

P1 - Zone Speed Receiver™

SPECIAL FEATURES

- *Emphasizes Personnel Safety while Maintaining Productivity.*
- *Provides 4 Different Zone Speeds.*
- *Interfaces with Existing Pace1™ Speed Limiters.*
- *Operator Tamper Resistant.*
- *Built-in Zone Indicator Display.*
- *Separate Input to Trigger External Event, such as Proximity to Pedestrians.*
- *Compatible with all vehicles.*
- *No Programming Necessary.*
- *Automatically Powers Up in the most Recent Zone Detected Prior to Shut-Down.*



FUNCTIONAL DESCRIPTION

The P1 Zone Speed Control Receiver™ detects signals (from the P1 Zone Speed Transmitter™) that define geographical zones in a vehicle environment. The signals define up to 4 different zones.

Each detected zone is shown numerically on a built-in LED display. The zone information is also transmitted to a Pace1™ speed controller. 2 wires are used for this. A green wire is used for Speed 2, and a brown wire is used for speed 3. Speed 4 is achieved by asserting both wires simultaneously. Both wires are active high, i.e. 12V is the asserted level and ground is the non-asserted level.

An input signal (purple wire) is also provided to trigger an external event, such as a pedestrian proximity. This is an active high signal (+12V asserted, ground non-asserted). An optical, RF etc. receiver module may be connected to this external trigger signal to facilitate proximity sensing. The external trigger signal overrides any other zone detection, and automatically applies zone 3. Normal zone detection resumes automatically when the external trigger signal is no longer asserted.

3 wires facilitate the power interface to your vehicle. A black ground wire connects to chassis ground, an orange wire connects to ignition feed (ignition key on), and a red wire connects to battery feed (constant +12V).

The P1 Zone Speed Receiver™ also features a zone memory. The most recently detected zone is stored in memory when the ignition key is turned off. The stored zone is retrieved from memory when the P1 Zone Speed Receiver™ is powered up again (by turning the ignition key on).

The P1 Zone Speed Receiver™ utilizes a modulated infrared signal to carry the zone information from the stationary Zone Speed Transmitter™. The signal is also encoded to further reduce possible interference. The infrared signal medium necessitates line-of-sight communication between the P1 Zone Speed Transmitter™ and the P1 Zone Speed Receiver™.

APPLICATIONS

- *Forklifts*
- *Tow Tractors*
- *Mini Trucks*
- *Ground Support Equipment*
- *Plant Vehicles*
- *Off-Road Equipment*
- *Golf Carts*



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ELECTRICAL

For 12V or 24V Automotive Systems with Negative Ground.

Nominal Input Voltage	12VDC
Input Voltage Range	10 - 15 VDC
Current Draw (Nominal)	70 mA
Current Draw (Max)	100 mA

Nominal Input Voltage	24VDC
Input Voltage Range	20 - 30 VDC
Current Draw (Nominal)	70 mA
Current Draw (Max)	100 mA

Reliability (mil 217)	250,000 MTBF
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SAFETY

P1 Zone Speed Receiver™ is built to comply with the relevant UL and SAE standards.

ADDITIONAL INFO

Please refer to the installation instructions for complete information on how to install this product in a vehicle.

All product documentation is available in electronic format and can be downloaded from Safety Systems & Control's WEB Site:

www.loadingzonesafety.com

ENVIRONMENTAL

Operating Temperature	-40 °C to +85 °C
	-40 °F to +185 °F

Storage Temperature	-55 °C to +85 °C
	-67 °F to +185 °F

Relative Humidity	0 - 100%
Mechanical Shock	20 G's
Splash Proof	

Transmit Range (Line-of-Sight)	80+ feet
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PART NUMBERS

Part Numbers:	ZSC-IRR-12V-1	(12 VDC)
	ZSC-IRR-24V-1	(24 VDC)

MECHANICAL

Weight	-9 oz (255 grams)
Dimensions	4.00" x 2.00" x 0.75"
Connections	6 stranded wires 20 AWG

Enclosure	ABS (Black)
Insulation	Epoxy (Black) - UL 94V0
PCB	Fiberglass Laminate – FR4, UL