

Piccolo Hybrid+ Installation Manual

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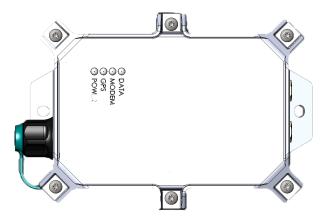
1 Powering The Unit For The First Time

Note: Before Installing the Piccolo Hybrid+, open the unit (by removing the top enclosure) and switch ON the power switch.



The Piccolo Hybrid+ may be supplied in two distinct versions:

2 Piccolo Hybrid+ Portable



The Piccolo Hybrid+ Portable is supplied with a water-proof DC charger connector (in place of the wire harness). To charge the internal rechargeable lithium battery, use an external power source such as 110 -240 VAC to 9 - 24V 1.5A with Long barrel 5.5x2.1 DC jack (the barrel length should be more than 10mm. You may also connect 12VDC from the car battery directly to the water proof connector



3 Piccolo Hybrid+ Pinout

The Piccolo Hybrid+ when supplied with the wire harness supports:

- 2 digital inputs one negative ground and one positive input.
- 1 digital output.
- 1 analog input or 1-wire.

Color of wire on mating connector	Pin Description	
Red	External power input Positive pin (+) 6 -32 Volts	
Black	GROUND	
Orange	Input1 negative input or CANL (Optional)	
Green	A2D or 1-wire	
Yellow	Input5 positive input or CANH (Optional)	
Brown	500maOpen Collector output1	

4 Hardwire Installation

Pre-installation notes:

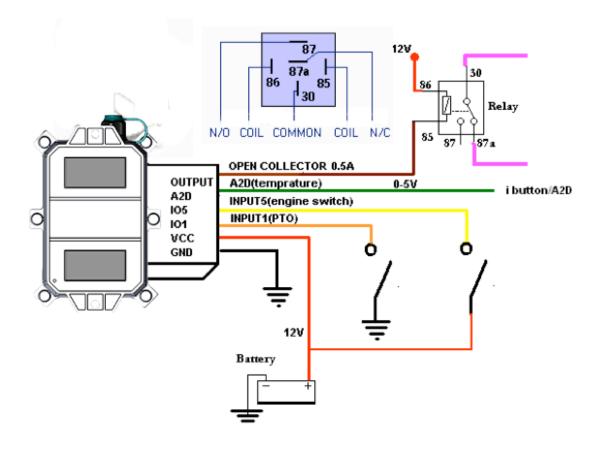
- If the HYBRID + is installed on a trailer, connect the red and black wire to the asset's power source. The connection will be to the back lights which are powered when the trailer is connected to the cabin/truck.

 Usually the power from the cabin connector to the back lights passes via a fuse box. If a junction box exists, you need to locate this junction box. Every trailer brand places the junction box at a different location.
- Extend the red (+) and black (-) wires as needed to reach the vehicle's main battery.
- You must wire the Piccolo HYBRID + directly to the power source without having any switches in between. You may wire the Piccolo HYBRID + to a wire panel and /or fuse panel only, but first verify that the connection to the specific point at the control panel or fuse panel is directly connected to the battery without any switches on the way.
- If the vehicle has more than one battery make sure the Piccolo HYBRID+ is wired to the main battery.
- If you need to connect IO's or sensors such as temperature sensors or an output command relay, follow the attached diagram.



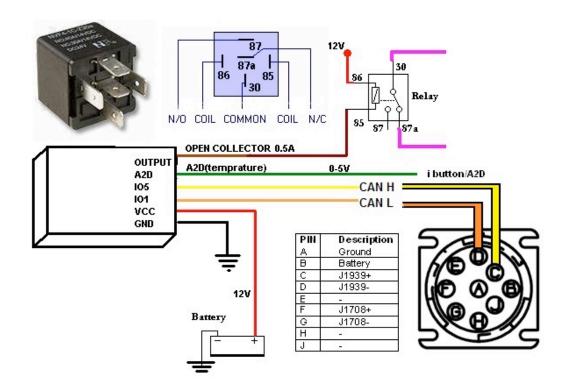
• The PICCOLO HYBRID+ has its own fuse but optionally you may add an external 5AMP fuse to the red wire connected directly to the battery.

4.1 Piccolo Hybrid+ Standard Wire Harness Diagram



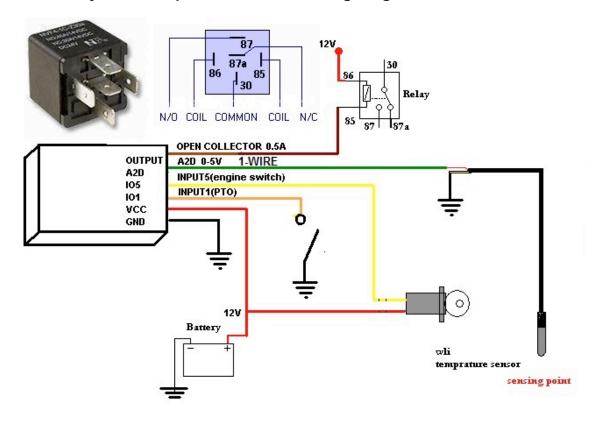


4.2 Piccolo Hybrid+ CAN Bus Wiring Diagram





4.3 Piccolo Hybrid+ Temperature Sensor Wiring Diagram



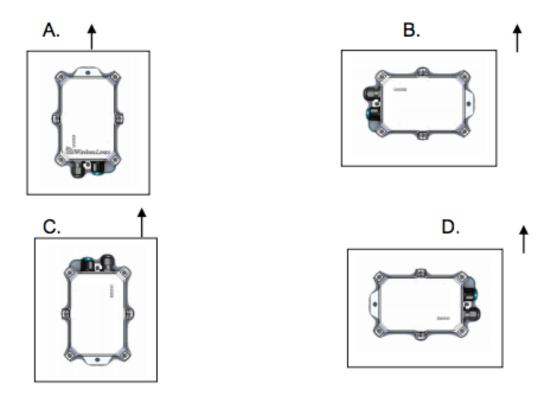


5 Accelerometer Mounting Instructions For Driver Behavior

For optimal performance, the Hybrid+ needs to be straight leveled and pointed in the driving direction with the LEDs pointing to the sky.

Driving direction can be one of the following 4 positions:

*It is recommended to install all units for a given fleet in the same orientation.



The configuration (see "service configuration" section in the Piccolo Family user guide) should be according to the driving direction shown by the arrow above. Choose the direction from the pull down menu in the configuration software as follows:

A->Power cable backward, sticker down

B->Power cable left, sticker down

C->Power cable forward, sticker down

D->Power cable right, sticker down



6 Mounting Options

1. A set of two strong magnets under the device for mounting onto a metal surface.



2. Two holes to screw/bolt the device to any surface.

