MistAway™ systems
Outdoor Insect Control

Drum-based Misting System

Operating Manual

The Cure for What Bugs You!℠

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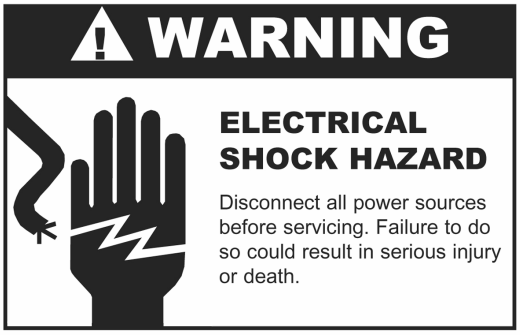
The MistAway™ Drum-based Misting System

INSTALLATION & SET-UP GUIDE

APPENDICES

WARNING

DO NOT ACTIVATE SYSTEM WHEN PEOPLE, PETS, FOOD OR FEED ARE PRESENT!



The MistAway™ Drum-based Misting System

This Installation Guide details the 15 steps needed to successfully install the MistAway™ Drum-based Misting System.

During the installation process you will need to frequently navigate the Misting System's digital controller.

To access the controller menu, simply press the gray "MENU" button on the controller. The cursor, a small triangle, will start flashing on the left side of the controller window. Turn the SELECT knob to align the cursor with the appropriate menu path and then push the SELECT knob to enter that menu path.

Pressing "MENU" or the red "STOP" button will exit the menu path and return to the main screen.

1 Assemble the Drum-based Misting System

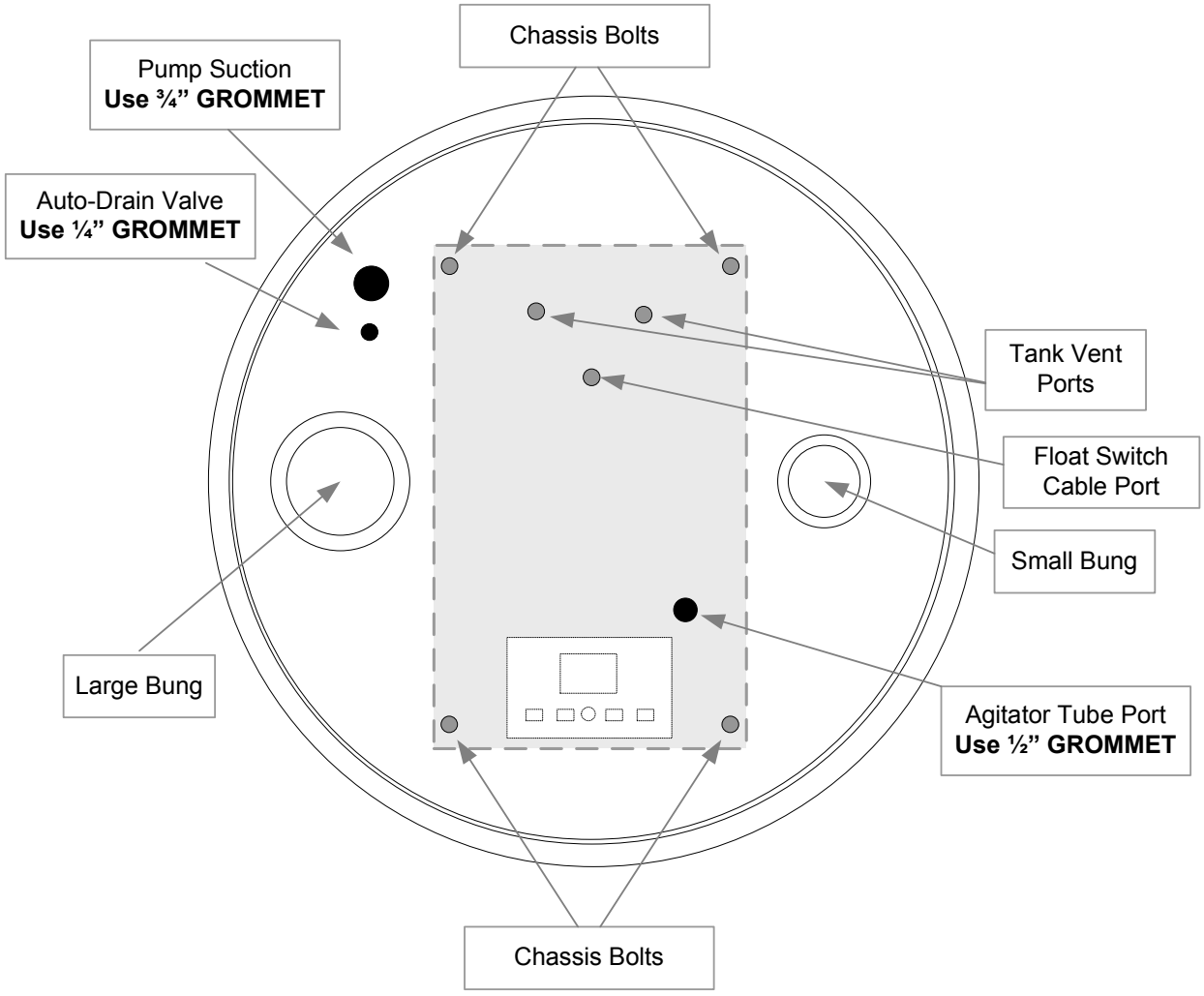
A. Select a suitable flat area for the MistAway™ Misting System. The location should be:
   - ☑ In an area free from any localized flooding, and out of the spray arc of any sprinkler heads.
   - ☑ Within 12 feet of an electrical outlet with GFI protection

