



**MCS PRODUCTS** 

INNOVATORS IN AUTOMATED OUTDOOR INSECT MISTING SYSTEMS

ESTABLISHED 2003 LOCALLY OWNED AND OPERATED MADE IN AUSTIN, TEXAS

#### **ABOUT US**

MCS Products has over 20 years experience in development, installation, support, and maintenance of Automated Outdoor Insect Misting Systems and High Pressure Mist Cooling Systems. We offer unique products that are made in the USA, dependable and extremely effective. MCS Products is committed to customer satisfaction! Over the years we have supported a large customer base of Pest Control Professionals, Landscapers and high-end residential and commercial customers that have helped us design rugged systems that stand the test of time. We have found that using high-quality products, designed specifically for heavy and long-term use, give the best possible results. We offer competitive pricing and the majority of our products can only be purchased directly through us and are not available through any other distributor or wholesaler. We offer great Vendor Support, including free design help, technical assistance. This gives us a huge advantage over other manufacturers who have never spent time in the field.

We stand behind our products because we know they are the best in the industry!

Our years of experience make us the best choice when it comes to choosing a reliable, results-driven product, and the support vendors need to be successful!

WE CAN TELL YOU ALL DAY ABOUT HOW GREAT OUR SYSTEMS ARE, BUT AFTER INSTALLATION WE THINK YOU'LL AGREE THE SYSTEMS SPEAK FOR THEMSELVES.





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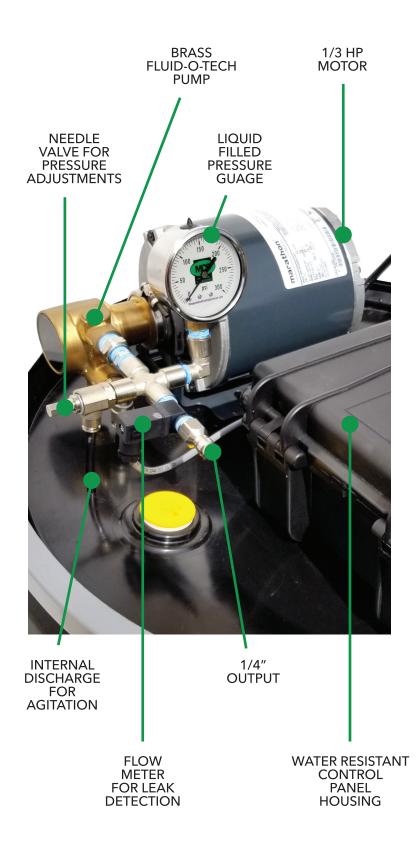
- 1/3 Hp Thermally Protected Motor
- Brass Fluid-O-Tech Pump
- Digital Timer
- Battery Back-Up
- LED Back Lit Control Panel Housed Inside Water Resistant "Pelican" Enclosure
- Remote Control Fob (Platinum Only)
- 60 Mesh / 250 Micron Strainer
- 10' Grounded Power Cord
- 120V/15 Amp Grounded Outlet Required
- 1/4" Push to Connect Output
- 24" Diameter 38" Height
- Nickel Plated Manifold
- Waterproof Cover
- Molded 55 Gallon Drum
- Lockable Lid
- User Friendly Operation
- Adjustable Pressure with Needle Valve
- Spray According to Volume or Time
- U.S. or Metric Units
- 12 or 24 Hour Clock
- Leak Detection
- Internet Connection (Smart Platinum Only)
- Fuse Protected Circuitry





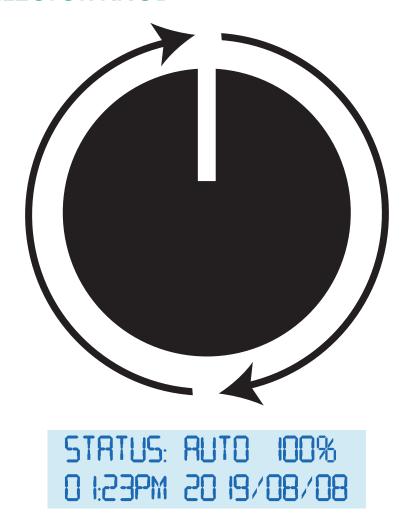








#### **USING THE SELECTOR KNOB**



#### TO OPERATE THE SYSTEM:

- Turn the selector knob to the desired screen position.
- Press the selector knob to activate changes.
- Turn the selector knob to change the desired field setting.
- Press the selector knob to save the changes.



