

# Electronic solutions for all vehicles



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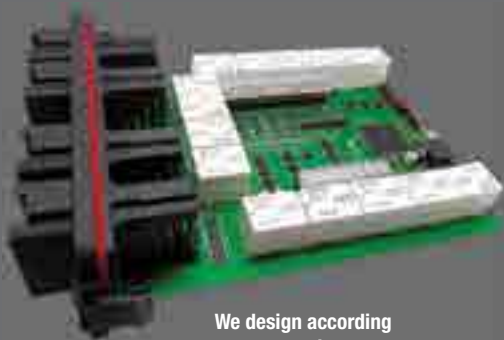
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# ABOUT



## Hummingbird Electronics designs and manufactures electronic solutions for all vehicles.

As well as our standard range of products featured in this catalogue and on our website, we will also manufacture a custom solution according to your requirements.



We design according to your requirements



Winner of 3 Innovation Awards



# KNOW YOUR ANGLE



## DUAL-AXIS INCLINOMETER HMDS1000B

Hummingbird's Dual-Axis Inclinometer provides a highly visible and configurable pitch and roll display to operators of industrial machinery.

Designed for harsh industrial environments, the module features a tough fascia with integrated buttons and LCD graphics display.

The unit allows customisation of sensor response times to allow maximum flexibility in various applications. Alarms and warnings can be configured from the integrated menu and saved to memory.



### FEATURES INCLUDE:

- High visibility display
- Simultaneous pitch and roll
- Graphical mode
- Warning and alarm outputs
- Remote sensor
- Password protection

#### Included Accessories



Wiring Loom



Tilt Sensor



RAM Mount



# HOW STEEP IS TOO STEEP?



## PREMIUM DIGITAL INCLINOMETER HMDS7000A

Hummingbird Electronics' Premium Inclinometer provides a full colour configurable pitch and roll display that is highly visible to operators of industrial machinery.

Many aspects of Hummingbird's Inclinometer are customisable, including positioning and sensitivity of the sensors, separate alarms and warnings for stationary or moving vehicles and four distinct primary display options.

Warning and alarm events are logged to an SD® card, to allow for later review and reporting.



### Included Accessories



Tilt Sensor



RAM Mount



Wiring Loom



GPS Antenna

### FEATURES INCLUDE:

- Large colour screen
- Simultaneous pitch and roll
- Graphical modes
- Warning and alarm outputs
- Stationary and moving alarm thresholds
- Logging of alarm and warning events to SD card
- Time, date, location and speed as well as incline
- Password protection

Made in Australia

# VIBRATION TOLERANT SWITCHING

## VIBRATION TOLERANT TILT SWITCH HMTS9CFG0

Hummingbird Electronics' USB configurable, IMU stabilised Tilt Switch allows for more precise pitch and roll measurement in high vibration environments.

### FEATURES INCLUDE:

- Vibration tolerant switching
- User configurable (via USB):
  - switching angle
  - damping (sensor response)
  - hysteresis
  - orientation
- 2 voltage free relay outputs
- 3-axis accelerometer, gyroscope and magnetometer
- 12/24V operation

Made in Australia



Configuration software

## IS MY MACHINE SAFE TO OPERATE?

### 2 AXIS TILT SWITCH HMSTS2CFG10

Hummingbird Electronics' 2 Axis Tilt Switch is a simple to configure, flexible Tilt Switch with a wide range of applications. The switch set-point is user configurable.

#### FEATURES INCLUDE:

- 0-64 degree user configurable switching angle
- Single or dual-axis operation
- Horizontal or vertical operation
- In system calibration
- User settable damping
- Relay output
- Replacement for mercury switch
- 12/24V operation



Optional accessory:  
Combination LED Alarm  
(HMAL001)



# NEED TO MEASURE DISTANCE AND POSITION?



## COLOUR GPS TRIP METER HMGT5000

Hummingbird's GPS Trip Meter provides up to eight customisable counters. An event-logging system allows the operator to save and later view events using Hummingbird's Hawk-I software.

### FEATURES INCLUDE:

- Up to 8 independent trips
- No installation required
- External reset switch
- Freeze modes
- Up/Down count direct from menu
- Current speed display
- Position and event logging to SD card
- Ball bank indicator
- Optional remote RF event uploads
- 10Hz updates

#### Included Accessories



Wiring Loom



RAM Mount



GPS Antenna



Radio Antenna



RAM Suction Cup Base



Hummingbird Hawk-I software



## HASSLE FREE DISTANCE MEASUREMENT



### GPS TRIP METER

#### HMGT1000B

Hummingbird's GPS Trip Meter provides a highly visible and configurable distance readout without any installation being required. Used by local councils, government, traffic authorities, the construction industry and rally drivers.

