VENETIAN SM
GOLF & RIVER CLUB
PROPERTY OWNERS ASSOCIATION

VENETIAN GOLF AND RIVER CLUB

A GUIDE TO VENETIAN RESIDENTIAL IRRIGATION

The purpose of this document is to educate you just a bit on the irrigation system serving your property. It's not meant to make anyone an expert on irrigation, but rather to assist the average person with understanding how their system works and how each of its components fit together. You should be more comfortable when you understand how various parts of your home and property fit together. You don't need to be an electrician to understand how electricity flows through a light switch or receptacle to provide light or run a refrigerator, but you probably know enough about it to call an expert when something goes wrong. This pamphlet was prepared to make you aware enough to call an expert when something goes awry with your irrigation system.

First things first:

- The irrigation water for our community is controlled by the VCDD. They operate the main pumps within the community and set the days and times for property owners to irrigate.

- The amount of water allowed for VG&RC as a whole is controlled by the Southwest Florida Water Management District (SWFWMD). The community is allocated a certain amount of well water each month and the community as a whole can be fined up to $10,000.00 a day for over usage! That's why each homeowner must follow the irrigation schedule.

- The property owner is ALWAYS responsible for irrigation violations just as with other violations of the Master Declaration. This applies even if you're on vacation somewhere, head north for the summer, become ill, forget, or simply just don't pay attention to your property.

- Your irrigation controller is the box located on the outside of your garage wall, usually close to your electric meter. A power outage or power surge will likely affect its timer and settings, so they should be checked regularly. In some homes, the controller is wired directly to a circuit breaker in your electric panel. In other homes, it's wired through a GFI (Ground Fault Interrupter) circuit. This GFI may trip and it must be manually reset for the controller to operate. Learn where the GFIs in your home are located. If you have a GFI supplying the controller, it is most likely located in the garage, or it could be on the outside wall near the control box. When the landscaper is doing a wet check on your property, ask him to show you how he does it. It takes just a few minutes to learn how and that knowledge can be very helpful to you. If you're not available to check your GFIs, make certain a friend, neighbor, or house sitter does so for you and has access to them.

- **DAYLIGHT SAVINGS TIME adjustment** – don't forget to reset your timer's clock, which must be done manually. *Spring forward* and *fall back.*