# PLATINUM SYSTEM SCREEN INFORMATION

#### **SCREEN 1 | STATUS:**

This screen shows the system status, barrel level, and time and date. This screen lets you know if there are any problems with the system.

STATUS: AUTO: 100% 0 1:23PM 20 19/08/08

#### **SCREEN 2 | VERSION:**

This tells you the system software version you have and system serial number.

MES SW NERSION 1.4 S/N: FFFFFFF

#### SCREEN 3 | MODES:

Press the selector knob to change the setting. Select **AUTOMATIC** to run the set application times. Select **REMOTE ONLY** to allow the system to come on only with the use of a remote. Select **OFF** to disable system. Press the selector knob to save the setting.

SET: APPL MOJE
AUTOMATIC

#### SCREEN 4 | APPL METHOD:

Select **TIME** for all timed applications most common setting. Select **VOLUME** for volume controlled applications (advanced users only).

SET: APPL METHOD
TIME

#### SCREEN 5 | APPL DURATION:

In the **TIME** mode, rotate the selector knob for the desired number of seconds. The system has a 60 spray time by default. Press the selector knob to save the desired setting.

SET: APPL JURATION 60 SECONJS



#### **SCREEN 6 | APPL VOLUMES:**

If running system according to *TIME*, this screen is disregarded. If you have chosen to run your system according to *VOLUME*, set the desired spray here. Remember to save your setting prior to exiting. **VERY IMPORTANT:** If running the system on *VOLUME*, you will need to calculate the volume based on the number of nozzles you have and enter that volume here for your system to operate correctly. You first have to go to the *TECH MODE* to calculate your volume and return to this screen and enter your volume based on your spray time.

SET: APPL NOLUMES 16 DUNCES

#### **SCREEN 7 | APP TIMES:**

You have up to 12 different spray setting times to choose from. Your system will come with two settings from the factory, 12:00 midnight and 6:00 am are preset. You can add up to 10 more auto spray times by cycling through the settings and saving them 2-3 times per day are sufficient for most applications.

SET: APPL TIME #0 I I2:00AM ON

#### SCREEN 8 | TIMES AND DATE:

Use this screen if you need to adjust your time or date.

SET: TIME-DATE
0 1:23PM 20 15/08/08

#### SCREEN 9-14 | SYSTEM ALARMS

Cycling through the screens 9-14 will give you the status of the system. Your system has several built in alarms to let you know if there are any problems with the system.

**ALARM BARREL** indicates an empty system.

ALARM FLOW RATE indicates low or high flow detected.

**ALARM CLOCK** indicates problem with the internal clock.

ALARM BATTERY indicates internal batteries need to be replaced. (Two AA batteries required.)

ALARM FUSE indicates internal fuse needs to be replaced.

**ALARM INTERNAL** indicates the need to check internal circuitry.

SET: BARREL



# PLATINUM SYSTEM SCREEN INFORMATION

#### SCREEN 15 | TECHNICIAN MODE:

#### LOGIN

The system is preset with login code of **0000** (this can be changed, but not recommended). Enter **0000** by pushing down on the selector button.

#### **BARREL ALARM**

Reset when empty.

#### **BARREL CAP**

Preset to 55-gallon system do not change.

#### BARREL LEVEL

Reset this screen to **100%** each time you refill your system.

#### **BATTERY ALARM**

Detects low battery.

#### **CHANGE PIN**

Changes the PIN number if desired.

#### **CLOCK ALARM**

Detects clock malfunction.

#### **DEFAULT**

Restores the system to preset defaults.

#### **FLOAT SWITCH**

Use only if float switch installed from manufacture preset to none.

#### **FLOW ALARM**

Detects low or high flow.

