

Instrumentation and Software for Research

OPEN FIELD ACTIVITY

STANDARD

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Sound Attenuating Cubicle Packages 4	-5
Components	. 6
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VIDEO TRACKING

Home Cage & Open Field Packages 10-11







PACKAGE CONTENTS A = MED-OFAS-MSUC = MED-OFAS-RSU B = MED-OFAS-510U D = MED-OFAS-515USKU DESCRIPTION ABCD 1 ENV-510S Seamless Open Field Arena for Mouse 1 ENV-515S Seamless Open Field Arena for Rat 3 ENV-256R IR Receiver Strip, 12" (30.48 cm) w/cable 3 ENV-258R IR Receiver Strip, 16.5" (41.91 cm) w/cable 3 ENV-256T IR Transmitter Strip, 12" (30.48 cm) w/cable 3 ENV-258T IR Transmitter Strip, 16.5" (41.91 cm) w/cable 1 ENV-520USB IR Controller, 48 Channel, USB 1 DIG-801 USB Hub, 4 port 1 SG-506 Regulated Power Supply (+/- 12 V, +5 V) 1 CAB-USB-AM-BM-15 USB Cable, Type A-B, M/M, 15' (4.57 m) 1 SG-520USB-1 IR Controller Power Cable 1 SOF-812 Activity Monitor 7

SEAMLESS OPEN FIELD STARTER PACKAGE

MED-OFAS-MSU MOUSE MED-OFAS-RSU RAT

These starter packages provide everything you need to get your experiments up and running, and offer flexibility not seen in competing systems. Our easy-to-install accessories and components open up the possibility of running different protocols in the future (such as place preference or light/dark) without the expense of purchasing new systems.

- Animal movement tracking using three 16-beam IR arrays located on both the X and Y axes for positional tracking and Z axis for rearing detection
- Easily expandable design for accommodating up to 16 chambers for increased throughput from one PC
- USB connection on 48 channel IR controller for connection to PC or USB hub
- Accessories include ventilated covers, two chamber place preferences, dark boxes, hole board inserts, sound attenuating cubicles, and more
- Seamless design is both easy to clean and swap out with spare arenas

FULL ADDITIONAL TEST CHAMBER

MED-OFAS-510U MOUSE MED-OFAS-515U RAT

For expanding your system to up to 16 chambers for increased throughput from one PC.

• SAC sold separately, see Sound Attenuating Cubicle Package w/Pullout Shelf (MED-OFA-017 / -022)

NOTE: Includes all necessary cables.







ENV-017M-27 | 1NTERIOR (w×H×D) | 26" x 22" x 22" (66 x 56 x 56 cm) | 22" x 15" x 14" (56 x 38 x 35.6 cm) |



PACKAGE CONTENTS						
A = MED-OFA		A = MED-OFA-17 $B = MED-OFA-22$				
#	SKU	DESCRIPTION	A	В		
1	ENV-017M-27	Extra Large MDF Cubicle w/Pull Out Shelf	A			
1	ENV-022MD-27	Standard MDF Cubicle w/Pull Out Shelf		В		
1	SG-216A	Mini-Molex Extension, 3-Pin, 18" (45.7 cm)	A	В		
1	SG-216C	Mini-Molex Y Cable, M/FF , 3-Pin	A	В		
2	ENV-221CL	House Light, Ceiling Mount	A	В		
1	SG-235PF-6	Power Cord Daisy Chain, 6' (1.83 m)	A	В		
1	SG-235PM-6	Power Cord Daisy Chain, 6' (1.83 m)	A	В		

SOUND ATTENUATING CUBICLE PACKAGE w/PULLOUT SHELF

MED-OFA-017 RAT EXTRA LARGE MED-OFA-022 MOUSE STANDARD

- MDF sound attenuating cubicle with pull-out drawer for easy access to animals
- Two ceiling lights with power cables are included
- Some applications, such as light/dark boxes, may require additional lighting

NOTE: A 28V DC power supply (SG-500T) is required to operate lights and fan; and is recommended to support up to four cubicles.

NOTE: Anchoring of cubicle is recommended



INFRARED SOURCE + DETECTOR STRIPS 16 BEAM

ENV-256 MOUSE ENV-258 RAT

Detects lateral and vertical movement within the open field test chamber.

• Connects to the IR controller for data collection (ENV-

SPARE RIBBON CABLES

CAB-ENV-256R MOUSE RECEIVER CAB-ENV-256T MOUSE TRANSMITTER CAB-ENV-258R RAT RECEIVER CAB-ENV-258T RAT TRANSMITTER

Connects the IR strips to the IR controller.

ADDITIONAL SEAMLESS OPEN FIELD ARENA

ENV-510S-A MOUSE ENV-515S-A RAT

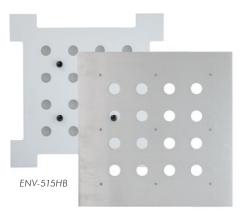
Having spare arenas makes for a quick and easy change between experiments or between animals for cleaning, sanitation, and increased throughput.

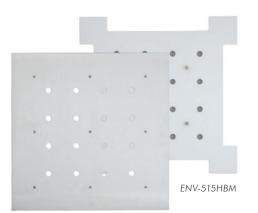
IR CONTROLLER 48 CHANNEL

ENV-520USB MOUSE+RAT

Controls up to three pairs of infrared strips (one transmitter + one receiver strip in each pair) with 16 photo beams on each.









HOLE BOARD FLOOR INSERTS

ENV-510HB MOUSE ENV-515HBM MOUSE ENV-515HB RAT

Consists of an aluminum floor with five standoffs, two polypropylene plates, and one stainless steel screen.

- Sixteen equally spaced holes with bait wells below the floor
- Screen can be sandwiched between the polypropylene plates under the floor to deny access
- By placing the IR arrays in the lowest available screw holes, the photo-beams are positioned between the floor and the tray to detect entries into the holes

INFRARED SOURCE + DETECTOR STRIPS FOR HOLE BOARD

ENV-256HB MOUSE ENV-258HB RAT

- Emits IR beams beneath a hole board insert to detect when a test animal has explored a hole
- Connects to the IR Controller (ENV-520USB) in place of the Z-axis strips for data collection

TWO CHAMBER PLACE PREFERENCE INSERT

ENV-512 MOUSE ENV-517 RAT

- A wire mesh and grid floor provide distinct tactile environments to maximize contextual differences
- The walls are clear, allowing the user to apply different color and design patterns between the insert and the test arena
- NOTE: custom contextual additions cannot block the photobeams
- Hinged lid allows easy subject insertion and removal, and a black IRT acrylic wall with manual door separates the two compartments

DARK BOX INSERT

ENV-511 MOUSE ENV-516 RAT

- Dark compartment is made of black IRT acrylic as to not interfere with IR beams, allowing tracking in both the light and dark compartments
- Hinged lid for easy animal insertion & removal
- Ideal for using an open field arena for a light/dark test, similar to a shuttle box

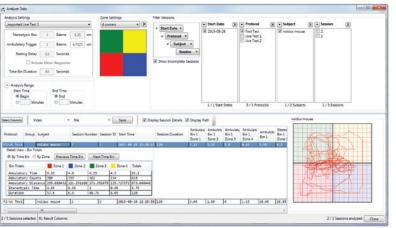


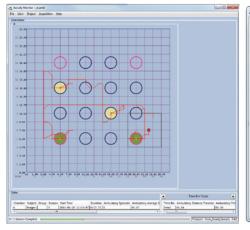


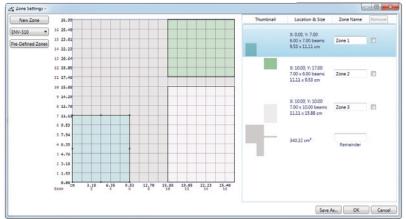
VENTILATED COVER

ENV-510T MOUSE ENV-515T RAT

• Clear vented polycarbonate top for the open field arena prevents the animal from escaping







ACTIVITY MONITOR 7 SOFTWARE

SOF-812 MOUSE+RAT

Written for open field activity test chambers, it allows for flexible protocol configuration and repeated data analysis. Data may be expressed as totals or parsed into user-defined time bins.

