

INSTALLATION GUIDE FOR THE E-ACVDRLY-xxx AC Voltage Detector

**E-ACVDRLY-515****E-ACVDRLY-C14**

INTRODUCTION

The NTI E-ACVDRLY-xxx detects voltage (50-250VAC) when connected to an E-16D/5D/2D, E-MICRO-TRH(P), E-1W(P) (SYSTEM). The E-ACVDRLY-xxx can also provide a triggered response when connected to a PWR-RMT-RBT-C13. A 2-wire sensor cable (6 foot cable included), is used to connect to a SYSTEM, which can be configured to send alerts based on the presence or lack of AC voltage.

The E-ACVDRLY-xxx includes an internal relay:

- Maximum close voltage: 90VAC @ 60Hz, 108VAC @ 50Hz
- Maximum open voltage: 10VAC @ 60Hz, 12VAC @ 50Hz

E-ACVDRLY-515 includes a NEMA 5-15 Plug for connection to a standard 120V NEMA 5-15 receptacle.

E-ACVDRLY-C14 includes a 250V IEC C14 Socket for connection to a 250V IEC C13 receptacle.

Features:

- Monitors the presence of 50-250VAC
- 2-position screw-terminal connection
- Supports 2-wire sensor cable up to 1000 ft¹ (6 foot cable included)
- RoHS and CE certified

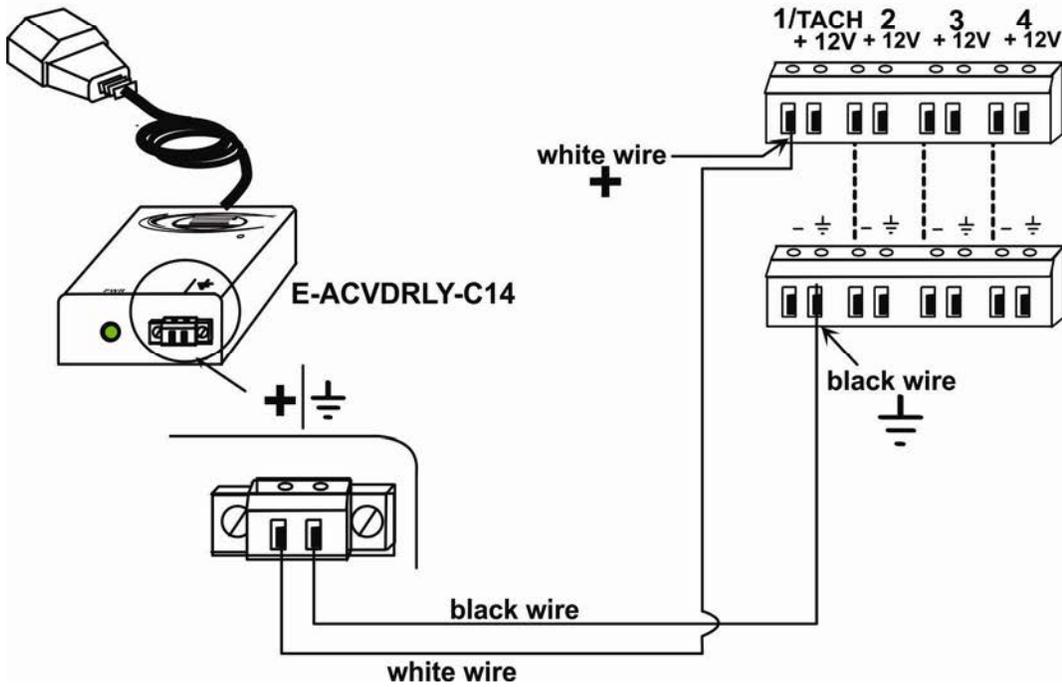
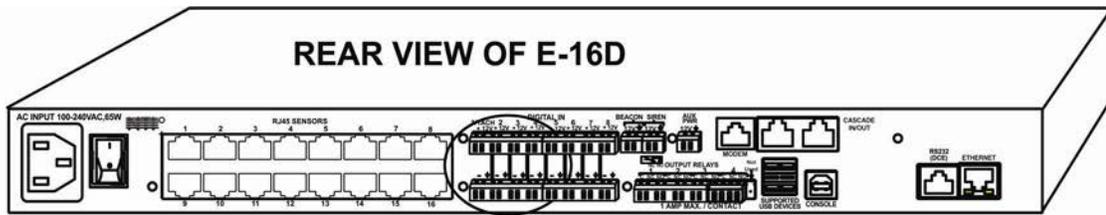
MATERIALS SUPPLIED

