

WAC LIGHTING

VENTRIX Remote CPU

Fixture Type: _____

Catalog Number: _____

Project: _____

Location: _____

ORDER NUMBER

Model	Power	Control Protocol	Finish
S2CPU-R	096 96W Hardwired	S (1) 0-10V or (1) ELV or (1) TRIAC X DMX or (1) 0-10V or (1) ELV or (1) TRIAC Z (4) 0-10V or (1) ELV or (1) TRIAC	BK Black
	150 150W Hardwired		
	320 320W Hardwired		
	600 600W Hardwired		

Example: **S2CPU-R096-S-BK**

PRODUCT DESCRIPTION

The only lighting, power, and control system complete with lighting elements designed for discriminating performance. Configure VENTRIX for your retail, restaurant, commercial office, or residential lighting plan without custom lead times - get exactly what you want, when you want it.

FEATURES

- Accepts input ranges of 120-277V AC, and converts to a stable 48V DC output.
- 4 conductor wire feed to channel required.
- Maximum feed and channel length (12 AWG power and 16 AWG data wires): 96W, 150W, 320W: 200FT; 600W: 100FT
- On/Off Switch, TRIAC, ELV Dimmer Input: 120VAC
- No minimum load requirement for system operation. However, to meet EMC requirements, it is recommended for 150W, 320W, 600W CPU's that the total system power should be between 50%-95% of the CPU's capacity.
- Compatible with WAC App via 2.4 GHz WiFi or wired RJ45 Ethernet.
- Group and control commissioning via WAC App required.
- 5 year warranty

SPECIFICATIONS

- Construction:** Steel housing with injected molded polycarbonate cover
- Input:** 120-277 VAC, 50/60Hz
- Dimming:** TRIAC, ELV, 0-10V, DMX: 100-0.1%
- Mounting:** Secures on wall or on ceiling for remote powering of VENTRIX, can be mounted on ceiling or wall vertically or horizontally
Injection Molded Polycarbonate Black
- Finish:** -4°F to 122°F (-20°C to 50°C)
- Operating Temp:** UL, cUL, Non IC
- Standards:**

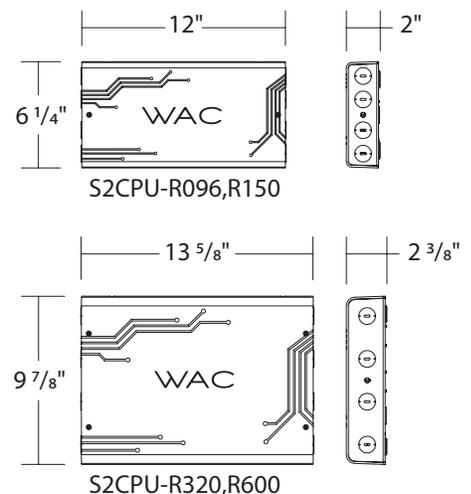


FINISHES



Black

LINE DRAWING



wacighting.com

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VENTRIX - REMOTE CPU

Connected Power Unit (CPU) Range

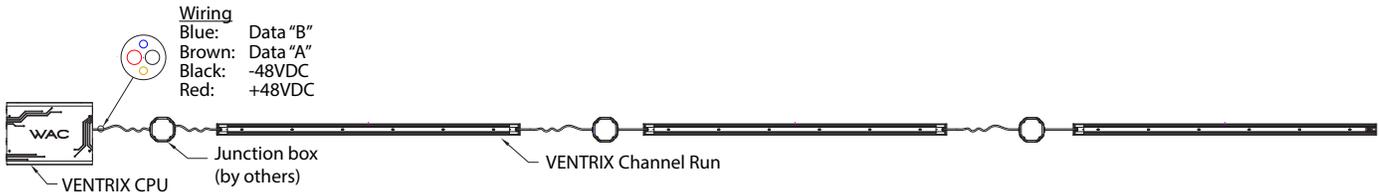


CONNECTED POWER UNIT RANGE				
POWER SUPPLY	96W	150W	320W	600W
TOTAL FEED AND CHANNEL LENGTH	200 ft	200 ft	200 ft	100 ft

Note: Above calculations based on 12 AWG power wires and 16 AWG data wires.

