VANTAGE CONTROLS™

Installation

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RadioLink ScenePoint Dimmer — Rx

Overview

The Vantage ScenePoint with RadioLink is a wall box dimmer that communicates to the Vantage Control System via a radio transceiver. It is available in 1-4 load configurations that can be mounted respectively in 1-4 gang back boxes. It is powered via the local line feed. Before the dimmer is programmed, or if communication is lost, the dimmer functions in default mode as an independent dimmer. Once a button is programmed it can perform any operation that a standard station supports controlling its own or other loads. Any load on the dimmer may be controlled by any other keypad, IR input, RS-232 or timed event. It supports up to eight keypad buttons on a four gang station, and an optional internal IR receiver.

Specifications

Description	Specification
Station Dimensions	All Gangs Height = 4.3" -or- 109mm All Gangs Depth = 1.38" -or- 35mm One Gang Width = 2.5" -or- 63.5mm Two Gang Width = 4.3" -or- 109mm Three Gang Width = 6" -or- 154mm Four Gang Width = 7.9" -or- 200mm
Faceplate Dimensions	All Gangs Height = 4.7" -or- 119.3mm One Gang Width = 2.95" -or- 75mm Two Gang Width = 4.68" -or- 118.8mm Three Gang Width = 6.5" -or- 165mm Four Gang Width = 8.31" -or- 211mm
Weight	2.9oz. -or- 82g (1-gang)
Voltage	120/240V ~ 60/50Hz
Max. Load Using Default Power Profile	Single Gang = 5A (600W @ 120V) - or - Single Gang = 5A (1200W @ 240V) See Load Ratings and Types below for multi-gang
Max. Load Using Relay Power Profile	All Gangs = 4A (480W @ 120V) - or - All Gangs = 4A (960W @ 240V)
Built-in Protection	MOV surge suppression
Arc Suppression	Zero Cross Built-in arc suppression
Lightning / Surge Protection	High Voltage meets IEEE C62.41 (6000V & 3000A) Low Voltage meets IEU-T K.20
Ambient Operating Temperature	32 - 95°F -or- 0 - 35°C
Ambient Operating Humidity	5 - 95% non-condensing
Cooling	None required
Safety Off Switch	Load by Load selectable
Status Indicator	Microprocessor Status
Load Types	Incandescent, Magnetic Low Voltage, forward phase Fluorescent dimming ballasts, non-dimmable fluorescent ballasts (relay mode only), Neon, Cold Cathode (lpf), and HID
UL and CUL Listed	Yes
FCC	Yes

System Requirements

This station is compatible with InFusion Design Center software or QLink software version 3.2 with Controller firmware version 6.2 or higher. For new projects it is recommended that firmware and software be kept to the most current release.

Load Ratings and Types

In multiple gang stations no single load may exceed 5 amps, i.e., a two gang station may have one load at 400 Watts (3.3 amps) and the second load at 600 Watts (5 amps) for a total of 1000 Watts. (See *Removing Metal Tabs* below.)

Number of Gangs	Maximum Rating at 120V 50/60Hz	Maximum Rating at 240V 50/60Hz
1	5A, 600W	5A, 1200W
2	8.3A, 1000W	8.3A, 2000W
3	12.5A, 1500W	12.5A, 3000W
4	16.7A, 2000W	16.7A, 4000W

Minimum Load Required

Neutral Station	No Neutral Station
15W	50W

***CAUTION**: To reduce the risk of overheating and possible damage to other equipment, **do not** install to control a receptacle. 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 RF station is on line.*

Installation

Installation of Vantage products should be performed or supervised by a *Certified Vantage Installer.* Turn the circuit breaker off and make sure no voltage is present where the ScenePoint Dimmer is mounted. Damage caused by failure to disconnect power may void warranty and is a risk to the installer. Connect the wires as follows: Black to LINE, White to NEUTRAL, Red to LOAD, Green to structure's safety GROUND. Before turning the circuit breaker on, check to see that all connections are correct (In particular, check to see that the correct wires have been connected to "Line In" and "Load Out").

Minimum Back Box Dimensions

Number of Gangs	Minimum Back Box Dimensions
1	2.80"h x 1.80"w x 2.5"d
2	2.80"h x 3.60"w x 2.5"d
3	2.80"h x 5.40"w x 2.5"d
4	2.80"h x 7.20"w x 2.5"d

With these 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.

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.*

No Neutral Installation

In its standard configuration, ScenePoint with RadioLink requires a Neutral connection to operate. If operation without Neutral is required, a "NO NEUTRAL" station must be specified when designing the project in QLink. "NO NEUTRAL" stations are configured to operate without a neutral connection and are shipped from the factory without a neutral connection. When installing a "NO NEUTRAL" station, a *minimum 50 Watt load* must be connected to the first gang. "NO NEUTRAL" stations are pre-programmed to allow the load on the first gang to be dimmed from 0% to a maximum of 93% of full on. Relay mode must not be used in the first gang of a "NO NEUTRAL" station.

