



**NETWORK  
TECHNOLOGIES  
INC**

1275 Danner Dr    Tel:330-562-7070  
Aurora, OH 44202    Fax:330-562-1999  
www.networktechinc.com

## **ENVIROMUX<sup>®</sup> Series**

### **E-IMD-LCV2(P)**

# **Low-Cost Infrared Motion Sensor Installation and Operation Manual**

---



**TRADEMARK**

ENVIROMUX and the NTI logo are registered trademarks of Network Technologies Inc in the U.S. and other countries. All other brand names and trademarks or registered trademarks are the property of their respective owners.

**COPYRIGHT**

Copyright © 2018, 2024 by Network Technologies Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written consent of Network Technologies Inc, 1275 Danner Drive, Aurora, Ohio 44202.

**CHANGES**

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

## **TABLE OF CONTENTS**

Introduction.....	1
Materials.....	1
Features .....	2
Installation .....	3
Operation.....	6
Alarm Delay .....	6
Test.....	6
Technical Specifications.....	7
Warranty Information.....	8

### INTRODUCTION

The E-IMD-LCV2 is a low-cost infrared motion sensor with advanced technology in signal processing and provided with high detection ability with protection against false alarms. When used with the ENVIROMUX Series Environment Monitoring Systems it will provide indication and alerts when it detects human motion/intruders that pass through the detection area.

#### Features

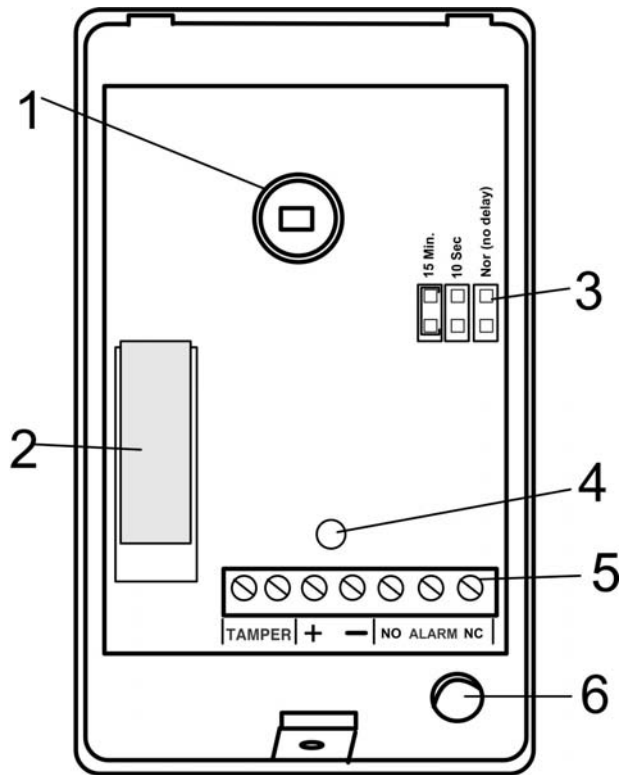
- Registers movement in area covered: 39x39 ft (12x12 m), 110° wide.
- Condition display via LED.
- Intelligent logic control prevents false alarms.
- Wall mount or hang in a corner.
- Good RFI protection.
- Screw terminal
- To connect to the digital inputs use a 22 AWG 2-wire cable. Connect the other end to the sensor screw terminal.
- Maximum cable length: 1,000 ft (305 m).
- Includes mounting bracket for installing the sensor to a ceiling or wall.
- Powered by E-16D/5D/2D
  - When separate power supply (12V/1A) is needed order E-IMD-LCV2P (When used with E-MICRO, E-1W, PWR-RMT-RBT-C13, etc)

### MATERIALS

#### Materials supplied with this kit:

- NTI E-IMD-LCV2 Infrared Motion Detector
- 110-240VAC, 50 or 60Hz-12VDC/1A AC Adapter (**E-IMD-LCV2P model only**)
- Country-specific Line Cord (**E-IMD-LCV2P model only**)
- Mounting hardware
- URL Slip with path to this manual

