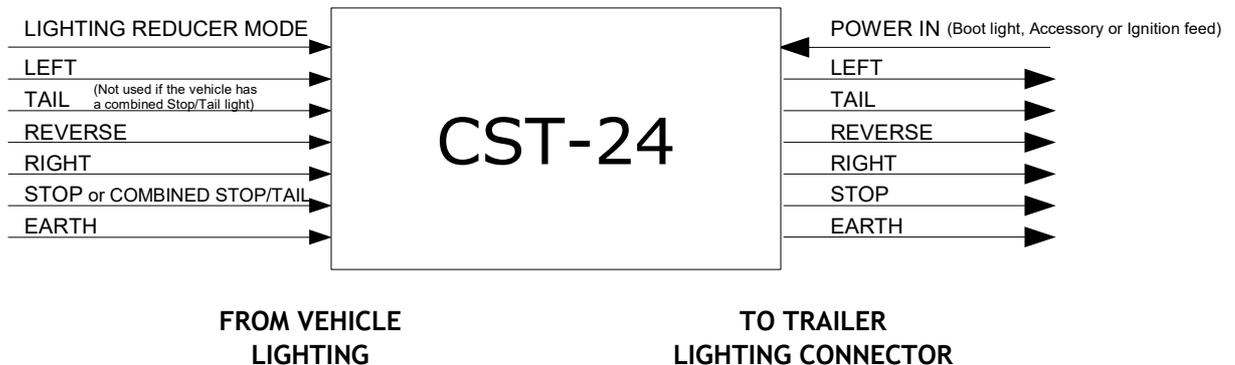


Combined Stop Tail Trailer Interface

Part No: **CST-24**



The CST-24 is an advanced 24V compatible lighting interface, and lighting reducer. It monitors each input to filter any unwanted data signal that the vehicle may use in lamp failure detection, or voltage control, and supplies a full output voltage to the trailer. It detects if the vehicle has a combined stop / tail (single bulb) circuit or a separate tail light and splits it into separate stop and tail feeds for the trailer. The CST-24 requires a separate power feed from the boot light feed or an ignition / auxiliary feed, and draws <2 mA to operate.

CST-24 Features

Protection:

- Prevents blown vehicle fuses and damage to the vehicle Body Control Module from a short circuit in the trailer wiring.
- Enables the vehicle lighting to continue operating if there is a short or open circuit in the trailer wiring.
- Automatically recovers from a short circuit in the trailer wiring.
- Compatible with vehicles having combined Stop / Tail lights.
- Will carry a maximum load per circuit of 42 Watts for a 12V feed and 84W for a 24V feed.
- All 5 output channels to the trailer are protected. Left, Right, Stop, Tail and Reverse.

Intelligent Monitoring:

- Many modern vehicles, especially those from Europe, monitor the state of the lighting circuits by using brief voltage pulses or a low current to check the bulb filaments. These lamp detection signals can cause LED trailer lights to turn on briefly. The CST-24 blocks these signals to the trailer lamps, as well as eliminating fault codes by prohibiting the trailer lamps from being detected by the vehicle electronics.
- The five CST-24 channels are compatible with trailers fitted with incandescent lamps or LED lights.

Lighting Reducer:

- Features an in-built lighting reducer for trailers that are fitted with **incandescent lamps**.
- Can be used to interface a 24V vehicle to a trailer that has 12V lighting.

Installation Notes

The CST-24 is connected into the vehicle wiring harness as per the diagram above.

The voltage fed into the power terminal on the CST-24, is the source of voltage that is supplied to the trailer lighting. If the CST-24 power terminal is connected to a 12V feed from the boot light, accessory or ignition feed - then this voltage is supplied to the trailer lights. If the CST-24 power terminal is connected to a 24V feed then 24 Volts is supplied to the trailer lights – unless lighting reducer mode is enabled.

When operating in lighting reducer mode, 24V is supplied to the trailer lights - but only for 25% of the time. This duty cycle results in an RMS voltage of 12V at the trailer lights, and works well for incandescent lamps. Lighting reducer mode is NOT compatible with 12V LED lights.

Only connect lighting reducer mode in 24V vehicles.
The lighting reducer functionality is not compatible with 12V vehicles.

Caution: If the vehicle is fitted with a genuine trailer lighting kit, the CST-24 must be connected to the vehicle lighting circuits and not the output of the genuine trailer kit. The genuine trailer kit outputs are load sensitive and will not be compatible.