

# DUAL PELLET/LIQUID RECEPTACLE

ENV-303RMW-3

USER'S MANUAL

**DOC-268**

**Rev. 1.0**

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## **CHAPTER 1**

### ***Overview***

The ENV-303RMW-3 Pellet/Liquid Receptacle for Mouse features a single 0.62 cc stainless steel cup with an 18 gauge inlet pipe for liquid and a chute for pellet dispensing. Liquid intake is detected via contact with the cup while also contacting the grid floor. The ENV-303RMW-3 can be used with photo beam head entry detection. The receptacles are mounted on a 1/4 size mouse modular panel.

### **Specifications**

#### **Dimensions**

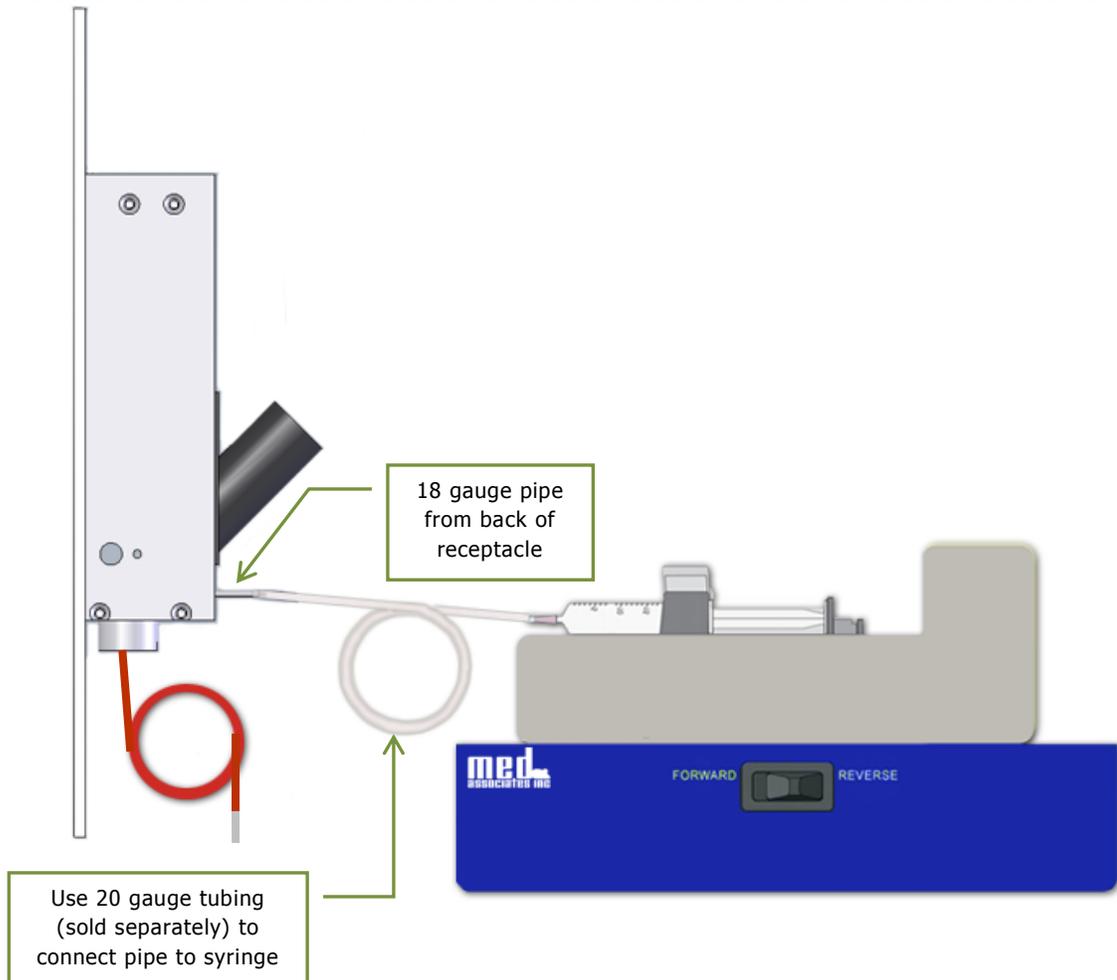
Panel:	2.4" W x 7" H (6.096 cm x 17.78 cm)
Opening:	1" W x 3" H x 1.095" D (2.54 cm x 7.62 cm x 2.781 cm)

## CHAPTER 2

### Connections

Connect the tubing from the Liquid Pipe Receptacle to the syringe using PHM-122-1.0-ML 20 gauge tubing, as shown in Figure 2.1.

