

LOW-VOLTAGE OUTPUT STATION

| LVOS-0-10-PWM-1
LVOS-0-10-PWM-P-1



Description

The Low-Voltage Output Station (LVOS) is used for the control and automation of LED, CFL, and CCFL lighting loads requiring either 0-10 or pulse width modulation (PWM) for dimming control. The dry contact inputs can be used with motion sensors, light sensors, pressure sensors, IR inputs, magnetic switches, and more. As part of the Legrand lighting solution, it provides control of LED loads as well as inputs from dry contacts for lighting and automation.

Highlights

The LVOS supports the addition of low-voltage lighting and/or high-voltage relays to InFusion based projects. Since each dimming channel can be programmed with a unique power profile to match the dimming curve of the lighting load, low-voltage and high-voltage lighting sources in the same area or on the same project can be programmed to dim simultaneously. The LVOS can be controlled over Station Bus or Ethernet Bus and can be utilized to expand centralized or distributed systems.

Operation

Each LVOS features four 0-10 outputs, four PWM outputs, and four high-voltage relays. The LVOS is firmware upgradeable in the field through its Ethernet Bus or Station Bus inputs. It has the capability of supporting four dry contact inputs and two additional override inputs and is powered by 120-277 VAC.

Applications

The LVOS is perfect for projects that wish to employ dimming for LED, CFL, or CCFL lighting loads, or for line voltage relay control. It may be used to add switched loads in remote places where homerun wire to a standard module is not possible or as an expansion strategy for additional load control. InFusion systems are fully compliant with 2013 Title 24 requirements for both residential and non-residential buildings. Additionally, the LVOS is UL and CE listed and is an integral component in Legrand's complete lighting control solution.

PROJECT		LOCATION/ TYPE	
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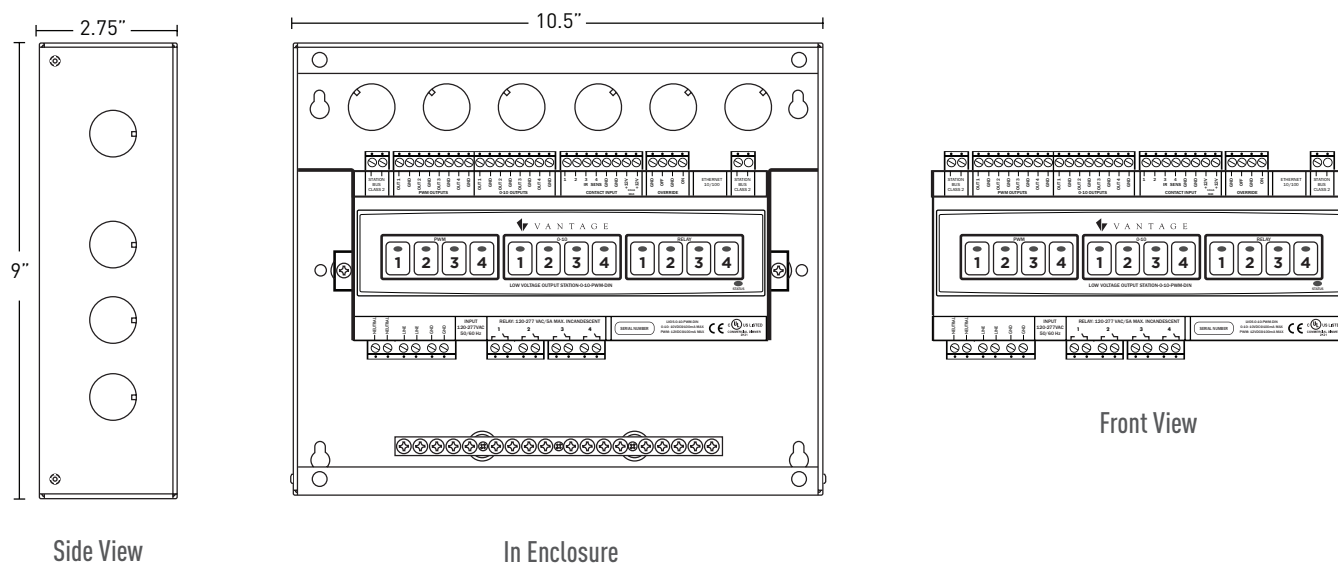
Features

