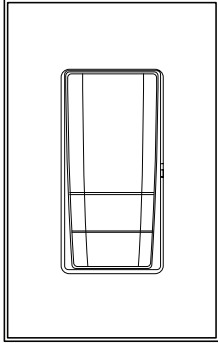

DSU1xxE-xxxx | RDU1xE-xxxx

Country of Origin: Made in China

OVERVIEW



The Legrand ScenePoint Universal Dimmer Station is a wall box dimmer that connects to the Wattstopper Architectural Dimming System. It is available in a one load configuration, and can be ganged up to four gangs. Communication with the system is through the WireLink Station Bus or RadioLink Bus depending on the model ordered.

FEATURES

- Station powered via local line feed
- Supports forward-phase or reverse-phase dimming
 - Station's load can be independently set for forward or reverse phase
- Provides exceptional support of LED, CFL, and other low wattage lighting
- Before the dimmer is programmed, or if communication through the controller is lost, the dimmer functions in default mode as an independent dimmer
- Once programmed, buttons can perform any operation that a standard station supports controlling its own or other loads, tasks, etc., on the system
- Dimmer station loads can be controlled by any other keypad, timed event, IR input or integrated control
- Each station supports up to five buttons
- *Dimming Phase Configuration* option in Design Center – *Auto* or *Manual* (*Factory default is Auto Mode*)
- Advanced built-in circuitry protection
- Dims incandescent, LED, dimmable CFL, dimmable ballasts, magnetic low-voltage, or neon/cold cathode
- Automatic shutdown when over-temperature, overcurrent, and other incorrect load conditions are detected
- Step-free ramping and dimming operation
- Support for LED lighting, (See *LED Dimming* pg 2)
- Button LEDs indicate load status
- Self-powered - remembers load levels if controller communication is temporarily lost
- Load handling - *FET* dimming
- Ships in auto detect mode

SPECIFICATIONS

Description	Specification - WireLink or RadioLink
Dimensions, HWD (Station Only)	4.1" x 2.3" x 1.48" (104.1mm x 58.4mm x 37.6mm)
Dimensions, HWD (Faceplates Only)	4.6" x 2.9" x .26" (116.8mm x 73.7mm x 6.6mm)
Weight	2.9oz or 82g (1-gang)
Voltage	120V ~ 60/50Hz
Load Types	Incandescent; LED; dimmable CFL; dimmable ballasts; magnetic low-voltage; neon/cold cathode (lpf); fluorescent (relay mode only); constant-speed motors (relay mode only)
Minimum Load	2W@120V

Incandescent Loads - Section	
Max. Load, 1-Gang Stations	1-Gang: 5.8A (700W @ 120V)
Max. Load, 2-Gang Stations	Each gang: 5A (600W @ 120V)
Max. Load, 3-4 Gang Stations	End gangs: 5A (600W @ 120V)
	Middle gangs: 4.2A (500W @ 120V)

Forward Phase LED Loads - Section <small>(See LED Dimming, pg. 6)</small>	
Max. LED Load, 1-Gang Stations	1-Gang: 1A (120W @ 120V)
Max. LED Load, 2-Gang Stations	Each gang: 0.8A (100W @ 120V)
Max. LED Load, 3-4 Gang stations	End gangs: 0.65A (100W @ 120V)
	Middle gangs: 0.65A (80W @ 120V)

Reverse Phase LED Loads - Section <small>(See LED Dimming, pg. 6)</small>	
Max. LED Load, 1-Gang Stations	1-Gang: 3.5A (420W @ 120V)
Max. LED Load, 2-Gang Stations	Each gang: 3A (360W @ 120V)
Max. LED Load, 3-4 Gang stations	End gangs: 3A (360W @ 120V)
	Middle gangs: 2.5A (300W @ 120V)

Transformer Magnetic Loads* <small>(See pg. 1)</small>	
Max. Magnetic Load, 1-Gang Stations	1-Gang: 4.7A (560W @ 120V)
Max. Magnetic Load, 2-Gang Stations	Each gang: 4A (480W @ 120V)
Max. Magnetic Load, 3-4 Gang stations	End gangs: 4A (480W @ 120V)
	Middle gangs: 3.3A (400W @ 120V)