3-Way Switch Application
The RadioLink Satellite ScenePoint Dimmer station and Satellite keypad (part numbers: RDSS1-(X) & SK-1) are available from Vantage for 3-way applications. Also, a standard RadioLink ScenePoint Dimmer Station may be used in any 3-way application. Installing a standard RadioLink ScenePoint Dimmer station - as a 3-way switch - is done the same way as a standard installation with the exception that the Red (Load Out) wire is not connected and is properly capped-off.

Station Set Up in Software
InFusion: First select the room, then click on *Vantage Objects* in the *Object Explorer* and expand *Stations, RadioLink*. From the list of stations double click on the ScenePoint Dimmer Station to place it in the room. In the *Object Editor,* name the station and make sure it is on the correct RadioLink bus port.

QLink: First make sure that the Main Controller is RadioLink enabled in the QLink Project. Select the Controller in Hardware View and look at its properties. It should have RadioLink on one of its RS-232 Ports. To add a ScenePoint RadioLink Dimmer in QLink, right click on the room and from the pop-up menu, select Add RadioLink Station | ScenePoint Dimmer station. This will reveal the *RF ScenePoint Station Definition Box*. Select the number of buttons and loads according to the configuration of the dimmer station and click OK.

Configuration
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 Vantage system, do the following: From Design Center, click in the *Serial Number* section in the *Object Editor* and type in the serial number. From the menu bar in QLink, select *System/Configure Stations*. A list of all stations will be displayed on the screen. Manually enter the serial number for each RadioLink station to match it with the corresponding programming in QLink.

The serial number of each station is located on a permanent sticker and a removable sticker on the front of the station. Remove the sticker with the number only and place on the Station Design Report for easy reference when programming. 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. The Status LED will blink steadily when a station has been added to the network and configured.

Default Mode
The ScenePoint with RadioLink has a default mode that operates without programming or being connected to the Vantage System. If a ScenePoint has been programmed but communication with the controller is lost, the ScenePoint will revert to default operation. Multiple gang Dimmer loads are numbered from left to right.

When default is the desired operation for a button, it may be left unprogrammed and will continue to operate in default mode even if other buttons on the dimmer are programmed.

Default Operation

Station Type	Button to Load Mapping
1-gang Dimmer	All buttons control the load.
All buttons in first (left) gang. One column of buttons	The top button controls the first load. Second button controls second load etc.
All buttons in first gang. Two columns of buttons	Top left button controls first load. Top right button controls second load. Second row left button controls third load. Second row right button controls fourth load.
One or two buttons per gang.	Each button(s) controls the load in its gang.

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.

Default IR Mode
If the ScenePoint has the optional IR receiver, it will have a default IR mode that is active when it is not communicating with a system or when none of the Scene Codes in its IR Zone have been programmed.

The Scene Codes 230-239 are transmitted by the Scene buttons 1-10 on the Vantage IR Remote Control.

The Scene buttons 1-4, codes 230-233, controls loads 1-4 operating the same as the default operation for a button. Scene 9, code 238, will turn all station dimmer loads on. Scene 10, code 239, will turn all station dimmer loads off.

Unlike the buttons, if any IR Scene button is programmed all of the IR Scene buttons stop executing default operation.

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 ScenePoint 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 1-3 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%, the loads will all be off, and other settings will be at factory default.

Note: If the Station Load was changed to RELAY this Process will change it back to DIM. Make sure it is back on line with the Main Controller before testing button or load operation.

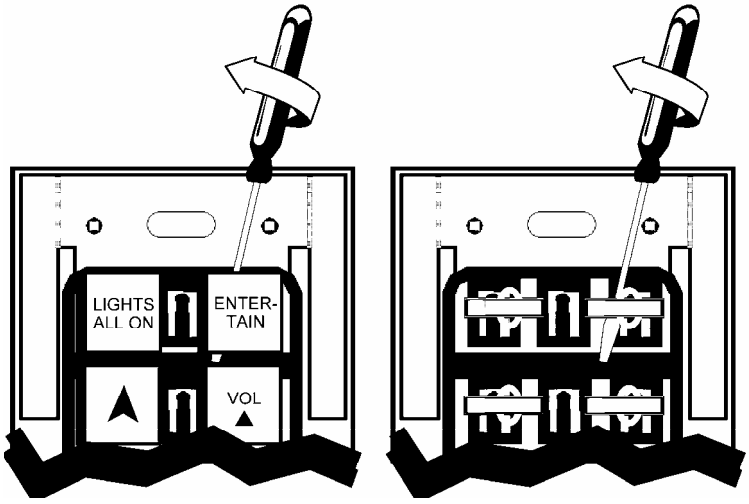
Removing Metal Tabs
Removal of metal tabs does ***not*** derate the stations load. (See *Load Ratings and Types* above.)