#### **FLOW DELAY**

Allows the system a delay before determining if there is a leak. If you live on a terraced property, make sure and set this to 20 seconds. This will allow the line to properly fill and pressurize before triggering a high flow alarm.

#### **FLOW RATE**

Displays measured flow rate of system. See page 10 for instructions. This step must be done for **LEAK DETECTION** feature to function properly.

#### **FUSE ALARM**

Detects internal fuse problems.

#### INTERNAL ALARM

Internal malfunction.

#### REM CONTROL

Push to learn or remember new remote control. You will see ! when system has learned new remote control code.

#### **RESET ALARMS**

Resets all alarms.

#### **TECH LOGOUT**

Takes you back to the home screen.

#### **TFST**

Tests the system flow rate parameters.

#### TIME FORMAT

Choose 12 or 24-HOUR clock.

#### **VOLTAGES**

12.9v 5.4v 3.4v normal ranges.

#### **VOLUME/UNITS**

Choose **US** or **METRIC**.



#### FLOW RATE INSTALLATION & SYSTEM NOTES TO CALCULATE FLOW

- Enter TECHNICIAN MODE.
- Go to the **FLOW RATE** screen.
- Allow the system to run for about 60 seconds. During this time check all connections and nozzles and make sure there are not leaks in the system.
- At the end of this time, your number on your display will have stabilized and calculated your normal output of flow. This number is based on the number of nozzles you have on your system. Each nozzle will spray approx. 1-1.5 ounces per minute, so with a 40 nozzle system your normal flow should be between 40 and 60 ounces per minute. Once this number has stabilized, make sure and save your flow. Your system will use this number to determine if there is high flow, in the event of a leak, or low flow, in the event that many of your nozzles are clogged.
- If you do not get a stable or constant number while calculating the flow, or if you get an unusually high number, you probably have a leak. Check off fittings and nozzles to ensure your system is operating properly.
- If a problem persists, recheck all fittings and nozzles, correct the problem and report the above steps.
- To disable this leak detection feature, simply go to the *FLOW METER* screen and set to *NONE* and save.
- If a problem persists, recheck all fittings and connections, correct the problem, and repeat the above steps.
- Once satisfied that the system is operating properly and there are no leaks, unplug, add desired insecticide, and fill to the top with water.
- Note the 55 gallon mark inside the tank, it is about 1-2" below the top of the lid, do not overfill, do not leave the system unattended while filling, keep the motor and control box dry. (Water damage is not covered by the system warranty.)
- Once full, and your app volume is set, your system is now ready to operate.
- Close timer box cover. Place weatherproof cover over system.
- Make sure that the cover is properly seated in the groove around the top of the reservoir to assure that it will not blow off.
- If desired, you can put a lock on the timer box and the ring around the reservoir to help prevent tampering or unauthorized entrance.



# REMOTE CONTROL SET UP AND INSTALLATION

#### TO SET UP THE REMOTE CONTROL TRANSMITTER ADDRESS

The address is changed by using a paper clip or probe to press the CREATE\_ADDR button on the board through the hole in the back of the case. When the button is depressed, an LED lights up on the front of the key fob, indicating that the address is being created. The address is randomized for as long as the button is held down. When the button is released, the randomized address is saved and the LED begins flashing to indicates that the Control Permissions may now be set. Go to the settings that the key fob user will have the authority to access. Press the CREATE\_ADDR button with the paper clip again or wait 17 seconds for it to time out. The address and Control Permissions are now set. The controller needs to learn the address before it accepts any transmissions.

Press the selector knob to go through all four zeroes on the second line. Rotate the selector knob to the status screen shown below.

LOGIN: TECHNICIAN 0000

Press the selector knob until *LISTEN* becomes *ERASE*, then press the selector knob. *ERASE* will start flashing. This will erase the previously stored code.

TECH: REMOTE
LISTEN LISTENING

TECH: REMOTE ERASE ERASING

Rotate the selector knob to LEARN. Depress the gray button on the remote. There will be an exclamation point *!* indicating the system is learning.

TECH: REMOTE
LEARNING!

When the exclamation point turns off, the system has learned the new code. Exit the remote setup by rotating the selector knob to the *TECHNICIAN LOGOUT* screen. Press the selector knob to logout of *TECHNICIAN MODE*.

