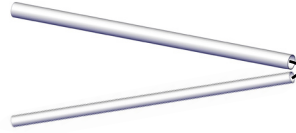**WAVE-R**

Included In Your Kit
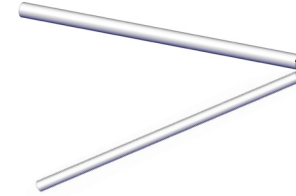
Tools, Components, & Connectors
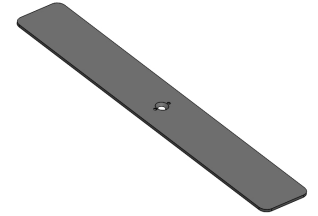

TC-50-90T x2

TC-50-90B x2

FMLT-DYCL-WS8-01-SIDE x2

FMLT-DYCL-WS8-01-HORIZONTAL x2

LN114-S2-650 x2

LED-DYCL-710MM x3

LED-CURTAIN-TRANS-2 x1

LED-CURTAIN-TRANS-1 x1

LED-DYCL-CONTROLLER x1

DYCL-SD-CARD-8GB x1
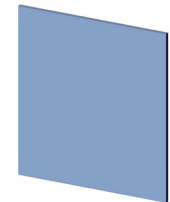

LED-DYCL-CABLES x2

HEX-KEY-5MM x1

ES30-90-SCRW x2

OCE x1

Graphics

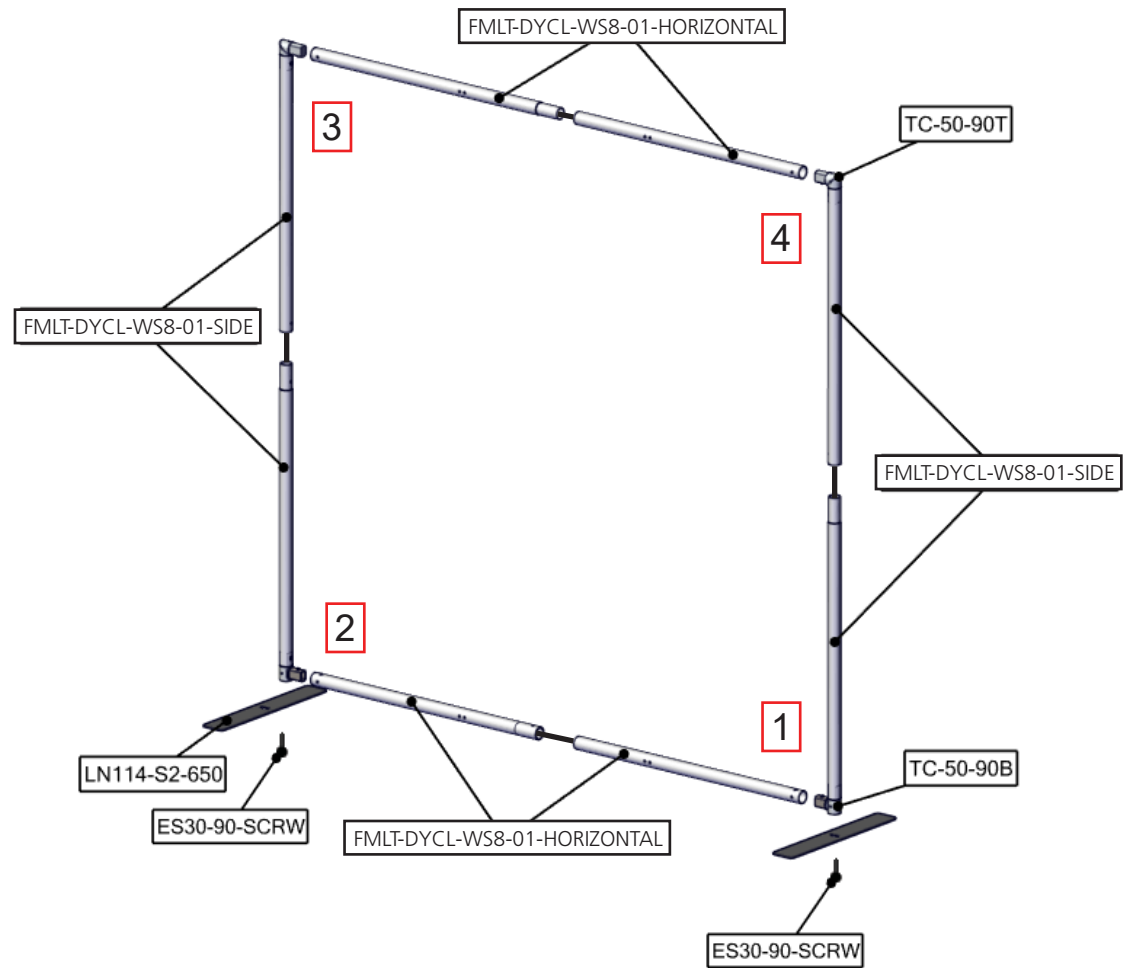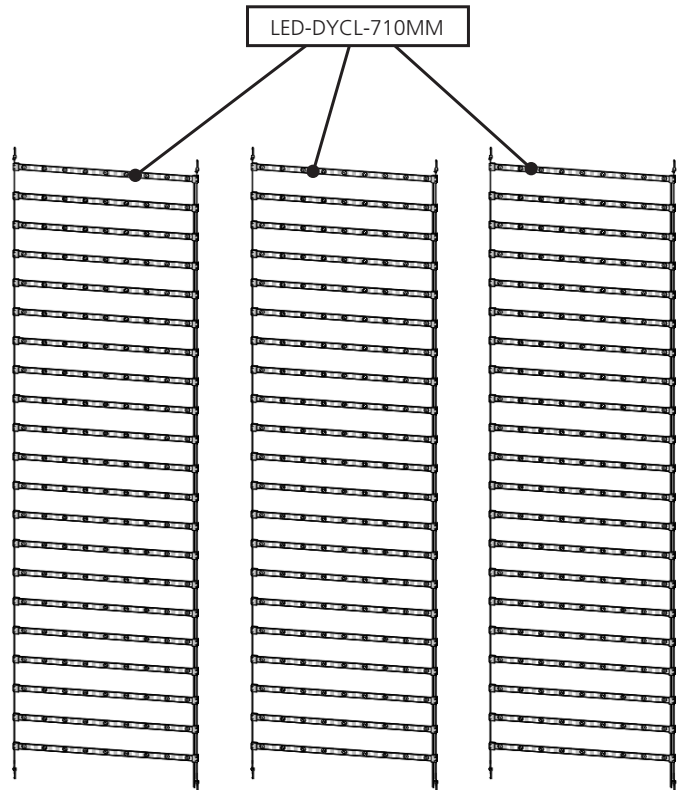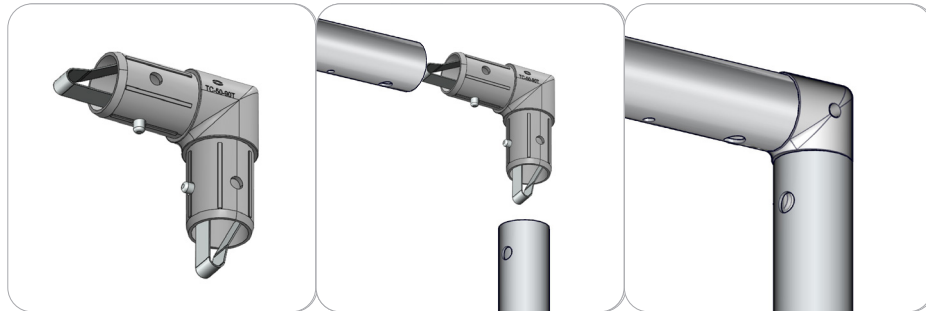FMLT-DYCL-WS8-01-G x1

