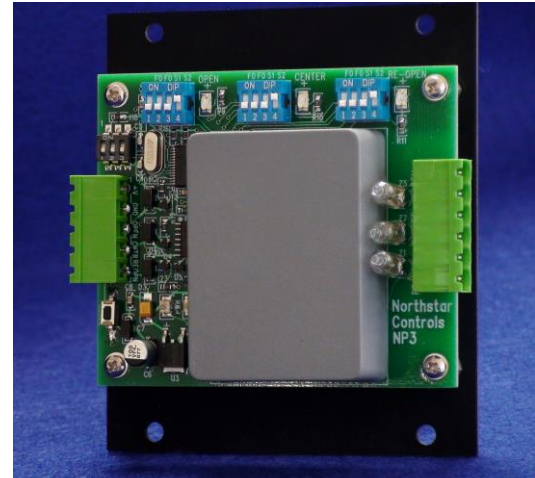


Three Channel – Plug-In/Terminal Block Vehicle Detector

Model NP3 Features:

- 3 selectable Sensitivities per channel
- 4 selectable Frequencies per channel
- Single Output
- Wrong voltage protection
- Separate Power/Fault and Detect Indicators
- Automatic Sensitivity Boost
- Power Supply requirement 10 to 30 Volts DC, 5ma Nominal
- Loop Scanning PREVENTS cross talk
- Selectable 15 or 60 min presence time
- Direct plug into All-O-Matic and Viking operators
- Can be hardwired into any operator using supplied connectors



The NP3 has been specifically designed and engineered for use in the Parking/Access Control industries and is designed for use where open, safety and exit loops are used. With standard operations including compatibility with all radio controls and more, the NP3 covers your low power, plug-in detection needs.

The NP3'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.

NP3 Specifications

Front Panel Selections:

Sensitivity – controlled by board mounted DIP switch.

- S1+S0 = Low sensitivity
- S2+S0 = Medium sensitivity
- S1+S2 = High sensitivity
- S0S0 = Channel OFF

Medium sensitivity is used for most applications; this is a setting of S2S0. Always use the lowest sensitivity setting that provides expected operations.

Frequency – four separate settings controlled by board mounted 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

Small 3 Position Switch Options:

Switch 2 ON = 15 min presence time

Switch 2 OFF = 60 min presence time

Switch 3 ON = Fail Safe/Re-Open

Switch 3 OFF = Fail Secure

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 sensitivity (S2S0)

Specifications:

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

Power: 10 to 30 volts DC, 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: 1.0" H x 3.0" D x 4.0" W.

Indicators – front panel indicators:

Power-	Blue, solid with correct power supplied.
Fault-	Yellow solid during a fault condition. The channel detect LED will flash during a current fault: Single flash and pause = Open Circuit Loop, Double flash and pause = Shorted Loop.
<u>Detect</u> –	Red, solid during detect.

Sensitivity Boost – automatic during detect except in the highest sensitivity setting (S1S2).

Connectors: – 5 Pin Terminal Block

Pin #	Function
1	Power – 10 to 30 V DC
2	Power common
3	Open
4	Center
5	Re-Open

6 Pin Terminal Block	
Pin #	Function
1	Loop Open
2	Loop Open
3	Loop Center
4	Loop Center
5	Loop Re-Open
6	Loop Re-Open

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 NPV3L.Rev.B
05.11.2020