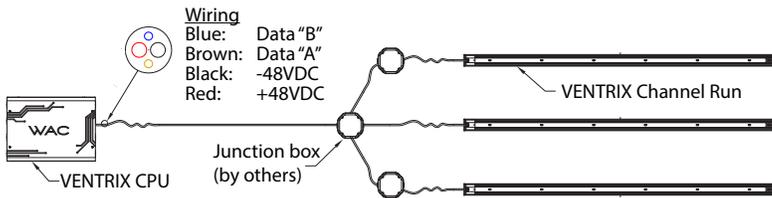
VENTRIX CPU to Channel Capability: Series Connection

For maximum power and data integrity, 1 CPU per 1 VENTRIX channel run is recommended. However it is possible to connect 1 CPU to up to 3 VENTRIX channels; provided the specifications of the system length and wire gauge as well as reliable electrical and mechanical connections are implemented.



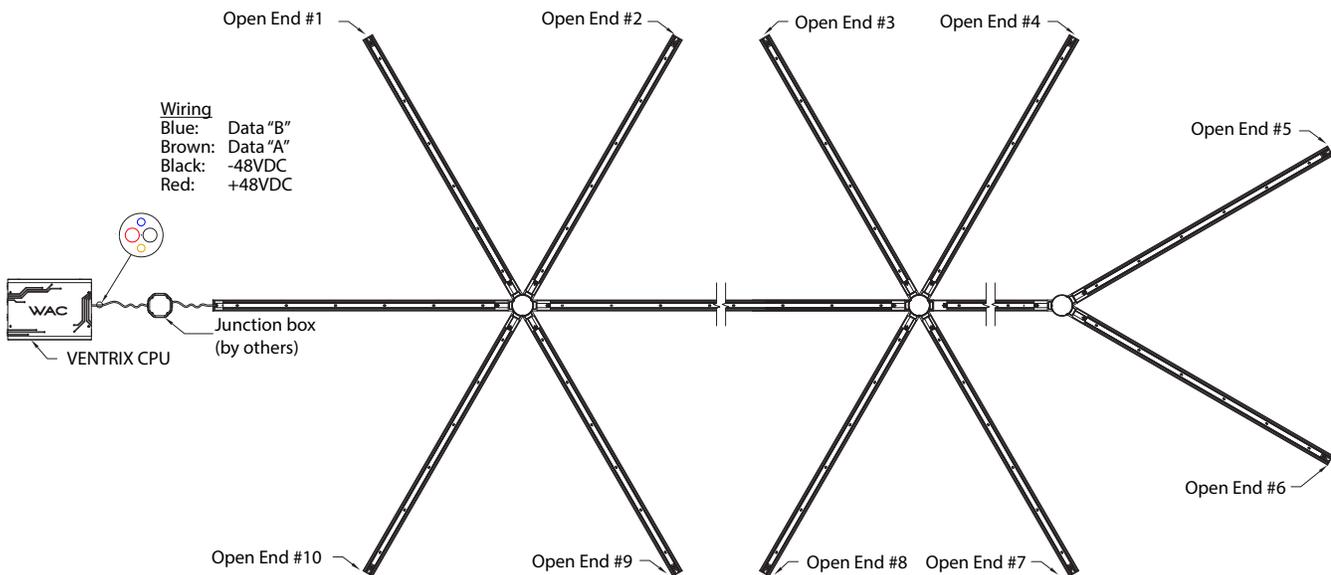
VENTRIX CPU to Channel Capability: Branch Connection

For maximum power and data integrity, 1 CPU per 1 VENTRIX channel run is recommended. However it is possible to connect 1 CPU to up to 3 VENTRIX channels; provided the specifications of the system length and wire gauge as well as reliable electrical and mechanical connections are implemented.