- Controls up to eight separate sets of LED, CFL, or CCFL lighting loads
- 4 analog, 0-10 low-voltage outputs
- 4 PWM, low-voltage outputs
- 4 high-voltage relays (120-277VAC)
- High-voltage relays may be tied to selected low-voltage outputs through Design Center
- Allows for the addition of dry contact inputs to the automation network, including motion sensors, light sensors, IR inputs, pressure sensors, magnetic switches, and more
- Powered by 120VAC to 277VAC
- Each dimming channel can be programmed with a unique power profile to match the dimming curve of the lighting load
- Override switch for on and off states of all loads
- Communicates via Ethernet Bus or Station Bus
- Manual control and LED status for all 12 outputs on front
- Firmware upgradeable in the field
- UL and CE listed

Specifications

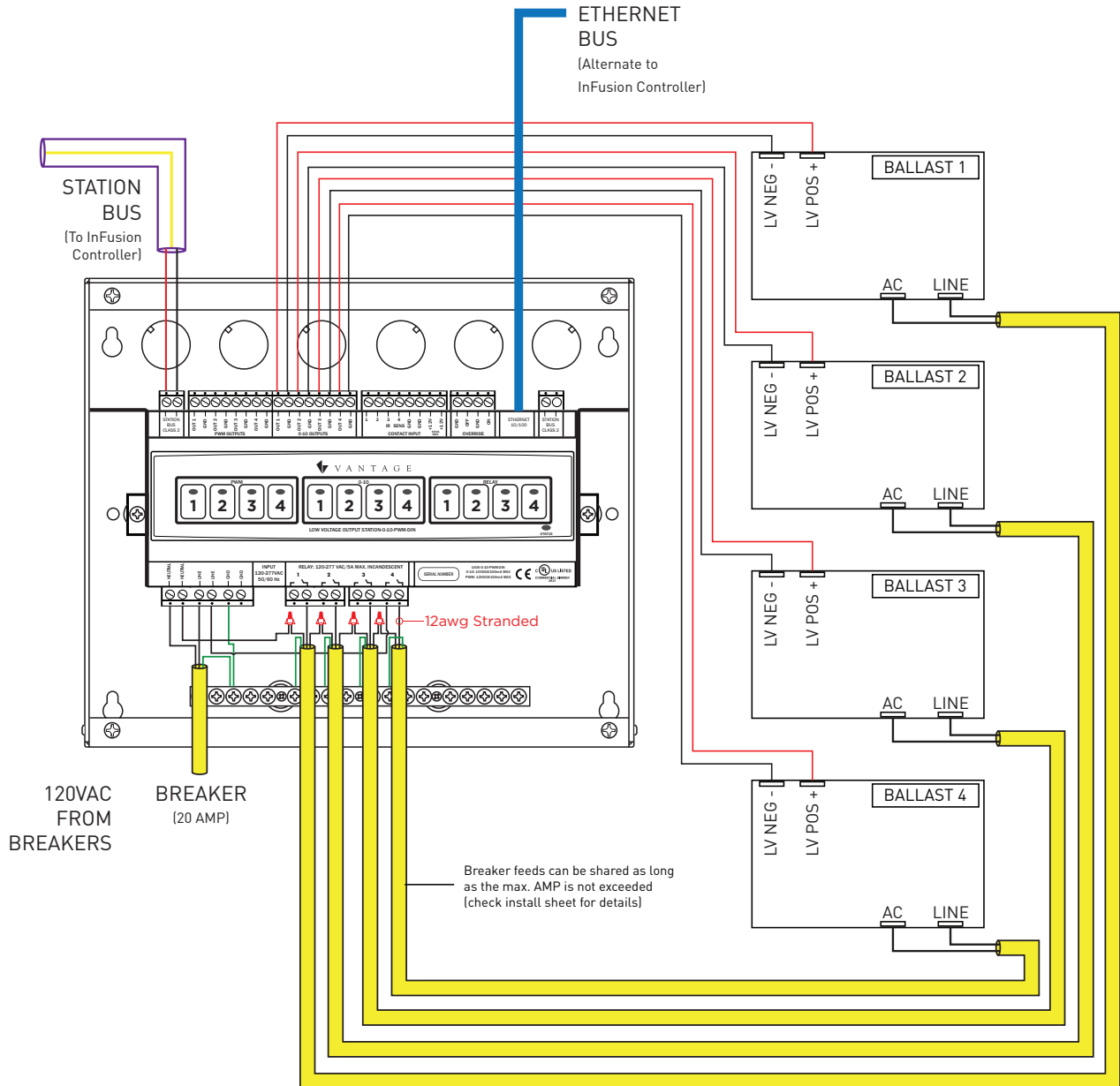
- Dimensions (HWD) - Station only: 3.32" x 10.34" x 2.667" (84mm x 263mm x 68mm)
- Dimensions (HWD) - Wall box: 9.0" x 10.5" x 2.75" (229mm x 267mm x 70mm)
- Model: LVOS-0-10-PWM-1 / LVOS-0-10-PWM-P-1
- Mounting: Panel mount
- Ambient operating humidity: 90%, non-condensing
- Ambient operating temperature: 32-104°F (0-40°C)
- Auxiliary inputs: 4 dry contacts (3 and 4 may be for an IR receiver and light sensor respectively)
- Override inputs: 2 (On and off contacts)
- Input power (universal): 120-277VAC, 50-60Hz
- Power consumption: 16W
- LED Indicators: Microprocessor status, configuration, load
- Number of low-voltage outputs: 4 (0-10) low-voltage outputs (0-10V @ 100mA sink or source); Output 50 @ 2mA per load, typical 4 PWM low-voltage outputs; Output voltage 12V (source only); Output current 100mA per channel, 400mA total, IEC 60929 Annex E Standard
- Number of high-voltage outputs: 4 high-voltage relays (120-277VAC), general purpose load rating 10A
- Ethernet Bus connections: RJ45 – auto crossover detection – 10 / 100
- Station Bus connections: 24V / 36V Station Bus
- Station equivalent InFusion: 0.35W on IC-24 / 0.55W on IC-36
- UL/CE Listed: Yes
- Station Bus wiring minimum: 2 conductor, 16 AWG stranded, non-shielded twisted pair, 30 pF/foot max, UL rated CL2
- Station Bus topology: Any combination of daisy chain or star or branch
- Station Bus should be separated a minimum of 18" from other parallel communication and/or high-voltage runs

