ECO Lines™ Projector Install Guide

This guide aims to instruct installers, owners, operators and technicians on suitable and recommended mounting techniques for industrial line projectors.

These instructions are designed for installations that utilize imperial sized hardware, but many of the configurations can be simplified with the use of metric hardware.

NOTE

Many of the mounting methods detailed in this guide will require supplementary hardware in conjunction with included pieces.

⚠WARNINGS

Please read and review the following precautions before handling the projector unit, accessories, and hardware.

✋ *Prohibited Actions*	☞ *Mandatory Instructions*
☒ Do <u>not</u> rest the projector on the cables protruding from the rear of the unit.	☑ Projectors <u>must</u> be installed by professionals and in compliance with all applicable rules and regulations.
☒ Do <u>not</u> lift the projector by any cables other than the safety cable.	☑ Projectors in wet or dusty environments <u>must</u> have lock- and O-rings installed between threaded parts.
☒ Do <u>not</u> power the LED light source while it is detached from the heat sink.	☑ Installer <u>must</u> ensure all hardware is tightened to specification, including lock-rings, knobs and pivots.
☒ Do <u>not</u> use projector if the driver, power cable or plug shows signs of damage or overheating.	☑ Projectors <u>must</u> be attached to a safety cable after mounting.
☒ Do <u>not</u> introduce flammable materials in proximity to the projector.	

WARRANTY

- Projectors have a limited manufacturer's warranty, starting on the <u>Date of Purchase</u>.
- <u>Retain your receipt</u> for reference and contact your reseller, if applicable.

NOTE: For warranty details specific to your model, please refer to the ECO Spot Spec Sheets.

UNPACKING YOUR PROJECTOR

Each projector is individually packaged in a box with a Gobo Source label. Projectors may arrive in a master carton, which may include multiple individual projector units, as well as any additional lens and spare parts.

1 Open the box and remove the first layer of foam. Place the foam on a table or other stable work surface.

2 Remove foam-wrapped driver (if the unit has an external driver) and hardware tin and set aside.

3 Pull projector out of box by lifting the plastic bag or foam casing, and then set on top the foam from Step 1.

NOTE: Ensure cables are not crimped or bent underneath

4 Unseal and remove plastic bag from projector and return to rest on foam.

5 Position the projector facing a wall at a distance equal or similar to the expected final projection distance.

6 Loosen the four (4) thumbscrews on the retainer collar.

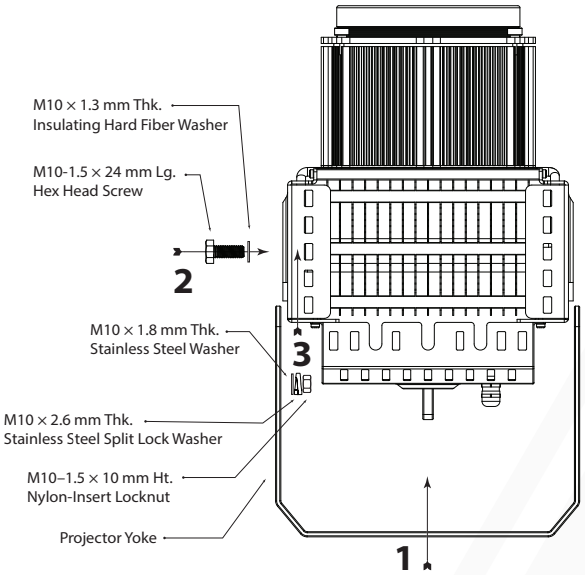
NOTE: Removing the thumbscrews makes adjustment easier

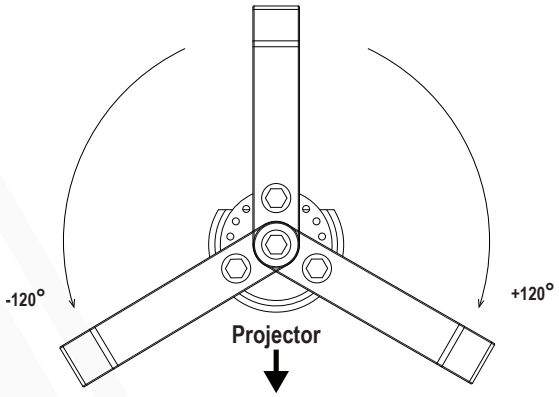
7 Connect driver to projector and wall plug adapter, then plug in the projector to verify projection appearance.

