

IrriGRAY is designed to use as little potable water as possible for irrigation. Instead it uses various water sources such as graywater, AC condensate, and rainwater as efficiently as possible.

The basic concepts of IrriGRAY are very simple:

- * Catch the graywater in a small pumping basin, sending graywater through the filter as soon as there is as little as 7 gallons available. IrriGRAY does NOT store graywater for batch irrigation.
- * Pass the graywater through an automated self cleaning filter.
- * Send the graywater & any other water sources to irrigation zones based on climate and plant needs.

Managing graywater efficiently is a complex task—and that is why we developed our own integrated controller.

This document explains the features and benefits of each of the IrriGRAY components.



Graywater Collection & Pumping Basin

Filter & Water Management



Controller

Pumping Basin

Small Size: Reduced installation cost. Reduced system cost. No odor / sediment issues.

Integrated 3" Inlet / Overflow / Bypass plumbing with Single Gate Valve: Reduced installation cost. Automatic overflow to waste.

Basin Agitation & Coarse Prefilter: Automated self cleaning, only inspect basin annually. Long pump life.

Failsafe pumping of graywater to waste, if any controller failure: In the event of any system or power failure, graywater is automatically pumped to waste.

Basin surge capacity can be enhanced with twin (or more) basins: The irriGRAY pumping basin is highly adaptable to suit almost all requirements.

Plug and Play: Simple to install, reducing installation labor.

Easy maintenance: Multiple plumbing unions make for simple and fast pump removal.



Filter and Water Management

Small Footprint: Simplified installation, easily hidden by cabinet or screen, if desired.

Fully automated, self-cleaning: No frequent filter cleaning – just a once a year clean for most residential installations.

Permanent filter screen / discs: No consumables needed.

Freeze protected : The unique design places the filter into protected mode during freezing conditions, so the filter can be located in or outdoors.

Plug and Play: Simplified installation, minimize installation costs.

Easy maintenance: The module contains multiple unions to make component change simple and quick.



Filter options available



IrriGRAY Controller

Industry standard controller weather proof box with lock: Can be installed in any location.

7" Tablet as Controller: Apart from being simple and easy to use, online or standalone, The IrriGRAY system is designed to adapt well into the future.

Programming and electronics specifically designed for graywater, condensate, rainwater, and potable water management: No matter your circumstance, IrriGRAY automatically manages available water efficiently, and in order of importance (1st - graywater / condensate, 2nd - available rainwater, 3rd - potable water)

Online (wifi) or Offline Operation: If Wifi is unavailable, IrriGRAY can still be programmed directly on the tablet, and keeps a log of irrigation information on the tablet, as well as a graph for viewing irrigation events. The Tablet interface is almost identical to the internet interface.

Automatic Self Updating: Your system will automatically receive the latest updates and features. If you have a specific issue that needs a software change, our support team can automatically test resolutions for your system, without anybody needing to be on site.

Simple Programming: Just specify the climate location, any local water restrictions, zones sizes., plant type and planting density. IrriGRAY automatically manages zone irrigation throughout the day, to most effectively use all available water supplies.

Remote Access: Remote access provides unsurpassed levels of data back to the installer, while checking zones on site. This significantly reduces undetected irrigation issues while the irrigation crew is still onsite. Remote access also enables the support team to analyze the entire system if an issue occurs – without needing anybody on site.

Automatic System Monitoring: IrriGRAY, with wifi connection, automatically identifies issues for review by the IrriGRAY support team. The IrriGRAY support team currently contacts the client to discuss, however this will also be automated in a future version. Monitoring is critically important, because most system components are hidden from view, and all irrigation occurs subsurface. Without monitoring the first indication of an issue would otherwise be stressed plants in the affected irrigation zone/s.

Multi-purpose zones: IrriGRAY gives you the flexibility to choose from graywater dripperline, graywater disposal, potable water dripperline, and potable water sprinklers to meet all of your irrigation needs. Each zone is irrigated as efficiently as possible, minimizing water use and cost.

Metered Flow: IrriGRAY uses flow meters to deliver the exact number of gallons required each day. IrriGRAY also uses the measured flow rate to detect any system issues.

Automatic distribution of graywater throughout the day: IrriGRAY pumps the graywater around all zones throughout the day, without waiting for single zones to receive the full water requirement. This means graywater irrigation zones do not wait until previous zones have received their total required water. This is particularly important for installations having only large zones, or a mix of large and small zones.

New Planting: When Sod (or virtually any new landscape) is planted, additional water is needed to help overcome soil dryness and transfer shock. Additional water can be programmed to help new plants establish in existing soil. Automation helps reduce plant stress / loss, and saves significant time and effort.

Rainwater storage management: A key challenge with Rainwater Harvesting is to remember to use the rainwater when you have it (but always use graywater first because it must be used the same day). Rainwater storage is ineffective if the tank is full and there is no more capacity left when the next storm comes through. By automating rainwater use, IrriGRAY maximizes the utility of the rainwater tank / cistern. Graphs and charts illustrate current storage levels, as well as inflow events and flow rates.

Vacation Supply: While you are on vacation, IrriGRAY irrigates zones as if you were still at home with potable water. This helps avoid introducing irrigation stress for your landscape by waiting until the end of the day for makeup water.

Rain & Flood Sensor inputs: The first rain sensor input, typically set to trigger around 1/4" of precipitation stops adding any rain or potable water for X hours. A flood sensor, typically set to 1 or 2" of precipitation stops all irrigation, and any graywater collected is sent straight to waste, again for a variable number of hours.

Excess Graywater: If you have a septic waste system, IrriGRAY helps reduce your septic maintenance costs by automatically keeping graywater away from the septic during winter with optional graywater disposal zones.

More: *This is a list of the most valuable functions included with IrriGRAY. There are many other features available, and more planned. If you have a particular need, please contact us to discuss—it is most likely already in IrriGRAY!*



IrriGRAY Online

The IrriGRAY system includes a 7" tablet as the controller. The tablet manages all minute by minute activities such as water management, filter cleaning, dripperline flushing and more. When connected to the house or building wifi, the tablet can be programmed via our internet server (www.irrigray.com) or directly on the tablet. Internet programming and connectivity provides many advantages, such as remote control from any device, remote programming, and continuous performance monitoring and issue notifications.

The programming interfaces on the tablet and www.irrigray.com are almost identical. www.irrigray.com is device responsive, meaning the screens adapt to best suit your internet device, whether it be a smart phone, tablet, PC or Apple computer, without needing an application.

With IrriGRAY, programming is easy—simply specify the system location, any local potable water restrictions, and what type and size zones you have. Because all irrigation water is metered by a flow sensor, there are no minutes to guess, no sprinkler cup tests etc - IrriGRAY simply does it all automatically.

These example charts show some of the detailed information available at IrriGRAY.com:

Programming IrriGRAY is much easier than traditional dial based irrigation controllers.

Just 6 Simple Steps:

1. Create an Account
2. Add your "Installation"
3. Edit a "Configuration"
4. Set Climate & Water values
5. Edit Zones
6. Save your "Configuration" & Mark it "Active"



Water Usage by Zone



Day by Day Water Usage



Total Water Usage

More Information?

Go to <http://www.waterrenu.com/documents/> and download useful documents such as:

- IrriGRAY Brochure
- Water ReNu Product Catalog (including pricing)
- IrriGRAY Features and Benefits
- IrriGRAY Installation Guide (user guide, plumbing, electrical and irrigation)
- IrriGRAY Online

Or contact us at 1-844-472-9426 (1-844-grayh2o), or go to <http://www.waterrenu.com/contact/>