




LUTRON DVRF-5NS Smart Switch User Guide

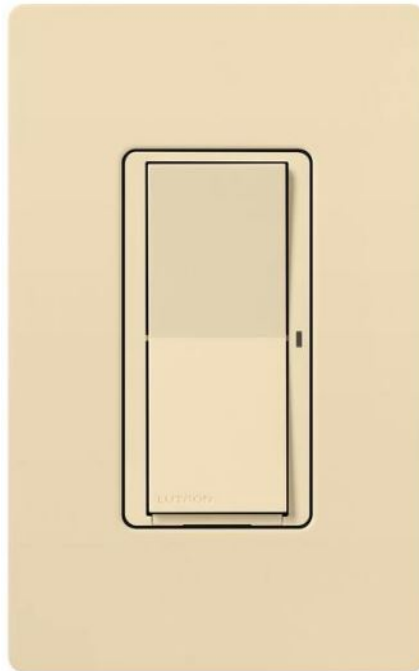
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LUTRON DVRF-5NS Smart Switch



Product Information

The Claro Smart Switch DVERF-5NS is a single-pole switch that is rated for 120 volts and 50/60 Hz. It is designed to control lighting and general-purpose fan loads. The switch is UL-Listed for use with all magnetic and electronic fluorescent ballasts. It supports LED, fluorescent, incandescent, halogen, ELV, MLV, and general-purpose fan loads.

The switch comes with a jumper wire, six wire connectors, and two screws. It requires a flat-head screwdriver and a Phillips-head screwdriver for installation. The switch has a green wire for the ground connection, a red wire for the load connection, a black wire for the hot connection, a white wire for the neutral connection, and a blue wire that is not used for single-pole installations.

The switch is compatible with the Lutron Caseta Wireless system and can be installed in accordance with all national and local electrical codes.

Product Usage Instructions

- **Step 1:** Turn off power at the circuit breaker before starting the installation process.
- **Step 2:** Remove the existing switch from the wall.
- **Step 3:** Disconnect all three wires from the switch. Note the hot and load wires. If your light has more than one switch (called a 3-way), please visit www.casetawireless.com/3way for complete installation instructions and how-to videos.
- **Step 4:** Connect the bare copper (or green) ground wire from the wall box to the green wire on the switch using one of the largely supplied wire connectors.
- **Step 5:** Connect the load wire from the wall box to the red wire on the switch using one of the largely supplied wire connectors.
- **Step 6:** Connect the hot wire from the wall box to the black wire on the switch using one of the largely supplied wire connectors.
- **Step 7:** Connect the neutral wire from the wall box to the white wire on the switch (neutral connection required) using one of the largely supplied wire connectors.
- **Step 8:** Cap the blue wire coming from the switch with the small supplied wire connector. The blue wire is not

used for single-pole installations.

- **Step 9:** Mount the switch using the mounting screws provided, leaving them loose for this step.
- **Step 10:** Attach the adapter to the switch using the screws provided. Tighten the mounting screws on the switch. Snap on the wallplate.
- **Step 11:** Turn power on at the circuit breaker. Use only with permanently installed lighting loads or with general-purpose fan loads.

Note: Wire colors depicted in this install guide may not match what is on your walls.

Installation videos can be found here:

www.casetawireless.com/support.

Contents supplied

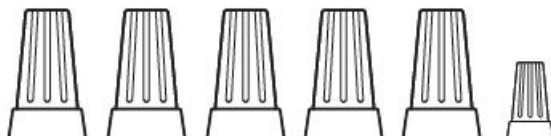
Switch
(DVRF-5NS)



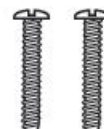
Jumper
wire



Wire connectors (6)

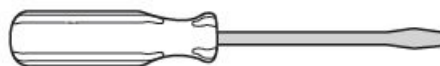


Screws (2)

