

Standard Load Dimmer Station 4 - MODEL: SLDS4-DIN

**Overview**

The Vantage SLDS4-DIN, DIN Dimmer Station is a 4 channel dimmer that connects to the Vantage Control System. It is powered from a local line feed, and communicates with the system through the two wire station bus. Before the dimmer is programmed, or if communication is lost, the dimmer functions in default mode as an independent dimmer by pressing the buttons on the front of the station. Any load on the dimmer can be controlled by any other keypad, IR input or timed event. It supports up to six contact inputs.

**System Specifications/Requirements**

Description	Specification
Ambient Operating Humidity	5-95% non-condensing
Ambient Operating Temperature	0-40°C / 32-104°F
Dimensions, HWD	86mm x 157mm x 58mm
LED Indicators	Status and Load State
Lightning Surge Protection High Voltage	IEEE C62.41 (6000V 3000A)
Lightning Surge Protection Low Voltage	ITU-T K.20
Load Types	Incandescent, Magnetic Low Voltage, forward phase Fluorescent dimming, non-dimmable fluorescent*, Neon, Cold Cathode (Ipf), HID, Variable-Speed Motors, constant-Speed Motors* - *(relay mode only)
*Max. Current per Load	2.5A (see load configurations below)
Max. Voltage	250VAC
*Max. Watts per Load	640W@240V Attention: Not all channels can be used on max. load / see load configurations below
Maximum Line Feeds	1 @ 20A (Maximum) breaker 8A Maximum current per station
Mounting	35 mm DIN Rail (EN 50 022: 1977)
Number of Dry Contacts	6
Number of Loads	Four (4)
Station Bus connections*	24V / 36V Station Bus
Station Bus Specification	2C 16AWG, non-shield, <30pF per foot Station Bus should be separated a minimum of 18" from other parallel communication and/or high voltage runs.
Station Equivalent InFusion	0.35W on IC-24 / 0.55W on IC-36
Station Equivalent QLink	1 Station
Station Wiring configuration	Daisy-chain/Star/Branch
Weight	595g

LOAD CONFIGURATIONS	Load 1 MAX.	Load 2 MAX.	Load 3 MAX.	Load 4 MAX.
Normal Loads 120VAC	240W	240W	240W	240W
Normal Loads 240VAC	480W	480W	480W	480W
Expanded Loads 120VAC	320W	320W	320W	<b>Do Not Use!</b>
Expanded Loads 240VAC	640W	640W	640W	<b>Do Not Use!</b>

For proper heat dissipation:

**ATTENTION: NOT ALL CHANNELS CAN BE USED ON MAX. LOAD**

- Expanded loads 1 through 4 must not exceed 960W@120V
- Expanded loads 1 through 4 must not exceed 1920W@240V.
- The **Do Not Use!** loads, may be used, if combined loads 1 through 4 do not exceed the 960W or 1920W limits and individual loads do not exceed the limits in the table.

**\*CAUTION:** 36V stations have a  symbol on the Serial Number sticker. Any station, not displaying this symbol, should not be connected to a 36Volt Station Bus.

**CAUTION: Do not use an SLDS4-DIN Dimmer Station to control an outlet/plug.** Any motor or appliance connected to a Dimmer Station requiring "RELAY MODE", must not be greater than 2A, (240W @ 120V or 480W @ 240V), to reduce the risk of overheating and possible damage. This rating allows most ceiling fans requiring relay mode to work with the Dimmer. The station is shipped in "DIMMING MODE". To change the default mode to RELAY change the Power Profile to Relay in the QLink Software. The Relay Mode change will not take place until the system is programmed and the station is on line. For relay loads please look at Vantage's DIN 8 Channel 10 Amp Relay Station part #STR8RW201.

**System Requirements**

This station is compatible with InFusion Design Center software or QLink 3.5 software with Controller Firmware 6.5 or higher. For new projects it is recommended that firmware and software be kept to the most current release.

**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 dimmer station is to be mounted. Damage caused by failure to disconnect power may void the warranty and is a risk to the installer. **High voltage DIN products must be installed inside of a properly vented and covered DIN enclosure.** The dimmer station requires Neutral to operate. Two Line and Neutral screw terminals are provided allowing the power to be jumped from station to station until the Breaker limit is reached. A standard screw terminal is provided for landing the station bus connector on the dimmer station or connect by using the pins on the side of the station to pass station bus between stations (see drawing).

**Dimmer Station Set Up in Software**

**InFusion:** First select the room, then click on *Vantage Objects* in the *Object Explorer* and expand *Stations, WireLink*. From the list of stations double click on the SLDS4-DIN Dimmer Station to place it in the room. In the Object Editor name the station and make sure it is on the correct station bus port. In the Object Editor note that contact inputs 5 and 6 may be assigned to a Vantage IR receiver and LightPoint Sensor respectively.

**QLink:** First change to Wiring view, right click on the Main Controller and from the pop-up menu, select Add SLDS4-DIN Station | DIN Dimmer from the station list. This will reveal the *DIN Station Definition* Dialog Box. Type the name of the Dimmer Station. If an external IR receiver or a Vantage LightPoint Sensor will be connected, select the appropriate contact. A Vantage remote IR receiver may be connected to contact 5 (QLink address 9) and a Vantage LightPoint sensor may be connected to contact 6 (QLink address 10). Click OK to exit the DIN Station Definition window.

