

Galstar



Gal-Star is a medium size controller. It is capable of controlling two irrigation heads. Its software includes all the programming features of an irrigation controller including fertilization according to ECpH. It is designed to be operated via the wide screen and keyboard but is also capable of communication with a PC. The keyboard is designed in a similar fashion to automatic telling machines (with function keys) and therefore the controller is very user friendly. It provides remarkable sophistication in relation to its size.

Hardware Description

AC / DC Modulation

All of the models are available in AC or DC.

AC Models

- Inputs: 220 /110 Volts AC
- Outputs: 24 Volts AC.

DC Models

- Inputs: 12 Volts DC. (12 Volts 9 Amp*Hr battery).
Optional connection to solar panel.
- Outputs: DC latching.



Large Casing



Small Casing

Mini Gal-star

A non modular controller 16 Outputs, 8 Inputs in a "Small Casing".

Gal-Star and Gal Star EX

Gal-Star is a modular controller. Its casing contains slots in which I/O cards can be inserted.

Casing

There are two types of casing:

Small Casing: 5 Slots.

Large Casing: 7 Slots. The large casing has a future preparation for: Integral L-485, Integral Radio Adapter, Integral ECpH Adapter.

Maximum Outputs/Inputs

The Gal-Star is designed to have a maximum of 32 outputs and 24 inputs. The inputs can be a combination of discrete inputs and analogs. The maximum configuration can only be achieved with the EX (large casing) model.

I/O Cards

- 8 * 24 VAC Output Card
- 8 * DC Latching Output Card
- 8 * Discrete (On/Off) Input Card
- 8 * Analog (4-20mA or 0-2V) Card

Software Features

Capacity

- 2 irrigation heads
- 3 fertilizer pumps per head
- 4 water meters per head
- 4 filters per head
- Up to 32 valves per head
- 64 irrigation programs per head
- 10 fertilizing programs per head

Programming Features

- Irrigation duration according to Time, Volume or Automatic calculation of Volume per area.
- Fertilization according to Time, Volume, Proportional, and according to ECpH.
- Sequential operation
- Priority operation
- Scheduled operation according to:
 - Cycle (1 Min. to 360 Days).
 - Daily (Monday - Sunday).
 - Conditioned Operation: According to Input or Logic Condition.
- Alarm Settings: including: Overflow and Under flow,

Water Pulse Fault, Uncontrolled Water, Pause Device and more.

- Flow Rate Limit: Automatic mechanism of program ordering to prevent exceeding of a flow rate limit.
- Flow Rate Division: The ability to divide the flow rate and accumulation between valves which are simultaneously irrigating with the same water meter or the same fertilizer program. The division is made according to the nominal flow rates set for the valves.

Accumulations

Accumulation of Water, Time and Fertilizers independently for each valve even when working with the same water meter.

PC Connections

The controller has an RS232 port to connect to a PC. The PC connection may be used for:

- Remote Control Operation.
- Data acquisition.
- Graphical presentation.
- Controller Network Operation.
- Cellular (GPRS) connection.

