

ECO Lines™ 80/150 User Manual

Thank you for choosing an ECO Lines™ Virtual Line LED Projector. ECO Lines projectors are designed to project a highly visible virtual line in industrial environments, thus eliminating the need for painted or taped lines.

Please read this manual before installing and operating the fixture, follow the safety precautions listed below, and observe all warnings.

ECO Lines 150



ECO Lines 80



Package Contents

ECO Lines 150: Projector with mounting yokes and power cord

ECO Lines 80: Projector with external LED driver and power cord

Safety Information

- Please unpack and carefully check for damage caused during transportation.
- Light fixtures should be installed and maintained only by qualified personnel with lighting equipment and general electrical experience.
- When suspending the fixture above ground level, verify that the structure can hold at least ten times the installed devices' weight.
- Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.
- Place your fixture at a suitable place with good airflow.
- Keep flammable materials away from the fixture.
- Use only genuine spare parts for part replacement.
- Do not look directly into the lamp; it can result in eye damage.
- Always disconnect the fixture from power before handling.
- Use only a power source that complies with local building and electrical codes and has both overload and ground-fault protection.
- Do not use the fixture if the power cable or power plug is in any way damaged or defective, or if they show signs of overheating.

Line Length and Projection Lenses

The projected line length depends on the projection distance and the lens angle.

- The larger the projection distance, the longer the line.
- The wider the lens angle, the longer the line.
- The shorter the line, the brighter it will project.

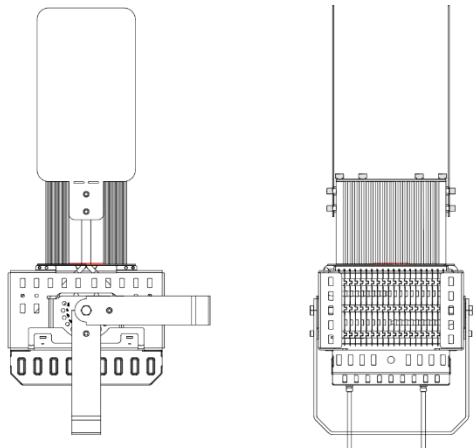
The projectors come with a pre-installed projection lens. Lenses can be interchanged to optimize the line length and brightness in relation to the projector mounting height.

Line Limiter Option

In certain circumstances, it may be necessary to shorten the projected line on one or both sides to achieve the desired line length.

Therefore, the projectors can be equipped with optional line length limiters. These are “flaps”, that can be mounted on one or both sides of the projector. The line length is adjusted by bending the limiters in or out. Line Limiters also help to achieve a more refined line end.

Note: The minimum achievable line length is approx. 30% of the max. line length. For example, a 30ft line can be limited to approx. 10ft. These values may vary.

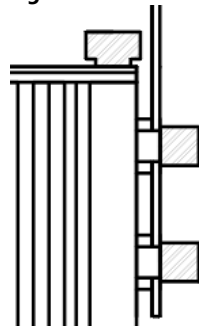


Line Limiters, mounted to the EL-150

Mounting the line limiter(s):

For handling the lenses, please refer to the chapter "Lens Configuration" below

- Remove the front thumbscrews that hold the lenses
- Remove the lenses, keep them together precisely as they were mounted.
- Place two slot nuts into the channel.
- Replace the lenses and thumbscrews.
- Place the plastic washers onto the slot screws.
- Screw the line limiter into the slot nuts.



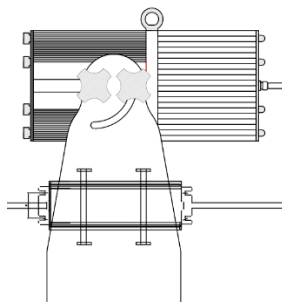
Mounting

The projectors come equipped with yokes for mounting and alignment.

Ideally, the fixtures should be mounted perpendicular and centered above the projected line. Since this is rarely the case, the fixture is equipped with a yoke and pivot to position the projected line.

The **EL-150** projector comes with one or two yokes. If you use only one yoke, install the narrower yoke. Attach it to the projector by using the provided mounting hardware.

The **EL-80** has an external driver. It can be attached to the mounting structure or to the yoke, through the designated slots with zip ties.



Pivot

The yoke allows for alignment in two dimensions. To cover all possible angles, the projector comes with a pivot. It is especially handy if the projected line needs to be adjusted sideways.



Lens Configuration

Do not touch the lens surface. If it needs to be cleaned, use compressed air, or wipe it with a soft cloth. Do not use cleaning chemicals.

The projection lens system consists of two parts, an inner lens (mounted closest to the enclosure) and an outer lens, sitting on top of the inner lens.

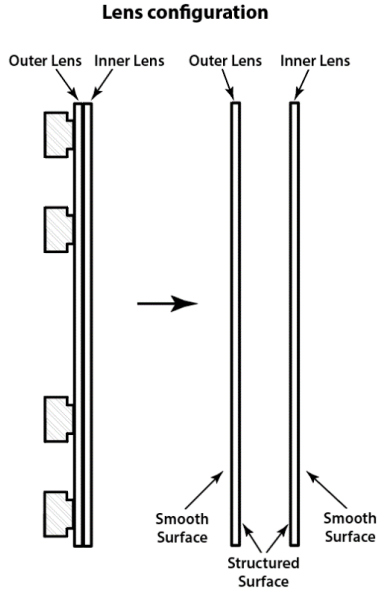
The lenses should not be handled in normal operation, only for:

- Mounting the Line Limiters
- Exchanging the lens

It is important to keep the lens mounting positions exactly as they came installed.

The lenses have a smooth surface on one side and a structured surface on the other.

- The structured surfaces face each other.
- The smooth surfaces face outward.



Short Distance Focusing

The focus is pre-set, and no adjustment is required. If the lines become too wide or blurry at distances under 15ft, add one focusing gasket between the lens assembly and the housing. If it's missing from the accessories, contact your reseller for a gasket.

Line Colors

The projectors come pre-configured with a color LED array. The colors cannot be changed without replacing the LED array. Standard colors: Yellow, Green, Red, Blue

Maintenance and Cleaning

In general, the projectors are maintenance-free. In dusty environments, they can be dusted off with compressed air.

Do not try to clean the lens with any chemicals or paper towels as they can scratch it. Instead, use compressed air from a spray can. If you need to wipe the lens, use a soft microfiber cloth.

Warranty

Two years from Date of Purchase. Keep your receipt for reference and contact your reseller in case of warranty issues.

For further technical information, please refer to the ECO Lines Spec Sheets