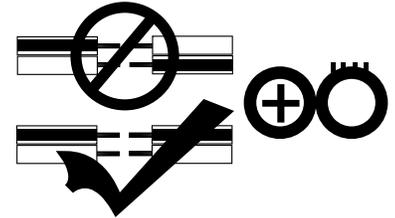


**Prior to Installation**

Be sure electrical current is turned off. Make sure installer uses an external, weatherproof, protected 110 volt outlet that meets GFCI (ground fault circuit interrupter) standards. Mount the LED Driver Box 18 inches above the ground. Best results can be achieved when you have access to the underside of your deck or installation surface. Do not install more than 40 Fiberon recessed deck lights on one driver box. Do not install within 10 feet of a pool, fountain or spa. Building codes vary; please consult all applicable codes before beginning project. If there are any doubts about how to install a fixture, please contact an electrical contractor.

**Tools**

- Power Drill
- 1-1/8" spade bit or forstner bit
- 3/4" spade bit or forstner bit
- Two Wood Screws
- Screwdriver
- Pliers
- Chisel
- Tape Measure
- Clear silicone caulk or sealant
- Eye protection



**Main Low Voltage Wire Run**

Be sure to use UV protected, exterior grade low-voltage wire. To determine the amount of wire required, measure the distance from the furthest light, in series, back to where the transformer will be mounted. Each light is wired "daisy chain" style to the main low voltage wire. The wire is typically sold in 100' coils. The wire can be run above ground, under the joist, or through the hand railing. Wire run should not exceed 100'. Longer wire runs will require a heavier gauge wire, such as 16 or 12 gauge wire. Polarity is important. Wires must connect positive to positive and negative to negative. The ribbed side of the low-voltage wire is the negative (-), and the smooth side it the positive (+). The smooth side (+) should be connected to the white wire on the light fixture.

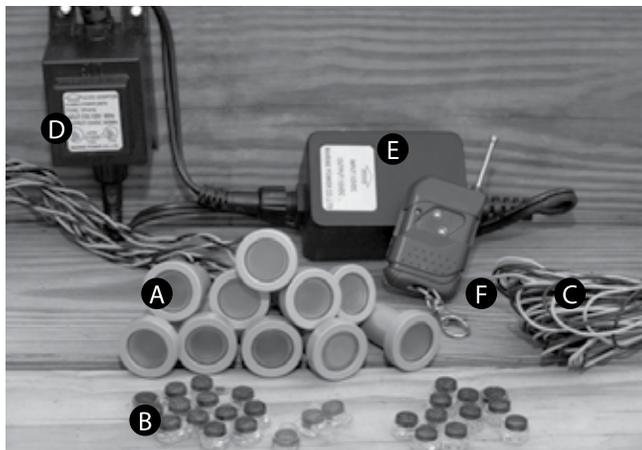
**Transformer (Power Supply)**

Fiberon Deck and Rail Lights are designed to operate on a Fiberon D/C Transformer. Installing on any other transformer voids the warranty. Up to a total of 30 watts can be installed on the 3AMP transformer. Exceeding this will result in damage to the LED's and/or transformer failure. An optional 60 watt transformer is available for projects requiring more than 30 watts; please contact Fiberon customer service for a larger transformer.

**Caution: Use eye protection when using power tools.**

**Please use chart below to find out how many watts will be needed**

Lighting Fixture	Watt Usage	Number of Lights	Total Wattage Needed
Post Cap Light	1W	x	=
Post Sleeve Light	1W	x	=
Riser Light	1W	x	=
Recessed Light	.35W	x	=
			=



**Recessed Lighting Kit Includes**

- A. 10 LED Flush-mount Deck/Stair Lights
- B. 27 Connectors
- C. 100' (30m) of Twisted Cable Wire
- D. LED Driver Box with Power Cord (Capacity up to 40 lights)
- E. Remote Driver
- F. Remote Control