Description <small>(continued)</small>	Specification - WireLink or RadioLink <small>(continued)</small>
Arc Suppression	Zero Cross Built-in arc suppression
Built-in Lightning / Surge Protection	<ul style="list-style-type: none"> • Load, <i>overcurrent</i> auto shutdown • Load, <i>short circuit</i> auto shutdown • Load, correct <i>load type</i> protection • Load, <i>irregular load conduction</i> protection • MOV surge • Lightning surge protection high-voltage <ul style="list-style-type: none"> - IEEE C62.41; (6000V & 3000A) • Lightning surge protection low-voltage <ul style="list-style-type: none"> - ITU-T K.20

Description <i>(continued)</i>	Specification - WireLink or RadioLink <i>(continued)</i>
Load Error	<p>Blink patterns below possible <i>after</i> the station has been configured</p> <ul style="list-style-type: none"> • 1 – blink pattern:..... load is <i>wrong load type</i> • 2 – blink pattern:..... load has a <i>short circuit</i> • 3 – blink pattern:..... load is <i>overcurrent</i> • 4 – blink pattern:..... <i>irregular load conduction</i>, (i.e., saturated transformer) <p>NOTE: - Red LED blink - <i>Status Only</i> - Blue LED - <i>Error</i></p> <p>NOTE: Blink pattern is 1 second off then number of quick blinks</p>
Cooling	None required (when properly installed and loaded)
Status Indicator	Microprocessor status
Safety Off Switch	Yes
Station Equivalent	WireLink: 0.36W on IC-24 / 0.54W on IC-36 RadioLink: Counts as 1 RF station
Station Bus Connections	24V/36V Station Bus - WireLink only
Station Bus Specification	2C, 16AWG / 1.31mm ² , twisted, non-shielded, <30pF per foot. Separate a minimum of 12" / 30.5cm from other parallel communication and/or high-voltage runs
Station Wiring Configuration	Daisy-chain/Star/Branch – WireLink only
Ambient Operating Temperature	32° - 95°F (0 - 35°C)
Ambient Operating Humidity	5° - 95°F non-condensing
UL and CUL Listed	Yes
WireLink Part Number	DSU1xxE-xxxx; 120V Electronic Universal Dimmer Station
RadioLink Part Number	RDU1xxE-xxxx; 120V Electronic Universal Dimmer Station

SYSTEM REQUIREMENTS

This station is compatible with InFusion Design Center software version 3.8 or higher. For new projects it is recommended that firmware and software be kept to the most current release.

CAUTION: This unit shall be provided with maximum **20 Amps** non-time delay suitable branch circuit protection or equivalent. To reduce the risk of overheating and possible damage to other equipment, **do not** install to control a receptacle or a motor operated appliance. The station is shipped in "DIMMING MODE". To change the default mode to RELAY change the Power Profile to Relay in the Software. The Relay Mode change will not take place until the system is programmed and the station is on line.

*IMPORTANT MAGNETIC LOAD INFORMATION

- Connecting unloaded magnetic transformers should be avoided
- Magnetic transformers should be appropriately sized
- Magnetic transformers should not be over loaded or under loaded and should be operated near the rated capacity with an appropriate safety margin
- Magnetic transformers should be overcurrent protected on the low-voltage side (fused or circuit breaker protection type)
- For transformers that have dual secondary coils, each secondary should be equally loaded (e.g., Model EREA E212SC300SK transformer or similar)
- Magnetic transformers in conjunction with LED lamps are **NOT** compatible with this device

INSTALLATION



Installation of Wattstopper products should be performed or supervised by a *Licensed Electrician*. *Turn the circuit breaker off and make sure no voltage is present where the dimmer station is to be mounted*. Damage caused by failure to disconnect power may void the warranty and is a risk to the installer. The dimmer station requires neutral to operate. The green ground lead must be connected to the structure's safety ground. A standard station pigtail will mate with the station bus connector on the dimmer station. The Station Bus wires on the dimmer and the pigtail are both made with wire rated at 600 Volts. A pigtail connects to the Station Bus using wire nuts, insulation displacement crimps or any other suitable wire fastener.