- E-ACVDRLY-yyy Voltage Detector (yyy= 515 or C14)
- E-2W-6 (6 foot 2-wire sensor cable)

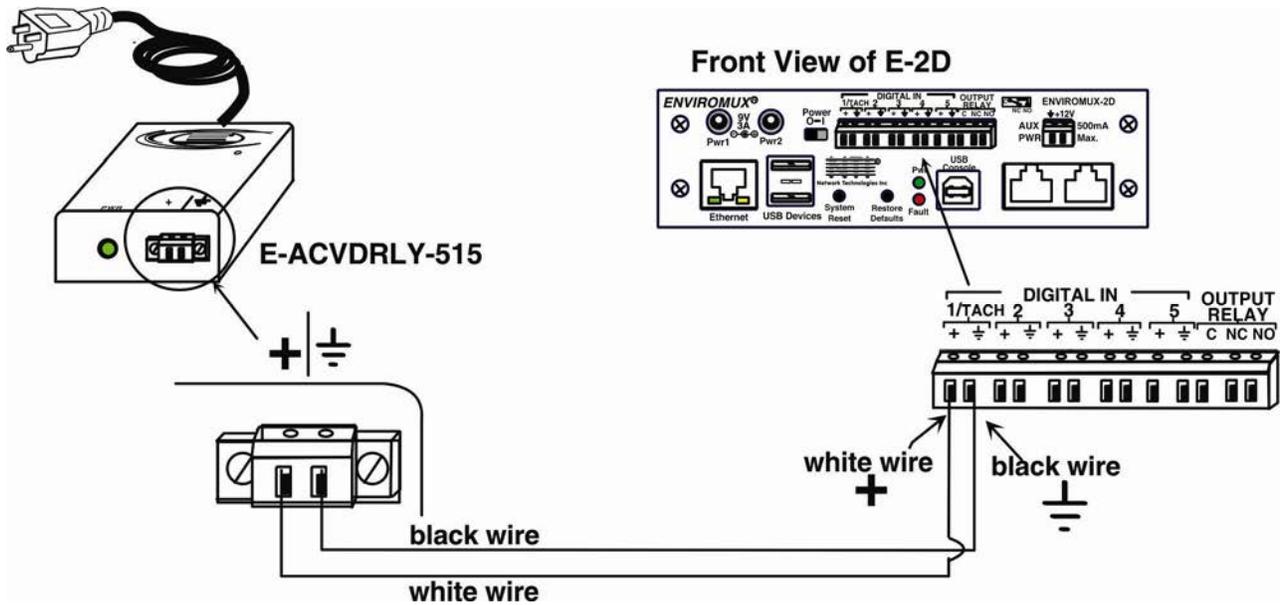
INSTALLATION

Place the E-ACVDRLY-xxx where it can be plugged into an AC power source (50-250VAC). Connect a 2-wire (16-26 AWG) cable up to 1000 feet long between the + and ground (⊥) terminals on the Voltage Detector and the same labeled "DIGITAL IN" terminals on the SYSTEM or PWR-RMT-RBRT-C13.

