

PRO 900 Seríes

# PREMIER $\chi C$



## **Operation Manual**

PREMIER XC Model MCP-900xc

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## **Important Safety Instructions**

- Do not operate the Trap indoors.
- Do not look directly into the UV lights during operation of the Trap.
- Keep children and pets away from the Trap.
- Always disconnect power before cleaning, servicing or inspecting the inside of the Trap.
- To avoid injury from the High-Speed Fan inside the Trap, always disconnect power before opening the Door. Keep the Door locked and remove the Key while the Trap is operating.
- Do not allow the Trap, Power Supply, Power Cord or plug to be immersed in water.
- Do not operate the Trap with a damaged Power Supply, Power Cord or plug.
- Use only the Extension Cord supplied with the Trap.
- Ensure Power Cords are placed carefully to avoid causing a tripping hazard.
- Ensure the Trap is properly installed and operated in accordance with this
  operation manual.

**NOTE:** We recommend your Mega-Catch™ Mosquito Trap should be used in conjunction with other **sensible mosquito control measures** designed to manage mosquito problems.

Eliminate standing water in low spots, ditches, gutters and similar areas.

Empty or dispose of anything that collects water i.e. tin cans, old tires, buckets, pet dishes, pot plant saucers etc...

Install or repair screens. Some mosquitoes like to come indoors. Keep them outside by having well-fitting screens on both windows and doors.

Keep grass mown and bushes trimmed to deprive mosquitoes of their favorite resting places.

Apply insect repellents when outdoors for extended periods of time. According to the U.S. Centers for Disease Control (CDC), the most effective repellents to use contain one of the following EPA registered active ingredients: DEET (N,N-Diethyl-m-toluamide), Picaridin (KBR 3023) and Oil of Lemon Eucalyptus (p-menthane 3, 8-diol).

Light colored clothing is less attractive to some mosquito species. Wear long sleeves and long pants for added protection.

## Introduction

Mosquitoes have been described as the most dangerous creatures on Earth. Aedes mosquitoes may carry yellow fever and dengue fever. Culex mosquitoes may carry several strains of encephalitis (including St. Louis Encephalitis, Eastern Equine Encephalitis and West Nile Virus), and Anopheles mosquitoes may carry Malaria.

Male mosquitoes do not bite. The real risk is from female mosquitoes which bite when in search of blood to provide protein for their eggs.

Scientific research over the past 50 years has shown that female mosquitoes find their prey using a combination of sensory cues including light, shape, color, heat, movement/vibration, sweat and other by-products of human activity. Using that research and with the benefit of extensive field testing (including tests by the United States Department of Agriculture in Gainesville, Florida), Mega-Catch<sup> $\mathrm{TM}$ </sup> has developed one of the world's most advanced mosquito traps: the Mega-Catch<sup> $\mathrm{TM}$ </sup> **Pro 900 Series PREMIER**  $\mathcal{XC}$  Mosquito Trap.

There are over 3,500 species of mosquitoes worldwide and your yard could harbor as many as 30 different species. Each species is unique and each is attracted by different combinations of sensory stimuli. Even miniscule changes in those stimuli can mean the difference between catching or not catching a certain species of mosquito. For that reason catching mosquitoes can be compared to fishing. Everyone can do it, but those who are willing to take the time to experiment and learn about the target species will always achieve the best results.

## Features of Mega-Catch<sup>™</sup> Pro 900 Series PREMIER XC Mosquito Trap

The Mega-Catch<sup>™</sup> **Pro 900 Series PREMIER**  $\mathcal{XC}$  Mosquito Trap comes ready to go with preloaded factory default settings so you can get started right away simply by pressing the multi-function button with the Standby Symbol  $\mathcal{O}$  above (see page 8, Operation of the LCD Module section). The Mega-Catch<sup>™</sup> **Pro 900 Series PREMIER**  $\mathcal{XC}$  Mosquito Trap has been designed to give you the ability to adjust a range of settings and mosquito attracting stimuli (there are literally thousands of setting combinations available) using the revolutionary **MAS** (**Mosquito-Attracting-Stimuli**) settings within the trap to maximize mosquito capture in your yard.

#### Features include:

- 5 stage Central LED Cluster programmed to illuminate and give the appearance of movement.
- 5 stage oscillating ultra violet (U.V.) LED light array spectrally matched to frequencies known to attract many mosquito species.
- 5 stage fan to maximize capture rates and allow for live catches (for species identification).
- Low-intensity black light ultra violet (U.V.) cathode tube that emits light in a frequency band known to attract many mosquito species.
- 5 stage Heating Element with adjustable heat mode to subtly alter the infrared signature that attracts many mosquito species.
- Full diagnostics software.

Mosquitoes attracted to the **Pro 900 Series PREMIER** XC by visual and other cues seek to land on and probe specially designed surfaces and enter the Trap where they are collected in the Catch Bag or Liquid Catch Container.

The Mega-Catch<sup>TM</sup> **Pro 900 Series PREMIER**  $\mathcal{XC}$  Mosquito Trap has been designed for outdoor use only. The **Pro 900 Series PREMIER**  $\mathcal{XC}$  can operate unattended for long periods. It can be programmed to start and stop according to peak mosquito activity in your area.