**Installing Recessed Lighting and RF Dimmer**

1. Mount the LED Driver Box 18 inches above the ground near your outlet using screws. Do not plug it in (Figure 1).
2. Determine the spacing of the lights on the deck. Be sure to avoid positioning lights over joists and headers or on spacing gaps. For best results, place lights three to six feet apart. Keep in mind that the farthest light can be no more than 100 feet from the LED Driver Box using the wire included in this kit (Figure 2).
3. For each light, using a spade bit or forstner bit, drill a 1-1/8" hole approximately 1/4" deep. Check the depth by placing one of the LED lights upside down in the hole until the shoulder is flush with the decking surface. The bottom of the hole needs to be flat so the light lays in correctly. If necessary, use a chisel to scrape away excess material to flatten the bottom of the 1/4" hole.
4. Change to a 3/4" spade bit or forstner bit and start in the center of the hole and bore through the decking. This creates the hole for the base of the light and for the wires. Drill all holes to size.
5. (Figure 3A) Starting with the hole farthest from the power source, run the 100 feet of twisted cable wire below the deck and up through each hole, leaving six inches of slack above deck to allow for connections.

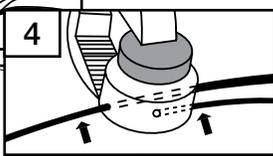
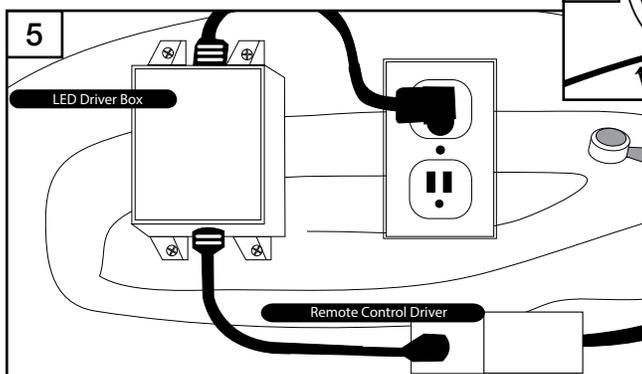
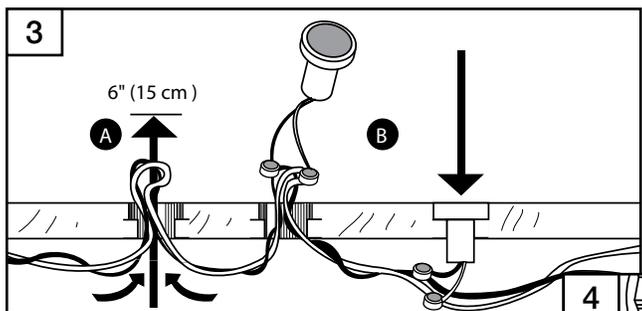
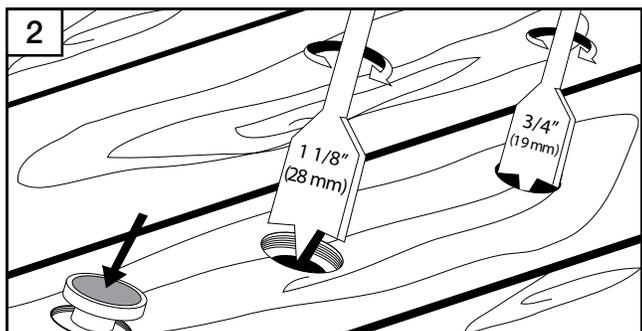
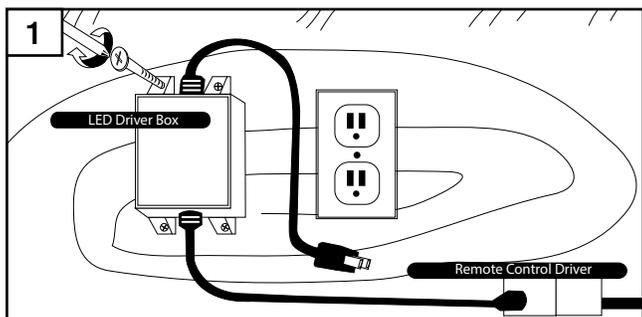
**NOTE:** The farthest end of the wire will be capped with a red connector at the end of your installation.