**FEATURES**



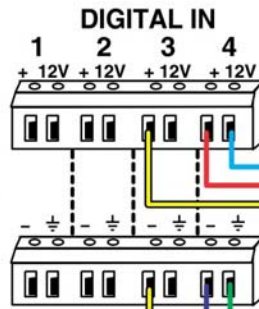
#	ITEM	DESCRIPTION
1	Sensor	Infrared Motion Sensor
2	Switch	Tamper switch - NC
3	Jumper blocks	For placement of delay jumper
4	LED	Illuminates Red to indicate when motion is sensed
5	Wire Terminal Block	For connection of ENVIROMUX and power wires
6	Hole in Case	Pre-drilled hole for passage of wires into case

# INSTALLATION

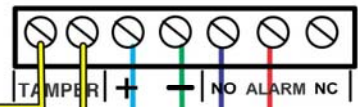
1. Select a location suitable for installation:
  - Stationary surface at least 86 inches (2.2m) above the ground.
  - Away from air movement source (air should be static/stable)
  - Away from a window (no direct sunlight)
  - Away from a heat or cold source (temperature should not be changing significantly)
2. Mount E-IMD-LCV2(P) using installation bracket provided.
3. Remove the screw from the bottom of the case and remove the cover.
4. Pass wires through pre-drilled hole in the case.
5. Connect wires to terminal block as per appropriate wiring diagram below.

## WIRING FROM E-IMD-LCV2 TO E-2D/-5D/-16D

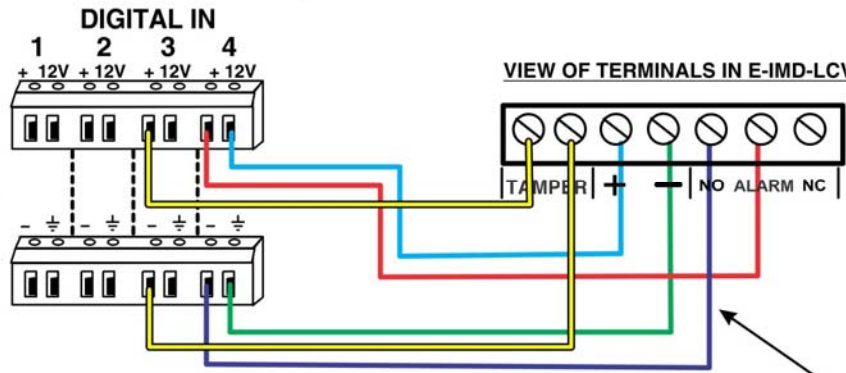
VIEW OF TERMINALS ON REAR OF E-16D



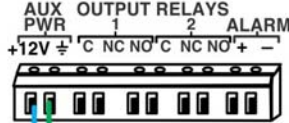
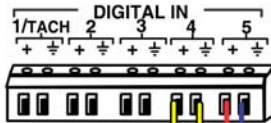
VIEW OF TERMINALS IN E-IMD-LCV2



CONNECT THE E-IMD-LCV2 SENSOR CONTACT TERMINALS TO ANY SET OF DIGITAL IN TERMINALS ON THE E-16D (1-8)

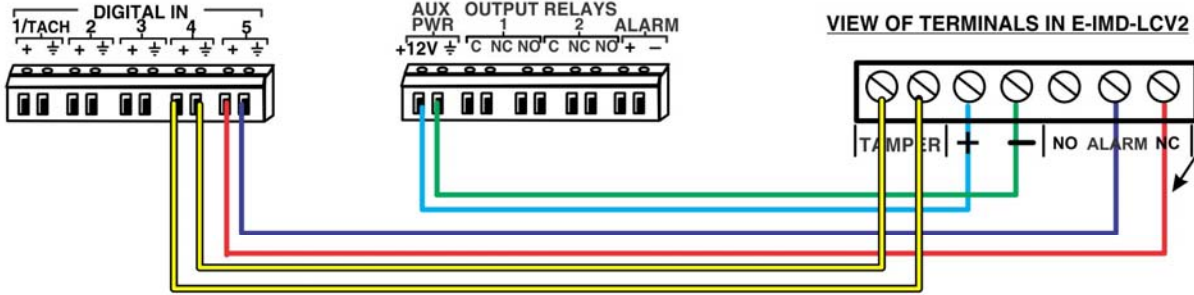
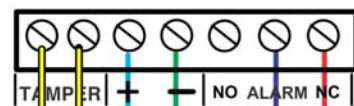


