

# SWAYCONTROL INSTALL GUIDE

BMPRO SwayControl is a proactive electronic stability control that can automatically stabilise a caravan/trailer in the event of it's sway. It automatically corrects caravan/trailer sway which can be caused by changing road conditions, driver error, lateral winds or a passing truck keeping drivers safe on the road.

Electronic sway control is mounted on the underside of the caravan/trailer chassis, wires directly to the trailer braking system and continuously monitors trailer yaw to detect sway. In the event that sway is detected the SwayControl automatically activates the caravan/trailer brakes to bring both it and the vehicle under control.

## 1. CONSIDERATIONS

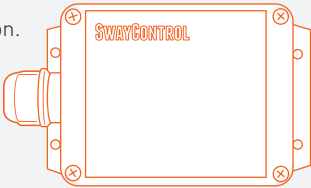
- The SwayControl must be installed by suitably qualified service personnel.
- For proper operation, ensure electric brakes are adjusted and maintained according to the manufacturer's recommendations.
- The caravan/trailer must be equipped with a 12V battery system of greater or equal to 50Ahr.  
A full size caravan/trailer battery must be used.

## 3. MOUNTING

- Using four 10G hex head self-drilling screws, mount the SwayControl to the caravan/trailer using the mounting flanges on the sides of the unit.
- Starlock washers are recommended.
- Tightly secure the mounting screws to hold the SwayControl firmly in position and to avoid becoming loose from vibration.

## 2. LOCATION

- The SwayControl must be installed on the rear of the first trailer frame crossmember, between 0.3 and 3m behind the trailer hitching point. It must:
  - be in the centre of the crossmember.
  - be in the correct orientation. Use the label on the SwayControl as a guide.
  - be fastened hard against the floor of a steel trailer.
  - have no overhang below the crossmember.
  - not be mounted where it is affected by vibration.



## 4. WIRING

- The wire harness has five wires requiring connection and one cable for the status LED light.
- Solder joints are recommended when connecting to the caravan/trailer's wiring harness.
- If solder joints are not possible, use the appropriate size and type of "crimp-type" weather sealed heat-shrink connectors, using the manufacturer's recommended crimping tools and using their instructions.

SwayControl Wire	Trailer Wire Function	Required Wire Size (min)
PURPLE	Left side electric brake output (all left side brakes)	1.8 mm <sup>2</sup>
PINK	Right side electric brake output (all right side brakes)	1.8 mm <sup>2</sup>
WHITE	Trailer battery/frame ground point	1.8 mm <sup>2</sup>
BLUE	Electric brake controller signal from tow vehicle	1.8 mm <sup>2</sup>
BLACK	12V DC from tow vehicle trailer harness	1.8 mm <sup>2</sup>

## 5. GROUND CONNECTIONS

- The caravan/trailer battery ground, the SwayControl ground and the electric brake ground wires must be securely connected a minimum 1.8 mm<sup>2</sup> wire, all fully grounded to a common point on the caravan/trailer.

## 6. 12V CONNECTIONS

- The tow vehicle 12V charge line, the 12V caravan/trailer battery terminal and the SwayControl 12V black wire must be securely connected together with a minimum 1.8 mm<sup>2</sup> wire.
- The "hot" wire from the breakaway switch must be connected to the +12V terminal of the caravan/trailer battery.

