



## RVsecure Installation Manual – PlatinumX - ProtectorX

**This installation guide assumes that you already have experience in RV installations. Installing any system in any vehicle requires a level of knowledge of your vehicles electrical systems prior to starting. If in doubt please have a professional installer complete the installation for you.**

### Tools you will require

- Electric Drill
- 12mm drill bit
- Automotive crimpers
- Phillips head screw driver
- Flat screwdriver

### Other consumable items that may be required

- Silicone suitable for outdoor exposure
- Cable ties
- Screws
- Cable/connectors for the brake circuit
- 5A and 25A inline fuses and holders

### Mounting the Control unit

The control unit can be mounted in any location within the vehicle and with any physical orientation as long as one face is aligned in the direction of tow and another face to the side of the vehicle that has the door (commonly passenger side). It is recommended that the alignment be within +/- 4 degrees. It is a good idea to firstly check the cable length for the strobe (if not using extensions) and decide both the strobe and control unit positions based on this and the ability to run the cable. Also ensure that you have the ability to run cables to and from the control unit as required.

The Control unit is attached with 4x suitable screws on the end plates. Mounting the control unit outside or to the underside of the vehicle is not recommended.

### Installing the PIR

The RV PIR can be mounted in a variety of positions due to its unique ability to work through multiple planes. It is good practice to firstly test the operation of the PIR in the chosen position before a final decision is made to install, ensuring suitable operation.

To install the PIR

1. Open the battery compartment at the rear and install the batteries
2. Mount the bracket in the chosen position
3. Clip the PIR on the bracket
4. When ready, power up, add sensor to control unit and then test.

### Installing the Strobe

The strobe is an external blue warning strobe and comes as a “plug n play” unit. Once installed simply plug it in to the control unit.

1. Drill an 12mm hole to allow for the cable and plug to run through
2. When in position, drill the holes for the two fixing screws
3. Apply silicone sealant to the rear of the strobe and then mount and screw the strobe to the wall
4. Apply silicone sealant around where the surround meets the wall to ensure it is water tight
5. Plug the strobe into the control unit

Strobe extensions (3m and 5m) are available if required.

*As with any external item fitted to an RV, be generous with the amount of silicone applied to ensure it is water tight. All external fixings / silicone's should be inspected bi annually at a minimum to ensure there continued function and water seal.*

### Installing the Siren

It is recommended that the siren be mounted near to the control unit. Its operation will not interfere with the unit. The siren is waterproof so it can be mounted outside of the vehicle however it is perfectly OK to mount inside. Once a position has been chosen screw the siren bracket into the surface and plug the siren into the control unit.

### Installing Reed switches

The reed switches are installed so that opening the door will break the contact. They do not need to be touching, a distance of 1~3cm will generally be suitable however it is important to test this before permanent mounting with the double sided tape (supplied). Remove cover and install battery. The blue light can be seen activating when the connection is broken allowing easy test.

When mounting remember that the sensor will require occasional change of batteries (the blue light goes dim / flashes when battery low) so do not bond the outer cover in place.

### Installing Emergency Switches – PlatinumX only

The emergency switches can be easily installed in any location with either screws or double sided tape (supplied). With a screwdriver carefully prize the top cover off and insert battery.

### Installing Wired Switches (optional)

Zone 15 has the capability to install 1 or more wired switches in parallel. Each switch requires two wires from the alarm side of the GPS loom, or if not using the a GPS from the wired switch plug (optional), the Orange (earth) and the White (active). The Orange is connected to the ring connector and the White to the Pin. It is important that these two do not get mixed up and the White earthed to the vehicle otherwise the alarm will not arm.

### Wiring – (also see wiring diagrams page 4)

### Connecting Power

The 4 pin loom contains the power and earth cables and should be connected directly to the battery. Do not connect this through any master switching circuits as turning them off will de-power the alarm. The Red cable goes to the +ve battery (we recommend fitting a 5A inline fuse), whilst the Black cable goes to Earth.