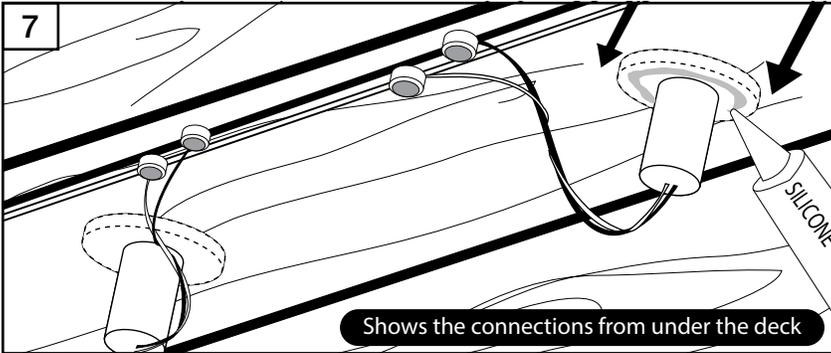
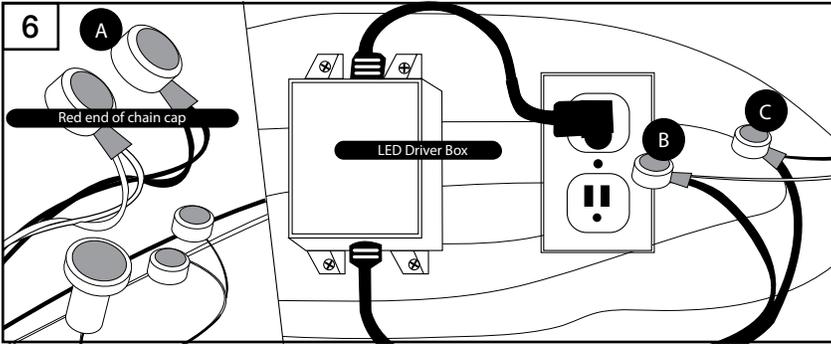
6. (Figure 3B) To install a light module, untwist the wire coming up from below the hole in the center of the slack. There is no need to cut or strip the wire. Use two green connectors for each light. Insert the black twisted wire into the open side of a connector so that it fits snugly in the space provided. It will go all the way through the connector. Then take the black wire from the light and insert it into the other hole in that connector. Push the wire from the light in until it stops. (Figure 4) Squeeze the connector closed using a pair of pliers.
7. Repeat this process to connect the gray twisted wire and the gray wire from the light fixture using another green connector. Connect all lights to the wire in this manner.
8. (Figure 5) Once all of the LED deck lights have been connected to the wire, connect the end of the twisted wire to the Remote Control Driver using two red connectors.

Note: RF dimmer is a controller that can adjust light to the appropriate lighting brightness incrementally and requires the installation of the Remote Control Driver.

9. (Figure 6) Use of the remote control is optional and the Remote Control Driver can be bypassed by removing it from the Driver Box.
10. When all lights are installed, cap the ends of the twisted wire separately with the red connectors.

**Caution:** Do not connect the ends together as this will short out the system.





11. Plug in the power source to make sure all lights are working properly. Unplug before proceeding to the final steps.
12. (Figure 7) Run a bead of silicone sealant or caulk around the underside of the lip of the light fixtures and feed the wires back through the hole and insert the fixture into place. Make sure the module is flush with the decking.
13. Plug in the power cord, and operate using either the remote control or the light switch.

