



INSTALLATION GUIDE FOR THE ENVIROMUX-S60VDC

INTRODUCTION

The NTI ENVIROMUX-S60VDC Voltage Detector Converter monitors DC voltage sources (up to two) when connected to an ENVIROMUX-16D/-5D/-2D or ENVIROMUX-SEMS-16 Enterprise Environment Monitoring System (SYSTEM). The voltage sources can be anything with a range between 0 to -60VDC or 0 to +60VDC. When connected to a SYSTEM via CAT5/5e/6 cable (up to 1,000 feet away), the voltage source(s) can be monitored and the SYSTEM can be configured to alert users as to variations in the voltage levels.

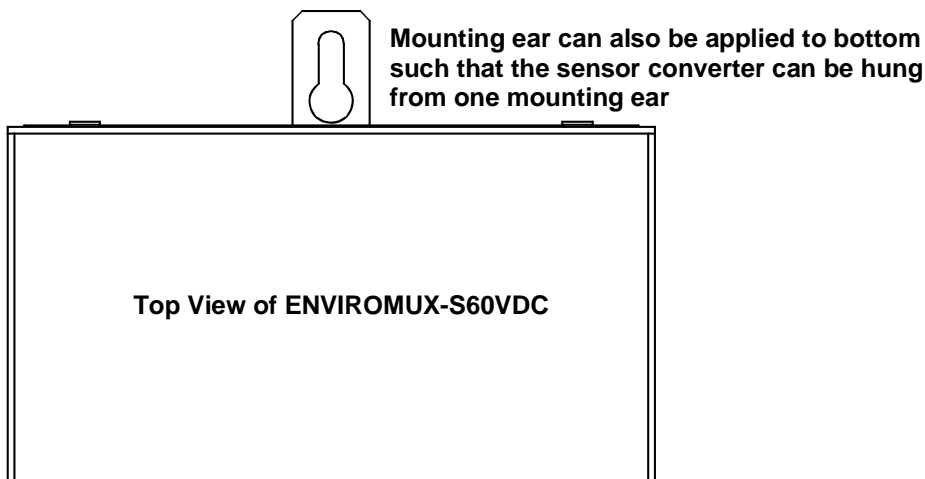
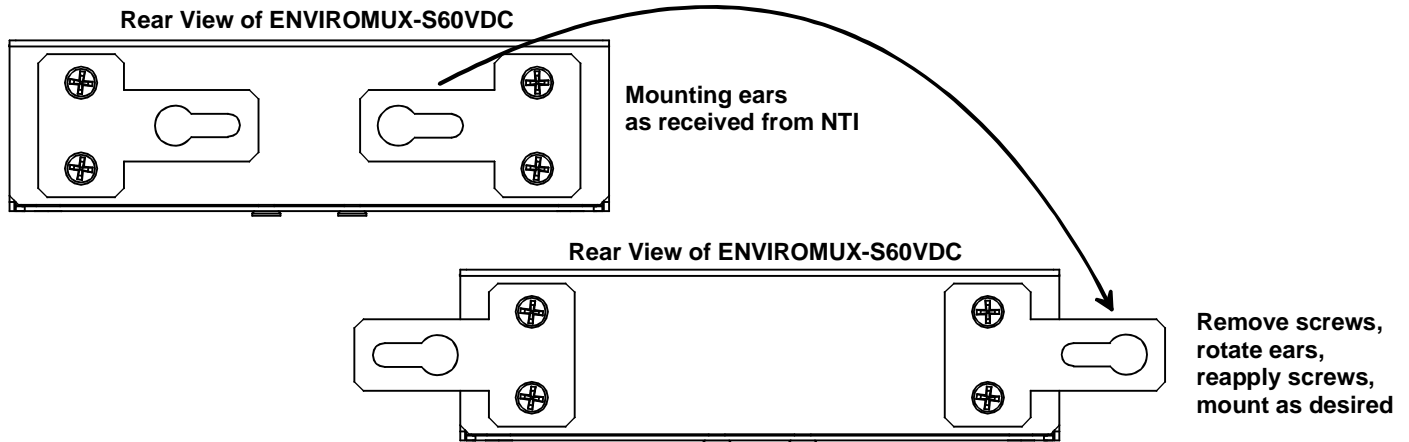
Features:

- Detects and monitors up to two DC voltages, each with a range of either 0 to -60VDC or 0 to +60VDC
- 5-position screw-terminal connection
- Supports CAT5/5e/6 cable up to 1,000 ft. (not included)
- Includes Mounting Ears
- RoHS certified

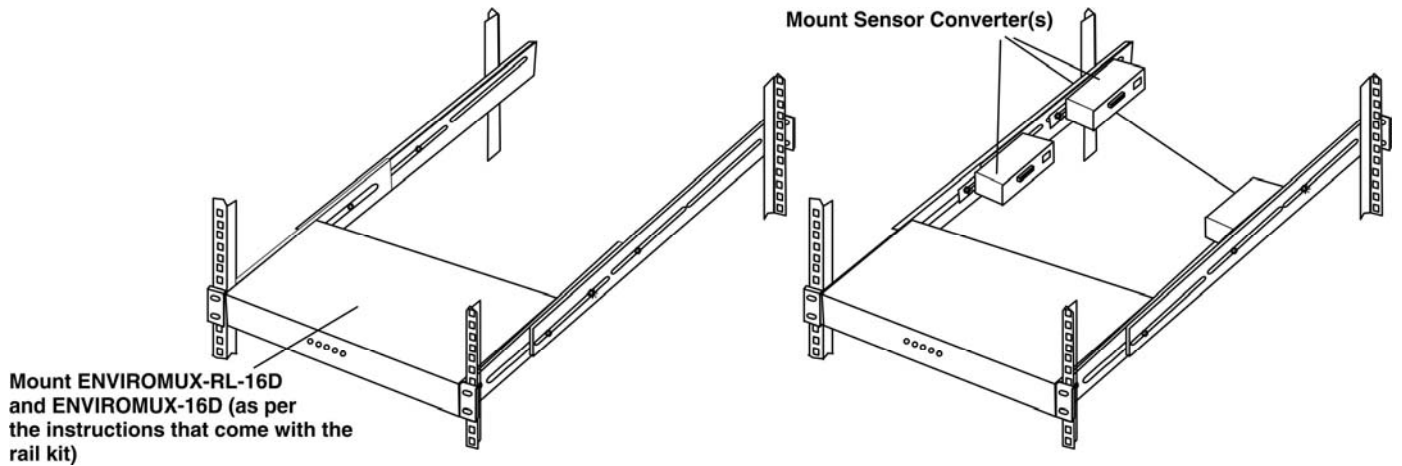
Note: The ENVIROMUX-SEMS-16 must be running firmware version 2.4 or later in order to use the ENVIROMUX-S60VDC with it. Refer to the ENVIROMUX-SEMS-16 manual for firmware upgrade instructions as needed.

INSTALLATION

Mount the ENVIROMUX-S60VDC using the mounting ears provided. To use the ears, remove the screws securing the ears to the rear of the ENVIROMUX-S60VDC, turn the ears around, and reapply the screws. Alternatively, secure one ear to holes on the bottom of the unit so that it can be hung as shown in the image below.



