

# Automatic Transmission Controller

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A revolution in automatic transmission control



Proudly Introduced by

**PCS**

Powertrain Control Solutions



Powertrain Control Solutions proudly announces the first universal automatic transmission controller. Our aftermarket electronic controller allows full control through PC programmability for any modern electronic automatic transmission.

## Universal Automatic Transmission Controller

### Electronic Control

- Shift points
- Shift firmness
- TCC lockup
- Shift Speed

### Fully programmable based on:

- Gear
- Load
- Speed
- Rpm

### Features

- Button Shifting
- Multiple Shift Modes
- Dual Calibrations (real time switchable)
- Auxiliary Inputs
- Auxiliary Outputs
- Powerful Datalogging
- Easy to use Software
- Real Time Tuning
- Real Time Dash
- Self Diagnostics
- Durable Sealed Case

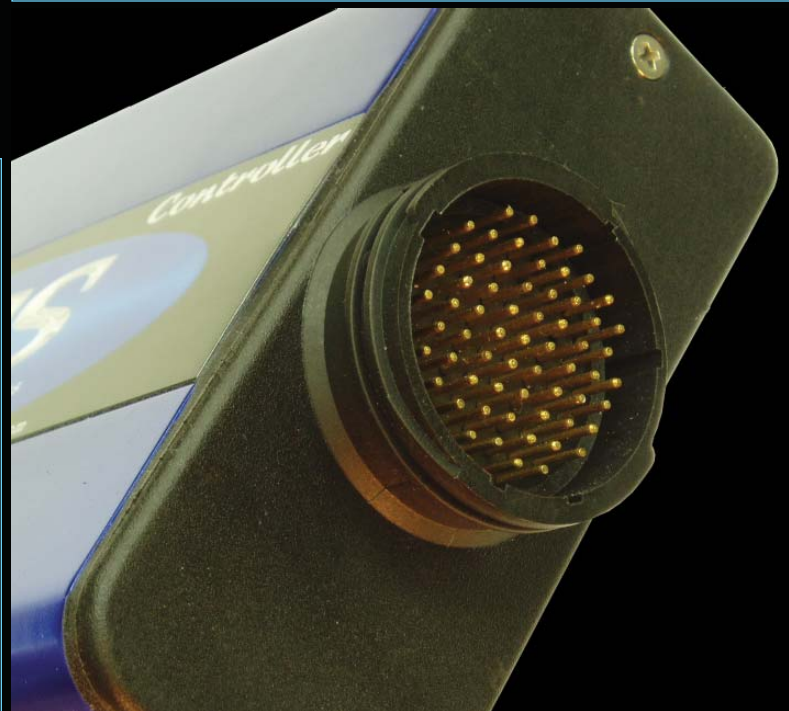
### Universal Architecture

Our customizable software allows the user to define input and output functions after wiring is complete. This simplifies installation and eliminates most wiring errors. In addition, complete wiring harnesses are available for many common applications. Custom wiring harnesses are available for any application.



The Powertrain Control Solutions Automatic Transmission Controller is a fully programmable transmission control system. Through a friendly PC Windows interface users are able to program transmission settings based on speed, engine load, engine speed and many other parameters. This powerful unit allows users to control every type of electronic automatic transmission from Ford, Nissan, GM, Toyota, Chrysler and most other manufacturers. If you are wondering whether our product will control your transmission, the answer is yes.

Engineered for the harsh automotive environment, the case employs gaskets for weather sealing. All components are rated for 125°C (257F). Gold contacts provide excellent long term durability and the highest current capability available. Nylon 6/6 plastic case ends offer unmatched durability and simplicity. Even the PCS logo uses the toughest VHB adhesive and it's sub-surface print will not be affected by surface scratches or damage. Every unit is manufactured at an ISO 9001 facility, rigorously tested and inspected to meet the highest quality standards. Quality and reliability are our first priority.



# Inputs

## 16 Digital Inputs

Programmability:

- Active High or Low
- Range switch
- Brake light
- Mode switch
- Other digital inputs

## 4 Speed Inputs

Programmability:

- Hall effect
- Magnetic reductor
- Advanced filtering
- Wheel speed
- Turbine speed
- Engine RPM
- Driveshaft speed
- Other speed inputs

## 6 Analog Inputs

Programmability:

- Throttle position
- Manifold pressure
- Definable calibration
- Other analog inputs

## 2 Temperature Inputs

Programmability:

- Engine coolant
- Transmission fluid
- Other temp inputs

# Power & Ground



# Outputs

## 6 Digital Outputs

Programmability:

- Active High or Low
- Solenoid output
- TCC lockup
- Mode indicator
- Other digital outputs

## 6 PWM Outputs

Programmability:

- Active High or Low
- Definable frequency
- TCC pressure
- Line pressure
- Accumulator pressure
- Any digital function
- Traction control
- Other pwm outputs

## 1 Speed Output

Programmability:

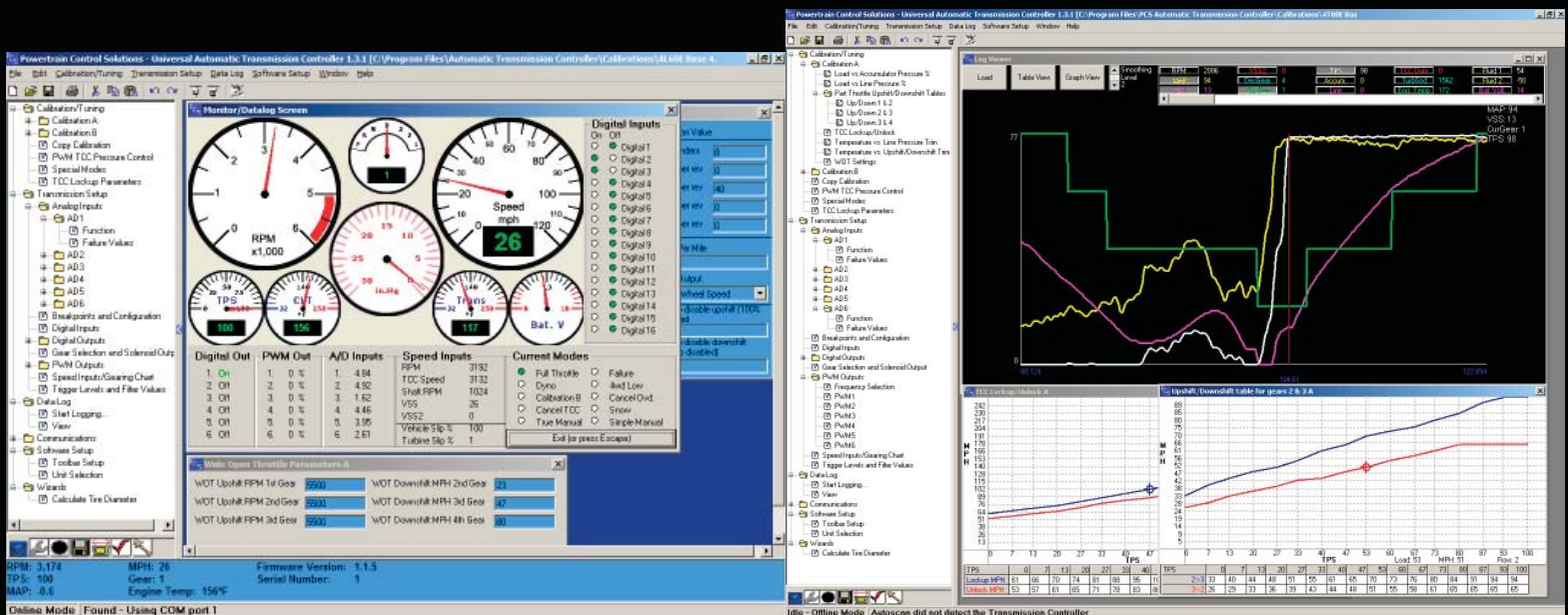
- Speedometer output
- Linked to definable speed input
- Definable pulse count

# Communication

- RS-232
- CAN 2.0b

# Software

An intuitive and familiar windows style interface provides a simple but powerful set of controls to program transmission functions. User preferences are also accommodated by a concurrent menu and explorer style of navigation, concurrent tabular and graphical tuning, a customizable toolbar, and a dockable explorer bar. Real time tuning gives the user immediate control and results over transmission parameters. A monitor screen and background datalogging assist in speeding the tuning process. Microsoft Excel® file exporting allows advanced data analysis. Base settings are provided for common transmissions and most transmissions require very little tuning. Programmable filtering, diagnostics and full programmability of inputs & outputs allow for complete flexibility in the automotive environment. Compatibility with Windows® 95/98/ME/NT/2000/XP ensures usability on almost any computer.



## Transmission Controller Specifications

### General

Microcontroller	25 MHz
Manufactured at ISO9001 Facility	✓
Warranty (parts and labor)	1 Year
Factory Tested and Burned In	✓
In-Field Flash Upgradeable	✓
Weather Sealed Case	✓
High EMI Immunity	✓
Weatherproof Connector	✓
Small Case (5.9x4.15x1.75in)	✓
Low Weight	1.2lbs
Gold Contacts	✓

### Operating Conditions

Temperature Range	-40 to 105°C
Operating Voltage	8 to 27 Volts
Operating Current (Controller Only)	0.5amp MAX
Reverse Battery Protection	✓
Transient Voltage Protection	✓

### Communication

CAN 2.0b	✓
RS-232	✓

## Transmission Controller Specifications

### Outputs

6 Digital	✓
6 PWM (also programmable as digital)	✓
User Selectable Output Type (+12v or Gnd)	✓
Maximum Current	3.5 amp
Short Circuit Protection on each Output	✓
Overcurrent Protection with Shutdown	✓
Thermal Protection	✓
Definable Output Type/Parameter	✓

### Inputs

16 Digital (active high or low)	✓
4 Frequency (rpm, wheel speed, vehicle speed, torque converter speed, etc)	✓
Programmable Trigger Levels and Filtering	✓
6 Programmable Analog	✓
2 Temperature	✓
Programmable Input Parameters (map, maf, throttle, coolant, oil temp, voltage trim, etc)	✓
10 bit Resolution	✓
Failure Diagnostics for each Input	✓
Overvoltage Protection for each Input	✓

## Website & Contact Information

Visit our website for online ordering, additional product information, product support, full product documentation, software, web forum, secure dealer forum and dynamic content.

The image displays two screenshots of the Powertrain Control Solutions website. The left screenshot shows the 'Automatic Transmission Controller' product page, featuring a price of \$700.00 and a detailed description of the universal automatic transmission control system. The right screenshot shows the 'Programmable Transmission Controller' product page, highlighting its features and specifications. Both pages include navigation menus, contact information, and a 'Need See our office Product Brochure' link.

**Powertrain Control Solutions, LLC.**  
 11139 Air Park Rd Suite 2  
 Ashland, VA 23005  
 Phone: (804) 752-6025  
 Fax: (804) 752-3516  
 Email: sales@powertraincontrolsolutions.com

