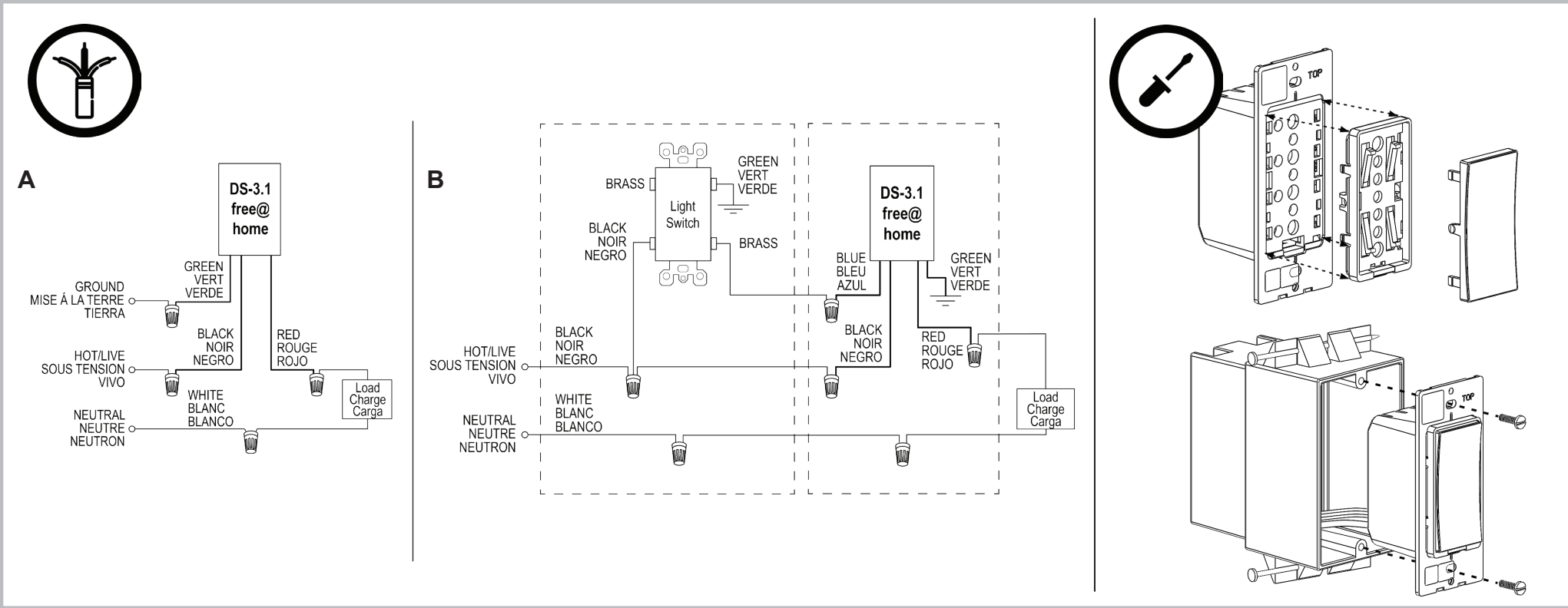




DS-3.1

EN
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QR-Link

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Dimmer Switch (2-wire), ABB-free@home Installation and Operation Instructions



IMPORTANT: Carefully read all instructions and safety information about this device before operation. Please leave this document with the homeowner for future reference.



WARNING: Installation must be performed by a licensed electrician or electrical professional. Improper installation can cause property damage, personal injury, or loss of life.



WARNING: FIRE

Work performed incorrectly can cause fires. Use the device only in a certified wall box. Recommended: Carlon® products, which have a high safety standard. Do not connect equipment that is not intended to be controlled by this device. Please refer to the equipment manufacturer if it is unclear.



WARNING: DAMAGED DEVICE

A damaged device could result in serious injury or death. If the device shows any damage to its body or wiring insulation, immediately turn off the power at the circuit breaker or fuse. Replace the device with an undamaged device. Do not try to repair the device.



IMPORTANT: Only use with fixed lighting loads.

Intended Use

The ABB Dimmer Switch controls dimmable lights. It has a wireless control unit that connects it to the ABB-free@home system. For information about the many functions of this device, see the system manual at www.abb.com/us/freeathome.

INSTALLATION

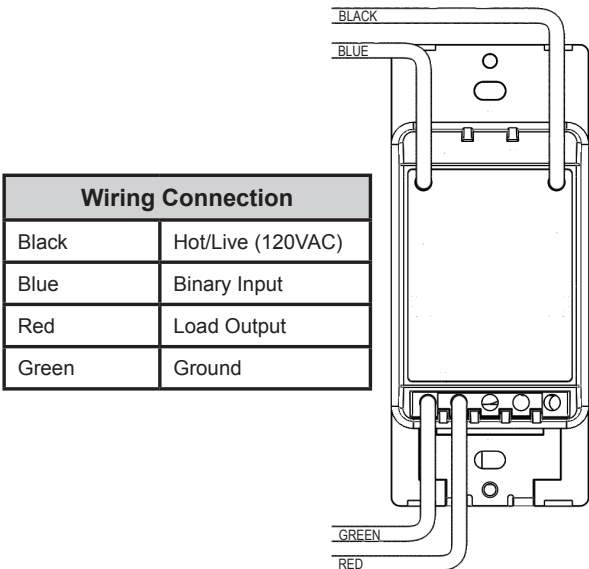


WARNING: SHOCK HAZARD

1. Turn the power OFF at the circuit breaker before installing.
2. Remove the old wall plate from the wall. Remove the old switch/dimmer from the wall box.
3. Disconnect all three wires from the switch/dimmer.
4. Connect the Dimmer Switch. (Refer to the wiring diagrams.)

