



Automation in Greens

BIGWIG
TECHNOLOGIES

Product Highlights



Technology

Latest Technology with Innovation

- Built using latest Wireless Master/Slave Technology
- IoT (Internet of Things) and W-CDC (Wireless Cross Device Communication) Enabled.
- Add endless Slave Modules to Master as per needs / requirement.



Wireless

Complete Wireless Freedom & Beyond !

- Uses Web Protocol (Internet / Network) for communication
- Monitor and Control system using Mobile App; from anywhere in the world.



Features

Enhanced Features

- Operate all stations (Valves) at same time. Save Water, Time and Electricity!
- Dual Control - Manual and Wireless operations of Valves.
- Shutdown / Resume all Valves with single click using Mobile App.
- Receive Mobile Alerts and Email Notifications.



Scheduler

Schedule Routine Tasks

- Schedule unlimited irrigation routines.
- Create unlimited scheduled Timer Routines with duration starting from 5 seconds.
- Enable / Disable schedule with one click using Mobile App or Web Console



Modes

Modes / Scenes

- Enhanced Auto-Rerun mode - Resume irrigation cycles post power failures.
- Auto Motor operations using Internal Switch.
- Auto Remote Motor operations possible using E-Switch.



Statistics

View Historical Data Trends

- View historical data for performing root-cause/trend analysis.
- Easy options to export selected historical data in Excel, Tab delimited or Plain text formats.



Installation

Installation and Maintenance

- Quick and easy installation. Save time, efforts and infrastructure costs.
- Configuration, Monitoring and Maintenance of system can be performed remotely.

Maestro and it's Family Devices

Z - Switch

Z-Switch is used in automating irrigation systems. It is widely used in the segment of Turf & Landscapes, Agriculture, Fountains, etc.

Z-Switch actuates Solenoid Valves to control irrigation lines. It is designed considering existing system/infrastructure aiming to ease installation and configuration at site without any major changes. It is compatible with majority of solenoid valves available in market.

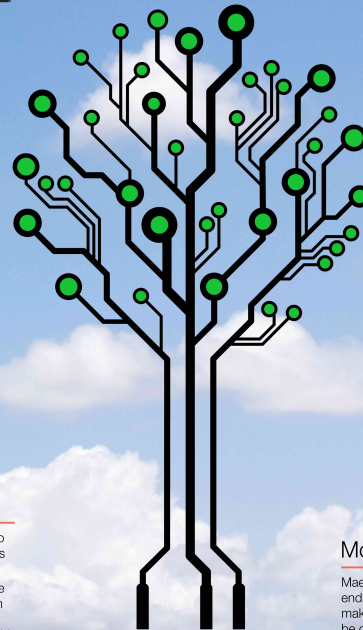
Using Maestro's Mobile App, Users can remotely control irrigation lines of Z-Switch. Unlike other systems, Z-Switch provides easy push-button switches to manual control irrigation lines. With this, anyone with basic skills can perform manual operations.

Z-Switch Applications:

1. Agriculture
2. Polyhouses
3. Turf and Landscapes
4. Gardens (Public and Home)
5. Fountains

Z-Switch Implementations:

1. Drip Irrigation
2. Foggers / Misters
3. Sprinklers
4. Fertigation System
5. Filtration System



Z - Sensor

Z-Sensors are used in advanced irrigation systems to monitor ambient and/or root-zone temperature and moisture. Using Maestro's Mobile App, Users can see live readings on their favourite computing device.

Z-Sensor systems can also be configured to automatically activate irrigation systems whenever temperature or moisture crosses user-defined threshold. During such events, irrigation system can be activated to get the environment back within limits without any manual intervention.

Using Maestro's Web Console, historical data can be easily extracted for performing root-cause / trend analysis.

Applications:

1. Deployments where it is difficult to physically monitor and check green systems.
2. Monitor and control climatic conditions in Polyhouse.
3. Agriculture professionals, researchers and Horticulturist.
4. Poultry farms, animal shelters, etc.



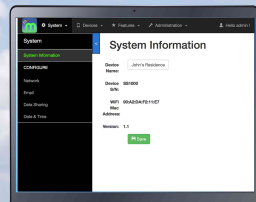
E - Switch

E-Switch is used to control lighting devices. In a typical irrigation automation system, E-Switch is used to control external motor/pump that is physically away from location where Z-Switch is deployed.

