



## 10 gallon Mist System





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- In-Line Nozzle Circuit Filter
- Remote Control
- Battery Charger

If you should experience any difficulties, issues or problems while assembling or operating your system, contact customer service at info@pynamite.NET or 866-986-5586.

**Before installation**

Pynamite Mosquito Misting Systems are shipped with a charged battery, however if the system is not installed and plugged in soon after receipt, the battery will discharge. Plug the system in prior to or during the installation to ensure the battery is charged and the system is able to operate fully when installation is complete. Allow 6-8 hours to fully charge a dead battery.

**PROGRAMMING THE TIMER**

**Buttons on Timer**

1. LED: To indicate ON/OFF status
2. CLOCK: To adjust current DAY and TIME
3. TIMER: To Review & Set Programs
4. DAY: To adjust Day of Week
5. HOUR: To adjust Hour
6. MIN: To adjust Minute
7. MANUAL: To select ON, AUTO or OFF  
(see more on MANUAL button below)
8. : Reset Timer's Settings



**NOTE: Press button to reset Timer before programming**

**1. Adjusting CLOCK**

Press and hold CLOCK and then press DAY, HOUR, MIN, respectively to adjust clock of Timer to accurate DAY, HOUR & MINUTE. To change to the 24-Hour Format where LCD screen indicates, 0:00-23:59, hold the CLOCK button down for 3 seconds.

**2. Programming the Timer**

- A. Press TIMER. LCD screen shows 1 --:--<sup>on</sup> --.
- B. Press DAY to select any of the preset 15-combinations. Continuing to press DAY, the LCD alternates between the 15-combinations.
- C. Press HOUR, MIN respectively to set desired Hour and Minute for 1 ON.
- D. After finished setting 1 ON, Press TIMER again, 1<sub>off</sub> --:-- will appear on LCD screen to set 1 OFF.
- E. Press DAY to select the same Day combination as 1 ON.

**NOTE: DAY-combinations chosen in each of ON/OFF program-period must be consistent**

- F. Press HOUR, MIN respectively to set desired Hour and Minute for 1 OFF.

**CAUTION: AN "OFF" SETTING OF 1 MINUTE LATER MUST BE PROGRAMMED FOR EVERY "ON" SETTING. For example, if 8:00 is scheduled for ON, then 8:01 must be scheduled for OFF. IF THIS IS NOT DONE, SCHEDULED MISTING CYCLES WILL NOT INITIATE AND REMOTE WILL NOT WORK. At any time entire clock can be reset by pressing the grey button next to .**

- G. When finished setting 1 ON & 1 OFF, Press TIMER 2<sub>on</sub> --:-- will appear on the LCD screen.
- H. Repeat programming procedure above to complete additional ON/OFF misting cycles if desired.
- I. When finished programming mist cycles, press CLOCK.

**NOTE: To disable a scheduled misting cycle, set the OFF time to the same as the ON time and the system will not mist that cycle.**

**At any time entire clock can be reset by pressing the grey button next to**



MANUAL Button on Timer – is to select the ON, AUTO or OFF mode of the timer, not to initiate a mist. The recommended mode is AUTO.

- When in AUTO mode, the timer will function as programmed above.
- When in OFF mode, the programmed misting cycles will not initiate. The Remote Control Start/Stop buttons will initiate/stop a mist cycle while the timer is in OFF mode.
- When in ON mode, a mist cycle will initiate after a 2 second delay. Timer must be returned to AUTO mode for the programmed mist cycles to continue. **NOTE: The remote control is the preferred method for initiating an unprogrammed mist.**

**BATTERY MAY BE PLUGGED IN CONTINUOUSLY WITHOUT LOSING BATTERY CAPACITY OR HARMING THE BATTERY**

**NOTE: Do not use an extension cord with this system.**

**When system is plugged in continuously, see the LED on the plug-in Battery Charger for battery status.**

- RED - charger is plugged into a 120v outlet and is charging
- YELLOW - battery is 1/2 charged
- GREEN - battery is fully charged
- NO LED - not plugged into a 120 v outlet, reverse polarity, or blown fuse on positive side of the battery

**NOTE: When unit is being stored or not in use for periods longer than 6 months, to preserve battery capacity, keep Battery Charger plugged in continuously and turn main power toggle to OFF.**

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## BACK OF 10 GALLON SYSTEM

1. NOZZLE CIRCUIT OUTLET – this is the beginning of the Nozzle Circuit. **NOTE: To insert the tubing correctly, first make a clean straight cut with the Tube Cutter, then moisten the tubing and push it all the way in and then swiftly pull back to lock the tubing in place.** Attach the included In-Line Nozzle Circuit Filter to the tubing on the outside of the tank. Refer to INSTALLING IN-LINE NOZZLE CIRCUIT FILTER below.

2 BATTERY CHARGER 2 PIN MATING CONNECTOR - Attach the two pin connector from the Battery Charger to the mating two pin connector. Plug the Battery Charger into a 120v outlet.