Diagnostic Information
If the faceplate is removed the Status LED can be seen in the approximate middle of the station's switch matrix. The Status LED blinks evenly or flashes 2, 3, or 4 times followed by a pause to indicate status information.

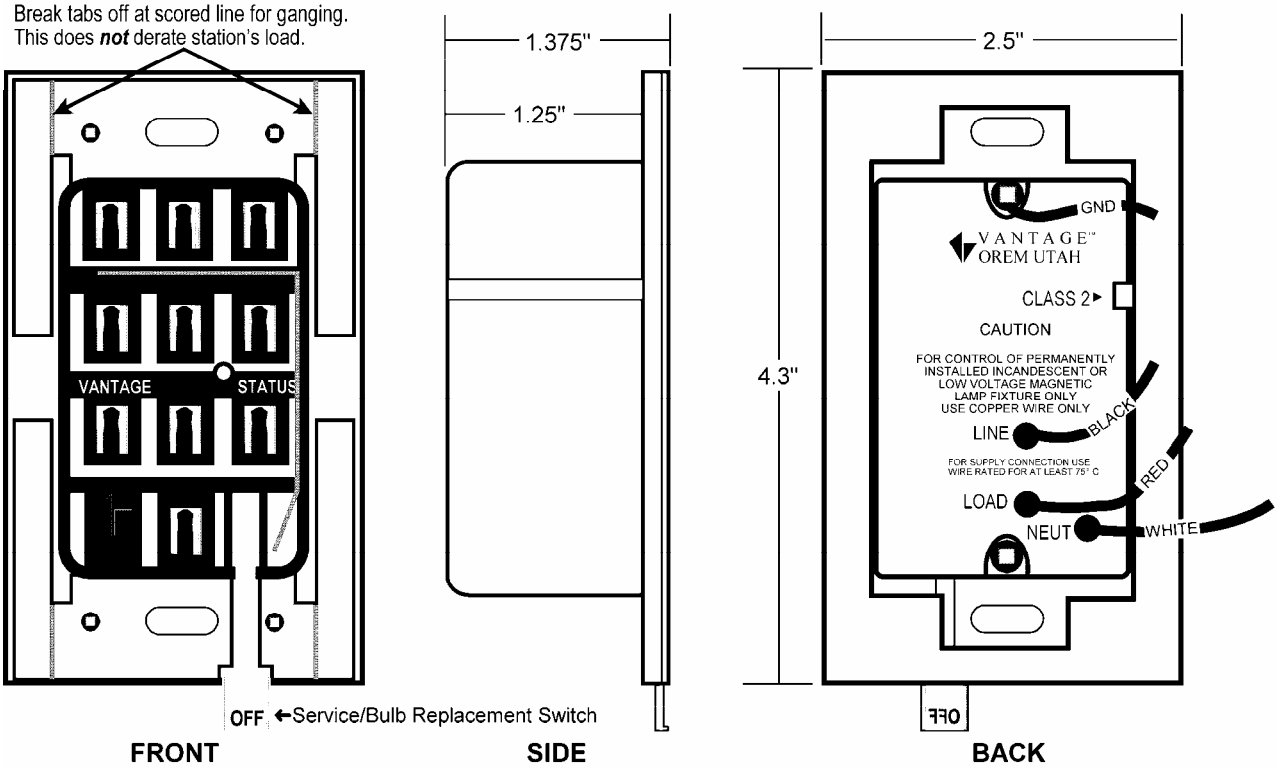
Off: The station is not powered. A line voltage connection has not been made or the line feed breaker is off.
Even blink: Station is operating correctly and is configured.
Two blinks: Station should be reset. See Reset above.
Three blinks: Station is not added to the network. Verify that its serial number has been programmed into the Main Controller using Design Center or QLink *and* that the station is within 100 Feet of the Main Controller.
Four blinks: Dimmer problem. Please contact the factory.

Button Removal Instructions

Remove power from station. Do not use fingers to remove SquareTouch or FineTouch buttons or the switch matrix may be broken voiding the warranty. Carefully insert a small flat-blade screwdriver between the button and the black switch matrix. Make sure the screwdriver does not protrude below the switch matrix. Slightly twist the screwdriver and the button will easily lift off the switch matrix. EasyTouch buttons must be removed from bottom to top.



FCC ID: PII-RDS2000
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.