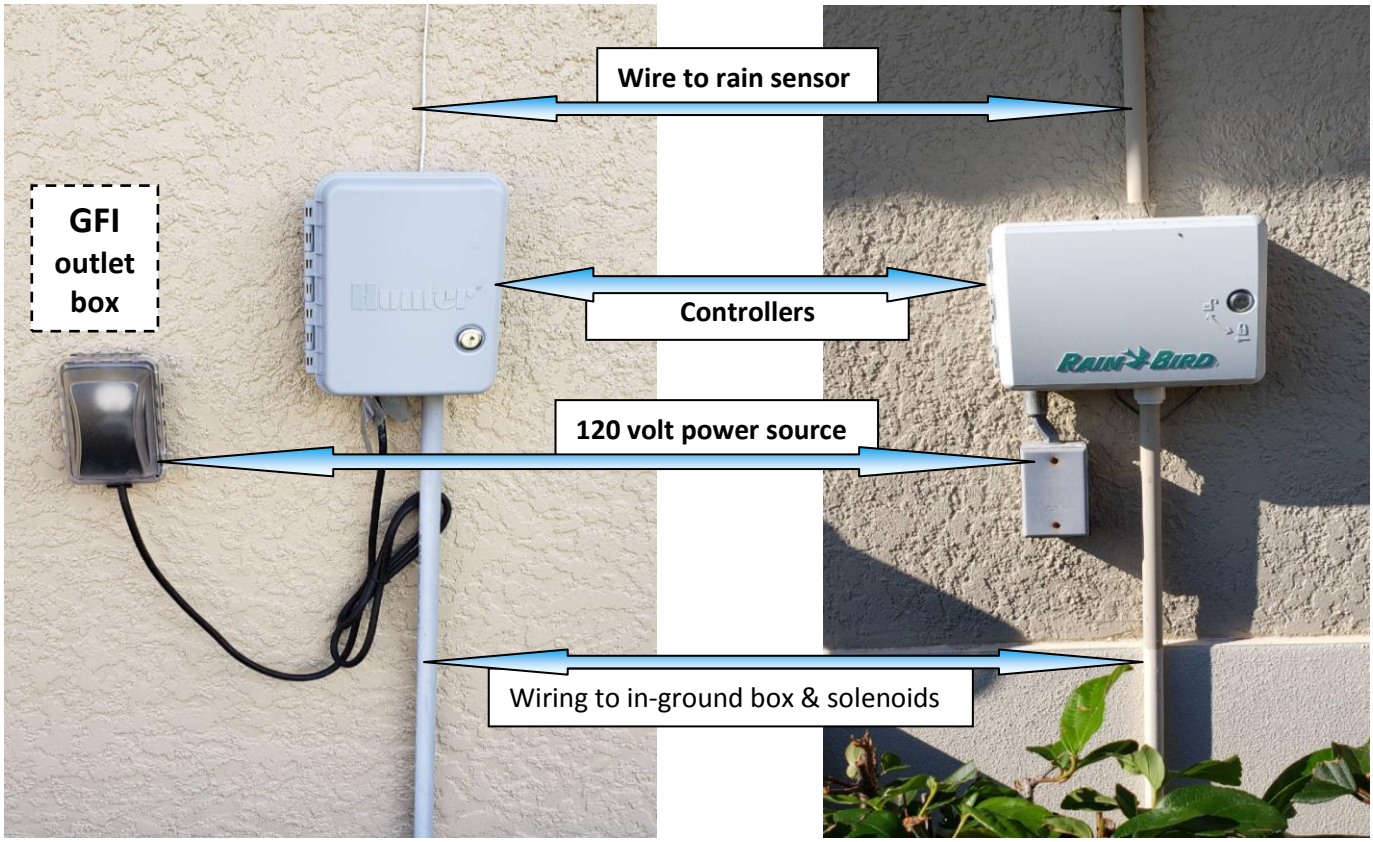
- No part of your irrigation works by magic. Once you become familiar with how the various interrelated parts function and work together to deliver water to your property, you'll be better informed and be able to participate in the process – if only to learn when to call an expert, just as you would call an electrician when necessary.

THE IRRIGATION CONTROLLER

The irrigation controller is normally located on the outside garage wall of your home. It electrically controls the solenoids that operate the valves that allow water to flow through your irrigation lines. The day of the week, time of day, and amount of time allowed for each zone (or line) is determined by the irrigation controller. The lines are all PVC pipe as they leave the in-ground irrigation box but one is then connected to the 1/2 inch low-density polyethylene tubing for the planting areas and the others to smaller (1/2 inch) PVC pipes and heavy "rubber-like" flexible lines to the lawn pop-up heads.

The controller also reduces the voltage in the lines operating the solenoids with a small transformer that takes the standard 120 volts coming from the home electrical system and reduces it to 14 volts. This is for safety reasons since the wires are buried. The time of day and amount of time for each zone (or line) is determined by the irrigation controller. There's also a small battery within the controller to maintain programming in the event of a power outage.

IMPORTANT: The battery should be replaced every 2 years.



