



# ENVIROMUX-ULT

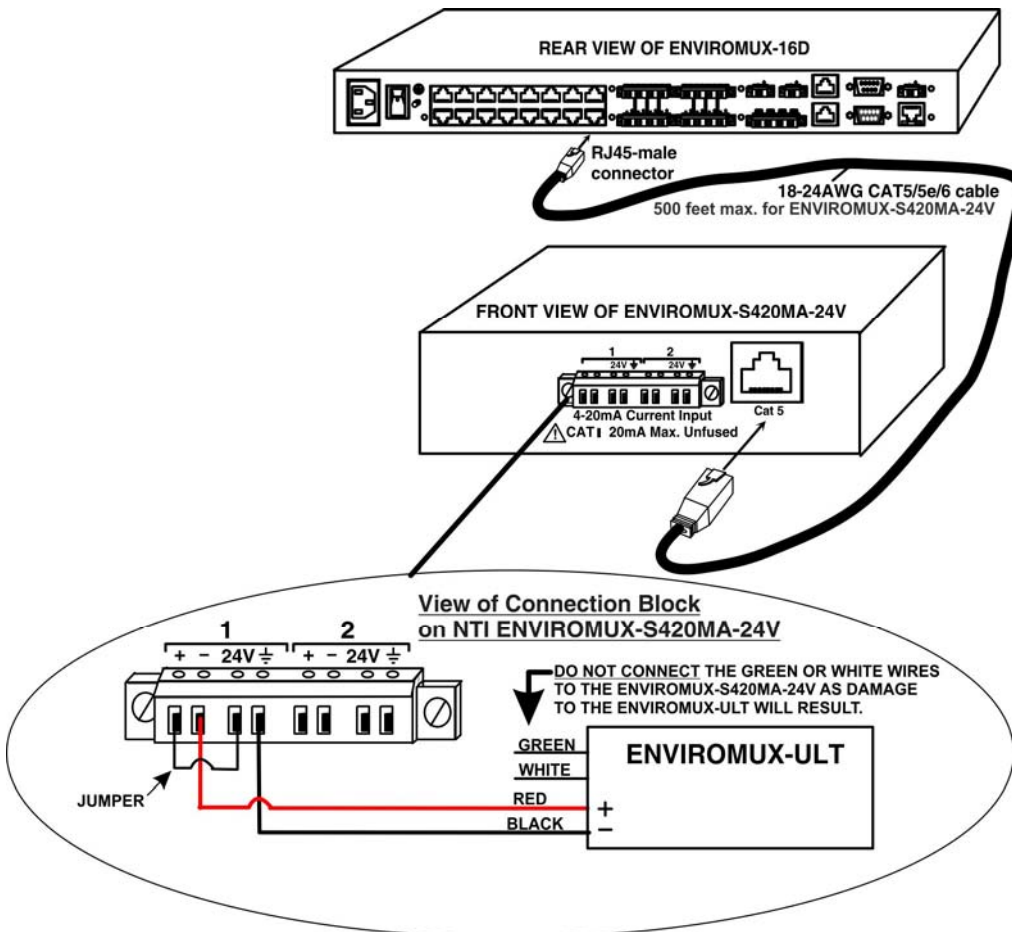
## Ultrasonic Level Transmitter

### Guide for Installation with an ENVIROMUX Server Environment Monitoring System

ENVIROMUX-ULT is a general purpose non-contact ultrasonic level switch, controller and transmitter for small tanks (49.2" (1.25 m) or smaller) or feed applications integrating process or control automation of small tanks mounted on tools, skids or machines. The rugged PVDF enclosure is well suited for a wide range of corrosive, waste or slurry type media. The ENVIROMUX-ULT can be used for atmospheric day tank, process vessel or dispenser, pump lift station and waste sump applications to name a few. Level indication can be monitored via connection to an NTI Server Environment Monitoring System.