B. Remove chassis assembly from the box and verify all components present.

C. The MistAway™ Drum-based Misting System kit includes the following components
   - ☑ Chassis assembly with controller, pump, motor, and agitator (if so optioned)
   - ☑ Drum and pre-drilled drum lid
   - ☑ Screw-on Remote antenna
   - ☑ Remote Transmitter
   - ☑ Drum Lid Cover
   - ☑ Pump suction pipe, with pre-attached suction strainer
   - ☑ Float Switch Assembly (pre-attached to pump suction pipe)
   - ☑ Auto-Drain Valve Assembly (valve attached to 8" of black ¼" nylon tubing)
   - ☑ Agitator pipe (if so optioned)
   - ☑ 4 each of ¼" stainless hex-head bolts, flat washers, lock washers, and nuts
   - ☑ ¾" rubber grommet (for pump suction – 55 gallon systems only)
   - ☑ ½" rubber grommet (for agitator; included with all kits – 55 gallon systems only)
   - ☑ ¼" rubber grommet (for auto-drain valve – 55 gallon systems only)
   - ☑ 2 spare black nylon anti-vibration washers

Assemble the Drum-based Misting System (continued)

D. Install the provided rubber grommets as per the below drawing of the drum lid (55 gallon systems only).



E. Thread the float switch cable/connector (attached to the pump suction strainer pipe) up through the ½" hole nearest the center of the drum.

F. Lay the Misting System chassis on its side on the drum lid

G. Attach the float switch connector to the connector with the BLUE wires, located near the front of the underside of the chassis.

Assemble the Drum-based Misting System (continued)

H. Verify other connectors are tight:
   - The YELLOW wires should be connected to the BLACK & WHITE wires for the agitator (if equipped)
   - The ORANGE wires should be connected to the Zone Solenoid Valve (if equipped)
   - The RED wires are not used at this time.

I. Align the chassis with the four holes on the drum lid. The chassis should be oriented such that the pump is on the same side as the large bung in the drum lid.

J. Insert the ½" pump suction line (with float switch attached) up through the ¾" grommet on the drum lid and into the ½" fitting on the pump.
   - Push the pipe in firmly and then pull it back to ensure it is locked into the fitting.
   - **The float switch float must be oriented towards the center of the drum**.

K. Insert the ¼" black tubing of the auto drain valve assembly up through the ¼" grommet in the drum lid and into the ¼" fitting on the pump discharge.
   - Push the tubing in firmly and then pull back to ensure it is locked into the fitting.

L. If the system is equipped with an agitator, insert the agitator line up through the ½" grommet in the drum lid, through the hole in the chassis, and into the ½" fitting on the agitator.
   - Push the tubing in firmly and then pull back to ensure it is locked into the fitting.

M. Secure the chassis to the drum lid with the provided bolts, flat washers, lock washers and nuts.
   - Use two 7/16" wrenches to secure the bolts.
   - Installation sequence is bolt, chassis, drum lid, flat washer, lock washer, nut.
   - The flat washer, lock washer, and nut should be on the underside of the drum lid.
   - Note that the four chassis mounting holes in the drum lid have been oversized to ease assembly. Ensure that the chassis mounting bolts are tightened so that the chassis does not slide around in the mounting holes

N. **VERIFY THAT THE FLOAT SWITCH FLOAT IS ORIENTED TOWARDS THE CENTER OF THE DRUM** and then secure the drum lid to the drum, ensuring that lip is tightly pressed down to the drum around the entire circumference of the drum.

O. Screw the Remote Antenna to the threaded connector on the chassis (located just behind the controller).

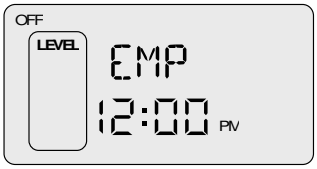
P. Verify that the anti-vibration spacers are installed on the hinge pins between the enclosure lid and the enclosure
   - If the anti-vibration spacers have become dislodged during shipment, two spares spacers have been provided with the Misting System.
   - Use a small flat-tipped screwdriver to replace the spacers on the hinge pins, if necessary.

2 Connect to the Nozzle Circuit

- Connect the Misting System to the nozzle circuit by attaching the ¼" nozzle circuit line to the open ¼" push-to-connect fitting on the "T" fitting on the pump discharge.
- If the Misting System is equipped with a Zone Kit, connect the **Zone 1** nozzle circuit to the ¼" push-to-connect fitting on the **TOP** of the zone solenoid, and connect the **Zone 2** nozzle circuit to the ¼" push-to-connect fitting on the **BOTTOM** of the zone solenoid.
- If the nozzle circuit features risers, it's recommended to install an anti-siphon valve
- NOTE: If the first nozzle is located more than 30 ft from the drum, it is highly recommended to run 3/8" tubing from the drum to the first nozzle in order to avoid significant pressure loss in the line, and corresponding degradation in mist quality at distant nozzles.