- A) Single-Location Installation
B) 3-Way Installation

Wiring Connection Diagrams



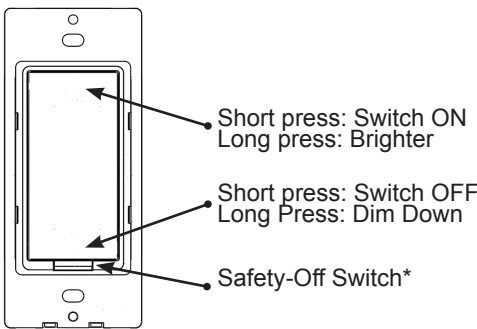
5. **Mount the Dimmer Switch.** Using a screwdriver and the screws provided, mount the ABB Dimmer Switch.
6. Replace the wall plate.
7. Turn the power ON at the circuit breaker.

Replacing the Rocker and Bezel: The rocker and bezel of the device can be exchanged. Turn the power OFF before removing the adapter bezel with a screwdriver. Turn the power ON after the rocker and bezel have been assembled.

DS-3.1 Technical Data	
Operating Voltage	120 VAC, 60 Hz
Connection	No Neutral Wire Required
Wireless Transmission Protocol	free@home, 2.400 - 2.483 GHz, Meshed
Ambient Operating Temperature	23° F to 113° F (-5°C to 45°C)

Load Table	
Incandescent or Halogen Lamp	300 W
Electronic Low Voltage Transformer (ELV)	200 W
CFL Lamps	150 W
LED Lamps (Max. 20 Lamps Allowed)	150 W

OPERATION



WARNING: *SAFETY-OFF SWITCH

May result in serious injury or death. This switch allows the user to turn off the power to safely replace a lamp. However, the rocker on the device may have been configured to operate a lamp other than the one switched off by the Safety Off. Before replacing a lamp, verify that the wires to the lamp do not have power. Turn the lamp on, then operate the Safety Off. If the lamp turns off when the Safety Off is activated, it is safe to replace the lamp.

SETUP AND COMMUNICATION

After installation, the Dimmer Switch will immediately allow the lamp to function. To control the switch wirelessly, it will need to be added to the free@home network. Detailed information about setup is available in the technical reference manual and the online help for the System Access Point at www.abb.com/us/freeathome.

1. To complete setup, you will need the ABB-free@home System Access Point (SysAP) and a computer (tablet, laptop, or desktop computer).
2. Walls, ceilings, and electrical equipment can affect wireless communication, especially steel reinforcements or other large metal objects. Electrical devices that send high-frequency signals (such as computers, wireless routers, audio systems, and video systems) should be at least 3-feet from this device.
3. When first powered, the device is in discovery mode for 30 minutes. This time period allows the SysAP to see and connect to the device. During this time, the user can login to the SysAP and add the device to the free@home network.
4. After 30 minutes, the device will automatically exit discovery mode. To re-enter discovery mode, the user must turn the power OFF and back ON again. This will place the device in discovery mode for another 30 minutes.

5. Once a device has been added to a network, it will no longer enter discovery mode at power-up. To add the device to a new network, the user must first force the device to forget its existing network by resetting it back to factory settings. This takes two people to do safely. **Follow these steps to reset:**
 - A) Turn the power OFF at the circuit breaker.
 - B) Turn the power ON at the circuit breaker while pressing the bottom half of the rocker for at least 15 seconds, until the LED light stops flashing.
 - C) Return to steps 3-4 of SETUP AND COMMUNICATION to connect the device to a new network.

Codes

Install according to national and local electrical codes.

Grounding

When there is no ground connector in the wall box, the National Electrical Code (NEC®) allows a control to be installed as a replacement ONLY IF 1) a non-metal, non-burning faceplate is attached with non-metal screws, OR 2) the circuit is protected by a ground fault circuit interrupter (GFCI). When installing a control, be sure to cap or remove the green wire before screwing the control into the wall box.

Cleaning:

To clean, wipe with a clean damp cloth. DO NOT use any chemical cleaning solutions.

FCC/IC Information

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause unwanted operation. Modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in an installation. If this equipment does cause harmful interference to radio or television reception, which can be tested by turning the equipment off and on, the user is encouraged to try to correct the interference by doing one or more of the following:

- Reposition or move the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a different circuit (not the circuit used by the receiver).
- Consult the dealer or an experienced radio/TV technician for help.

Customer Service

800-816-7809
7:00 am - 5:30 pm, CST, Monday - Friday
elec_custserv@tnb.com

Technical Support

888-385-1221, Option 1
7:00 am - 5:00 pm, CST, Monday - Friday
lvps.support@us.abb.com

For information about the many functions of this device, see the system manual at www.abb.com/us/freeathome

ABB Inc.
Electrification Products
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www.abb.com/us/freeathome

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