### SPECIFICATIONS

| Voltage¹ | 12VDC/24VDC |
| Environment² | Indoor / Dry Location |
| Warranty | 3-Year Warranty |
| Ambient Temp³ | -4 - 122°F (120 - 50°C) |
| Operating Temp⁴ | -4 - 176°F (-20 - 80°C) |

Visit the product page at [www.DiodeLED.com](http://www.DiodeLED.com) for installation guides, .IES files, voltage drop charts, and LM-79 reports.

*Note: TOUCHDIAL Receiver may only be synced/controlled by one of the following controllers at a time.

### RECEIVERS/HUBS (A RECEIVER IS REQUIRED)

| A | TOUCHDIAL™ Receiver DI-RF-REC-CV-A |
| B | TOUCHDIAL™ Mini-Receiver DI-RF-REC-CV-SC |
| C | TOUCHDIAL™ WiFi Hub DI-WIFI-RF-TRMS |

### SINGLE COLOR DIMMERS

| D | TOUCHDIAL™ Mini-Remote Dimmer DI-RF-REM-DIM-1 |
| E | TOUCHDIAL™ Wall Paddle Dimmer DI-RF-WPD-DIM-1 |
| F | TOUCHDIAL™ Wall Paddle Dimmer DI-RF-WPD-DIM-2 |
| G | TOUCHDIAL™ Remote Dimmer Control DI-RF-REM-DIM-5 |
| H | TOUCHDIAL™ Wall Dimmer DI-RF-WMT-DIM |

### RGBW COLOR CONTROLLERS

| I | TOUCHDIAL™ RGB(W) Wall Control DI-RF-WMT-RGBW |
| J | TOUCHDIAL™ Mini-Remote RGB(W) Control DI-RF-REM-RGBW-1 |
| K | TOUCHDIAL™ Remote RGB(W) Control DI-RF-REM-RGBW-4 |

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Specifications are subject to change without notice.
Toll Free: 877.817.6028 | Fax: 415.592.1596 | [www.DiodeLED.com](http://www.DiodeLED.com) | info@DiodeLED.com
1. TOUCHDIAL accessories are rated to be used with 12V, or 24V DC Constant Voltage (Non-dimmable) Drivers.
2. These products are rated for indoor installation and are not protected against moisture.
3. Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
4. Operating temperature is measured according to the minimum and maximum ambient temperature environment.

TOUCHDIAL™ Receiver

TOUCHDIAL™ Receiver
DI-RF-REC-CV-A

Receiver for use with RGB color changing, adjustable kelvin, and single color applications.

• RGB(W), adjustable kelvin, and single color control
• Input from Driver: 12-24VDC Constant Voltage
• Output to Load: 12-24VDC Constant Voltage
• Max Load: 4CH x 5A, 4CH x 60W (12V), 4CH x 100W (24V)
• Power Failure Memory: Yes

MECHANICAL DIAGRAM
**TOUCHDIAL™ MINI-RECEIVER**

**TOUCHDIAL™ Mini-Receiver**
DI-RF-REC-CV-SC

Miniature Receiver for use with single color applications.

- Single color control
- Input from Driver: 12-24VDC Constant Voltage
- Output to Load: 12-24VDC Constant Voltage
- Max Load: 1CH, 1CH x 60W (12V), 1CH x 100W (24V)
- Power Failure Memory: Yes

**MECHANICAL DIAGRAM**

Note: The TOUCHDIAL Mini-Receiver is not compatible with the DI-RF-REM-RGBW-4 TOUCHDIAL Remote RGB(W) Control.

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**TOUCHDIAL™ WIFI HUB**

**TOUCHDIAL™ WiFi Hub**
DI-WIFI-RF-TRMS

WiFi Hub for expanded connectivity utilizing the Diode LED Android or iOS mobile App.

- RGB(W), adjustable kelvin, or single color control
- Input from Driver: 5VDC Constant Voltage
- Operating Frequency: 868 MHz
- Connections: WLAN
- OS Compatibility: iOS or Android system
- Range: 300 ft.