MINIMUM BACK BOX DIMENSIONS

Most standard back boxes that have the receiving threads for the dimmer mounting screw inside the box will be adequate. Most back boxes where the receiving threads are outside the box will be too small. In some areas local codes may require that the low-voltage wiring be connected outside of the electrical box. A groove is provided in the dimmer station to route the Station Bus outside of the electrical box. See detailed drawing at end of instructions. (Also see *Removing Metal Tabs* below for ganging stations together)

MUD RINGS

If mud rings are specified on a job it is important to test the mud rings for proper fit. Two-gang mud rings, in particular, run substantially smaller than back boxes and some brands are not large enough for the station. The *only solution* is to test the fit first.

3-WAY SWITCH APPLICATION

A standard ScenePoint Dimmer station may be used in any 3-way application. When installing a standard ScenePoint Dimmer station, as a 3-way switch, the red (Load Out) screw connector is not connected and is properly capped-off.

SOFTWARE STATION SET UP

LOAD AND BUTTON LAYOUT

Each station is a single dimmer station with a single load. Stations may be ganged together, up to 4 gangs. Select the room, then click on *Vantage Objects* in the *Object Explorer* and expand *Stations, WireLink* or *Stations, RadioLink*. From the list of stations, double-click on the *ScenePoint Universal Dimmer Station* to place it in the room. In the *Object Editor*, name the station and make sure it is on the correct WireLink or RadioLink Station Bus port. Select the number of buttons, Load Type, dimming configuration, etc.

CONFIGURATION - WireLink

When the station is first connected to the Station Bus, the diagnostic LED will blink twice followed by a pause, meaning that the station is connected correctly but not yet configured. In Design Center, click on the *Configure Stations* button, on the toolbar. Highlight the ScenePoint Universal Dimmer station. The Status LED will blink five times followed by a pause and the button LEDs will blink rapidly indicating that the station is in configuration mode. To finish configuring press any button on the Station three times. The station may also be configured by typing the serial number in the project file, using this method the station will automatically be configured when the system is programmed. Please note, if the serial number contains an alpha character please ignore this when typing in the serial number. Once configured the Status LED will be blue, red, or purple.

CONFIGURATION - RadioLink

RadioLink stations need to be configured to associate which physical station goes with the station in software. When the station is initially powered-up, the Status LED will blink three times followed by a pause - this means the station is powered correctly but not yet on the network. **Before** uploading the file to the Wattstopper Architectural Dimming System, do the following: From Design Center, click in the *Serial Number* section in the *Object Editor* and type in the serial number. Please note, if the serial number contains an alpha character ignore this when typing in serial numbers. The serial number of each station is located on a permanent sticker on the front of the station. When the system is programmed the Main Controller will add to its network and configure all the RadioLink stations that it has serial numbers for. This may take several minutes depending on the number of RadioLink stations on the network.

RadioLink stations may also be configured the same way WireLink stations are configured, i.e., 3-button press. When configuring RadioLink stations this way, make sure the *Exclude RadioLink Bus* check box, under *Settings | System Preferences*, is not checked. All RadioLink stations go back to non-programmed mode when the *Configure Stations* button on the tool bar is clicked. Unconfigured station's LEDs will all blink on and off while in configure station mode. Press any button three times to configure each station. After configuring stations and clicking the *Configure Stations* button again to turn configure stations mode off, all RadioLink stations need to log back on to the system before working as programmed. Allow time for this to occur. TIP: Reprogram the system when finished configuring.

SOFTWARE STATION SET UP *(continued)*

DEFAULT MODE

ScenePoint UDS stations have a default mode that operates without programming or being connected to the Wattstopper Architectural Dimming System. If a dimmer has been programmed but communication with the controller is lost, the dimmer will revert to default operation.

DEFAULT OPERATION

Station Type	Button to Load Mapping
1-Gang Stations	All buttons control the load
2-4 Gang Stations	All buttons in each gang control the respective load (load 1, load 2, etc.)

When power is restored from a power outage the dimmer will return the loads to the last load level. This will occur whether or not the dimmer is connected to a system.

Button Action	Load Operation
Single Press	The load toggles between off and the learned level. The turn on ramp time is 1.5 seconds and the turn off fade time is 5 seconds
Double Press	The load ramps to 100% in 1.5 seconds The second press must be within 1 second of the first press
Press and Hold	After a one second delay the load will ramp in the opposite direction from the last press and hold. If the load reaches 0 or 100% it will reverse direction. When the button is released the current load level will be saved as the new learned level for that button. The cycle time is 5 seconds from 0-100%

When multiple buttons control the same load, each button will have its own learn level.

