



Del Lighting Installation & Fiber Guide

Installation Guide

This manual was designed to assist in the installation and operation of our fiber optic illuminators. Please read and understand this manual before beginning installation. If you have any questions, please contact us at (210) 590-5196 – Monday to Friday – 8am to 5pm CST.

WARNING!!!!

Before starting the installation process disconnect all power supply service. Failure to do so may lead to severe electrical shock, which can result in death or severe personal injury.

Electrical connections must be made by a certified electrician in accordance with local codes. There is a risk of electric shock or electrocution if unit is not wired properly.

Lamp and lamp shield may be hot. Exercise caution when working with or near these items. Failure to do so may lead to fire or personal injury.

ANY modifications to the illuminator will void your warranty. Also, ANY modification to the illuminator or use not in accordance with manufacturers specifications and guidelines absolves Del Lighting, Inc and the illuminator manufacturer from any and all liability for any injury or property damage that the modification may have caused. If you have any questions concerning the performance or safety features, please call Del Lighting, Inc. or the manufacturer for input concerning these issues.

GENERAL INFORMATION

Voltage used must match voltage rating of unit.

Electrical circuit used should be a GFI (Ground Fault Interrupt) circuit.

Install unit a minimum distance from water, according to local codes.

Unit must be installed in accordance with either NEC 680-31 Standards or CEC 68-068 Standards.

Do not install unit in an enclosed area, temperatures above 110°F or near flammable liquids or material.

Do not operate without lamp in place. Allow lamp to cool before removing.

Replace lamps supplied by DEL Lighting, Inc.

For servicing purposes, install in an area that is readily accessible. The unit may be mounted on a wall, floor or ceiling. Good air circulation is a must. Avoid areas where debris (leaves etc.) might clog the fans. Also, avoid dusty areas as dust could be drawn into the unit and cause the unit to overheat, thus damaging multiple parts. If the unit is installed outdoors (outdoor units), it should be mounted on a fence or post 18" – 20" above ground level. In this case, make sure the fiber port is on the bottom (S150 series). Your cable should go straight at least 12" out of the illuminator before any large bends. Fiber installed underground outdoors should be installed in a conduit. Use sweep elbows only. Do not use 90 degree plumbing fitting. After the cable is set, seal the opening with RTV silicon caulking or similar. This will prevent water or debris from entering the conduit.

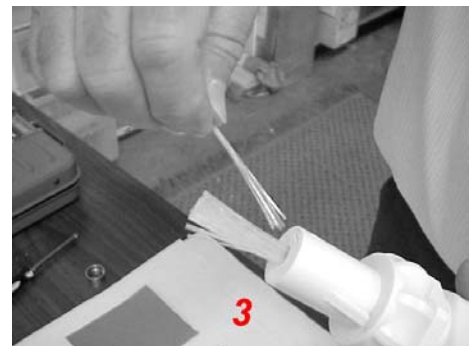
There are some things you need to do to make sure your project performs as you expect it to. You must polish the cable end that goes into the illuminator. If you don't, the light output will be weak and you could actually melt the cable (one good reason to have a service loop in the cable!). Also, if the cable ends are not trimmed before you insert the harness you could damage or destroy the color/twinkle wheel. Cut the cable with an anvil type garden shears or, for larger cable, PVC cutter.

To prepare the cable: Trim the cable jacket from the fiber strands (be careful not to cut or damage the Teflon coating on the outside of the fiber strands. Leave approximately 4" of exposed fiber strands. If you nick the strands you WILL reduce the fibers ability to transmit light. (Picture 1)



Unscrew the large nut from the fiber port and place it on the cable. Place the exposed fiber strands into the fiber port, extending the fibers about 1/2" beyond the port and screw the nut back onto the port face. Tighten carefully, this will determine the light intensity, the tighter the cluster of fibers before the final cut, the more light will be transmitted. (Picture 2)

