

KIT CONTAINS

1-3/4 in. Backflow preventer FHTxMHT	5-Micro sprinklers on spike with 24 in. microtubing and barb and three each additional large diameter spreaders for, 180°, 90° and strip patterns	3-Ray jets on threaded barb with 2 additional spreaders 180° (orange) and 90° (green)
1-3/4 in. FHT Preset pressure regulator at 25 PSI	1-1/2 in. Tee	2-Goof plugs
1-3/4 in. FHT Swivel adapter with screen		1-Hole punch
1-3/4 in. MHT x MPT Nipple		2-Figure "8" hose ends
50 ft.-1/2 in. Polyethylene tubing .600 ID x .700 OD		
1-1/2 in. Hose coupling		

3 YEAR WARRANTY

DIG CORPORATION warrants these products to be free from defects in material and workmanship for a period of two years from date of purchase. This warranty does not cover damage resulting from accident, misuse, neglect, modification, improper installation or subjection to line pressure in excess of 50 PSI. This warranty shall extend only to the original purchaser of the product for use by the purchaser. This warranty shall not cover batteries or any malfunction of the product due to battery failure. The obligation of DIG CORPORATION under this warranty is limited to repairing or replacing at its factory this product which shall be returned to the factory within two years after the original purchase and which on examination is found to contain defects in material and workmanship.

DIG CORPORATION SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND; THE SOLE OBLIGATION OF DIG BEING LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Unattended use for prolonged periods without inspection to verify proper operation is beyond the intended use of this product, and any damage resulting from such use shall not be the responsibility of DIG CORPORATION. There are no warranties which extend beyond the description on the face hereof. In the case of purchase of the product for use other than, for irrigation purposes, DIG CORPORATION hereby disclaims any implied warranties including any warranties of merchantability and fitness for a particular purpose. In the case of the purchase of the product for personal, family or household purposes, DIG CORPORATION disclaims any such warranties to the extent permitted by law. To the extent that any such disclaimer or implied warranties shall be ineffectual, then any implied warranties shall be limited in duration to a period of one year from the date of the original purchase for use by the purchaser. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

In order to obtain performance under this warranty, the unit must be returned to the factory, along with proof of purchase indicating original date of purchase, shipping prepaid, addressed as follows:

DIG CORPORATION, 1210 Activity Drive, Vista, CA 92081. Repaired or replaced units will be shipped prepaid to the name and address supplied with the unit returned under warranty. Allow four weeks for repairs and shipping time. Repair of damaged units not otherwise within warranty may be refused or done at a reasonable cost or charge at the option of DIG CORPORATION.

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

MATERIALS

The following raw materials are used to manufacture this kit:

- Drip tubing: low-density 7510, 2% carbon black, polyethylene
- Micro tubing: Vinyl
- Pressure regulator and backflow device: ABS with 204 SS spring
- 1/2 in. Fittings: ABS
- 1/4 in. barb connectors: Acetal
- Hose end and stakes: Polypropylene

1.800.344.2281 FAX: 760.727.0282

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INSTALLATION INSTRUCTIONS

Micro Sprinkler Watering Kit

Model EF55AS

INTRODUCTION

Thank you for purchasing the DIG Model EF55AS Drip Watering Kit. Please take the time to read through the enclosed instructions and follow them step by step. If you have any questions, please call our customer service line at 1-800-344-2281.

GENERAL DESCRIPTION

Follow these guidelines for the design and installation of a cost effective and reliable drip irrigation system in a landscape area, which promotes efficient water use and protects our natural resources.

PLANNING & DESIGN

Micro sprinklers and sprayers work by the same principals as conventional sprinkler systems and are suggested for use where low volume overhead irrigation is desired or for areas where drip emitters may not be practical. Micro sprinklers and micro sprayers operate within the same pressure range as drip emitters. The micro sprinklers have a small droplet size and a low flow application rate that can help prevent plant stress by maintaining low water tension in the soil.

When designing an irrigation system make sure to have a design drawing before you start installation. This will require measuring the area you wish to water and the use of graph paper to make the drawing to scale. We suggest using drip irrigation for trees, shrubs, vines, vegetables, flowerbeds, containers, pots, boxes, house foundations, on any individual plant, and in narrow planting areas. Micro sprinklers are best used on groundcover, flowerbeds, seedlings, young saplings or mature trees with groups of plants, on hillsides and on sandy soil. When using drip irrigation, water in sandy soil will percolate downward before it can spread far enough horizontally; micro sprinklers will solve this problem because of the wide spray diameters. Avoid using micro sprinklers in windy areas. High winds will disturb the micro sprinkler spray pattern.

