

# Lawn Pop-Up Irrigation DIY Kit (inc. Rainbird Timer)

## Installation Guide

Congratulations! Your garden is about to benefit from some of your finest work, with the help of this DIY Irrigation Kit. While gardens do come in all shapes and sizes, we've done our best to put together this kit to suit your typical small to medium sized lawns.

And even if it doesn't quite include everything for your place, for instance you need an extra fitting here or there, it's still a great way to get started with your own irrigation project.

#### Kit includes:

- 1 x Rainbird 1ZEHTMR Digital Tap Controller
- 2 x AA Batteries
- 1 x 19mm x 20mm Nut & Tail
- 1 x 25m 19mm Poly
- 4 x 19mm Elbow
- 2 x 19mm Tee
- 2 x 19mm x 15mm M.I. Side Outlet Elbows
- 2 x 19mm x 15mm M.I. Tees
- 2 x 19mm x 15mm M.I. Elbows
- 25 x 19mm Ratchet Clamps
- 6 x Rainbird 1804 Pop-Ups
- 6 x Rainbird 8VAN Spray Heads
- 1 x Teflon Tape

## Tools you'll need:

- Shovel
- Pipe Cutters (or Secateurs)
- Multi-Grips (to tighten the Ratchet Clamps)



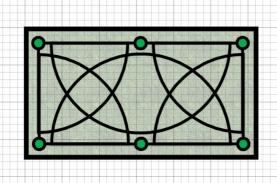
# Installation Steps

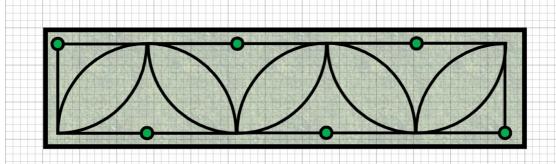
- 1. Identify a preferred layout & dig trenches (or scrape away mulch)
- 2. Roll out pipe & install parts
- 3. Program your timer
- 4. Flush the system

## 1) Identify a preferred layout & dig trenches

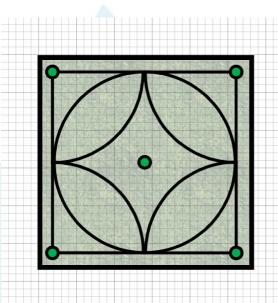
#### How to work out your ideal sprinkler layout

Spray Heads fitted into Pop-Ups (like the ones included in this kit) provide the most even coverage when positioned to spray all the way to the base of the next one, so you want considerable overlap. This is extra important for lawn, as dry areas become particularly conspicuous. The Rainbird 8VAN spray heads in this kit have a spray radius of up to 2.4m (8 feet), so you'll want to space them no further than 2.5m apart. See the examples below, you'll notice the more overlap, the more even coverage:



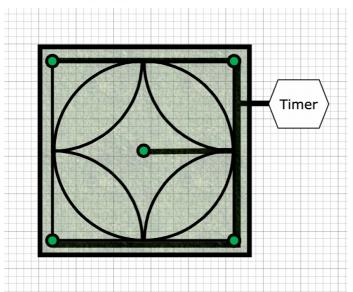






#### How to plan trenches

Always start from your water source (usually a garden tap) & identify a path that runs to the base of where each sprinkler will go. The Sprinklers will screw directly into the pipe with the help of a Poly M.I. Tee (inline) or Poly M.I. Elbow (at an end point). Your goal here should be to minimise the distance the water needs to travel to get to each spray. See this example:



## How to dig trenches in lawns

First things first, you'll want to make sure your lawn still looks good once you're done. To make sure of that:

1. Use a flat shovel to cut into your turf at 45deg angle along one edge of the trench you're about to dig.



- 2. Then on the other side, do the same. The result should be one long line of cut turf, 15-20cm wide.
- 3. Working along the channel, use the end of your shovel to cut the turf into 30-40cm wide pieces
- 4. Carefully lift each piece out, so it can be re-instated at the end.

With the turf removed, use a trenching shovel to dig out the rest of the trench. Important: Your trench must be deep enough for the pop-up sprinkler with a fitting screwed in the bottom to sit just below ground level.

#### 2) Roll out pipe & install parts

As you roll out the pipe & connect each piece, always start from the timer, it will make your life a whole lot easier.

#### How to connect the timer

Connecting your Rainbird 1ZEHTMR Tap Computer is easy:

- 1. Pull the battery case out of the back of the timer & insert the included **AA batteries**.
- 2. Screw the timer directly onto the tap. (the timer screws onto a standard 20mm tap, if you have a non-standard 25mm tap, you may need one of these)
- 3. Screw the included 13mm x 20mm Nut & Tail onto the bottom of the timer.

### How to connect poly pipe fittings

Connecting poly fittings is easy, but you must do it correctly to avoid any burst pipes later on! It's a matter of:

- 1) Cutting your pipe,
- 2) Push the barbed fitting all the way inside the pipe,
- 3) Connect and secure a *ratchet clamp*, behind the raised barb, using multi-grips.

And if it's a cold day, and your pipe is too firm, you can always dunk the cut end of pipe in some hot water to soften it a little. **Watch the YouTube video**.

### How to Install Pop-up Sprinklers

This kit includes both *Poly M.I. Tees & Elbows*, *Rainbird Pop-Ups*, *Teflon Tape* & *Rainbird 8VAN Spray Heads*. To install them:

1) At the point along the poly tube that you wish to install a pop-up, cut the poly pipe and connect a *Poly M.I. Tee* (or *Elbow if at an end point*) as directed above.



- 2) Apply *Teflon Tape* to the threaded end of the *Poly M.I. Tee*, going around about 3-4 times & tight enough that it doesn't slide off when the pop-up is screwed on.
- 3) Screw the *Rainbird Pop-Up* onto the *Poly M.I. Tee*.
- 4) Hold the *Rainbird Pop-Up* in place, making sure the top of the sprinkler is below ground level, and backfill dirt around it so that it stands securely in place.
- 5) Hold off screwing in the *Rainbird 8VAN Spray Heads* until after you've flushed the system.



## 3) Program Your Timer

This Kit includes a **Rainbird 1ZEHTMR Tap Timer**, learn how to program it here:

- Watch YouTube Video
- Read Product Manual

#### 4) Flush & Adjust The System

Although we have no doubt you worked as cleanly as possible, you still want to make sure there's no dirt or grit in the lines from installation that will block the system up on it's first cycle. So just:

- 1) Make sure your spray heads aren't screwed on yet,
- 2) Give the system a manual cycle for a minute or until you can see the water is flowing clear out of all outlets, then on each pop-up,
- 3) Pull up the orange flush nozzle, holding the riser up, and screw it off.
- 4) Insert the included **Spray Head Filter**, then screw on your **Rainbird 8VAN Spray Head** & adjust accordingly.

#### How to Adjust Rainbird VAN Spray Heads in Pop-Ups

There are 2 adjustments you can make to *Rainbird VAN Spray Heads*:

- 1. **Spray Arc Adjustment:** Looking at the spray, you'll see a middle collar in between the coloured top & the base. Use your fingers to rotate it, and it will open and close the spray arc from left-to-right.
- 2. **Spray Radius Adjustment:** You can adjust the flow from these spray heads all the way down to zero, but they'll effectively spray with only a small adjustment down to about 80%. This is done with a small screwdriver, by screwing down the small screw on the top of the Spray Head.

You can also adjust your Rainbird Pop-Ups:

• **Spray direction adjustment:** Pull up the Pop-Up riser, and with a firm grip, rotate it. It will make a ratcheting sound as you make adjustments.