

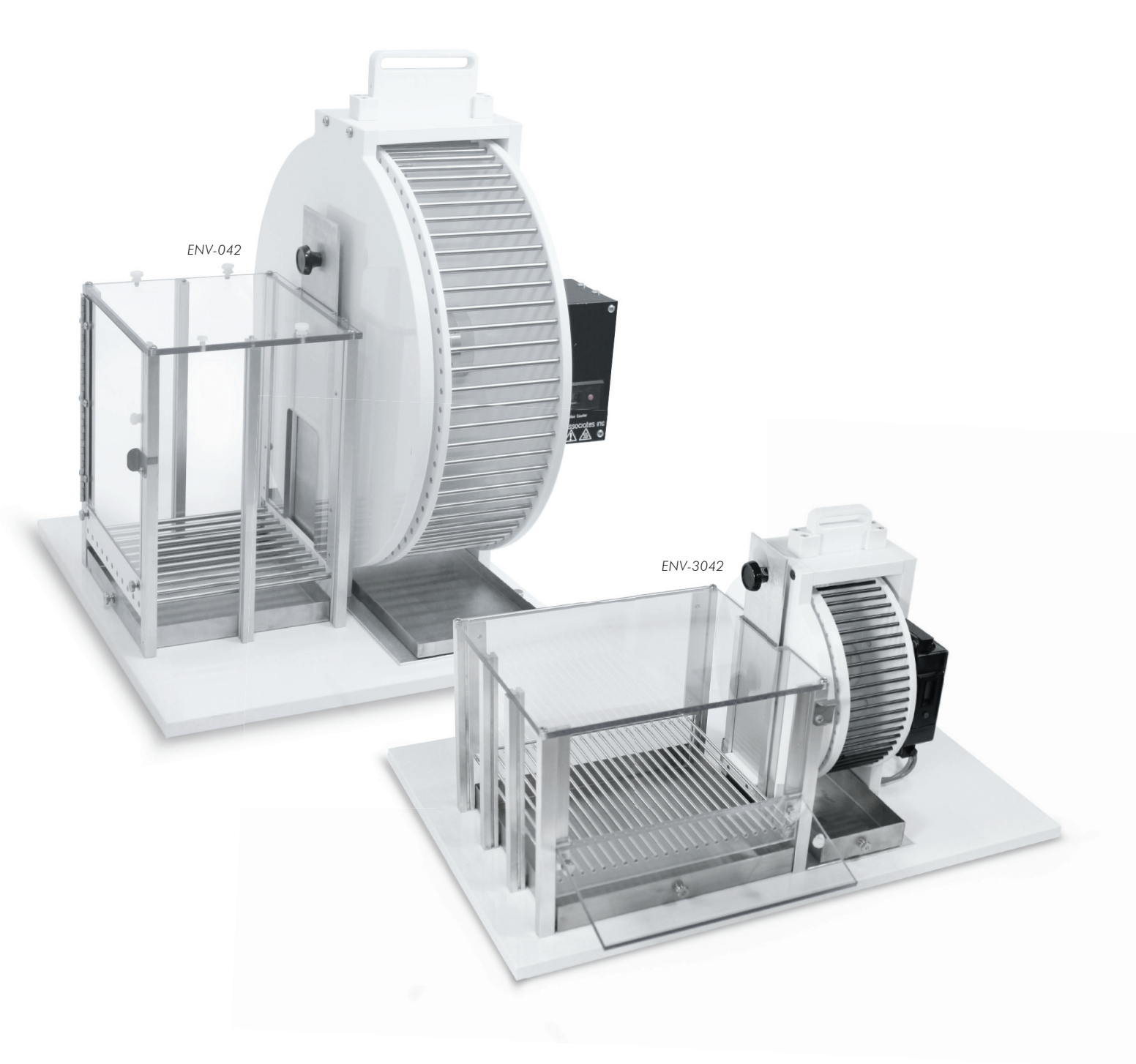


SCAN FOR
WEBSITE

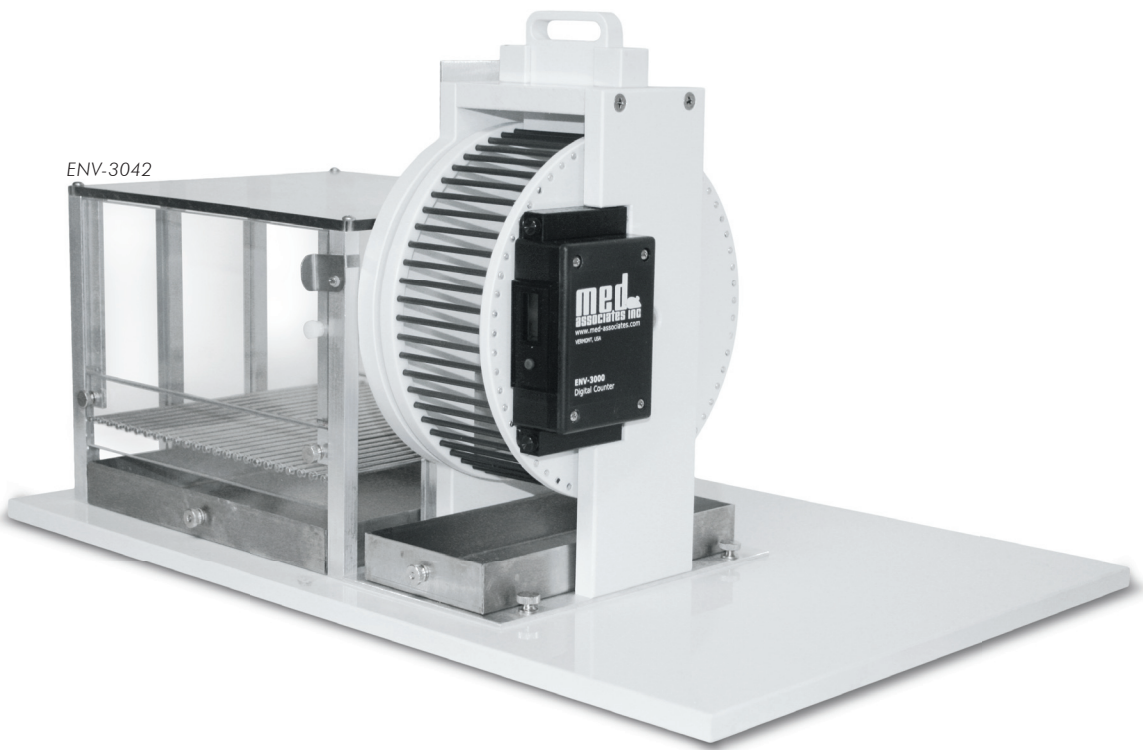
ACTIVITY WHEELS

Wheel + Modular Chamber	2-3
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	BASE (W×H×D)	CHAMBER (W×H×D)	WHEEL (W×OD)	RODS (W×H×D)	ROD SPACING
ENV-042A	16" x 0.5" x 14.43" (40.64 x 1.27 x 36.65 cm)	10" x 8.13" x 11.5" (25.4 x 20.65 x 29.21 cm)	4.44" x 14.5" (11.28 x 36.83 cm)	0.187" (4.763 mm)	0.61" (1.55 cm)
ENV-3042	21" x 0.5" x 13.75" (53.34 x 1.27 x 34.93 cm)	7.86" x 4.9" x 8.44" (19.96 x 12.45 x 21.44 cm)	2.5" x 7.3" (6.35 x 18.54 cm)	0.125" (3.175 mm)	0.37" (0.93 cm)



ACTIVITY WHEEL
w/MODULAR CHAMBER

ENV-042A **RAT**
ENV-3042 **MOUSE**

Test chamber models are fully compatible with all standard response, reward, and stimulus devices providing a myriad of possible combinations. Both models feature a fully integrated manual guillotine door to provide access to the wheel area. The cam switch can be connected to any Med Associates standard 28 V input module, SuperPort,™ or SmartCtrl™ for automated data collection.

- Manual stop handle (see page 4 for details)
- Wheels generate four counts per revolution
- The rat activity wheel features a 28 V DC electronic drag control with nine preset resistance levels, while the mouse uses a magnet & reed switch to provide nearly drag and resistance free wheel rotation
- Utilize the LCD revolution counter for manual stand-alone operation, or connect to a computer for automatic data collection using the Med-PC + SmartCtrl interface

NOTE: Drag function only available with rat activity wheels.

