



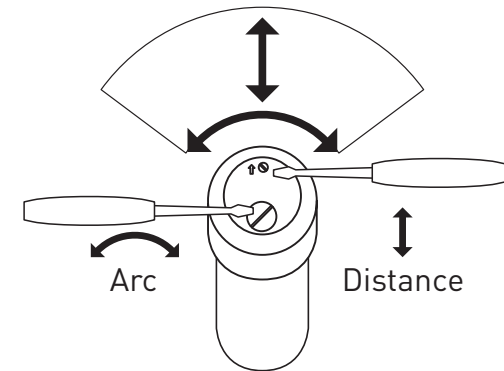
Look for leaks. If you need to make repairs or adjustments, Blu-Lock fittings are easily removable. To do so, turn your water off. Hold the fitting in one hand and the pipe in your other. Pull back on the tabs located at the end of the fitting, push the pipe in, twist the pipe, then pull the pipe out.

STEP 9
Adjust Your Sprinklers

Watch each sprinkler head as it rotates to ensure it waters where you need it. You can improve coverage by moving sprinkler heads, or adjusting the spray pattern with a flat head screw driver.

See the enclosed Saturn III, Gear Drive Sprinkler manual for complete instructions on how to adjust the sprinkler head.

If water sprays less than the distance shown in Step 2, review Steps 1 and 2 for flow, pressure, and distance.



STEP 10
Digging

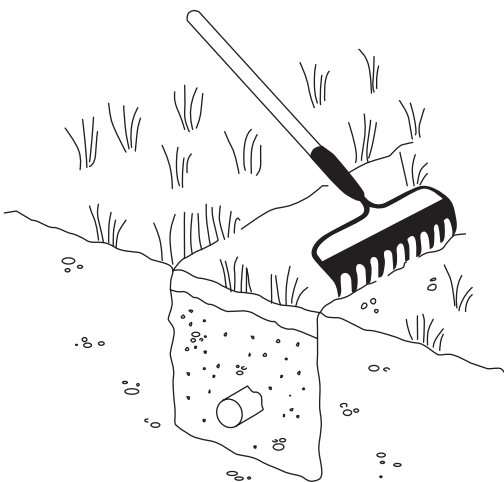
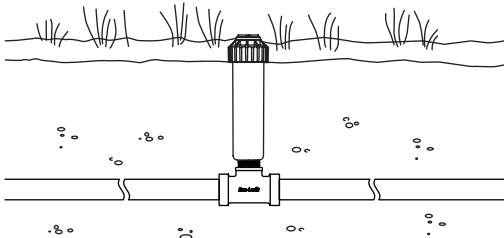
Once you are satisfied with your system coverage, it is time to bury the pipe.

Start by removing your sod. Dig down a few inches in rectangular or square shapes and pry up your sod. Set the sod aside so that it can be put back in place later.

Dig trenches eight inches deep. The top of the sprinkler head should be level with the ground.

Dig the auto drain locations deeper than the rest of your pipe. Install auto drains at the lowest elevation so that water can properly drain from the system.

Auto drains allow water to purge the pipes, reducing possible damage to your system. This does not take the place of winterizing your irrigation system. Be sure to properly winterize if you live in an area with freezing temperatures.



STEP 11
Clean Up

Bury your system. Shovel and rake soil back into the trench it came from, making sure to compact your trench so soil will not settle and create a trip hazard in your yard. Replace sod back over your trenches. Clean up any extra material from your yard.

STEP 12
Program Your Timer

See the included timer instruction manual on how to program your timer.

*Need more help?
Try our videos on the YouTube Orbit channel.*

- Suggestions:*
- *How to Perform a Water Pressure Test*
 - *Saturn III Gear Drive Sprinkler by Orbit*
 - *How to Program an Orbit Hose Faucet Timer (find the timer model number appropriate for your system)*
 - *How to Winterize a Sprinkler System*