Exploded View

FMLT-DYCL-WS8-01

- LED-DYCL-710MM
- FMLT-DYCL-WS8-01-HORIZONTAL
- TC-50-90T
- FMLT-DYCL-WS8-01-SIDE
- FMLT-DYCL-WS8-01-SIDE
- LN114-S2-650
- ES30-90-SCRW
- FMLT-DYCL-WS8-01-HORIZONTAL
- TC-50-90B
- ES30-90-SCRW

Connection Methods

Connection Method 1: TC-50-90T

Take the plastic connector and make sure the snap buttons are in proper position for the frame tube holes. Simply press the snap button with your thumb and carefully slide the tube onto the connector. The snap button should pop through. Some twisting may be necessary to assure the snap button has popped all the way through the tube hole. Do not force the connection and be careful with the tube edges, they may be sharp.
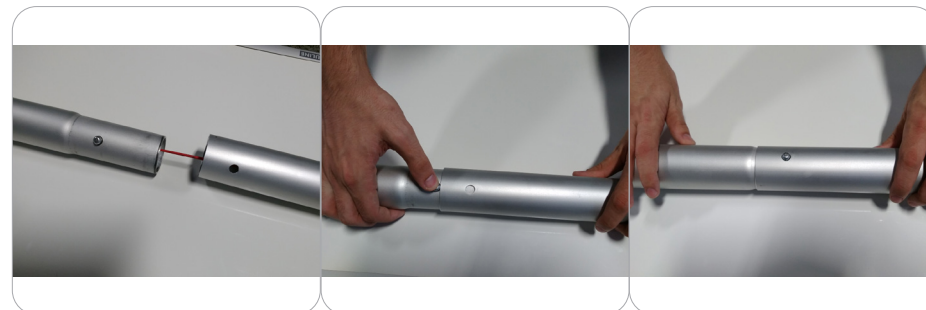
Connection Method 2: TC-50-90B

Take the plastic connector and make sure the snap buttons are in proper position for the frame tube holes. Simply press the snap button with your thumb and carefully slide the tube onto the connector. The snap button should pop through. Some twisting may be necessary to assure the snap button has popped all the way through the tube hole. Do not force the connection and be careful with the tube edges, they may be sharp.