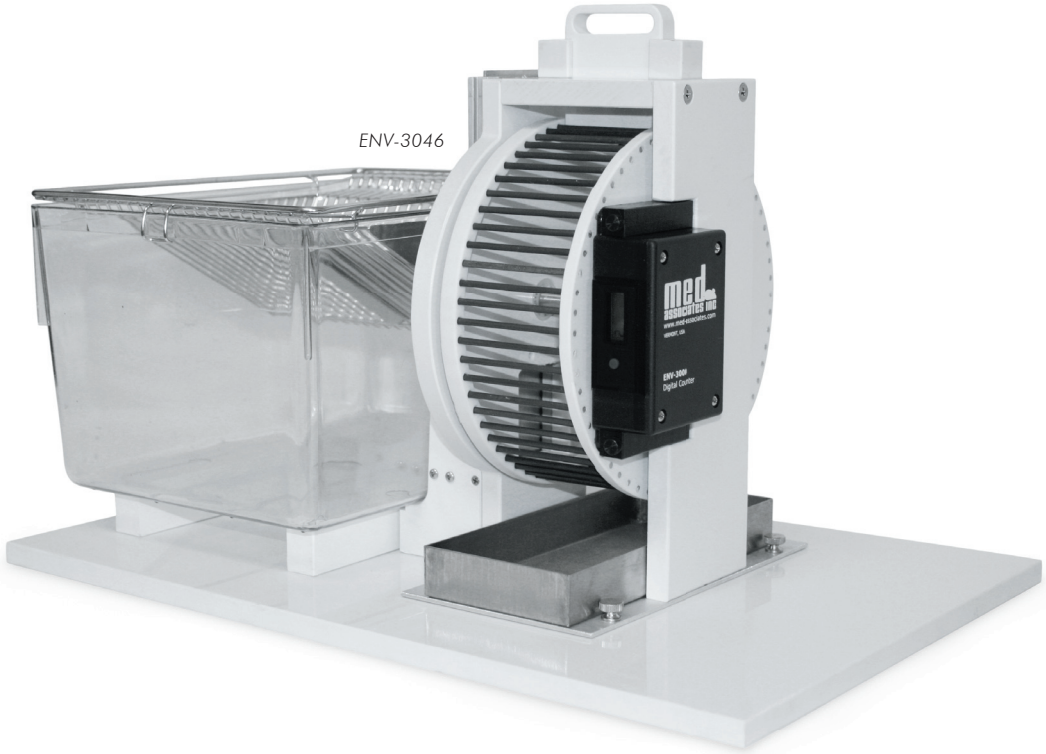
OPTICAL ENCODER

ENV-042-OE **MOUSE**

- Fits activity wheels for rat (ENV-042 / -042A)
- High resolution counter provides up to 64 counts per revolution, and detects both clockwise and counter-clockwise wheel rotation
- Requires RotoRat™ software (SOF-801) to record revolutions and wheel direction data (not included)
- Output is 5 V TTL compatible



SETTING	DRAG TENSION
0	12 grams
1	15 grams
2	20 grams
3	25 grams
4	30 grams
5	35 grams
6	40 grams
7	50 grams
8	60 grams
9	80 grams



	BASE (W×H×D)	HOME CAGE (W×H×D)	WHEEL (W×OD)	RODS (W×H×D)	ROD SPACING
ENV-046	16" x 0.5" x 16" (40.64 x 1.27 x 40.64 cm)	17" x 7.5" x 8.5" (43.18 x 19.05 x 21.59 cm)	4.44" x 14.5" (11.28 x 36.83 cm)	0.187" (4.763 mm)	0.61" (1.55 cm)
ENV-3046	18.25" x 0.5" x 12" (46.36 x 1.27 x 30.48 cm)	10.69" x 6.06" x 8.19" (27.15 x 15.39 x 20.8 cm)	2.5" x 7.3" (6.35 x 18.54 cm)	0.125" (3.175 mm)	0.37" (0.93 cm)

DRAG CONTROL

The wheel drag tension can be set by using the thumbwheel switch mounted on the side. The revolution counter will add one count for every quarter turn of the wheel and also provides a closed switch contact to the revolution counter output connector.

- Available only for rat models:
 - ENV-042 / -042A / -046
- Requires 28 V DC

MANUAL BRAKE CONTROL

The manual brake allows the wheel to be disabled without the use of external power.