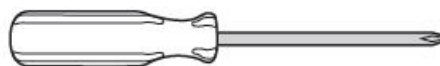


Tools you'll need

Flat-head screwdriver

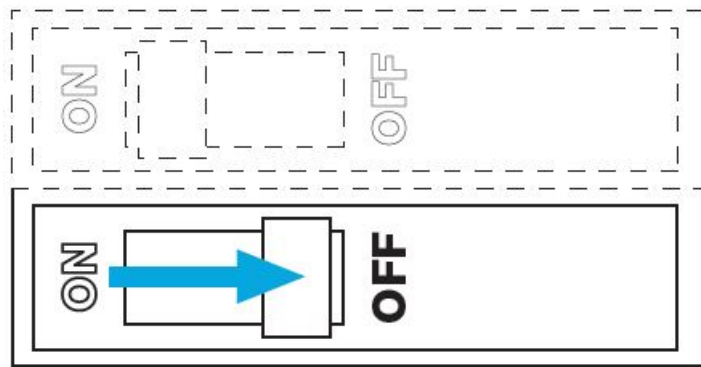


Phillips-head screwdriver



Installing your switch

1. Turn the power off at the circuit breaker!

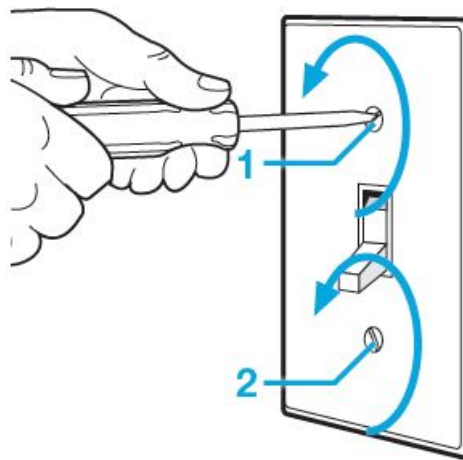


WARNING: SHOCK HAZARD

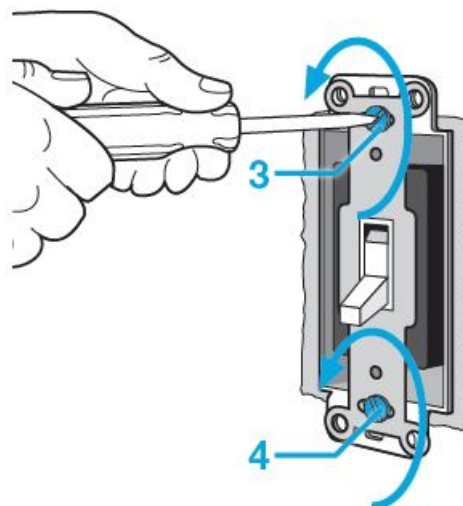
May result in serious injury or death. Turn off power at circuit breaker or fuse before installing.