E-Switch enables automatic operation of motor/pump whenever irrigation lines are opened/closed using Z-Switch. This is achieved by deploying E-Switch along with the standard motor control panel (with auto mode option).

Applications:

1. Automatic operation of motor/pump deployed at remote location.



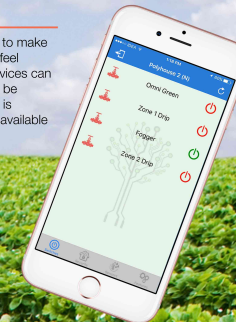
Web Console

Web Console is Control Panel of Maestro. It is primarily used to add / modify / delete and configure Maestro family devices. It is also used to set operating parameters for Maestro.

The Web Console is a browser based application which can be accessed from any computing device containing browser, from anywhere in the network. If network is connected to Internet, then Web Console can be accessed from anywhere in the world.

Mobile App

Maestro mobile app named "Maestro Ctrl" is designed to make end user operations simple and easy. Its rich look and feel makes others envy. Using the Mobile App, all family devices can be operated anywhere within the same network. It can be operated from anywhere in the world provided Internet is enabled on Maestro & Mobile device. "Maestro Ctrl" is available on iOS and Android Platforms.



Product Specifications

Description	Maestro	Z-Switch	Z-Switch Solar	Z-Sensor	E-Switch
Input Supply Ratings					
Input Voltage	5 Volts (DC)	170-240 Volts (AC)	6-18 Volts (DC)	6-14 Volts (DC)	170-240 Volts (AC)
Input Current (max)	1 Ampere	0.6 Ampere	0.6 Ampere	0.25 Ampere	0.6 Ampere
Solar Support	No	No	Yes	No	No
Internal Battery Backup	No	No	2000 mAH (Li Ion)	No	No
Supply Socket	Micro USB	3 Line	DC Jack	Not Available	Terminal Screw

Internal Communication					
Type	Wireless	Wireless	Wireless	Wireless	Wireless
Frequency	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz
Range (Line of sight)	1.2 Km	1.2 Km	1.2 Km	1.2 Km	1.2 Km
Wireless Repeater	Enabled	Enabled	Enabled	Enabled	Enabled
Antenna Type	RP SMA (Female)	RP SMA (Female)	RP SMA (Female)	RP SMA (Female)	RP SMA (Female)

Network					
Ethernet Port	802.3 10/100 Mbit/s	-	-	-	-
Built-in WiFi	802.11b/g/n 2.4 GHz	-	-	-	-

Sub Models					
Model Names	-	AC, DC, DC-Latching	-	Ambient, Soil	-

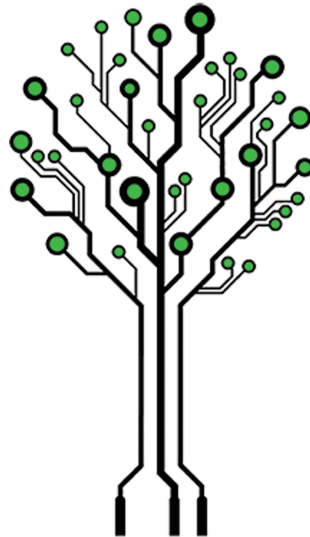
Sensors					
Moisture	-	-	-	Ambient (1), Soil (2)	-
Temperature	-	-	-	Ambient (1), Soil (1)	-

Switch Ratings					
Max # of Switches	-	4	2	-	4
Max Voltage	-	240 Volts (AC)	9 Volts (DC)	-	240 Volts (AC)
Max Current	-	5 Ampere	0.3 Ampere	-	5 Ampere

Solenoid Valve Support					
Type - AC	-	Yes *	-	-	-
Type - DC	-	Yes *	-	-	-
Type - DC-Latching	-	Yes	Yes	-	-

Enclosure					
Mount Slots	No	Yes	Yes	No	Yes
Dimensions- L (mm) x B (mm) x H (mm)	80 x 117 x 28	130 x 155 x 58	82 x 105 x 41	95 x 52 x 40	112 x 69 x 25
Water Resist	No	Yes	Yes	Yes	No





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