Connection Method 3: SNAP BUTTONS

For snap button connections, locate the snap button on the connector or swage tube. Locate the hole on the corresponding tube. Press the snap button with your thumb and slide the tube and connector together so that the snap button snaps fully into the lock hole. To disassemble, press the snap button and pull apart.
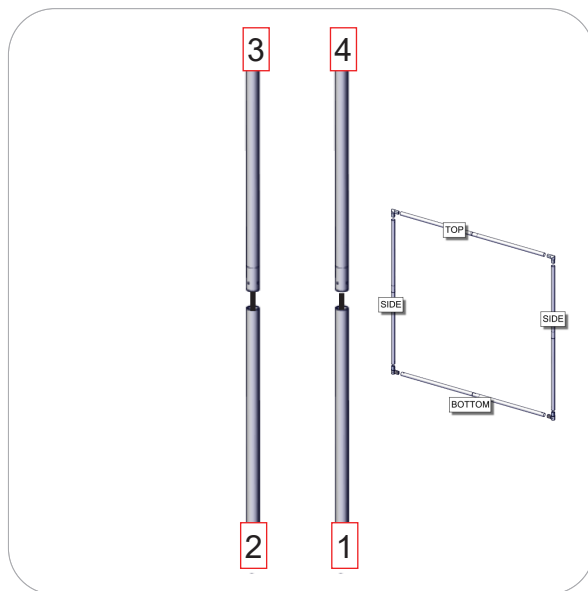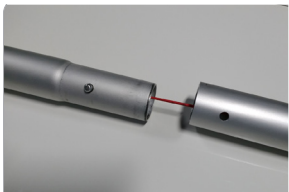
Frame Assembly

Step by Step

Step 1.

Unzip and remove all tubes from the bag. Assemble the bungee connected tubes using the push buttons. See Connection Method 3 for more details.
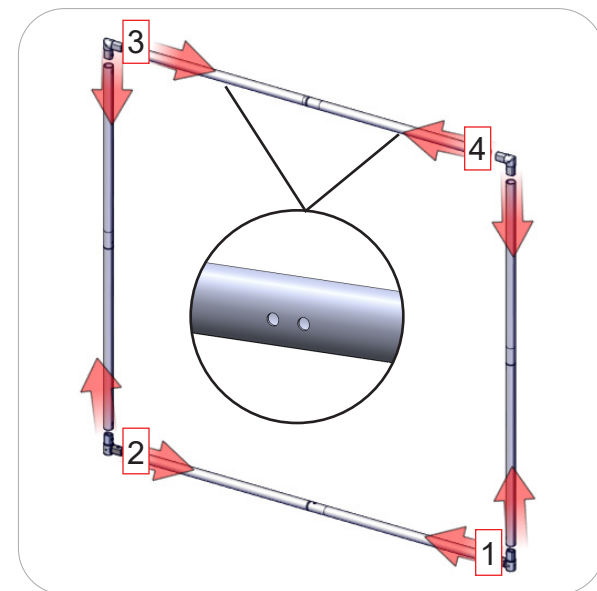
See Connection Method 1 for the top of the frame, and Connection Method 2 for the bottom of the frame.

Step 2.

Match the labeled numbers at the ends of the previously assembled tubes and combine to assemble the frame.

See Connection Method 1 for the top of the frame, and Connection Method 2 for the bottom of the frame.
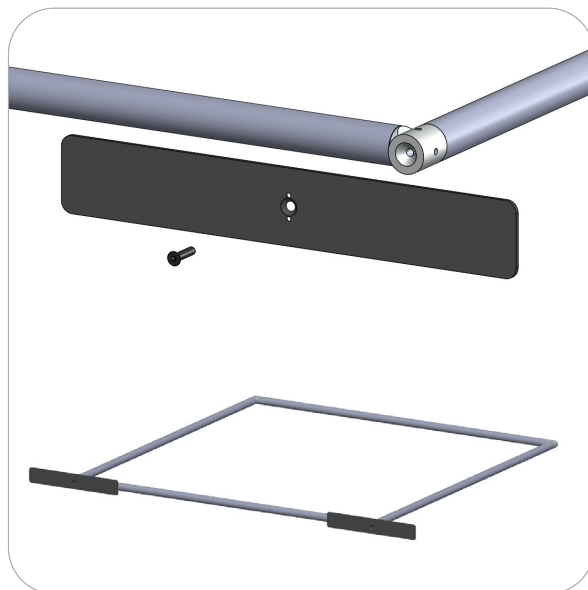

Step 3.

