

## Instruction Manual for Touch Dimmer for Under Cabinet Lights

Part Number: [TD1](#)



Congratulations on your purchase of premium LED under cabinet lighting products or infrared bar products from EnvironmentalLights.com. The mini touch dimmer is a sleek and compact in-line dimmer that can control a very large installation of our under cabinet bars or infrared bars subject to a simple rule: you must not have more than 40 watts of power running through the touch dimmer. Our High Brightness under cabinet light series uses 5 watts per foot, so you cannot have more than 8 feet of lights on the end of the dimmer that is opposite the driver.

This means you can place the dimmer on one branch and have it control all the other branches on the “tree”. But if you put the dimmer on the “trunk” of the tree, the tree can’t have more than 8 feet of branches (or 12 feet of infrared bars, which use only 3.2 watts per bar.)

For our under cabinet lighting, use a high quality LED regular (non-dimming) driver that provides 24 volts DC (+/- 5%), such as those we sell. Do not use the in-line mini touch dimmer with other dimming or control systems. We do not recommend a wall switch with this dimmer because when you turn off the wall switch, the adapter will cut power to the dimmer, and it will power up in the dark “off” state. Flipping the switch will not turn on the lights. You still have to touch the dimmer. For our infrared bars used in multitouch screens, use 12 VDC, not 24 VDC.

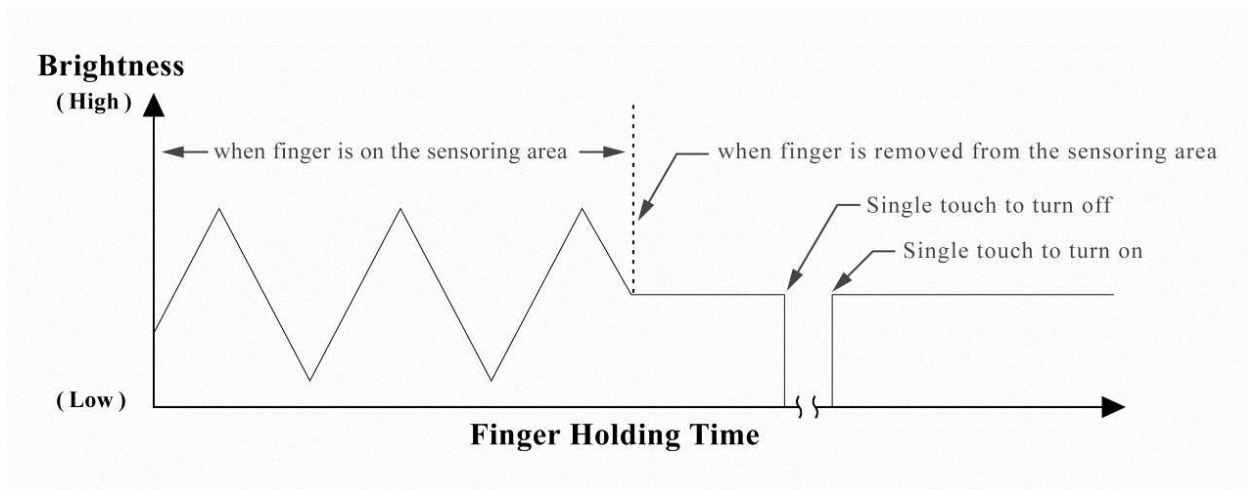
The TD1 ships as a kit, including all the parts shown in the picture at right, above. The gray power cord ([PCTD1](#)) is available for purchase as a separate item, should you lose or damage yours. The touch dimmer will not work with our normal power cords. Also, the lights will not work using the gray cord without the dimmer. You must use both the special cord and the dimmer in your installation. That does NOT mean they must be connected directly to each other, as you will see in the diagrams later in this note.

