



6147 Clark Center Ave  
Sarasota, Florida 34238

Internet: [www.northstarcontrols.com](http://www.northstarcontrols.com)

Fax: (941) 926-2461 Tel: (941) 926-2454

## Single Channel – Dual Output Plug-In Vehicle Detector

### Model NP2-ES Features:

- 4 selectable Sensitivities
- 4 selectable Frequencies
- Wrong voltage protection
- Separate Power/Fault and Detect Indicators
- Automatic Sensitivity Boost
- Power Supply requirement 10 to 30 Volts AC or DC, 5mA nominal



The NP2-ES has been specifically designed and engineered for use in the Parking/Access Control industries and is designed for use where low current consumption is required, for example in solar powered installations. With standard operations including compatibility with all radio controls and more, the NP2-ES covers your low power, plug-in detection needs.

The NP2-ES's wide inductance range allows for use with small loops sometimes found in the Parking/Access Control industries (for recommended loop sizes please consult the Northstar Loop Information Guide).

Separate indicators for power/fault and detect output provide for quick visual verification of proper operation. Loop diagnostics are easily viewed with the front panel power/fault indicator.

Reliable operation and long field life are key engineering goals in every Northstar product.

# NP2-ES Specifications

## Front Panel Selections:

**Sensitivity** – controlled by front panel DIP switch.

- 0 = Low sensitivity
- 3 = High sensitivity

Medium sensitivity is used for most applications; this is a setting of 1 or 2. Always use the lowest sensitivity setting that detects the desired vehicles.

**Frequency** – four separate settings controlled by front panel DIP switches.

- 2+1 = High
- 2+0 = Medium High
- 1+0 = Medium Low
- 0+0 = Low

**Reset** – front panel reset performs a hard reset of the detector.

## Internal Switch Settings:

**Call Delay** – select from delay off and 2 second delay

**Call Extend** – select from extend off and 5 second extend

**Permanent Presence** – select from 60 minute and permanent presence.

## Outputs:

Detect Output is fail secure, loss of power does not cause a detect output to be placed.

## Factory Settings:

- Set to High frequency
- Set to Medium Low sensitivity (1)

## Specifications:

**Output Rating:** Solid State both Detect and Fail. 30mA Maximum current sink. Outputs are protected from overvoltage or polarity reversal.

**Power:** 10 to 30 volts AC or DC

**Inductance Range:** 20uH to 1500uH.

**Temperature Range:** -30 F to +180 F.

**Lead-In Length:** up to 2500 ft. with proper lead-in and loop.

**Mechanical:** 2.4" H x 2.25" D x 0.8" W.

**Supply Voltage** – incorrect voltage supplied to the unit will not result in damage, the unit will simply not operate until correct voltage is supplied. No fuses need to be reset.

**Indicators** – front panel indicators:

Power/Fault – Green, solid with correct power supplied.  
Flashes during a fault condition.  
Fault flash sequence: Single flash and pause = Open Circuit Loop, Double flash and pause = Shorted Loop.

Detect – Red, solid during detect.

**Sensitivity Boost** – automatic during detect except in the highest sensitivity setting (3).

**Connector:** – 10 position Molex Type 09-48-1104

Pin #	Function
1	Loop
2	Loop
3	Power – 10 to 30 V AC/DC
4	Not used
5	Not used
6	Fail output
7	Fail output
8	Detect output
9	Power – 10 to 30 V AC/DC
10	Power common

**Note:** The above connections are shown with correct power supplied and no vehicle present.

Northstar Controls L.L.C. warrants this product against defects in Manufacturing and workmanship for one year from date of shipment from the Northstar Controls L.L.C. factory.

Specifications are subject to change without notice.

L NP2ESL-Rev B