Attach the feet by removing the bolt from the bottom of the upright tubes, placing the foot agains the frame, and inserting the bolt through the foot and into the frame so the bolt head sits in the countersunk hole and is flush with the foot.

Hand tighten and lay the feet so they sit flat against the floor on their side.

Reference Connection Method 2 for more details.

Light Curtain Attachment

Step by Step

Step 4.

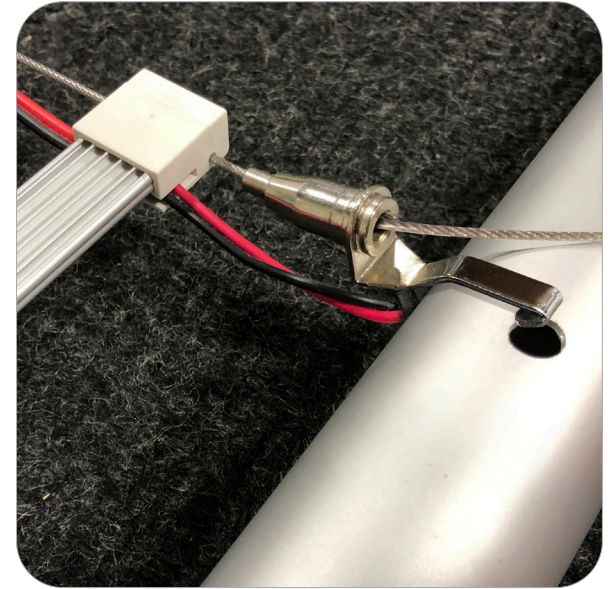Remove one of the light curtains from its box and bring it to the frame.

Check the plugs of the curtain; with the male end toward the top of the frame, unroll the curtain with the bulbs facing down.

Be sure to keep the padding and packaging to protect the lights during storage and shipping.

Step 5.

Hook the light curtain clips into the two holes at the top of the frame closest to the side.
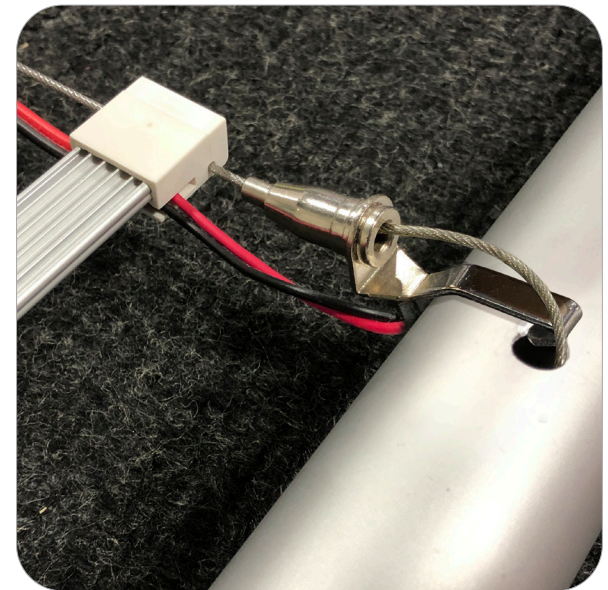

Step 6.

Unroll the light curtain and leave the bottom loose.

Repeat Steps 4-6 until all curtains have been hooked to the top of the frame.

Step 7.

Insert any excess cable of the light curtains into the hole of its connected hook to prevent it from pushing against the graphic.
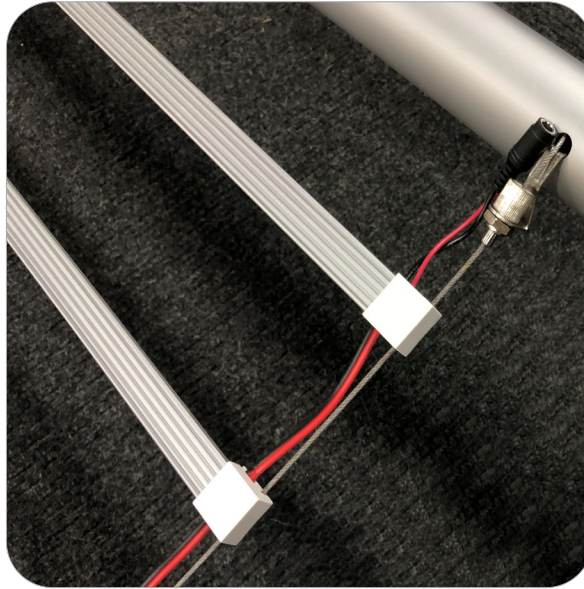
Light Curtain/Graphic Attachment

Step by Step

Step 8.