SERVICE SWITCH FOR LAMP REPLACEMENT

An off switch is provided to disconnect power between the station and the fixture for lamp replacement. Service other than lamp replacement requires the breaker to be switched off.

RESET

The dimmer stores the configuration data locally so that it will continue to operate correctly if communication with the system is lost. This information includes: LED properties, sounder properties, load profile, last load level, and default learn levels.

To reset this information to the factory default, press and hold switches one and five when power is applied to the station. The board will respond by sounding three slow beeps to indicate that the reset took place. Since buttons do not need to be installed in switches 1-3, the faceplate may need to be removed so that the switch matrix can be pressed directly. After a reset the load profile will be *Default*; the learn levels will be 50%, loads will all be off, and other settings will return to factory defaults.

REMOVING METAL TABS

Removal of metal tabs does **not** derate the stations load. (See *Specifications* table above)

CLEANING BUTTONS and FACEPLATES

- Turn the breaker to the station OFF
- Dampen a soft cloth in water and wring-out to barely damp – almost dry
- Use a light buffing motion to wipe clean
- **Do not** take the station apart
- Never spray station with any cleaners

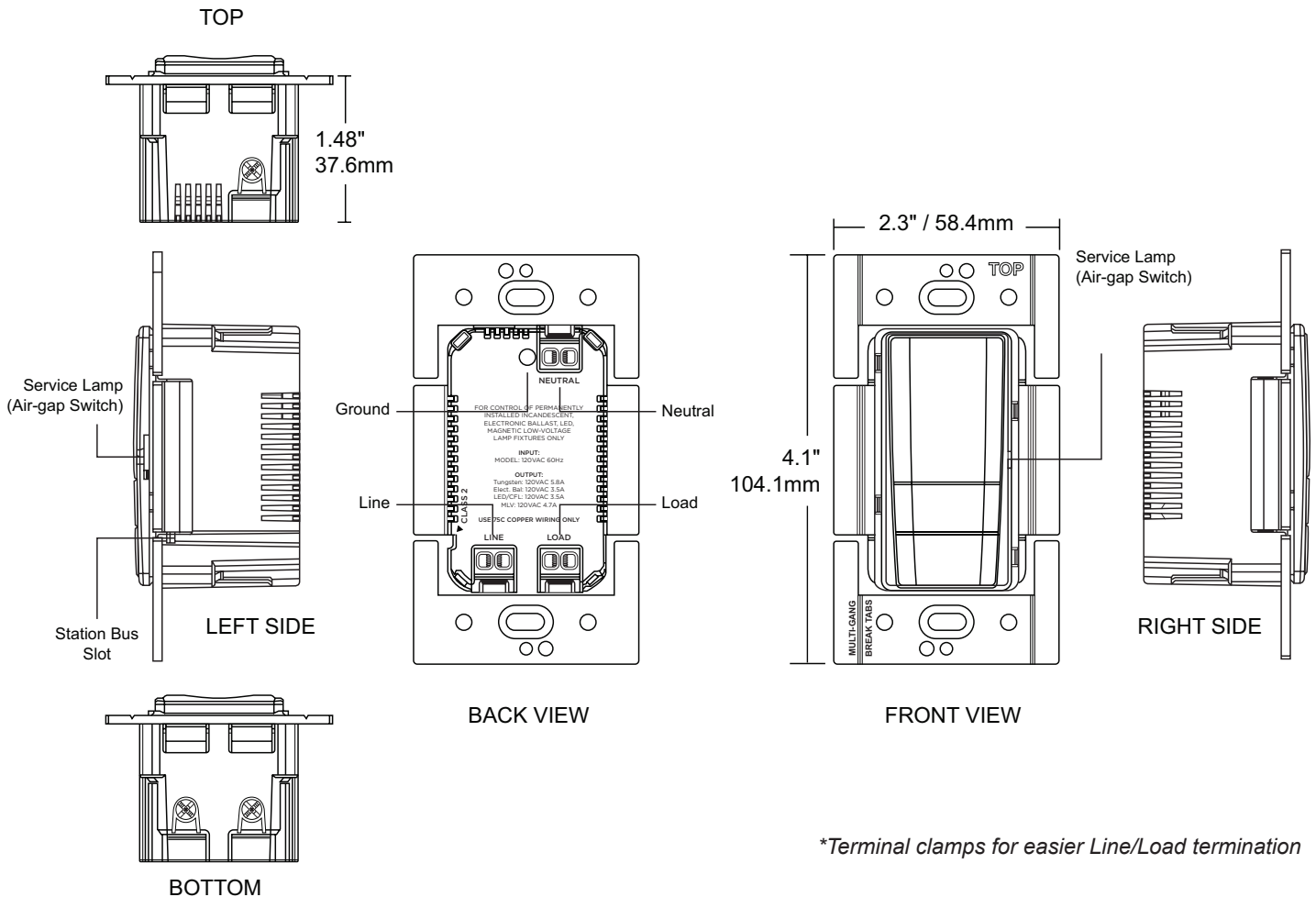
IMPORTANT LED LIGHTING INFORMATION

LED DIMMING

Legrand is leading the way in LED lighting control through innovations of new hardware and software products; however, industry standards are still undefined for dimming LED lamps and fixtures. Dimming performance of LED lighting cannot be guaranteed, even when applying the correct dimming technology specified by the LED manufacturer. While Legrand may be consulted when performance issues are present, Legrand will not be liable for on-site performance issues.

- Check Legrand's online library of LED product test reports prior to installing LED products to be dimmed by Legrand dimmers
- We offer *on-demand product testing* of untested LED products
 - Please visit our testing web page for more information <http://dealer.vantagecontrols.com/led/>
- Selecting a tested product greatly increases the likelihood of successful dimming. However, LED product tests are performed under laboratory conditions with a set number of samples and a quality power source. Please use contact information at <http://dealer.vantagecontrols.com/led/> for details regarding this service.
