

Make the Switch to Wireless



Smart
RV
Controls



Module Hardware Installation Guide

Latest Smartphone product.

Does not need cell service to work.

Greater than 100-foot range.

Mounts 3 ways:

- Directly replaces the switch
- Works with the switch
- Bluetooth only

Universal for all 12Volt features:

- Jacks, Awnings, Slides
- Lights (LED and Blub)
- Relays and Hydraulics

Multiple Safety features:

- smartLOCK (patent pending)
- Motion Sensing
- Reverse protection
- Short circuit
- Over current
- Over temp
- Under and Over voltage

smartRV app

- Apple and Android
- Free, no advertising
- Can pair to as many modules as needed

The smartRV controls are multi-use remote control modules that can be configured to operate any 12V electrical feature in your RV, such as lights, Bulb or LED, jacks, awnings, slides, relays, valves, RGB LEDs and more.

Download the free easy-to-use smartRV app, available for iOS and Android, to configure a module for the function you need and take control right from your phone.

Installs three ways: simply replace the existing switch with a smartRV controls module, and in minutes you will have smartphone control of your RV feature. It is really that easy! The smartRV controls module connects directly to the existing wiring and covers the existing mounting hole. You then pair and configure the module in the app, and you are in control. The switches on the front of the module allow for manual operation.

If there is not enough space to install a smartRV controls module, the smartRV controls module has external switch inputs, and with some very minor wiring using quick disconnects you can easily connect the smartRV controls module into the wiring and you are controlling the feature via your smartphone. Of course the original switch works at all times.

If you are installing a new feature such as an awning, the smartRV controls module are smartphone controls and a manual switch all in one! Additionally, the smartRV controls have a special feature that allows a light to be controlled by the same module that controls the feature, so you get control of your awning and a light. That is amazing!

Our patent pending smartLOCK environmental safety system ensures that your devices will not activate while your RV is in motion or in any other unsafe condition. The smartRV controls module has a 1-year manufacturer defect warranty.



Make the Switch to Wireless



Smart RV Controls



Front Control and Indicator, Rear Inputs and Outputs

Manual Switches
built in to smartRV
controls module

Power and Ground
connections



LED indicator

Remote Switch
Inputs



Power Output
connections



Make the Switch to Wireless



Smart
RV
Controls



Built in Switches and LED indicator



Built in switches; operation is based on function.

Examples

DC Motor	Extend/Retract
Jack	Up/Down
Single Light	On/Off
Dual Light	Red ch1 toggle on/off Blue ch2 toggle on/off

LED indicator shows conditions of unit with a sequence of lights:

Green: The smartRV controls module is on and has no problems but is not connected to the phone

Blue: The smartRV controls module is on and has no problems and is connected to the phone

Red: There is an issue: Device is not configured, device is locked, or it is in over current

White: The smartRV controls modules are being controlled by the existing wall switch

Cyan: The smartRV controls are being controlled by a phone via the app

Purple: Voltage supply is outside of the nominal operating range (9.5 volts - 14.5volts)