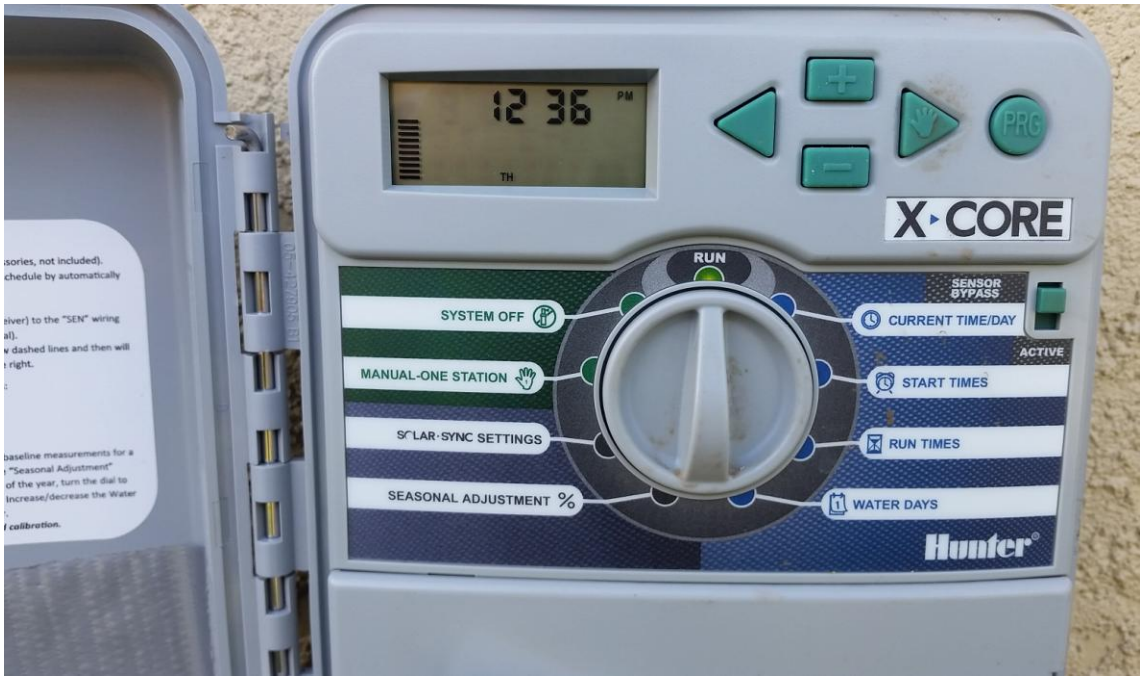
There are two ways in which the controller receives electrical power. The first is through a junction box on the outside garagewall. The second is through a Ground Fault Interrupter (GFI) outlet box either on the outside wall **OR** on an inside garage wall. A GFI is an outlet designed to protect you against electrical shock. In the event of a power surge, the GFI may trip creating an open circuit and cutting power to the controller. In this case, the controller will not receive power even when power is restored to the home because the GFI must be manually reset. The battery will maintain the settings already programmed into the controller but the controller won't operate.

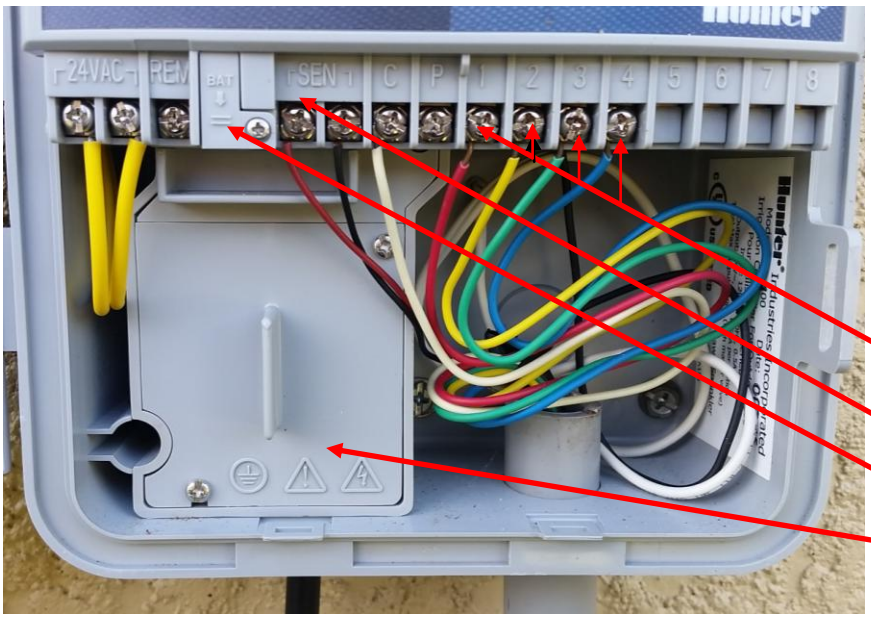
IMPORTANT: check to determine if your system has a GFI.

INSIDE THE IRRIGATION CONTROLLER

This is the inside of the Hunter X-Core controller. Other styles of the Hunter brand and even other brands all have the same basic controls. The door has been opened to show that this controller displays the correct time and day of week. If only the year was shown and flashing, it would indicate that there was an interruption of power and the date and time would need to be reset. The original programming setting will hold in the event of a power outage **IF the battery is functional.**

You can download the full operating manual from your controller brand's website.