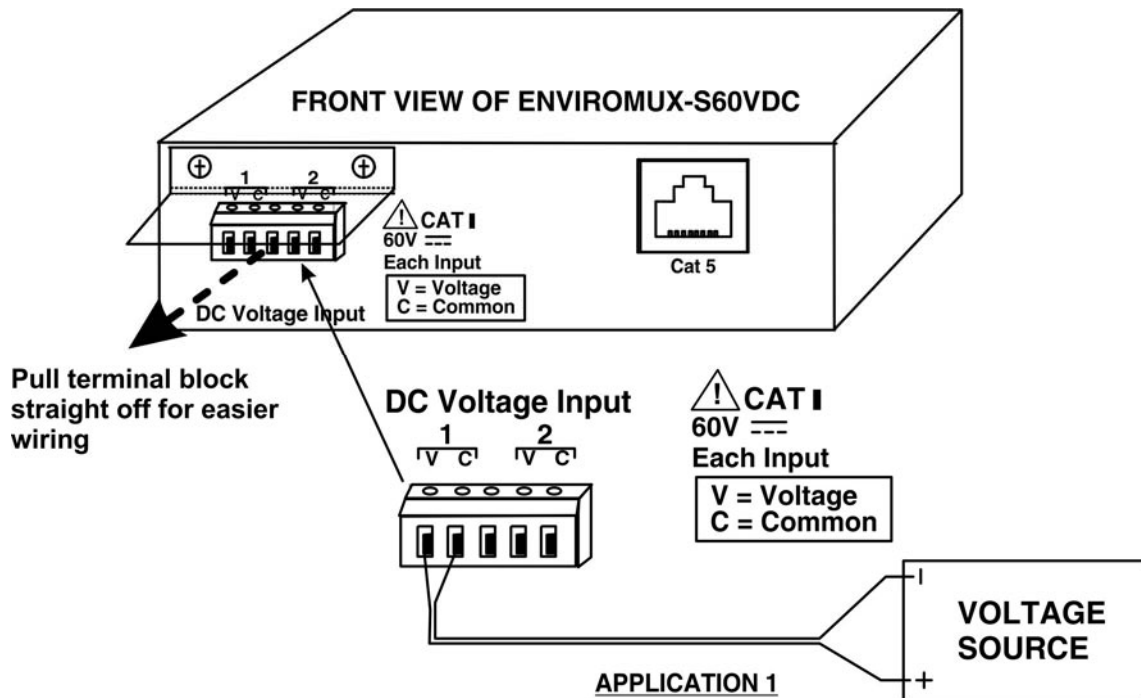
To mount multiple Sensor Converters in close proximity to the SYSTEM, install an extension rail kit (NTI ENVIROMUX-RL-16D - sold separately) and mount Sensor Converters as seen in the illustration below.



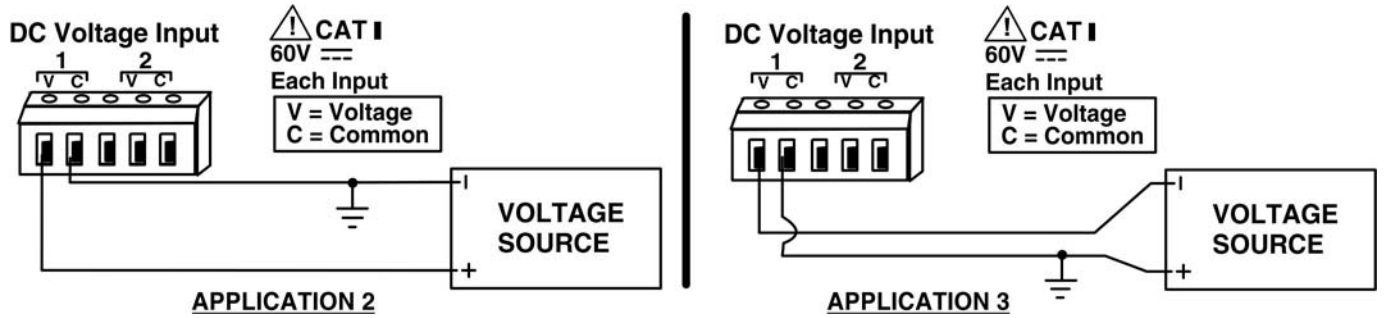
CONNECTION

1. Connect a voltage source to the “V” and “C” connections of either pair 1 or pair 2 on the removable terminal block. Wiring for three applications are illustrated below for your reference.