3 Connect the Electrical Power

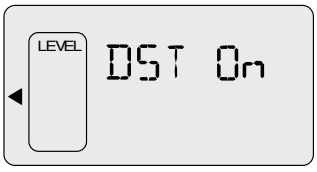
- Connect the Misting System power cord to the nearest electrical outlet.
- **NOTE: You must plug the Misting System power cord into a GFI/GFCI protected outlet.**
- ***The use of extension cords is not approved by MistAway Systems, Inc.***



- Open the digital controller lid and observe the LCD display. It should be flashing "EMP" (i.e., "Empty") and display a time.

4 Set the Date & Time

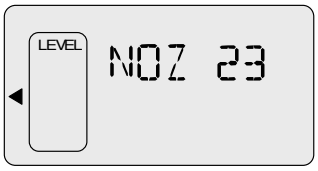
- Prior to setting the Date/Time you need to first set the Daylight Savings Time indicator **ON** or **OFF**.
- Navigate to **SET-UP → DST**.
- Push **SELECT** to set **DST** as **ON** or **OFF**.
- Press the **MENU** button when finished.
  - "**DST ON**" would be the setting used in summer months.



- Next navigate to the **DAY/TIME** menu.
- Turn the **SELECT** knob to set the day of the week.
- Press **SELECT** again to set the hour, followed by the minutes.
- Press the **MENU** button when finished.

5 Set the Number of Nozzles

- Navigate to **SET-UP → NOZ**.
- Press **SELECT** while **NOZ** is flashing, and the number will start to flash.
- Turn the **SELECT** knob to set the number of nozzles in the installation.
- Press the **MENU** button to exit.



- If the Misting System is equipped with a **Zone Kit**, you will instead need to navigate to NZ1, set the number of nozzles in Zone 1, and then navigate to NZ2, and set the Number of nozzles in Zone 2
- The **ZN1** and **ZN2** functions may be used to turn **Zone 1** and **Zone 2** on/off.
- ***NOTE: For 125 gallon systems, you must set the number of nozzles to HALF the actual number in order for the level indicator to read correctly.***

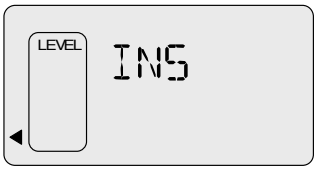
6 Program Remote Transmitter

- Verify that the provided antenna is securely attached to the connector on the chassis, located just behind the controller enclosure.
- Remove the small, raised plastic cover on the back of the remote and randomly set the DIP switches. A small nail, toothpick or safety pin works well. Changing the DIP switches from the standard position will minimize the possibility of interference from other mosquito systems or garage door and gate transmitters.
- Navigate to **SET-UP → LRN** and hold the **SELECT** button for 5 seconds.
- The system will begin a 30 second countdown. Hit any button on the remote until the display changes to "**DONE**".
- The remote transmitter is now programmed to work with the MistAway™ Misting System.

7 Run the Initial Inspection Cycle

- **!!!! UNPLUG THE UNIT FROM THE ELECTRICAL SOURCE!!!** .
- Fill the drum with at least 10 gallons of water.
- Plug the unit back into the electrical source, and verify that the bottom bar in the level indicator has appeared, indicating that the float switch has "floated". You now must set the level indicator.
- Navigate to **MAINTENANCE → LEVEL** and hold the **SELECT** knob down for 5 seconds.
- Turn the **SELECT** knob to set the approximate tank level.
- Press the **MENU** button when finished.

- Connect a temporary in-line pressure gauge.

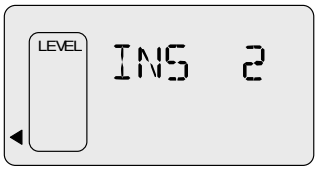


- Navigate to the **INS** function on the **MAINTENANCE** menu. **INS** will be flashing.
- Hold down the **SELECT** button to activate the Inspection cycle
- The system will mist for 5 continuous minutes.

- Use a flathead screwdriver to turn the pump pressure adjustment screw until the pressure gauge reads 240 psi. Do NOT allow the system pressure to exceed 240 psi.
- Inspect the nozzle circuit for any leaks or clogged nozzles and correct as necessary

- If a Zone Kit is installed on the Misting System, you will need to inspect both zones.

- To inspect Zone 1, navigate to **INS 1** on the **MAINTENANCE** menu and hold **SELECT** for 5 seconds.



- To inspect Zone 2, navigate to **INS 2** on the **MAINTENANCE** menu and hold **SELECT** for 5 seconds.

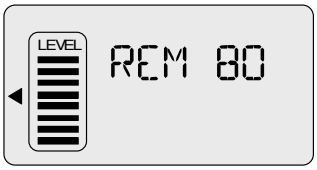
- Ensure the pump pressure is set such that neither Zone 1 nor Zone 2 exceeds 240 psi when misting.