**TROUBLE SHOOTING TIPS**

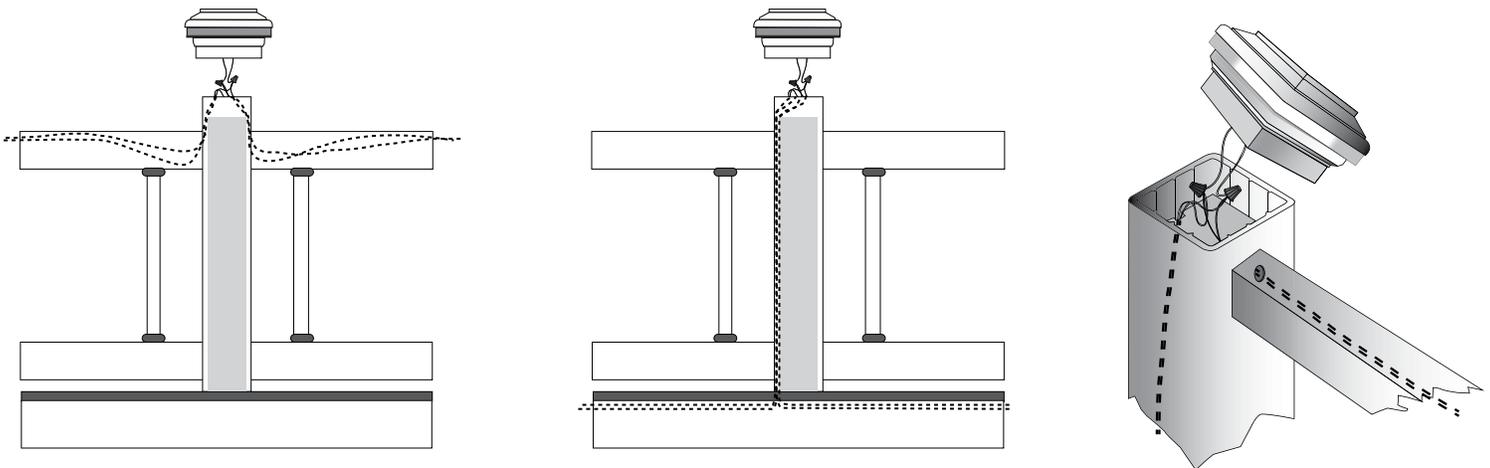
Make sure all wires are connected in like color pairs. Make sure the remote control has a battery and it is installed correctly. If you choose to bypass the remote, be sure to remove the remote driver from the set-up and connect the twisted pair wires directly to the power box.



*Single Step Drill Jig available*

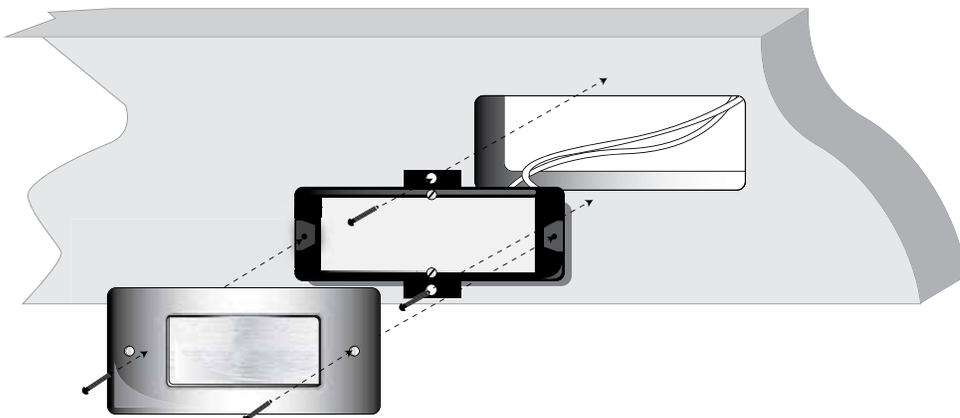
**Installing Post Sleeve Cap Lights**

Be sure to maintain polarity when connecting the light fixture to the main low voltage cable run. At each light location, leave a loop of wire to allow for splicing. Use gel filled wire nuts, connecting the white wire from the light fixture to the smooth side of the main low voltage wire, and black wire to ribbed side of the main low voltage wire. Cutting or routing a channel in the structural wood post to accommodate the thickness of the wire may be needed.