Move to the bottom of the frame and insert the light hooks from the bottom of the curtains into the holes.

Step 9.

Tighten the curtain light cables so that the curtain is taught with the frame and insert excess cable into the bottom hole to prevent it from pushing against the graphic.

See next page for in-depth instructions on tightening the curtain, and pages 10 and 11 for wiring the lights.
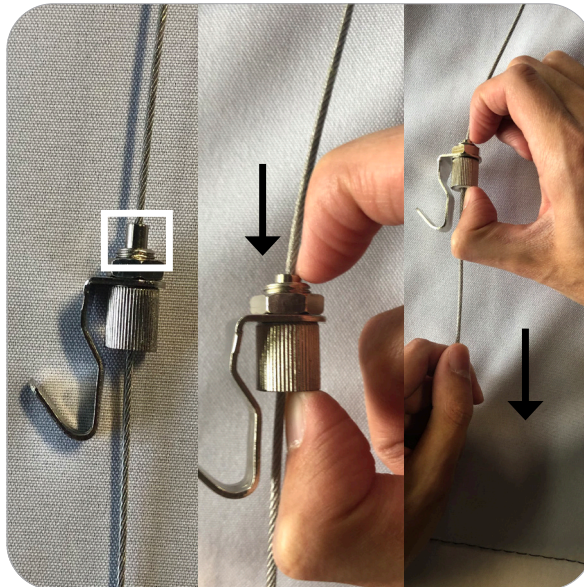

Adjusting Light Curtain Tension

Locate the curtain light hook button.

Press down on the button releasing pressure from the curtain light cable.

While pressing down on the button pull the cable away from the curtain light until it is tight with the frame.
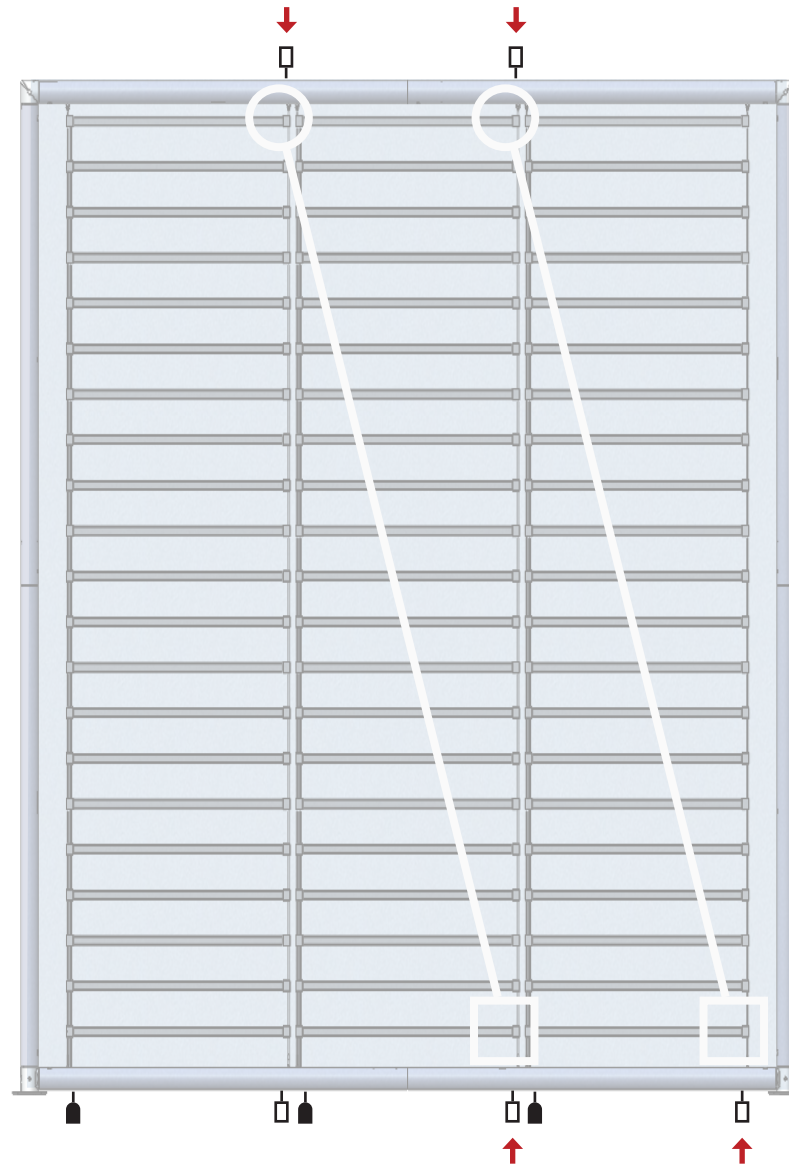
Light Connection