**MECHANICAL DIAGRAM**

Android and iOS Mobile Apps for use with the TOUCHDIAL™ WiFi Hub may be found at www.DiodeLED.com
**TOUCHDIAL™ MINI-REMOTE DIMMER**

TOUCHDIAL™ Mini-Remote Dimmer  
DI-RF-REM-DIM-1  
One button, single zone dimmer for use with single color applications.

- Single color control
- Input: 1x CR2025 3V Battery (Included)
- Operating Frequency: 869.5MHz / 434 MHz
- Signal: Radio Frequency
- Range: 95 ft.

**MECHANICAL DIAGRAM**

**OPERATION**

Short press to turn ON/OFF.  
Hold to increase or decrease brightness.

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**TOUCHDIAL™ WALL PADDLE DIMMER**

TOUCHDIAL™ Wall Paddle Dimmer (Single Zone)  
DI-RF-WPD-DIM-1  
One button, single zone wall mounted dimmer for use with single color applications.

- Single color control
- Input: 1x CR2430 3V Battery (Included)
- Operating Frequency: 868 / 869.5MHz / 434 MHz
- Signal: Radio Frequency
- Range: 95 ft.

**MECHANICAL DIAGRAM**

**OPERATION**

Short press to turn ON.  
Hold to increase brightness.  
Short press to turn OFF.  
Hold to decrease brightness.
TOUCHDIAL™ Full Control System

**F **TOUCHDIAL™ WALL DUAL PADDLE DIMMER

TOUCHDIAL™ Wall Paddle Dimmer (Dual Zone)
DI-RF-WPD-DIM-2
Two button, two zone wall mounted dimmer for use with single color applications.

- Single color control
- Input: 1x CR2430 3V Battery (Included)
- Operating Frequency: 868 / 869.5MHz / 434 MHz
- Signal: Radio Frequency
- Range: 95 ft.

**MECHANICAL DIAGRAM**

![Mechanical Diagram for TOUCHDIAL™ WALL DUAL PADDLE DIMMER](image)

**OPERATION**

- Short press to turn ON Zone 1. Hold to increase brightness.
- Short press to turn OFF Zone 1. Hold to decrease brightness.
- Short press to turn ON Zone 2. Hold to increase brightness.
- Short press to turn OFF Zone 2. Hold to decrease brightness.


**G **TOUCHDIAL™ REMOTE DIMMER CONTROL

TOUCHDIAL™ Remote Dimmer Control (Five Zone)
DI-RF-REM-DIM-5
Five zone, hand held dimmer for use with single color applications.

- Single color control
- Input: 1x CR2032 3V Battery (Included)
- Operating Frequency: 868 / 434 MHz
- Signal: Radio Frequency
- Range: 95 ft.

**MECHANICAL DIAGRAM**

![Mechanical Diagram for TOUCHDIAL™ REMOTE DIMMER CONTROL](image)

**OPERATION**

- Short press to turn SINGLE ZONE ON.
- Long press to increase brightness.
- Short press to turn SINGLE ZONE OFF.
- Long press to decrease brightness.
- Master Power ON/OFF
  - Short press to turn zone ALL ZONES ON.
  - Short press to turn ALL ZONES OFF.

**Power Indicator**
Indicator will flash red when data is transmitting.

**Single Zone Dimming Control**
- Short press to turn SINGLE ZONE ON.
- Long press to increase brightness.
- Short press to turn SINGLE ZONE OFF.
- Long press to decrease brightness.
**TOUCHDIAL™ WALL DIMMER**

TOUCHDIAL™ Wall Dimmer
DI-RF-WMT-DIM

Single zone, hand held, and wall mounted dimmer for use with single color applications.