8 Fill the Drum and the Set the LEVEL Indicator

- Once the Inspection process is complete, **UNPLUG THE UNIT FROM THE ELECTRICAL SOURCE**, complete the fill of the drum with water and add the insecticide concentrate. Plug the unit back in when the fill is finished.
- Repeat the previously described process to set the Drum Level to full
- Note that only the bottom bar of the Level indicator is set by the float switch.
- As the system mists, the controller uses the number of nozzles and the mist duration to recalculate the level indicator over time. Bars 2 – 8 of the Level indicator may not exactly reflect the actual tank volume and are intended solely to provide a rough estimate to the user of the remaining tank volume.
- The bottom bar of the level indicator will only clear, and lock the system with an "EMP" empty tank indicator, when the float switch drops to the bottom of the tank.

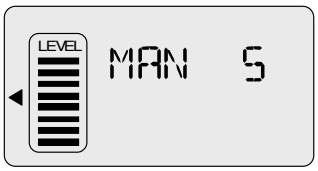
9 Set the Remote Mist Duration

- Navigate to **SET-UP → REM**.
- Push **SELECT** to enable the remote mist duration to be changed.
- Turn the **SELECT** knob to set the remote mist duration
- Press **SELECT** when complete (to enable navigation to **MAN** for the next step).



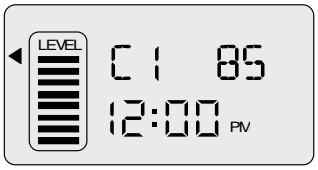
10 Set the Manual Mist Duration

- Navigate to **SET-UP → MAN**.
- Push **SELECT** to enable the manual mist duration to be changed.
- Turn the **SELECT** knob to set the duration for mists triggered by the **MANUAL MIST** button
- Press the **MENU** button when finished.



11 Program the Auto Mist Cycles

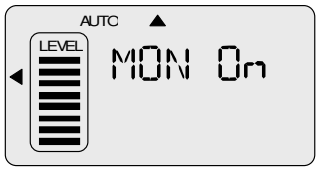
- Navigate to the **CYCLES** menu
- "**C1**" will be flashing, representing Auto Mist Cycle 1
- Press **SELECT**. The mist duration for Cycle 1 will be flashing.
- Turn the **SELECT** knob to set the Cycle 1 mist duration.
- Press **SELECT** again and set the Hour and then the Minute for the mist time for Cycle 1.



- Once the hour and minutes are set, press **SELECT** again to flash "**C1**".
- Turn the **SELECT** knob again to select cycles C2 through C12 and repeat the above procedure to program each cycle as needed.
- Press the **MENU** button when finished.

12 Program the Auto Mist Days

- *Follow this step only if you need to program the system to auto mist on specific days of the week. If the system should auto mist everyday, you may skip this step.*
- Navigate to the **CUSTOM PGM** Menu.
- Turn the **SELECT** knob to select the day of the week you want to turn ON or OFF for the auto mist cycles.
- Press **SELECT** and turn the **SELECT** knob to choose "**ON**" or "**OFF**" for the selected day.
- Press **SELECT** to choose the next day to configure.



- In Step 13 you must set the System Mode to **AUTO - CUSTOM PGM** in order to have the system mist only on the selected days
- For the days set to "ON", the system will follow the mist cycle schedule defined under **CYCLES**. You cannot customize the mist times/durations for each day.

13 Set the System Mode

- You now must activate the System by setting the **System Mode**. The System Mode is displayed along the top edge of the controller display.
- You may cycle through the four System Modes by pressing the green **AUTO ON/OFF** button.
- The four system modes are:
  - ☑ **OFF**
    - System will NOT Auto Mist.
    - Remote Transmitter and Manual Mist button are *DEACTIVATED*.
    - You may **INSPECT** and **DRAIN** the system, however.
  - ☑ **ON**
    - System will NOT Auto Mist.
    - Remote Transmitter and Manual Mist button are ACTIVATED.
  - ☑ **AUTO – EVERYDAY** ("AUTO" + 1st triangle)
    - System will Auto Mist every day of the week.
    - Remote Transmitter and Manual Mist button are ACTIVATED.
  - ☑ **AUTO – CUSTOM PGM** (AUTO + 2nd triangle)
    - System will Auto Mist only on the days of week that are set to "ON" under the **CUSTOM PGM** menu.
    - Remote Transmitter and Manual Mist button are ACTIVATED.

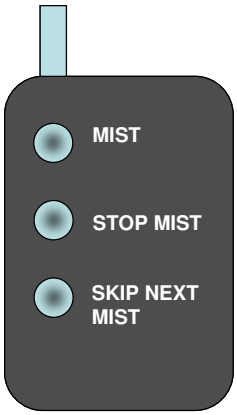
14 Run Initial Mist Cycle

- Use the MANUAL MIST button or Remote Transmitter to trigger a mist cycle.
- Close the controller lid and verify that the lid is not vibrating loudly against the controller mounting assembly as the system executes a mist cycle.
- Once the mist cycle is complete, the system will return to the “Ready” screen with the Day and Time displayed.
    - If the system stops and flashes “ERR 1”, you have not set the number of nozzles. Hold SELECT for 5 seconds to clear the error, and then execute Step 5.
    - If the display is flashing “SKIP”, you have accidentally hit the SKIP NEXT MIST button on the Remote. Hold SELECT for 5 seconds to clear.