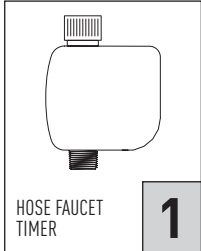
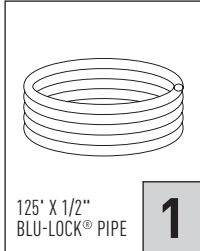
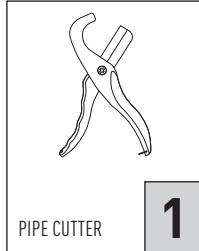
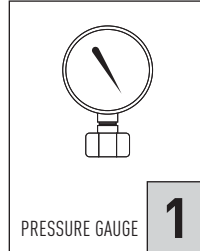
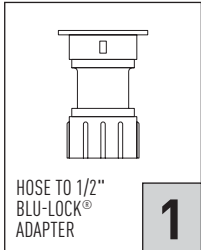
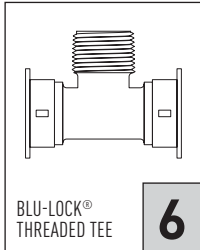
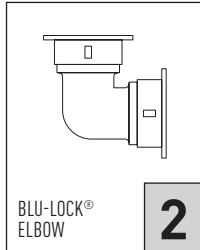
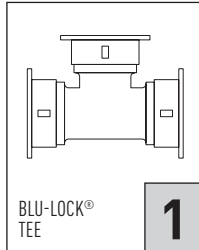
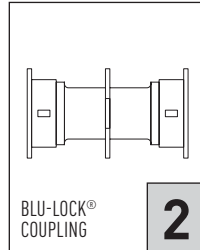
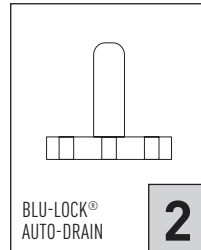
Complete Sprinkler System Kit

For instructions in Spanish, visit: orbitonline.com
Para instrucciones en español, visite: orbitonline.com

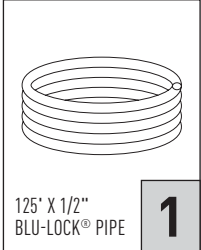
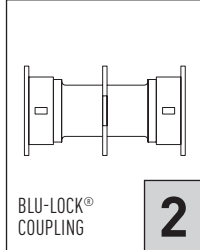
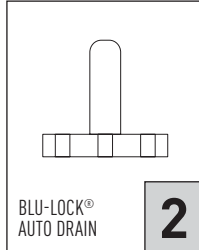
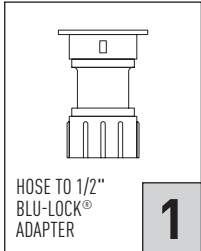
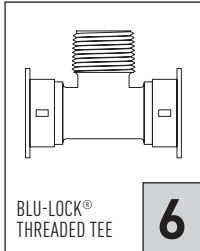
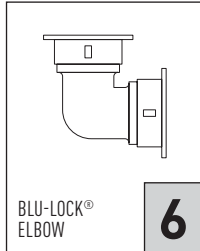
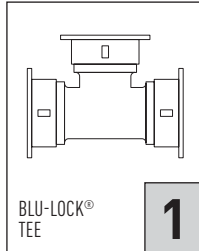
⚠ WARNING: Check Local Codes
It is important that you check with your city, county, state, and municipal water agencies to learn the local codes and permit requirements for sprinkler systems. Call utility providers to mark utility lines. Call before you dig; in most areas dial 8-1-1. Call days in advance to give the utility companies time to mark their lines on your property.

⚠ CAUTION:
In order to keep your drinking water safe and free of hazards, all faucets must be protected against the possibility of water flowing backwards from this irrigation system, into the home. If your faucet does not have a backflow device, such as a vacuum breaker, make sure to install one before attaching this sprinkler system. The home's backflow device must be compliant with local and federal plumbing codes. Orbit is not responsible for damage or harm caused by not installing and maintaining the appropriate backflow prevention device.

