Relay Control Interface

Controls external latching & non-latching relays including but not limited to panel relays

Status LEDs & Config Button
Quick and easy validation of wiring and network

Flexible Antenna Options
Internal and external antenna options for metal enclosures and extended range.

Terminal Blocks & Mounting Tabs
Faster, easier and lower cost installation eliminating connectors

PRODUCT OVERVIEW

Description
The Relay Control Interface (RCI) provides 12-24VDC latching relay OPEN/CLOSE signals to external relays, AC relay panels, and other similar systems. The RCI enables installers and operators to update legacy systems with Avi-on Controls. It is part of the Avi-on Bluetooth® Mesh product ecosystem, which is supported by the Avi-on mobile app, commissioning tools, and cloud IoT services.

Operation
The RCI requires 12-24VDC, and the voltage should match the requirements of the specific latching relay. It controls external relays based on commands from the Avi-on network, including sensors, wall stations, and schedules. The RCI is compatible with most 2- or 3-pin latching relays and can drive relay switching currents up to 350mA.

Applications
The RCI allows for the control of circuit relays in control panels (AC or DC powered), external commands to building control systems, and other applications requiring an ON/OFF signal based on a command from the Avi-on Network.

Any output command from the Avi-on network, including motion sensors, wall stations, and schedules, can be directed to the RCI. The RCI comes with an external antenna, allowing for flexible mounting options in metal enclosures.

ORDERING INFORMATION

Part Number	Description	Application	Input Voltage
AVI-B-RCI-12-24VDC	Relay Controller Interface - Internal Antenna	Indoor	12 - 24 VDC
AVI-B-RCI-12-24VDC-OA	Relay Controller Interface - Outdoor Antenna	Indoor	12 - 24 VDC

To order please contact Avi-on sales at **(877) AVION-US,** (877) 284-6687 or **prosales@avi-on.com** for order information or integration support.

Project		Location/Type	

avi-on
Bluetooth® Lighting Controls

SPECIFICATIONS

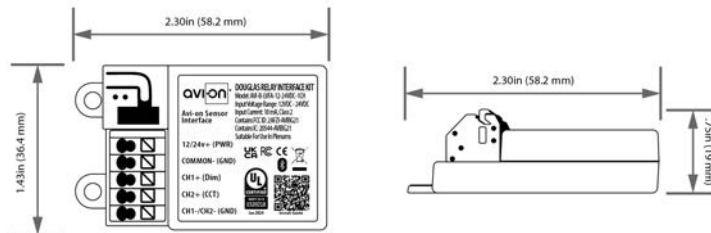|			
Input Voltage:	12-24VDC, Operating Voltage Matches Relay Switching Voltage	**Wireless Standard:**	BLE 5.3 with Mesh
Current: 15mA		**Point to Point Range[1]:**	80ft with obstructions, 350ft unobstructed
0-10V Dimming:	200 mA	**ESD:**	IEC/EN 61000-4
Size:	2.30in x 1.43in x 0.75in (58.2mm x 36.4mm x 19mm)	**Security:**	AES 128-bit encryption for device to device communication
Mounting:	Removable mounting tabs		AES 256-bit encryption for device to cloud communication
Weight:	0.45 oz (16g)	**Warranty:**	5 years; 10 years optional
Terminal Blocks:	22-16 AWG wires	**Regulatory:**	FCC ID: 2AFZI-AVIBG21
Operating Temperature:	-40F to +158F (-40C to +70C)*		IC ID: 20544-AVIBG21
Storage Temperature:	-40F to +185F (-40C to +85C)		BQB: DID: D063032
Humidity Rating:	95% non-condensing		CE: EN IEC 6100-6-1:2019, EN IEC 6100-6-3:2021
Radio Frequency:	2.4GHz		UL 916, 2043 (Plenum Rated)

Note: *Operating controller at or above these levels may result in damage to components/product*

*For temperatures below freezing or dew point, the device should be sealed in a watertight container to prevent frost buildup
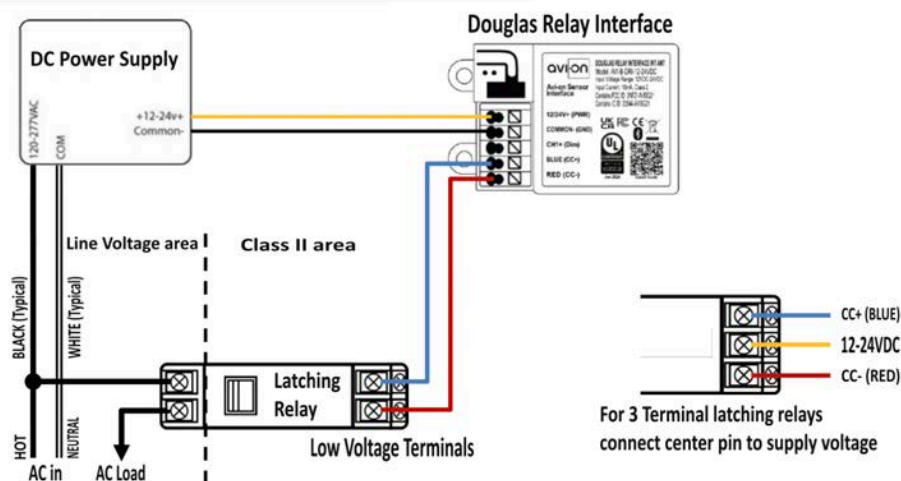
**When communicating through the mesh, range is essentially unlimited (5000ft+)

See Safety and Certification Details here: https://tinyurl.com/y4698945

Dimensions:

WIRING DIAGRAMS

RCI powered by 12-24VDC supply. Connected to latching relay using CC+ & CC- lines.