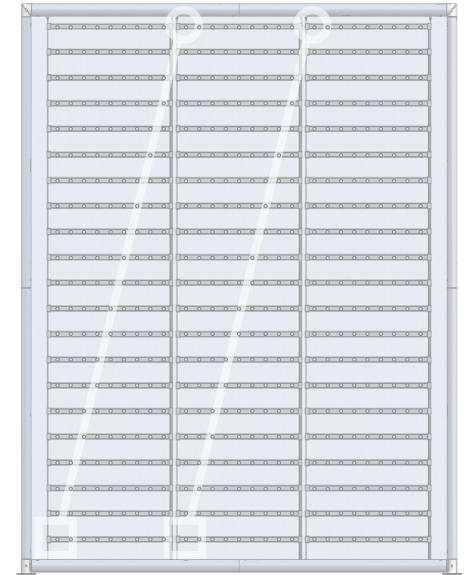## Step by Step

Step 10.

Connect the light curtains together with the LED-DYCL-CABLES;

From the back of the frame, start at the top-right corner of the left-most curtain and connect the LED-DYCL-CABLE to the bottom-right corner of the next adjacent curtain, as shown to the right.

Then repeat, starting at the top-right of the newly bottom-connected curtain, for all remaining curtains.
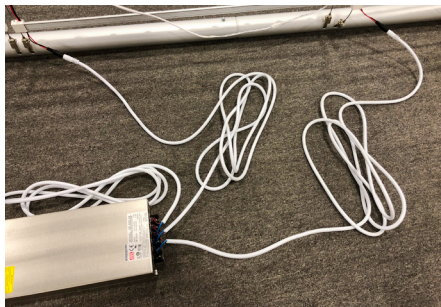
Front View

Back View

Transformer and Controller Connection
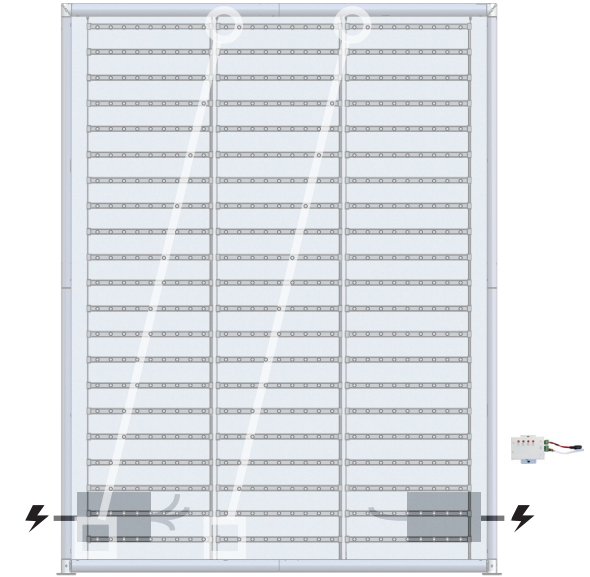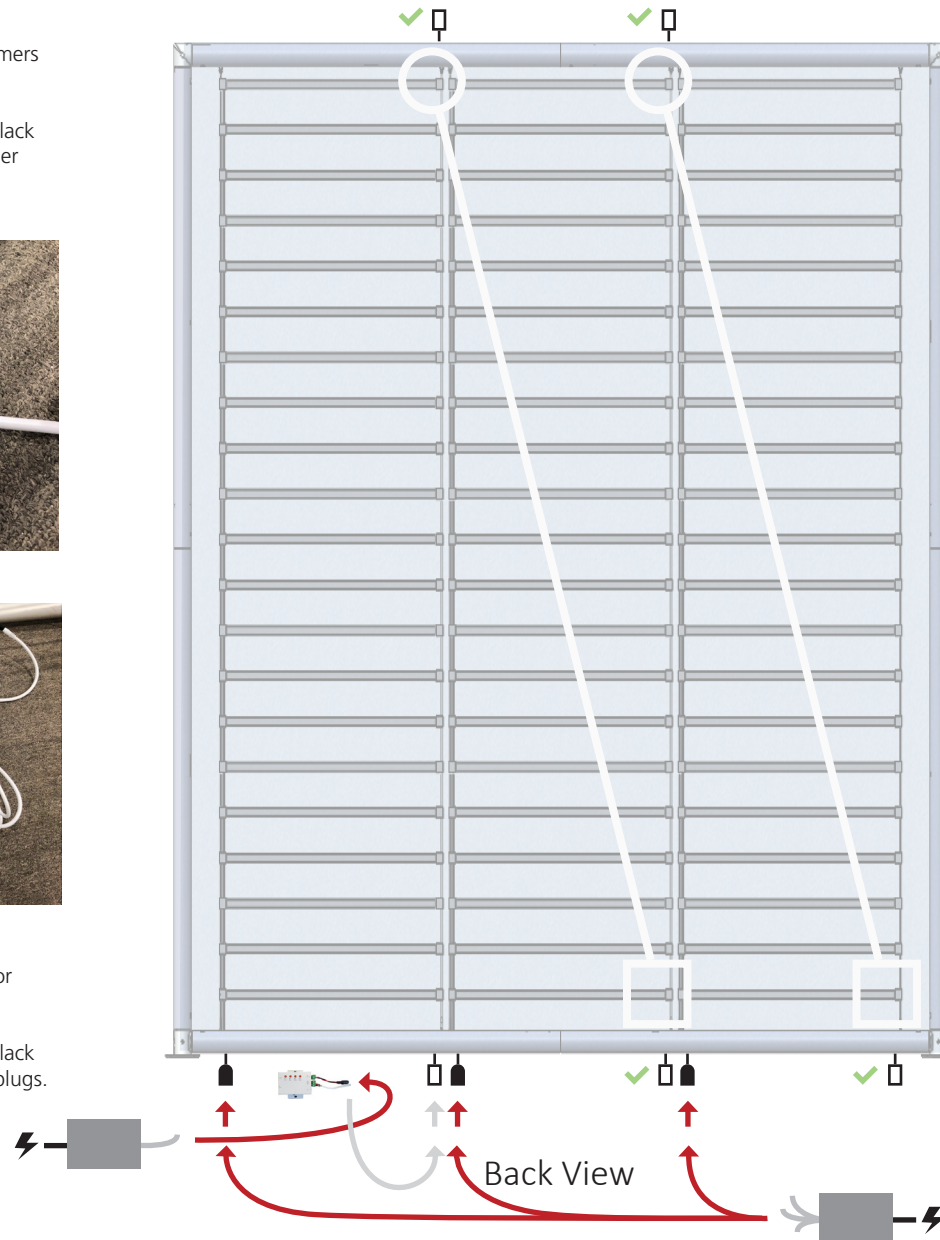
Step by Step