15 Cover Misting System Chassis

- Use the supplied Drum Lid Cover to cover the entire controller and chassis assembly.
- Ensure that the cover is positioned such that it extends past the lip on the drum.

APPENDIX A - OPERATION OF THE REMOTE



MIST Button

Activates a Remote Mist for the duration defined under the SET-UP menu.

A brief agitation cycle will precede the Remote Mist.

If a Zone Kit is installed, the system will mist both zones or either zone, as defined in the SET-UP menu.

STOP MIST Button

The STOP MIST button stops any activity that the system is executing at the time "STOP MIST" is pressed. Pressing STOP MIST is the same as pressing the "STOP" button on the controller.

SKIP NEXT MIST Button

The SKIP NEXT MIST button enables the next programmed AUTO MIST to be skipped.

When SKIP NEXT MIST is activated, the controller display will flash "SKIP".

The Remote and Manual Mist button may still be used to trigger a mist while the system is flashing SKIP.

Once the next programmed Auto Mist is skipped, the system will return to the normal display, with the "sunshine" icon in the lower right corner of the display flashing to indicate the mist was skipped.

You may only skip one mist at a time, i.e., pushing the SKIP NEXT MIST button multiple times will not cause multiple AUTO MIST cycles to be skipped.

The SKIP NEXT MIST can be cleared by holding the SELECT knob on the controller down for 5 seconds.

What's an example of how to use the SKIP NEXT MIST function?

- The system is programmed to auto mist at 6:30 AM and 7:30 PM.
- The user has a party scheduled to start outside at 7:00 PM. The user doesn't want the system to mist during the party, but wants the system to mist prior to the guests' arrival.
- At 6:30 PM the user presses the SKIP NEXT MIST button. The user may verify a SKIP MIST has been set by ensuring that the controller display is flashing "SKIP".
- The user then uses the Remote Mist to mist the yard immediately.

The system SKIPs the mist scheduled at 7:30 PM but executes the next auto mist cycle scheduled for 6:30 AM the next day.

APPENDIX B – THE CONTROLLER MENUS

Enter and Exit the controller menus at any time by pressing the MENU button on the controller. After pressing MENU, turn the SELECT knob to select the correct menu, and the push the SELECT knob to enter that menu path.

DAY/TIME Menu		
	Sets the Day of the Week and the Time of Day.	
CYCLES Menu		
	Configures the mist time and duration for each of the twelve possible Auto Mist Cycles (C1 – C12).	
CUSTOM PGM Menu		
	Configures the days of the week for Auto Misting in the AUTO-CUSTOM PGM mode.	
SET-UP Menu		
	DST	Turn Daylight Savings Time ON or OFF. (DST ON is the USA summer setting).
	MAN	Sets the duration for mists triggered by the Manual Mist button on the Controller. Values from 5 to 120 seconds.
	LRN	Programs system to recognize a specific Remote Transmitter. Hold down SELECT for 5 seconds and then press the Remote Mist button. When the system flashes DONE, remote is programmed.
	REM	Sets the duration for mists triggered by the Remote Transmitter. Values from OFF to 120 seconds.
	NOZ	Set the Number of nozzles in the circuit attached to the system. (No Zone Kit) *Note: For 125 gallon systems, set NOZ to half the actual number of nozzles.*
	NZ1	Set the Number of nozzles in Zone 1. (Systems with Zone Kit only)
	SEN	Turn Sensor Package On/Off (No sensor package option offered at this time)
	NZ2	Set the Number of nozzles in Zone 2. (Systems with Zone Kit only)
	ZN1	Enable or disable misting from Zone 1. (Systems with Zone Kit only)
	ZN2	Enable or disable misting from Zone 2. (Systems with Zone Kit only)
MAINTENANCE Menu		
	LEVEL	Sets the level of the tank level in the controller display. System will automatically decrease level as system mists. Hold SELECT for 5 seconds to set.
	INS	Inspect System – Runs pump for 5 minutes. Hold SELECT for 5 seconds to trigger (No Zone Kit)
	INS1	Inspect System – Zone 1 (Systems with Zone Kit only)
	INS2	Inspect System – Zone 2 (Systems with Zone Kit only)

DATA Menu		
	Note: All values except for TMH may be individually reset by holding SELECT for 5 seconds	
	TMC	Total Mist Cycles - Total number of mist cycles executed since TMC was last reset. Includes AUTO, Manual, and Remote mists
	TMM	Total Mist Minutes - Total number of minutes the unit has misted since TMM was last reset. Includes AUTO, Manual, and Remote mists.
	RMC	Remote Mist Cycles - Total number of Remote Mist cycles triggered since RMC was last reset.
	MMC	Manual Mist Cycles - Total number of Manual Mist cycles triggered since MMC was last reset.
	TMH	Total Mist Hours - Cumulative time that the machine has misted since manufacture.