**Configuration**

With AC power connected and turned on, when the dimmer 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. From QLink, select System | Configure Stations and click on the radio Configure button in the Online Configuration section from the pull down menu. Highlight the SLDS4-DIN dimmer station. The Status LED will blink 5 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 3 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. Once configured the Status LED will blink evenly and the buttons stop blinking.

### Default Mode

The dimmer station has a default mode that operates without programming or being connected to the Vantage System via the four buttons on the front. If a dimmer has been programmed but communication with the controller is lost the dimmer will revert to default operation.

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.

### Default Operation

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%.

### Reset

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

To reset this information to the factory default, press and hold switch 1 when power is applied to the station. The Status LED will flash the serial number when the reset is complete (this flash is too fast for the naked eye). 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. IR scenes and buttons 1-4, dim loads according to default programs when station is reset and no programming is present.

### Actuator Buttons

The four actuator buttons on the front of the Dimmer station are for local control only and are not programmable through Design Center or QLink software. These buttons will not register in Monitor Button press.

### Connection Terminals

#### Top Connections:

- Connections 1-4 are dry-contacts. Program the same way you would program any dry-contact
- Connections 5 and 6 (addressed as 9 and 10 in software) are for dry-contacts or a Vantage remote IR receiver and a Vantage LightPoint sensor respectively
- A +12VDC, 50mA power connection may be used for any device requiring this power profile, i.e., the Vantage Remote IR or Vantage LightPoint Sensor
- A Station Bus connection to the Vantage system

#### Bottom Connections:

- Neutral and Line for high-voltage connections
- Load and Neutral connections for loads 1-4

#### Side Connections:

Station Bus Pin, (included) Part #VDC-0197.

**CAUTION:** All Dry-Contacts to third party equipment may produce a ground loop. If a dry contact is connected directly to any Vantage station, and the device is not using the same power source or is far away from the Vantage station, a ground loop or data noise condition may occur. If this condition is suspected, Vantage recommends a third party Opto (optical) Isolation Module. Opto Isolation provides a communications link and is an important consideration if a system uses different power sources, has noisy signals or must operate at different ground potentials.

### Diagnostic Information

The Status LED blinks evenly or flashes 2, 3, 4 or 5 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.

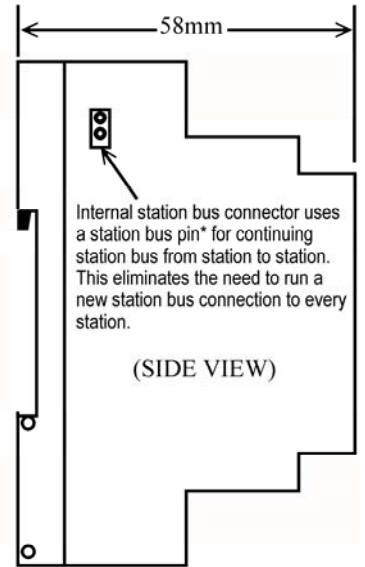
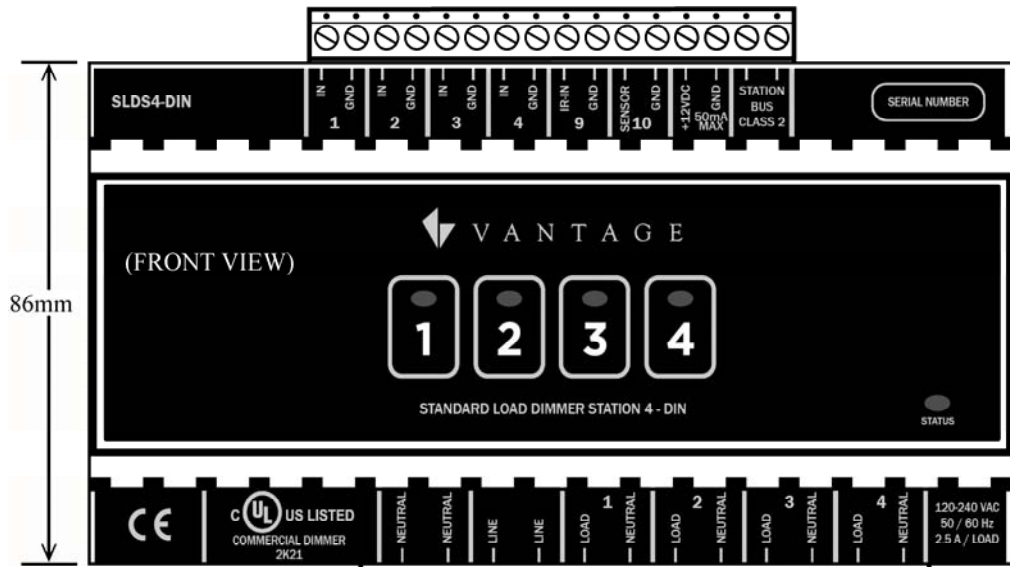
**One Even blink:** Station is operating correctly and is configured.

**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:** Dimmer problem. Please contact the factory.

**Five blinks:** Configuration mode.



\*This station bus pin may be inserted between stations for continuous station bus connection.  
Screw Terminals are removable for easy connection of wires.

