LED Stealth-T

Installation Guide
Safety

- Fixture installation should be performed in accordance with local and national codes. All fixtures must be properly grounded.
- To prevent fire or shock hazard, do not expose the unit to water or moisture. LED Stealth-T fixtures are listed for indoor use only.
- Do not attempt to dim a non-dim fixture.
- A qualified technician should perform service on fixtures. Do not remove the driver cover until the unit has been fully powered off.

Owner's Record

The model and serial number of this product can be found on the side of the fixture's main housing. You should note the model number and the serial number in the space provided and retain this book for future reference as a permanent record of your purchase.

- Model #: ______________________
- Serial #: ______________________
- Date of Purchase: _______________

Product Description

LED Stealth-T fixtures are glare-free videoconference lighting fixtures, ideal for e-learning and telepresence applications. Available with four louver types: Forward Throw, Corner Throw, Bidirectional Throw or Downward Throw. Multiple driver types are available.
Housing:
Die-formed, code-gauge, cold-rolled steel housing with aluminum louvers. Fixture may be used in a 24-in or 600-mm lay-in grid ceiling or cut into drywall or plaster.

Louver Frame:
Die-cut, code-gauge, cold-rolled steel with (4) pull-down spring latches. Louver frame may be removed from fixture without tools.

Finish:
Fixture body is painted with 20% gloss, electro statically applied white enamel finish. Louver and frame are painted with matte white enamel.

Driver:
High-frequency electronic driver with a power factor > .90, THD of <10% and a Class A sound rating. A variety of dimming drivers are available (DALI, Lutron Eco-System and 0-10V Analog). Fixtures are available for operation on 120VAC, 230VAC and 277VAC, 50-60 Hz.

Color Temperature:
3000K: 36,000 hours - 90CRI
3500K: 36,000 hours - 90CRI
4000K: 36,000 hours - 90 CRI
5000K: 36,000 hours - 80 CRI

Louver Options:
Louvers are available for angled operation (approximately 45°) in one direction (FW or CA options) or bidirectionally (BI option). Louvers are also available for downward-throw operation (DN option). Louvers are backed with a matte white lens.

Dimensions:
The overall dimensions of the fixture body (with the exception of the louver frame) is 23.4- x 23.4- x 4.8-in (595- x 595- x 122-mm). The approximate weight of the fixture is 18-lb (8.2-kg).

Labels:
UL, cUL, CE, CCC and PSE certifications pending.
1. Unpack the fixtures. (The louver frames may be packed with the fixtures or separately.)
To prevent damage, install the fixtures then install the louver frames.

2. Prepare the line-voltage wiring to the fixtures. Depending on building conditions, it may be necessary to install the power and control wiring before the fixture is placed in the ceiling. Ensure that the supply voltage matches that required by the drivers. To install the power feed, remove the knockouts as needed and install the correct type of power cabling and strain relief (not provided). Connect the wires from the feed using wire nuts, observing the wire color-coding, and re-install the knockout plate. (Brightline fixtures intended for the North American market use Black/White/Green wires respectively for Line/Neutral/Earth Ground; fixtures shipped to Europe use Brown/Blue/Green-Yellow for Line/Neutral/Earth Ground.) You may want to install sufficient slack in the power cable so that, if necessary, the fixture can be moved to an adjacent ceiling opening.

3. These fixtures are not Insulated Ceiling (IC) rated. Maintain the proper distance from insulation (3 in [76 mm] in the US and Canada).

4. If the fixture requires low-voltage control, the proper wiring must be run to each fixture. Connect the control wires inside the fixture, observing the proper color-coding. Install the control wiring above the ceiling.

5. Fixtures can be mounted in two ways: either flush-mount in a hard ceiling, such as plaster or drywall; or mounted in a T-Grid acoustical-tile ceiling.

**Hard Ceilings:** Verify that the locations in which you intend to mount the fixtures are free of above-ceiling obstructions such as ceiling joists, air conditioning ducts, etc. For ease of installation, a minimum of 8 in [203 mm] of clear height above the ceiling is recommended.

In accordance with drawings provided by Brightline or the local architect or engineer, prepare the ceiling by cutting openings that are 24.56- x 24.56-in [624- x 624-mm] in size.

Install wiring as described above with the mounting clips in their recessed position (folded back next to the fixture, see figure 1), lift the fixture into its opening.
5. (continued) Using a screwdriver, turn the screws on the bottom of the mounting clips until the clips turn approximately 90° and rest on the frame or ceiling structure. (Figure 2) Adjust the clips so the bottom of the fixture is flush with the exposed side of the ceiling. (Figure 3)

**T-Grid Ceilings:** Prepare the T-Grid to receive the fixtures. Fixtures are available for either 2' x 2'-ft or 600- x 600-mm grid spacings. Depending on the ceiling layout, it may be necessary to add additional track sections and/or prepare different sized ceiling tiles. For ease of installation, a minimum of 8-in (200-mm) of clear height above the track is recommended. Make sure that the T-Grid is sufficiently braced to accept the weight of the fixtures. Place the fixtures into the correct openings in the ceiling grid in accordance with plans provided by Brightline or the local architect or engineer.

