

Medium Profile Channel

Please verify the contents of the packages!

Please read instructions entirely before starting installation.

Be sure power is turned off before installing or modifying the system.

#### Call Tivoli, LLC tech support with questions.

Caution: Architectural Channel is designed to work with listed Class 2 12V DC transformers only. Use of any other power source will cause damage, shorten the life of the fixture and void the

Consult any and all applicable local and national codes for installation.

**Do not** conceal or extend exposed conductors through a building wall as per local electrical code.

Warning: With any luminaire for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injuries. This fixture should be installed by a certified professional.







## Installation instructions:

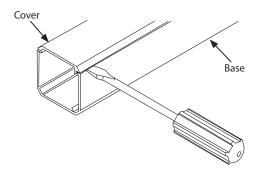
## **Tools / Materials required**

Wire stripppers for 12GA wire **Pliers** Measuring tape Wire cutter Crimping pliers Wire nuts for 12GA wire Wire connectors for 12GA Wire Chop Saw

Tivoli's Architectural Channel is used mostly for decorative lighting designs. To design the best and most attractive system, first determine lamp spacing and accessories needed.

#### **Cover Removal:**

Architectural Channel is a two-piece aluminum channel extrusion with a snap lock type closure system. It is shipped with the Cover in position on the Base. To install the fixture, you will need to remove the Cover first. Insert a flat head screwdriver between the Cover and Base and rotate screwdriver a quarter turn. This will cause the Cover to pop open. Once started, the Cover can be easily pulled away from the Base.



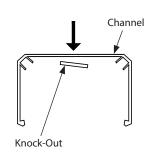
### Mounting:

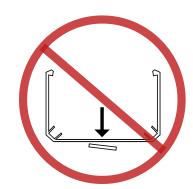
Step 1: Measure and cut Base and Cover from supplied 12 ft lengths.

**Step 2:** Attach Base using screws (supplied by others) appropriate for the mounting surface, ie: wood screws for wood.

Note: It is suggested the Base be securely attached at each end and at intervals not exceeding 24". Tivoli Lighting has provided 1/4" knock out holes spaced every 24" (the spacing is closer on pieces ordered shorter than 36"). These can be knocked out by using a small punch hammer.

WARNING: Attempting to punch in the wrong direction will cause the aluminum channel to distort. An alternative method is to drill a clearance hole at the desired location and attach the Base to the surface with a screw. The Base may be mounted in any fashion with the lamps facing up, down or horizontal. This allows for either wall or ceiling mounting. However proper clearances (as stated in the national electrical code) should be maintained between lamps and combustable surfaces.







# Installation instructions (continued):

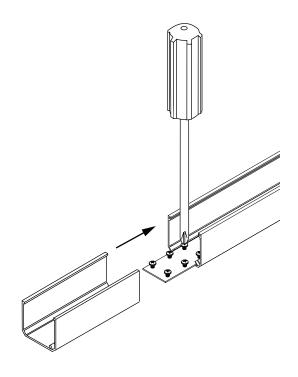
### **Straight and Radiused Channel Assembly:**

**Step 3:** After the first Base section is securely mounted, insert an internal bracket into the end of the Base so half of the bracket remains outside the Base. Tighten the screws along the part of the bracket that is located inside the Base. Slide the next Base section over the exposed end of the internal bracket so it is flush against the previous Base section and attach it to the mounting surface. Tighten the remaining screws along the internal bracket. This will allow the section being attached to be aligned squarely with the first section, leaving a clean, attractive and mechanically sound connection. This is especially important when installing the fixture in a wet location. The better the connection the less chance water will have to enter the fixture.

**NOTE:** If the fixture is installed in a wet location, it must bear the label from Underwriters Laboratories stating that it is approved for such use

**Caution:** Do not install fixture marked "approved for damp locations" where it will be exposed to rain, sprinklers or any other source of water.

**Note:** When assembling a fixture made up of several Base sections (whether it be a corner "L" or "T", "Cross-shape" or just a straight splice connection) they should be installed one piece at a time. Adding pieces as you go will assure tight fitting splice joints. In some cases, it may be desireable or necessary to assemble the channel prior to positioning or mounting. If this is the case, be sure to provide sufficient support when lifting the assembly into place. Failure to do so could cause damage to the aluminum channel.