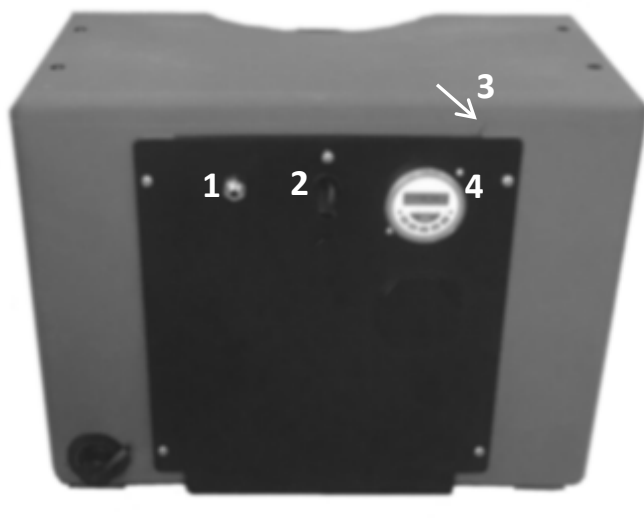
**When the system is plugged in continuously, the LED on the Battery Charger shows battery status:**

- RED - charger is plugged into a 120v outlet and is charging
- YELLOW - Battery is 1/2 charged
- GREEN - Battery is fully charged
- NO LED - not plugged into a 120v outlet, reverse polarity, or blown fuse on positive side of the Battery

**NOTE: Battery Charger may be plugged into 120v outlet continuously without causing damage to the Battery.**

**NOTE: When unit is being stored or not in use for periods longer than 6 months, to preserve Battery capacity, keep Battery Charger plugged in continuously and turn Manual on Timer to OFF.**

**NOTE: If extension cord must be used, make sure: (a) that pins on the plug of the extension cord are the same number, size, and shape as those of the plug on the charger; (b) that extension cord is properly wired and is in good electrical condition; and (c) that wire size is large enough for AC ampere rating of the charger (up to 100 foot extension, use 18AWG size cord, 101-150 foot, use 16AWG size cord).**





3. REMOTE CONTROL ANTENNA WIRE - Blue antenna wire for the supplied remote control. Ensure that it is sticking out of the black plate.

4. TIMER - See programming Timer above.

NOT PICTURED

PRESSURE GAUGE – Tool to use to check misting pressure

PUMP AND MOTOR – are located behind the black plate. The 200 psi Pump can mist up to 40 Nozzles on up to 600 feet of Tubing. Adding additional Nozzles will drastically decrease psi.

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## REMOTE CONTROL

1. ON Button - pressing this button will initiate a 1 minute unscheduled mist cycle.
2. OFF Button - pressing this button will stop a remote mist once it starts.



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## INSTALLING THE IN-LINE NOZZLE CIRCUIT FILTER

The In-Line Nozzle Filter is attached to the 1/4 inch tubing coming out of the Nozzle Circuit Outlet before the first fitting on the Nozzle Circuit. The Filter only flows one way.

**The tubing coming out of the system must be plugged into the side of the In-Line Nozzle Filter stamped IN.** Attach the tubing to the other side of the Filter and continue the Nozzle Circuit. **NOTE: To insert the tubing correctly, first make a clean straight cut with the Tube Cutter, then moisten the tubing and push it all the way in and then swiftly pull back to lock the tubing in place.**



The In-Line Nozzle Circuit Filter is used to capture particles from the solution inside the tank prior to entering the Nozzle Circuit. This will help prevent the Nozzles from clogging. The Filter contains a Sintered Bronze Filter which may be cleaned and or replaced over time.

**NOTE: For optimum performance, in-line nozzle circuit filter should be checked and cleaned several times a year.**

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## SYSTEM SETUP

Once the nozzle circuit has been installed and connected to the system, the system needs to be purged and tested before filling it with insecticide.

- Fill the tank about half way with tap water. **DO NOT ADD INSECTICIDE**
- Go to the last nozzle in the circuit (or nozzles if you Tee'd off into different runs) and remove the nozzle tip(s) by unscrewing it from the adapter.



- To purge the air out of the system, press the ON button on remote. Water and air will come out of the open nozzle(s). Run system as long as it takes to get the air out of the lines so that the water runs freely without sputtering. Make sure the Suction Strainer on the 3/8" tube is below the surface of the water.
- Once the water is running without air sputtering, press the OFF button on the remote, and screw the nozzle tip(s) back on.
- If the pressure does not get to 175-200 psi, there could be several reasons:
  - Tubing is loose – check every connection where tubing goes into a fitting and make sure water is not leaking out or air is not being sucked in. It is imperative that the tubing is pushed in and swiftly pulled back to lock it in place.
  - Too many nozzles on a linear run – the most optimum run is a looped run, it starts at the Nozzle Circuit Quick Connect fitting on the enclosure and loops back around to tee into the same connection. A Tee'd circuit works well too, just make sure there is an equal number of nozzles on each of the main runs. A linear run can cause the pressure to go down if there are too many nozzles on too long of run of tubing.
- Once the pressure is set, pour in the insecticide and continue filling the tank with tap water.