8 Rotate the lens tube until the line appears in focus, then replace and tighten the thumbscrews.

Yoke Angle Configurations

HANGER YOKE





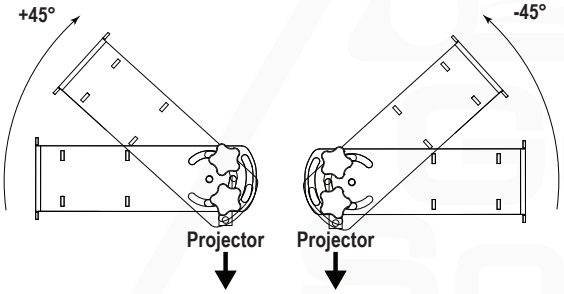
EL-150 and F150 utilize a hanger yoke and axle design, shared with other full size passively cooled projectors.

Due to the packed size of these projectors, the yoke is not pre-assembled. Hardware is included to both connect the yoke and lock it at a specific angle.

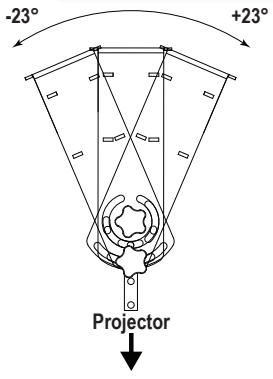
With the standard hanger yoke, a lateral pitch adjustment of ±120° is possible.

STANDING YOKE

Perpendicular Configuration



Parallel Configuration



Yokes on the EL-80 and F80 have multiple cutouts for various configurations, as well as the option to free-stand.

The two-knob standing yokes detailed above have 45° of pitch in each configuration, with a total pitch adjustment of 135°.

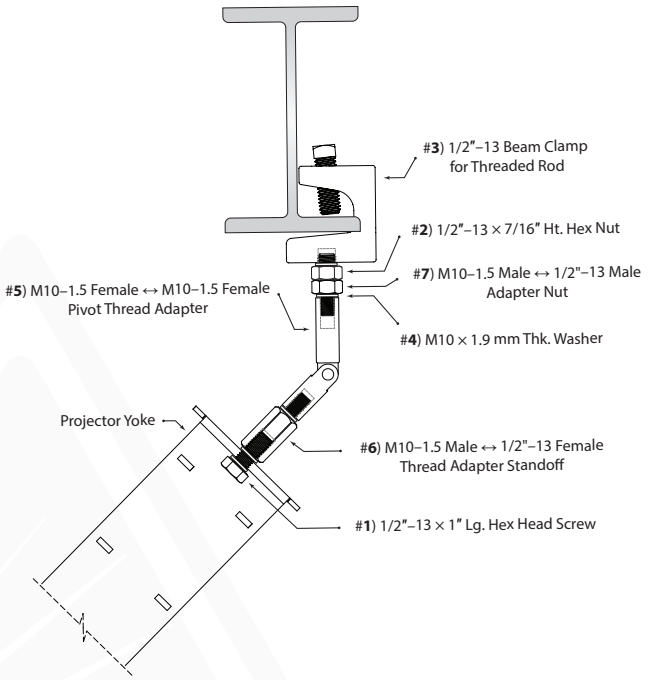
To switch between parallel and perpendicular orientations, both knobs must be removed from each side of the yoke before aligning the side cutouts with the mounting rail.

Clamp Mounting Methods

STANDARD PIVOT MOUNT

Suggested Hardware		
ITEM#	QTY	Description
1	1	1/2"–13 × 1" Lg. Hex Head Screw
2	1	1/2"–13 × 7/16" Ht. Hex Nut
3	1	1/2"–13 Beam Clamp for Threaded Rod
4	5	M10 × 1.9 mm Thk. Washer
5	1	M10–1.5 Female ↔ M10–1.5 Female Pivot Thread Adapter
6	1	M10–1.5 Male ↔ 1/2"–13 Female Thread Adapter Standoff
7	1	M10–1.5 Male ↔ 1/2"–13 Male Adapter Nut

Pivots are included with line projectors to allow the lateral movement of projected line. The pivot is metric sized, and adapter hardware is included to fit imperial fixtures.



ROD & PIVOT MOUNT

Suggested Hardware		
ITEM#	QTY	Description
1	2	1/2" × 0.125" Thk. Split Lock Washer
2	1	1/2"–13 × 2' Lg. Threaded Tie Rod
3	3	1/2"–13 × 7/16" Ht. Hex Nut
4	1	1/2"–13 Beam Clamp for Threaded Rod
5	5	M10 × 1.9 mm Thk. Washer
6	1	M10–1.5 Female ↔ M10–1.5 Female Pivot Thread Adapter
7	1	M10–1.5 Male ↔ 1/2"–13 Female Thread Adapter Standoff
8	1	M10–1.5 Male ↔ 1/2"–13 Male Adapter Nut

Projectors can be connected via a hanging tie rod. This allows for a reduction in the projection distance, causing projected images to appear brighter.

Note that the pivot is attached below the rod in this configuration.