APPENDIX C - FREQUENTLY ASKED QUESTIONS

This section of the MistAway™ Drum-based Misting System Product Manual answers the most common questions regarding System Operation, the Remote Transmitter, and Installation & Servicing Procedures

Questions about Normal System Operation	
FAQ – OPS – 01	How does the Level Indicator work?
FAQ – OPS – 02	Why does the system agitate before a Remote Mist?
FAQ - OPS – 03	What happens if power to the unit is turned off and back on?
FAQ – OPS – 04	Can I set unique Auto Mist Times/Durations for each day of the week?
FAQ - OPS – 05	There is a symbol that looks like a “sunshine” flashing in the lower right corner of the display. What is it?
FAQ - OPS - 06	After the system finishes misting, the display says “HOLd” for a short time. What is going on?

Questions about the Remote Transmitter	
FAQ – REM – 01	What does the SKIP NEXT MIST button on the remote do?
FAQ – REM – 02	I accidentally pressed SKIP NEXT MIST on the Remote. How do I clear it?
FAQ – REM – 03	If I press STOP MIST on the remote, does that set the SYSTEM MODE to OFF?
FAQ – REM – 04	I have the optional Zone Kit installed. Can I use the Remote Transmitter to trigger each zone individually?

Questions about Installation & Servicing	
FAQ – ISR – 01	Why does this machine have to be plugged into an electrical circuit with GFI protection?
FAQ – ISR – 02	Do I need to install an anti-siphon valve on the nozzle circuit connected to the Misting System?
FAQ – ISR – 03	Is there a battery back-up for the clock that needs to be replaced?
FAQ – ISR – 04	Why do I have to set the Daylight Savings Time (DST) to ON or OFF?
FAQ – ISR – 05	What is SEN ON/OFF for on the SET-UP menu? Is this for a wind sensor? Where can I get one?
FAQ – ISR – 06	The installation instructions mention a zone kit. What is a zone kit, and how do I know if I have one?

FAQ – OPS - 01	How does the Level Indicator work?

- The Level Indicator on the displayed is composed of 8 bars, indicating the level of the tank in increments of 1/8th.
- The bottom bar on the Level Indicator is controlled by the float switch in the drum.
- When the tank level drops below the pump suction line, the float switch will register an empty tank, the display will flash “EMP”, and the pump will shut-off.
- When the tank is refilled, the bottom bar will appear in the level indicator when the float switch is floating. However, the display will continue to flash “EMP” until the LEVEL indicator is set in the MAINTENANCE menu.
- Bars 2-8 of the LEVEL indicator are managed by a calculation in the system.
- Each time the system mists, the controller will calculate, using the number of nozzles and the mist duration, the amount of fluid that left the tank. The “Remaining Tank Volume” that drives the LEVEL indicator display is then updated accordingly.
- Note that only a dropped Float Switch can cause the contoller to register EMPTY.
- The calculation that drives bars 2 – 8 of the level indicator is intended to serve solely **as an approximate reference to the level of the tank.**

FAQ – OPS - 02	Why does the system agitate before a Remote Mist?

The system agitates before a remote mist to ensure that the fluid misted out through the nozzle circuit is of an even concentration.

Note that the agitation duration prior to a Remote Mist is 15 seconds, while the agitation duration prior to a Manual or Auto mist is 2 minutes.

You cannot change the agitation duration, nor can you program independent agitation cycles. The system will always agitate prior to a mist.

If your system is not equipped with an agitator, you will still see on the controller display the “AGT” agitation countdown prior to the mist.

FAQ – OPS - 03	What happens if the power to the unit is turned off and back on?

When electrical power is restored to the unit, the digital controller will reboot into the same mode the unit was operating in prior to the power being turned off.

For example, if the unit was in AUTO-EVERYDAY mode prior to the power being turned off, it will reboot into AUTO-EVERYDAY mode when the power is restored.

The controller features a "Super Capacitor" that stores enough electrical power to run the internal clock for up to six weeks in the event power to the unit is turned off. There is no battery for the clock.

FAQ – OPS - 04	Can I set unique Auto Mist Times/Durations for each day of the week?

No. While you may use the CUSTOM-PGM menu to turn specific days of the week ON or OFF, each day set to ON will mist according to the auto mist cycles defined under the CYCLES menu. You cannot customize mist times for each day.

FAQ – OPS - 05	There is a symbol that looks like a "sunshine" flashing in the lower right corner of the display. What is it?

The small "sunshine" indicates that the previous mist was skipped, for one of three reasons:

1. The user triggered a SKIP NEXT MIST with the remote, and the most recent auto mist was skipped.
    - The next Auto Mist will be executed as programmed unless the user presses the SKIP NEXT MIST button again.
2. The Maximum Daily Mist time has been reached
    - On the DATA menu, the "DM" and "MX" values represent the Total Daily Mist (seconds) and the Maximum Daily Mist allowed
3. A weather or motion sensor blocked the previous auto mist.

FAQ – OPS - 06	After the system finishes misting, the display says "HOLd" for a short time. What is going on?

The "HOLd" step, while present on all Drum-based Misting Systems, is really only applicable to those that have the Zone Solenoid installed.

When the Zone Solenoid is installed, the system will hold the solenoid valve open for a period of 15 seconds following the mist for that zone. This action enables the pressure present in the nozzle circuit to quickly bleed off into the tank, rapidly shutting the nozzles.

If this function was not present, the nozzles would "weep" or drip following the mist as the pressure in the nozzle circuit for that zone would not be able to bleed off.