To engage the manual brake, pull on the release knob while pressing down on the manual brake. This is also useful for creating a control group with access to the wheel, but are unable to turn it.

ACTIVITY WHEEL w/HOME CAGE

ENV-046 **RAT**
ENV-3046 **MOUSE**

- Manual stop handle (see page 4 for details)
- Plastic home cage is secured in place alongside the activity wheel for stable transitions
- For ease of cleaning, the components can be separated, or the animal can be kept in the cage while the wheel is removed
- Utilize the LCD revolution counter for manual stand-alone operation, or connect to a computer for automatic data collection using the Med-PC + SmartCtrl interface.
- Generate four counts per revolution
- Unique features:
 - **Mouse model:** Magnet & reed switch provide nearly drag and resistance free wheel rotation
 - **Rat model:** A 90 degree cam and micro-switch, 28 V DC electronic drag control with nine preset resistance levels

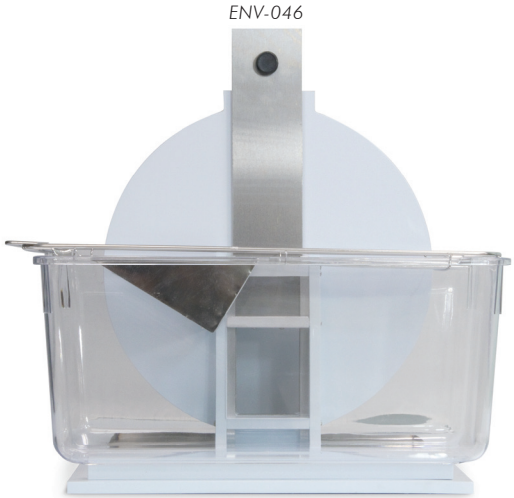
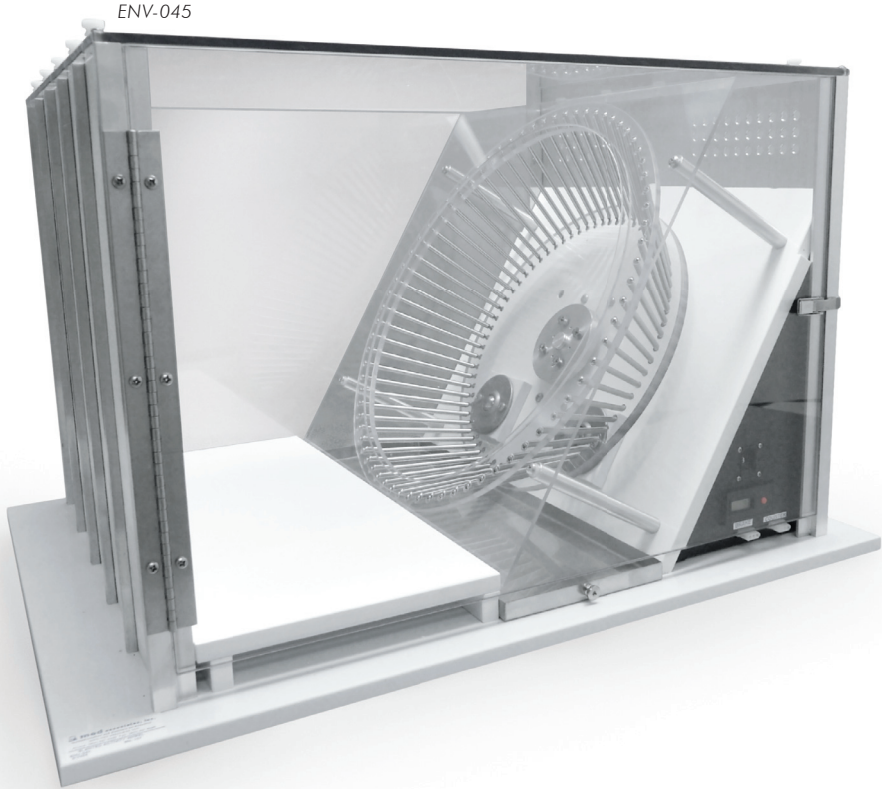


Solenoid Brake Accessory (ENV-042A-SBA)
shown on rat activity wheel (ENV-042)