VENTRIX CPU to Channel Capability: "Open Ends"

In order to maintain data and control integrity, keep the number of system "open ends" (data reflection points) to less than 10 per CPU. Reference below for an example of system with multiple open ends.



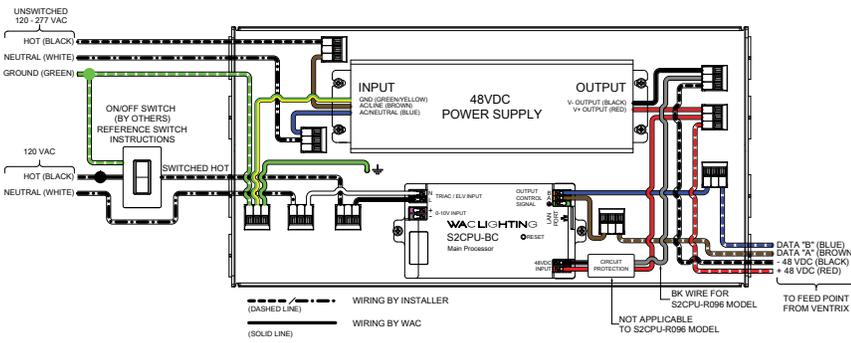
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VENTRIX - REMOTE CPU

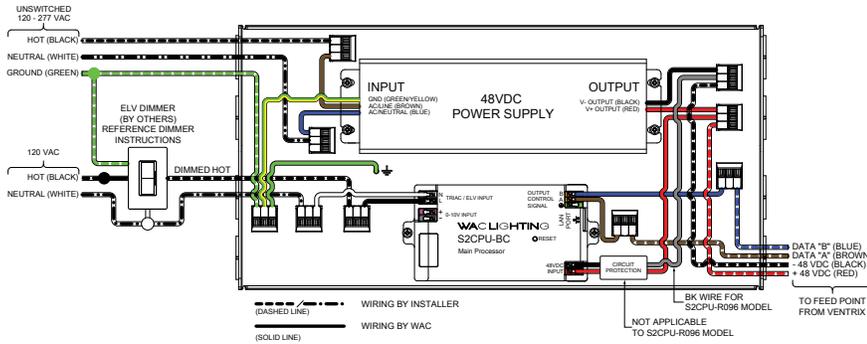
Wiring Diagrams

Figure 1 Remote CPU with On/Off Switch Wiring Diagram



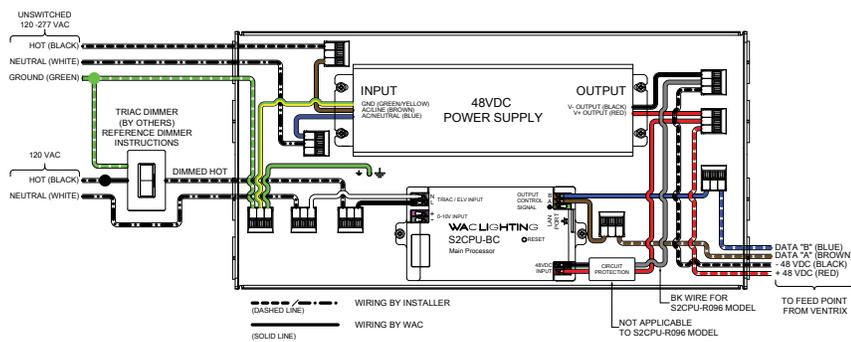
To utilize on/off switch, connect SWITCHED HOT and NEUTRAL in accordance to switch specifications to the wire connectors leading to the "L" and "N" inputs of the S2CPU-BC processor. Ensure appropriate ground connection is made to the on/off switch.