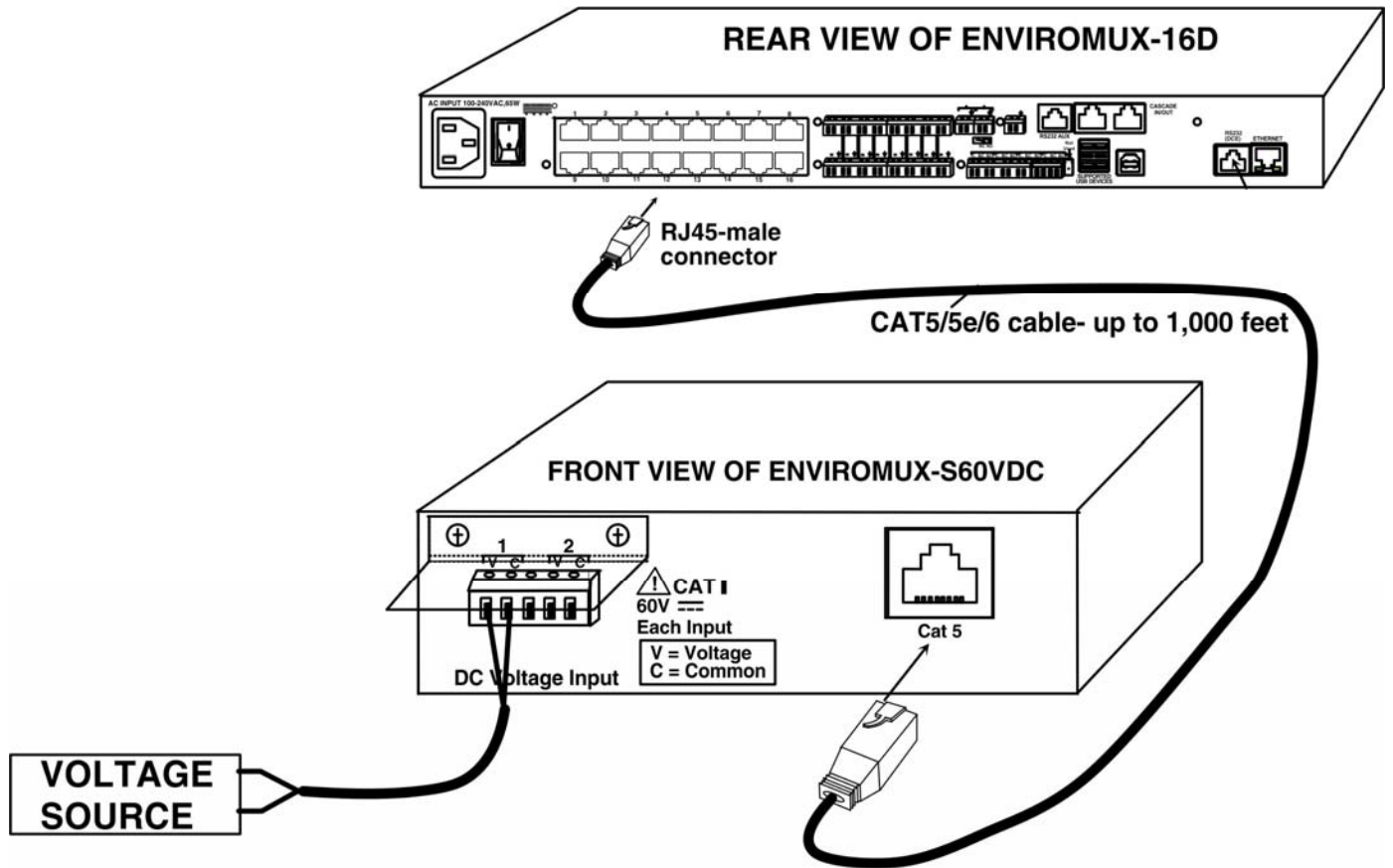
Note: The wire connection terminal block is easily removed from the Voltage Detector Converter for convenient wire termination.



WARNING: It is extremely important that the “earth ground” wire of a non-floating voltage source is connected to the “C” terminal on the Voltage Converter. The “C” terminal of the Voltage Converter is internally connected to earth ground. Failure to connect the voltage source correctly may result in damage to the voltage source. (See applications 1-3 for proper wiring of the voltage source.)