2. Remove existing switch from wall

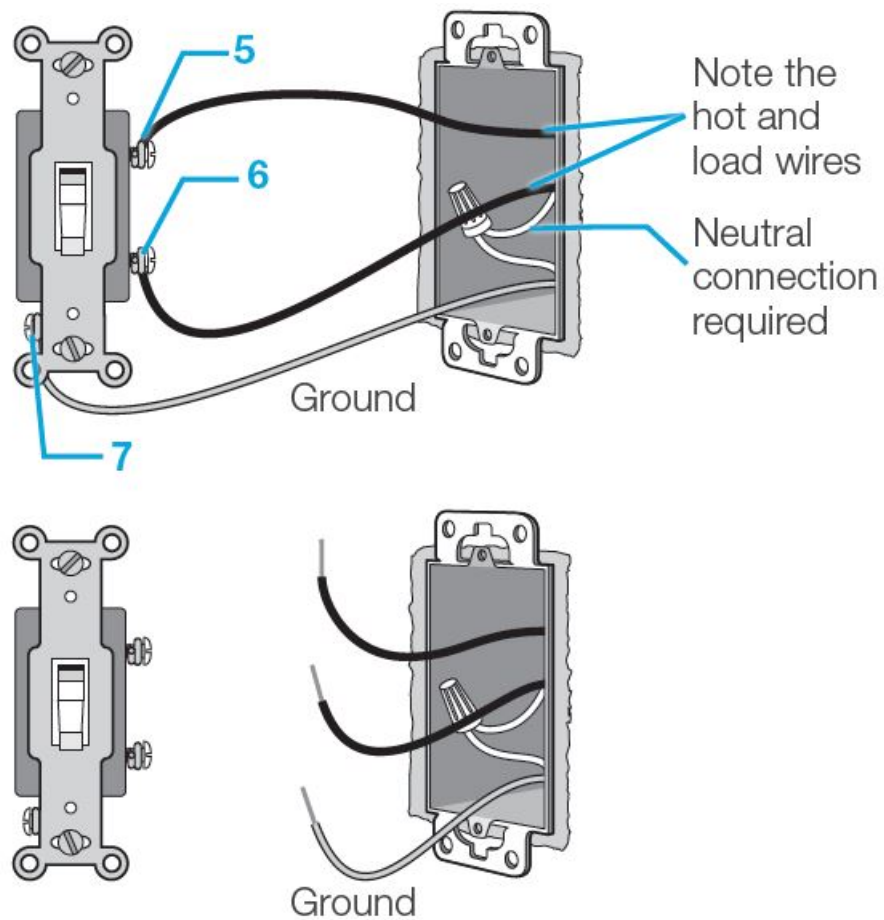
Remove the wallplate from switch.



Remove the switch and pull it away from the wall.



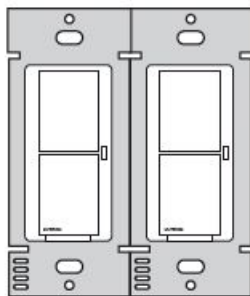
Disconnect all three wires* from the switch.



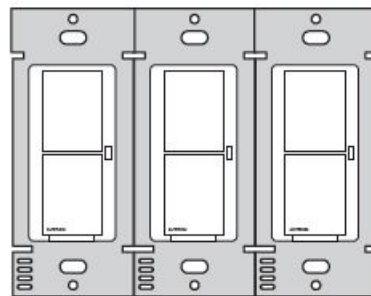
If your light has more than one switch (called a 3-way), please visit www.casetawireless.com/3way.

3. Ganging and Derating

Double Gang



Triple Gang



Important note:

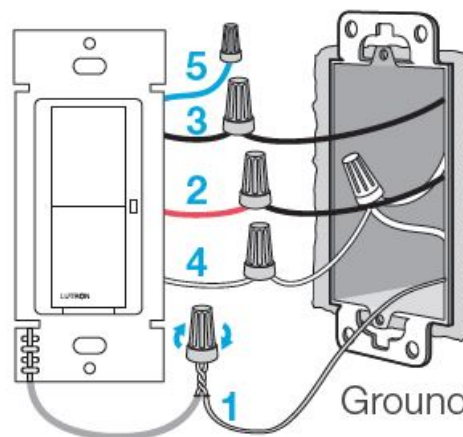
Removing side sections does not reduce the switch's maximum wattage rating. See the chart below for maximum load information.

Maximum load derating chart (120 V~ 50/60 Hz)

Load Type	Single gang	Double gang	Triple gang
LED, & Fluorescent 1	5 A	5 A	5 A
or			
Incandescent, Halogen, & ELV	600 W	600 W	600 W
or			
MLV 2	600 VA	600 VA	600 VA
or			
General Purpose Fan	3 A	3 A	3 A

1. The switch is ULR Listed for use with all magnetic and electronic fluorescent ballasts.
2. The maximum lamp wattage is determined by the efficiency of the transformer, with 70%–85% as typical.
For actual transformer efficiency, contact either the fixture or transformer manufacturer. The total VA rating of the transformer(s) shall not exceed the VA rating of the switch.