The cover has been removed to show some of the inner parts. The transformer is still covered and should always remain so. From the connected wires you can see that this is a 4 zone system (numbers 1-4), the red, yellow, green, and blue wires.

WIRES TO THE ZONES

RAIN SENSOR

BATTERY

TRANSFORMER

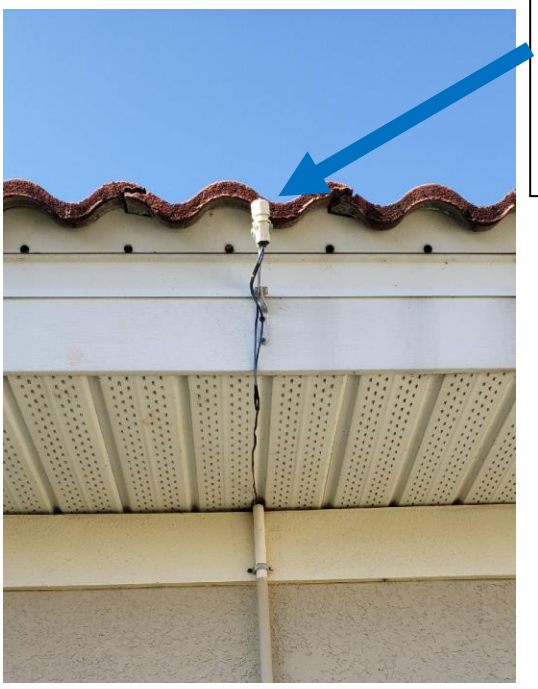
SOME ANCILLARY ITEMS OF INTEREST

FROM THE BEGINNING

THE CURB OUT FRONT

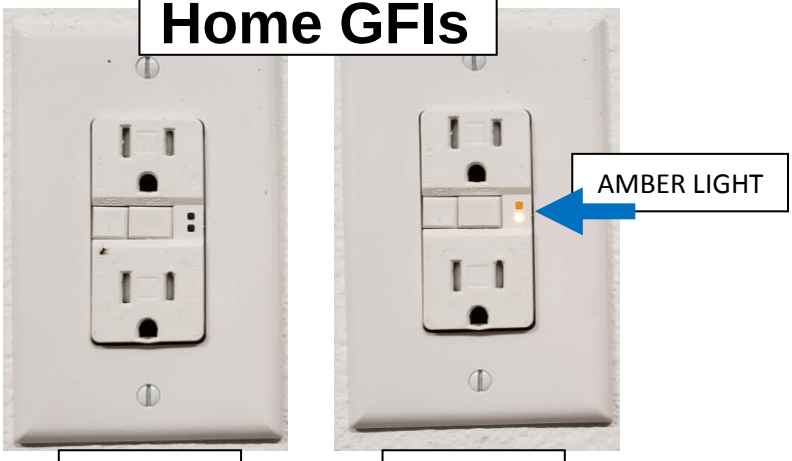
The letter **R or I** is embedded in the concrete curb in front of each home. It indicates where the **R**eclaimed water line comes in to supply **I**rrigation water to the home. Other letters in the curb are **W** for the potable water line and **S** for the sanitary/sewage line. The occasional **V** indicates a valve.