- There are many factors that may contribute to unsatisfactory results within a specific installation, including, but not limited to,
 - Line noise originating from electrical equipment within the premises
 - Line noise from the source (particularly with local generators or inverters)
 - Interference between dimmed LED products
 - Wiring conditions (i.e., shared neutrals, loose neutrals, incorrectly bonded neutral, or grounding issues), and
 - LED product variances including:
 - unintended batch-related variances
 - product revisions

MULTI-VIEW LINE DRAWING



**Terminal clamps for easier Line/Load termination*

DIAGNOSTIC INFORMATION

When the faceplate is removed the Status LED can be seen behind the station's switch matrix. The Status LED blinks evenly or flashes two, three, or four times followed by a pause to indicate status information.

Off: The station is programmed and configured, or the station is *not* powered. A line voltage connection has not been made or the line feed breaker is off.

Two blinks: Station is operating correctly but is *not* configured

Three blinks: Station is *not* communicating with the Main Controller. Verify that Station Bus wiring conforms to Vantage guidelines.

Four blinks: ScenePoint problem, please contact factory

Five blinks: Configuration mode

FCC ID: PII-22713 IC: 3505A-22713

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications to this product not expressly approved by Vantage Controls could void the user's authority to operate this product.

CHANGING THE NUMBER OF BUTTONS

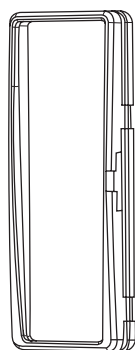
EasyTouch II keypads will support 1 to 5 buttons. The number of buttons may be changed on a keypad after it has been installed by following these instructions.



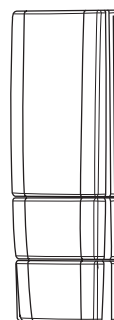
CAUTION: Turn the circuit breaker off and make sure no voltage is present at the ScenePoint station being modified.



1. Change the software file to the new number of buttons with proper engraving
2. Order the new buttons for proper engraving
3. Disconnect power from the station
4. Replace the old button configuration with the new button configuration using the chart example (pg. 8)
5. When finished replacing the buttons and the station is fully assembled, test the new buttons operation



