



LOW-VOLTAGE OUTPUT STATION

load controls

LVOS-0-10-PWM

Controls up to eight separate sets of LED, CFL, or CCFL lighting loads

Ethernet port for Ethernet bus connection

Communication via Station Bus or Ethernet Bus

Firmware upgradeable in the field

4 Analog, 0-10 low-voltage outputs
4 PWM, low-voltage outputs
4 High voltage relays (120-277VAC)

Override switch for ON and OFF states of all loads



Allows for the addition of dry contact inputs to the automation network, including motion sensors, light sensor, IR input, pressure sensors, magnetic switches, and more for localized wiring or emergency override scenarios

UL and CE listed

Each dimming channel can be programmed with a unique power profile to match the dimming curve of the lighting load

product overview

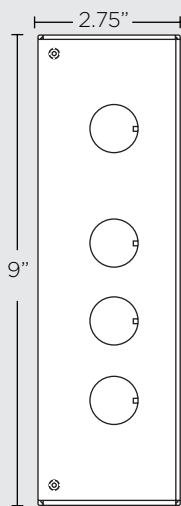
description

The 0-10 PWM Low-voltage output station (LVOS) is used for the control and automation of LED, CFL, and CCFL lighting loads requiring either 0-10 or 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 Vantage lighting solution, it provides control of LED loads as well as inputs from dry contacts for lighting and automation.

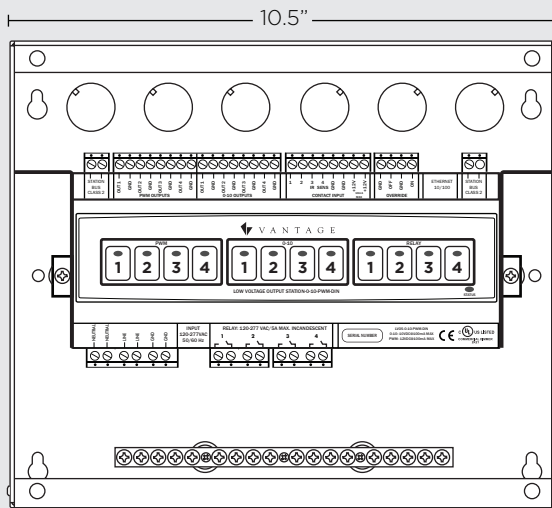
operation

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.

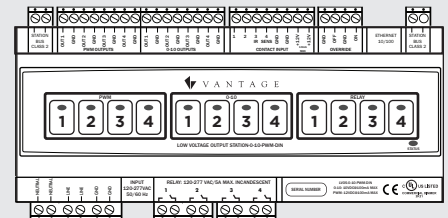
PROJECT	
LOCATION/TYPE	



SIDE VIEW



IN ENCLOSURE



FRONT VIEW

highlights

The LVOS-0-10-PWM low-voltage output station 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-0-10-PWM can be controlled over station bus or Ethernet bus and can be utilized to expand centralized or distributed systems.

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

applications

The 0-10 PWM low-voltage output station 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. Vantage's 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 Vantage's complete lighting control solution.

- 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 Vantage Ethernet bus or station bus
- Manual control and LED status for all 12 outputs on front
- Firmware upgradable 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
Wall Box	9.0" x 10.5" x 2.75" 229mm x 267mm x 70mm

General Specifications

Model	LVOS-0-10-PWM
Weight (with wall box)	5.85lbs (2.65kg)
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