BYPASS THE RAIN SENSOR



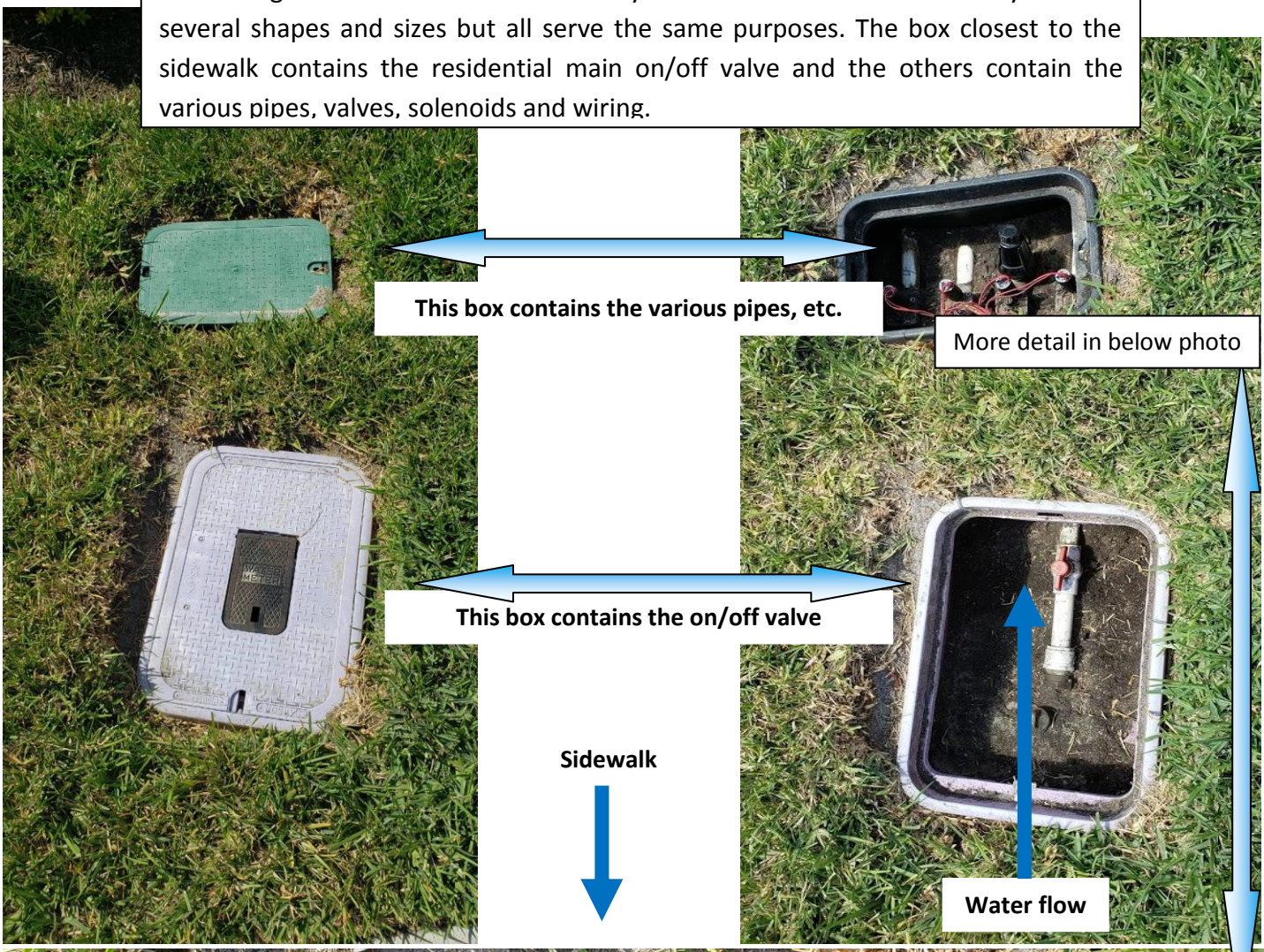
The rain sensor on your roof or on a post is designed to send a STOP signal to the controller when enough rain has fallen so that the lawn and plants should not need supplemental water. **Please bypass this function in the controller with the switch on the control panel.** The VCDD controls water use by not activating the main pumps if sufficient rain has fallen.