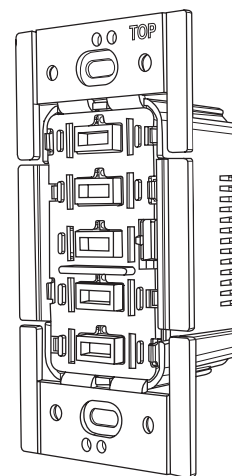
DECORA RING



BUTTONS
1 to 5



DIFFUSERS



MATRIX BASE

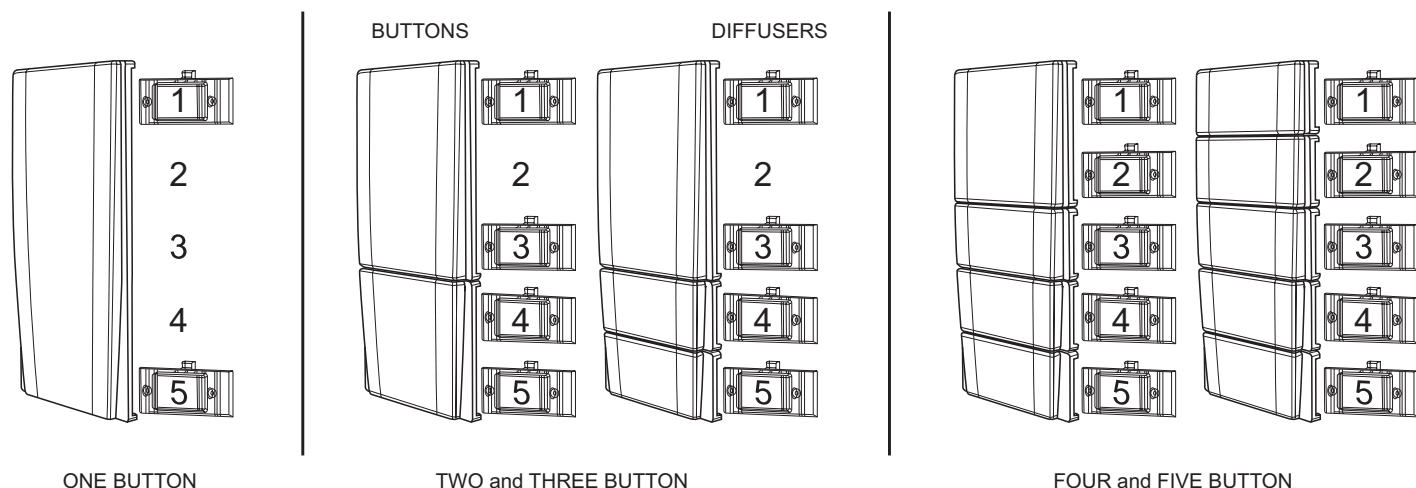
PROPER BUTTON ASSEMBLY OF EASYTOUCH II STATIONS

Disassemble

1. Remove faceplate
2. Remove Decora button ring
3. Remove buttons that need replaced
4. LED Button Diffuser: Remove *or* add button diffusers for new button configuration (see examples below)

Assemble

1. Double check LED diffusers are in the correct position
2. Place buttons in proper positions for new configuration. Buttons must be in the correct position following tapered design from top to bottom. Buttons have a small number on the back border; 1 is top and 5 is bottom.
3. Replace Decora button ring and securely snap in place
4. Replace faceplate



