

Installation Overview:

The Core Skipper maintains the active skip cycles and holds essential settings. A Core Skipper MUST be properly installed to use the Skip-Line SC-12 system.



Recommended location:

On a vehicle with a rear operator cab, the Core Skipper is commonly located in the center console (doghouse) between the rear operator stations. Please mount inside a console or protected cabinet.

Mounting:

The Core Skipper comes with DIN clips on the device for top hat DIN rail mounting. Skip-Line does not supply DIN rails, so please contact your preferred distributor or order DIN rails online.

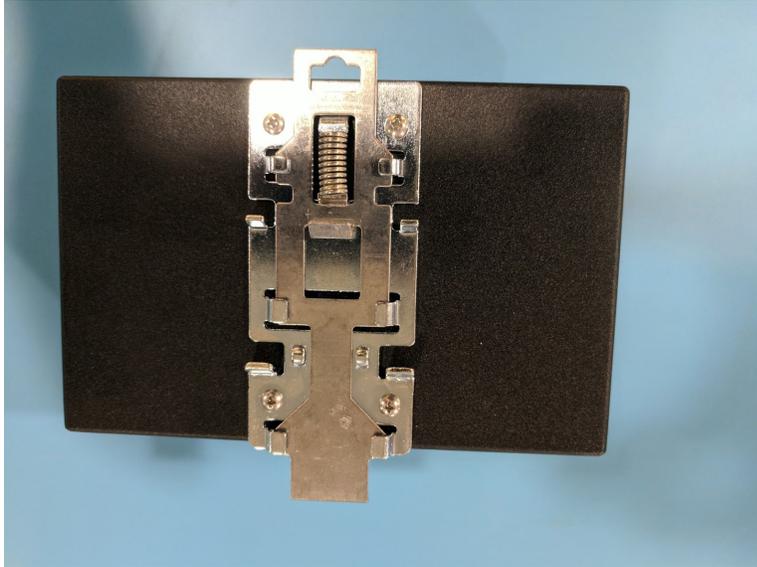
Use Top Hat DIN Rails:

EN 5022 35mm x 7.5mm

EN 5022 35mm x 15mm (deep version)

https://en.wikipedia.org/wiki/DIN_rail

<https://www.digikey.com/product-detail/en/phoenix-contact/0807012/277-2064-ND/2179626>



Please mount in a location free from exposure to:

- Water
- Pressure Washing
- Excessive mechanical vibration
- Temperature extremes
- Intermittent, poorly regulated, highly inductive, or noisy power sources
- Improper wiring

Communications Cabling

The Core Skipper gets power and communications from one of the BUS-012 hubs (usually the rear hub, although it does not matter) via a CAT5 cable. Connect the Core Skipper to any of the numbered BUS-012 RJ45 jacks (1-8). If properly connected to a BUS-012 hub, both the large green port light and the small red SLAVE LED on the BUS-012 hub should be illuminated (the slave light may blink). The Core Skipper activity light (green) will flicker when the device is functioning properly.

Cabling should use 26AWG (or larger) Cat5 cable and RJ45 connectors. Cat5 cable should not be longer than 5 meters (16.4 feet). The Hubs accept only standard RJ45 plugs. Some of the devices have sealed RJ45 jacks, available from Skip-Line, which will accept either standard or strain-relieved IP-67 rated plugs. See Appendix B of the SC-12 Manual for instructions on RJ45 568-B connector wiring.

Avoid pinch points where the cable may be damaged from moving parts.

Tips:

- Use a continuity tester for all Cat5 cables

Connections:

The Core Skipper accepts a single 12-pin Euro Plug connector (supplied by Skip-Like). Pin wiring may vary, so please refer to your vehicle's wiring sheet for instructions.

Common Wiring Connections

Pin A: No connection. If upgrading from an SM-5 system, your A-L plug may have +12V on this pin of the plug. It is acceptable to leave +12V connected here if you're using the same connector on an upgrade.

Pin B: No connection / GROUND. If upgrading from an SM-5 system, your A-L plug may have GROUND on this pin of the plug. It is acceptable to leave GROUND connected here if you're using the same connector on an upgrade.

Pin C: Yellow Pump Stroke Sensor Input (NPN). This is an opto-isolated input from a pump stroke sensor (limit switch, pressure switch, flow meter, etc). The Core Skipper is looking for a grounding (NPN) signal from the sensor.

Pin D: White Pump Stroke Sensor Input (NPN). This is an opto-isolated input from a pump stroke sensor (limit switch, pressure switch, flow meter, etc). The Core Skipper is looking for a grounding (NPN) signal from the sensor.

Pin E: Ground Output for Sensors (NPN). The Core Skipper is providing GROUND for sensors to use.

Pin F: Power Output (+5V) for Sensors. This is a clean, regulated +5V to use with unregulated sensors. Note that this connection is rated to 350mA.

Pin G: Motion Sensor Input (NPN). This is an opto-isolated input from a motion sensor (5th wheel encoder, hall effect sensor, etc). The Core Skipper is looking for a grounding (NPN) signal from the sensor.

Pin H: Extra Opto-Isolated Input (NPN). Connection is for vehicles with more than two pump stroke sensors. If less than or only two pump stroke sensors, this Pin has no connection. The Core Skipper is looking for a grounding (NPN) signal from the sensor.

Pin I: Extra Opto-Isolated Input (NPN). Connection is for vehicles with more than two pump stroke sensors. If less than or only two pump stroke sensors, this Pin has no connection. The Core Skipper is looking for a grounding (NPN) signal from the sensor.

Pin J: No connection / GROUND.

Pin K: Extra Opto-Isolated Input (PNP). This connection is reserved for unique +12V (PNP) signals.

Pin L: Transmission Reverse Input (PNP). This connection is looking for an active +12V (PNP) signal from the vehicle to indicate the transmission is in reverse. This connection is optional, but features such as Auto-Reverse Carriage Lift and CVO-312/DL-12 Backup Camera will not function without a connection.

Dimensions:

Core Skipper: 5.71"W x 3.74"H x 1.93"D

Enclosure Used: Hammond 1590JBK

WARNING!!!

Always unplug all CAT5 and LOAD (green connectors) cables prior to any welding on the vehicle. Failure to do so may result in severe damage to the unit.