- Easy on-screen data analysis, any protocol parameter may be used to sort and filter the data.
- Data is displayed in real time, along with a cumulative plot of the subjects' activity for all chambers during acquisition
- Live, easy to use data analysis with settings, filters and time ranges that can be adjusted on the fly from one screen
- Easily export data to text, Excel®, video, or legacy data file formats
- Customize zones to create definable, drag-and-drop adjustable zones, or select from a list of common configurations

- Standard measures include:
 - Ambulatory counts, distance, time and episodes
 - Stereotypic counts and time
 - Resting time
 - Jump counts and time
 - Rearing time
 - Average speed
 - Hole board scoring*
 - User defined zone analysis*
 - Standard run time data
 - *when appropriate

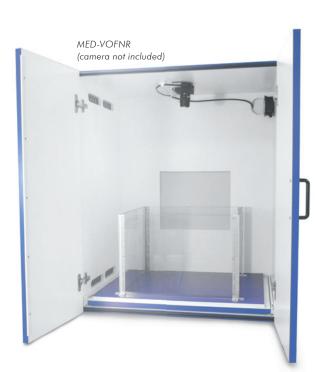
COMPUTER REQUIREMENTS

- Windows 7, 8, 10 or 11 (32 and 64-bit)
- One USB 2.0 Port (for ENV-520USB)

FOR USE WITH THIRD PARTY **VIDEO TRACKING SOFTWARE**









INTERIOR (L×W×H) 10.7" x 8.1" x 6.2" PHM-125H (27.2 x 20.5 x 15.7 cm) 19" x 10.5" x 8" PHM-126H (48.2 x 26.6 x 20.3 cm) 28" x 34" x 22" SAC-283422-NIR (71.1 x 86.4 x 55.9 cm)

PACKAGE CONTENTS									
A = MED-VHCNM B = MED-VHCNR C = MED-VO D = MED-VO									
#	SKU	DESCRIPTION	A	В	C	D			
4	PHM-125H	Specialized Home Cage for Mouse	Α						
2	PHM-126H	Specialized Home Cage for Rat		В					
1	MSUB-VOF-RAT	Video Open Field (ENV-515)				D			
1	MSUB-VOF-MOUSE	Video Open Field (ENV-510)			C				
1	NIR-100V	Variable Intensity NIR/White Light Package	Α	В	С	D			
1	SAC-283422-NIR	MDF SAC for Video Tracking	A	В	C	D			

VIDEO HOME CAGE PACKAGE w/NIR LIGHTING

MED-VHCNM MOUSE MED-VHCNR RAT

- Mouse (4 cages), Rat (2 cages)
- Extra tall sound attenuation cubicle accommodates a ceiling mounted video camera (camera not included)
- NIR lighting for video recording in the dark
- Pull-out blue base enables tracking of rodents of many colors
- SAC features a 28V DC fan and camera mount
- Ad-lib food + water receptacles are located on the side for an unobstructed view for top-mounted video monitoring equipment
- Clear polycarbonate lid securely attaches to the home cage with four key hole slots

Note: There is an opening in the back panel of cubicle for the NIR-100 Light System (sold separately). Power supply to operate fan also sold separately.

VIDEO OPEN FIELD PACKAGE w/NIR LIGHTING

MED-VOFNM MOUSE MED-VOFNR RAT

- Mouse (2 arenas), Rat (1 arena)
- Extra tall sound attenuation cubicle accommodates a ceiling mounted video camera (camera not included)
- NIR lighting for video recording in the dark
- Pull-out blue base enables tracking of rodents of many colors
- SAC features a 28V DC fan and camera mount

Note: There is an opening in the back panel of cubicle for the NIR-100 Light System (sold separately). Power supply to operate fan also sold separately.

