Multi-Zone LED Touch Dimmer (Remote Control-8 Zones) and LED Touch Dimmer (Receiver)

Part numbers: Dim-T1
Dim-T1-T2-T3-Receiver

The Multi-Zone LED Touch Dimmer is a simple and easy way to customize white lighting to achieve the perfect brightness. The Dim-T1-T2-T3-Receiver can be used with 5, 12, or 24 volt DC LED strips or other LEDs. This remote allows users to control and dim LED strip lights in multiple zones, with an unlimited number of receivers in each zone. Zones can be controlled individually or together to create the perfect ambiance in real time. This user friendly system is ready to use out of the box. Simplify your LED installation and eliminate wires by pairing multiple Dim-T1-T2-T3 Receivers with a single remote.

Both the remote and receiver utilize 2.4 GHz radio frequency for wireless communication and synchronization. The effective range for communication is 30 meters (100 feet) and works through walls. There is a mini-USB port to charge the internal battery of the remote (mini-USB to USB cable included). A single remote can control an unlimited number of receivers within each zone for coordinated light control.

Zones are ideal for homes, businesses, and commercial facilities where different rooms require different types of lighting in multiple areas. By controlling each zone individually you have the ability to create the perfect ambiance, as well as save energy by easily turning off the zones that are not needed.
The receiver is rated at 6 amps per channel, which is 90 watts per receiver at 5V, 216 watts per receiver at 12 volts, or 432 watts per receiver at 24 volts. Either one, two, or three single color strips may be directly connected to the receiver using the W W W outputs. Our 120 LEDs per meter white strip uses 42 watts at 12 volts DC, per 5 meter reel. Therefore, you can control 1.7 reels of this strip per channel.

Features

- Color wheel lets you select the perfect level of light - 256 brightness levels available at the touch of a finger.
- 4 preset brightness levels: 25%, 50%, 75% and 100%
- Control up to 8 separate zones.
- Zones can be controlled individually or synchronously.
- Each zone can contain an unlimited number of receivers.
- 3 synchronized signal outputs W W W per receiver. Common anode takes 5, 12, or 24 VDC.
- Power off memory function.
- Radio frequency remote can control the receiver from up to 30 m (100 feet) away, through walls.
- Remote is charged via mini-USB port, USB to mini-USB cord included.
- -20 to 130°F operating temperature range.
- 1 year manufacturer warranty.

Applications

- Create the perfect ambiance for any home or business, with the ability to control up to 8 zones.
- Retail environments may require different brightness levels depending on the area of the store and the items being displayed.
- Modify your lighting throughout the day to suit your mood. Zones give you the ability to adjust lighting levels in each room individually to suit your needs.
- Hotels, restaurants, bars, clubs, retail stores, businesses.
Specifications

Remote
Dimensions: 5.71” x 2.17” x 0.87”
145 mm x 55 mm x 22 mm
Input voltage: 5 VDC built-in lithium-ion battery
Charge method: Mini-USB port (cable included)
Working current: <30 mA
Working frequency: 2.4 GHz
RF remote distance: 100 ft (30 m)
Transmitting rate: 500 Kbps
Battery capacity: 1000 mAh
Standby time: 1 year
Normal use time: 30 days
Charge time: <4 hours
Number of charge cycles: 500+
Weight: 9.6 ounces
Max. number receivers: Unlimited in each zone (within effective range)

Receiver
Dimensions: 6.89” x 1.77” x 1.18”
175 mm x 44 mm x 30 mm
Channels: 3
Input voltage: 5, 12, or 24 Volts DC
Max. current load: 6A per channel
Max. output power: 90W/216W/432W (5V/12V/24V)
PWM frequency: 1920 Hz
Dimming range: 5-100%
Weight: 7 ounces
**Operation**

**Remote**

Charge the remote using the provided mini-USB to USB cord. If the remote is on while charging, the indicator will flash. A solid light indicates that the charge is complete.

To choose a custom level of brightness, simply touch the desired setting on the color wheel. The status indicator will blink to confirm the selection. Light intensity can also be adjusted using the increase/decrease brightness buttons. Use the preset levels to automatically adjust lighting to 25%, 50%, 75% and 100% brightness.

Store all current receiver states to memory by holding down M1 or M2 for three seconds. Each time you press M1 or M2 the remote will restore all eight zones to the settings you saved.

Whenever a button is pressed or a setting is saved, the sync status indicator light will blink and the buzzer on the receiver will beep. **To disable the default beep settings simply hold down the * button for three seconds.** The receiver will still beep to confirm new settings saved, such as memory functions, but will not beep in response to simple lighting adjustments.

**Lowered sensitivity of the touch wheel is a symptom of low battery charge. If you notice this happening, charge the remote.**
How to Create and Use Zones

Creating and saving zones is easy with the Dim-T1 remote. Zones are sets of lights that are controlled synchronously. Multiple zones can be present in the same room, or each room can be a separately controlled zone.

1. Hold down the Remote ID Learning Button for several moments until it beeps. While continuing to hold down the Remote ID Learning Button, press the zone key (1-8) to set which zone the receiver should be in.
2. The white light on the remote will flash three times and the receiver will beep to confirm the zone selection.
3. Save as many receivers as you would like into each zone.
4. Once receivers are saved, you can control them at any time by pressing the zone number.
5. To select multiple zones, press the * button, followed by the numbers of all zones you would like to select, followed again by *. For example to control zones 2, 5, and 8 together you would press * 2 5 8 *.
6. To select all zones press **.

How to disable Zones

To remove a receiver from a zone, press the Remote ID Learning Button for several moments until it beeps. While continuing to hold down the Remote ID Learning Button, simultaneously press the zone number you would like it to be removed from. The LED indicator light will blink to confirm.

Receiver

Connect the LED load to the receiver using the W terminal blocks. Apply 5, 12 or 24 VDC, depending on the requirements of the LED strip, to the power input socket. As shown below, receivers may be connected to the same or different power sources, as long as power needs are met. If two LED strips are connected to the output terminals they will be controlled synchronously.

Please note that either the Dim-T1, Dim-T2M, or RGB-T3X remote is required to operate the Dim-T1-T2-T3-Receiver.
Detailed Wiring Instructions

*Single power supply supporting multiple receivers*

Diagram showing how to connect multiple receivers to a single power supply.

*Individual power supply for each receiver*

Diagram showing how to connect each receiver to its own power supply.
Instructions

Please take the following precautions:

1. This equipment, like all electrical equipment, should be installed by a qualified person.
2. Do not expose these LEDs, dimmers or power supplies to intense electro-magnetic fields, including lightning.
3. The controllers and power supplies are not waterproof. Keep them dry.
4. Always observe proper polarity.

When installing LED lighting, it is a good idea to follow this “dry-run” procedure:

1. Be sure you have everything you need before you start.
2. Lay out your lights and power supply on the floor or table.
3. There is some resistance in the LED lighting. If you see any color fading or dimming at the end of a long run, you may have too many LEDs for your power supply and you might need a bigger supply or shorter runs. Use a bus structure as described in rgb_manual.pdf. Call if you need assistance with larger projects.
4. Connect everything and test it to be sure it works and you have it connected properly. It is unlikely, but possible, that some part of your system is defective or was damaged during shipment. If that is the case, it will be very helpful to you to know that before you do all the work involved in installing custom LED lighting systems. You will also know if you damage anything during installation, which is really helpful in trouble-shooting because manufacturing defects and installation damage typically have very different solutions.

Once you have tested the system successfully, you are ready to install it. We recommend you install LEDs, electronic controls and dimmers in such a way that you have access to them in case they fail. All electrical components can fail.