One Zone Kit Product List

 HOSE FAUCET TIMER 1	 125' X 1/2" BLU-LOCK® PIPE 1	 SATURN GEAR DRIVE SPRINKLER WITH .5 GPM NOZZLES 6	 PIPE CUTTER 1	 PRESSURE GAUGE 1	
 HOSE TO 1/2" BLU-LOCK® ADAPTER 1	 BLU-LOCK® THREADED TEE 6	 BLU-LOCK® ELBOW 2	 BLU-LOCK® TEE 1	 BLU-LOCK® COUPLING 2	 BLU-LOCK® AUTO-DRAIN 2

2-Zone Kit Additional Product List
If you purchased the Complete 2-Zone Sprinkler System Kit you will have these additional items:

 125' X 1/2" BLU-LOCK® PIPE 1	 SATURN GEAR DRIVE SPRINKLER WITH .5 GPM NOZZLES 6	 BLU-LOCK® COUPLING 2	 BLU-LOCK® AUTO DRAIN 2
 HOSE TO 1/2" BLU-LOCK® ADAPTER 1	 BLU-LOCK® THREADED TEE 6	 BLU-LOCK® ELBOW 6	 BLU-LOCK® TEE 1

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STEP 1

Test Your Water Supply

For these tests, make sure that no one else is using the water in your home. Anytime water is in use, it will affect the performance of this irrigation system.

Pressure Test

Attach the pressure gauge to the desired hose faucet, and turn the water on to find out how much pressure is available.

We recommend using a pressure reducer if your pressure exceeds 80 psi.

If pressure is below 35 psi, please note that this system may not work as designed.

Flow Test

The next test will tell you if you have the flow needed to use all six heads. Use a bucket that you know the volume of in gallons, a stopwatch, and something to write with, to record your results.

Using the faucet you intend to connect to, place the bucket underneath it, and open the faucet fully. Time how many seconds it takes to fill the bucket. When you are done, record the seconds. To find out how much flow you have, divide the number of gallons in your bucket by the seconds you recorded, and times that by 60. For example, if you have a five-gallon bucket that took 50 seconds to fill, it will look like this:

$5 \text{ (Gallons)} \div 50 \text{ (seconds)} \times 60 = 6 \text{ gallons per minute (GPM)}$

If your flow is less than five GPM, you should design with fewer than six sprinkler heads or the heads may not work properly.

STEP 2

Determining Sprinkler Head Spacing

Your available pressure will determine how far your sprinkler heads will spray water. Use this chart to help you determine how far apart to space your heads.

Distances are approximate and based on the Orbit recommended, U-shaped, design.

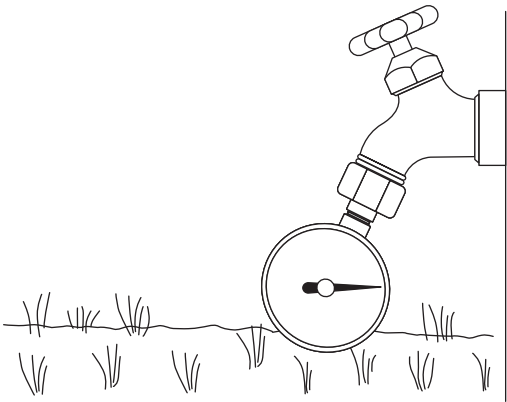
Performance will vary based on your design, and how many sprinkler heads you use. The spacing is based on the .5 nozzle provided. Distance will vary if the nozzle is changed.

STEP 3

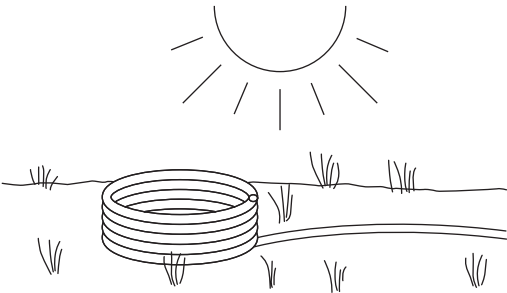
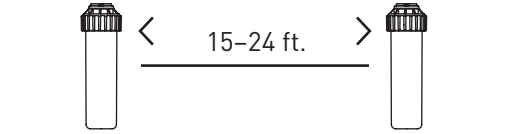
Prepare the Blu-Lock Pipe

- Unroll the 125' coil of pipe, making sure not to kink the pipe.
- Let the pipe rest in the sun for approximately one hour (depending on how warm it is outside), which will make the pipe easier to put into place.

While you are waiting for the pipe, you can move on to the next few steps.



Spacing Chart		
35 psi	50 psi	75 psi
15 ft.	21 ft.	24 ft.