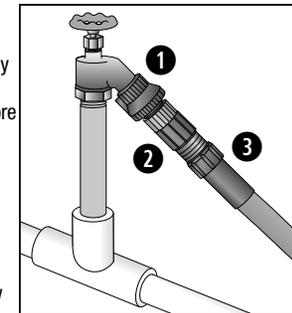
INSTALLATION

Begin your installation at the water source by attaching the backflow preventer **1** to your faucet, then attach the 25 PSI preset pressure regulator **2** to the backflow preventer. Connect the hose adapter **3** to your pressure regulator and insert the poly tubing into the swivel compression adapter. If you wish to automate the system, you can use a DIG battery operated controller (Model 9001D or 9001EZ) available at a store near you.

NOTE: If the kit is to start from a 3/4 in. female pipe thread, use the 3/4 in. nipple included in the kit.

NOTE: The pressure regulator is used to lower the incoming pressure to the suggested operating pressure of 25 PSI, which is within the range of recommended pressures for a micro sprinkler system.

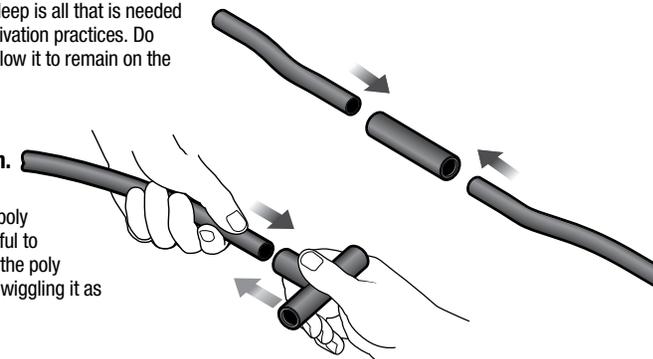
Next, lay down your 1/2 in. poly tubing. If you plan to leave it above the ground, allow the poly tubing to sit in the sun before installation, making it easier to work with. Use stakes to secure the poly tubing to the ground. If you are burying the poly tubing, dig a trench about 6 in. from the roots of the plants. A shallow trench, 5-8 in. deep is all that is needed to keep the poly tubing safe from cultivation practices. Do not bury the end of the poly tubing, allow it to remain on the surface for periodic flushing.



TYPICAL INSTALLATION

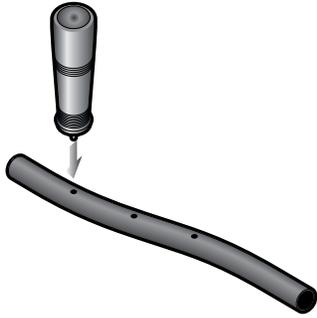
Connecting and installing 1/2 in. compression fittings:

To install your 1/2 in. fittings, cut the poly tubing with a hand pruner, being careful to keep dirt from entering the line. Push the poly tubing into the compression fitting by wiggling it as you apply force.



Using the punch tool:

To use the punch, hold the poly tubing in one hand and the punch in the other hand, using the punch to apply pressure to the poly tubing. At the same time rotate the punch back and forth creating a hole in the poly tubing.



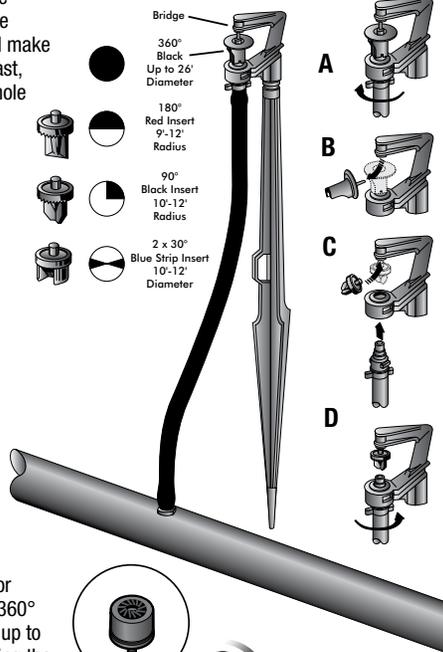
INSTALLING THE MICRO SPRINKLER ASSEMBLY:

The 360° 21-GPH bridged micro sprinkler has a green nozzle with black spinner and a coverage of up to 26 ft. diameter @ 25 PSI. Install the micro sprinklers every 8 to 12 ft. using the full circle pattern or every 5 to 6 ft. using any of the inserts. To install the micro sprinkler, insert the stake assembly into the ground and make sure that the micro sprinkler is about 7-9 in. above ground. Last, insert the 1/4 in. barb at the end of the micro tubing into the hole punched in the poly tubing.