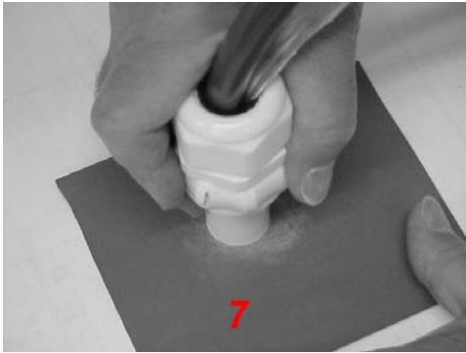
If the fiber ends are still loose you will have to use the reducers or extra fibers to "fill in" the empty space. The reducers, in order of fiber capacity, are: 500 strands, 300 strands, 200 strands and 100 strands. To use the reducers, just place one inside the other until you get a tight fit on the cable. If it's still loose, place 4" lengths of fiber into the fiber ends sticking out of the fiber port until it is as tight as you can make it. (Picture 3)



Heat the blade of a utility knife or other sharp knife (we provide one for this purpose). Make sure the blade is quite hot before cutting the exposed fiber. Carefully trim the excess fiber in front of the port end (use the metal ring on to make sure you don't melt the port). (Picture 4&5)

Do not use a sawing action; rocking back and forth is OK. Press down on the fiber and allow the hot blade to do all the cutting. (Picture 6) A smooth cut (like ice smooth) will increase the light transmitted dramatically. Now remove the ring.





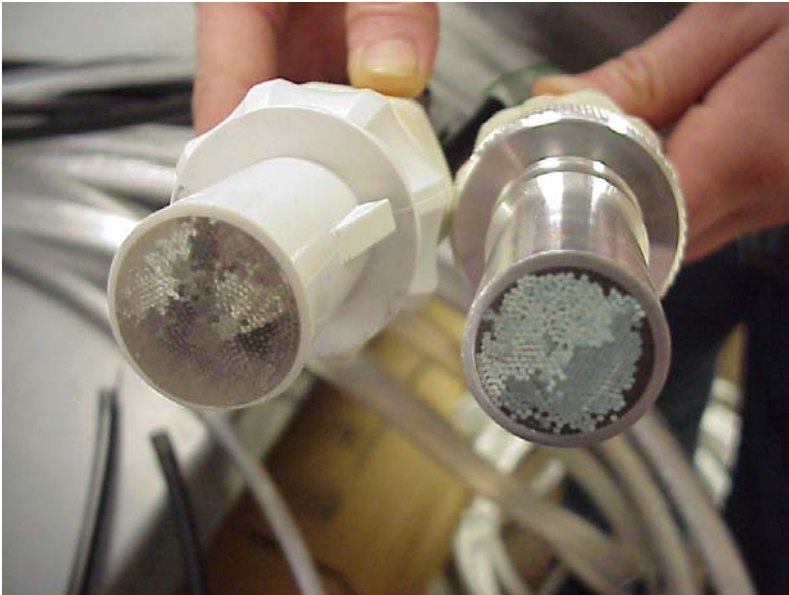
(Picture 7) After you cut your cable, it's very important that you prepare the end of the cable that will go into the illuminator port. You can do this quite easily by using 150 grit sandpaper to remove the rough edges of the cable. Sand the strands until they're fairly smooth. Finish the cable by using 600 grit wet/dry

sandpaper. Sand until the cable is mirror smooth - this will give you the maximum light output for your project! (Picture 8)



PLEASE REMEMBER TO PUT THE ILLUMINATOR WHERE IT CAN GET COOL AIR!

Notes on Metal Halide illuminators: It takes about 5 minutes for these units to come to full brightness. They also have a heat protection switch for protection of the illuminator. When you turn off your unit, it will not turn back on right away, please allow about 3 minutes for the unit to cool. When you change out the lamp, it gets VERY hot, don't touch it, just the base after it has cooled. Note: You **CAN NOT** place fiber optic illuminators on dimmer switches.



RIGHT!



WRONG!

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