Step 11.

Connect the light curtains to the transformers for power;

From the back of the frame, plug in the black plug of the light curtains to the transformer plugs.
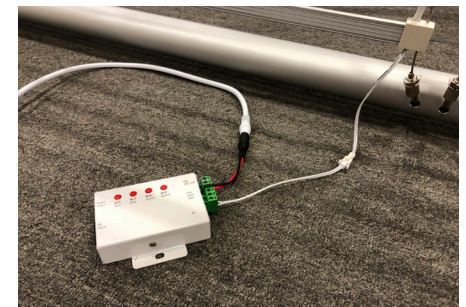

Connect the controller to a transformer for power (see image on the right);

From the back of the frame, plug in the black plug of the controller to the transformer plugs.

Back View

Front View

Important: the controller must be connected to the right-most light curtain from the front (left-most from the back) for the animation to operate correctly.

Applying Graphic & Powering Up

Step by Step

Step 12.

Rotate the feet to their correct, perpendicular orientation.

With the frame still laying on the ground, pull the pillowcase graphic over the top of the frame to begin fitting.

Make sure the graphic is being installed evenly down both sides of the frame.

Step 13.

Once the graphic has reached 1/4 to 1/2 way down the frame, you can stand the frame upright to assist in installing the graphic the rest of the way down the frame.

Roll up the padding for the lights and store in the light curtain boxes to use during dismantle.

Step 14.