### Installing Brake/Stop relays

**Please note: Installation of the braking relays and braking circuit is optional and not required for the correct operation of the alarm system.**

*\*\*\*Important\*\*\* if you are not 100% confident regarding your ability to install the brake module do not attempt it. Have a professional RV trades person or Auto Electrician complete the job.*

The brake/stop relays switch power into the braking and stop light systems. Using relays have the advantage that they can be positioned close to the brake cable / battery and thereby minimising the heavier duty cable run needed. All that is needed from the control unit is a light duty signal cable that is provided as part of the 4 pin loom. Due to the many possible variations of cabling there is no loom provided for the brake/stop lamp side of this circuit.

1. Mount the relays on a solid mount and secure.

The following wiring connections must be made, please also refer to the wiring diagram:

2. Connect pins 30 from each relay. One side is the piggy back terminal connector, the other side the female spade connector.

3. Connect pins 85 from each relay. One side is the piggy back terminal connector, the other side the female spade connector.

4. Connect pins 86 from each relay. One side is the piggy back terminal connector, the other side the female spade connector.

5. Attach the cables from the Control unit loom to terminals 85 and 86 using the piggy back connectors

6. Attach the +ve of the battery to terminal 30 using the piggy back connector. It is recommended to use a 25A inline fuse in this.

7. Attach the terminal 87 of the brake relay to the brake cable of the vehicle, generally this is the Blue cable in the loom however consult your owners manual before making any connections

Automotive Wiring Current / Gauge			
	1m	2m	4m
10Amp	18	18	16
15Amp	18	18	14
20Amp	18	16	14
25Amp	18	16	12
30Amp	18	16	10

  

AWG	mm Diam
18	1.02
16	1.29
14	1.63
12	2.03
10	2.59

8. Attach the terminal 87 of the stop relay to the stop light cable of the vehicle, generally this is the red cable in the loom however consult your owners manual before making any connections

#### **Cable sizes required for brake circuit**

The following cable sizes are recommended for the "hot" side of the brake circuit.

\*\*\*Remember to assess the cable size in the trailer loom. Brake looms are generally connected across between the brakes however the limitation in current capacity may be one side after the initial split from the trailer plug. It may require that there are two cables installed from the SSR terminal 1, one to each side of the brake loom, if the cable in the loom cannot carry the current for both sides.

#### **Testing the brake circuit operation**

1. Both the PlatinumX and ProtectorX brake circuits can be tested by applying 12V over the relay connections 85 and 86.
2. The PlatinumX also has a brake test function in the programming menu. Please refer to the operating instructions.

#### **Motion Settings**

There are many factors that can effect the required motion sensitivity. Mounting position, vehicle weight, weight distribution, suspension type and position, tyre type and pressure as well as many environmental factors including road surface, wind and other conditions. To ensure the best operation of the unit please follow the guide in the operating manual to set up the correct operation of the system.

<b>It is essential that the Tow and Door directions be set to allow for correct operation</b>
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#### **Installing (optional) GPS and Communications Hub**

The GPS and Communications Hub connects to the alarm system via a 6 pin loom (supplied with GPS kit), 2 of these cables are for the wired sensors (Orange and White) and are not required to be connected to the GPS. The plug end with all 6 cables is connected to the alarm system whilst the plug end with 4 cables is connected to the GPS. Install the 4G and GPS antennas in a convenient position. The ideal position for the GPS antenna is either internally just under the roof or externally on top of the roof. The 4G antenna should be as high as practical. Please see GPS Communications Hub manual for further information.

#### **Liability**

- 1/ tech7/RVsecure accepts no liability for damage done either to the unit itself, its sub components or to the vehicle due to owners incorrect wiring. If in doubt please consult a professional.
- 2/ tech7/RVsecure accepts no liability for any theft of any property, vehicle or other.
- 3/ tech7/RVsecure accepts no liability for any damage to any property, vehicle or other due to the operation of the braking circuit (if connected) at any time or under any condition.

#### **Installation Notes**

- As with any plastic material it is recommended that if drilling any holes they be slightly larger than the screw to avoid cracking the plastic.
- When using double sided tape it is advisable to first clean the surface. Prepsol or IPA are suitable cleaners however caution is suggested when using these on wood (or wood lookalike) surfaces.
- If using bonding agents be careful to follow the manufacturers advice.
- Whilst the control unit has internal power fusing and advanced automotive type power filtering when connecting the + power cable to the unit it is highly recommended to install an inline fuse as a first line of defence.

Wiring Diagram