Figure 2 Remote CPU with ELV Dimmer Wiring Diagram



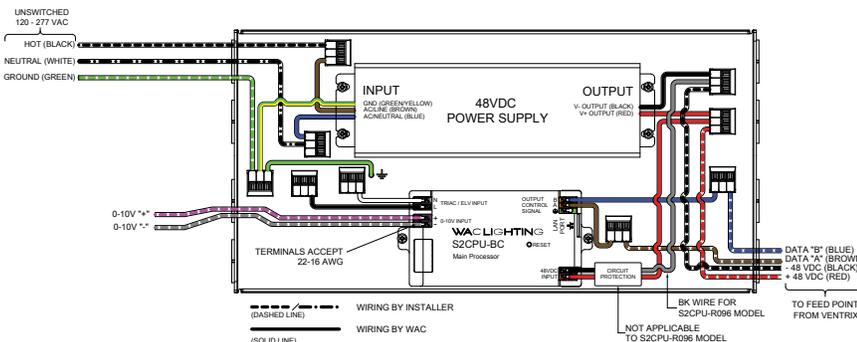
To utilize an ELV dimmer, connect DIMMED HOT and NEUTRAL in accordance to dimmer specifications to the wire connectors leading to the "L" and "N" inputs of the S2CPU-BC processor. Ensure appropriate ground connection is made to the ELV dimmer.

Figure 3 Remote CPU with TRIAC Dimmer Wiring Diagram



To utilize a TRIAC dimmer, connect DIMMED HOT and building NEUTRAL in accordance to dimmer specifications to the wire connectors leading to the "L" and "N" inputs of the S2CPU-BC processor. Ensure appropriate ground connection is made to the TRIAC dimmer.

Figure 4 Remote CPU with Single Input 0-10V Dimmer Wiring Diagram



To utilize a single channel 0-10V dimmer, connect 0-10V "+" and 0-10V "-" wires in accordance to dimmer specifications directly to the "+" and "-" input terminals of the S2CPU-BC processor.

Note: Use either 0-10V or ELV/TRIAC control input. Do NOT use multiple control input types concurrently.

With this wiring setup, the line voltage power is constantly supplied to the VENTRIX CPU and the toggle on/off mechanism of the controls (by others) is to bring the 0-10V signal to 0V when in the off position.

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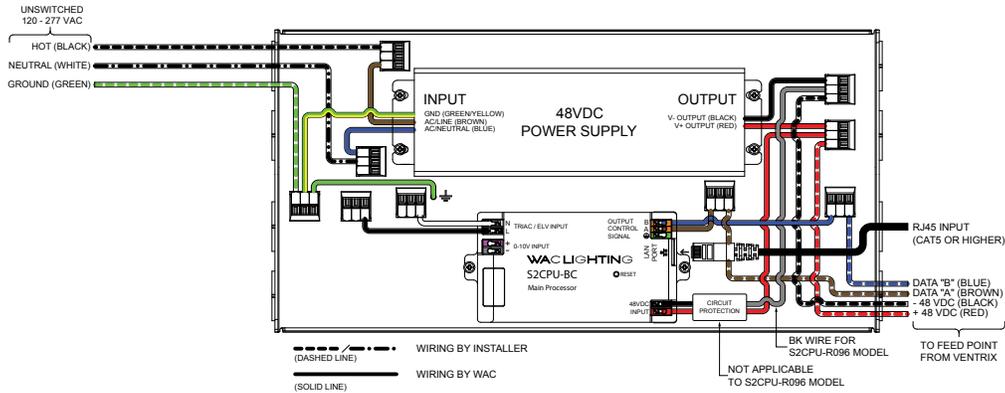
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VENTRIX - REMOTE CPU

