Switches and Dimmers

Easy Circuit-Based Mesh-Networked Lighting Controls

Avi-on Switches and Dimmers enable physical and Bluetooth® wireless lighting controls for on/off and dimming functions. Solutions are available for new construction and retrofit needs. All controls interface to lighting fixtures and with the Avi-on App, providing a platform that supports easy-to-change grouping, scheduling, timers and scenes.

Applications

• 120V New Construction or Retrofit
• Indoor Commercial office & Institutional Spaces
• Retail, Restaurant & Hospitality
• Residential

Benefits

• Enable networked lighting control of switch legs utilizing existing wiring and no changes to fixtures
• Available Dimming can save energy and extend lamp life while allowing optimum light levels for task
• Automated control of lighting and plug loads based on schedule, occupancy sensor, additional wall station controllers, or via Application or API integration (ex. Alexa or Google Assistant)

Switch and Dimmer Features

In-Wall Dimmers and Switches

• Universal Dimming circuit compatible with Incandescent, Halogen, and most CFL/LED lights
• Direct control (on/off) of load regardless of other system components
• No additional wiring required
• High and low end trim
• Capable of multi-ganging, and compatible with Decora-style faceplates
• Standard wall-box mount, using single-gang space
• XYZ Color Options

Plug-In Dimmers and Switches

• Sleek design with side mounted plug for locating behind furniture
• Backlit button on module for local test and override
• Type B plug
Options

- In-Wall or Plug-in
- Direct AC circuit switching and dimming
- Ability to add wireless switching and dimming
- Ability to add additional control points without direct wiring
- Pre-set scene selection

Common Specifications

- Indoor use only
- 120VAC, 60Hz
- Operating Temp: 32 to 104 °F (0 to 40 °C)
- Grouping and Favoriting with the Avi-on App

Parts and Ordering

Select a part number from the table listed below.

## Switches

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-wall Switch</td>
<td>Decora-style switch with LED status indicator. AC-powered. Maximum Loads: 960W incandescent, up to 1/2 HP motor, 1800W Resistive.</td>
<td>BT4001</td>
</tr>
<tr>
<td>Add-on Switch</td>
<td>Use with In-wall Switch, Dimmer or Controller for multi-way switching. Decora-style switch with LED status indicator. The Add-On Switch is not wireless. AC-powered. Maximum Loads: 960W incandescent, up to 1/2 HP motor, 1800W Resistive.</td>
<td>ZW2004</td>
</tr>
<tr>
<td>Plug-in Switch</td>
<td>The Avi-on Plug-in Switch allows you to wirelessly schedule, control and dim lights quickly and easily. Plug in a dimmable fixture, claim it and you now have a lamp with ON/OFF, dimming, scheduling, scenes, countdown timer, and sunrise/sunset functions.</td>
<td>BT4101</td>
</tr>
</tbody>
</table>

## Dimmers

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug-in Dimmer</td>
<td>The Avi-on Plug-in Dimmer allows you to wirelessly schedule, control and dim lights quickly and easily. Plug in a dimmable fixture, claim it and you now have a lamp with ON/OFF, dimming, scheduling, scenes, countdown timer, and sunrise/sunset functions.</td>
<td>BT3101</td>
</tr>
</tbody>
</table>

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.

### Case Dimensions (Excluding Wires or Plugs)

<table>
<thead>
<tr>
<th>Part</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Wall</td>
<td>105</td>
<td>54.3</td>
<td>46</td>
</tr>
<tr>
<td>Plug-In</td>
<td>79.2</td>
<td>67.5</td>
<td>37.9</td>
</tr>
</tbody>
</table>

### Certifications

<table>
<thead>
<tr>
<th>Regulatory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA*</td>
<td>FCC: U2ZBT3101, U2ZBT4101, U2ZBT3001, U2ZBT4001</td>
</tr>
<tr>
<td>Canada</td>
<td>IC: 6924A-BT3101, 6924A-BT4101, 6924A-BT3001, 6924A-BT4001</td>
</tr>
<tr>
<td>UL</td>
<td>3MWZ</td>
</tr>
</tbody>
</table>
Multi-way Switch/Dimmer Wiring

Avi-on In-wall Switches and Dimmers may be wired in multi-way (e.g. 3-way) switching configurations by using a single primary switch or dimmer and one or more In-wall Add-on Switches. Add-on Switches function like the switch or dimmer to which they are connected, but do not electrically switch a load or communicate wirelessly. Add-on Switches use a traveler wire, typically the red wire found in multi-way wiring, to connect with the primary In-Wall Switch or Dimmer, which manages the load. This wiring is different from typical multi-way wiring. An example diagram of a 4-way switch configuration is shown in Figure 1.

Please reference the 4-way wiring diagram below (Figure 1) when installing In-Wall Add-On switches.

![Figure 1. Example 4-way Wiring Diagram](image-url)
Product Diagrams

Figure 2. Avi-on In-Wall Dimmer and Switch Dimensions

Figure 3. Avi-on Plug-In Dimmer and Switch Dimensions

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