STEP 4

Design Your System

For optimal coverage and health of your plants, locate each sprinkler so that the spray distance reaches adjacent sprinklers. Ideally the sprinkler heads' spray pattern will spray over each head a short distance.

- Orbit recommends the U-shaped design shown in this manual, but this design can be adapted to the unique shape of your landscape.
- To ensure proper pressure and spray coverage of your lawn, do not put any more than three sprinkler heads on any length of pipe.
- If you have the 2-zone kit, adapt this design for your second zone. It is okay to have extra parts left over when you are done; we added parts for varying layouts.

STEP 5

Connect the Timer

Connect the timer to the desired faucet and then connect the Hose to 1/2" Blu-Lock adapter to the timer.

STEP 6

Cut the Pipe

Cut the pipe where tees, elbows, and couplings will be located. Mark the Blu-Lock pipe one inch from the end before installing the fittings. This mark will help you know how far to push the fittings on to the Blu-Lock pipe. Don't worry if the pipe stays coiled, it will straighten out as fittings are attached.

STEP 7

Connect the Fittings

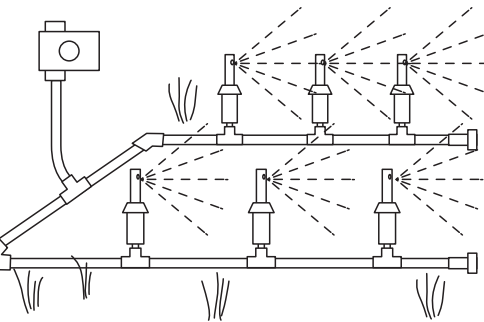
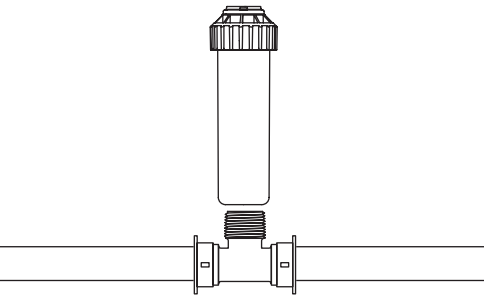
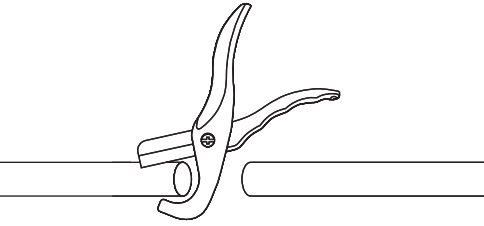
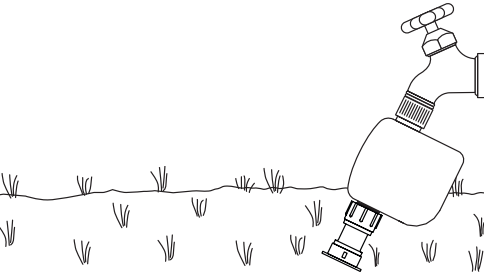
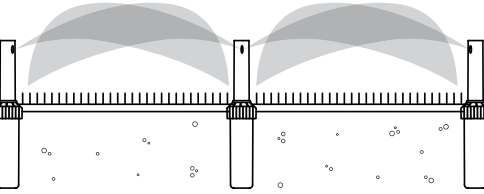
Connect the Blu-Lock pipe to the Hose to Blu-Lock adapter, tees, elbows, and couplings where you made your cuts. Make sure to push the pipe all the way into each fitting using the marking you made in Step 6. Attach sprinkler heads and auto drains to the appropriate fittings.