TECH: LOGOUT
PRESS TO LOGOUT

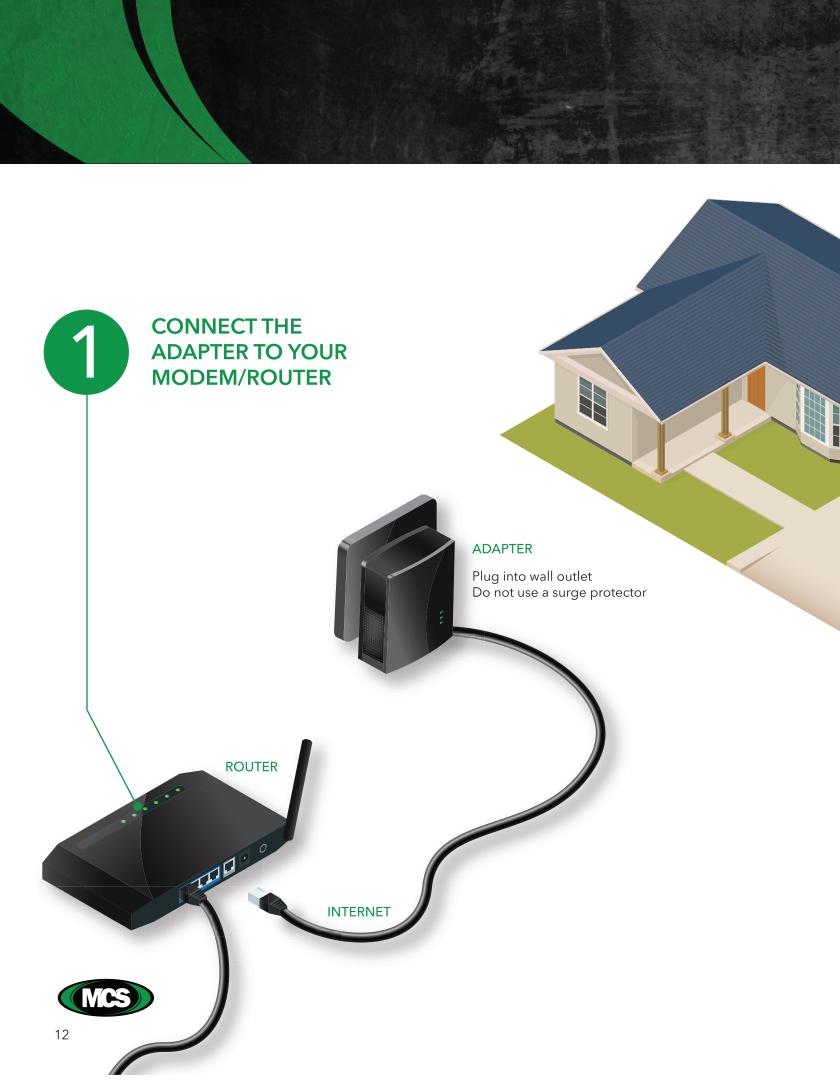




**LED LIGHT** 









## YOUR SYSTEM IS NOW CONNECTED EASY AS 1-2-3

Next download our app to manage your system.

Your installer will connect to our site to view and monitor your system.





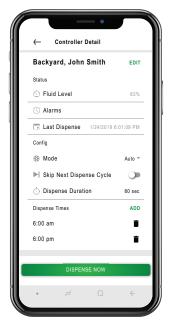
## EXCLUSIVE TO OUR SMART PLATINUM SYSTEM

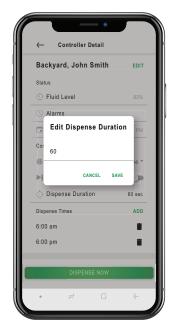
The app is available for download for both Android and iOS devices. For Android users, visit the Play Store. For iOS users, visit the App Store.

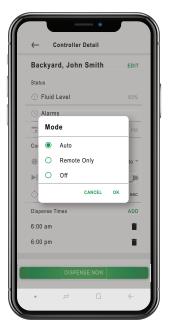
Search for Mosquito Control System and look for the MCS logo. After downloading the app, login with the information your installer provided.