4. Connect the switch

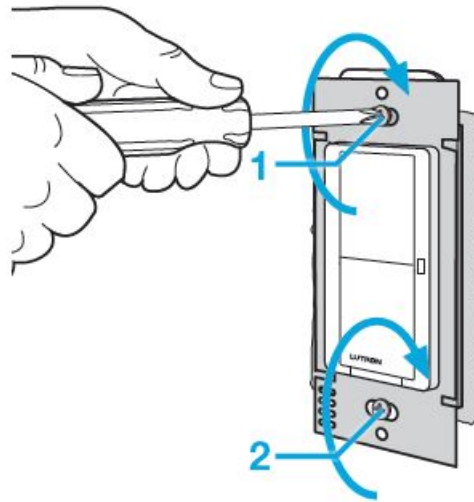


1. Connect the bare copper (or green) “ground” wire from the wall box to the green wire on the switch using one of the largely supplied wire connectors.
2. Connect the load wire from the wall box to the red wire on the switch using one of the largely supplied wire connectors.
3. Connect the hot wire from the wall box to the black wire on the switch using one of the largely supplied wire connectors.
4. Connect the neutral wire from the wall box to the white wire on the switch (neutral connection required) using one of the largely supplied wire connectors.
5. Cap the blue wire coming from the switch with the small supplied wire connector. The blue wire is not used for single-pole installations.

Note: Wire colors depicted in this install guide may not match what is in your walls.

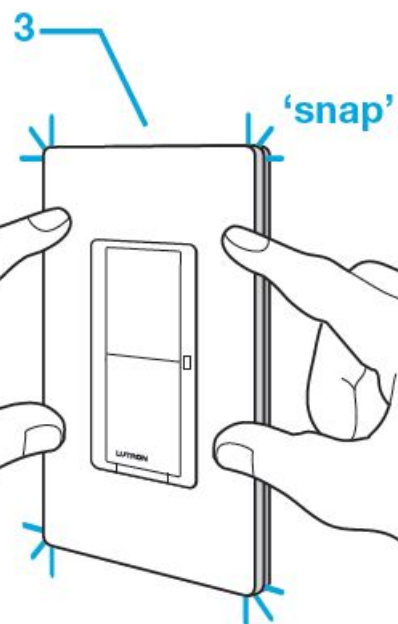
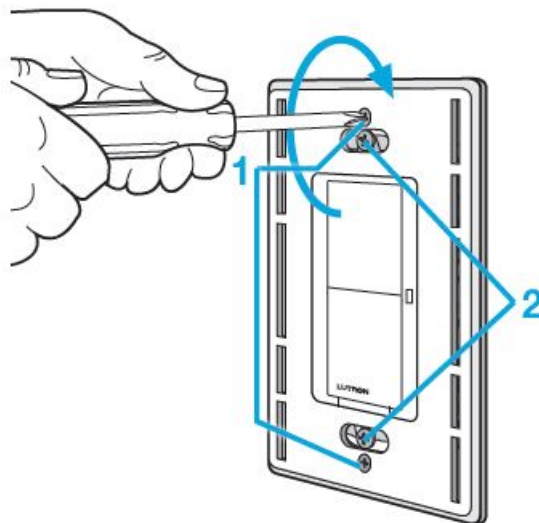
5. Mount the switch

Use the mounting screws provided, leaving them loose for this step.

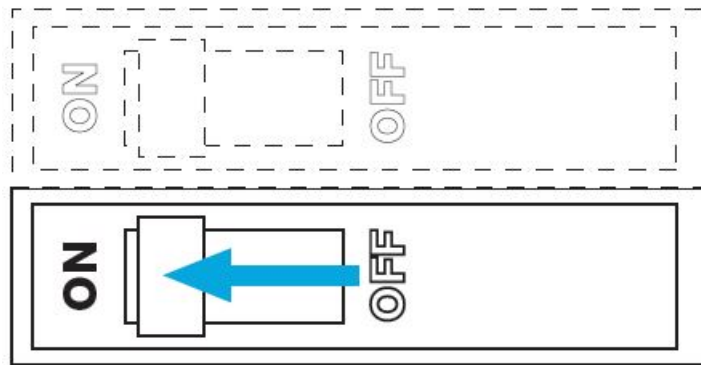


6. Attach the wallplate

1. Attach the adapter to the switch using the screws provided.
2. Tighten the mounting screws on the switch.
- 3 Snap on the wallplate.



