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<u>Multi-Zone White Adjustable LED Touch Dimmer</u> (Remote Control-8 Zones) and White Adjustable LED Touch <u>Dimmer (Receiver)</u>

Part numbers: Dim-T2M Dim-T1-T2-T3-Receiver



The Multi-Zone White Adjustable LED Touch Dimmer is a simple and easy way to customize 2channel white lighting to achieve the perfect color temperature and brightness. The Dim-T1-T2-T3-Receiver can be used with 5, 12, or 24 volt DC LED strips or other LEDs. The Dim-T2M remote allows you to create zones, with an unlimited number of receivers in each zone. Zones can be controlled individually or together to create the perfect ambiance in moments. This user friendly system is ready to use out of the box. Simplify your color tunable LED installation and eliminate wires by pairing multiple Dim-T1-T2-T3-Receivers with one 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 or areas in a room require different types of lighting. By controlling each zone individually you have the ability to create the perfect ambiance in multiple areas, as well as save energy by turning off the zones that are not needed. Furthermore, research has shown that color temperature has strong effects on mood, and energy. Optimize your work by using cool light or relax with warm light. 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. Our Color Tunable strip uses up to 42 watts at 12 volts DC per 5 meter reel. Therefore, you can control 2.5 reels of Color Tunable strip with each receiver.

Features

- Color wheel lets you find the perfect balance of color temperature over 65,000 color options available.
- Control up to 8 separate zones.
- Zones can be controlled individually or synchronously.
- Each zone can contain an unlimited number of receivers.
- 2 signal outputs: Warm White and Cool White. Common anode takes 5, 12, or 24 VDC.
- Pre-programmed dynamic mode fades between cool and warm light, with adjustable speed.
- 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

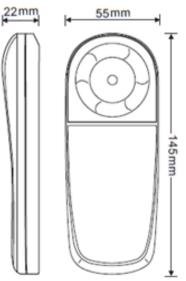
- Create the perfect ambiance for any home or business, while saving energy.
- Retail environments may require different color temperatures and brightness levels depending on the area of the store and the items being displayed.
- The body's circadian rhythm and is regulated by photoreceptors in the brain. Research has shown that warm light promotes relaxation and cool promotes energy and focus.
- Modify your lighting throughout the day: use warmer lighting in the morning and evening, cool lighting during the day.
- Availability of color tunable, dimmable lighting to employees has been shown to promote efficiency and reduce frequency of headaches and migraines.
- Hotels, restaurants, bars, clubs, retail stores, businesses.

Specifications

Remote

Dimensions:

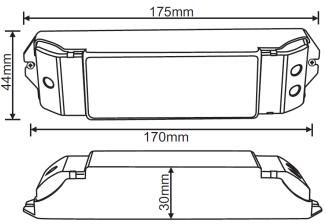
Input voltage: Charge method: Working current: Working frequency: RF remote distance: Transmitting rate: Battery capacity: Standby time: Normal use time: Charge time: Number of charge cycles: Weight: Max. number receivers: 5.71" x 2.17" x 0.87"
145 mm x 55 mm x 22 mm
5 VDC built-in lithium-ion battery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



Receiver

Dimensions:

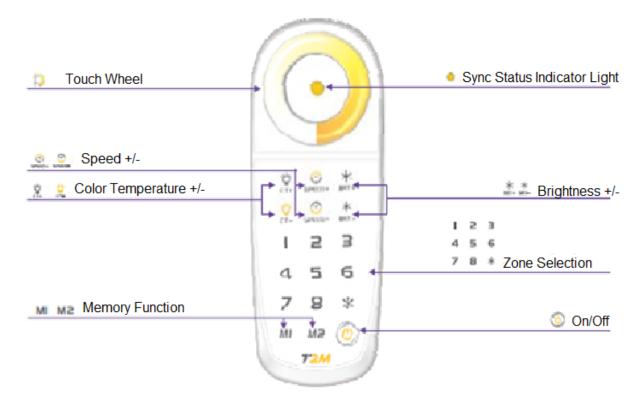
Channels: Input voltage: Max. current load: Max. output power: PWM frequency: Dimming range: Weight: 6.89" x 1.77" x 1.18" 175 mm x 44 mm x 30 mm 2: Warm White and Cool White 5, 12, or 24 Volts DC 5A per channel 50W/120W/240W (5V/12V/24V) 1920 Hz 5-100% 5.8 ounces



Operation

<u>Remote</u>

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 color temperature, simply touch the desired hue on the color wheel. The status indicator will blink in confirmation. The brightness and color temperature can also be adjusted using the up and down buttons. To activate the pre-programmed dynamic mode, in which the light fades between warm and cool, simply press the speed buttons and adjust accordingly. Please note that the smooth fade mode will not always be synchronous between multiple receivers.

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 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.

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How to Create and Use Zones

Creating and saving zones is easy with the Dim-T2M 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 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

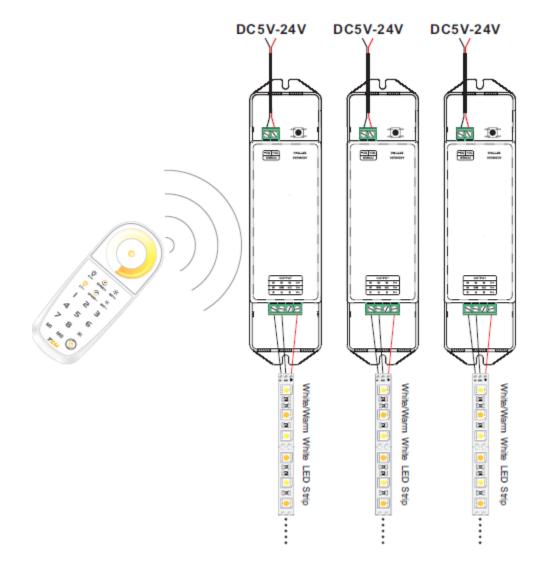


Connect the LED load to the receiver using the WW (warm white) and W (cool or neutral white) terminal blocks. The NC block is null and should not be used. Apply 5, 12 or 24 VDC, depending on the requirements of the LED strip, to the power input socket. As shown below, receivers may be connected to the same or different power sources, as long as power needs are met. It is also possible to use either 2-channel Color Tunable strip, or to use two separate strips of Daylight White and Warm White. See wiring diagrams below for more information.

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

Option to use a single power supply to support multiple receiver or an individual power supply for each receiver.



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.

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