



## Micro-Irrigation

### The Ultimate Flowerbox

## Installation Confidence Builder: Irrigation System (Self-installation guidelines)

### Tools & supplies you will need:

Tape measure	Hammer, with claw	Pliers
Level	Knife	Zip ties

### General Guidelines

1. Use as much as possible of the ½” tube, from the faucet, to keep the water pressure as high as possible.
2. **Never** bend the ½” or ¼” tube. That will restrict the water flow. ALWAYS use a right-angle elbow to change direction.
3. The ¼” tube can carry water to a total of 12 feet of boxes. That could be four 3’ boxes, or three 4’ boxes. For more than 12’ of boxes, run additional lines of ¼” tubing.
4. **Never turn off the water** at the spigot. That will prevent the water getting to the timer. Please attach the yellow “Warning” tag to the faucet handle.
5. **Always turn off the garden hose at the Y valve.** This way you do not lose the use of your garden house, you just control it via the Y valve.

The Controller (DK-14C) is fully assembled, even with Teflon sealing tape.

1. Attach system controller to an outdoor faucet.
2. One of the first components in this system is a Back Flow Preventor (BFP). This is required in many communities. The BFP function is to prevent any contaminated water from reentering the potable (household) water.
3. The full assembly can be set on the ground in the direction you wish to irrigate. That works fine. You may wish to bury the controller so it is out of sight using our optional valve box. You will want to assemble the tubing before you decide to bury it, to keep any dirt from getting inside the unit.
4. The system comes with a one foot piece (tail) of ½” poly tubing. You can attach the ¼” tubing from this section or replace it with a longer ½” section.

- a. For direct ¼” conversion: use the yellow key punch to puncture the ½” tube. Take the second of ¼” tube and insert a double-barbed connector or elbow. The elbow will allow you to take a right angle turn. Now insert this ¼” section into the ½” tail.
  - b. For converting to a longer piece of ½” tube remove the existing ¼” tail. Remove the tail by taking the thumb grips on the ratchet clamps and push them sideways in opposite directions. That will release the clamp. Keep the clamp, it is still good. Now remove the figure-8 crimper on the other end by sliding it away from the crimp. Once the short side slips out of the figure-8 the tube can be straightened and you can slip the figure-8 off. Keep the figure-8 for later use on the very end of the tubing.
5. Almost always the ½” tubing remains on the ground, slightly buried, against the foundation. You may want to dig a little trench (with a tool or the claws of a hammer) to bury the tubing after adding the 6” stakes to keep it in place. Use a stake every 4’, if you decide to purchase more than the standard one foot ½” tubing.
  6. Once you have the ½” laid out below every box you will want to connect, run the ¼” tube up to each box. Just poke, with the yellow punch, a hole in the top of the ½” tube. Then insert a double-barb ¼” fitting with the ¼” tubing attached.
  7. It is easier to insert the tubing onto an elbow or T if you use a cigarette lighter to “warm” it, but not burn it.
  8. Next attach the ¼” tube the house in the most inconspicuous way possible. Use a color that will blend best with the house color from the choice of white, tan or black. Use downspouts, gutters, trim on fascia boards, and/or shutters to camouflage the tubing.
  9. Use double-barb fittings as anchor points by putting a clamp right up next to them. This allows you to pull the tubing snug, thus eliminating any sag.
  10. Vertical water lines should be clamped every 18” and horizontal runs every 12” to 14”, or one hammer length.
  11. At the flower box, connect the colored water supply ¼” to the drip line with the emitters every 6”.
  12. Be sure the drip line is not being pulled. It needs to lie on top of the mix without any tension.

### **To Winterize**

1. Disconnect the controller system from the spigot and the ½” black tubing.
2. Disconnect the emitter line at the box so air can get in as the tubing back drains.
3. Wash the filter out so it is ready in the spring.  
Let the tubing to aerate for 2-3 hours allowing for it to completely dry out.
4. Use duct or electrical tape to seal either ends of the tubing/connections to prevent debris or insects from entering.
5. Store the system in a warm place, preferably in a sealed plastic bag to prevent debris or insects from entering.

### **To prepare for spring**

1. Reverse the winterizing procedure.
2. Check all tubing and connectors for cracks or possible leaks prior to reconnecting.