#### FEATURES INCLUDE:

- Two independent trips
- No installation required
- External reset switch
- Freeze modes
- Up/Down count direct from menu
- Current and average speed display
- Highly configurable
- 10Hz updates

#### Included Accessories



RAM Mount



Wiring Loom



HMGTO300 Remote  
(optional accessory)



RAM Suction Cup Base



GPS Antenna



# SPEED KILLS!

## GPS SPEEDOMETER

### HMSS1000B

Hummingbird Electronics' GPS Speedometers provide a quick to install, vehicle independent speed readout in vehicles that are not fitted with conventional speedometers.

#### FEATURES INCLUDE:

- High visibility display
- Settings not adjustable by operator
- Adjustable speed limit
- Internal relay to drive alarm
- External antenna option for harsh environments
- 12/24V operation
- Rugged RAM mount
- Simple electrical installation



Magnetic mount antenna



Bulkhead mount antenna

## EASY SPEEDO REPLACEMENT



Odometer mode

### FULLY FEATURED GPS SPEEDOMETER

#### HMST1000B

Hummingbird Electronics' Fully Featured GPS Speedometer provides a highly visible and configurable speed, trip and odometer readout.

#### FEATURES INCLUDE:

- High visibility display
- Speed only or speed and distance display
- Adjustable speed limit with internal buzzer
- External antenna option for harsh environments
- 12/24V operation
- Rugged RAM mount
- Simple electrical installation



Speedometer mode



Magnetic mount antenna



Wiring loom



Bulkhead mount antenna



Suction mount

# TIRED OF SPEEDING FINES?



White face mode

## GPS SPEED ALERT

### HMSA1000

Hummingbird Electronics' GPS Speed Alert provides drivers with an accurate digital speedometer and over-speed alert in a small, easy to mount unit.

#### FEATURES INCLUDE:

- Colour display
- Adjustable speed limit
- Optional password protection
- Buzzer and colour change on limit
- Internal GPS antenna
- Simple installation



Black face mode



Windscreen mount

## ARE YOU SPEEDING?



Black face

### ANALOGUE GPS SPEEDOMETER

#### HMAS1000

Hummingbird Electronics' 85mm GPS Speedometers provide a quick to install, vehicle independent speed readout in automotive and marine applications.

#### FEATURES INCLUDE:

- Industry standard 85mm size
- 120 or 200 ranges available
- Kilometres or Miles per hour
- Odometer and trip
- LED backlight
- External GPS antenna
- Simple installation



White face



Magnetic mount antenna



Bulkhead mount antenna



# HOW FAST IS TOO FAST?

## GPS SPEED SWITCH HMSW1000B

Hummingbird Electronics' GPS Speed Switch provides a simple to install, calibration free speed based switch in a small, easy to mount unit.



### FEATURES INCLUDE:

- No connection to vehicle electrics
- Voltage free relay output
- Adjustable speed limit
- Kilometres or miles per hour
- External GPS antenna
- 12/24V operation



Bulkhead mount antenna



Magnetic mount antenna



Optional accessory:  
Combination LED Alarm  
(HMAC001)

## SICK OF COMPLEX SPEEDO INSTALLS?

### GPS SPEED SENDER

#### HMGS1A10

Hummingbird Electronics' GPS Speed Sender provides a reliable calibration-free replacement for mechanical speed senders thereby reducing installation time and eradicating the need for periodic calibration.

#### FEATURES INCLUDE:

- Four selectable fixed pulse rates: 2000ppk, 4000ppk, 8000ppk, 50000ppk
- Optional variable pulse rate
- Two pulse out wires for differential drive
- Optional tunnel distance correction
- External antenna option for harsh environments
- 12/24V operation
- Simple electrical installation



External antenna version



Internal antenna version



Magnetic mount antenna



Bulkhead mount antenna

# ARE YOUR OPERATORS BREATHING DUST?

## CABIN PRESSURE MONITOR

### HMPS1000KIT

Hummingbird Electronics' Cabin Pressure Monitor warns operators when the cab pressure falls below a critical threshold. Low cab pressure can result in operators being exposed to harmful contaminants in the cabin.