## **Initial Set Up Instructions**

Before attempting operation of your Pro 900 Series PREMIER XC Trap, follow these instructions:

- 1. Remove the box marked Accessories from the carton.
- 2. Remove the box containing the Stand from the carton.
- 3. Assemble the Stand (see page 7, **Stand Assembly Instructions** section).
- 4. Remove the Trap from the carton (Note: the screen on the LCD module will be blank until power is connected to the trap).
- 5. Fit the External Skirt to the outside of the Trap by sliding the skirt on from the top of the Trap so that the opening is directly in front of the Door (see page 17, **Fitting of External Skirt** section).
  - Note: Failure to position the Skirt correctly may result in a NIL mosquito catch.
- 6. Hang the Trap from the hook on the Stand in the direction shown in the Stand Assembly Instructions. To achieve this, hold the Trap in an upright position so that the top of the Trap is next to the hook on the stand. Then swing the bottom of the Trap outwards (through an arc of about 45 degrees) and you will see that the top of the Trap will fit through the gap in the hook. This is a design feature to prevent the Trap falling off the stand accidentally.
- 7. Your **Pro 900 Series PREMIER** XC Trap has two mosquito collection methods: a dry-catch system using a Catch Bag and a wet catch system using a Catch Container. In most circumstances the wet-catch system offers superior catch performance to the dry-catch system. The dry-catch system using the Catch Bag is better for mosquito species identification.
- 8. If you wish to catch mosquitoes using the Catch Bag, then attach the Catch Bag to the base of the Fan inside the Trap. The Catch Bag has an elastic top to facilitate attachment (see page 15, **Mosquito Catching Systems** section).

- 9. If you wish to catch mosquitoes using the wet-catch system, fill the Liquid Catch Container two-thirds full with fresh water. Add 2 or 3 drops of liquid detergent/soap to break the surface tension of the water. Also add 3 or 4 teaspoons of a non-diet (sugar-based) soda pop or fruit juice. Then place the Liquid Catch Container in the Trap using the locating feet on its base.
- 10. Reinstall the Door by locating the base of the Door in the Trap and then pushing firmly until Door clicks into place. Lock the Door using one of the two Keys provided with the Trap and then remove the Key. (NOTE: Removing and reinstalling the door is designed to require a reasonable amount of force to make it difficult for children).
- 11. Your **Pro 900 Series PREMIER** *XC* Trap comes with a low-voltage Power Supply and a 60-foot(18 metre) low-voltage extension cord with weatherproof connectors. Plug the extension cord into the Trap connection turning the connector clockwise until tight. Plug the extension cord into the power supply cable turning the connector clockwise until tight. Then plug into the power supply. (**NOTE**: The connectors are designed to be a tight fit to ensure that they are weatherproof).
- 12. Turn on the power. The Trap will take around 2 seconds to initialize and then a display should appear on the screen of the LCD Module and a blue LED light inside the Trap should pulse to indicate that power is connected. (If it does not, see page 26, **Problem Solving** section). To immediately begin operating your Trap at the factory default settings press the multi-function button with the Standby Symbol  $\circlearrowleft$  above it (see page 8-14, **Operation of the LCD Module** section for programming instructions).
- 13. When the Trap is operating, the Fan should be running, the U.V. and colored LED lights should be flashing intermittently and the U.V. Tube should be on (unless the U.V. tube has been programmed off). If the Trap is not operating correctly then re-read these instructions or see page 26, **Problem Solving** section, or email us at info@megacatch.com.

## What Your Mega-Catch™ Mosquito Trap Will Do

While the Mega-Catch™ Mosquito Trap has been designed to catch immediately there is any mosquito activity in the vicinity, it may take as much as 6-8 weeks of use to reduce local populations to the point that breeding cycles are interrupted. Patience and experimentation are the keys to getting the best out of your Mega-Catch™ Mosquito Trap. Subsequent re-infestations will probably occur after rain.

You should not expect to completely get rid of mosquitoes. Mega-Catch™ Mosquito Traps should be used in conjunction with other sensible mosquito control measures (see "NOTE" page 1, Important Safety Instructions section) designed to manage mosquito problems.

The Mega-Catch™ Mosquito Trap is not designed to compete with humans in close proximity eg. at a barbecue. If you are planning an outdoor function, operate the Trap for several days before the function.

## Installing and Siting the Mega-Catch™ Mosquito Trap

## **Installation of Trap:**

Your Mega-Catch™ Mosquito Trap comes fully assembled. To install refer to the instructions on Page 3, Initial Set Up Instructions section.

The Initial Set Up Instructions assume that you have decided to install your Mega-Catch™ Mosquito Trap on the Stand that is supplied with the Trap.

Alternatively, the Trap can be hung from a tree or fixed post using a chain/rope (or the like) connected to the attachment hole at the top of the trap. We recommend a height of around 3 feet(1 metre) from the ground to the top of the Mega-Catch™ Mosquito Trap. However, you may need to adjust the Trap's height depending on the type of mosquitoes you are catching.

Your Mega-Catch Mosquito Trap is supplied with a 60 foot(18 metre) low voltage extension cord with weatherproof fittings. To avoid the cord posing a tripping hazard or being damaged, (e.g. by lawn mower) we recommend that, if possible, it be placed 2-3 inches(5-8 cm) underground. This can be easily achieved by using a spade which is inserted into the ground and moved backwards and forwards to create a shallow slit trench into which the cord can be pushed before the ground is replaced by standing on the top of the slit trench.



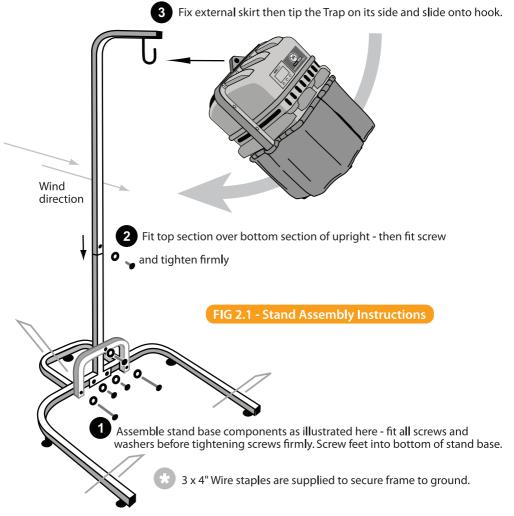
## **Siting of Trap:**

For the best performance from your Mega-Catch™ Mosquito Trap, first determine the primary source of the mosquito nuisance (Mosquitoes breed in wet areas like around streams, marshland, wooded areas and gardens). Then use these rules to site the Trap:

- Rule 1: Place the Trap between the mosquito source and areas of human activity.
- Rule 2: Place the Trap as far away from people and as close to the mosquito source as possible (attract them to the Trap and not to you).
- Rule 3: Place the Trap upwind of the mosquito source but only if you can comply with Rule 1 (mosquitoes sometimes use the wind to navigate).
- Rule 4: Place the Trap in a predominantly shaded area (most mosquitoes avoid direct sunlight).
- Rule 5: Place the Trap in a location protected from rain and strong wind (mosquitoes don't fly in strong winds).
- Rule 6: If severe weather conditions, such as a cyclone, are predicted then store the Trap out of the weather.