#### DIRECTIONS FOR USING THE MOSQUITO CONTROL SYSTEM APP:

Our app gives a snapshot of your system. Once logged in you can see the fluid levels or if any alerts have been triggered allowing you and your installer to be proactive in servicing the system.

Both the installer and customers can sign up to get text or email messages in the event any alerts are triggered. Such as low flow, high flow, fluid levels, and power outages again allowing for the installer to be proactive in servicing systems.

- **FLUID LEVEL:** Displays remaining amount of fluid in your tank.
- **ALARMS:** Any alarm conditions will be displayed here.
- LAST DISPENSE: Will display last time the system was activated.
- MODE: Choose between *AUTOMATIC*, *REMOTE CONTROL ONLY* and *OFF*.
- SKIP NEXT DISPENSE CYCLE: Skip next auto spray time.
- **DISPENSE DURATION:** Set how long the system will spray for. The recommended dispense duration is 45 to 60 seconds.
- **DISPENSE TIMES:** Add desired auto spray times.
- DISPENSE NOW: Active remote spray cycle.

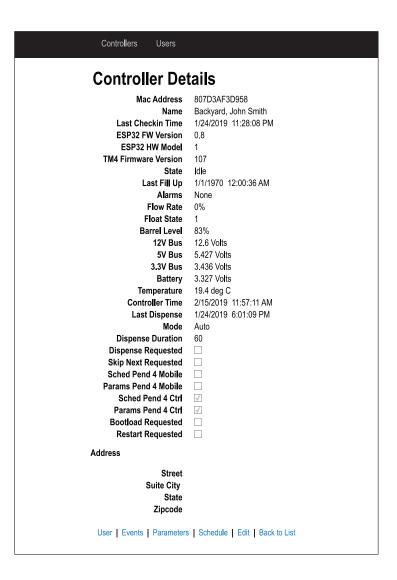


# MCS SMART SYSTEM BENEFITS FOR VENDORS AND INSTALLERS

With the new MCS Smart Platinum System, installers will be able to monitor and adjust almost every aspect of the mosquito misting system. You will be able to login to the installed systems control panel via a desktop or laptop computer. Once logged in to the control panel you will be able to view all your customer's systems and monitor them from the online dashboard. This new system and features will allow you to:

#### **MONITORING:**

- 24 Hour monitoring of the misting system and full capability to add or modify settings remotely.
- The desktop dashboard will allow active monitoring and control of all systems installed, including fluid levels and any triggered alerts on the systems. Allowing installers to be proactive in the servicing of their systems.
- Monitor the status of the systems "alert" function. The alerts will go off if the system is low on fluid, power outages, and low and high flow alerts.







#### **SCHEDULING:**

 Schedule refills only when the tank is empty, making partial refills and unnecessary service calls a thing of the past.

#### **SERVICING:**

The advanced monitoring the system has will allow you to be proactive in servicing the systems instead of waiting for the customer to call you with an issue, you will already be aware of the problem. You can then proactively schedule service calls if needed.

#### **SETUP:**

The new Smart
Platinum System is
also very user
friendly! You will
enjoy the ease of
setting it up, there
are no hard to follow
instructions or
directions, it's very
akin to "plug and
play"!