Yellow: There is a failure in internal communications



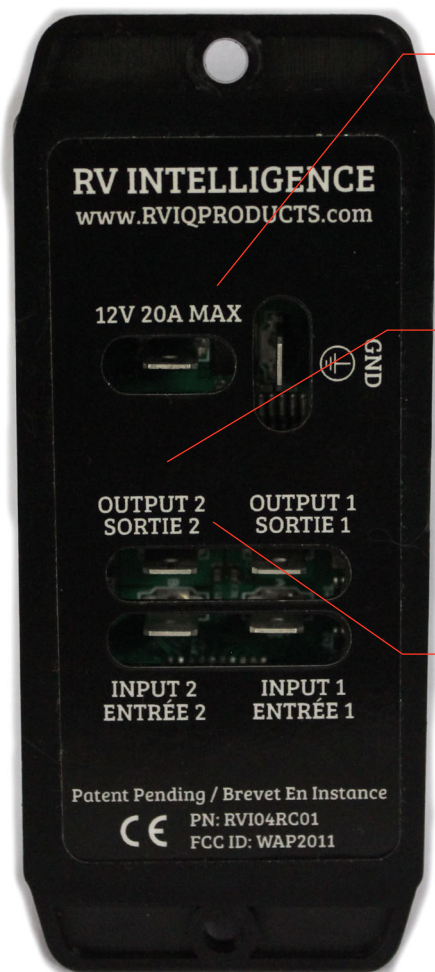
Make the Switch to Wireless



Smart RV Controls



Power Supply, Driving Outputs, Control Inputs



Power Supply

12Vdc at 20 amp cont, 30 amps surge
Ground at 20 amps cont, 30 amps surge
Reverse voltage protection
*NOTE: typically 12gauge stranded wire

Driving Outputs

Software configured and controlled
Can be 12V, Ground or Open as needed
Fully self protected from shorts and over current
*NOTE: typically 12gauge stranded wire

Control Inputs

Selected in app setup
12V signal "ON"
Ground or no current signal "OFF"
Can be any gauge wire, very low current, only signal