Installation and Wiring



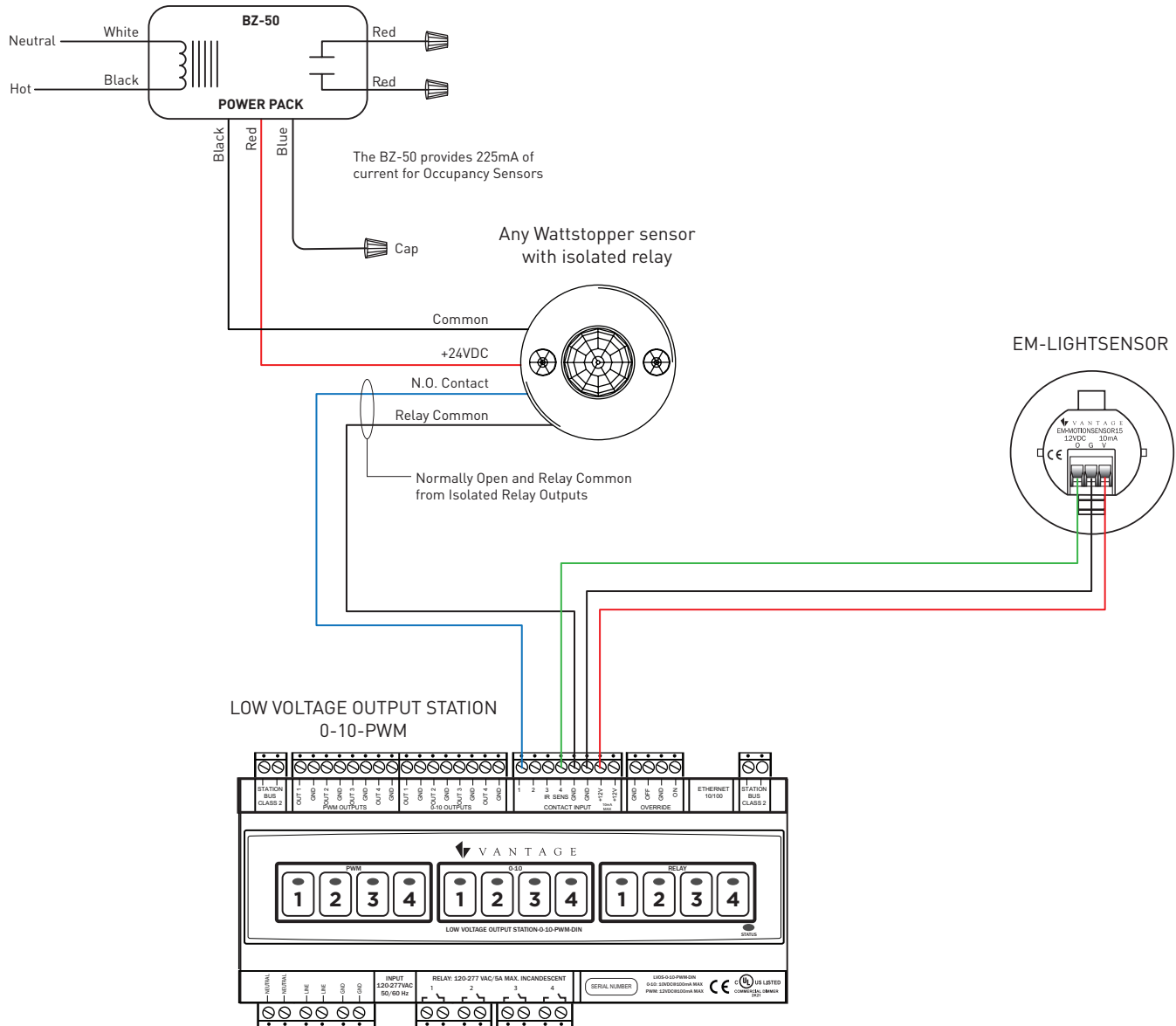
Typical Wiring for 0-10V Output

Each relay will have (2) 12AWG stranded wires (jumpered to next relay).



Analog Wattstopper Sensor to Low Voltage Output Station (LVOS) Wiring Diagram

Note: Only the EM Daylight Sensor can be used on the Architectural Dimming System



Ordering Information

Catalog #	Description	Misc.
<input type="checkbox"/> LVOS-0-10-PWM-1	Low-Voltage Output Station	(4) 0-10 low-voltage outputs, (4) PWM outputs, (4) high-voltage relays
<input type="checkbox"/> LVOS-0-10-PWM-P-1	Low-Voltage Output Station (w/out enclosure)	(4) 0-10 low-voltage outputs, (4) PWM outputs, (4) high-voltage relays