- Single color control
- Input: 1x CR2032 3V Battery (Included)
- Operating Frequency: 916.5 MHz
- Signal: Radio Frequency
- Range: 95 ft.
- Magnetic Mount
- Removable Remote

**MECHANICAL DIAGRAM**

![](image1)

**OPERATION**

- Hold to increase brightness.
- Short press to turn ON.
- Short Press to recall Brightness Level. Hold to save Brightness Level.
- Hold to decrease brightness.
- Short press to turn OFF.

**TOUCHDIAL™ RGB(W) WALL CONTROL**

TOUCHDIAL™ RGB(W) Wall Control
DI-RF-WMT-RGBW

Single zone, hand held, and wall mounted color controller.

- RGB(W), and single color control
- Input: 1x CR2032 3V Battery (Included)
- Operating Frequency: 916.5 MHz
- Signal: Radio Frequency
- Range: 95 ft.
- Magnetic Mount
- Removable Remote

**MECHANICAL DIAGRAM**

![](image2)

**OPERATION**

- Hold to increase or decrease RGB brightness.
- Short press to turn ON.
- Hold to increase or decrease White brightness.
- Long Press to change RGB Color selected.
- Short press to turn OFF.
**TOUCHDIAL™ MINI-REMOTE RGB(W) CONTROL**

**TOUCHDIAL™ Mini-Remote RGB(W) Control**

**DI-RF-REM-RGBW-1**

Single zone, hand held, or wall mounted color controller.

- RGB(W), and single color control
- Input: 1x CR2430 3V Battery (Included)
- Operating Frequency: 869.5MHz / 434 MHz
- Signal: Radio Frequency
- Range: 95 ft.

**MECHANICAL DIAGRAM**

![Mechanical Diagram](image)

**OPERATION**

- **Hold to increase brightness.**
- **Hold to decrease brightness.**
- **Short press to turn ON/OFF.**
- **Hold to increase or decrease White brightness only.**
- **Long Press to change RGB Color selected.**
TOUCHDIAL™ Remote RGB(W) Control
DI-RF-REM-RGBW-4
Four zone hand held color controller.

- RGB(W), adjustable kelvin, and single color control
- Input: 3x AAA 1.5V Batteries (Not Included)
- Operating Frequency: 434MHz / 868 MHz
- Signal: Radio Frequency
- Range: 95 ft.

Note: The TOUCHDIAL Remote RGB(W) Control is not compatible with the DI-RF-REC-CV-SC TOUCHDIAL Mini-Receiver.

OPERATION

See TOUCHDIAL APPLICATION INSTALLATION GUIDE for detailed mobile device setup and use.

**Color Wheel**
Adjust RGB color mixing.

**Zone Control**
Short press to control zones 1-4. Control two zones at once by pressing one zone, and then another. Long press to turn one individual zone ON/OFF.

**Power**
Press to turn all zones ON/OFF.

**Dynamic Modes**

**Save Function**
Save up to 3 colors. Long press to save color. Short press to retrieve saved color.

**White Channel Control**
Short press to turn CH4 ON/OFF. Long press to adjust brightness.

**RGB Brightness**
Press to increase or decrease 8 levels of RGB Brightness.

**RGB ON/OFF & White Presets**
Double tap to turn RGB channels ON/OFF. Short press for 3 variations of "white" created with RGB color mixing (Neutral, Cool, Warm). Useful for applications that don’t utilize 4th channel for RGBW applications.

**Power Indicator**

**DYNAMIC MODE CHART**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Random Fade</td>
</tr>
<tr>
<td>2</td>
<td>Random Fade</td>
</tr>
<tr>
<td>3</td>
<td>Random Fade</td>
</tr>
<tr>
<td>4</td>
<td>Random Fade</td>
</tr>
<tr>
<td>5</td>
<td>RGB Fade In/Out</td>
</tr>
<tr>
<td>6</td>
<td>RGB Fade In</td>
</tr>
<tr>
<td>7</td>
<td>RGB Fade Out</td>
</tr>
<tr>
<td>8</td>
<td>RGB Skip</td>
</tr>
<tr>
<td>9</td>
<td>Random Fade</td>
</tr>
<tr>
<td>10</td>
<td>Random Fade</td>
</tr>
</tbody>
</table>
TOUCHDIAL™ Full Control System

GENERAL DIAGRAM

See TOUCHDIAL INSTALLATION GUIDES for detailed connections to driver and luminaire.