3. Connect a CAT5/5e/6 patch cable (up to 1,000 feet long) between the “Cat 5” port on the Voltage Detector Converter and an “RJ45 Sensor” port on the SYSTEM.



4. Configure the SYSTEM to react to changes in the voltage from the source, as desired.

CONFIGURATION

When an ENVIROMUX-S60VDC Voltage Sensor is connected to the SYSTEM, the summary page will update with two sensor names of the Type "Voltage". In order to better define the sensor on the Summary Page, in SNMP traps, or in an MIB browser, click on the "Edit" link to open the sensor configuration page and configure the sensor. In the image below, an ENVIROMUX-S60VDC has been connected to an ENVIROMUX-16D at RJ45 Sensor port 7 and configured to be used.

Sensors					
Conn.	Description	Type	Value	Status	Action
1	Temperature 1	Temperature Combo	83.2°F	Normal	View Edit Delete
1	Humidity 1	Humidity Combo	40%	Normal	View Edit Delete
1	Dew Point Sensor 1	Dew Point	56.5°F	Normal	View Edit Delete
2	Light Sensor 2	Light	78.7lx	Normal	View Edit Delete
3	Temperature 3	Temperature	81.4°F	Normal	View Edit Delete
4	Humidity 4	Humidity	39%	Normal	View Edit Delete
5	Temperature 5	Temperature Combo	27.8°C	Normal	View Edit Delete
5	Humidity 5	Humidity Combo	40%	Normal	View Edit Delete
6	ACLMV 6 Main	ACLM-V AC Voltage	116.7V	Normal	View Edit Delete
6	ACLMV 6 UPS	ACLM-V AC Voltage	118.5V	Normal	View Edit Delete
7	S60VDC 7-1	Voltage	12.2V	Normal	View Edit Delete
7	S60VDC 7-2	Voltage	0.1V	Normal	View Edit Delete
9	ACLM-P Power 9	ACLM-P Power	Out of range	Acknowledged	View Edit Delete
9	ACLM-P Voltage 9	ACLM-P AC Voltage	117.9V	Normal	View Edit Delete
10	RTD Sensor 10	Temperature	78.1F	Normal	View Edit Delete
10	Sensor 10-2	Current	0.0mA	Normal	View Edit Delete
15	Key Pad 15	Keypad	Open	Normal	View Edit Delete
16	Motion Detector 16	Motion Detector	Closed	Normal	View Edit Delete

Two voltage sources are being monitored

Select "Edit" to configure

S60VDC 7-1 Configuration (Type: Voltage)

Sensor Settings

Description
Descriptive name for the sensor

Min. Level
Min. supported value for the sensor

Max. Level
Max. supported value for the sensor

Min. Non-Critical Threshold
Min. threshold below which indicates a non-critical alert condition

Max. Non-Critical Threshold
Max. threshold above which indicates a non-critical alert condition

Min. Critical Threshold
Min. threshold below which indicates an alert condition

Max. Critical Threshold
Max. threshold above which indicates an alert condition

Refresh Rate
The refresh rate at which the sensor view is updated

Group Settings

Schedule Settings

Non-Critical Alert Settings

Critical Alert Settings

Data Logging

Alert Simulation

Configure thresholds within the range of -60 to +60 VDC

Configuration of sensor connected to ENVIROMUX-S60VDC

The sensor settings are the same as any other sensor configuration (see your SYSTEM manual for details).

TROUBLESHOOTING

Problem	Solution
Message "OUT OF RANGE" appears in sensor status page	<ul style="list-style-type: none">Measured voltage has exceeded the 0 to -60VDC / 0 to +60VDC limits

TECHNICAL SPECIFICATIONS

Description	Specification
Measurement Range	0 to -60VDC / 0 to +60VDC
Accuracy	+/- 100mV +/-1% reading
Resolution	31mV
Input Impedance	20K ohms
Power	30mA @ 12VDC (Powered by SYSTEM)
Size (In.) W x D x H	4.21x3.2x1.2

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