

instrumentation and software for research

HEAD ENTRY DETECTOR

ENV-254 USER'S MANUAL

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notes

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CHAPTER 1 | INTRODUCTION

The ENV-254 Head Entry Detector is the simplest motion/position detector available. It is most commonly used in nose-poke, ultra sensitive levers, or head entry detectors. Its range is limited to approximately 6 inches. It is not intended for use in groups where there are high levels of ambient light.

Depending on placement, the ENV-254 Head Entry Detector can also be used for pellet detection.

Specifications

Operating Voltage: 28 Volts DC

Operating Current: 15 ma – quiescent

Output (white lead): 0 Volts @ 50mA – beam broken

27 Volts @ 40 mA - beam connected

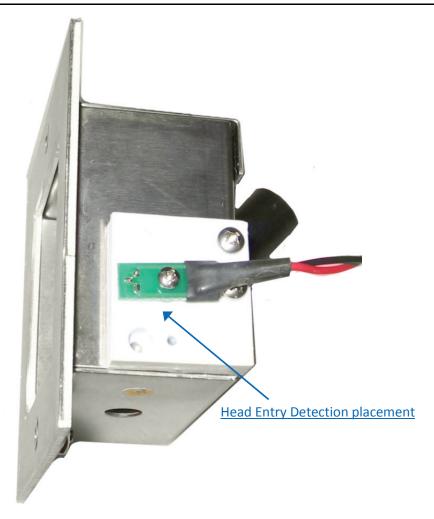
CHAPTER 2 | ASSEMBLY

Figure 2.1 – Mounting Block installed without Transmitter or Receiver



Align mounting block to receptacle so that the large hole and the 2 smaller holes line up. Ensure that the smooth side of the block is facing out and attached with the screws provided. Place one on each side of the receptacle.

Figure 2.2 – ENV-2002RM Transmitter and Receivers



For head entry detection applications install the green circuit board with transmitter or receiver into the <u>upper set of holes</u>, attach board with the screw and <u>nylon washer</u> (provided) placing the nylon washer between the circuit board and mounting block.

Figu Figure 2.3 – ENV-254 Transmitter/Receiver



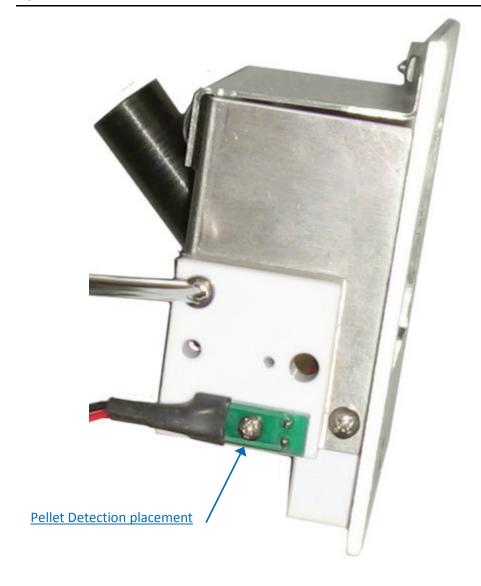
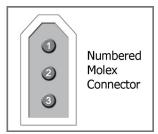


Figure 2.4 – ENV-200R2AM with Transmitter/Receiver on Pellet Detection Holes

For pellet detection applications using ENV-200R2AM, the circuit board needs to be installed in the <u>lower set of holes</u>. Attach board with the screw and nylon washer (provided) placing the <u>nylon washer</u> between the circuit board and mounting block.

CHAPTER 3 | OPERATION

Molex Pin #	Function	Wire Color
1	28 Volt Ground	Black
2	Operate	White
3	+28 Volts	Red



Connect the ENV-254 cable to any available Input on a Standard MED Connection Panel. Place the transmitter and receiver in the desired position, turn on the power, and check for proper operation.

Note: The ENV-254 is affected by any bright light source, so be sure the application provides adequate shielding, otherwise it will appear that the beams are always connected. Also, source and detector pairs cannot be placed in close proximity, as cross talk will result. The source and detector pairs cannot come in contact with any metal surface, especially one that is common between the two units. The units must be isolated from each other. Make final adjustments as needed.

Appendix A | Contact Information

Please contact Med Associates, Inc. for information regarding any of our products.

Visit our website at www.med-associates.com for contact information.

For technical questions, email support@med-associates.com.