5A. Install “safety wires” on the tabs on the sides of the fixtures and attach to the building structure, in compliance with local codes. (Figures 4 and 5) Do not rely on the T-track alone to hold the weight of the fixtures.

*Note: Use screwdriver to bend tabs outward to install safety wires.*
5. If necessary, complete the installation of the power and control wiring.

6. Energize the fixtures and test for proper operation.

7. Install the louver assembly, with the openings in the louvers pointed in the correct direction(s) as indicated on the project drawings. (Figure 6 and 7)
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
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</thead>
<tbody>
<tr>
<td>Fixture does not light.</td>
<td>1. Missing or improper incoming power.</td>
<td>1. Verify that the fixture is receiving proper voltage.</td>
</tr>
<tr>
<td>Lights go to full but do not dim to minimum.</td>
<td>1. Drivers are not properly grounded.</td>
<td>1. Check to see that the fixture is properly grounded.</td>
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<tr>
<td></td>
<td>2. Improper control signal.</td>
<td>2. If a low-voltage-control fixture, the control signal may be missing, or the fixture may not be properly configured.</td>
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<tr>
<td>Lights are flashing or strobing.</td>
<td>Wrong voltage for driver installed.</td>
<td>Verify that the supply voltage is correct for driver installed.</td>
</tr>
<tr>
<td>Driver buzzes or hums.</td>
<td>Defective driver.</td>
<td>Identify location of buzz and replace driver if necessary.</td>
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</table>

For optimal fixture performance, it is necessary to keep the lenses clean. Use a dry, non-abrasive cloth to remove dust. Avoid the use of materials that might scratch the lens.
Notes:

A DALI (Digital Addressable Lighting Interface) signal controls these fixtures. The fixtures will function (as switched on/off) in the absence of a control signal.

The control signal is connected to the fixture through the 3-pin XLR-type receptacle on the side of the unit. As this is low-voltage wiring, it may not be necessary to install the control wiring in conduit. Brightline recommends that it provides the DALI control cables as part of your system order. Specification should be verified with Brightline if control cables are provided by others. Two receptacles are provided to allow the control wiring to be daisy-chained.

As each fixture is assigned an individual address, fixtures on a DALI control line may be dimmed to differing intensities.

DALI control wiring is topology and polarity independent. DALI control cables may be daisy-chained. Keep total wire run as short as possible. See the literature that is provided with your DALI controller, or contact Brightline for details.

Power for the DALI network is provided by the Busmaster. The Busmaster and the DALI network are configured by using the supplied WinDIM software. Optionally, the Busmaster may be controlled by an A/V processor via its RS-232 serial interface.

Each fixture requires a source of unswitched AC power. For clarity, only one fixture’s power feed is shown.
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Power for the DALI network is provided by a separate power supply. Installation instructions are included with Busmaster.

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Notes:

Fixture provided with 1 Phillips Xitanium driver, #XIO75C 200V 054 BST, 75W

0-10V Dimming - 150 μA source current from driver
Notes:

DMX addresses distribute sequentially by port. Looking at the back of the device, addresses read from right to left, 1-8.

Up to (7) LST fixtures can connect per 6060 Power Driver.

Brightline's low-voltage fixtures cannot daisy chain. Each fixture must homerun back to the 6060 Power Driver.

Brightline's low-voltage LED Stealth-T fixtures require (3) wiring homeruns. Fixtures ship with a budgeted length of 225-ft of 16AWG single pair wiring.
WARRANTY

**Brightline** guarantees all its products to be free from defects in materials and workmanship for a period of three (3) years from the date of shipment.

PROCEDURES

If any product is found to be unsatisfactory under this warranty, the buyer must notify **Brightline** immediately. Once a course of action has been determined, if it is necessary to return the product to **Brightline** a Return Authorization (RA) will be issued. Ship the product directly to **Brightline**, 580 Mayer Street, Building #7, Bridgeville, PA 15017, USA. The RA number should be marked on the shipping carton. The unit will be replaced or put into proper operating condition, free of all charges if under warranty. The correction of any defects through repair or replacement by **Brightline** shall constitute fulfillment of all obligations and liability of **Brightline** to the buyer under this warranty and the contract of sale.

DISCLAIMERS

**Brightline** is not responsible for damage to its products caused by improper installation, maintenance, or use; by improper electrical hookups; or by unauthorized repairs. Failure to notify **Brightline** of unsatisfactory operation or any improper or unauthorized installation, maintenance, use, repairs, or adjustments shall terminate the warranty and **Brightline** shall have no further responsibility under the warranty. **Brightline** shall not be liable for special or consequential damages in any claim, action, suit, or proceeding arising under this warranty or contract of sale, nor shall **Brightline** be liable for claims for labor, loss of profits or goodwill, repairs, or other expenses incidental to replacement. **Brightline** makes no other warranty of any kind whatsoever, expressed or implied, and all implied warranties of merchantability and fitness for a particular purpose that exceed the obligation specifically described in this warranty are hereby disclaimed by **Brightline** and excluded from this agreement.

All shipments, unless otherwise noted, are F.O.B. factory. The customer is advised to inspect for shipping damage, apparent and/or hidden. If detected, notify the transportation company and file your claim.