Controllers	Users				Hello smar	lsystem@mosquitoo	controlsystems.com	Log out
Mac Address	Name	User	Barrel Level	Alarms	Last Checkin Time	TM4 Firmware Version	Controller Time	Manage
2B60AE595697	Clarke, Jimmy	jclarke@gmail.com	91%	None	8/27/2019 3:04:00 PM	114	8/27/2019 3:04:24 PM	User   Edi UpdateFV Restart
796C2ZE6E357	Curry, Paige	paige_curry@gmail.com	17%	BarrelLow	8/27/2019 3:04:16 PM	114	8/27/2019 3:04:22 PM	User   Edi UpdateFV Restart
BB492ZD4Z4B1	Frazier, Rose	roseanddon@icloud.com	28%	None	8/27/2019 3:04:20 PM	114	8/27/2019 3:04:26 PM	User   Edi UpdateFV Restart
2B60AE595CZ9	French, Luke	Ifrench90@gmail.com	63%	None	8/27/2019 3:04:19 PM	114	8/27/2019 3:04:25 PM	User   Edi UpdateFV Restart
2B60AE5953B7	Hoffman, Larry	texaslhoffman@gmail.com	81%	None	8/27/2019 3:03:29 PM	114	8/27/2019 3:04:23 PM	User   Edi UpdateFV Restart
BB49D2ZD5927	Johnson, Kyle	jouhnsonk09743@gmail.com	99%	None	8/27/2019 3:04:06 AM	114	8/27/2019 3:04:26 PM	User   Edi UpdateFV Restart
2B60AE5953BB	Kelley, Harris	harrisutalum@yahoo.com	99%	None	7/3/2019 10:41:56 AM	114	7/3/2019 3:04:24 PM	User   Edi UpdateFV Restart
2B60AE5955E7	Mack, Liam	Imackattack@gmail.com	98%	None	7/3/2019 10:32:41 AM	114	7/3/2019 3:04:25 PM	User   Edi UpdateFV Restart
2B60AE59555B	Romero, Irene	ireneandbob@gmail.com	93%	None	8/27/2019 3:03:49 PM	114	8/27/2019 3:04:23 PM	User   Edi UpdateFV Restart

Controller Ev	tiilo	
Mac Address Name	807D3AF3D958 Backyard, John Smith	
Time		Туре
1/24/2019 12:01:09 PM		DispenseCompleted
1/24/2019 12:00:14 PM		DispenseInitiated
1/24/2019 11:41:42 AM		DispenseCompleted
1/24/2019 11:40:48 AM		DispenseInitiated
1/24/2019 6:25:33 AM		DispenseCompleted
1/24/2019 6:24:38 AM		DispenseInitiated
1/24/2019 5:58:58 AM		DispenseCompleted
1/24/2019 5:56:58 AM		DispenseInitiated



### INSTALLATION INSTRUCTIONS

#### FOLLOW THESE INSTRUCTIONS FOR INSTALLING A PLATINUM SYSTEM:

- Make sure the system is plugged in and has power. In addition, the installer will install a power line adapter inside your home or office. There is a secondary power line adapter installed in your smart platinum system inside the control box.
- Plug the power line adapter into an existing power outlet near a modem or router. It is important not to use a surge protector with the power line adapter as the protection devices can cause interference. Using a short 1ft extension is allowed.
- After the power line adapter is plugged into an appropriate power outlet, the installer will connect the supplied network cable from the modem or router to the power line adapter. This will allow the smart platinum system to connect to the internet.
- The installer will verify connectivity of the power line adapter. There are three lights on the power line adapter. The top light indicates the unit has power. The second light indicates if another power line adapter is communicating. If the second light is not on, the installer will need to press the **PAIR** button on the power line adapter inside the home or office, then repeat this on the power line adapter in the smart platinum system's control box. This button is accessible through a hole on the right side of the control box.
- Once the second lights are on for both power line adapters, verify that the third light, which indicates a connection to the internet, is on. This should be on for both power line adapters. After all three lights are on, the system is ready to use.
- First step for the user is to download the Mosquito Control System app from either the Play Store for Android users or the App Store for iPhone users. They simply search for Mosquito Control System and download the app with our orange and green logo.
- Next login to the app with the supplied email and password. When a customer orders a system, MCS will create an account using their email. MCS will give them a generic password that they can change if they wish. When the customer orders a system, it should be explained that notifications can be sent through text or email and to find out the customer's preference.
- After log in, the system is ready to use. The installer should show the customer the different features and how to set their spray duration and spray times.





BEFORE USING ANY CHEMICAL OR PESTICIDE, READ THE LABEL FIRST.

USE ONLY ACCORDING TO THE LABEL. USE PROPER EYE AND SKIN PROTECTION, ACCORDING TO THE LABEL WHEN FILLING RESERVOIR.