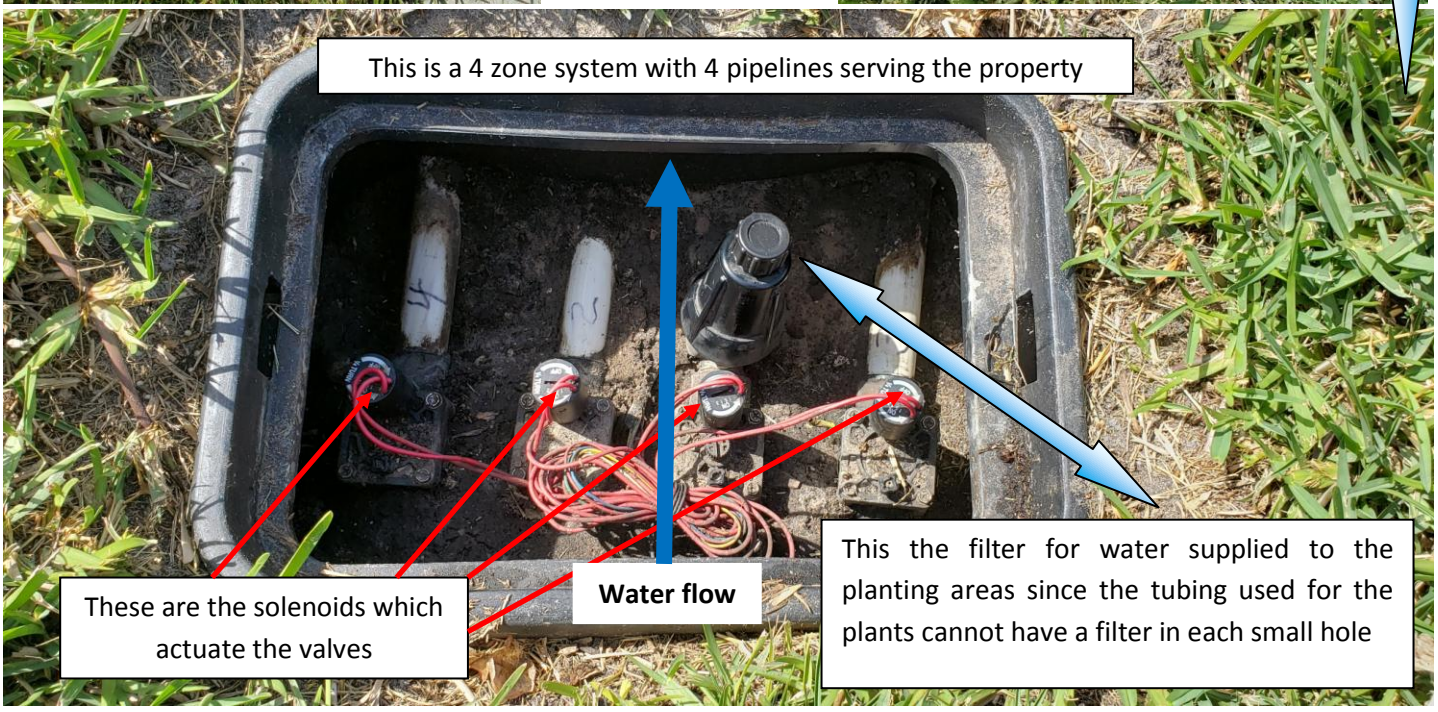
Home GFIs



NORMAL **TRIPPED**

2 or 3 irrigation related boxes are usually located near the sidewalk. They come in several shapes and sizes but all serve the same purposes. The box closest to the sidewalk contains the residential main on/off valve and the others contain the various pipes, valves, solenoids and wiring.