STEP 8

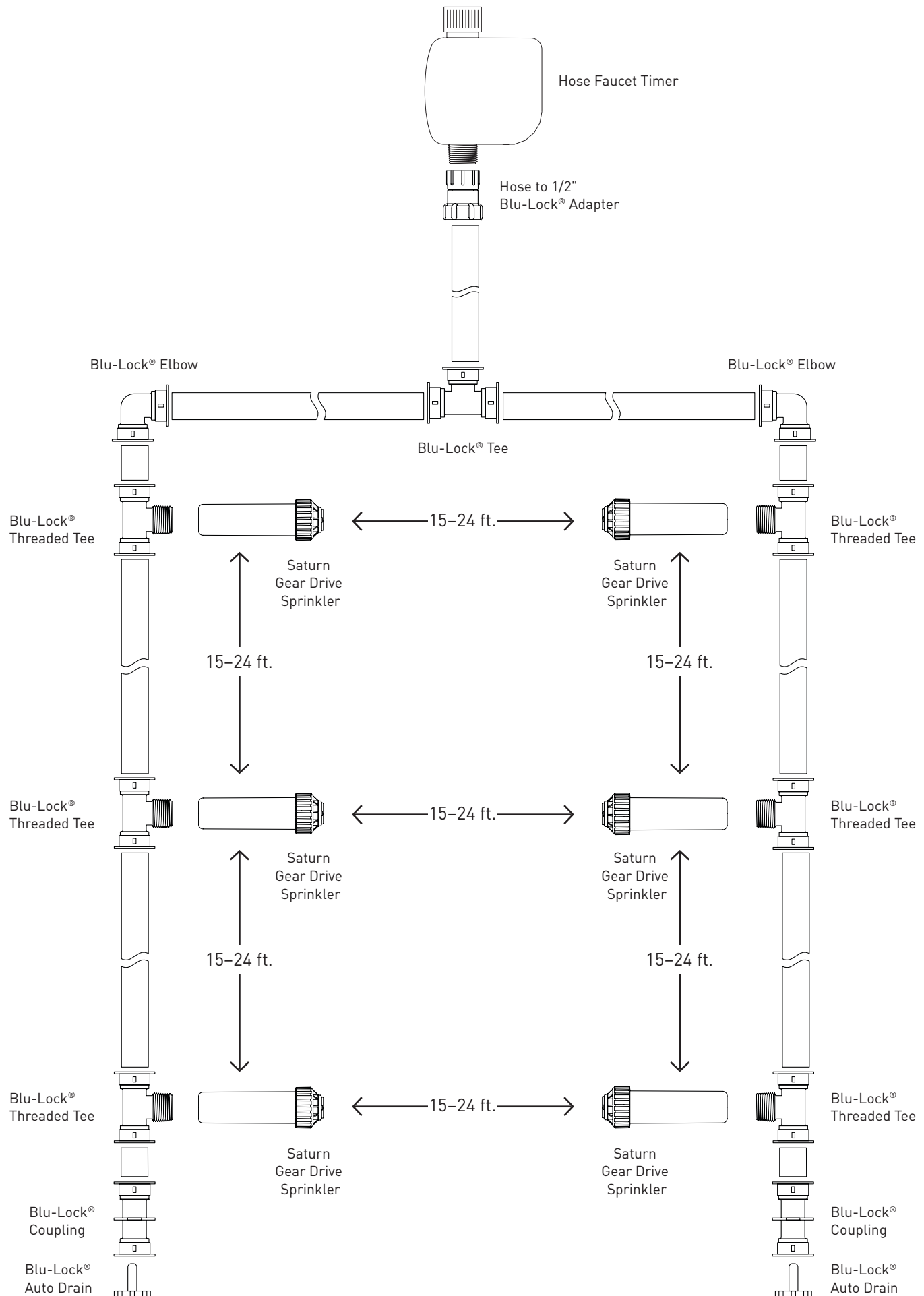
Test Your System

Above ground, place your pipes, sprinkler heads, and drains in the desired location. Stake or secure your sprinkler heads to the ground so they will not move when you turn your water on to perform this test. Turn the water on slowly.