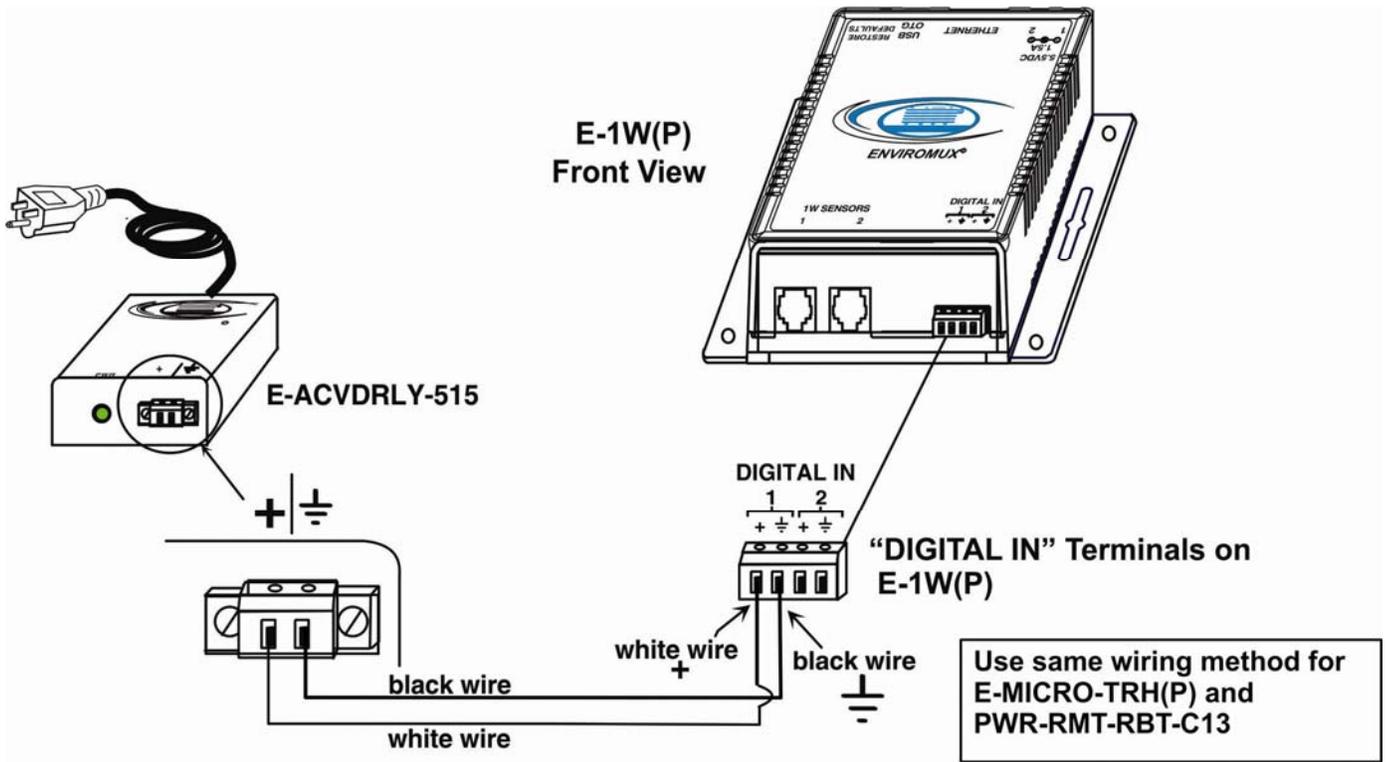
¹ When using 2-wire cables longer than 100 ft, be careful to route cables away from AC wiring, lighting sources, electric motors, or other electrical devices.



