

Setup and Test SMS Messaging

To test a modem installed on an ENVIROMUX Monitoring System, you must first make sure the System has been configured properly to use the modem. This guide will take you through the basic steps to do that. For more details, see your respective product manual.

1. Install a USB modem as directed on the respective manual for the ENVIROMUX product:

Product	Page	Manual
E-2D/5D/16D	17	www.networkteching.com/pdf/man154.pdf
E-MINI-LXO	19	www.networkteching.com/pdf/man143.pdf
E-MICRO	10	www.networkteching.com/pdf/man220.pdf
E-1W	11	www.networkteching.com/pdf/man253.pdf

USB GSM Modems are no longer available for the E-MICRO or E-1W, but if you already have one, this instruction applies.

2. Configure the ENVIROMUX User Account Contact settings (Administration -> Users -> Edit User -> Contact Settings) to receive SMS Alerts and enter a valid phone number for the SMS messages to be sent to for that user.

Also make sure that user is set to receive messages from the type of sensor causing the message to be sent. Make sure enough boxes are checked under "Group Settings."

The screenshot shows the 'Group Settings' and 'Contact Settings' sections of the ENVIROMUX user account configuration. In the 'Group Settings' section, all checkboxes are checked, indicating that the user will receive notifications for all sensor types. In the 'Contact Settings' section, 'E-mail Alerts', 'Syslog Alerts', and 'SMS Alerts' are checked. The 'SMS Number' field is set to 123-456-7890. A callout box points to the 'SMS Number' field with the text 'Make sure this is a valid phone number'.

3. Configure a sensor to send alerts via SMS messaging.

For an E-2D/5D/16D or E-MINI-LXO, the Sensor Configuration has the settings to be changed. For an E-MICRO-T(RHP) or E-1W, settings to enable SMS messaging are found under Alert Configuration.

First make sure the sensor will send messages to a group the user is configured to get messages from, again, under “Group Settings” for that sensor.

Group Settings	
Group 1	<input checked="" type="checkbox"/> Sensor sends notifications for Group 1
Group 2	<input type="checkbox"/> Sensor sends notifications for Group 2
Group 3	<input type="checkbox"/> Sensor sends notifications for Group 3
Group 4	<input type="checkbox"/> Sensor sends notifications for Group 4
Group 5	<input type="checkbox"/> Sensor sends notifications for Group 5
Group 6	<input type="checkbox"/> Sensor sends notifications for Group 6
Group 7	<input type="checkbox"/> Sensor sends notifications for Group 7
Group 8	<input type="checkbox"/> Sensor sends notifications for Group 8

(Image from the E-xD web interface under Configuration for a Sensor)

Configure Alert

Alert Settings	
Associated Sensor	<input type="text" value="Internal Temperature"/> <small>Sensor associated to this alert</small>
Groups	<input checked="" type="checkbox"/> Group 1 <input checked="" type="checkbox"/> Group 2 <input checked="" type="checkbox"/> Group 3 <input checked="" 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	Greater than ▾
Threshold	<input type="text" value="50.00"/> <small>Threshold value</small>
Alert Delay	<input type="text" value="2"/> (sec) <small>Duration the sensor must be out of thresholds before alert is generated</small>
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	<input type="text" value="120"/> (min) <small>Time after which alert notifications will be sent again</small>
Enable Syslog	<input checked="" 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

Group Settings for this product

(Image from the E-MICRO web interface under Alert Settings)

Next make sure that “Enable SMS Alerts” is checked. Also make sure that “Disable Alerts” is **NOT** checked for this sensor.

Non-Critical Alert Settings	
Disable Alerts	<input type="checkbox"/> Disable alert notifications for this sensor
Alert Delay	5 Sec Duration the sensor must be out of thresholds before alert is generated
Notify Again Time	6 Hr Time after which alert notifications will be sent again
Notify on return to normal	<input checked="" type="checkbox"/> Send a notification when this sensor returns to normal status
Enable Syslog Alerts	<input checked="" type="checkbox"/> Send alerts for this sensor via syslog
Enable SNMP Traps	<input type="checkbox"/> Send alerts for this sensor via SNMP traps
Enable E-mail Alerts	<input checked="" type="checkbox"/> Send alerts for this sensor via e-mail
E-mail Subject	E-16D-M Temperature 1 W Subject of e-mails sent for alerts
Enable SMS Alerts	<input checked="" type="checkbox"/> Send alerts for this sensor via SMS
Send custom SMS	<input type="checkbox"/> Replace standard SMS with a customized message
Customized SMS	Customized SMS message sent for alerts
Enable Siren	<input type="checkbox"/> Turn on the siren when this sensor goes to alert

Make sure there is NO checkmark in this box if you want this sensor to send alert messages!

With the E-xD, you can not only send standard SMS alerts that include the text in the E-mail subject line, you can also customize that message to say something other than the text in the e-mail subject line.

(Image from the E-xD web interface under Sensor Configuration Settings)

4. Once the sensor (or alert in case of the E-MICRO and -1W) is configured, and the user settings include the correct settings and valid phone number, a test can be conducted.