Design for head-to-head coverage

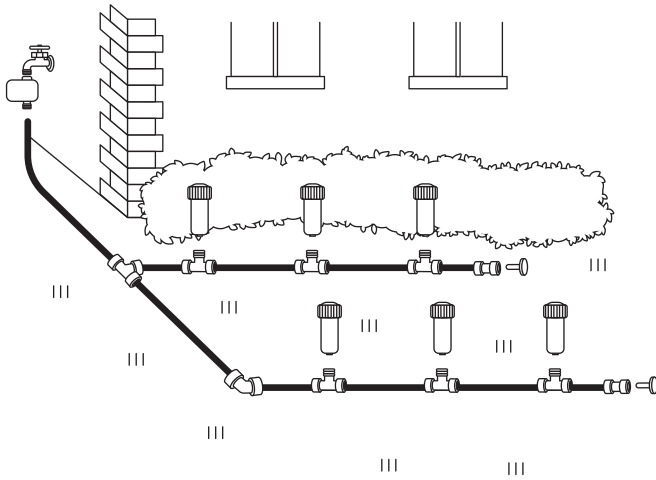


Recommended Sprinkler System Design

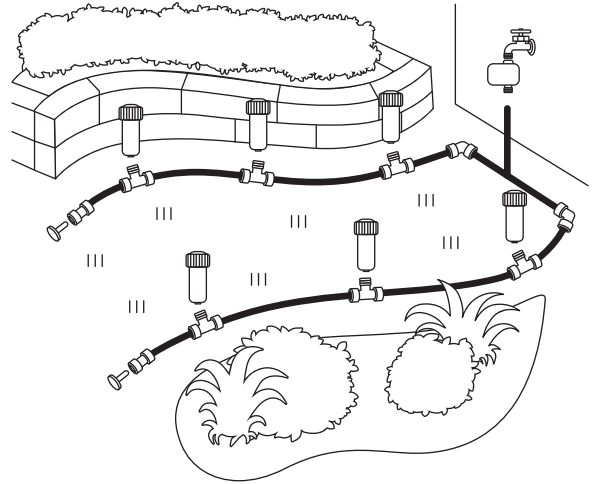


The Orbit recommended design can be adapted to the unique shape of your landscape

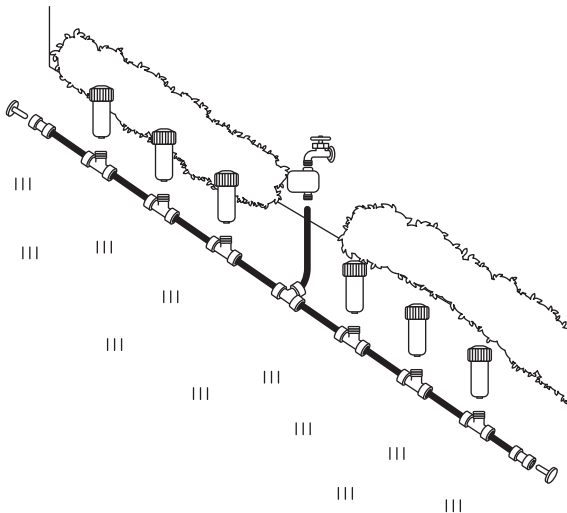
L-Shaped Design



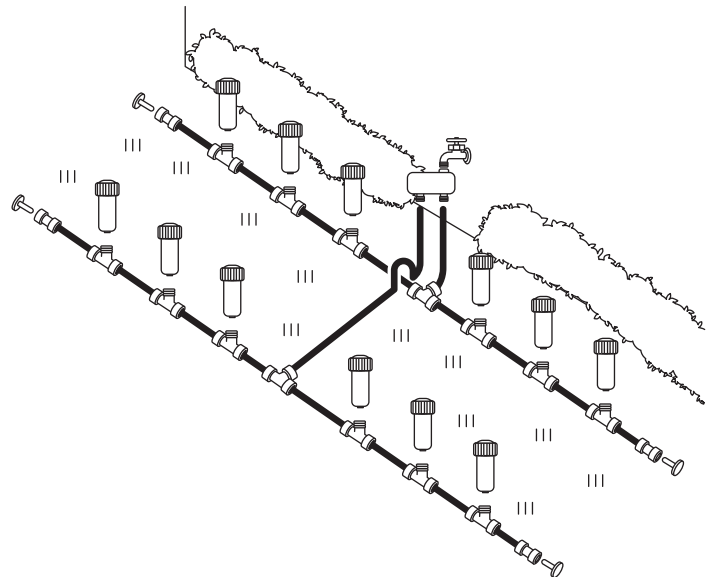
Modified U-Shaped Design



T-Shaped Design



2 Zone T-Shaped Design for 2 zone kits only



For the most satisfying results, bury your pipe, heads and fittings, as shown in Step 10