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## INSECTICIDES REGISTERED FOR MISTING

Only products that are water based, approved by the EPA and labeled for use in an Automated Misting System can be used in a Pynamite Misting System. **Products containing Petroleum Distillates should never be used in an Automated Misting System regardless of labeling. Additionally do not use Natural Products containing essential oils such as wintergreen, peppermint and similar in a Pynamite Misting System. Using unauthorized products can damage your system as well as your residence and will void the warranty.**

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## MISTING TIMES

Mist durations are preset for 60 seconds. Mist at dusk and at dawn, and then an additional mist around 10 pm. It will take a couple days to get control of your yard initially and sometimes after a big rain and breeding cycle. Use the remote control to mist in between scheduled mists.

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## Nozzles

Pynamite Nozzles are fully cleanable. The tip (1) can be unscrewed and soaked in a vinegar/ warm water solution to remove calcium deposits. The Nozzle also contains a stainless steel cleanable mesh filter (2) in the rear of the Nozzle. Unscrew the back of the Nozzle to locate the filter, remove and rinse the filter with fresh water to remove any debris. Hand tighten to reassemble.



**NOTE: For optimum performance, nozzles should be checked and cleaned several times a year.**



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## WINTERIZING

If possible, plan for your tank to be close to empty as the winter season commences. You will need to empty the tank for the winter. Be sure to dispose of any remaining liquid properly according to the instructions on the label of your misting concentrate.

### Flush pump with clean water:

1. Open the Drain Cap on the back of the Tank, drain and rinse inside the tank with fresh water, replace the Drain Cap.
2. Remove the Nozzle Circuit tubing from the outlet side of the In-Line Nozzle Circuit Filter by pushing in on the collet and pulling out the tubing.
3. Fill a 5 gallon bucket with fresh water and position it next to Tank.
4. Open the Tank and remove the Suction Line and rinse thoroughly with fresh water.
5. Submerge the Suction Line in the 5 gallon bucket of fresh water.
6. Press the ON button on the Remote Control to clear the water from the Suction Line and flush the Pump.
7. Remove the Suction line from bucket and activate a dry mist cycle by pressing the ON button on the Remote Control to clear the water from the Pump.
8. Replace the Suction Line back in the now empty Tank and close the Lid.
9. Turn the Manual on Timer OFF and keep the system plugged in to maintain the Battery.
10. Open the In-Line Nozzle Circuit Filter and inspect and clean or replace the Sintered Bronze Filter.

### Purge fluid remaining in the Nozzle Circuit with compressed air.

1. Remove the Nozzle(s) from the Adapter(s) on the end of each run.
2. Using a portable air compressor with adapter (adapter can be purchased from Pynamite) purge fluid from Nozzle Circuit by connecting the air compressor to the tubing that was removed from the In-Line Nozzle Circuit Filter at the beginning of the Nozzle Circuit.
3. Once the fluid has been purged from the lines, replace the Nozzle(s).

**NOTE: Winterizing is a great time to check and clean the nozzles and in-line nozzle circuit filter.** For optimum performance, nozzles and in-line nozzle circuit filter should be checked and cleaned several times a year. See nozzle cleaning instructions above. Contact us to purchase replacement filters for the in-line nozzle filter.

**NOTE: If you live in an area that does not freeze and you do not plan on performing a complete winterization process, the Tank should either be emptied and cleaned or kept running throughout the winter. If the liquid sits stagnate over several months, slime and bacteria will naturally grow in the tank. When the system starts up again, that slime will be drawn up into the suction filter, though the pump and out through the nozzle circuit causing damage.**

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## WARRANTY

Lovett Industries, LLC dba Solar Insect Systems (SIS) warrants this Product, to be free from defects in material and workmanship as follows:

- For a period of one (1) year from the date of purchase (whether or not actual use begins on that date), SIS will repair or replace defective electronic 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. Additionally warranty does not apply to nozzle circuit or fittings.
- This warranty applies solely to equipment supplied by SIS 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 Solar Insect Systems.



**Warranty Conditions:**

- This warranty is extended only to the original Purchaser and is nontransferable.
- A purchase receipt or other proof of date of 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 Solar Insect'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 Solar Insect Systems not more than three years after the original purchase date.
- SIS reserves the right to inspect the equipment prior to any decision involving a warranty claim.
- SIS reserves the right to make warranted repairs at either the installed site or at SIS's location in Richmond, TX. If SIS opts for repair at its own location, Purchaser is responsible for shipping the item to SIS at its 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 (including running the pump over 200 psi), accident, vandalism, acts of God, acts of war, whether declared or undeclared, improper application, or any other contingency beyond the control of Solar Insect System
- Cosmetic damage
- Damage in transit
- Failures caused by products not supplied by SIS
- 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 SIS or in a manner inconsistent with such authorization
- Normal wear on any item or piece of equipment
- Lost items

Manufactured by:		
19840 FM 1093 #G7		866-986-5586
Richmond TX 77407		info@pynamite.NET
	www.pynamite.NET	