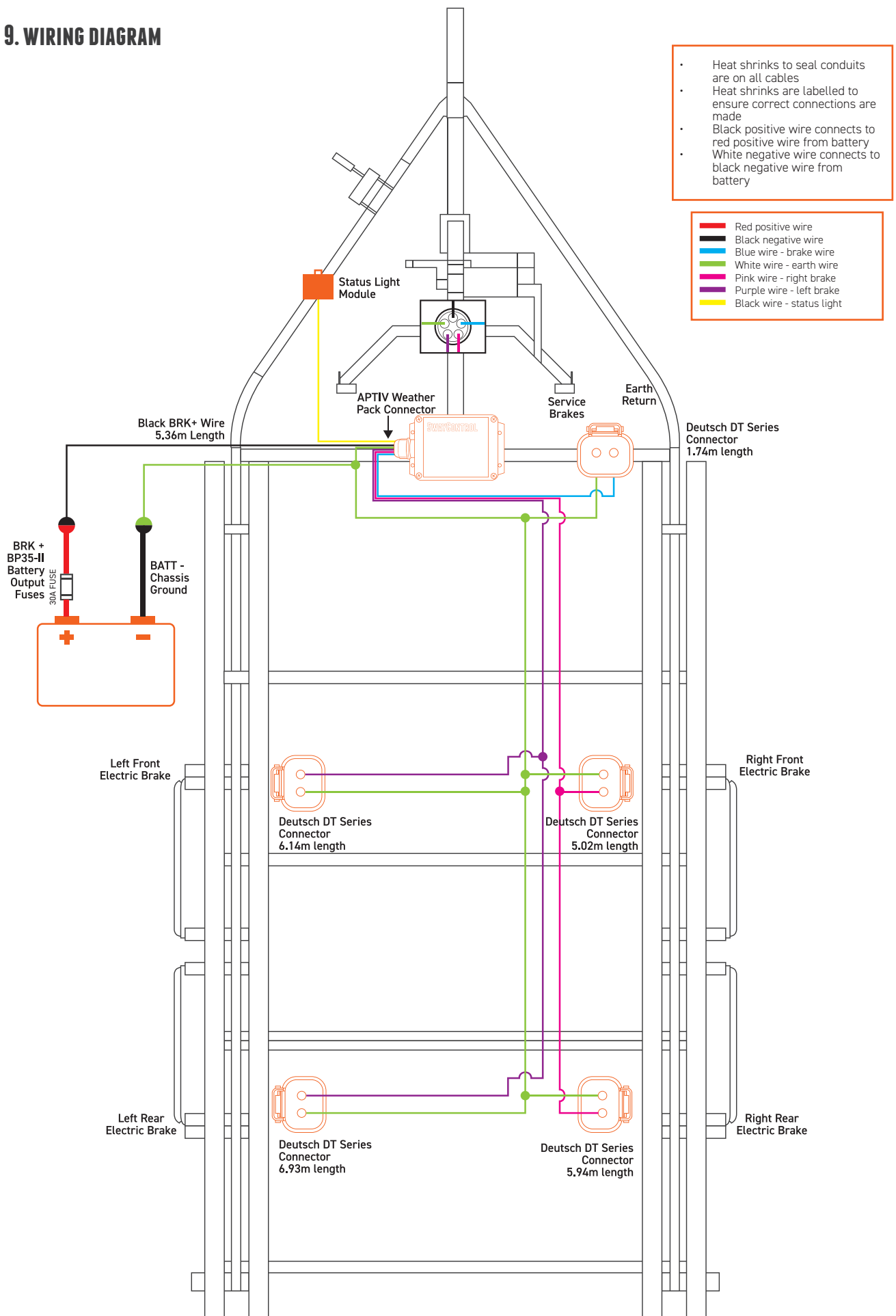
## 7. ELECTRIC BRAKE CONNECTIONS

- The blue tow vehicle brake signal wire must be connected to both the SwayControl blue brake signal wire and the "cold" wire from the breakaway switch.

## 8. LEFT & RIGHT BRAKE CONNECTIONS

- The SwayControl operates the left and right side caravan/trailer brakes independently in order to control caravan/trailer sway. It is very important the correct SwayControl wires are connected to the correct side of the brakes.
- The SwayControl purple wire connects to all left side brakes.
- The SwayControl pink wire connects to all right side brakes.

## 9. WIRING DIAGRAM



## 10. STATUS LIGHT MODULE INSTALLATION

Once wiring is completed, route the Status Light cable to the front of the trailer.

Using self-tapping screws, mount the Status Light module onto a flat surface on the drawbar of the caravan/trailer. Select a location that makes it easy to see the Status Light when looking at the front of the trailer.

## 11. STATUS LIGHT LEDS

Status Light Flash Sequence	Condition or Fault	Solution
Solid GREEN pulsing	Normal operation	
GREEN flash 5 times per second	SwayControl braking is active	
1 GREEN flash every 4 seconds	Module reset to manufacturer default values. Keep trailer still for 60 seconds (minimum) then drive normally	If module does not return to normal solid GREEN pulsing light after 3 system restarts, have the unit checked at a service centre
Continuous RED, GREEN flash	Driving on rough terrain and SwayControl of trailer is disabled	SwayControl of trailer is automatically disabled when driving on rough terrain. Unit will return to normal operation (GREEN light) when not on rough terrain.
No Light	Unit in "sleep" mode	Activate manual override on the brake controller to "wake-up" unit
No Light	No power after "wake-up" from brake controller	Check quality of power, ground and brake controller wire connections. Check for any blown fuses on the tow vehicle and trailer.
No Light	Over voltage, greater than 20V detected	Check power source voltage, correct voltage is 12-15V
No Light	Low voltage, less than 3V detected	Check power source voltage, correct voltage is 12-15V. Check quality of power and ground connections.
1 RED flash	System malfunction	Service centre repair required
2 RED flashes	Sensor malfunction - no sway control of trailer	Service centre repair required
3 RED flashes	Left side brake short	Correct the short in the left side brake
4 RED flashes	5 side brake short	Correct the short in the right side brake
Fast RED Flashing	Low voltage, between 3 and 6V	Check quality of power and ground connections



MANUAL



DATASHEET



FAQs