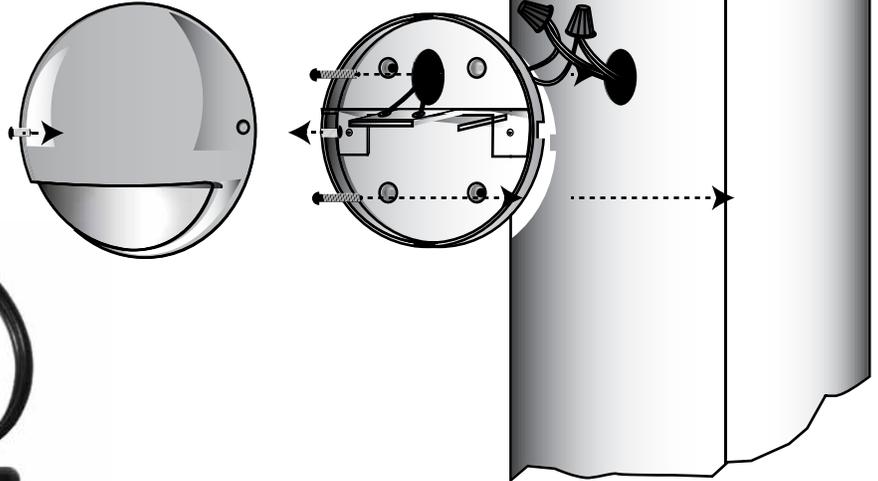
**Installing Riser Lights**

Be sure to maintain polarity when connecting the light fixture to the main low voltage cable run. At each light location, cut the riser opening 1½" high x 4" wide. Use the back box as a template to trace the cut-out. Loop main wire run through this opening and make splice connection with wire nuts. *The Riser Light must be installed between stair stringers.*



### Installing Post Sleeve Lights

Be sure to maintain polarity when connecting the light fixture to the main low voltage cable run. Run the main low voltage light through the top rail, or under the deck. At each light location, splice a wire at the top of the post or under the deck, bringing a wire lead to the Post-Sleeve light opening. Cutting or routing a channel in the structural wood post to accommodate the thickness of the wire may be needed. Drill a 3/4" hole to a depth of approx. 1" to allow room for light connections. Make splice connection using wire nuts.



#### There are 4 buttons on the remote control

- M = Mode button - allows for quick click adjustment
- ∩ = Micro adjust UP - Press and hold
- V = Micro adjust DOWN - press and hold
- ⏻ = On/Off button

### Trouble Shooting

1. If lights do not come on at all, check power to outlet, and inspect wiring system for damage, such as staple, nail, or screw piercing the wire.
2. Test the lights using the buttons on the Remote Control Driver Box.
3. Next, disconnect the Remote Control Driver Box from the Transformer, and connect the lights directly to the transformer.
4. Replace the battery in the handheld remote control with type MN27/A27 battery, 27A 12V.

### Replacement Remote Controllers

The Remote Control handheld device is programmed to the frequency of the Remote Control Driver Box. In the event that a replacement is needed for the handheld remote, follow the instructions below to reprogram the handheld device:

1. Check all connections on the transformer, Remote Control Driver Box, and lights. Confirm the power is on and lights are lit.
2. Unplug the transformer from outlet.
3. Press and hold both UP and DOWN arrow buttons on the handheld remote and simultaneously plug in the transformer. Continue to hold UP and DOWN arrow buttons for 15 seconds.
4. Release UP and DOWN arrow buttons. Press on/off button to activate.