# To add additional channel to an existing run:

#### Be sure power is turned off before installing.

**Step 1:** To add another run of lights, pull out wire from end of existing run. Either cut hole through end cap or replace end cap with an end cap with hole (available by special order).

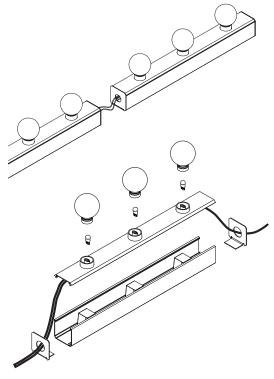
**Step 2:** Fasten wires to new run with wire connectors. Be careful to maintain polarity. The smooth wire is positive (+) and the ribbed wire is negative (-).

**Step 3:** Push wires and connectors back into extrusion.

#### **Cut Instructions**

**Step 1:** To shorten run, determine location for cut and mark cut line on Cover and Base. Cut the wire first, leaving some additional length for connections and move wire out of the way before cutting the Cover. Cover and Base may be cut at any location between sockets.

**Step 2:** Place wire nuts (by others) and place end caps at end of run.

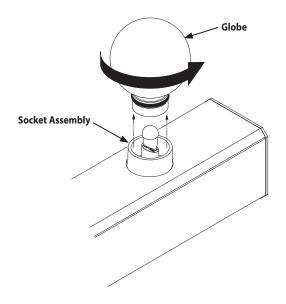


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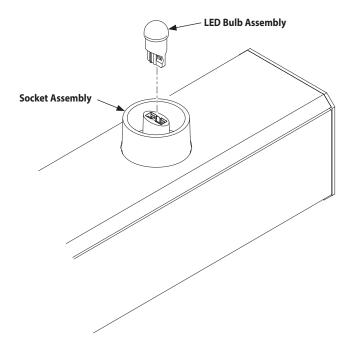


# **LED Bulb Replacement**

Step 1: Remove Globe. Pull globe away from socket using a twisting motion like unscrewing a thread. If the LItesphere™ socket is suspended from a cable, it will be important to keep a firm hold on the socket.



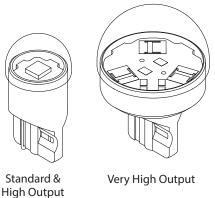
**Step 2:** Hold LED Bulb firmly and lift straight up to remove.



Step 3: Install replacement LED Bulb by inserting gently into socket until it locks into place.

**Step 4:** Replace Globe by reversing the removal procedure. It is very important to insert the Globe as far into the socket as possible to prevent water from leaking inside the fixture.

## Litesphere™ Bulb Identification





## **Electrical Connections**

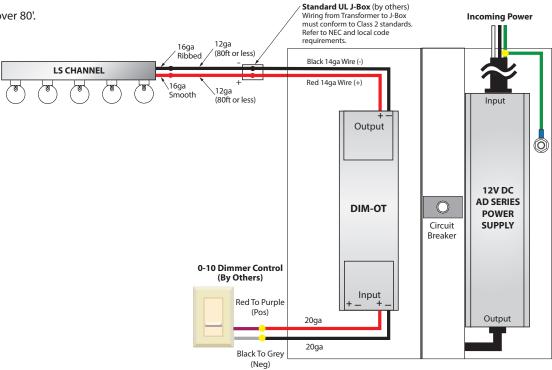
Installer calculates wire size between load and power supply to avoid voltage drop.

The wire sizing from the transformer to the light strings must be carefully calculated in order for low voltage circuits to operate properly. Tivoli recommends locating the transformer as close to the light string as possible. Use 12 gauge lead wire and keep the transformer within 80 ft of the fixture. **Caution:** Be sure to maintain polarity. The smooth wire is positive (+) and the ribbed wire is negative (-).

Wiring Diagram for Electronic Dimming

#### Note:

Consult factory for lengths over 80'.



## Wiring Diagram for Magnetic Dimming

Maximum Single Run*				
LED Type	6" OC	12" OC	18" OC	24" OC
Standard	100'	150'	180'	200'
High Output	60'	90'	110'	130'
Very High Output	30'	45'	55'	60'

 $<sup>\</sup>hbox{*Maximum run lengths are based on Tivoli's recommended lumen drop.}\\$ 