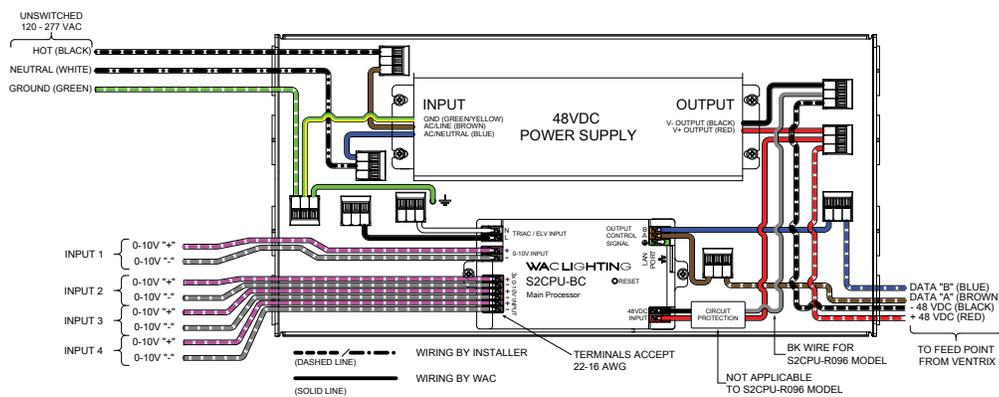
Wiring Diagrams (continued)

Figure 5 Remote CPU with RJ45 Ethernet Wiring Diagram



To utilize a RJ45 wired ethernet input, connect the RJ45 cable to the LAN PORT of the S2CPU-BC processor. WAC recommends a minimum cable type of CAT5.

Figure 6 Remote CPU with 4x 0-10V Input Wiring Diagram ("Z" Model CPU only)

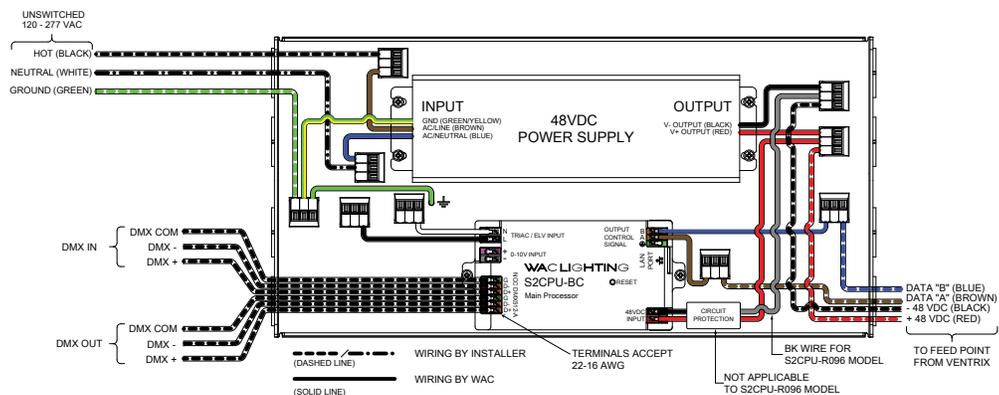


To utilize up to 4x 0-10V dimmers, connect 0-10V "+" and 0-10V "-" wires in accordance to dimmer specifications directly to the appropriate "+" and "-" input terminals of the S2CPU-BC processor.

With this wiring setup, the line voltage power is constantly supplied to the VENTRIX CPU and the toggle on /off mechanism of the controls (by others) is to bring the 0-10 V signal to 0V when in the off position.

Note: Use either 0-10V or ELV/TRIAC control input. Do NOT use multiple control input types concurrently.

Figure 7 Remote CPU with NCC DMX 512-A Input Wiring Diagram ("X" Model CPU only)



This CPU type features alternative connector (NCC) terminals for DMX-512A input. There are two sets of terminals to accommodate DMX daisy chain wiring between the VENTRIX CPUs and other DMX devices. To utilize DMX 512-A, connect the appropriate DMX control wires directly to either set of "D+", "D-", and "G" input terminals of the S2CPU-BC processor.

Note: Use either DMX-512A, 0-10V, or ELV/TRIAC control input. Do NOT use multiple control input types concurrently.

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