



# Instructions for the Dripper and Feather Mister Combination

The **Dripper and Feather Mister Combo** can be operated as an adjustable flow rate mister, as a dripper, or simultaneously as a mister and a dripper. It is suitable for pedestal and in-ground bird baths and is very easy to install. Normally, it is best to run it as a dripper during the cool months of the year, and when water conservation is critical.

## Contents:

Dripper tube and dripper fitting  
Mist nozzle assembly  
Rock or pebble base  
Garden hose to 1/4" tubing adapter  
Y valve and 50 ft. of 1/4" OD tubing  
PVC regulating valve for adjusting drip or mist rate  
"T" connector for system expansion  
Combo adapter  
1 straight connector and 2 elbows  
Instructions

*(All above items can be ordered direct from Winged Aquatics™.)*

## Selecting a Location:

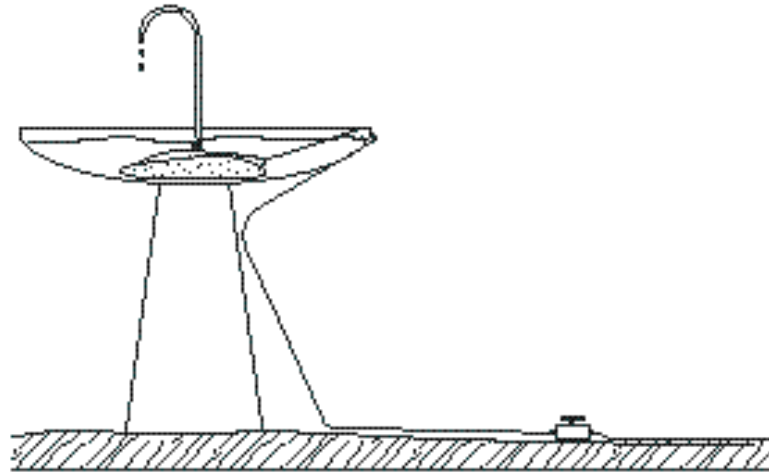
*If you are locating a bird bath at the same time as you are setting up the Mister-Dripper Combo we recommend that you:*

- Avoid locations with dense ground cover which can hide a cat, as birds are very vulnerable to predators while bathing, and hence also very wary.
- Try to locate near good bird habitat, such as large trees for warblers, or hedge rows. This provides a tree "highway" to your bathing area.
- Have the bath in at least partial shade if possible, as this keeps the water cooler.
- Locate your bird bathing facilities approximately 20 to 40 ft. from a patio or picture window where you often sit to watch birds. The bird bath can be near feeders, but should not be so close that seeds and hulls fall into the water.

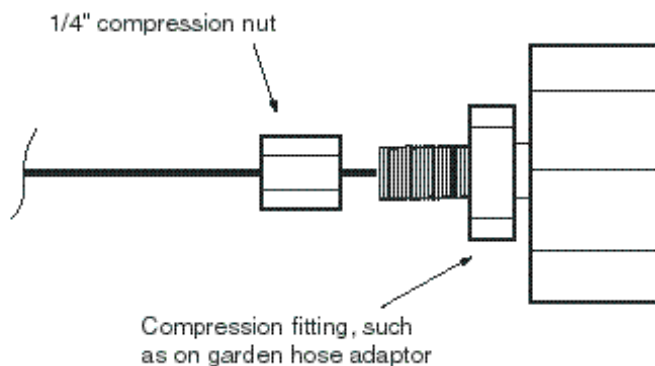
## Installation:

We recommend that you first run the unit as a dripper to flush the lines out, and then if you like, convert it to a mister. To install the dripper tube, remove the compression nut from the dripper fitting. Push the copper dripper tube all the way through the compression nut and then push the dripper tube to its fullest extent into the fitting. Slide the compression nut down to the fitting and tighten the compression nut so that the dripper tube cannot be pulled out with a good tug. Next, install the dripper fitting in the base securely by hand. Do not use a wrench unless the joint leaks and then tighten only 1/4 to 1/2 turn with a wrench. Overtightening the dripper fitting can cause the base to crack. The dripper fitting does not need to go all the way into the base.

For installation in a pedestal bird bath, set the **Dripper-Mister** in the bath and connect to the 1/4" tubing using the two elbows provided. You may wish to shorten the piece of tubing coming from the base so that it hugs the edge of the bird bath when connected with the elbows (see illustration below).



Select an accessible, but inconspicuous location for the regulating valve which is within 5 ft. of the base. Cut the tubing at this point and rejoin by pressing both ends over at least 2 of the barbs of the regulating valve. To facilitate installing tubing on the barbed fittings immerse the ends of the tubing in hot tap water for about 15 seconds, then press the tubing onto the barbed fittings. Run the tubing above ground from the bath back to the nearest faucet. Install the Y valve and adapter on the faucet and connect the tubing to the adapter as follows: to install tubing on compression fittings, first remove the 1/4 inch compression nut from the fitting, next slide the nut over the tubing so that the tubing end protrudes, then insert the tubing end to the fullest extent into the recess in the fitting, and finally tighten the compression nut securely on the fitting (see illustration below).