FAQ – REM - 01	What does the SKIP NEXT MIST button on the remote do?

Please refer to the “Operation of the Remote” section of this Product Manual.

FAQ – REM - 02	I accidentally pressed SKIP NEXT MIST on the remote. How do I clear it?

Hold down the SELECT button on the controller for 5 seconds.

The remote cannot be used to clear a SKIP MIST.

FAQ – REM - 03	If I press “STOP MIST” on the remote, does that set the system mode to OFF?

No. When STOP MIST is pressed on the remote, or the STOP button is pressed on the controller, the system simply halts whatever current activity it is executing, be it misting, agitating, filling, etc. The system mode remains unchanged.

FAQ – REM - 04	I have the optional zone kit installed. Can I use the remote to trigger each zone individually?

No. When the Remote is used to trigger a mist, and a zone kit is installed, the system will mist according to which zones are set to “ON” in the controller.

If you wish to suspend one zone for a period of time, navigate to the SET-UP menu and set ZN1 or ZN2 to OFF, depending on your needs. These two items control the zone behavior for all

FAQ – ISR - 01	Why does this machine have to be plugged into a GFI circuit?

As an outdoor electrical appliance that is often exposed to the elements, for protection of both the installer and end-user MistAway Systems, Inc. requires that the MistAway™ Drum-based Misting System is plugged into an electrical outlet that has Ground Fault Interrupter (GFI or GFCI) protection.

Please note that the unit also requires a minimum electrical service of 15 Amps.

FAQ – ISR - 02	Do I need to install an anti-siphon valve on the nozzle circuit connected to the Misting System?

If the nozzle circuit features risers or nozzles positioned below the top of the tank, we recommend an anti-siphon valve is installed to prevent excessive fluid loss in the event of a leak in the nozzle circuit.

FAQ – ISR - 03	Is there a battery for the clock that needs to be replaced?

No. The digital controller features an electrical device known as a “Super Capacitor”. The “Super Cap” stores enough electrical energy to power the internal clock for up to six weeks in the event power is shut-off to the system.

If electrical power is suspended to the Misting System for more than six weeks, the clock may need to be reset when the system is powered up.

FAQ – ISR - 04	Why do I have to set the Daylight Savings Time (DST) to ON or OFF?

DST, which is found under the SET-UP menu, is a feature added for convenience of the user.

If DST is changed from OFF to ON, two events happened automatically:

1. The clock is advanced forward one hour
2. The time for each mist cycle, as defined in the CYCLES menu, is advanced forward one hour.

The reverse of the above occurs when DST is changed from ON to OFF.

DST ON is the setting that would be used in the summer months.

FAQ – ISR - 05	What is SEN ON/OFF for in the SET-UP menu? Is this for a wind sensor? Where can I get one?

SEN enables an external wind/rain/motion sensor package to be turned on or off.

However, at present MistAway Systems has not found a sensor package we consider reliable and durable enough to sell to our customers, and thus we are not offering a sensor package kit at this time.

The Misting System digital controller has been developed however to enable the installation of a sensor package at a later date.

FAQ – ISR - 06	The installation instructions mention a zone kit. What is a zone kit, and how do I know if I have one?

A zone kit is primarily composed of a solenoid valve attached to the Misting System that enables the system to sequentially mist through two different nozzle circuits, effectively doubling the capacity of the unit.

Misting Systems with zone kits may be visually identified by the presence of 3-port solenoid valve located just in front of the electric motor. “Zone 1” should be connected to the fitting on the top of the solenoid valve, and “Zone 2” to the lower fitting on the solenoid valve.

For systems with zone kits, the controller is also slightly different in the SET-UP menu.

The number of nozzles setting “NOZ” is replaced by “NZ1” and “NZ2”, representing the number of nozzles in Zone 1 and Zone 2 respectively.

APPENDIX D – TROUBLESHOOTING

Problem	Probable Cause	Troubleshooting Actions
The system clock shows odd numbers	The clock has not been set	On brand-new systems the clock must always be set when the system is powered for the first time. Refer to Step 4 of the Installation Guide.
Just before the system mists, the displays shows “ERR 1” and the system stops	Number of Nozzles set to 0	Repeat Step 5 in the Installation Instructions to set the Number of Nozzles
The Remote Mist won’t work	System Mode set to OFF	Repeat Step 13 in the Installation Guide to set the System Mode. The system will not mist if the System Mode is set to OFF.
	Remote Mist Duration set to OFF	Repeat Step 9 in the Installation Instructions to set the Remote Mist Duration
	System does not recognize the Remote Transmitter	Repeat Step 6 in the Installation Guide to program the system to recognize the Remote Transmitter
	System antenna not installed	Verify rubberized black antenna is screwed on tightly to the antenna connector just behind the controller enclosure
The Manual Mist Button doesn’t work	System Mode set to OFF	Repeat Step 13 in the Installation Guide to set the System Mode. The system will not mist if the System Mode is set to OFF.
The system will not Auto Mist	System mode set to OFF or ON	The system mode must be set to AUTO-EVERDAY or AUTO-CUSTOM in order for the Auto Mists to work. If the system is to be set to only mist on certain days of the week (as programmed under the CUSTOM PGM menu), the System Mode must be set to AUTO-CUSTOM.
	SKIP mist has been triggered.	Verify controller is not flashing “SKIP”. If it is, it can be cleared by holding SELECT for 5 seconds. If a small “sunshine” is flashing in the lower right hand corner of the display, the previous mist was skipped due to a SKIP signal from the Remote. It is possible that the unit is receiving signals from another remote. To correct, change the DIP switches on the remote and repeat Step 6 in the Installation Guide to program the system to recognize the Remote Transmitter.