System Compatibility

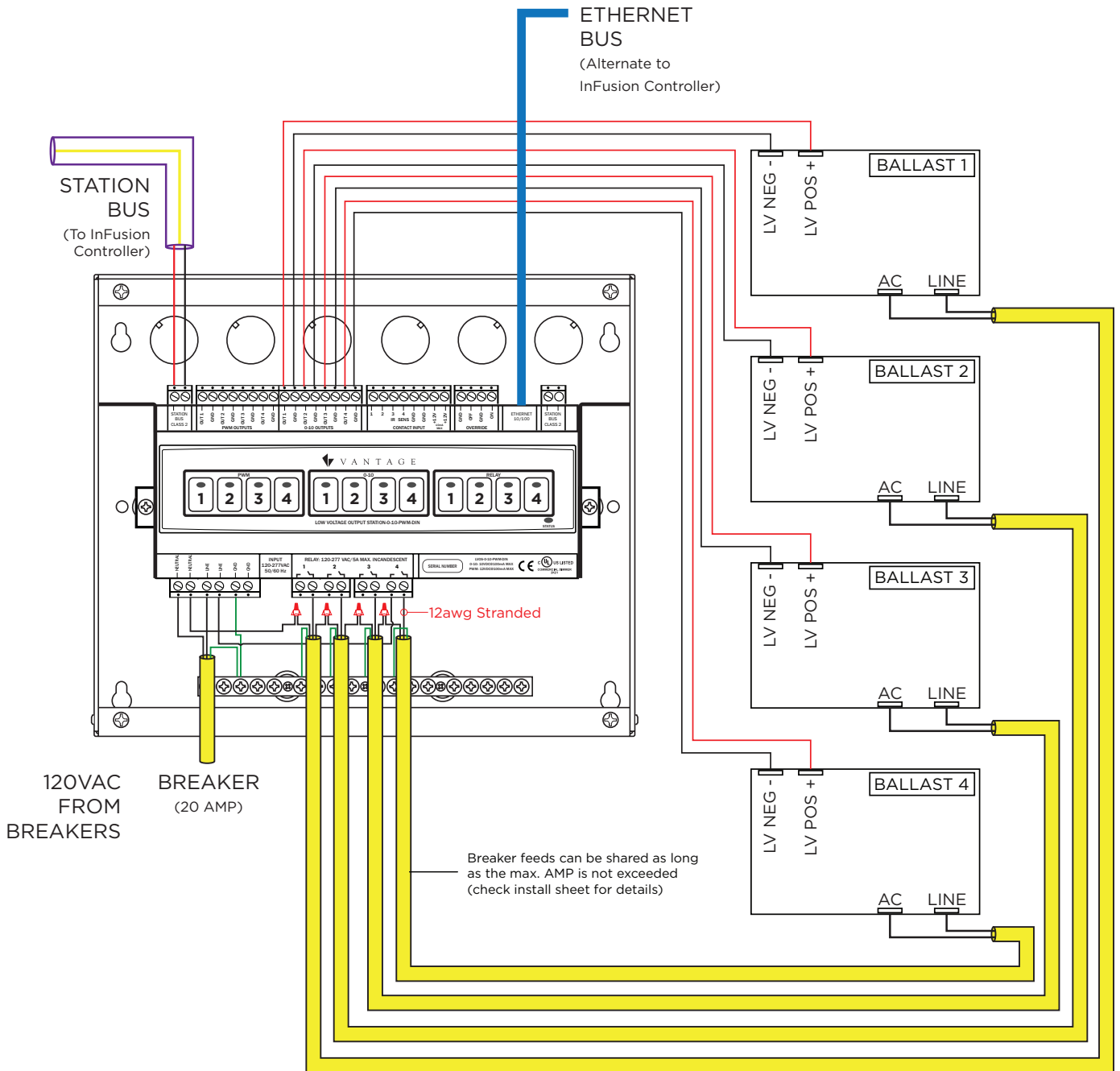
Station Bus wiring minimum	2 conductor, 16 AWG stranded, non-shielded twisted pair, 30 pF/foot max, UL rated CL2
Station Bus topology	Any combination of daisy chain or star or branch Station Bus should be separated a minimum of 18" from other parallel communication and/or high-voltage runs

Ordering Information

CATALOG NO.	DESCRIPTION	MISC.
○ LVOS-0-10-PWM	Low Voltage Output Station	(4) 0-10 low-voltage outputs, (4) PWM outputs, (4) high-voltage relays
○ 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

typical wiring for 0-10V output

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



typical wiring with sensors

Typical wiring with the use of the Vantage light sensor (EM-LIGHTSENSOR) and motion sensor (EM-MOTIONSENSOR40).