*Figure 2.1 – Liquid Pipe Receptacle to Syringe Connection*

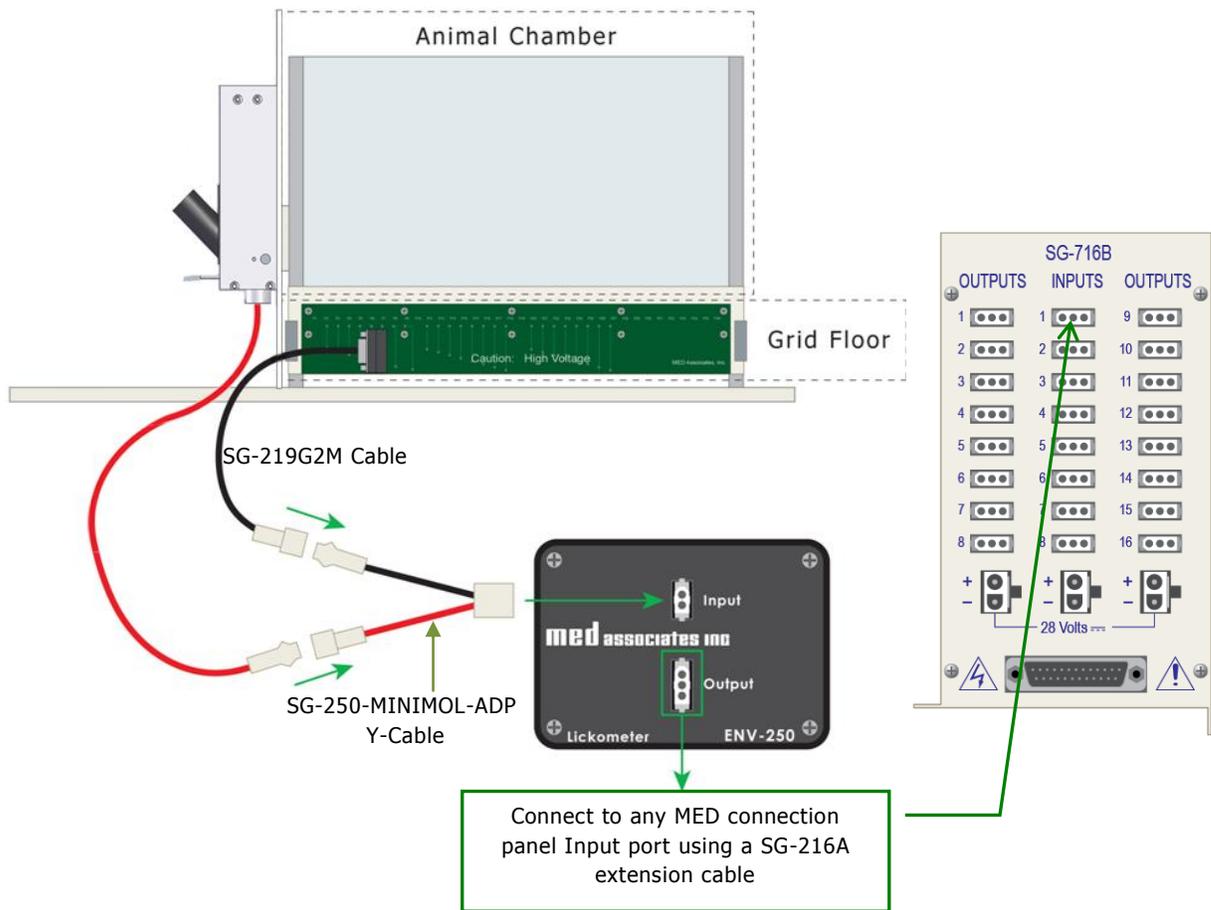


**Note:** It is recommended that the pump sit level with or below the tube to prevent siphoning.

### Wiring the ENV-250 Contact Lickometer

The ENV-250 Contact Lickometer input port is connected to the Liquid Pipe and the Quick Disconnect Grid Floor using an SG-250-MINIMOL-ADP Y-Cable and the SG-219G2M Cable as shown in Figure 2.2.