Problem	Probable Cause	Troubleshooting Actions
The system agitates normally, but just before the mist, the controller resets	Insufficient Electrical Power	Verify that the unit is plugged directly into a GFI-protected electrical outlet with 15 amps service. Do NOT use an extension cord on the unit. The use of electrical extension cords is not approved by MistAway Systems, Inc.
The System mists randomly during the day.	System receiving a remote signal from another source	Change the DIP switches on the remote and reprogram the system to recognize the remote. Refer to Step 6 in the Installation Guide.
The tank is full but the controller still shows “EMP” and NO bars are shown in the LEVEL indicator	Float switch not recognized by the controller.	Verify that the Float Switch connector is firmly plugged into the two BLUE wires under the chassis.
The tank is full but the controller still shows “EMP” and ONE bar is shown in the level indicator	The LEVEL indicator has not been set since the float switch float last registered empty.	Execute Step 8 in the Installation Guide to set the LEVEL indicator.
The Tank is obviously empty, but the system still runs	Float switch float is lodged against the drum wall.	Remove the drum lid and verify that the float is pointed towards the center of the drum, and no foreign objects are restricting its movement.
As soon as I set the LEVEL indicator, the display flashes “EMP” again.	Float switch float not elevated	Verify that enough fluid is present in the drum to raise the float to 25 degrees *above* horizontal. (Note: the float drops when it is 25 degress *below* horizontal).
	Float switch not recognized by the controller.	Verify that the Float Switch connector is firmly plugged into the two BLUE wires under the chassis.
The motor runs, but the system isn’t misting at all, or the nozzles are sputtering	Air is being introduced into the pump suction	Verify that the pump suction pipe and discharge tubing is firmly engaged in the pump fittings. Verify that the Auto Drain valve is attached.
	Pump collar loose	Use a screwdriver to verify that the collar securing the pump to the electric motor is tight.
	Suction Filter Clogged	Remove and clean the suction filter on the end of the pump suction pipe.

APPENDIX E - WARRANTY AND LIMITATION OF REMEDY AND LIABILITY

MistAway Drum-Based Misting Unit

MistAway Systems Inc. (MSI) warrants this Product – the MistAway Drum-Based Misting Unit – to be free from defects in material and workmanship as follows:

For a period of one (1) year from the date of original installation (whether or not actual use begins on that date), MSI will repair or replace defective parts, with new or refurbished parts, at its option, at no charge. This warranty does not include labor or other costs incurred for diagnosing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts.

This warranty applies solely to equipment supplied by MSI and is in lieu of all other warranties, expressed or implied. No person, agent, dealer, or distributor is authorized or empowered to give any other warranty or to assume any other liability on behalf of MSI

Warranty Conditions:

- This warranty is extended only to the original Purchaser and is not transferable.
- A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered.
- Installation, use, care and maintenance must be normal and in accordance with instructions contained in the operating manual and MSI's service information. Failure to do so shall void this warranty.
- All claims for failure to conform to specifications or defects in material or workmanship under this warranty must be made promptly after discovery and, in any event, must be received by MSI not more than one year after the original purchase date.
- MSI reserves the right to inspect the equipment prior to any decision involving a warranty claim.
- MSI reserves the right to make warranted repairs at either the installed site or at MSI's location in Houston, TX. If MSI opts for repair at its own location, the Purchaser is responsible for shipping the item to MSI's Houston location at the Purchaser's expense.

Manufacturer's obligation under the warranty shall not apply to:

- Any equipment, which has been damaged by negligence, misuse, abuse, neglect and/or improper adjustment, accident, vandalism, acts of God, acts of war, whether declared or undeclared, improper application, or any other contingency beyond the control of MSI
- Cosmetic damage
- Damage in transit
- Failures caused by products not supplied by MSI
- Failures, which result from faulty installation, set-up adjustments, improper operation, power line surge, improper voltage supply or damage from lightning
- Any equipment that has been repaired or altered without authorization from MSI or in a manner inconsistent with such authorization
- Any unit that has not been maintained in accordance with the operator's manual
- Normal wear on any item or piece of equipment
- Lost items

The foregoing is the Seller's only obligation and Purchaser's exclusive remedy for breach of warranty. Purchaser's failure to submit a claim as provided above shall specifically waive all claims for damages or other relief, including but not limited to claims based on latent defects. In no event shall Purchaser be entitled to special, direct, indirect, incidental, exemplary or consequential damages, expenses, injury, lost profits, lost savings, business interruption, loss of business information, or any other pecuniary loss arising out of the use of or inability to use the equipment. In any case, MSI's entire liability shall be limited to the amount Purchaser actually paid for the item.

Except as modified in writing signed by both parties, this warranty is and shall remain the complete and exclusive agreement between the parties with respect to warranties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement.