

# Heron

## Multi-Wire Irrigation Controller



**The most  
comprehensive  
range of  
features in the  
marketplace.**

A versatile irrigation controller for  
horticulture, landscape and  
agriculture.



**Heron**  
Electric

# Why the Heron Multi Wire Controller ?

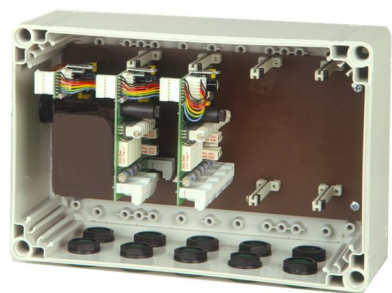
- A superb range of software features enable you to customize the controller to match the exact needs of each installation.
- Create irrigation programs, running any valve in any order.
- Run up to 6 valves in parallel.
- Option to operate your controller from a PC or a mobile phone
- Integrate with sensors and dosing systems..
- Unique lightning surge suppression feature utilizing optical technology built-in to all controllers.
- Battery powered versions available.

## Controller Sizes

The Heron Mi range of multi wire irrigation controllers operate from 4 to 144 valves.

Models sizes are available for 4, 8, 12 or 16 valves.

The Mi-144 irrigation controller runs 16 valves as standard but can be upgraded to support 144 valves using expansion boxes and additional output cards. Each expansion box can accommodate four 16 valve output cards.



## Easy To Use

The large display and menu driven operation of the Heron irrigation controllers, makes them intuitive and easy to use.



To simplify the creation of irrigation programs valves can be individually named. Irrigation programs can be completely customised, allowing the user to change the valve order, add and delete valves.



## Tailor Your Controller to Meet Your Needs

Because every site is different, Heron irrigation controllers can be configured to match the needs of each installation. You can specify the number of programs, the type and number of automatic starts needed. You can enable or disable the software features required.



Simply select the features you want from a list of options. The features will then appear in the controller's Main Menu for you to use.



## Complete Control

Mi controllers can be integrated with sensors and dosing systems.

Irrigation can be controlled by light, rain, temperature, humidity, wind speed, wind direction or flow meters.

For example, your Mi controller can be set up to :

- Operate a misting irrigation program initiated by light and humidity.
- The misting irrigation program can be set to take priority over outside irrigation programs.
- The outside irrigation can be configured to reduce based on rain fall.



Heron controllers can also be connected to Heron's fertiliser and acid dosing systems. Up to 4 Heron dosing systems can be connected to one irrigation controller.

Alternatively Heron controllers can be used to control the dosing of fertilizer on a proportional basis using two flow meters. One flow meter measuring the irrigation flow and the other measuring fertilizer flow.

By adding an additional output card Mi controllers can also operate back flush filters or be used for frost protection.

## No Mains Power

Heron multi wire battery powered controllers provide an ideal solution for the irrigation of remote areas on farms or nurseries, where there is no mains electrical power.

- The latching solenoid version can be powered from a small solar panel.
- The controllers are available in two sizes. The Mi-B8 operates up to 8 irrigation valves, the Mi-B16 operates 16 irrigation valves.



## Choose How You Want to Work

To give you a true degree of flexibility in how you work, Heron's Mi range of irrigation controllers can be operated as standalone controllers, from a PC or via a mobile phone.



## PC Operation

Using Heron's "Ground Control" software you can generate irrigation programs and operate your irrigation system from a PC. Controllers can be directly connected to your PC or dialled up remotely.

All the functions on the irrigation controller can be operated from the PC.

The software includes a number of functions to help you reduce costs through water budgeting.

Irrigation programs can be automatically generated to optimise water usage. Estimated water usage is calculated. Actual water usage can be reported.

"Ground Control" also available with a full graphical drawing facility enabling you to draw a realistic picture of your installation. You can operate your irrigation system, or view historical data by simply clicking on the picture.



## Mobile Phone Operation

Take advantage of the mobile phone network to operate your controller.

Use your mobile phone as a remote control to start a valve, a program, or a pump. Receive a text message from your controller should an alarm condition arise.

In built security prevents unauthorized mobile phones from dialling up.

# Irrigation Program Features

- Up to 60 independent programs.
  - Run up to 6 valves in parallel as standard
  - Possibility to run up to 12 valves in parallel with additional output cards.
  - Up to 64 automatic starts.
  - Daily, weekly and variable period automatic starts.
  - Automatic starts can be set to run on odd or even days.
  - Valves can be individually named e.g. Lawn1, Bed1.
  - Valves can be specified to run on a time or volume basis.
  - Valves can be allocated to one of five water meters.
  - An optimal flow can be entered for every valve.
  - A minimum, maximum and pipe break flow rate can be specified for each water meter.
  - Valve times can be set from a minimum of 1 second to 10 hours.
  - Valves can be allocated to an irrigation group.
  - Rainfall can be monitored over 1 to 4 days, irrigation programs can be reduced by 25%, 50%, 75% or 100%.
  - Manually percentage adjust (0% to 250%) .
  - Separate manual percentage adjust for programs and valve groups.
  - Continual cycling of irrigation programs between specified time of day. Delay between cycles can be set from 1 minute to 9 hours.
  - Manually start an individual program or valve.
  - Manually start multiple programs.
  - User can select which program to stop or manually advance if multiple programs are running.
  - Pump pressurisation time can be set in minutes and seconds.
  - Programs can be configured to start, stop, freeze or manually advance on a remote input.
  - Up to 10 remote inputs can be connected.
  - Programs can be allocated up to 5 pump starts or master valves.
  - Valves can be defined as 'special outputs' to control external devices e.g. fill a pond, switch lighting.
  - Valves can be defined for back flush use.
  - Irrigation programs can be inhibited by wind speed or wind direction.
  - Programs can be integrated with light, rain, humidity, temperature sensors.
  - Irrigation can be controlled from a calculated evapotranspiration (ET) value. The ET value can be calculated using a variety of sensors depending upon the required accuracy.
  - Programs can be attached to a dosing recipe.
- 
- Compatible with any 24V AC solenoid valve.
  - Option to operate DC valves.
  - Output current 1.2 Amps (resistive) with electronic overload cut-out.
  - Output current is measured which can be displayed for diagnostic purposes.
  - Two pump start outputs.
  - Three digital inputs.
  - One socket to connect additional cards.
  - Two sockets for connecting additional output-boxes (MI-144 only).
  - One data connector to connect PC and GSM mobile phone module.
  - Designed to operate in an industrial environment. High electrical noise immunity, can withstand a 2.5KV spike.
  - Battery backed up real time clock. Real time clock immune to high electrical noise.
  - All outputs protected against electrical surges exceeding ANSI C62 surge suppression standards.
  - Lockable outdoor steel enclosure version available.

3,