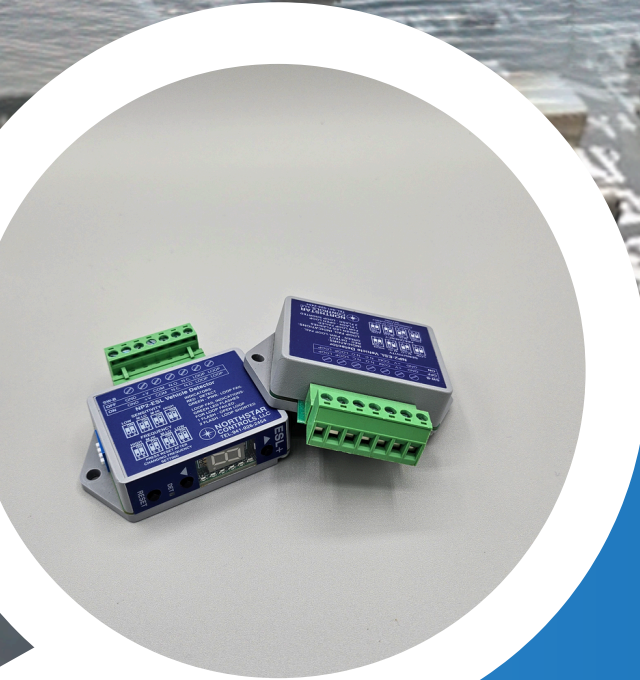




**NORTHSTAR
CONTROLS, LLC**
Vehicle Detection, Systems & Accessories



NP2-ESL PLUS

Single Channel Single Output, Very Low Power,
Miniature Vehicle Detector

Low Power Operation

Digital Display & EZ Tune Technology

Digital Bar Graph for Loop Diagnosis

10 Sensitivity & 4 Frequency Settings



Our Facility
Sarasota, Florida



Learn more
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941.926.2454

Built in America, by an American

Controls

The NP2-ESL PLUS has three front-panel pushbutton switches.

- UP / Sensitivity Programming Mode.
Press and hold for 3 seconds to enter Sensitivity Mode.
UP and DOWN buttons may be used to step through sensitivity levels.
- DOWN / Frequency Programming Mode.
Press and hold for 3 seconds to enter Frequency Mode.
UP and DOWN buttons may be used to step through the frequency selections.
- Reset – Front panel reset performs a hard reset of the detector and resumes operation using the last programmed settings.

A Four position DIP switch on the side of the unit allows the selection of additional operational modes:

Switch No.	OFF	ON
1	Fail Secure	Fail Safe
2	60 Min Presence	15 Min Presence
3	Presence	Permanent
4	Normal Mode	Low Power Mode

Indications

Single digit 7 Segment Multifunction Display

- In normal operation this display shows the current sensitivity level.
- In Sensitivity Programming Mode, the decimal point flashes and the lowest red led is lit. Displayed sensitivity may be changed by manipulating the UP/DOWN pushbuttons.
- In Frequency Programming Mode, the decimal point flashes and the highest green led is lit. Frequency of the loop oscillator in kHz is displayed. This may be changed by manipulating the UP/DOWN pushbuttons. The display alternates digits to show the ‘tens’ digit, then the ‘ones’ digit and then a pause.
- When the detector is in fault, the display shows ‘OC’ for open circuit loop or ‘SC’ for short-circuited loop.

6 Segment Bar Graph

- 2 red, 2 yellow and 2 green segments.
In Sensitivity Programming mode, this shows depth of detection as vehicle pass over detection area. A single red LED remains lit.
In Frequency Programming Mode this shows level of interference from adjacent loops. A single green LED remains lit.

Detect LED

- Detect LED shows a steady blue when in the detect or fault condition.

Additional Indications

- When the detector is in fault, two yellow LEDs will be illuminated.
- When the detector is tuning to the loop, a green LED will be illuminated.

Outputs

The NP2-ESL PLUS detect output is fail secure: loss of power does not cause a detect output to be placed.

Output Rating

Relay Output is rated 120VAC, 28VDC, 0.5A

Supply Voltage

10 to 30 volts DC, 20mA nominal.

Note: 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.

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.

Connector 7 position Receptacle and removable Terminal Plug

Pin #	Function
1	Loop
2	Loop
3	Relay N.C. (N.O if in FailSafe Mode)
4	Relay N.O. (N.C. if in FailSafe Mode)
5	Relay Common
6	Power 10 - 30 VDC or AC
7	Power Common