Wire connections for E-16D



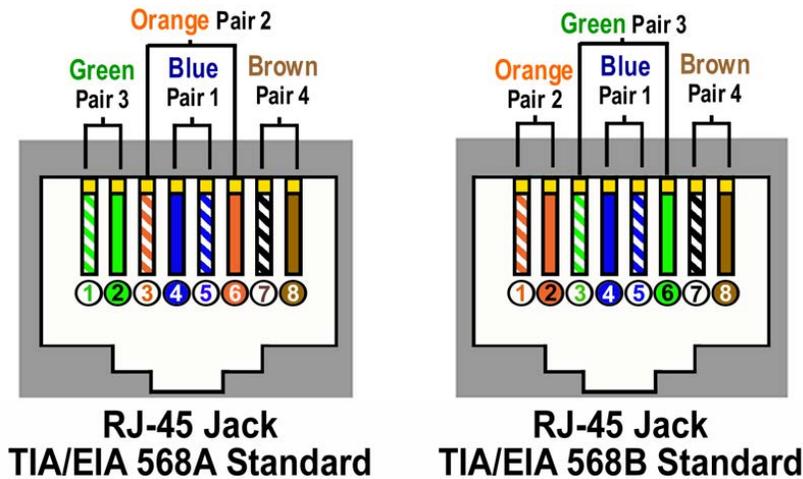
Wire connections for E-2D/5D

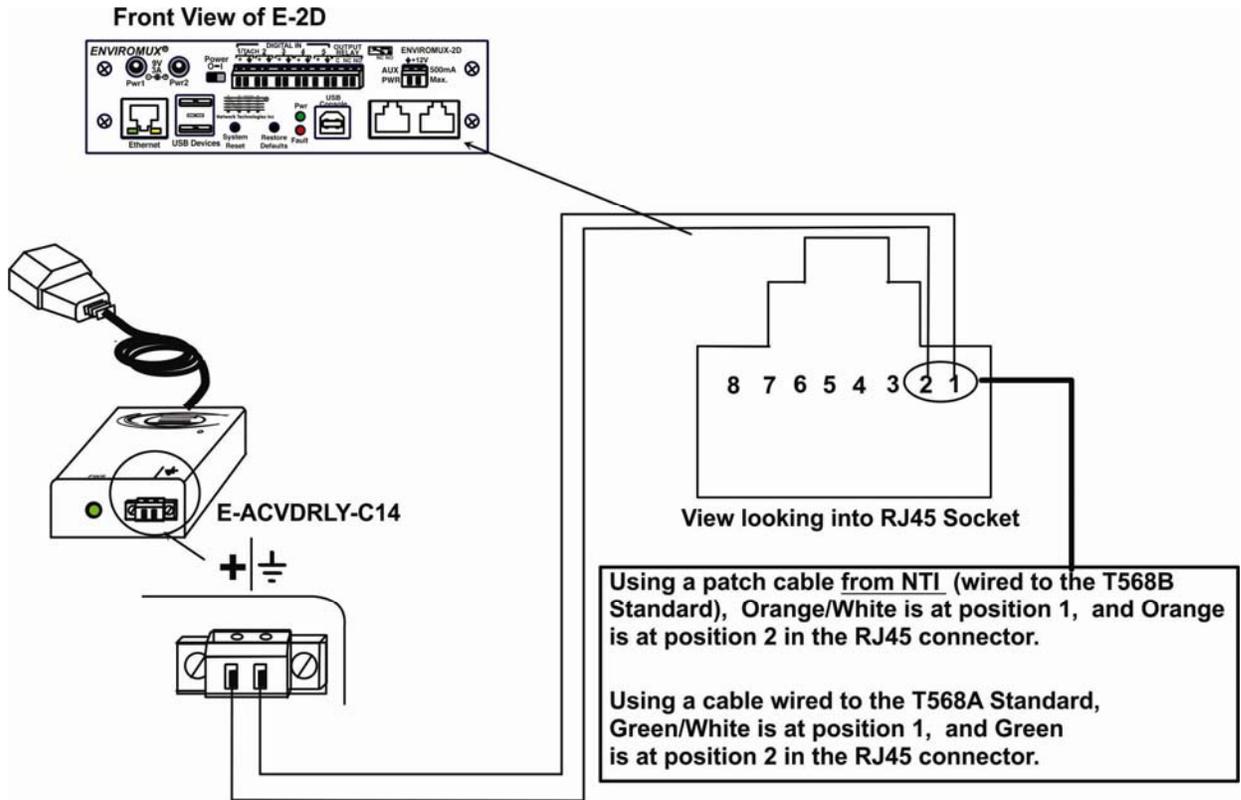


Wire connections for E-MICRO-TRH(P), E-1W(P) or PWR-RMT-RBT-C13

The E-ACVDRLY-xxx can also be connected to the "RJ45 SENSORS" sockets of the E-16D/5D/2D. When using a CAT5 patch cable to make connection, you must first determine what wiring standard the cable has been made to. Make connections based on the chart below.

TERMINAL ON E-ACVDRLY-xxx		RJ45 Socket Pin #	Cable Wire Color (T568A Standard)	Cable Wire color (T568B Standard)
+	→	2	Green	Orange
-	→	1	Green/White	Orange/White





Wire connections for E-16D/5D/2D using RJ45 Sensor sockets

OPERATION

The E-ACVDRLY-xxx is designed to **close** the circuit between the “+” and “ $\frac{1}{2}$ ” terminals when AC voltage is greater than 90VAC @ 60Hz, 108VAC @ 50Hz and will open the circuit when AC voltage is less than 10VAC @ 60Hz, 12VAC @ 50Hz. The “PWR” LED on E-ACVDRLY-xxx will illuminate when the circuit is closed.

The circuit status can be monitored by the SYSTEM. Each SYSTEM can be configured to send alert notifications when the circuit opens or closes. Configuration of the E-ACVDRLY-xxx is done on the “Digital Input Configuration” page of the E-16D/5D/2D web interface. Configuration for the E-MICRO-TRH(P) and E-1W(P) is done on the Configure Alert page. A sample configuration page from the web interface for each product is shown below.

The PWR-RMT-RBT-C13 can be configured to trigger a response to a status change provided by the E-ACVDRLY-xxx. This is configured on the Sensor Settings page of the web interface.

Please refer to the appropriate section of the SYSTEM manual for additional information on the configuration pages.

Digital Input Configuration

Digital Input Settings	
Description	Digital Input #2 Descriptive name for the digital input
Group	1 Select which group the digital input belongs to
Normal Status	Closed Select the normal status for the digital input
Refresh Rate	20 Sec The refresh rate at which the digital input view is updated
Alert Settings	
Data Logging	
Save	
Alert Simulation	
Simulate Alert Clear Alert	

Configuration page for E-16D/5D/2D

Configure Alert

Alert Settings	
Associated Sensor	Digital Input #1 Sensor associated to this alert
Groups	<input type="checkbox"/> Group 1 <input type="checkbox"/> Group 2 <input type="checkbox"/> Group 3 <input type="checkbox"/> Group 4 <input type="checkbox"/> Group 5 <input type="checkbox"/> Group 6 <input type="checkbox"/> Group 7 <input type="checkbox"/> Group 8
Trigger Event	Closed
Alert Delay	0 (sec) Duration the sensor must be out of thresholds before alert is generated
Auto Acknowledge	<input type="checkbox"/> Automatically acknowledge alert when sensor returns to normal status
Notify on return to normal	<input type="checkbox"/> Send a notification when this sensor returns to normal status
Notify Again Time	0 (min) Time after which alert notifications will be sent again
Enable Syslog	<input type="checkbox"/> Send alerts for this event via syslog
Enable SNMP Traps	<input type="checkbox"/> Send alerts for this event via SNMP traps
Enable E-mail Alerts	<input type="checkbox"/> Send alerts for this event via e-mail
Enable SMS Alerts	<input type="checkbox"/> Send alerts for this event via SMS messages
Save	

Configuration page for E-MICRO-TRH(P) or E-1W(P)

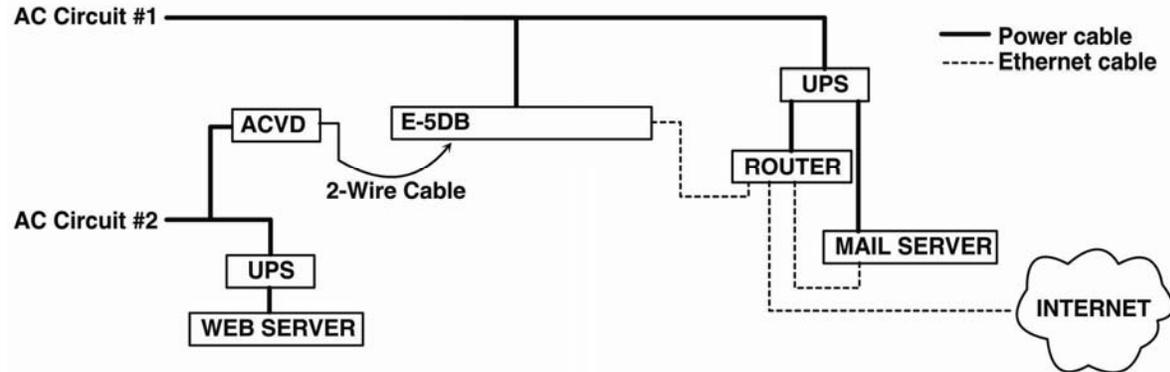
INSTALLATION NOTES

- It is not necessary to install an E-ACVDRLY-xxx to monitor the AC circuit which provides power to the E-16D/-5DB / -2DB. These models have built-in power monitoring and battery backup and will send an alert in the event of a power failure.
- In order for the ENVIROMUX System to send an e-mail alert, the attached network components (routers, mail server, etc.) must have power. If you are using the SYSTEM and E-ACVDRLY-xxx to monitor the AC circuit providing power to any of these network components, be sure they will not lose power during a fault condition. (See image below.)