### **Caution**

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|---|--|
| 1. Follow safety precautions. If you are not qualified to do electrical work, get help. | 4. Do not use this device near water, for example, a bathtub, a pool, sinks, or laundry tub. |
| 2. Do not modify the device.  | 5. Keep the device dry.  |
| 3. Disconnect the power (adaptor) before installing/removing the device.                | 6. Do not scratch the sensing area.  |

## I. Operation Description

1. **On/Off:** Use your finger to touch the sensor area briefly. (Single touch, ~0.5 seconds.)
2. **Dimming:** Continue to hold the finger on the sensor area, it will dim the light bar brightness in a cycling pattern. Remove your finger when it reaches the desired brightness. (See figure below.)
3. **Brightness setting memory:** The previous selected brightness is stored until the adaptor plug is disconnected. If you use a wall switch to control your adaptor, the dimmer will forget the dimming level and power up in the dark “off” state, so a wall switch is not recommended.



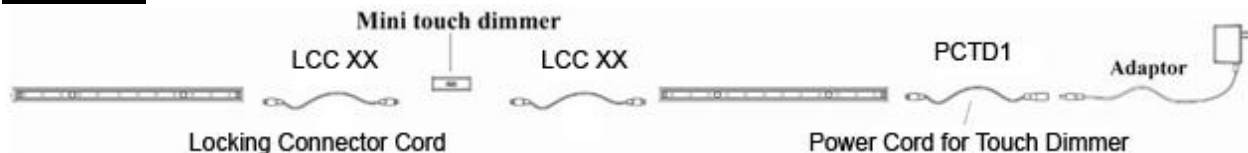
## II. System Configuration

The dimmer can be installed at any place in a light bar chain or network. Several scenarios are illustrated below.

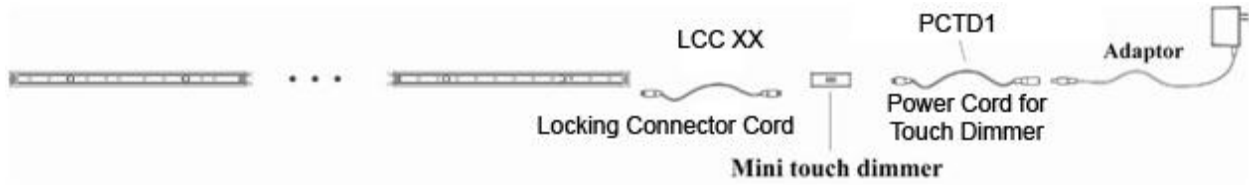
**Scenario 1:** Dimmer at the “end” of a chain:



**Scenario 2:** Dimmer in the “middle” of a chain:

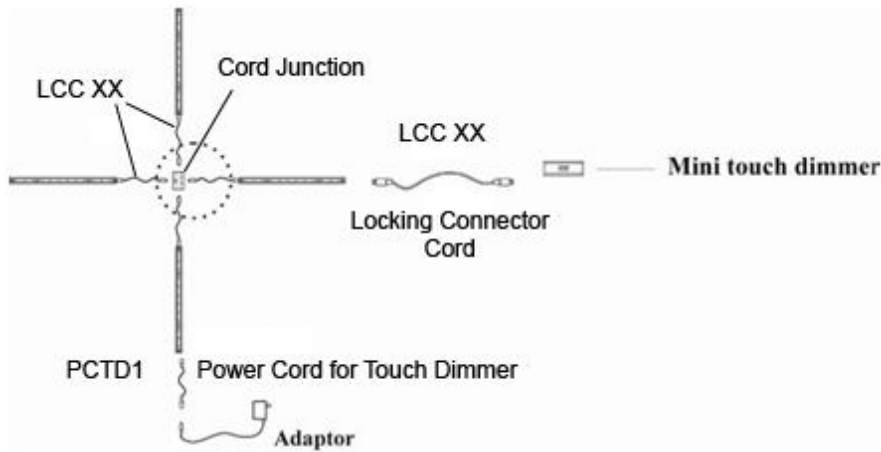


**Scenario 3:** Dimmer at the “beginning” of a chain:



**Scenario 4:** Dimmer on a branching “network”:

In this case, the network could be very large because the dimmer is at the end of a branch, so it does not have to carry the current of any bars. This installation shows how you can use the dimmer to control many bars at once.



There is an extensive operating guide for the under cabinet lighting system available online at [EnvironmentalLights.com](http://EnvironmentalLights.com). Our engineers are available to answer your questions, and we welcome your call.

You may use more than one touch dimmer on a network, but use only one of the special cords.