7. Turn power on at circuit breaker



Specification

Supported Loads (120 V~)

DVRF-5NS

	LED —up to 5 A
	Incandescent/Halogen —up to 600 W
	MLV —up to 600 VA
	ELV —up to 600 W
	Fluorescent —up to 5 A
	General Purpose Fan —up to 3 A

To use your Caseta by Lutron system

With a smartphone or tablet (Smart Hub required, sold separately)

The Claro smart switch can be controlled from a smartphone when used with the Lutron smart hub (formerly smart bridge). All devices must be within 30 ft (9 m) from the Lutron smart hub. If you are using the switch and remote control with the Lutron smart hub follow the instructions below.



Lutron Smart Hub



Lutron app

Note:

If you are using the switch and remote control with another manufacturer's bridge, please refer to that manufacturer's instructions for set-up.

1. Download the Lutron app



Search for "Lutron Caséta"



2. Launch the Lutron app



The Lutron app will walk you through setting up your devices.

3. Use the Lutron app to complete ALL remaining steps



Add devices

- Pico remote controls
- Dimmers
- Shades



Control three ways



Schedule your lights



Connect while away

Without a smartphone or tablet

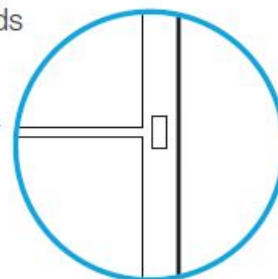
(Smart Hub not required)

- Pairing the switch and
- Pico remote control

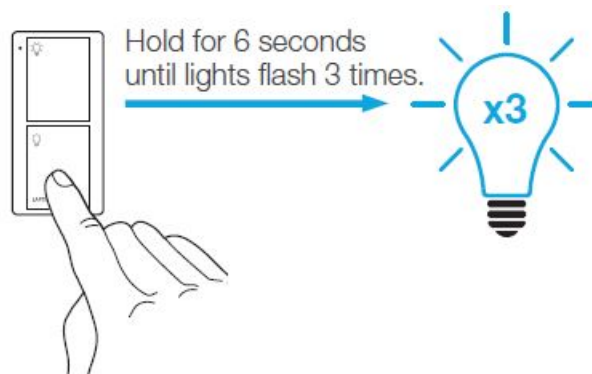
1. Press and hold "off" button on the switch