The ENVIROMUX-ULT may be connected to the terminal block of an NTI ENVIROMUX-S420MA-24V 4-20mA Sensor Converter. The ENVIROMUX-S420MA-24V can then be connected to an RJ45 Sensor port on an ENVIROMUX-2D, ENVIROMUX-5D, or ENVIROMUX-16D Server Environment Monitoring System (SYSTEM). Using a SYSTEM, the ENVIROMUX-ULT can be monitored automatically and the SYSTEM can be configured to alert users of variations in levels sensed by the ENVIROMUX-ULT.

Follow the wiring diagram below to connect the ENVIROMUX-ULT to a 4-20MA Sensor Converter and then configure the SYSTEM to provide users with alert messages as defined in the sensor configuration within the SYSTEM. An example of that configuration can be found on page 2.



## Sensor 10 Configuration

Sensor Settings	
Description	Sensor 10 <small>Descriptive name for the sensor</small>
Group	1 <small>Select which group the sensor belongs to</small>
Min. Level	4.0 <small>Min. supported value for the sensor</small>
Max. Level	20.0 <small>Max. supported value for the sensor</small>
Associate Sensor	<input checked="" type="checkbox"/> Associate sensor to a customized sensor type
Associated Sensor Type	Fluid Level <small>Type of the associated sensor</small>
Associated Sensor Unit	Inch <small>Measurement unit for the associated sensor</small>
SNMP Associated Type ID	32767 <small>ID value for SNMP type of associated sensor</small>
Min. Associated Level	0.000000 <small>Sensor expected value corresponding to 4mA</small>
Max. Associated Level	47.2 <small>Sensor expected value corresponding to 20mA</small>
Min. Non-Critical Threshold	<input type="text"/> <small>Min. threshold below which indicates a non-critical alert condition</small>
Max. Non-Critical Threshold	<input type="text"/> <small>Max. threshold above which indicates a non-critical alert condition</small>
Min. Critical Threshold	<input type="text"/> <small>Min. threshold below which indicates an alert condition</small>
Max. Critical Threshold	<input type="text"/> <small>Max. threshold above which indicates an alert condition</small>
Refresh Rate	10 Sec <small>The refresh rate at which the sensor view is updated</small>
Non-Critical Alert Settings	
Critical Alert Settings	
Data Logging	

## Specifications

Range:	49.2" (1.25 m)
Accuracy:	0.125" (3 mm)
Resolution:	0.019" (0.5 mm)
Beam width:	2" (5 cm)
Dead band:	2" (5 cm)
Supply voltage:	24 VDC (loop)
Loop resistance:	400Ω max @ 24 VDC
Consumption:	0.5W
Signal output:	4-20 mA, two-wire reversible mA
Loop fail-safety:	4 mA, 20 mA, 21 mA, 22 mA, hold last
Configuration:	WebCal® USB 2.0
Temp. comp.:	Automatic over range
Process temp.:	F: -20° to 140° C: -7° to 60°
Ambient temp.:	F: -31° to 140° C: -35° to 60°
Pressure:	MWP = 30 PSI
Enclosure:	Type 6P encapsulated, corrosion resistant & submersible
Encl. material:	Polycarbonate
Strain relief mat.:	Santoprene
Trans. material:	PVDF
Cable length:	48" (1.2 m)
Cable jacket mat.:	Polyurethane
Process mount:	1" NPT (1" G)
Mount. gasket:	Viton®
Classification:	General purpose
Approvals:	CE, cFMus

### (Example of possible ENVIROMUX-ULT sensor configuration in the ENVIROMUX-16D)

In the above example, we assume the tank used has the sensor mounted 49.2" from the bottom of the tank. With a 2" dead band, the maximum fluid level ("maximum associated level") would be 47.2". Therefore a 20mA output from the sensor would be equal to a full tank. An empty tank ("minimum associated level") would be equal to a 4mA output.

For instruction on mounting and configuring the ENVIROMUX-ULT, refer to the manual packaged with the unit.

## WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at <http://www.networktechinc.com> for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

MAN182 Rev. 11/27/12