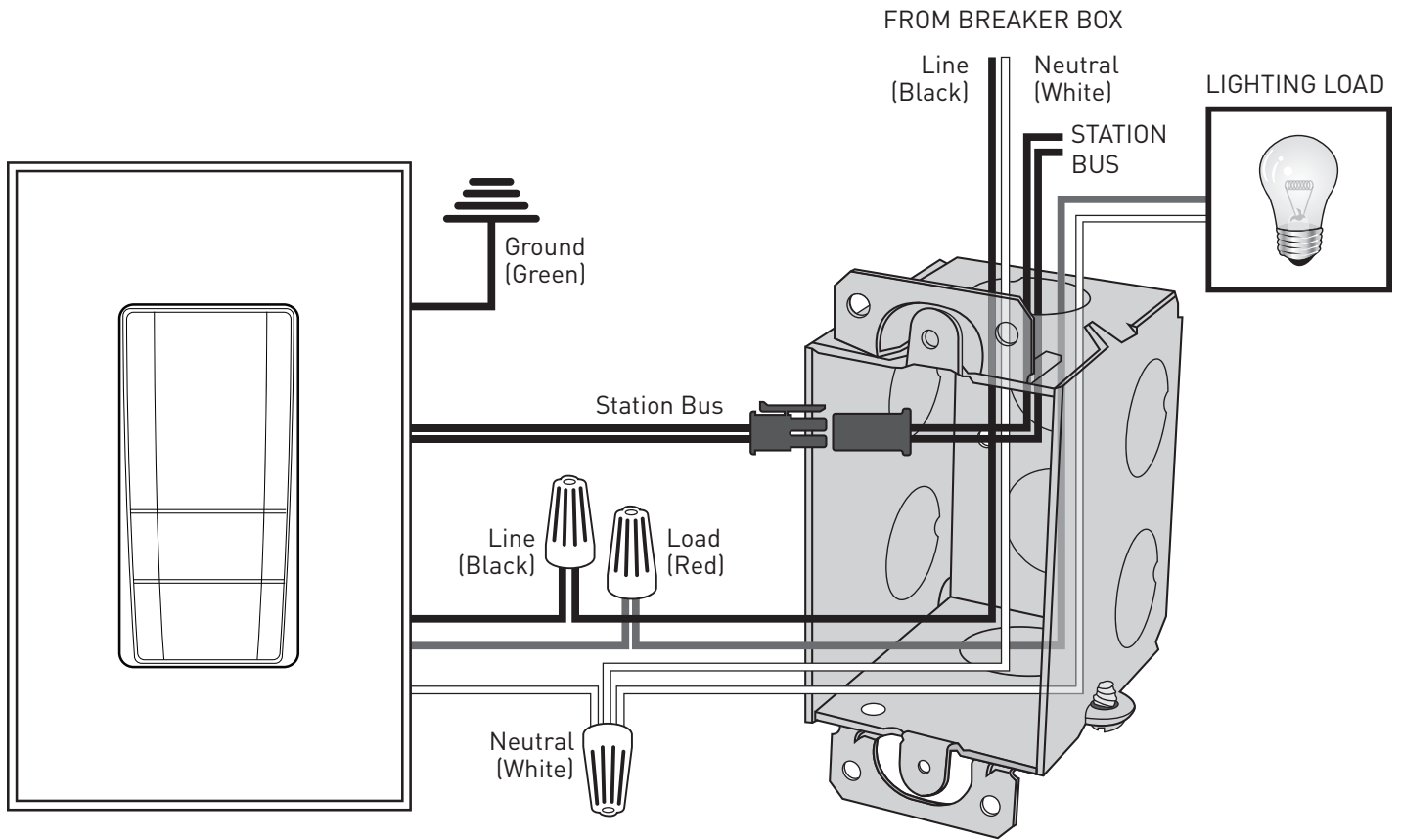
WIRELINK MODELS: NEC CODE WIRING INFORMATION

Installing ScenePoints with Architectural Dimming parts, meet or exceed all NEC codes for connecting the Class 2 wiring *inside or outside* of the electrical box. See diagram (pg. 9) for Class 2 connections outside of the electrical box.