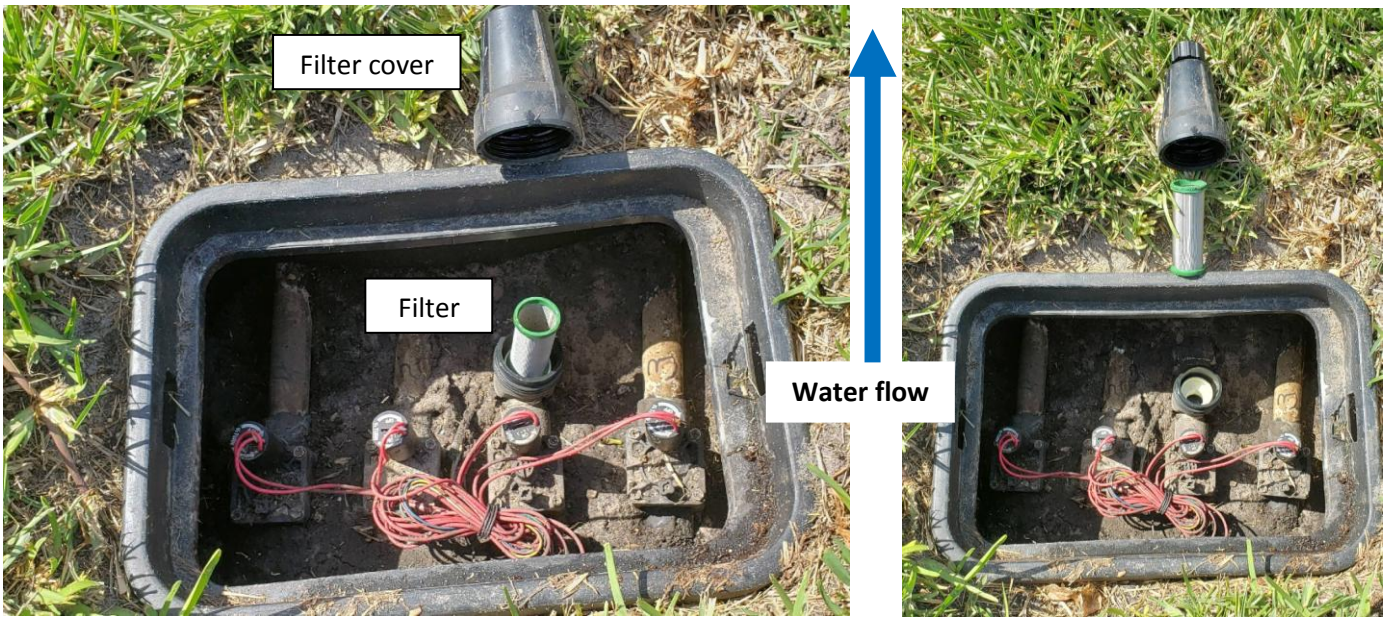




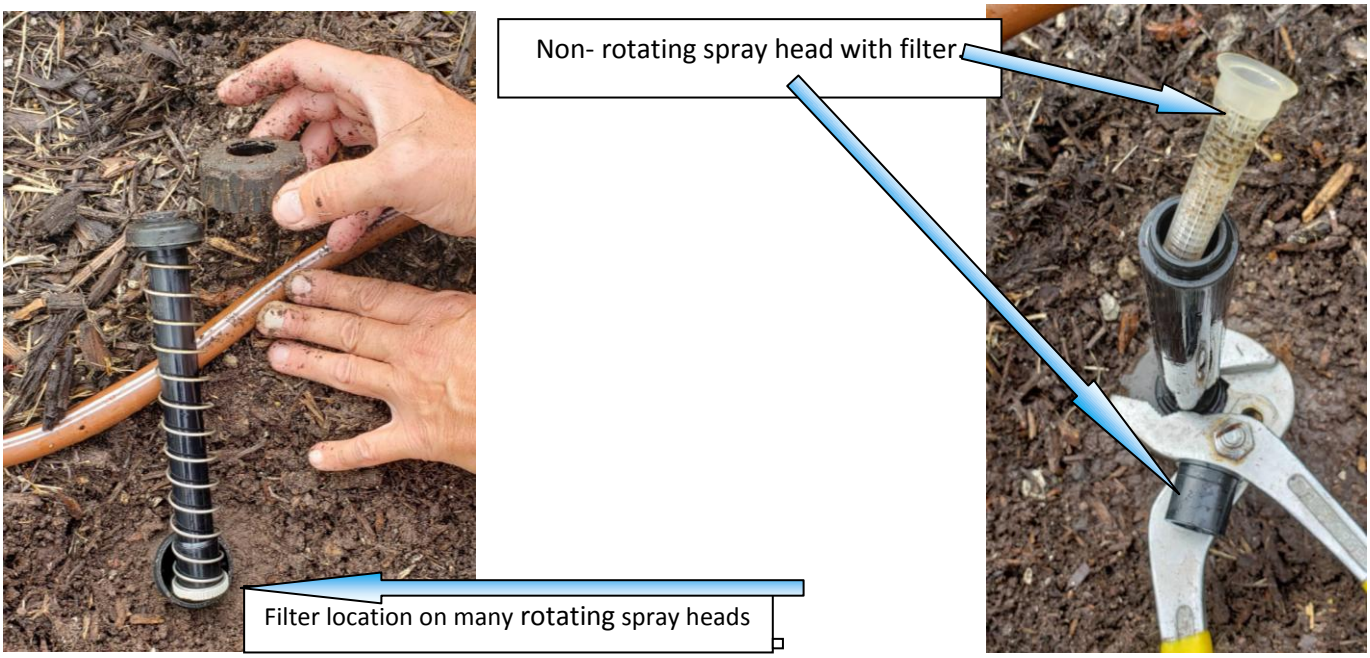
This box contains the necessary solenoids, valves, pipes, and wiring to run the system