SOLENOID BRAKE ACCESSORY

ENV-042A-SBA **RAT**

- Replaces the manual brake that comes factory installed on rat activity wheels (ENV-042 / -042A / -046)
- Can be controlled programmatically by any operating command signal (such as Med-PC), to prevent wheel turning at any time
- Uses a solenoid to depress a lever which places a rubber pad in contact with the rim of the wheel
- Designed to restrain up to 400 grams of load applied directly downward in the middle of the wheel

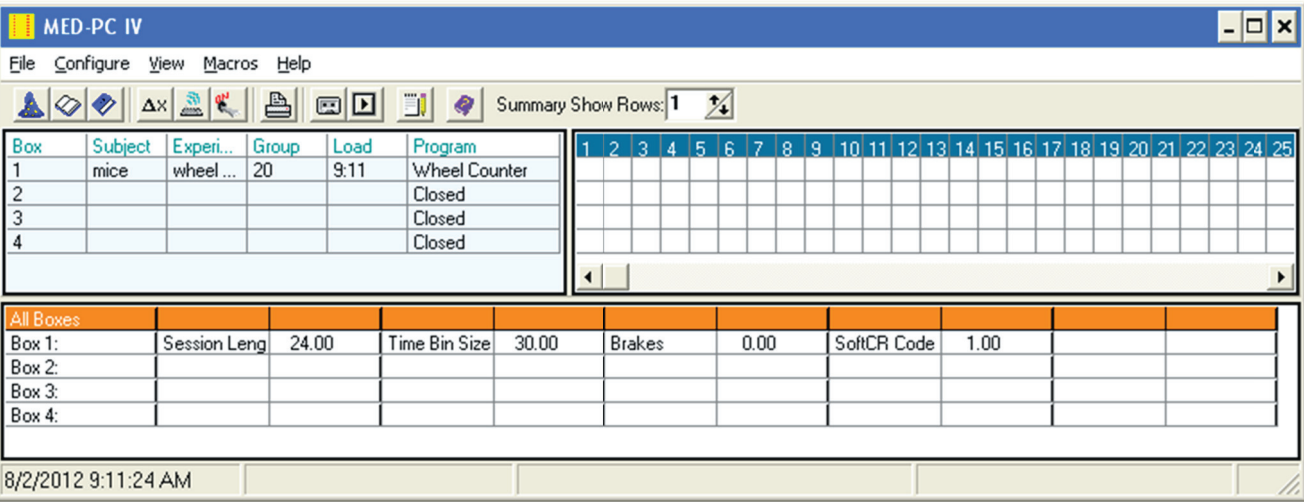


	BASE (W×H×D)	CHAMBER (W×H×D)	WHEEL (W×OD)	RODS (W×H×D)	ROD SPACING
ENV-045	18" x 0.5" x 24" (45.7 x 1.27 x 61 cm)	15.75" x 14" x 8.5" (40 x 35.56 x 21.6 cm)	4" x 13" (10.16 x 33.02 cm)	0.187" (4.763 mm)	0.61" (1.55 cm)

SLANTED ACTIVITY WHEEL w/FIVE CHANNEL CHAMBER

ENV-045 **RAT**

- Utilizes the same electronic drag, 90 degree cam, and digital display as the standard Activity Wheel for Rat (ENV-042).
 - Electronic drag control with nine preset resistance levels (requires 28 V DC power supply)
 - A 90 degree cam and micro-switch result in four counts per revolution
 - Utilize the LCD revolution counter for manual stand-alone operation, or connect to a computer using Med-PC + SmartCtrl for automatic data collection
- 30° angle of the wheel provides an even running surface for the animal without interfering with a tether.
- Incorporate response and reward devices as needed for your specific experimental protocol, including response levers, liquid/pellet delivery, and stimulus devices.



SOF-700RA-20 shown running in Med-PC IV (SOF-735), also compatible with the new Med-PC V software suite (SOF-736)

WHEEL COUNTER UTILITY

SOF-700RA-20 **MOUSE+RAT**

- Our wheel counter program tracks the number of revolutions of the wheel over a 24-hour period. The counts are saved to a series of bins, one bin per each hour.
- Note: There are four counts per revolution (one for every quarter turn), so the number of counts in each bin must be divided by four to get the full turn count.*
- Collects and stores data from any activity wheel
 - Tracks the total number of revolutions over a user defined time period for analysis
 - Session time can be divided into any number of user defined segments (time bins)





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