



Rev: Mar 2023

# Mantis 1x2IP



**INSTRUCTIONS FOR USE** 



Confidence in **Fly Control** 

## Mantis 1x2IP

The Mantis 1x2IP is a professional grade flying insect management system, which has been designed for installation in designated hazardous environments of wet and dust. This system is tested for compliance to the highest standards applicable within this grade of product — EN60529:1992 IP66. However, the zoning classification for IP66 environments requires proper interpretation and each installation must be judged on its merits.

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING. DO NOT ATTEMPT TO OPEN THE LID OF THE SYSTEM. THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS SYSTEM. REMOVAL OF ANY PART INSIDE THIS SYSTEM WILL VOID BOTH THE IP66 RATING AND PESTWEST WARRANTY. THIS SYSTEM MUST BE FACTORY SERVICED ONLY.

## **PRODUCT DESCRIPTION**

PestWest Mantis systems are made using the highest quality materials. The frame of the Mantis 1x2IP is made of 304 brushed stainless steel. A 316 marine grade stainless steel guard protects the ultraviolet lamps against damage and also prevents operators from accidental contact with the glue board. The Mantis 1x2IP is IP66 rated to the EN 60529-1992 standard for dust and water ingress protection.

#### **UNPACKING YOUR SYSTEM**

Each Mantis 1x2IP is carefully inspected and packed before leaving our factory. Before discarding the outer carton, examine for obvious evidence of transport damage.

Remove the system, and before installation, pay particular attention to the removal of all packing materials.

### **OPERATION**

Insect Light Trap (ILT) systems operate on the principle that most flying insects are attracted to light, particularly to the ultraviolet (UV) end of the light spectrum. Since insects will fly at night, systems should operate 24 hours a day.

System efficacy can be affected by the intensity of other light sources (daylight and overhead lighting). For good results, mount the system where competition from other light sources is minimal. For best results, install all your systems using the PestWest UV-AMETER.

- In food areas, mount the system adjacent to, but not directly over, exposed food or food preparation surfaces (attract flies away from food preparation areas). Always refer to the current local, State and Federal Food Codes.
- Observe where flies tend to aggregate and install your system adjacent to that area.
- Mount systems adjacent to fly ingress points (service/overhead doors, and windows).
- Do not position the system over lock-out, tag-out areas.

 Mount the system above head-level and clear of any traffic, such as forklift trucks.

The system is manufactured with an 8-foot power cord and operates from a 120V 60Hz electrical supply. The power cord is hard-wired for electrical safety.

When installing in a wet or dust area, the power cord MUST be terminated by a connector designed specifically for that environment. Furthermore, it is the recommendation of PestWest that this system be installed by a licensed electrician qualified for these environments.

#### **INSTALLATION**

The system is designed to be wall mounted and a bracket is supplied. Using the wall bracket as a template, mark off the positions on the mounting surface. Screws and plastic plugs are provided to mount the bracket in place, making sure that the mounting lip of the bracket is highest in place. Hook the 1x2IP system securely onto the bracket. Secure the power cord to the wall or other firm surface prior to connecting to the power supply. Remove the backing paper from the glue board to reveal the adhesive surface.

**PRECAUTIONS:** All PestWest systems are fully insulated, Class I appliances. Observe the following precautions:

- Do not submerge the system in water.
- Do not install where dangerous concentrations of flammable gases or dusts are likely to occur.
- Ensure the system is properly grounded.
- Be certain to have a secure working platform while servicing the system.
- Do not allow the glue board to become over-filled with dead insects.
- The Mantis 1x2IP, when permanently mounted, may be used both indoors and outdoors (if under a covered area and installed by a licensed electrician).

#### **CLEANING AND MAINTENANCE**

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING.

To maintain the attractive appearance of the system wipe down and clean as often as required. Use a cloth dampened with water and detergent or a proprietary cleaner. Do not use scouring pads or abrasives.

Change the glue board at regular intervals, as required by insect captures, or at least every 8 weeks.

It is recommended to lubricate all moving parts such as the catch-tray spring-loaded retainer on an annual basis, particularly in harsh environments.

If Mantis 1x2IP systems are placed within a food or pharmaceutical plant, a pharmaceutical-grade lubricant may be required.

The UVA lamps in flying insect management systems

should be changed once per year. Lamps that are less than one year old are most attractive to targeted flying insects. UVA is highly attractive to photo-positive insects and is emitted from our Quantum lead-free, shatter-resistant lamps already installed in this system. UVA light is invisible to the human eye. Daily switching on and off of the lamps results in an even faster loss of the effective UVA emission. Use the PestWest UV-AMETER to measure lamp efficacy.

Adding PestWest Indian Meal moth pheromone monitors to the glue board further enhances the capture experience.

IT IS MOST EFFECTIVE TO LEAVE THE SYSTEM ON CONTINUOUSLY AND TO CHANGE THE QUANTUM LAMPS AT LEAST ONCE PER YEAR (PREFERABLY POST-WINTER ONSET OF INCREASED INSECT ACTIVITY).

PestWest's exclusive FEP shatter-resistant lamp coating is the highest quality available. FEP is both UVA and operating temperature tolerant while allowing maximum UVA emission at critical wavelengths.

## **CHANGING THE GLUE BOARD**

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING. DUE TO INSECT CONTAMINATION THE GLUE BOARD SHOULD BE CHANGED WHEN FULL OR AT LEAST EVERY EIGHT WEEKS.

Remove the catch tray by pulling out and holding the spring-loaded silver knob on the side of the tray. Remove the old glue board by pulling down and out of the system. Remove the backing paper from the new board and slide into position, sticky side facing the UV lamps, ensure it clicks into place under the retainers at the top of the system. Replace catch tray.



Note that given the environment that this system is designed to go in to, may require more frequent glue board changes than in a less dusty environment.

| REPLACEMENT<br>PARTS | DESCRIPTION / PRODUCT CODE                      |
|----------------------|---|
| LAMPS:               | 15W QUANTUM BL SHATTER-<br>RESISTANT 130-000171 |
| GLUE BOARD:          | 135-000057 (PLASTIC)                            |
| STARTERS:            | SERIES STARTER - Philips S22 or<br>800-000292   |

Use only genuine PestWest replacement parts to ensure high efficiency. Use of non-approved parts will void the warranty.

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#### **CHANGING THE LAMPS**

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING.

Remove the catch tray by pulling out and holding the spring-loaded silver knob on the side of the tray. Open the guard; this pivots downwards from its lower edge. Unclip the top of the guard from the body by pushing it upwards which will allow it to be hinged forward on the lower pivot points. This will permit access to the lamps and starters. Grasp the lamp with one hand and unscrew the white waterproof cap counterclockwise with the other hand until it slides free from the lamp holder. Repeat this operation with the waterproof cap at the other end of the lamp.

Care should be taken when removing each waterproof cap to ensure that its rear black rubber water-sealing ring does not become displaced and remains on the lamp holder body. Should this occur, it must be removed and refitted into the annular ring on the back of the waterproof cap before the cap is screwed back onto the lamp holder.

With the waterproof caps removed the lamp may now be removed from the system. Repeat the operation with the other lamp.

PestWest's Mantis 1x2IP system is manufactured with the revolutionary reusable Reflectobakt® sleeves, a PestWest innovation introduced to improve the performance of the system. The Reflectobakt® sleeve is a screen positioned between the source of the UV light and the glue board, reducing the amount of UV striking the board, (significantly increasing the life of the adhesive).

Unclip the Reflectobakt® sleeves from the used lamps and install them onto the new lamps following the instructions described under — INSTALLING THE REFLECTOBAKT® SLEEVE.

Position the waterproof caps on the new lamps, with Reflectobakt® sleeves, refit into the lamp holders by pushing the lamps into place. Refit each waterproof cap in turn while holding the lamp down in position with one hand to avoid it springing out of place while the caps are being tightened. The caps should be fully screwed down to ensure a watertight seal with the lamp.

Be sure the Reflectobakt sleeves are correctly placed (shielding the glue board from the lamps). Ensure a Reflectobakt sleeve is centered on each lamp.

## INSTALLING THE REFLECTOBAKT® SLEEVE

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING.

Take the lamp and line up the two leading edges of the Reflectobakt® sleeve with the pairs of pins at either end of the lamp - see Fig 1. Ensure that the sleeve is centered

on the lamp so that the small gap between the end of the sleeve and the metal end of the lamp is the same at both ends. Carefully push the sleeve so it is in contact along the length of the lamp surface. It should grip and stay in position. Re-fit the lamp into the lamp holder; the sleeve should be positioned at the back of the lamp, (between the lamp and the glue board), keeping the light off the glue board. At all times, handle the shield with care. The edges may be sharp and the dimensions are critical to proper fit upon the lamp.

Method of assembling Reflectobakt® showing alignment in relation to pins:

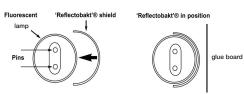


Fig 1

## STARTER REPLACEMENT (replace annually)

ALWAYS TURN OFF POWER TO THE SYSTEM BEFORE SERVICING.

The starters should be replaced every time lamps are changed. This operation is most easily accomplished when the upper lamp is removed. To gain access to the starters the white waterproof caps located on the lower surface of the frame tray need to be removed. If they have previously been tightened using tools, the use of a pair of electricians' pliers will enable this task to be more easily accomplished.

To access the caps, first remove the catch tray and drop the front guard down (follow the procedure described under CHANGING THE LAMPS). Unscrew one cap by turning it counterclockwise. Remove the starter from its housing by turning it counterclockwise, then extracting it downwards. Repeat the same operation with the other starter. Install the new starters following the above procedure in reverse order. Be certain the black sealing gasket ring located on the starter cap is properly in place to ensure a watertight fit.

Reflectobakt® is the registered trademark of PestWest Electronics Limited.

Manufacturer reserves the right to vary model specifications without notice.

#### NOTE

The Mantis 1x2IP is a professional grade flying insect management system which has been designed for installation in designated hazardous damp or dust environments and has been tested for compliance to the highest standards applicable within for this grade of product — EN60529:1992 IP66. However the zoning classification for IP66 environments requires proper interpretation and each installation must be judged on its merits.

Do not install where dangerous concentrations of flammable gases or dust are likely to occur. This system is not intended for hazardous locations. Call PestWest for systems designed for these areas.

PestWest is able to provide, upon request, copies of independent safety test certificates applicable to the model, to enable a suitability assessment to be made for a particular installation and no claims other than those therein identified on these certificates are expressed or implied. It is the ultimate responsibility of the installer to ensure that the Mantis 1x2IP is suitable for a particular environment.

## Warranty information must be received and on file with PestWest USA LLC for proper coverage.

For additional specialty products contact PestWest USA LLC at 941.358.1983 or click to: www.pestwest.com/ Specialty Range



## **RESTRICTIONS APPLY.**





Lamp contains mercury (Hg), dispose or recycle in accordance with applicable laws. In US, consult www.lamprecycle.org or 1-800-922-6693 for measures to be taken in case of breakage; safe handling procedures; and recycling and disposal options.

Outside of US, please contact your local authorities.



Scan the QR code to register your 3-year warranty or visit

https://support.pestwest.com/pestwest-warranty/







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PestWest Electronics Ltd operates a quality management system certified to ISO 9001

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