Check to be sure you get the desired flow and have no leaks. Then you can hide the tubing by opening a 1 to 2" deep slit in the lawn by pushing a shovel head in to the ground and pushing the handle to and fro, inserting the tubing, and then pressing the slit closed. Evidence of any work will disappear in just a few days. Excess tubing can be trimmed or coiled out of the way.

If the 50 ft. of tubing provided is not enough, you should be able to buy more at a local garden center, hardware store or automotive supply store. Ask for 1/4" OD tubing (which is also 3/16" ID). You should have either two elbows or one straight connector left which can be used to add the extra tubing or to repair tubing if accidentally cut while gardening. If you can not find any 1/4" tubing, you can order additional rolls from Winged Aquatics. In the meantime you can make up for the missing small tubing with regular garden hose by screwing the Y valve and adapter on the end of the garden hose.

Once connection to the faucet is complete, turn the faucet on, flush out the tubing by adjusting the regulating valve, then close the valve until you get the desired drip rate. It is sometimes necessary to repeat this adjustment for the first few days until the drip rate stabilizes. To switch to the mist nozzle, loosen the compression nut and remove the dripper tube, and then using a small wrench, remove the dripper tube fitting from the base. Hand start the mist nozzle assembly into the base and once you are sure it is threading properly, tighten gently by hand, being careful not to overtighten. Do not use a wrench unless the joint leaks and then tighten only 1/4 to 1/2 turn with a wrench. Overtightening the nozzle can cause the base to crack. The Mister Combo has a special low flow mist nozzle which uses only 3 gallons of water per hour. We have found that this is an ideal misting rate for songbirds. However, if you wish to reduce the misting rate, you can adjust it down to about 1 gallon per hour with the regulating valve.

With the mist nozzle installed, the nozzle is three inches above the base. This should keep it above the water level in most bird baths. However, if your bath is deeper than 3 inches, place a flat rock under the base so that the nozzle is above the water level. If you can find a large enough flat rock, you can also use it to adjust your bath depth to a more optimum 1 to 2 inches. When misting, we usually set the mister below some overhanging foliage to encourage "leaf-bathing", which is when the birds rub against the wet foliage to bathe. This is a favorite bathing technique for small birds like warblers and hummingbirds.

For installation in a ground level bird bath, you can set the Dripper Mister Combo in the bath or next to it. Connect the piece of tubing coming from the base to the coil of tubing with the straight connector provided.

The ***Dripper-Mister*** includes a "T" connector and a tubing-to-nozzle adapter so that you can operate the dripper on the base and the mist nozzle separately as a Mister. Set the dripper up on the base per the regular instructions. Screw the nozzle-to-tubing adapter (1/4" tubing x 1/4" female pipe thread) onto the mist nozzle. Cut the tubing to the dripper BEFORE the regulating valve. Install the "T" at the cut and attach additional tubing to run from the "T" to the mist nozzle. Fix the mist nozzle to a branch or garden stake and direct the mist at some nearby foliage to provide leaf-bathing opportunities (See illustration on next page).

### **Routine Operation:**

It is preferable to operate your Dripper Mister on a daily basis, as this provides the birds with a dependable supply of cool fresh water and also keeps your bird bath full. The easiest and most dependable way to do this is by using a battery operated water timer which can be purchased from most local garden centers or hardware stores. With a timer, we often observe the birds gathering around the bath about 15 minutes before the timer is scheduled to come on. Mid to late afternoon seems to be a favorite bathing time.

### **Maintenance:**

If at any time you experience low flows or a distorted mist/spray pattern, clean the filter just before the nozzle, and if required, clean the nozzle itself. If you have a lot of rust in your water, also check the strainer in the adapter on the Y valve. For a spray system used routinely with clean water, cleaning once per year should be sufficient. An old tooth brush works well for cleaning the filter. Rinsing the nozzle tip should be sufficient to clean it. Do **NOT** stick pins in the nozzle as this destroys the critical mist-forming shape.

## Winter:

The **Dripper-Mister** is not meant for operation below freezing. If freezing weather is anticipated, disconnect the base with mist nozzle or dripper and regulating valve and bring them inside. Disconnect the Y valve from the faucet and bring it inside. Clean the filters as per the maintenance instructions and then store for the winter. The 1/4" tubing can be left in place - freezing should not harm it. When reconnecting your system once warm weather returns, flush the 1/4" tubing prior to reattaching the dripper or mister and PVC regulating valve.

**Caution:** Failure to disconnect the Y valve or other devices from the faucet before freezing weather could result in a ruptured water line in your house (outdoor faucets are designed to drain the water in them when nothing is connected).

# HAPPY BACKYARD BIRDING!