## **Stand Assembly Instructions**

To assemble the Stand supplied with the Trap, follow the instructions shown in figure 2.1 below.



**NOTE**: For optimum performance place the trap in a predominantly shaded area (located between your dwelling and the source of the mosquitoes) which is protected from rain and wind (Mosquitoes do not fly in strong winds or severe weather conditions).

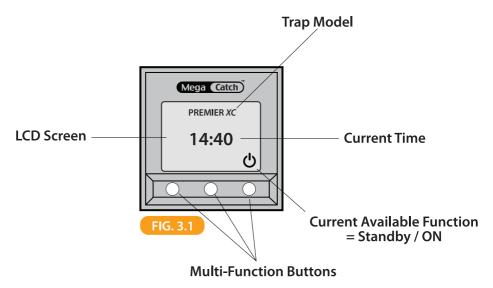
For maximum stability the 'U' shaped leg at the back of the stand should be pointed in the direction of prevailing winds. The wire staples supplied with the trap (or a cinder block placed on the back of the stand) can be used to increase stability.

## **Operation of the LCD Module**

#### **LCD Module**

The LCD (Liquid Crystal Display) Module provides the user with easy access to the trap settings by way of an LCD screen which has 3 multi-function buttons located at the bottom of the screen(see figure 3.1). The current function of each multi-function button is displayed directly above on the LCD screen. The LCD screen has a back light for operation in low light conditions (the back light automatically turns on momentarily whenever a function button is pressed).

Note: If a multi-function button has not been pressed for some time then the screen will revert back to the Main Screen (see figure 3.1) and any settings shown on the screen will be saved.



## Standby Symbol 🖰

Pressing the multi-function button with the Standby Symbol  $\mathcal{O}$  above it will turn the trap ON. Pressing the same multi-function button again will put the trap into Standby/Sleep mode. Standby/Sleep mode essentially turns the trap OFF and while in this state the Trap uses practically no power.

- When the Trap is in Standby/Sleep mode then pressing  $\circlearrowleft$  will turn the Trap ON.
- When the Trap is ON and running then pressing  $\circlearrowleft$  will put the Trap into Standby/Sleep mode. All trap operations will stop except for a pulsing blue LED light inside the Trap to indicate that the trap has power connected.

#### **Quick Start**

With the trap set up and plugged in press the multi-function button with the Standby Symbol  $\mbox{$\circlearrowleft$}$  above it. The trap will now run (turn on) 24 hours a day while connected to a power source. To turn the trap OFF then again press the multi-function button with the Standby Symbol  $\mbox{$\circlearrowleft$}$  above it (see figure 3.2). It is that easy.

The Trap comes configured with factory default settings for the Fan, Heater, U.V. tube, U.V. LEDs and Central LED Cluster that will be suitable for most mosquito capturing operations. Altering the settings to best "tune" the trap to your particular mosquito environment is optional (see below, **Adjusting Trap Settings** section).

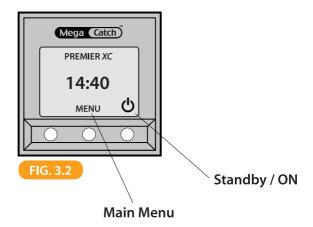
To program specific times of the day when you would like your Mega-Catch™ Mosquito Trap to run see page 11, **Setting the Timer** section.

To reset the trap back to the factory default settings see page 14, **Resetting the Trap** section.

## **Adjusting Trap Settings**

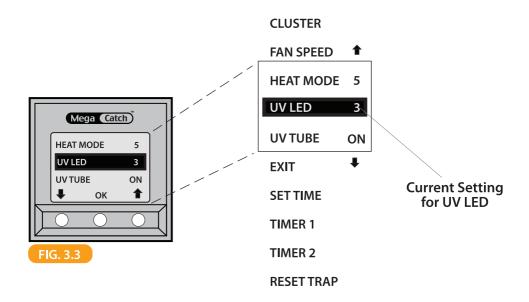
With the trap on and running the LCD Module screen will look similar to the one shown below in figure 3.2.

To access and view/alter the trap settings press the multi-function button that says "MENU" above it. Pressing this button will progress you through to the Main Menu screen where you will be able to adjust trap settings to optimize the operation of your trap.



To scroll through the menu use the multi-function buttons which have the Up ★ and Down ♣ arrows above them. The current selection, along with its current setting, will be highlighted on the screen with a solid black box behind the text (see figure 3.3). Press the multi-function button with "OK" above it to adjust the setting for the current highlighted selection.

Note: Settings will be saved when trap is turned off.



#### **Setting the Time**

Select "SET TIME" from the Menu.

Using the Up ★ or Down ♣ arrow adjust the Time then press "OK" to accept and exit back to the Main Menu (see figure 3.4).

#### Note:

- Time is in 24 hour format eg. 2pm equates to 14:00.
- To quickly advance through the minutes/hours press and hold the Up **↑** or Down **↓** arrow.