Make the Switch to Wireless



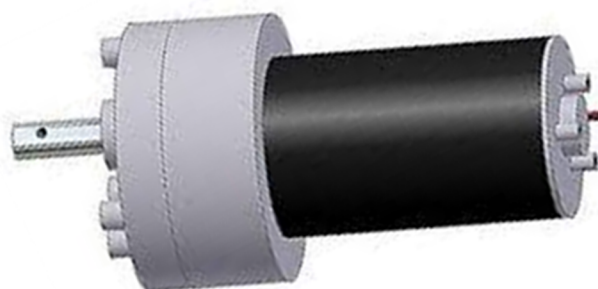
Smart
RV
Controls



DC Motors: Jacks Awnings Slides

12 Volt Electric Motor for
a Jack Awning or Slide

Power and Ground
Required but not shown



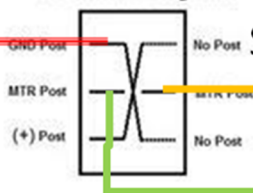
Motor 1

Motor 2

12Vdc

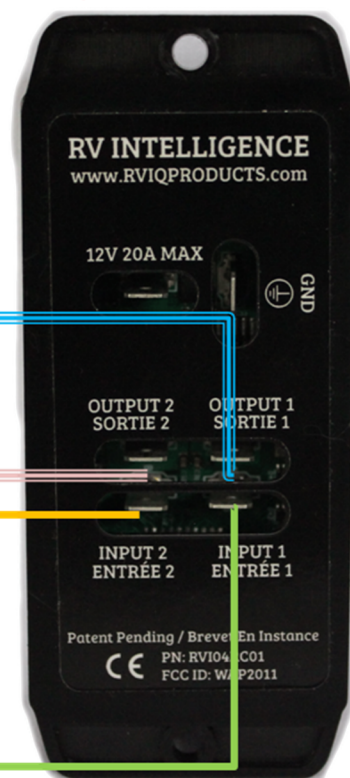


Terminal Diagram



SW2

SW1



*Connecting an external Switch



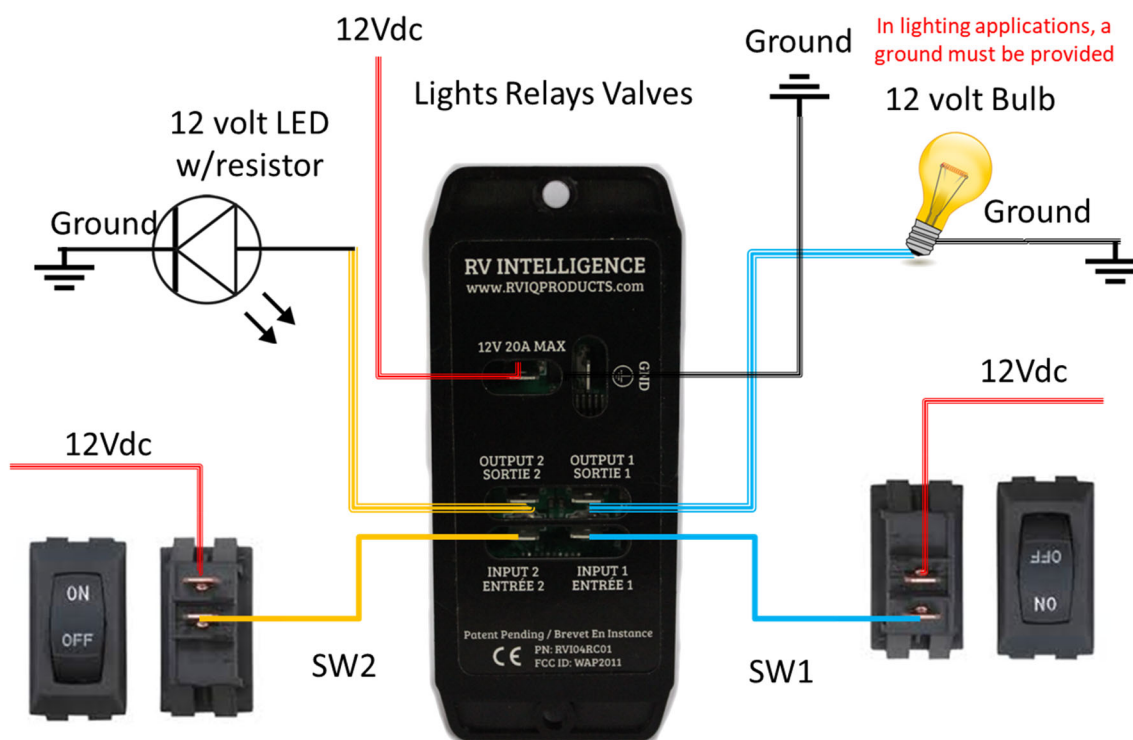
Make the Switch to Wireless



Smart
RV
Controls



Lights, Relays and Valves



*Connecting an external Switch
Switch can use the same 12Vdc as the module

**Relays and Valves connect the same

***Lighting applications will require a ground to be located for the module.



Make the Switch to Wireless



SmartRV Controls FAQs



Do I need to have cellular coverage or WiFi access to use the smartRV app?

No, smartRV controls is connected by Bluetooth Low Energy (BLE).

Can I add another smartRV controls module to this app?

Yes, multiple smartRV controls can be operated with the app. You simply select the device you wish to operate from the device listing in the menu after selecting the plus(+) sign in the upper right corner.

What is the smartRV app's working range?

Approximately 100 feet. Range is dependent on many factors; the application shows signal strength and will warn you if you are outside the effective range.

Can the smartRV controls be restored to factory defaults, no paired devices, and the PIN reset to 123456?

Yes, hold the two front switches on the module for about 10 seconds. The indicator will cycle through all the colors and the smartRV control module will reset all features to factory default, clear all pairings, and resets the PIN to 123456.

What is the smartLOCK environmental safety system, and why do I need it: In most RVs the features (slides, awnings and jacks) all have power available to them while the RV is being transported. Very few RVs have a safety interlock that prevents operation while the RV is in motion. If something were to fall against the switch while the RV was in transit, or someone were to activate an old-fashioned key fob remote control, it could start to move, really, it is not hard to image the many disastrous results! The smartRV controls module not only adds the convenience of smartphone remote controls, but in addition our smartLOCK technology provides this essential safety interlock in your RV, for our smartphone app and even for the manual switch, solving this scary problem.