VIEW OF TERMINALS ON E-5D

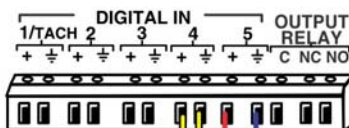


CONFIGURE THE SENSOR TO ALERT ON OPEN STATE OR CLOSED STATE

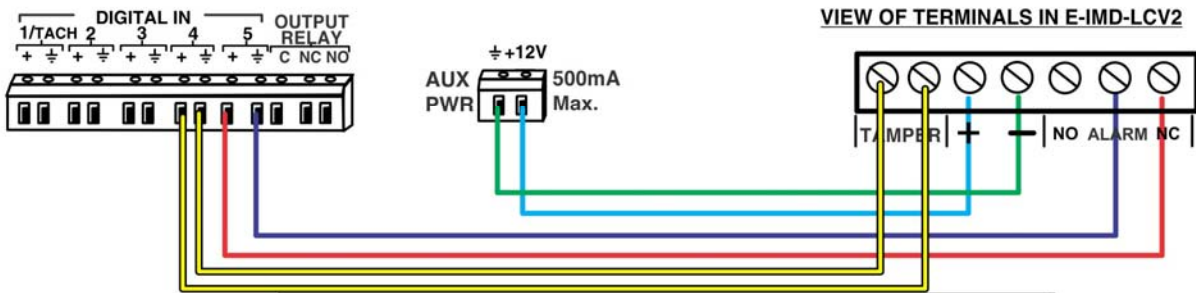
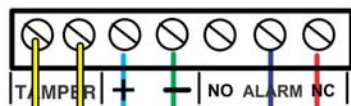
VIEW OF TERMINALS IN E-IMD-LCV2



VIEW OF TERMINALS ON E-2D



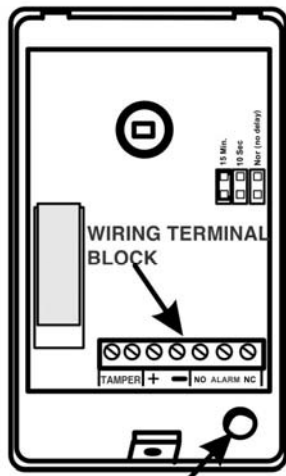
VIEW OF TERMINALS IN E-IMD-LCV2



If the AUX PWR is not available, use an external 12VDC power supply (sold separately(PS4299-4075)-contact NTI)

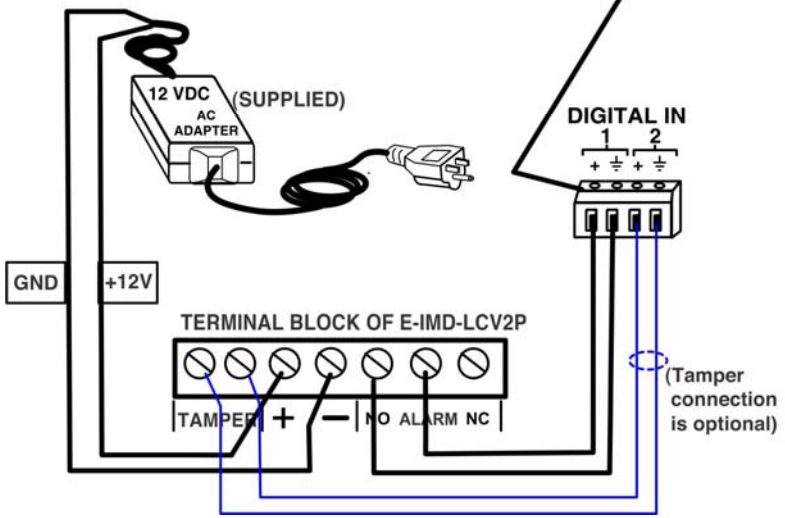
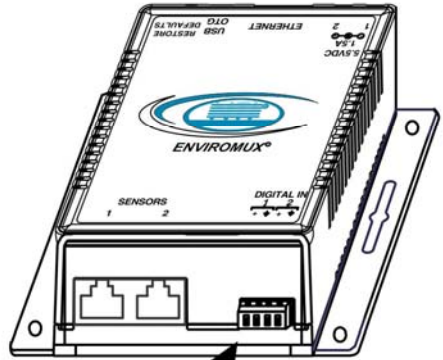
**WIRING METHOD TO E-MICRO-TRHP/E-1WP**

