

# **SWITCHABLE LIQUID DIPPER**

ENV-202M-S / EMV-302\*

USER'S MANUAL

**DOC-224**

**Rev. 1.2**

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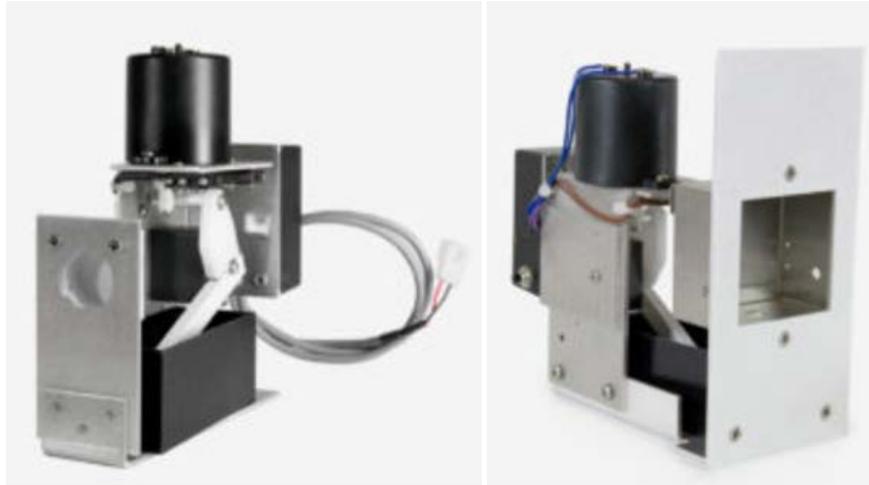
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## CHAPTER 1 | INTRODUCTION

The Switchable Liquid Dipper is designed to deliver a precise amount of liquid to a subject, anything from water to highly viscous fluids, such as condensed milk. The motor-driven arm is smooth and consistent to minimize spillage and the included 0.01cc stainless steel cup is presented to the animal as close to the front panel as possible.

*Figure 1.1 – ENV-302M-S (Mouse) and ENV-202M-S (Rat)*



### Available Configurations

ENV-202M-S: Switchable Liquid Dipper for Rat

ENV-302M-S: Switchable Liquid Dipper for Classic Mouse Modular Chamber

ENV-302W-S: Switchable Liquid Dipper for Wide Mouse Modular Chamber

ENV-302RM-S: Switchable Dipper with Dual Pellet Receptacle for Classic Mouse Modular Chamber

ENV-302RW-S: Switchable Dipper with Dual Pellet Receptacle for Wide Mouse Modular Chamber

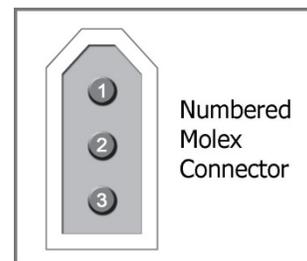
### Optional Cup Sizes

0.02cc - 0.04cc - 0.06cc - 0.08cc - 0.10cc

### Connections

The Liquid Dipper cable should be connected to any available Output on a Standard MED Connection Panel.

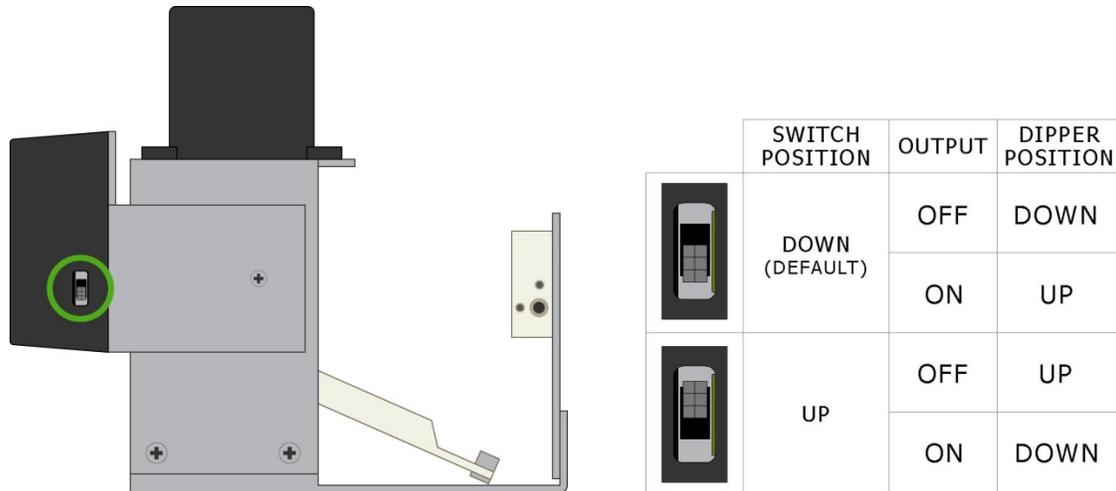
Molex Pin #	Function	Wire Color
1	28V Ground	Black
2	Operate	White
3	+28 Volts	Red



## CHAPTER 2 | OPERATION

The Switchable Liquid Dipper is equipped with a switch that allows the user to decide whether the dipper arm is up or down position when the output is off. This position switch is recessed and located on the side of the control box cover, shown below. The switch positions and the corresponding dipper positions are indicated in the table below.

