



6147 Clark Center Ave
Sarasota, Florida 34238
Internet: www.northstarcontrols.com
Fax: (941) 926-2461 Tel: (941) 926-2454

Single Channel – Single Output Low Power Vehicle Detector

Model NP2-ESL Features:

- 4 selectable Sensitivities
- 4 selectable Frequencies
- Wrong voltage protection
- Separate Power/Fault and Detect Indicators
- Automatic Sensitivity Boost
- Power Supply requirement 12 Volts DC, 5mA nominal



The NP2-ESL 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. Screw terminal connections for power, loop and output allow flexibility in application. With standard operations including compatibility with all radio controls and more, the NP2-ESL covers your low power detection needs.

The NP2-ESL'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-ESL 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: Dry contact closure, Relay output rated at 1A, 30VDC, 110VAC

Power: 12 Volts DC, 20mA Max (Relay Energized), 5mA nominal

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: – 7 position Terminal Block

Pin #	Function
1	Loop
2	Loop
3	Relay N.C.
4	Relay N.O.
5	Relay common
6	Power – 12Vdc
7	Power – Logic Ground

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 C

