# PCS Gear Display Kit User Guide

## Kit Contents

- 1 Gear Display
- 1 Interface Module

If any of the above items are missing, please contact Powertrain Control Solutions.

Four Display Kits available. These are listed below.

Kit Part Number	Gear Display
TCM-3700	Black 2.0"
TCM-3701	Polished 2.0"
TCM-3702	Black 1.75"
TCM-3703	Polished 1.75"

### Overview

The Gear Display is a dual input gear display indicator designed for rugged off-road use and is capable of displaying the current transmission gear from a CAN bus input. The gear display system contains the dash mounted 1.2" character height housing and an interface module. The two units are connected by a 4-pin weather-sealed connector and 2 ft of cable, and then terminated to a 4 pin connector that is utilized in PCS Simple Shift options connection. A pigtail is provided for power and CAN bus connection if connected to a TCM-2000 and includes CAN add-on or master connector with terminator.

## NOTE: BE SURE ALL SWITCHES ON THE BOTTOM OF THIS MODULE ARE IN THE "ON" POSITION.

## Dash Display Features:

- 16 segment alphanumeric character display
- Bright red daylight readable
- Night-time dimming
- Available character heights: 0.8", 1.2"

### Gear Display Wiring

RED	+12v fused ignition
BLK	Vehicle ground
Brown	Dim input (+12v)
WHT\RED	CAN HIGH
WHT\BLK	CAN LOW

Dim Input: Brown Wire Activates display dimming. 9v - 18v = Dim, N/C= Bright

Note that color of the CAN BUS wires change to reflect the colors utilized by PCS once the DEUTSCH connectors are encountered in the harness. The WHT/RED wire is CAN High, and the WHT/BLK is the CAN LOW signal.

All circuits are connected via circular or standard CAN BUS connectors.

### Setup the Mode

Setup switches on the back of the control module should be set to all on.

Ensure that the PCS Transmission controller CAN BUS is enabled in the TCU configuration. In the case if the Simple Shift controller no programming action is necessary. The TCU 2000 requires that the CAN BUS be enabled by going on line with the TCM-2000 transmission controller and selecting the CAN COMMUNICATION window in the TRANSMISSION SETUP pull down. Set SELECT DESIRED PROTOCOL to PCS and select TRANSMIT PROPRIETARY PCS MESSAGES in the transmit/receive options box.

When connecting to a Simple Shift, do not use the CAN and power pigtail. Connect the Gear Display directly to the harness OPTION CONNECTOR. If this is the only device use the DEUTSCH "Y" connector with the resistor terminating plug by installing it to the gray can plug on the harness where it breaks out at the option connector. If the connection is to a TCM-2000 this "Y" is connected to the gray CAN connector in the pigtail portion of the harness.

After powering up, if the display shows all segments lit, there is no communication over the CAN BUS. Keep in mind that both the TCU and GEAR DISPLAY must be powered up at the same time.

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