Zip the bottom of the graphic; one section for each light curtain.
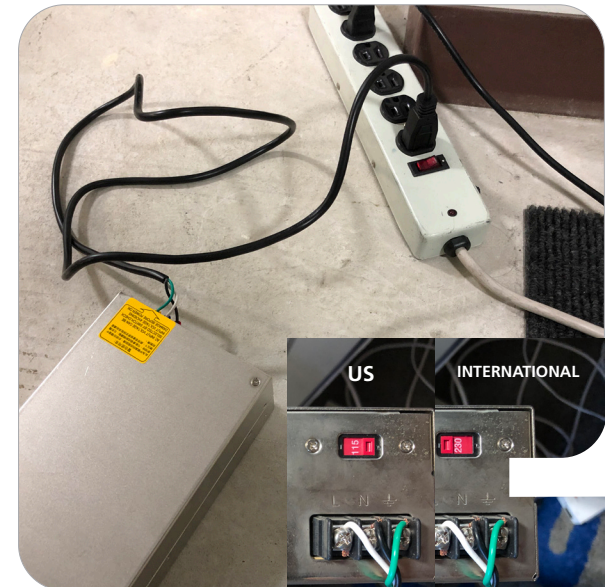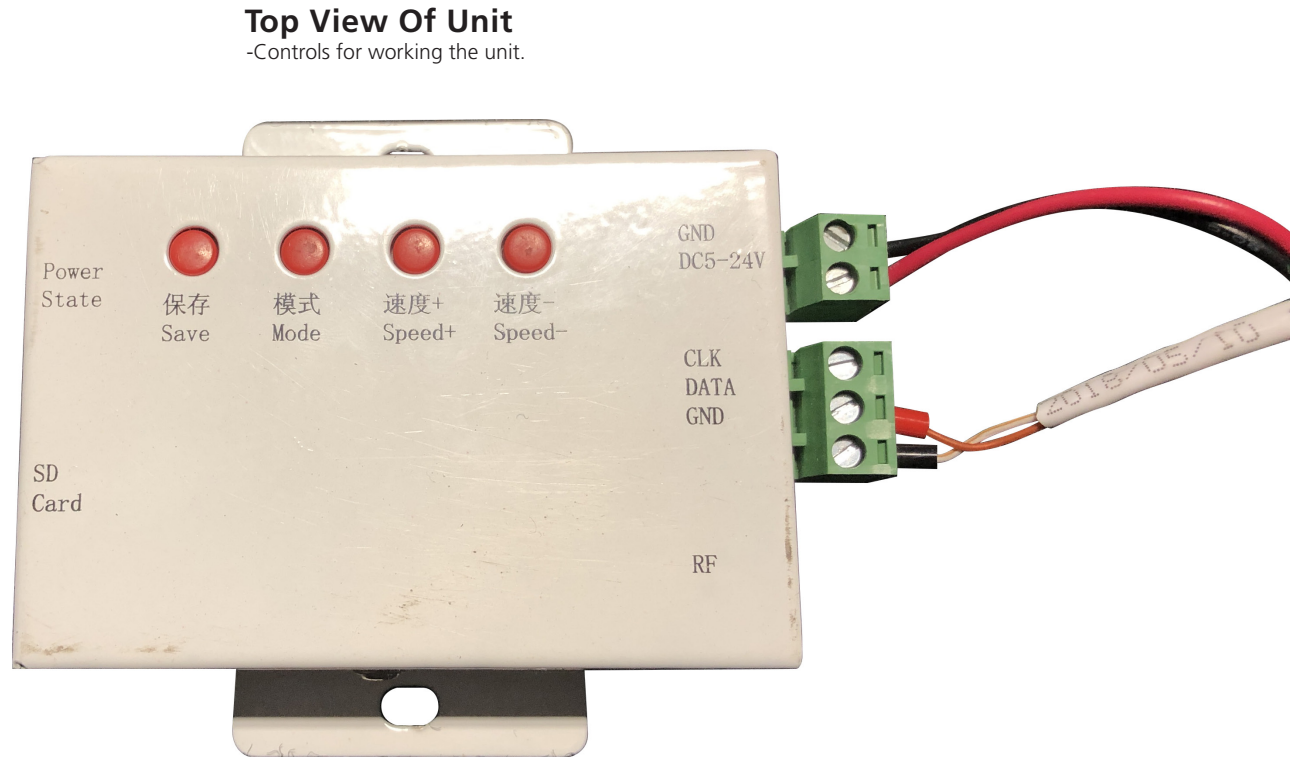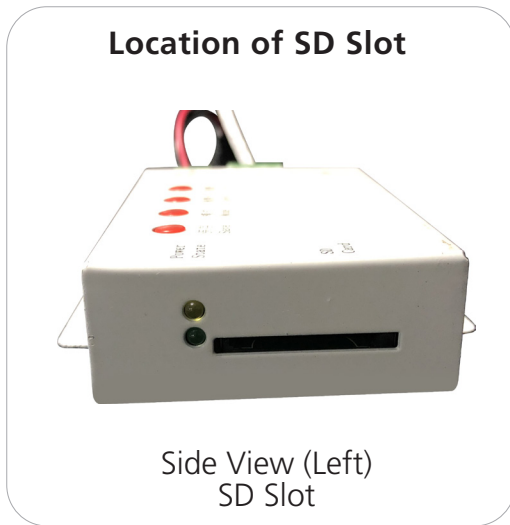

Step 15.

Plug in the transformer(s).

Do not cover or hinder airflow to the transformer(s) as air circulation is required to work properly.

Set up is complete.

Note: In the US, set the transformer to 115v; International, set it to 230v.

US   INTERNATIONAL

Dynamic Curtain Light Controller Information

Location of SD Slot

Side View (Left)
SD Slot

Top View Of Unit
-Controls for working the unit.

Power
State

保存
Save

模式
Mode

速度+
Speed+

速度-
Speed-

GND
DC5-24V

CLK
DATA
GND

SD
Card

RF

Save:	Mode:	Speed+:	Speed-:
Unused	Unused	Increase the speed at which the animation runs	Decrease the speed at which the animation runs