#### FEATURES INCLUDE:

- Simple install
- Red / Green LED indicates fail / pass
- Optional remote output to drive buzzer
- Optional RS232 for remote monitoring
- Installer settable air-pressure threshold
- 12/24V operation



#### Included accessories



Spare tube



Bulkhead adapter



90° adapter



Air filter



## IS THERE DUST IN YOUR CABS?

### PANEL MOUNT CABIN PRESSURE MONITOR

#### HMPS3000KIT

Hummingbird Electronics' Cabin Pressure Monitor will alert you when cabin pressure drops, placing operators' lungs at risk.

#### FEATURES INCLUDE:

- Easy to understand colour display
- Under and over-pressure warning
- Installer settable threshold
- Real-time pressure readout
- External output
- 12/24V operation
- Includes all fittings required



# ARE YOUR OPERATORS SAFE?

## DRIVER BEHAVIOUR MONITOR HMBS3CFG232-NAV

Hummingbird Electronics' Driver Behaviour Monitor detects harsh braking, harsh acceleration, accident, rollover and harsh cornering to an existing vehicle tracking system.

### FEATURES INCLUDE:

- No connection to vehicle electrics
- Easy interface with existing vehicle trackers
- Independent outputs for braking, acceleration, accident + rollover and cornering
- Pre-set thresholds can be modified remotely
- Details of events provided via serial connection
- Custom software available for road-condition detection, trailer movement detection etc.
- Analogue or digital outputs
- Optional RS232 or USB interface
- 12/24V operation



## HOW CAN WE WORK OUT WHAT WENT WRONG?

### DATA-LOGGER WITH INTEGRATED GPS HMDL1000

Hummingbird Electronics' GPS Data-Logger records vehicle parameters that can later be used to analyse performance or re-create incident scenarios.

#### FEATURES INCLUDE:

- Logs time, date, position, speed, heading, pitch, roll, acceleration, road-condition, system voltage at up to 10Hz
- Optional analogue, digital and frequency inputs
- Optional CAN / J1939 message logging
- 400Hz sampling of incidents
- Data stored on secure SD card and can be viewed on any spreadsheet programs
- Optional RF download of logged data
- Overspeed and rollover warning outputs
- LED and buzzer status indicators
- 12/24V operation
- Simple electrical installation

Made in Australia



4WD side impact on sedan, 60km/h



Magnetic mount antenna



Bulkhead mount antenna



# IS YOUR RADIO ISOLATED?

## ISOLATED DC-DC CONVERTER HMPS200Wxx

Hummingbird Electronics' series of ultra wide input, Isolated Converters are designed for high reliability and are ideally suited to mining, industrial and automotive applications.

### FEATURES INCLUDE:

- Ultra wide (9-36V) input
- High power 200W capability
- 12V, 13.8V, 24V versions available
- Step-up and step-down to maintain output
- Output supply and ground isolated from input
- Maintains output during cranking
- Optional shutdown input





**DON'T LET YOUR BATTERY END UP LIKE THIS**

## INTELLIGENT BATTERY CHARGER

HMPB200W13.8

Hummingbird Electronics' series of secondary battery chargers will keep your fridge, caravan, boat or other battery fully charged and ready for use.

### FEATURES INCLUDE:

- Use in 12V or 24V vehicles
- Ignition input to enable charging
- Ultra wide (9-36V) input
- High power 200W capability
- Three stage charge cycle
- LED indication of charge state





Rectangular bases



Diamond bases



Circular bases



Threaded bases



Camera mounts

## RAM MOUNTS

Hummingbird Electronics stocks a wide range of RAM mounts from small “A-size” 0.5” balls right up to massive “E-size” 3 3/8” balls.



Phone holders



Tablet holders



Roll-bar mounts



Locking mounts



Handlebar mounts



Various length arms

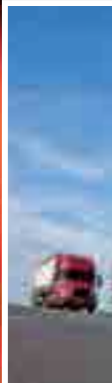
## HARNESS MANUFACTURE

Hummingbird Electronics will manufacture and braid harnesses to your specification. Bring us your harness and we will braid it or let us supply the entire service.

### **FEATURES INCLUDE:**

- Prevents vibration, eliminates abrasion
- 24 and 32 spindle braiding machines for all harness diameters
- High performance, high temperature yarn
- Flame retardant Exane wire
- Deutsch connectors
- We will reverse engineer existing looms
- All harnesses electrically tested





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