Max RF Distance Control to MASTER Receiver: 95 ft.
Max # MASTER receivers paired to single zone: Unlimited
Max # Controls Paired to Each MASTER Receiver: Unlimited

Max Data Wire Distance: 300 ft.
Max Slaves Wired to MASTER Within 300 ft.: Unlimited

TOUCHDIAL WiFi Hub w/ Mobile App
Control up to 8 Zones - All Luminaires

TOUCHDIAL Mini-Remote RGB(W) Control
Control one Zone - Color Control

TOUCHDIAL Wall Paddle Dimmer
Control one Zone - Single Color

TOUCHDIAL Mini Remote Dimmer
Control one Zone - Single Color Only

TOUCHDIAL Wall Dimmer
Control one Zone - Single Color

TOUCHDIAL Remote Dimmer
Control up to 5 Zones - Single Color Only

TOUCHDIAL RGB(W) Wall Control
Control one Zone - Color Control

TOUCHDIAL Mini-Remote RGB(W) Control
Control one Zone - Color Control

TOUCHDIAL Wall Dual Paddle Dimmer
Control two Zones - Single Color

TOUCHDIAL™ Receiver
SET TO MASTER

TOUCHDIAL™ Receiver
SET TO SLAVE

TOUCHDIAL RGB(W) Receiver
SET TO MASTER

TOUCHDIAL™ Receiver
SET TO MASTER

DI-RF-REC-CV-SC
TOUCHDIAL MINI RECEIVER

See TOUCHDIAL INSTALLATION GUIDES for detailed connections to driver and luminaire.

0 ft. 95 ft. 300 ft.
**ADDITIONAL INFORMATION**

- TOUCHDIAL™ Control System Installation Guide
- TOUCHDIAL™ Mini-Receiver Installation Guide
- TOUCHDIAL™ WiFi Hub Installation Guide
- TOUCHDIAL™ Mini-Remote Dimmer Installation Guide
- TOUCHDIAL™ Wall Paddle Dimmer Installation Guide
- TOUCHDIAL™ Wall Dual Paddle Dimmer Installation Guide
- TOUCHDIAL™ Remote Dimmer Control Installation Guide
- TOUCHDIAL™ Wall Dimmer Installation Guide
- TOUCHDIAL™ RGB(W) Wall Control Installation Guide
- TOUCHDIAL™ Mini-Remote RGB(W) Control Installation Guide
- TOUCHDIAL™ Remote RGB(W) Control Installation Guide
- TOUCHDIAL™ Application Operation

**SAFETY / WARNINGS / DISCLOSURES**

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. **DO NOT** connect directly to high voltage power. Install with a compatible Class 2 constant voltage LED driver (power supply).
4. Only install with a Class 2 DC Constant Voltage LED driver.
5. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
6. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
7. This product is rated for indoor installation and is not protected against moisture.
8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings
9. Do not modify product beyond instructions or warranty will be void.
10. We reserve the right to modify and improve the design of our controls without prior notice. We cannot guarantee to match existing installed system for subsequent orders or replacements in regards to product appearance, or operation.

**WARRANTY**

**Limited Warranty**
This product has a three (3) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at [www.diodeled.com/limited-warranty](http://www.diodeled.com/limited-warranty) within the Policies section. For warranty related questions please contact product support.

**Consumer’s Acknowledgment**
Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from an Elemental LED employee or agent regarding a customer’s bill of goods and/or purchase order is **NOT** an acknowledgment that the products purchased are designed and configured correctly. The purchaser agrees and acknowledges that it is the customer’s responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.