# ICC2 Irrigation Controller Programming Specification

**Part 1 – General**

* 1. The controller shall be a full-featured commercial-industrial product for the purpose of irrigation operation, management and monitoring of control valves and sensors. The controller shall be of a modular design that is provided with a standard 8 station output module. The controller shall be expandable with 4-stations, 8-stations, or a 22-station module up to 38 stations (plastic enclosure) or up to 54 stations (metal enclosures).

**Part 2 – Programming and Operational Software**

2.0 General

1. The controller shall have optional language customization kits that allow the front panel, display, and programming instructions inside the door to be changed to Spanish, French, Italian, German, Turkish and other languages.

2.1 Programming

1. The controller shall have 4 independent programs with unique day schedules, start times, and station run times.
2. Each program shall offer up to 8 start times.
3. The controller shall be capable of running any two automatic programs simultaneously.
4. The controller programs shall have 4 weekly schedule options to choose from:
5. 7-day calendar
6. up to 31-day interval calendar
7. odd day programming and even day programming
8. It shall also have a 365-day calendar clock to accommodate true odd-even watering
9. Each station shall be programmable in minutes of run time, from 1 minute to 12 hours.
10. The controller shall be equipped with programmable Non Water Days to prevent watering on selected days of the week.
11. Each program may be assigned a programmable delay between stations, to allow for slow-closing valves or pressure recharging.
12. Delays between stations shall be programmable in 1 second increments from 0 to 60 seconds and in 1-minute increments from 60 seconds up to 4 hours.
13. A pump start/master valve circuit shall be included, and shall be programmable by station.
14. The controller shall be equipped with a rain sensor bypass switch that allows the user to override a sensor that has suspended watering.
15. The controller shall allow the sensor input to be programmed by station, to exempt specified stations from sensor shutdowns.
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17. Program backup shall be provided by a non-volatile memory circuit that will hold the program data indefinitely.
18. The controller shall also track time of day and date during power outages by means of a replaceable, commonly available CR2032 lithium battery.

2.2 Software

1. The controller shall have manual Seasonal Adjust settings in 5% to 300% in 5% increments.
2. The controller shall have automatic Seasonal Adjust settings when installed with a Solar SyncTM weather sensor.
3. The controller shall be capable of determining and displaying the total run time input for each program.
	* + 1. It shall have the capability to store a program in backup memory for easy retrieval, and shall also have a test program for quick system checks.
4. The controller shall allow Easy RetrieveTM backup of all programming and configuration to preserve the original configuration, which may be restored at any time.

 