TOUCHDIAL™ Full Control System

**SPECIFICATION GUIDE**

**RECEIVERS/HUBS (A RECIPIENT 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

**SPECSIFICATIONS**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>12VDC</td>
<td>24VDC</td>
</tr>
<tr>
<td>CE</td>
<td>RoHS Compliant</td>
</tr>
</tbody>
</table>

**Important Notes:**

- **Voltage**
  12VDC/24VDC

- **Environment**
  Indoor / Dry Location

- **Warranty**
  5-Year Warranty

- **Ambient Temp**
  -4 - 122°F (120 - 50°C)

- **Operating Temp**
  -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.
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.

**COMPLIANCE & REGULATORY APPROVALS**

**Safety**
- CE Compliant

**Environmental**
- RoHS Compliant

**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**

![Mechanical Diagram](image-url)

Dimensions:
- Width: 6.57 in.
- Height: 2.09 in.
- Depth: 0.91 in.
**TOUCHDIAL™ Full Control System**

### 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

![Mechanical Diagram of TOUCHDIAL™ MINI-RECEIVER](image)

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

### 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 of TOUCHDIAL™ WIFI HUB](image)

Android and iOS Mobile Apps for use with the TOUCHDIAL™ WiFi Hub may be found at [www.DiodeLED.com](http://www.DiodeLED.com)
**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**

![Mechanical Diagram](image)

**OPERATION**

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

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**TOUCHDIAL™ Wall Paddle Dimmer**

**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**

![Mechanical Diagram](image)

**OPERATION**

Short press to turn ON. Hold to increase brightness.

Short press to turn OFF. Hold to decrease brightness.
### 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.

#### OPERATION

**ZONE 1**

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

**ZONE 2**

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

### 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.

#### OPERATION

**Master Power ON/OFF**

- Short press to turn zone ALL ZONES ON.
- Short press to turn ALL ZONES OFF.

**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.

**Power Indicator**

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

- Standard Decora Plate
- Magnet
- .35 in.
- 2.59 in.
- 1.27 in.

**OPERATION**

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

**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**

- Standard Decora Plate
- Magnet
- .35 in.
- 2.59 in.
- 1.27 in.

**OPERATION**

- Hold to increase or decrease RGB brightness.
- Hold to increase or decrease White brightness.
- Long Press to change RGB Color selected.
- Short press to turn ON.
- 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

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

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.

<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>
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<tr>
<td>3</td>
<td>Random Fade</td>
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<tr>
<td>4</td>
<td>Random Fade</td>
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<tr>
<td>5</td>
<td>RGB Fade In/Out</td>
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<tr>
<td>6</td>
<td>RGB Fade In</td>
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<tr>
<td>7</td>
<td>RGB Fade Out</td>
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<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>

DYNAMIC MODE CHART

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

MECHANICAL DIAGRAM

DIMENSIONS

4.72 in.
2.17 in.
0.66 in.

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

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

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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

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**ZONE 1**

*DI-RF-REC-CV-SC*  
**TOUCHDIAL MINI RECEIVER**  
**TOUCHDIAL™ Receiver**  
**TOUCHDIAL Mini-Receiver**  
**TOUCHDIAL™ Mini-Receiver**  
**TOUCHDIAL Remote Dimmer Control**  
**TOUCHDIAL Wall Paddle Dimmer**  
**TOUCHDIAL Wall Dual Paddle Dimmer**  
**TOUCHDIAL™ Wall Dimmer Control**  
**TOUCHDIAL Wall Dimmer**  
**TOUCHDIAL Mini-Remote RGB(W) Control**  
**TOUCHDIAL RGB(W) Wall Control**  
** TOUCHDIAL™ Full Control System**
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 five (5) 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/ 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.