*Figure 2.1 – Position Switch*

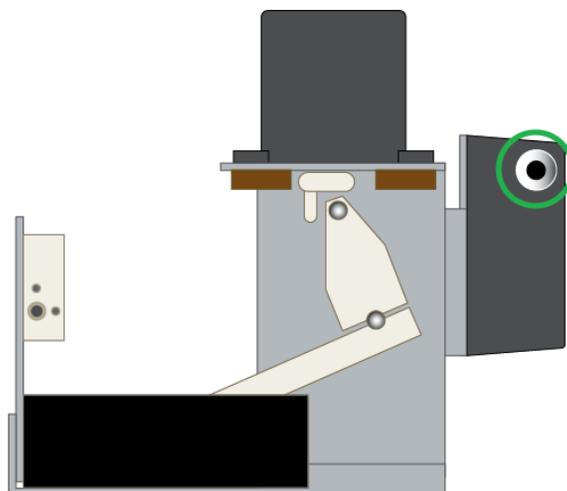


With the switch in the default (DOWN) position, the dipper arm will be raised when the corresponding output bit is turned ON. The dipper arm will remain up for as long as the output bit remains ON.

With the switch in the (UP) position, the dipper arm will lower when the corresponding output bit is turned ON and remain up for as long as the output bit remains ON.

The dipper will also operate when the manual operate button on the side of the control box is pressed.

*Figure 2.2 – Manual Operate Button*



## CHAPTER 3 | MAINTENANCE

### Cleaning

Due to the open design of the Switchable Liquid Dipper, It is very important to keep the device clean of any spills or splashing to ensure reliable operation and liquid delivery.

If splashing or spills do occur, wipe the Switchable Liquid Dipper and/or surrounding devices and components immediately with solution soaked swabs or wipes.

### Cleaning Supplies/Tools

- Swabs and Wipes
- Quatricide or 10% Ethanol

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**NOTE: Items returned for repair that have not been properly cleaned will be not covered under warranty. Please contact Med Associates (see Appendix A | Contact Information) if you would like to send your Switchable Liquid Dipper to us for a routine cleaning service. We will be happy to send you a quote for this service.**

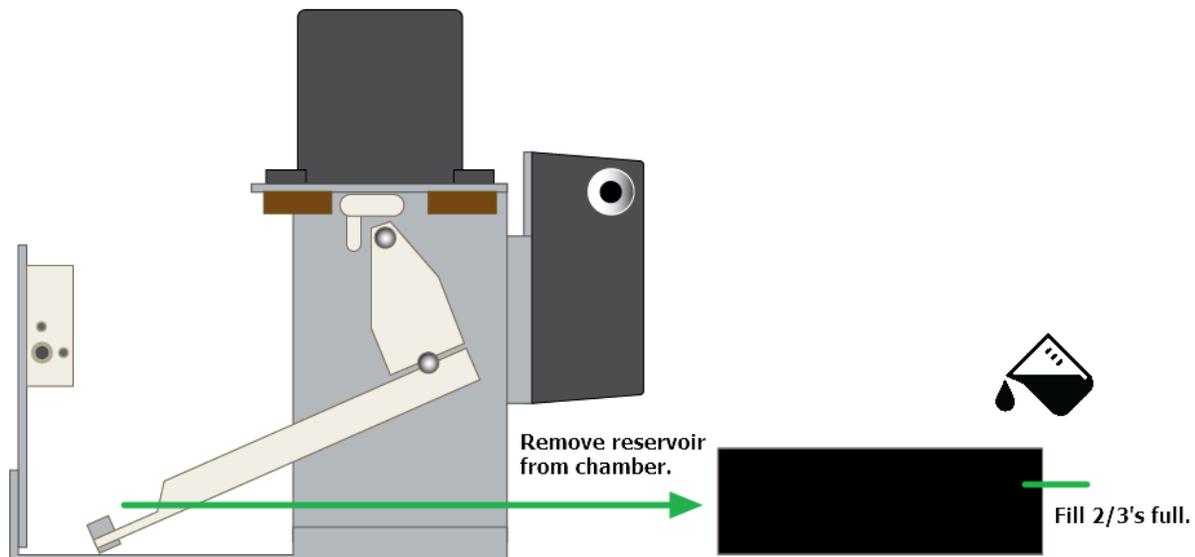
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Proper filling and handling of the reservoir will prevent most spills and splashes from occurring.

1. Remove the reservoir from the chamber to fill.
2. Do not overfill the reservoir, only fill 2/3's full.

*Figure 3.1 – Proper Reservoir Filling*

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## **APPENDIX A | CONTACT INFORMATION**

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

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

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

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