Selecting the proper coverage:

The micro sprinkler is assembled with a spinner for a 360° pattern and comes with three additional spreader patterns for any coverage. To replace the 360° spinner with one of the colored spreaders included, follow these steps:

- Twist the green nozzle assembly with the micro tubing counter clockwise and remove from the micro sprinkler bridge. See **A**.
- Snap out the black spinner. See **B**.
- Insert the desired colored pattern tip into the hole in the upper side of the micro sprinkler bridge. See **C**.
- Last, re-insert the green nozzle assembly by twisting clockwise locking it to the bridge. See **D**.



INSTALLING THE RAY JET SPRAYERS

The kit includes three Ray jet sprayers with a threaded barb for use on individual shrubs, trees or small areas. The blue body 360° 10-GPH Ray jet sprayer has a 12-jet pattern with coverage of up to a 5 ft. full circle. Install the Ray jet sprayers every 3 to 4 ft. using the full or part circle. To install the 10/32 thread Ray jet sprayer, thread it into the hole you made with the punch in the poly tubing or use it with a poly riser extension model P35B (not included in this kit).

Selecting the proper coverage

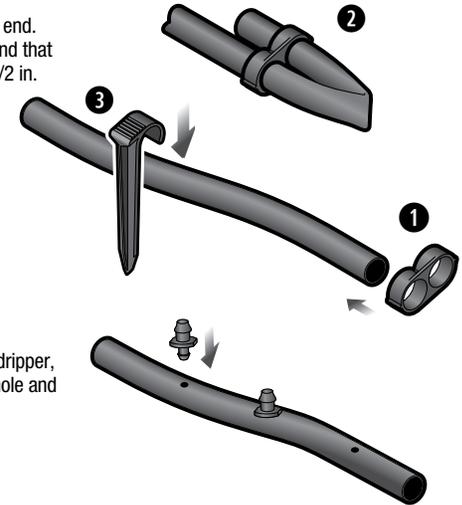
The blue body Ray jet sprayer comes with 360° coverage and has two additional tips for patterns of 180° and 90° coverage. To change the 360° pattern to one of the two colored tips included, follow these steps:

To install one of the colored tips, position the tip on the top of the jet sprayer and snap it in. The 180° tip is orange and 90° tip is green.



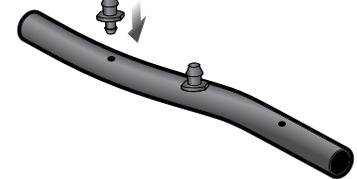
INITIAL SYSTEM START-UP

- Before turning the system on for the first time, leave all 1/2 in. poly tubing ends open and turn on your water and allow it to run freely for a few minutes. This will flush out any dirt that may be in the line.
- Close the end of the poly tubing by using a "figure 8" hose end. Check to see the micro sprinklers are operating correctly and that no leakage is occurring from the barb connections to the 1/2 in. poly tubing.
- Use stakes to secure the poly tubing to the ground.



Repairing or Plugging a Hole on 1/2 in. Poly Tubing:

If leakage occurs on the 1/2 in. poly tubing near the base of a dripper, simply remove the dripper and insert a goof plug to close the hole and reinsert the dripper in a different location.



MICRO SPRINKLER LAYOUT EXAMPLE



WATERING

Watering Time:

Run the system 45 minutes to 1 hour every 2-5 days, depending on your location (cool to warm) and soil type. After a week check the soil, the health of the plants, and adjust the watering time as needed.

MICRO SPRINKLER WATERING SCHEDULE

Flowerbeds, groundcover	30 min – 1 hr	1-2 days	3 days	4-6 days
Small trees	1-2 hours	2-3 days	4-5 days	5-6 days
Medium trees	2-3 hours	2-3 days	4-5 days	6-7 days
Large Trees	2-5 hours	2-3 days	4-5 days	5-7 days
Greenhouses, hothouses	5-10 minutes	2-4 times/day	2 times/2 days	1 time/2 days