USE OF UNAPPROVED PRODUCTS WILL VOID THE WARRANTY AND WILL CLOG NOZZLES. AGAIN, FILL THE RESERVOIR APPROXIMATELY 2 INCHES FROM THE TOP.

DO NOT SET TIMER TO OPERATE AT TIMES WHEN PEOPLE OR PETS ARE LIKELY TO BE PRESENT. USE THE REMOTE FOR THESE TIMES. WE RECOMMEND TWO SETTINGS FOR 30 SECONDS (12:00 AM AND 5:00 AM ARE COMMON SETTINGS) USE REMOTE FOR DAYTIME SPRAYS.

ALTHOUGH THE AVAILABLE PRODUCTS ARE CONSIDERED LOW IN TOXICITY, DO NOT ACTIVATE THE SYSTEM WHEN PEOPLE. FOOD OR PETS ARE PRESENT.

REMOTE CONTROL USE SHOULD BE DONE FROM INSIDE THE PROPERTY, AND IN AN AREA NOT EXPOSED TO THE MIST. AFTER USING THE REMOTE WAIT AT LEAST 5 MINUTES BEFORE RE-ENTRY OR UNTIL ANY RESIDUAL MOISTURE HAS DRIED.



# REFILLS & WINTERIZATION

#### **REFILLING THE SYSTEM:**

Your system is equipped with a flow meter and will need to be reset after each refill.

- After refilling your tank enter **TECH MODE**. Proceed to **BARREL LEVEL** and reset the value to 100%.
- When your system is empty it will make 4 attempts to spray.
- After 4 **NO FLOW** alarms, your system will shut itself off to prevent damage to the pump.
- When your system is empty contact your installer or us and order your choice of refill product.

#### APPROXIMATE REFILL FREQUENCIES

30 Nozzles / 2 Cycles per day 55 gallon tank will last approximately 70 days 40 Nozzles / 2 Cycles per day 55 gallon tank will last approximately 60 days 50 Nozzles / 2 Cycles per day 55 gallon tank will last approximately 50 days

#### **WINTERIZATION:**

In areas subject to freezing temperatures your system will need to be made ready for winter. Follow these instructions to protect your system from freezing conditions.

- Do not use system when temperatures are expected to drop below freezing.
- Try to time it so that your tank will run empty just before the average first freeze date for your area. This date can be identified by a simple internet search. Most average systems with 40 nozzles, spraying 2 times per day will last approximately 60 days between refills.
- If necessary, drain any excess water in lines by removing last nozzle and using an air compressor to blow any excess fluid out of the lines.
- Remove lid, remove suction filter, and insert suction line into bottle of environmentally friendly anti-freeze.
- Lift float switch to upright position.
- Turn system control switch to "On".
- Run system for approximately 45-60 seconds to fill line with anti-freeze product.
- Turn system control switch to "Off" position.
- Unplug system and replace cover.
- Your system is now ready for winter.
- For areas with extended winter months it is best to drain system and move to protected area.



## TROUBLESHOOTING GUIDE

If you have any problems with your system refer to this guide. Most problems are easily resolved. Remember you can always contact us via email for a quick answer to any questions you may have.

PROBLEM	PROBLEM CAUSE	REMEDY
System will not start	No power from outlet	Test outlet to make repairs
System only sprays for 5 seconds	Flow meter	Reset flow meter
Low pressure	<ul><li>Leak in connection</li><li>Cut line</li><li>Clogged intake filter</li></ul>	<ul> <li>Check all connections</li> <li>Run system look for wet spots</li> <li>&amp; repair damaged line</li> <li>Clean/replace filter</li> </ul>
Nozzle not spraying	Clogged Nozzle	Replace/Clean nozzle
Nozzle leaking	Bad nozzle	Replace/Repair nozzle
Blank screen	System needs reset	Unplug system for 30 seconds
Black screen	System needs reset	Unplug system for 30 seconds
No pressure	<ul><li>Bad or damaged pump</li><li>Bad or damaged Motor</li><li>Clogged suction filter</li></ul>	<ul><li>Repair/Replace pump</li><li>Repair/Replace motor</li><li>Repair/Clean motor</li></ul>
Remote not working	Low or bad batteries	Replace batteries



#### SYSTEM WARRANTY

## MOSQUITO AND COOLING SYSTEMS LLC ONE-YEAR WARRANTY

Thank you for purchasing this high quality system. Your system was hand made one at a time using the best parts and materials available. Regardless of our high standards, we understand that there could be issues with the parts or pieces of this system. We stand behind our products and offer a 1-year limited warranty. This warranty covers any defects in materials or workmanship of the enclosed product.