**VIEW INSIDE THE E-IMD-LCV2P**

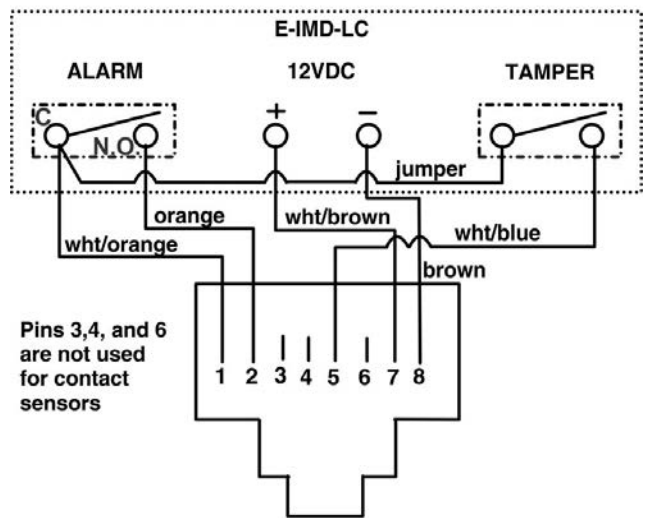


TO CONFIGURE THE E-MICRO TO RESPOND TO THE E-IMD-LCV2P, SEE THE E-MICRO MANUAL UNDER "SENSOR SETTINGS" AND "CONFIGURE ALERTS"

**E-MICRO-TRHP/ E-1WP**

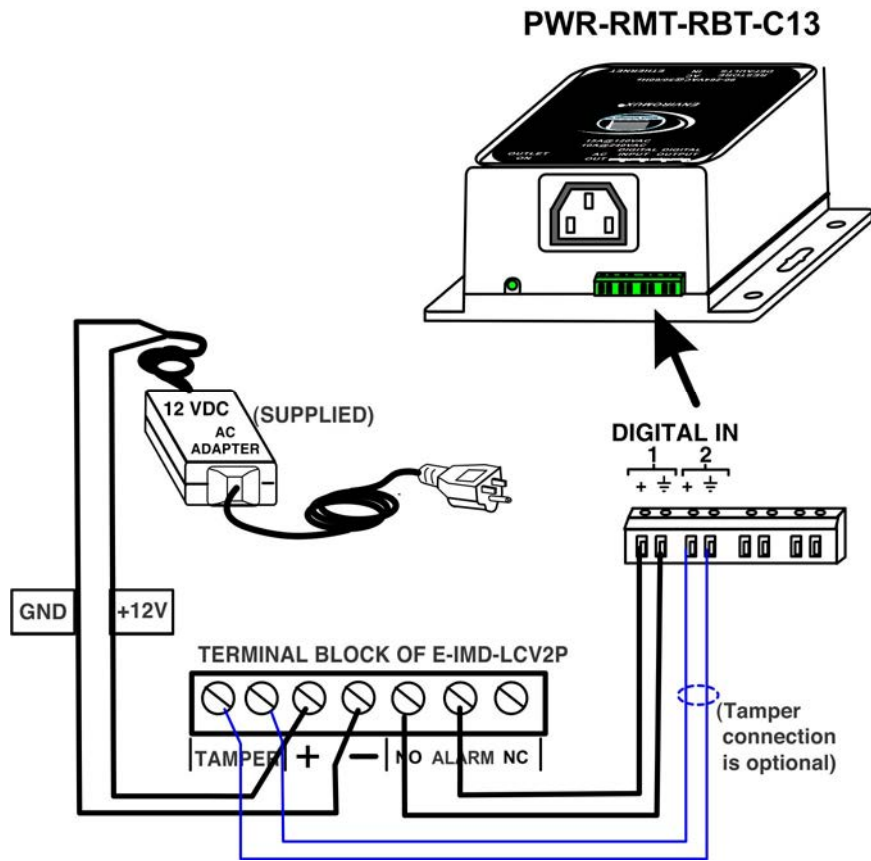


**Schematic for wiring E-IMD-LCV2 to RJ45 Sensor Socket (in E-xD ONLY)**



**View looking into RJ45 Socket**

WIRING METHOD TO PWR-RMT-RBT-C13





**OPERATION**

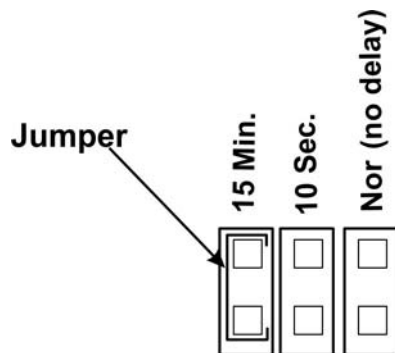
**Alarm Delay**

The E-IMD-LCV2(P) is equipped with three jumper positions to choose from. Place the provided jumper in one of the following positions:

**15 MIN-** After an initial alert is sent from the first motion sensed, there will be a 15 minute delay before the sensor will react to any additional motion and send another alert. The sensor will send an alert every 15 minutes if it continues to sense motion. All motion sensed between the 15 minute intervals will be ignored.

**10 SEC-** After an initial alert is sent from the first motion sensed, there will be a 10 second delay before the sensor will react to any additional motion and send another alert. The sensor will send an alert every 10 seconds if it continues to sense motion. All motion sensed between the 10 second intervals will be ignored.

**Nor-** There will be no delay. When the sensor senses movement, an alert will be immediately sent.



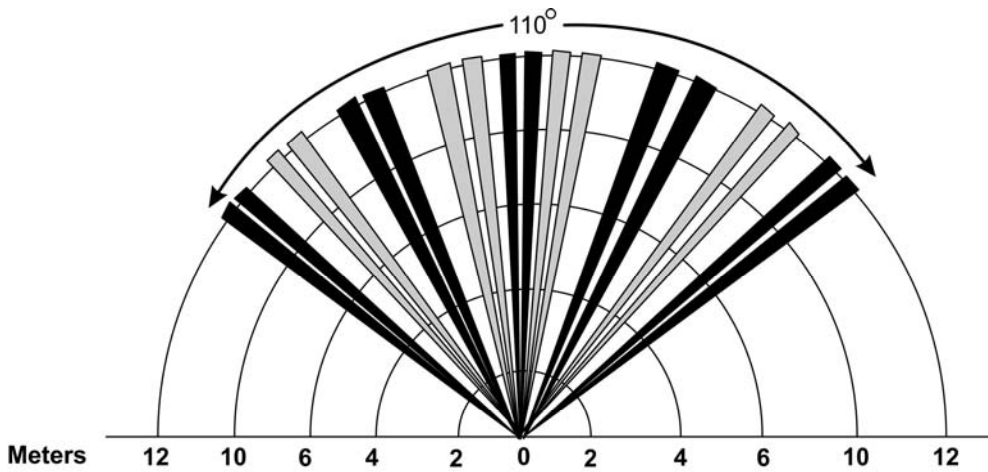
**Test**

When performing a product test, make sure the delay jumper is on the "Nor" pins for an immediate alert to be sent.

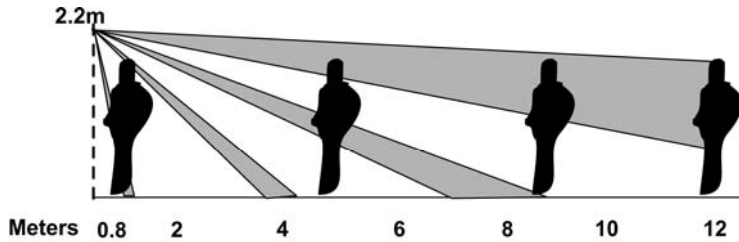
With the E-IMD-LCV2(P) connected to the ENVIROMUX (and power supply connected as applicable), the detector should be ready to sense. Walking within the sensed range of the detector should provide an alert message to any user configured to receive it. When sensed, the Red LED on the detector should illuminate for at least 2 seconds.

**TECHNICAL SPECIFICATIONS**

Operating voltage	8-15VDC
Current Consumption	less than 20mA (@12VDC)
Operating temperature	-10 to 50°C
Operating humidity	0-95% RH non-condensing
Mounting mode	wall-mounted
Mounting height	2.2m
Detecting distance	12m
Detecting angle	110 degree
Alarm output	NO/NC (optional)
Alarm Indicator	Red LED
Anti-dismantle (Tamper) switch	NC
Size (In.) WxDxH	2.07 x 3.54 x 1.74 In. (52.6 x 90 x 44.3mm)



**Overhead View of Range**



**Side View of Range**

## 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.

MAN238 Rev. 11/15/24