

# Heron

## 2-Wire Irrigation Controller



The most  
comprehensive  
range of  
features in the  
marketplace.

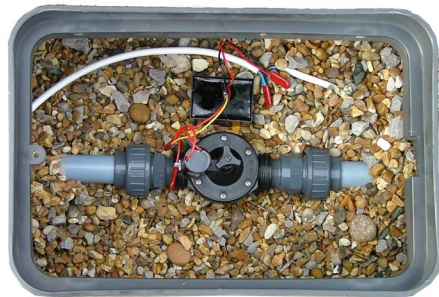
A cost effective, reliable solution  
for irrigation over large areas.



**Heron**  
E L E C T R I C

## Why the Heron 2 Wire Controller ?

- Operate up to 640 valves, run up to 60 irrigation programs, set up to 64 daily or weekly automatic starts, run 16 valves in parallel.
- Run single cable lengths up to 5 km.
- There are no special requirements regards the quality or type of cabling used.
- There are no limitations to the cable topology.
- A superb range of software features enable you to customize the controller to match the exact needs of each installation.
- The controller has been built with a unique lightning surge suppression feature utilizing optical technology.
- Decoders have massive in built surge suppression with a proven track record of working in the harshest of environments.
- To simplify programming valves can be individually named.
- Option to operate the controller from a PC or via a mobile phone.

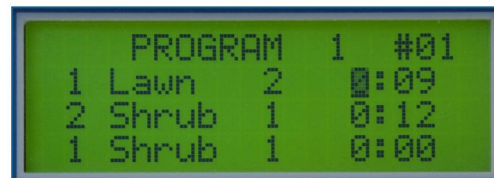


## Easy To Use

Heron's 2-wire controllers are menu driven, making them intuitive and easy to use.



To simplify the creation of irrigation programs, valves can be individually named.



## Tailor Your Controller to Meet Your Needs

Because every site is different, Heron 2-wire 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

To give you an even further degree of flexibility, our 2-wire irrigation controllers will integrate with a range of Heron sensors. Irrigation can be controlled by light, rain, temperature, humidity, wind speed or wind direction.



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

## True Expandability

With Heron 2-wire irrigation controllers its easy and cost effective to add more valves, outputs or inputs to your installation.

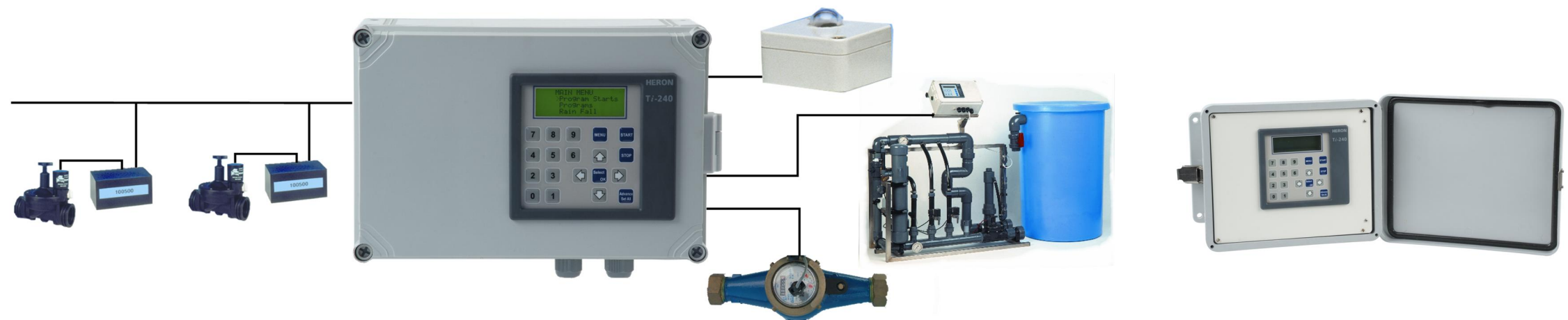
- Simply connect a decoder at the nearest point along the 2 wire cable where it is needed.
- Additional cable drivers can be added. Each cable driver can support an additional 240 valves .
- Multi-wire output cards can be connected for special outputs e.g. back flush applications.
- A range of additional inputs can be added e.g. digital inputs, flow meter inputs or switched inputs.

## Unsurpassed Reliability

Our 2-wire irrigation controllers and decoders offer an unparalleled level of protection against lightning and electrical surges.

The Ti range of controllers utilise optical technology to isolate them from the 2 wire cable. Decoders have their own surge suppression, thermal trip and are fully waterproof.

Communication between decoders and the controller is tolerant to poor cabling and earth leakages. Standard grease filled crimps can be used for joining the cable and decoders.



## Choose How You Want to Work

To give you a true degree of flexibility in how you work, Heron's TI 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" is 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 16 valves in parallel.
- 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 2 seconds 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%.
- Manual 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.

## Hardware Features

- Controllers are available in 3 sizes, supporting 40, 240 and 640 valves.
- Up to 5 cable drivers can be connected to one irrigation controller.
- Total output current of each cable driver is 1.6A.
- Compatible with any 24V AC solenoid valve.
- 1 , 2 or 3 output decoders available.
- Output current is measured which can be displayed for diagnostic purposes.
- Each Cable drivers have electronic over load cut out.
- Range of pump start decoder options.
- Standard decoder can be used as a master valve decoder or pump decoder.
- Three digital inputs.
- One socket to connect additional cards and line drivers.
- 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 electrical spike.
- All outputs protected against electrical surges exceeding ANSI C62 surge suppression standards.
- Battery backed-up clock. Clock immune to electrical noise.
- Lockable outdoor steel enclosure available.

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