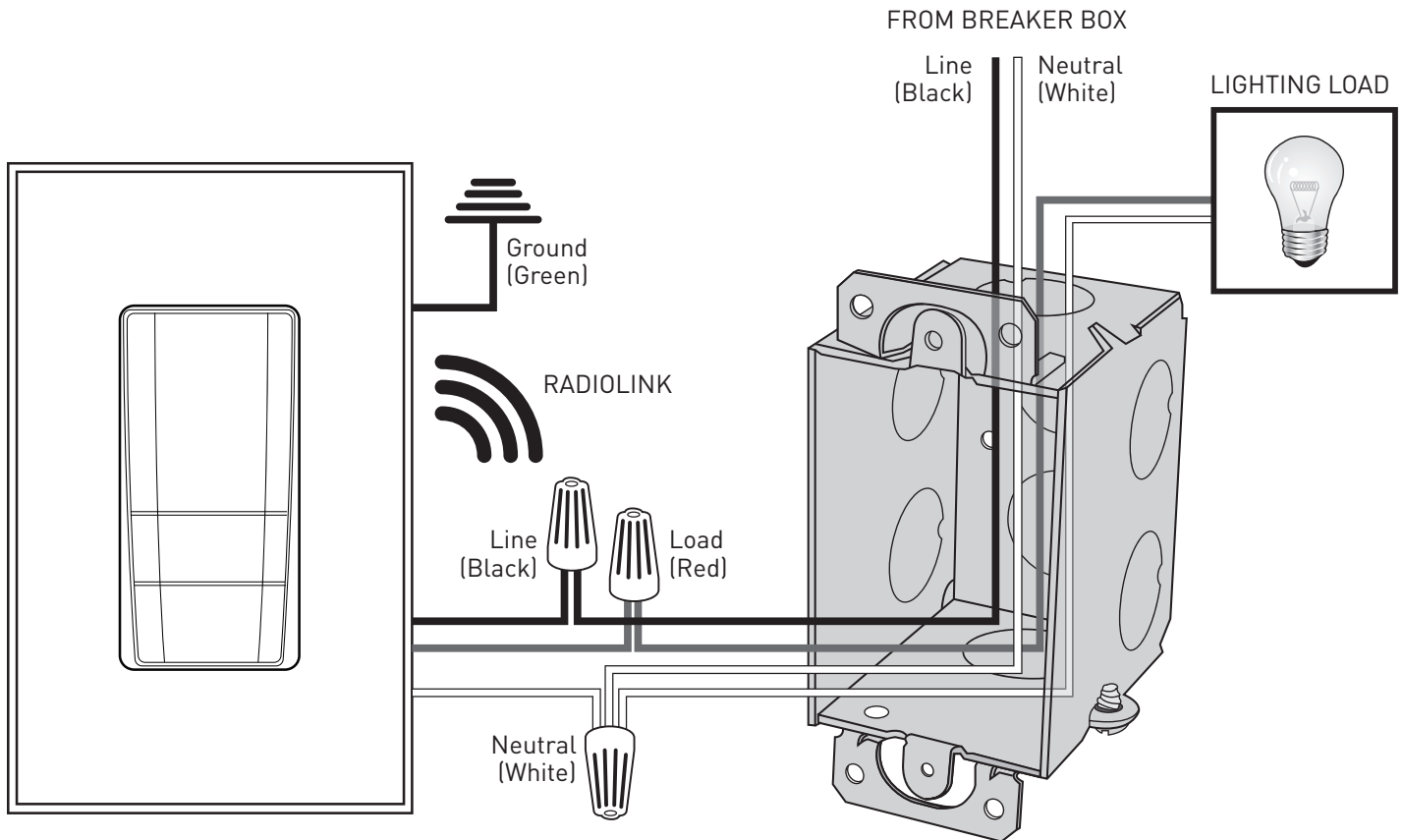
Wattstopper ScenePoint Stations satisfy National Electrical Code (NEC)*, based on Article 725-136. Wattstopper Station Bus wiring and Wattstopper pigtailed meet NEC's code. Wattstopper Station Bus wiring and ScenePoint pigtailed are 600V rated. Wattstopper ScenePoints installed with Wattstopper parts meet all NEC codes for wiring inside the electrical box. However, Wattstopper has included a path to make Class 2 connections outside of the electrical box if desired. Follow these instructions to make connections to the Station Bus outside of the electrical box.

*2017, National Electrical Code and NEC are registered trademarks of the National Fire Protection Association NFPA 70

WIRELINK INSTALLATION



RADIOLINK INSTALLATION



WARRANTY INFORMATION

Wattstopper warrants its products to be free of defects in materials and workmanship for a period of three (3) years. Touchscreens are warranted for 90 days. There are no obligations or liabilities on the part of Wattstopper for consequential damages arising out of, or in connection with, the use or performance of this product or other indirect damages with respect to loss of property, revenue or profit, or cost of removal, installation or reinstallation.

INFORMATIONS RELATIVES À LA GARANTIE

Wattstopper garantit que ses produits sont exempts de défauts de matériaux et de fabrication pour une période de trois (3) ans. Les écrans tactiles sont garantis pendant 90 jours. Wattstopper ne peut être tenu responsable de tout dommage consécutif causé par ou lié à l'utilisation ou à la performance de ce produit ou tout autre dommage indirect lié à la perte de propriété, de revenus, ou de profits, ou aux coûts d'enlèvement, d'installation ou de réinstallation.

INFORMACIÓN DE LA GARANTÍA

Wattstopper garantiza que sus productos están libres de defectos en materiales y mano de obra por un período de tres (3) años. Las pantallas táctiles están garantizadas por 90 días. No existen obligaciones ni responsabilidades por parte de Wattstopper por daños consecuentes que se deriven o estén relacionados con el uso o el rendimiento de este producto u otros daños indirectos con respecto a la pérdida de propiedad, renta o ganancias, o al costo de extracción, instalación o reinstalación.