TWO TYPES OF IRRIGATION FILTERS USED IN STANDARD SYSTEMS

This is the filter used for the irrigation line supplying water to 1/2 inch tubing winding through the planting areas. In the left photo the filter cap has been removed exposing the actual filter. In the right photo both the cap and the filter have been removed. The filter cap is easily removed by unscrewing it and when replaced is tightened by hand. The filter itself is a hollow metallic tube open on each end and easily cleaned with plain water and a toothbrush. It's recommended that the filter be removed and cleaned twice each year. Be sure to turn off the main water supply valve before removing the filters.



Most pop-up non-rotating irrigation heads have the filter pictured below. Many of the rotating spray heads have their filter in the bottom of the removable tube - the same type tube pictured here but just with a different head. They pop right out of the tube and are cleaned with plain water. Make sure the system is off first!

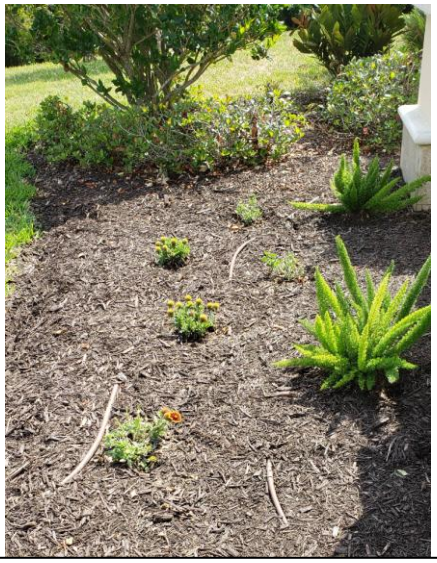


WHAT'S IN THE YARD ?

TYPICAL IRRIGATION SPRINKLER

The sprinkler on the left is in most yards.
On the right is the same type dissembled.

IRRIGATION DRIP TUBING



Drip tubing is located in planting areas. Small holes every 18 inches allow measured amounts of water to drip onto the soil. Each hole has a pressure reducing device imbedded to control the flow. That's why large amounts of water is not squirting out! Do **NOT** attempt to make additional holes or make the existing hole larger.

DONUTS

Every sprinkler needs a concrete donut.
Which kind is in your yard?

CLEAN DONUT & SPRINKLER

LOOKING FOR TROUBLE

It's in here somewhere. Honest!

Concrete donuts should be placed around every irrigation head on the property - even those located within mulched areas. Donuts hold back encroaching grass & mulch so that the riser and nozzle can rise to the occasion.

Some important things to remember:

- The property owner is **always** responsible for maintaining the correct schedule to avoid irrigation violations.
- When you leave the area, be certain that you have someone with the ability to access your property (including the garage) who can reset the GFIs if necessary. AND, did you know that in some cases your garage door is also on a GFI controlled circuit? Your garage door will not function if the GFI is tripped; a front door key will be invaluable in that case since your garage door will not respond to your remote.
- The filters on your system should be cleaned twice a year. Clogged filters slow and can even prevent water from reaching your lawn.
- Make certain all your popup nozzles are protected by a concrete donut. And, make sure you or your landscaper keeps grass or mulch from intruding so it won't block the nozzles.
- Don't forget to have the controller's time changed for Daylight Savings Time. If not, you will either miss an hour of irrigation or run over an hour into a violation time. If you can't do this ensure your landscaper does.
- It's really important that you take responsibility for YOUR irrigation system. Not necessarily by doing everything or even anything by yourself - though it's not that difficult - but by actively overseeing those who do. Remember that your landscaper, either private or through your association, likely has many customers and may occasionally overlook something important in your yard. Make sure your filters and donuts are kept clean and that wet checks are done thoroughly and at least monthly. You should obtain necessary contact information for your landscaper and contact them - or your association Property Manager - every time you think it's necessary. Remember that the "squeaky wheel" gets the grease so squeak when necessary to maintain your irrigation system.
- An excellent way to get started taking charge of your property is to learn how to conduct wet checks. It's really simple to learn how and you may even find things that require your landscaper’s attention.
- Good luck and don't forget to ask questions as necessary.