FIG. 3.4

#### Setting the Timer

The Timer function enables you to program the Trap to operate at the time/s of the day/night which you choose eg. when mosquitoes are most active in your area. There are 2 Trap Timers available and either, or both, of these can be used. Use of both Timers allows the user to program in two periods of operation during a 24 hour period (i.e. daytime and night-time).

Select "TIMER 1" or "TIMER 2" from the Menu and press "OK". The Start Time will appear on the screen with "ON" displayed to the right of the time (see figure 3.5).

Using the Up ♠ or Down ♣ arrow set when you would like the Trap to turn ON then press "OK".

"OFF" for Off Time will now appear on the screen to the right of the time (see figure 3.6).

Using the Up ♠ or Down ♣ arrow set when you would like the Trap to turn OFF then press "OK" to accept and exit back to the Main Menu.

When a Timer has been set the Timer symbol  $\oplus$  will be displayed to the left of the Main Menu screen (see figure 3.7).

#### Note:

- Before setting the Timer firstly ensure that the time has been set (see page 16, **Setting the Time** section).
- Time is in 24 hour format eq. 2pm equates to 14:00.
- To quickly advance through the minutes/hours press and hold the Up ♠ or Down ♣ arrow.
- To edit a Timer once set see below, **Editing the Timer** section.

Setting Range: OFF or ON.

Factory Default Setting: OFF

Indicates That a Timer Has Been Set.

#### **Editing the Timer**

To change the ON/OFF times for a Timer select the Timer from the Menu and press "OK" then press "EDIT" (see figure 3.8). Next follow the steps above in Setting the Timer to enter the ON and OFF times.

To disable an active Timer select the Timer from the Menu and press "OK" then press "OFF" (see figure 3.8).



FIG. 3.5



FIG. 3.6

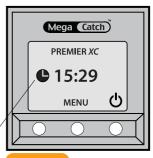


FIG. 3.7

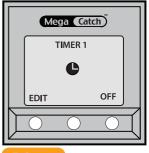


FIG. 3.8

#### **U.V. Tube**

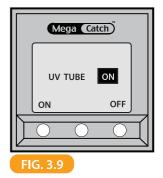
The U.V. Tube emits a light wavelength within the range that is effective in attracting many mosquito species. Note: The U.V. Tube light wavelength is different to that emitted by the U.V. LED lights.

Select "UV TUBE" from the Menu and press "OK".

Select "OFF" or "ON" to accept and exit back to the Main Menu.

Setting Range: OFF or ON.

Factory Default Setting: ON



#### U.V. LEDs

The flashing U.V. LED lights, located around the perimeter of the Control Box, emit a light wavelength within the range that is effective in attracting many mosquito species. Note: The U.V. LED light wavelength is different to that emitted by the U.V. Tube. Varying the U.V. LED intensity will vary the response from different mosquito species.

Select "UV LED" from the Menu and press "OK".

Use the Up arrow to increase or the Down arrow to decrease the U.V. LED intensity then press "OK" to accept and exit back to the Main Menu.

Setting Range: OFF to level 5.

Factory Default Setting: 3

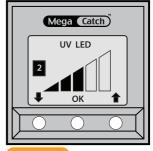


FIG. 3.10

#### Cluster

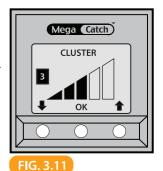
The Cluster refers to the Central LED Cluster or colored LED lights at the base of the Control Box that create the illusion of movement, or a live object inside the trap.

Select "CLUSTER" from the Menu and press "OK".

Use the Up ♠ arrow to increase or the Down ♣ arrow to decrease the Central LED Cluster rotation speed then press "OK" to accept and exit back to the Main Menu.

Setting Range: 1 to level 5.

Factory Default Setting: 3



#### **Heat Mode**

Heat Mode sends a signal to the heater element to subtly change the heat profile.

Select "HEAT MODE" from the Menu and press "OK".

time between each Heat Mode change then press "OK" to accept and exit back to the Main Menu.

Setting Range: 1 to level 5.

Factory Default Setting: 5

# Mega Catch **HEAT MODE**

## Fan Speed

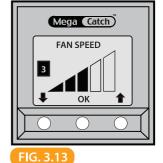
Fan Speed sets the rotational speed of the fan and, due to the resultant airflow change, will also subtly alter the effective heat profile of the heater element. Lower Fan speeds also better preserve captured mosquitoes for later species identification.

Select "FAN SPEED" from the Menu and press "OK".

Use the Up ★ arrow to increase or the Down ♣ arrow to decrease the Fan Speed setting then press "OK" to accept and exit back to the Main Menu.

Setting Range: 1 to level 5.

Factory Default Setting: 3



#### **Diagnostics**

Diagnostics can be used to check the module status of the U.V. Tube, Fan and Heater. This may be useful on the rare occasion that a module is not behaving as expected.

Ensure that the Trap is plugged in and in Standby/Sleep mode (the display will look similar to that shown in figure 3.14 and the blue LED inside the trap will be slowly pulsing).

Momentarily press and hold the multi-function buttons on the center and on the left until the word "DIAGNOSTIC" appears at the top of the screen (see figure 3.15). The Trap will now perform a self-diagnostic check and report back with the "OK" or "FAIL" status for:

Press Together <

TUBE: U.V. Tube

FAN: Fan

**HEAT**: Heater Flement

Example: The Trap has not been catching any mosquitoes this week compared with the many mosquitoes captured the previous week. A diagnostic check is run and the results found are shown in figure 3.16 with the Fan reporting a "FAIL" status. The Fan is inspected and it is found that a very large beetle is obstructing the fan blades from turning. Once the beetle has been removed the trap then begins functioning correctly again. Another diagnostic check is run and now shows that the Fan status is "OK".



FIG. 3.14



FIG. 3.15



FIG. 3.16

## **Resetting the Trap**

Resetting the Trap will restore the factory default settings for the Fan, Heater, U.V. tube, U.V. LEDs, and Central LED Cluster settings. The Time and all Timer ON/OFF times will remain unchanged however all Timers will be turned off

Select "RESET TRAP" from the Menu and press "OK".

Select "YES" to confirm restoration of factory default settings, or "NO" to cancel, and exit back to the Main Menu (see figure 3.17).



FIG. 3.17

## **Mosquito Catching Systems**

Your Mega-Catch™ Mosquito Trap comes complete with a Catch Bag and a Liquid Catch Container. You may choose to collect mosquitoes using either of these systems.

Our research has shown the Liquid Catch Container system to be more effective. This is because when the Mega-Catch $^{\text{M}}$  Mosquito Trap is operated using a Liquid Catch Container, the air plume emanating from the bottom of the Trap is humidity enriched.

Depending on local temperatures, evaporation may mean that it is necessary to replenish water in the Liquid Catch Container weekly or even more frequently. The Catch Bag system requires less frequent attention and therefore may be your preferred mosquito catching system. We recommend the Catch Bag system if your trap is going to be left unattended for any long period of time (e.g. vacation). Smaller biting insects (eg: no-see-ums) are best caught using the Liquid Catch Container because the mesh size on the standard Catch Bag may be too large to capture them (a smaller mesh Catch Bag is available from your Authorized Distributor or online at www.megacatch.com).

#### **Using the Liquid Catch Container**

To prepare your Mega-Catch™ Mosquito Trap, follow these steps:

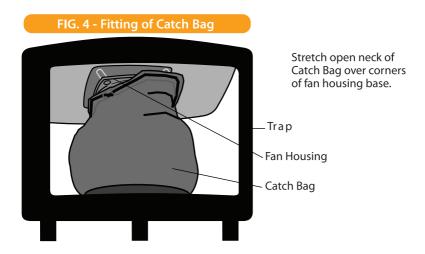
- Ensure that the Trap is switched off by disconnecting the power
   (Attention: High-Speed Fan inside the Trap may cause injury if the power is not disconnected.)
- Unlock and remove the Lockable Door.
- Slide the Liquid Catch Container out from beneath the Fan. This container has locating feet on its base.
- 4. Fill the container with water until it is approximately two-thirds full. Add 3 or 4 drops of liquid detergent/soap and stir thoroughly. This breaks the surface tension of the water ensuring that mosquitoes drown upon capture.
- 5. Add 3 or 4 teaspoons of a non-diet (sugar-based) soda pop or fruit juice. This duplicates the fructose content of nectar on which mosquitoes feed.
- 6. Reinstall the Liquid Catch Container into the Mega-Catch™ Mosquito Trap. Replace and lock the Door and remove the Key for child safety. Reconnect power.
- 7. Before removing the Liquid Catch Container, remember to disconnect the power to your Mega-Catch™ Mosquito Trap so that the Fan is not operational. Dispose of the contents well away from your dwelling so as to not attract ants.

#### Using the Catch Bag

To prepare your Mega-Catch™ Mosquito Trap, follow these steps:

- Ensure that the Trap is switched off by disconnecting the power (Attention:
   High-Speed Fan inside the Trap may cause injury if the power is not disconnected.)
- 2. Unlock and remove the Lockable Door.
- 3. Reach inside the Trap and stretch the open neck of the Catch Bag around the corners of the base of the Fan just above the Fan Safety Guard (see figure 4). The Catch Bag has an elastic neck to facilitate attachment.
- 4. Replace and lock the Door and remove the Key for child safety. Reconnect power.
- 5. Before removing the Catch Bag pull the drawstring tight so that any mosquitoes that remain alive cannot escape. Next disconnect the power to your Mega-Catch™ Mosquito Trap so that the Fan is not operational and then remove the Catch Bag. Crush the top of the Catch Bag down on its base to kill any mosquitoes that do remain alive. Dispose of the contents well away from your dwelling so as not to attract ants.

Mosquitoes collected in the Catch Bag will usually die very quickly without access to moisture. In cooler climates they may live for a longer period. In times of heavy infestations of mosquitoes, it may be necessary to empty the Catch Bag on a regular basis in order to ensure optimum operation of the Trap.

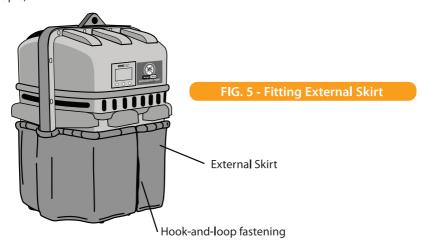


Catch Bags should be hand washed in warm soapy water from time to time. Catch Bags are a consumable item and replacements are available from your Authorized Distributor or online at www.megacatch.com.

## **Fitting of External Skirt**

Your Mega-Catch™ Mosquito Trap comes with an External Skirt which fulfils two important functions. First its color and texture provides a visual attractant for many species of mosquitoes. Secondly, it acts as a baffle directing the air plume out of the bottom of the Trap.

There are two methods which you can use to fit the Skirt (Method One is the easiest for most people):



#### **Method One:**

- 1. Place the Mega-Catch™ Mosquito Trap on a table or other flat surface.
- 2. Slide the Skirt on from the top of the Trap (over 2 corners initially) with the elastic band at the top.
- 3. The Skirt is properly fitted when the elastic band is seated over the lower horizontal rib, just below the inlet holes (see figure 5). The opening in the Skirt should be located at the front of the Trap so as to facilitate removal of the Door without having to remove the Skirt. The hook-and-loop fastening on this opening should be closed when the Trap is running.

#### Method Two:

- Hang the Mega-Catch™ Mosquito Trap from the Stand (see page 3, Initial Setup Instructions section - paragraph 6).
- 2. Slide the Skirt up from the bottom of the Trap (over 2 corners initially) with the elastic band at the top.
- 3. The Skirt is properly fitted when the elastic band is seated over the lower horizontal rib, just below the inlet holes (see figure 5). The opening in the Skirt should be located

at the front of the Trap so as to facilitate removal of the Door without having to remove the Skirt. The hook-and-loop fastening on this opening should be closed when the Trap is running.

**NOTE**: Failure to position the skirt correctly may result in a NIL mosquito catch.

The Skirt is not manufactured from a U.V.-resistant material but this will not be an issue if the Trap is operated in shaded conditions as recommended. The Skirt can be reversed should one side begin to fade from exposure to U.V. light. The Skirt is a consumable item and replacements can be obtained from your Authorized Distributor or online at www.megacatch.com.

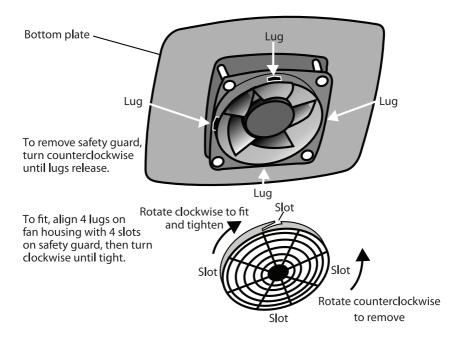
## **Care of Your Trap**

Your Mega-Catch™ Mosquito Trap requires very little maintenance. The Catch Bag and Liquid Catch Container should be cleaned and washed when required.

Heavy catches of mosquitoes may result in a build-up of material in the internal casing and blade tips of the Fan. There may also be a build-up of material on the Fan Safety Guard. If this happens use the following cleaning technique:

- Ensure the power to your Mega-Catch™ Mosquito Trap is disconnected. (Attention: High-Speed Fan inside the Trap may cause injury if the power is not disconnected.)
- 2. To remove the Trap from the Stand, tip the Trap on its side and slide it off the hook.
- 3. Unlock and remove the Lockable Door. Then lay the Trap on its side with the Door opening being face up.
- 4. Reach inside the Trap and remove the Fan Safety Guard (attached to base of Fan) by turning it counterclockwise (see figure 6).
- 5. Using a small sponge or toothbrush and warm soapy water, reach into the Trap and carefully clean the inside casing of the Fan and the Fan Blades.
- 6. Ensure that water is not allowed to enter into the Fan Motor. Never hose water into the Fan.
- 7. Clean and then replace the Fan Safety Guard.
- 8. Leave the Trap to dry for at least 24 hours before reinstalling it on the Stand and recommencing operation.

## FIG. 6 - Removal of Fan Safety Guard



The casing of your Mega-Catch™ Mosquito Trap is made from polypropylene, which is extremely strong and durable.

In order to prolong the life of your Mega-Catch™ Mosquito Trap store it and the Mega-Catch™ Stand in a dry place when not in operation. Your Mega-Catch™ Mosquito Trap should be serviced at the end of each season (see page 22, Maintenance and Repair of Your Trap section).

## Replacement of U.V. Tube

The U.V. Tube is a consumable item and replacements can be obtained from your Authorized Distributor or online at www.megacatch.com. To install a new U.V. Tube see page 22, Maintenance and Repair of Your Trap section.

## **Optional Accessories**

The following Optional Accessories can be obtained from your Authorized Distributor or online at www.megacatch.com.

#### 1. Mega-Catch™ Mosquito Lures

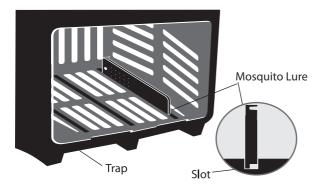
Mega-Catch™ mosquito lures have been specially formulated by Mega-Catch™ to increase capture rates of nuisance mosquitoes, sand flies, black files and biting midges (no-see-ums).

**NOTE**: There are over 3,500 species of mosquitoes worldwide. Mega-Catch™ mosquito lures can improve the rate of capture of some mosquito species. Other species, may not be overly attracted. You should determine what is best in your area by experimenting with and without a Mega-Catch™ mosquito lure in place.

## To install or replace a Mega-Catch™ mosquito lure:

- 1. Ensure the power to your Mega-Catch™ Mosquito Trap is disconnected.
- Unlock and remove the Lockable Door.
- 3. Remove the Mega-Catch™ mosquito lure from its pouch and be careful not to touch the exposed holes on its surface. Place the lure inside the Trap in the position shown in figure 7 below. Replace and lock the Door and remove the Key for child safety. Reconnect power. Wash your hands after this procedure has been completed.

## FIG. 7 – Placement Position for Mega-Catch™ Mosquito Lure



Place Mega-Catch™ mosquito lure in the trap as shown.

Mega-Catch™ mosquito lures should be effective for up to 30 days depending on weather conditions. Mega-Catch™ mosquito lures are a consumable accessory item and can be obtained from your Authorized Distributor or online at www.megacatch.com.

**NOTE:** Mega-Catch™ mosquito lures may not be available yet in your country for regulatory reasons.

ATTENTION: Keep Mega-Catch™ mosquito lures out of reach of children. Read directions and Important Safety Instructions carefully before use.

#### 2. Battery Terminal Power Cable

The Mega-Catch™ Mosquito Trap can be operated from a 12-volt car battery as a power source using a factory-approved Power Supply Cable complete with positive and negative alligator clips.

#### 3. Cigarette Lighter/Car Accessory Terminal Cable

The Mega-Catch™ Mosquito Trap can be operated from your vehicle's accessory terminal using a factory-approved Accessory Cable.

## 4. CO<sub>2</sub> Upgrade Kit

Mega-Catch™ also offers its own carbon dioxide attractant system using its patented "Variable Quantity Slow  $CO_2$  Gas Release System". The latest version of this system is now a standard feature on all Mega-Catch™ **Pro 900 Series ULTRA** model Traps. The  $CO_2$  Upgrade Kit upgrades the **Pro 900 Series PREMIER** XC to **Pro 900 Series ULTRA** trap specifications to include Mega-Catch's™ patented  $CO_2$  gas attractant system (for more information see online at http://www.megacatch.com/co2gassystem.html ).

Use of this attractant system is entirely optional i.e. while the system is designed to increase capture rates it is not essential to the effective operation of the Trap.

#### 5. Extension Cord

The Mega-Catch™ Mosquito Trap comes with a 60 foot(18 metre) low voltage Extension Cord. The Trap can be operated with up to 2 x 60 foot(18 metre) low voltage Extension Cords providing a placement range of up to 120 feet(36 metres) from the power source.

#### 6. Weather Proof Cover

To shelter your trap from the weather when not in use a Mega-Catch™ Weather Proof Cover is available.

#### 7. Fine Mesh Catch Bag

A Mega-Catch™ Fine Mesh Catch Bag can be used when trying to capture very small biting insects such as no-see-ums.

## **Maintenance and Repair of Your Trap**

Opening the two halves of the Mega-Catch™ Mosquito Trap will be necessary for the following purposes:

- Replacement of U.V. Tube.
- Annual service (At the end of each season, the Internal Plates, reflective Heater Element and Fan should be cleaned using warm soapy water and allowed to dry thoroughly).
- Battery replacement (The Control Box contains a Lithium Coin Cell Battery that provides power to the Trap's memory storage for recording the Trap settings). When the battery reaches the end of its useful life it will require replacement and then must be disposed of correctly. For assistance contact info@megacatch.com.

## Opening the Trap (see to figure 8.1):

ATTENTION: Always disconnect the power to your Mega-Catch™ Mosquito Trap before opening the Trap.

The two halves of the Trap are held together with 12 stainless-steel screws and nuts - six facing one way and six the other way.

Place the Trap on a table ensuring the LCD module is on the side facing down. Remove the six screws facing toward you using a Phillips screwdriver.

Then turn the Trap over (so that it is "LCD module" up) and remove the remaining six screws.

Then lift the top half of the Trap away from the bottom half as if it was hinged at the top. The top half should now be "LCD module side" down on the table and still connected to the bottom half by electrical cables.

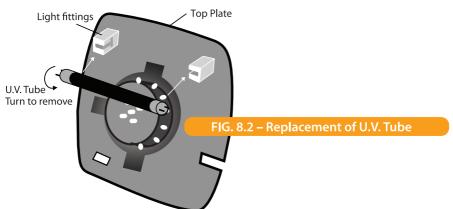
The Top Plate holds the Control Box and the U.V. Tube and holders (both underside of Top Plate).

The Bottom Plate holds the reflective Heater Element (upperside of Bottom Plate) and the Fan (underside of Bottom Plate).

## Replacement of U.V. Tube (see to figure 8.2):

Remove the U.V. Tube by twisting the tube gently until it is able to be removed. Then slot a new U.V. Tube into the connector ends and twist the tube gently until it is firmly in position.

## Top half of FIG. 8.1 – Opening the Pro 900 Series PREMIER XC Trap trap containing LCD Module U.V. cable (Purple) Control Box LCD Module ribbon cable (grey) Black cubes indicate Power cable plug/socket (red/black) connections Bottom half Heater cable of trap (Orange) Top plate mounts into top slot in body Fan cable (Green/White) Bottom plate mounts into lower slot in body Top Plate Light fittings



#### Reinstallation of Plates:

You should not have any reason to remove the plates from the Trap. If however you do, merely slot the plates back into the ribs so that the Control Box is on the under-side of the Top Plate and the Fan is on the under-side of the Bottom Plate. There are arrows on each plate that point to the bottom half of the Trap (i.e. the half that does not contain the LCD Module). To aid with reassembly there are also colored locator dots on the top of the plates and inside the rear of the trap. Align the green dot on the Top Plate with the green dot inside the trap rear and the yellow dot on the Bottom Plate with the yellow dot inside the trap rear.

## **Connection of Wires:**

You should not have any reason to remove any of the electrical connections. If however you do you should note all electrical connections are by push-in pin connectors. Cables are color coded so it is easy to determine which plug connects to which socket (see figure 8.1).

## Re-assembly of Trap:

Fitted to the groove around the top inner surface of the Trap is a rubber seal. This seal pushes into place for weather protection and should be reinstalled prior to final assembly of the Trap. The seal is formed to the shape of the trap. Check the seal is undamaged before it is reinstalled and the Trap is re-assembled.

With the Top and Bottom Plates in place replace the "LCD Module side" or top half of the Trap ensuring that each plate slots into the locating ribs. The 12 screw holes should now be aligned for replacement of the screws. Carefully screw in the screws.

**NOTE**: Do not overtighten the screws. This could cause the nuts to rotate and damage the pre-formed hexagonal pockets in the plastic housing.

## **Frequently Asked Questions**

- 1. How soon should the Mega-Catch™ Mosquito Trap begin to catch mosquitoes? While the Mega-Catch™ Mosquito Trap has been designed to catch immediately there is any mosquito activity in the vicinity, it may take as much as 6-8 weeks of use to reduce local populations to the point that breeding cycles are interrupted. Subsequent re-infestations will probably occur after rain.
- 2. Will my Mega-Catch™ Mosquito Trap get rid of all the mosquitoes in the area? No. There is no single silver-bullet to eliminate mosquitos. The best you can do is devise an effective mosquito management plan for your area, using the best available control strategies, including one or more Mega-Catch™ Mosquito Traps.

## 3. How often do I need to operate my Mega-Catch™ Mosquito Trap?

Before using your Mega-Catch™ Mosquito Trap note the time of day when mosquito activity is greatest. If, for example, this is in the morning and the evening, then you should set the Trap (using the LCD Module) to operate at these times. Where your mosquito problem involves night time biters, we recommend operation of the Trap between 7pm and 11pm and 4am and 8am. If mosquito activity is all day, then you may need to operate the Trap 24 hours per day until the mosquito population declines.

## 4. How many traps should I buy for around my house?

This depends on the size of your property. Generally we recommend one or two Traps depending on the number and location of mosquito breeding areas on your property. A Mega-Catch™ Pro 900 Series PREMIER XC Mosquito Trap can, in favorable weather conditions, attract mosquitoes from up to 120 feet(36 metres) away.

## 5. Will Mega-Catch™ Mosquito Traps catch biting flies?

In adition to mosquitoes the Mega-Catch<sup>m</sup> Pro 900 Series PREMIER XC Mosquito Trap will catch sandflies, black flies and biting midges (no-see-ums) and many other types of biting insect.

## 6. Can I stop my Mega-Catch™ Mosquito Trap from catching moths?

The Mega-Catch<sup> $\mathrm{M}$ </sup> Pro 900 Series PREMIER  $\mathrm{XC}$  Mosquito Trap incorporates a low-intensity U.V. Tube and U.V. LEDs which emit light at frequencies our research has shown to attract certain mosquito species. Unfortunately they can also attract small quantities of non-target species like moths. If this is a problem, the U.V. Tube can be switched off and/or the U.V. LED intensity reduced, or turned off, via the LCD Module.

## 7. What should I do if my Trap isn't catching mosquitoes?

First check that your trap is operating properly, ie the lights and fan are working and the external skirt has been positioned correctly. Secondly remember that catching mosquitoes is like fishing. There are over 3,500 mosquito species worldwide (and probably as many as 30 species in your locality) so you may need to experiment to optimize the performance of the trap in your location. See separate sheet headed "Mosquito Trap Optimization" for recommendations on optimizing the performance of your trap. Finally, if you are still having problems email us at info@megacatch.com.

## 8. Does my Mega-Catch™ Mosquito Trap use much power?

No. When operating , the Mega-Catch  $^{\rm m}$  Pro 900 Series PREMIER  $\mathcal{XC}$  Mosquito Trap uses less power than a 40 Watt light bulb

## **Problem Solving**

| DESCRIPTION of PROBLEM                                  | CHECKS  |  |
|---|---|--|
|   | Check that the Trap is turned on (see page 8, Operation of the LCD Module section).   |  |
| Trap fails to operate                                   | Check that the Power Cable is properly connected to both the Trap and the mains, and that the power is switched on. Try plugging the Trap into a different wall socket power outlet.            |  |
|   | Check that the power cable has not been damaged, e.g. by a lawn mower or animals (squirrels, dogs or racoons etc).  |  |
|   | Check that the Timer, if set to operate(see page 11, <b>Setting the Timer</b> section), is set to operate at the time you are checking its operation.   |  |
| Lights in the Trap come on but the Fan fails to operate | Check whether there has been a build up of<br>material in the Fan and/or Fan Safety Guard<br>which is preventing the Fan blade from turning<br>(see page 18, <b>Care of Your Trap</b> section). |  |

If these steps fail then email us at info@megacatch.com - or call the Service Centre number shown on the separate Warranty Certificate.

NOTE: Do not attempt to access the internal electronic components of your Mega-Catch™ Mosquito Trap. Opening of sealed units will void your warranty.

## **Need Help?**

For service, repair or any questions concerning Mega-Catch™ products, email us at info@megacatch.com - or call the Service Centre number shown on the separate Warranty Certificate. Do NOT return products to the place of purchase. Do NOT return products to an Authorized Distributor. You may also want to consult our website: www.megacatch.com.

## **Specifications**

Power Source
Input 100-240 VAC, 50/60 Hz
Output 12 VDC, 42 Watt

U.S. Design Patent No:

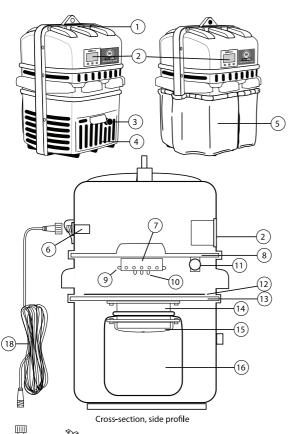
U.S. Patent Pending

U.S. Trade Mark Reg. No: 2,679,688 Canadian Trade Mark Reg. No: TMA 623,018

449,091



## **Parts List**



| Description | Part No. |
|-------------|----------|
|             |          |

| 1. | Mega-Catch™ Pro 900 Series<br>PREMIER XC Mosquito Trap |           |
|----|--|-----------|
| 2. | LCD Module   | MC-PU01.1 |

3. Key MC-PU2084. Lockable Door MC-PU203

5. External Skirt MC-PU112

6. Power Connection MC-PU107. Control Box MC-PU05

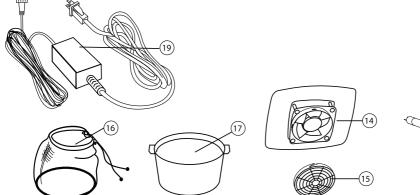
8. Top Plate MC-PU205

9. U.V. Light Emitting Diodes (LEDs)

10. Central LED Cluster

19. Power Supply

11. U.V. Tube MC-PU2 12. Heater Element MC-PU211 13. Bottom Plate MC-PU206 14. Fan Unit MC-PU210 15. Fan Safety Guard MC-PU209 16. Catch Bag MC-PU111 17. Liquid Catch Container MC-PU204 18.60ft Extension Cord MC-PU7



MC-PU246



Product made in China for: EnviroSafe Technologies International Limited Unit 10, 6 Omega St, Albany Auckland, New Zealand info@megacatch.com www.megacatch.com

 $Mega\text{-}Catch^{\text{\tiny{TM}}}\ is\ a\ trademark\ of\ EnviroSafe\ Technologies\ International\ Ltd.$