Note: Because of the low 500mA rating, the E-ACVDRLY-xxx is not recommended for inductive or capacitive loads (even very small loads), because the inrush current is likely to exceed the 500mA rating.

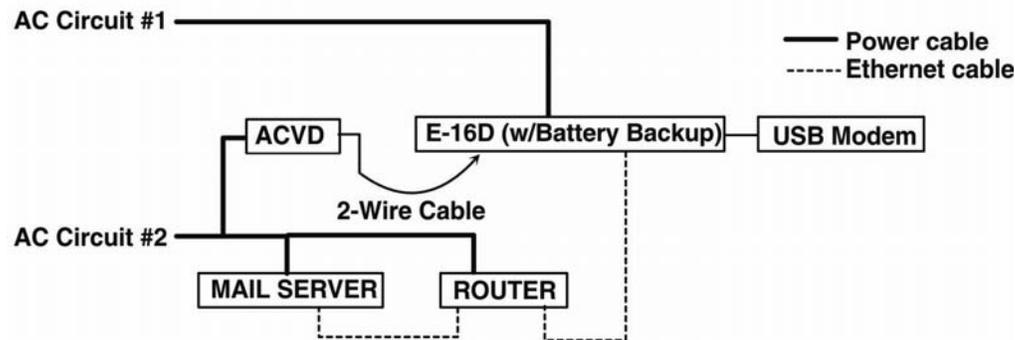
FYI: In the images below, the E-5DB \-2DB are indicated because they include the battery backup feature to provide sensing and alert communication in the event of a SYSTEM power failure.

E-16D \-5DB \-2DB Installation #1



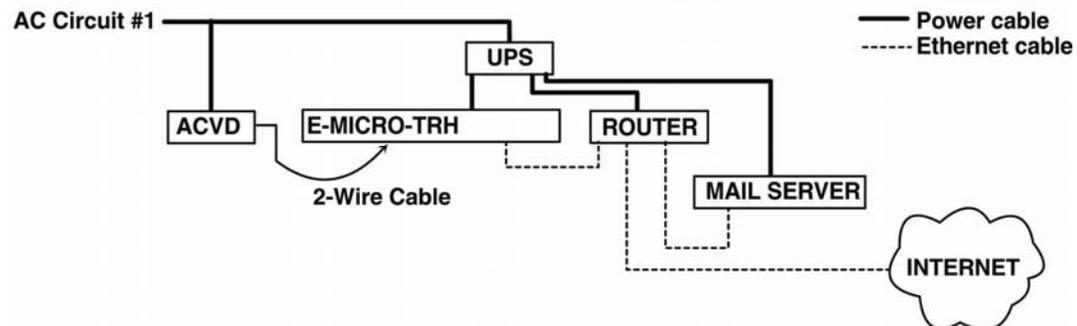
- If your network components will lose power during the AC fault condition, use an alternate means to send alerts such as a E-4GU-x USB Modem or Auto Voice Dialer (E-AVDS-4Gx). The USB Modem is powered by the battery backup feature on the E-16D/-5DB/-2DB. (See image below.)

E-16D \-5DB \-2DB Installation #2



- If you are using the E-ACVDRLY-xxx to monitor the AC Circuit which provides power to the E-MICRO-TRH or any of the necessary network equipment (router, mail server, etc.), be sure they will not lose power during the AC fault condition. (See image below.) The method below would also be best suited for E-5D/ -2D and E-1W (models without battery backup).

E-MICRO-TRH Installation



TECHNICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Input Voltage Range	0-250VAC
Power	Powered by 35-250VAC via power cord (25mA Max.)
Output Relay Maximum Switching Current	500mA
Output Relay Maximum Hold-off Voltage	250VDC
Size (In.) W x D x H	2x2.5x1.312

Note: Because of the low 500mA rating, the E-ACVDRLY-xxx is not recommended for inductive or capacitive loads (even very small loads), because the inrush current is likely to exceed the 500mA rating.

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CHANGES

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WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from date of purchase. Please contact Network Technologies Inc at (800) 742-8324 or 330-562-7070 for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.