Make the Switch to Wireless



Smart
RV
Controls



Trouble Shooting 1

Protection: Testing smartLOCK

While the unit is not attached to the wall, you can test the motion detection by slightly moving the smartRV controls unit. This motion should be detected and the unit should show a RED indication, GREEN/RED if not connected, BLUE//RED if connected. If connected to a phone, the app should show that the device is locked. The smartRV controls can be unlocked by entering the password on the app or hold one of the switch buttons for 10 seconds. Both result in a color wheel and the unit is returned to normal function. The motion detection sensitivity is a setting on the configuration page and can be made or less sensitive.

IF THE MOTION DETECTION IS NOT FUNCTIONING, PLEASE CONTACT US IMMEDIATELY AND DO NOT USE THE SMARTRV CONTROLS UNIT. WE WILL PROVIDE A REPLACEMENT DEVICE AT NO COST. WE TEST EACH UNIT, BUT INSIST THAT A TEST IS DONE WHEN CONTROLLING A MOTOR DRIVEN FEATURE TO ENSURE YOUR SAFETY.

Power: Is my unit powered correctly?

The smartRV controls module requires 12V DC 20-amp service. If the power is correctly connected to the two tabs in the back, marked 12V DC and Ground, the LED indicator in front will be green. If it does not illuminate, check to ensure that you have 12V DC and Ground on the wires and that your crimps are successful. You can also try swapping the two wires. Reverse voltage does not harm the smartRV controls module; it simply will not function until 12V DC and Ground are on the correct pins. If adding any wires, ensure they meet the electrical current requirements of the device being controlled.

Overcurrent protection and shorts to ground: My unit is not working and I hear a whining noise coming from the smartRV controls module.

The smartRV controls module has inherent overcurrent/short circuit protection built into the unit. You cannot break it by shorting out the outputs; they protect themselves against over current, and you can tell by the high-pitched sound made by the electronics. Also, the LED indicator will add a Red to its light sequence, and if connected the app will display an overcurrent warning. Once the problem is corrected, the module will work normally.

I am trying to pair, but the app keeps saying that the pin/passkey is incorrect?

Someone has set the PIN to a value different from what you are entering.

Make the Switch to Wireless



Smart
RV
Controls



Trouble Shooting 2

While using the smartRV controls module to run a feature it “just stopped”. I tried the button again and it started working again, but it said I was in overcurrent protection. What happened?

The smartRV controls module has inherent overcurrent protection built into the unit. Motor driven RV features can run it to many issues: poor lubrication, tacky gaskets, pitching and binding slides or bent awnings, jacks that can generate enough force to twist your RV frame. The smartRV controls module actively monitors the total power sent to the RV feature you are controlling. Should that power exceed a safe level, the overcurrent warning is activated. The LED indicator will add a Red to its light sequence, and if connected the app will display an overcurrent warning. Once the problem is corrected, the module will work normally. Before smartRV controls modules, people would just hold down the power switch, “forcing” more power to the unit. Many bad things can happen in that scenario; broken drive gears, burned out wires, blown fuses, bent metal. The smartRV controls module only allows the proper amount of power to be delivered, ensuring safe operation of your RV feature. If your smartRV controls module continues to overcurrent, it is an indication that your feature needs service.

I just bought a coach with smartRV controls modules, and I want to reset the pairing and PIN.

The smartRV controls module can be reset to factory defaults by holding the two front switches on the module for about 10 seconds. The indicator will cycle through all the colors and the smartRV controls module will reset all features to factory default, clear all pairings, and resets the PIN to 123456.

The pairing failed and I cannot seem to make it connect. I just want to start over?

Delete the device from your app. Select “delete device,” select the device, and then confirm. Close the app to clear the memory. Go to the Bluetooth icon on your phone, or through the settings menu, and delete or forget the smartRV controls device from the list of known Bluetooth devices. Restart the pairing procedure.

My phone is not connecting to the smartRV app.

Check that your phone’s Bluetooth is turned on. You can turn on Bluetooth via the phone’s settings menu. There are already four paired smartphones, and that is the limit of the number of paired smart devices at any time.