The web interface for the E-xD includes a button that simulates an alert message being sent. This is found under the sensor configuration for each sensor.

Alert Simulation

Simulate Alert Clear Alert

With the E-MINI-LXO, E-MICRO-T(RHP) and E-1W, to test the settings you will instead need to cause a sensor to go outside the alert conditions (or, change the settings so that the current conditions ARE considered alert conditions).

Once the alert is tripped or simulated, the phone number for the configured user should receive the configured SMS message.

Troubleshooting

If no message is received, double-check all of the settings just described. Then check your modem status and strength.

- In the E-xD and -MINI-LXO, this is found under **Administration ->Enterprise**
- In the E-MICRO-T and -1W, this is found under **Administration -> System**

When installed and working, the modem status will say "Ready" (E-xD) or "Connected" (E-MICRO) and the signal strength will be indicated. Ideally, signal strength should always be at least -100db. (-99, -98 is better, -101, -102 is worse). If the modem is plugged in and not working, make sure your SIM card is up to date and paid for with your service provider.

GSM Modem Status

Modem Type:	Not Available
IMEI:	
Modem Status:	Not Connected
Signal Power:	No Signal



No Modem Installed

GSM Modem Status

Modem Type:	USB Modem
IMEI:	352071041541975
Modem Status:	Ready
Signal Power:	-107 dBm



Modem properly installed in an E-xD (Note: Signal strength shown here is extremely poor)

Enterprise Configuration

Enterprise Settings

Enterprise Name
Name to identify this unit

Location
Location/Address

Contact
Contact person

Phone
Phone number of contact person

E-mail
E-mail address for messages sent from this unit

GSM Modem Status

Modem Type:	USB Modem
IMEI:	353254030124511,PZ2996N2VN
Modem Status:	Ready
Signal Power:	-103 dBm



Modem properly installed in an E-MINI-LXO

System Settings

Serial Number:	E03
MAC Address:	00:0c:82:15:00:03
SNMPv3 Engine ID:	80001f8803000c82150003
Unit Name	<input type="text" value="E-MICRO-E03"/> Name assigned to this unit

Save

Reboot

GSM Modem Status

Modem Status:	Not Connected
IMEI:	N/A
Signal Power:	N/A

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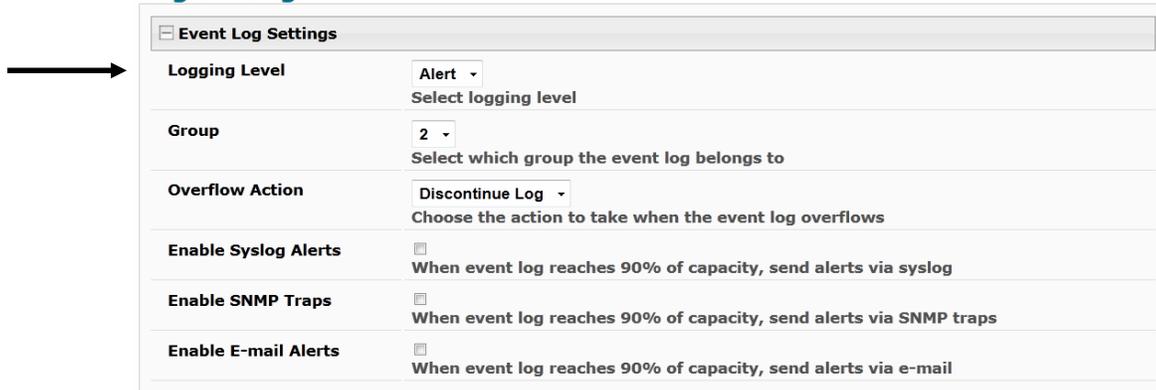
Modem Status on an E-MICRO-T

If the signal to the modem is too weak, then either the ENVIROMUX will need to be moved or the modem will have to be moved (you can extend the modem up to 5 meters (16.4 feet) from the ENVIROMUX with a USB extension cable).

CMS Error Codes

With E-xD units, there is also a feature under Log Settings for setting the Logging Level. Try setting the Logging Level to "Debug", and test the SMS messaging again. If the SMS message does not work, check the event log for an error code. "CMS error #500" for example, might show up. Perform a web search on the error code to investigate the possible cause ("SIM card inactive") for example.

Log Settings



The screenshot shows the 'Log Settings' configuration page. A black arrow points to the 'Event Log Settings' section, which is expanded. The settings are as follows:

Event Log Settings	
Logging Level	Alert Select logging level
Group	2 Select which group the event log belongs to
Overflow Action	Discontinue Log Choose the action to take when the event log overflows
Enable Syslog Alerts	<input type="checkbox"/> When event log reaches 90% of capacity, send alerts via syslog
Enable SNMP Traps	<input type="checkbox"/> When event log reaches 90% of capacity, send alerts via SNMP traps
Enable E-mail Alerts	<input type="checkbox"/> When event log reaches 90% of capacity, send alerts via e-mail

Log Setting configuration in E-xD