*Figure 2.2 –Contact Lickometer to Liquid Pipe and Grid Floor Connections*



The Contact Lickometer output port is connected to any available input port on a standard MED connection panel, e.g. an SG-716B, using an SG-216A extension cable. See Table 2.1 for pinouts of the Molex connector.

## Wiring the ENV-303HDW Head Entry Detector (Optional)

The Liquid/Pellet Receptacle for Mouse with Head Entry Detection is connected to any available input port on a standard MED connection panel, e.g. an SG-716B. It is not necessary to connect the Head Entry Detector in order to operate the Pellet/Liquid Receptacle. See Table 2.1 for pinouts of the Molex connector.

*Table 2.1– Wiring Diagram for Input Device*

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

### Operating Specifications

Power Draw: 1.4 Watts  
 Operating Voltage: 28 Volts DC  
 Operating Current: 15 mA – quiescent  
 Output (white lead): @ 0 Volts beam interrupted (maximum 50mA switch current)  
 @ 28 Volts – beam unobstructed

## CHAPTER 3

### *Operation*

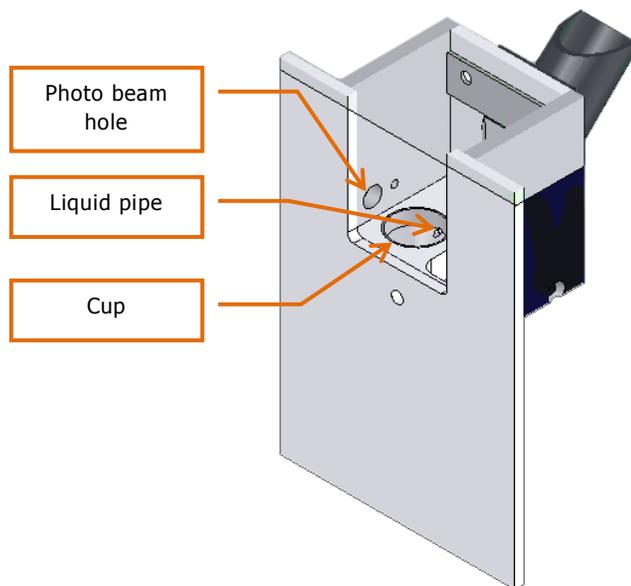
The Liquid Pipe Receptacle is designed for use with an infusion pump. All wetted parts are stainless steel and allow infusion of any low viscosity liquid that can pass through 20 gauge tubing. There is potential for the cup to overflow if too much liquid is pumped in through the liquid pipe.

### **Head Entry Detector Operation**

The ENV-303RMW-3 Pellet/Liquid Receptacle for Mouse with head entry detector utilizes a photo beam for monitoring when the animal's head enters the receptacle.

The holes for the photo beam used to detect animal head entry are located 1.157" (2.9cm) from the front of the Liquid Pipe Receptacle fascia, which is centered above the cup, and are .250" (0.6cm) from the floor of the receptacle.

*Figure 3.1 - ENV-303RMW-3 Cut-away View of Photo Beam Holes*



When the animal's head enters the receptacle, the beam is broken and a signal is sent to an input. It is important to keep the photo beam holes clear of debris so that there is no beam interference.

## **CHAPTER 4**

### ***Cleaning***

The liquid/pellet receptacle should be wiped down and the tube should be flushed with water, then air to keep the device clean and avoid occlusions.

The photo beam holes should be cleaned with forced air.

## **Appendix A**

### ***Contact Information***

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

Visit our website at [www.med-associates.com](http://www.med-associates.com) for contact information.

For technical questions, email [support@med-associates.com](mailto:support@med-associates.com).