

Remote Access Bridge (RAB)

Secure Remote Access and Backup for Avi-on Bluetooth® Lighting Systems



Anywhere Operation
Monitor or manage the connected Avi-on Bluetooth Lighting Control system from anywhere via the mobile app or cloud web page.

Remote Firmware Updates
Updates are provided automatically by Avi-on without user input required

Time Synchronization
The RAB automatically synchronizes network time to ensure consistent scheduling through power outages.

Easy Setup
The RAB connects to the Bluetooth network just like any other Avi-on device, and connects to a local wifi or cellular hotspot simply by selecting the wifi network and entering the password.

Product Overview

The Avi-on Remote Access Bridge (RAB) provides secure 24/7 access to Avi-on Bluetooth Lighting Control Systems from anywhere in the world, enabling remote management of the system, visibility to current device status, and capture of energy monitoring data (requires Avi-on energy monitoring hardware), and access to Google Home and Amazon Alexa services.

Remote System Monitoring

With a RAB bridging between the Avi-on Cloud and Avi-on Bluetooth Lighting Controls, the status of all devices is reported to the cloud in real time, allowing full remote monitoring of all system components.

Security Features

- Access password protected with secure email password reset.
- All traffic is HTTPs encrypted. Passwords use SHA256 or better.
- Remote Access Bridge passwords are unique and not available to users or factory.
- No use of special or dedicated access LAN ports.
- No VPN required, works with standard corporate firewall.
- No way to connect to Bridge from outside with methods that can load malicious firmware (e.g. SSH, Telnet). Restricted access even inside local network, even if you have a password.
- Components may only be registered to a single Avi-on account using a Mobile in close proximity to the Bluetooth network.

Secure Remote Access

The Avi-on bridge is not a gateway, and cannot be used as a platform to access a building network or lighting controls. All key IP access ports are closed and firmware cannot be updated without special access and a unique password not available to users. The bridge has passed multiple security threat tests and requires no special access ports or virtual networks (VPN).

Voice Assistant Integration

The RAB provides the ability to integrate with voice assistants, including Amazon's Alexa, and Google Home with Avi-on lighting controls via the Avi-on Cloud. With a voice assistant, lights may be turned off, dimmed, brightened and change color with simple voice commands. Configuration changes in the app, like device name changes and lighting groups, are automatically updated for use by the voice assistant.

Project		Location/ Type	
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Ordering Information

Select a part number from the table listed below.

Part Number	Description	Plug Type	Supply Voltage
2001RAB-01-C	Remote Access Bridge (100 or less BLE Node Capacity)	Type A Plug	120/240 VAC, 50/60 Hz
2001RAB-01-P	Remote Access Bridge (more than 100 BLE Node Capacity)	Type A Plug	120/240 VAC, 50/60 Hz

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or prosales@avi-on.com for information on becoming an Avi-on partner and order details.

Specifications

Electrical

Input Voltage Specifications	Min	Max	Unit
Supply Voltage	110	240	V
Mains Frequency	-	50/60	Hz
Operating Current	17	200	mA

System Communications	Min	Max	Unit
Bluetooth Signal Frequency	2402	2480	MHz
Bluetooth Wireless Range	-	70*	Feet
Wi-Fi Signal Frequency	2412	2472	MHz
Wi-Fi Wireless Range	10*	50*	Feet

* Actual results may vary, depending on local environment

Environmental Specifications	Min	Max	Unit
Ambient Operating Temperature	0	40	°C
Storage Temperature	-30	45	°C

Case Dimensions (Excluding Type A Plug)

Part	Length	Width	Height
All	2.17" (55 mm)	1.57" (40 mm)	1.38" (35 mm)

Supported Wifi Security Protocols

Security Protocol
WPA Personal
WPA Personal with Fixed IP Address
2.4G

Certifications

Regulatory	Description
USA	FCC: 2AFZI-2001RAB
UL	I.T.E. E486012
Canada	IC: 20544-2001RAB
BQB	DID: D031800 Qualified Design ID: 85750

Product Diagrams

The Avi-on Remote Access Bridge is designed in a small form factor (2.17" (55 mm) x 1.57" (40 mm) x 1.38" (35 mm)) and functions in any standard type A outlet running 110/240 VAC, 50/60Hz.

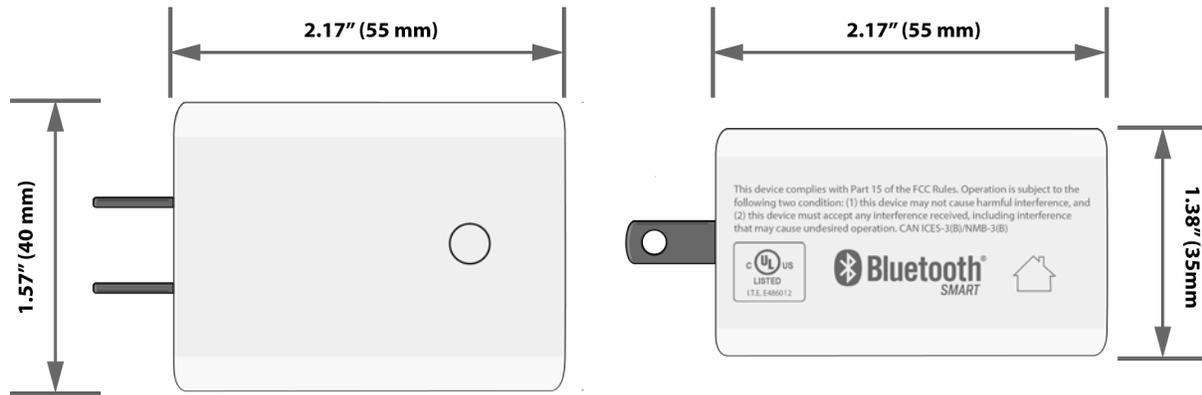


Figure 1. Avi-on Remote Access Bridge (RAB)

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