Mosquito and Cooling Systems, LLC will repair or replace any defective materials due to craftsmanship of the product. This warranty does not cover any problems caused by misuse, abuse, accidents or acts of God, such as floods or hurricanes.

Water damage is not covered by this warranty.

Pump damage due to running pump without fluid is not covered.

Consequential and incidental damages are not covered.

Mosquito and Cooling Systems Warranty are limited to the cost of system replacement. Coverage terminates if you sell or otherwise transfer ownership.

If you feel you have a defective product please submit a copy of your receipt to the address below and send an email to the address below for instructions.

Email us PRIOR to returning this item to the store or sending it back. A return number is required before any returns will be accepted. Many warranty items can be fixed without returning the entire system.

We will inspect the product and contact you within 72 hours to give you the results of our inspection. We reserve the right to repair the product at our discretion. However we may replace the product with one of similar but not exact features.

This warranty gives you specific legal rights and you may have other rights that vary from state to state.



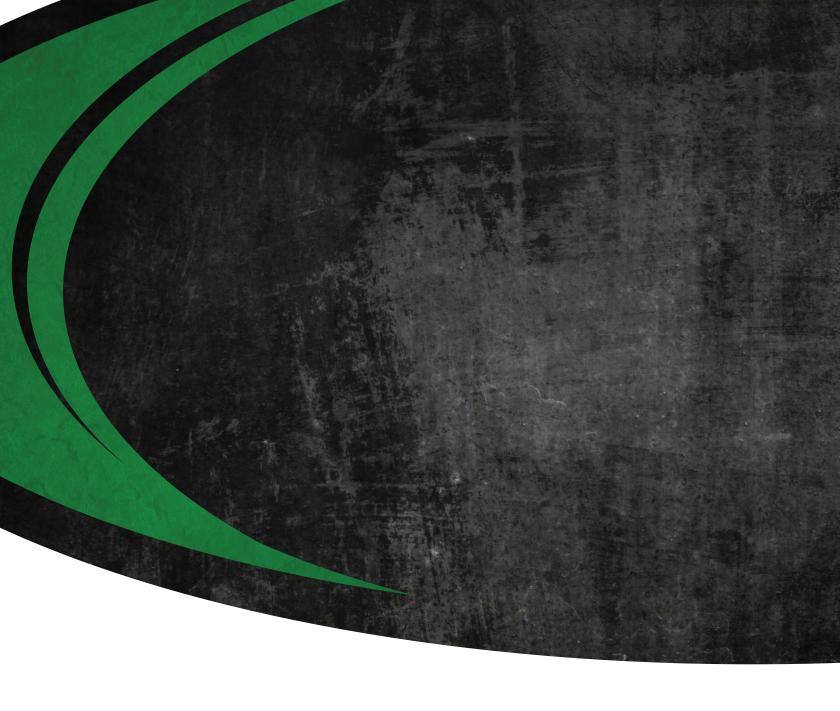
## PRODUCT REGISTRATION

#### TO REGISTER YOUR SYSTEM, FILL OUT THE FORM BELOW AND MAIL IT TO:

MCS Products 13200 Pond Springs Rd Suite A-106 Austin, TX 78729

NAME
ADDRESS
CITY
STATE
ZIP
PHONE
EMAIL
PRODUCT SERIAL NUMBER
PURCHASE DATE







## THE ONLY PERMANENT LONG TERM SOLUTION FOR MOSQUITO CONTROL

ESTABLISHED 2003 LOCALLY OWNED AND OPERATED MADE IN AUSTIN, TEXAS

13200 POND SPRINGS ROAD, SUITE A-106 AUSTIN, TEXAS 78729