Hold for 6 seconds until LED starts blinking

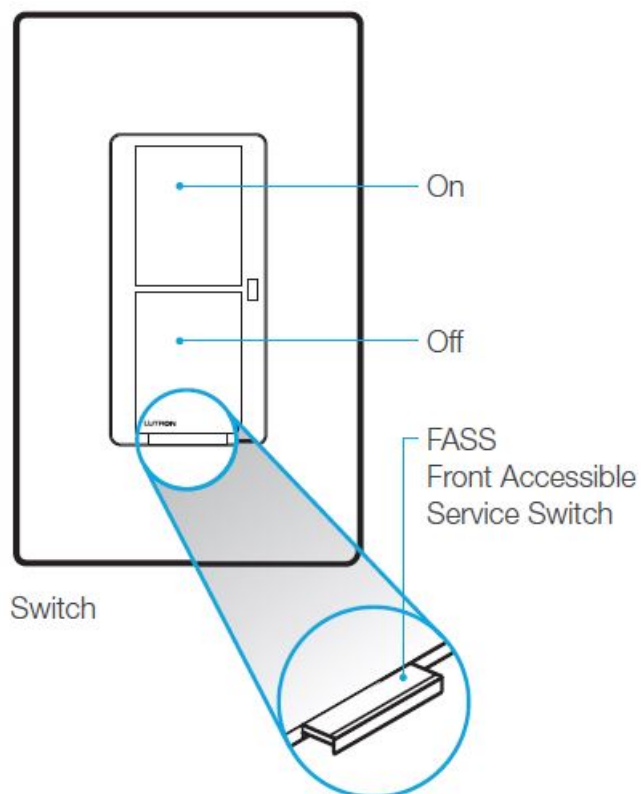


2. Press and hold "off" button on remote



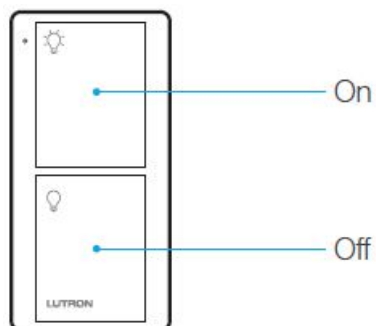
Repeat steps to pair other Pico remote controls.

Using your controls



Replacing light bulbs using the Front Accessible Service Switch (FASS)

Pull the FASS out on the switch to remove power at the light socket.



Pico remote control (sold separately)

To restore the original factory settings, please go to www.lutron.com/restore.

Important notes:

1. For indoor use only.
2. Operate between 32 °F (0 °C) and 104 °F (40 °C).

For advanced features, tips for using Caséta products with LEDs, the complete Caséta product line, and more, please visit www.casetawireless.com/features.

Troubleshooting

Symptoms	Probable cause and action
The light does not turn on or the switch LED does not light up.	<ul style="list-style-type: none">• Red and black wires on the switch are reversed. (See steps 4.2 and 4.3 on the previous page)• Light bulb(s) burned out.• Breaker is OFF or tripped.• Light not properly installed.• Wiring error.• FASS on the switch is in the Off position.
Light does not respond to Pico remote control.	<ul style="list-style-type: none">• The switch failed to pair with Pico remote control; see Pairing the switch and Pico remote control.• The switch is already at the light level the Pico remote control is sending.• The Pico remote control is outside the 30 ft (9 m) operating range.• The Pico remote control battery is low.• The Pico remote control battery is installed incorrectly.
Load is Off and the status LED blinks 4 times, pauses, and repeats.	<ul style="list-style-type: none">• The switch is in Over Temperature Protection (OTP) mode.• See Step 3 Ganging and Derating. Ensure the switch is not overloaded.• Reset the switch by using the FASS, Front Accessible Service Switch; See Using your Controls section. Pull out the FASS and push it back in.

Go to www.casetawireless.com/support for additional troubleshooting suggestions.

CAUTION

Use only with permanently installed lighting loads or with general-purpose fan loads.

Codes

Install in accordance with all national and local electrical codes.

Grounding

When no “grounding means” exist in the wall box, the National Electrical Code (NEC®) allows a control to be installed as a replacement if 1) a nonmetallic, noncombustible faceplate is used with nonmetallic attachment screws or 2) the circuit is protected by a ground fault circuit interrupter (GFCI). When installing a control according

to these methods, cap or remove the green wire before screwing the control into the wall box.

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 undesired operation. Modifications not expressly approved by Lutron Electronics Co., Inc. 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 in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warranty

For warranty information, please visit www.casetawireless.com/warranty.

Double your warranty

Love Caséta products? Have ideas for making them better? Tell us what you think and we'll extend your warranty by 1 year. www.casetawireless.com/register.

Contractor note:

For wiring diagrams, please visit www.casetawireless.com/wiring.

Important note:

We've included instructions for when a single switch is controlling the lights. For installation instructions when two or more switches are controlling a light, please visit www.casetawireless.com/3way for complete installation instructions and how-to videos.



Documents / Resources



[LUTRON DVRF-5NS Smart Switch](#) [pdf] User Guide
DVRF-5NS Smart Switch, DVRF-5NS, Smart Switch, Switch

References

-  [Installing Caséta for a light with two switches | Lutron](#)
-  [Application Notes | Caséta Wireless | Lutron](#)
-  [casetawireless.com/register](#)
-  [Application Notes | Caséta Wireless | Lutron](#)
-  [casetawireless.com/warranty](#)
-  [Wiring Diagrams | Caséta Wireless | Lutron](#)
-  [How to Factory Default Caseta Dimmers, Switches, and Fan Controls | Lutron](#)