

IM Series Controllers

Advanced Stand-Alone Irrigation Manager (IM)

The Rain Bird IM is the most flexible, full featured irrigation management system available in a stand-alone package. It offers features that maximize water conservation, it provides the flexibility to manage all aspects of your changing landscape, and it makes programming and operation easy. All of these advanced features are packaged in a reliable controller designed for rugged use and long life.

Programming Flexibility

The Rain Bird IM has the most comprehensive, flexible and easy-to-use programming features in the industry. Think of it as “Central Control in a stand-alone controller.”

Water Conservation and Management

By tracking water usage, detecting and shutting down excessive flow, and automatically adjusting run times to weather or moisture, the Rain Bird IM can pay for itself in water savings.

Installation Flexibility

Select and use only those Rain Bird IM features that suit your application, then upgrade as your situation changes.

User-Friendly Programming

A large backlit LCD display, large keypad and tabular programming make it easy to take advantage of the IM controller’s advanced landscape management features.

Upgrade Modules and Accessories

It is critical that an irrigation system can adapt for the future. With a built-in upgrade path to more advanced features, the Rain Bird IM is the perfect choice.

Electrical Specifications

Large, durable transformer. Advanced electronic filtering and surge protection features that will keep your system running for years to come.

Models

- IM-12
- IM-16
- IM-20
- IM-24
- IM-28
- IM-32
- IM-36
- IM-40
- IM-44
- IM-48



How to Specify

IM - 24 - IMPSEN - IMSWSEN		
Model	Number of Stations	Upgrade Module
IM	12, 16, 20, 24, 28, 32, 36, 40, 44, 48	IMPSEN: Three Pulse Sensor Assembly IMSWSEN: Three Switched Sensor Assembly

Note: The IM Series controller comes standard with one (1) 3-switched sensor card (IMSWSEN).



Programming Flexibility

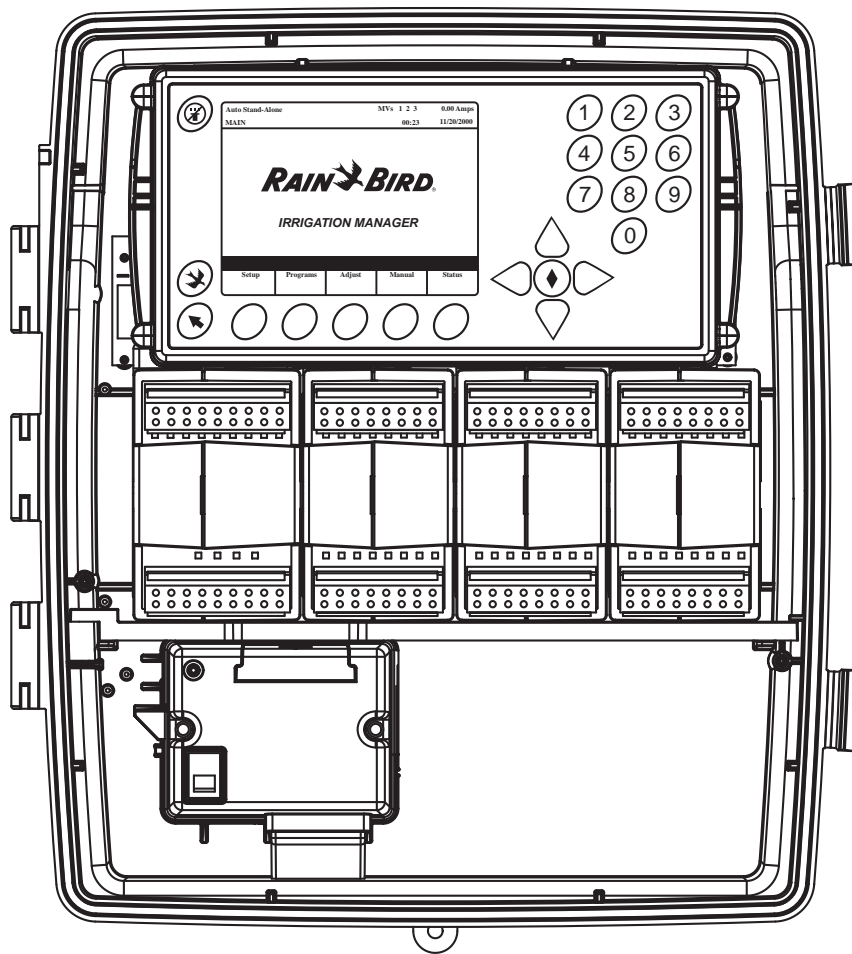
- Seven grouped programs with up to eight start times each
- Optional independent station control
- Program by volume, ET or time
- 14-day custom, cyclical or odd-even programming
- Standard or looping program start times
- 365-day calendar with leap year intelligence
- All programs are selectable as irrigation, drip or non-irrigation
- 24-hour run time per station: 1 second to 24 hours
- Over 50 user-defined setup options

Water Conservation and Management

- Automatic shutdown when open valves exceed the defined maximum flow
- Optional programming using evapotranspiration (ET) value to automatically calculate run times based on weather conditions
- Cycle+Soak™ by station allows total irrigation run time to be split into usable cycles, minimizing runoff
- Water usage logs based on actual or estimated flows
- Maximum flow limit to prevent hydraulic overload
- Programmable delay between stations and delay between master valve and station
- Water budget by program provides adjustments from 0-999% in 1% increments
- Water window
- Event-day off
- Rain delay up to 99 days
- Usage log which records your choice of station starts, programming changes and/or alarm conditions

Installation Flexibility

- 12-48 stations, upgradeable in four-station modules
- 3-12 sensors, switched or pulse inputs, upgradeable in increments of three
- Three levels of password protection of setup and programming



Inner Door Off

User-Friendly Programming

- Large 15 line by 53 character backlit LCD display
- Graphics make it simple to view calendars and monitor station activity
- Projected schedule shows what stations will run and when
- Easy-to-read table shows what happens when changes are made
- Run times programmed in mm:ss or hh:mm
- Convenient copy and paste command
- Operator-selectable languages: English, Spanish and French

Operating Specifications

- Simultaneous operation of up to eight stations plus three master valves
- Three master valve terminals are programmable by station
- Up to 12 sensor inputs, pulse or switched sensors, which can be assigned to cancel or interrupt irrigation by station
- Test programs for each station as well as recording the water flows and electrical current draw (Amps)
- Pause and resume operations for use during maintenance
- Choice of resuming programs in progress or where interrupted

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Upgrade Modules and Accessories

- Four-station upgrade module
- Three switched sensor (e.g. rain shutoff) upgrade module
- Three pulse sensor (e.g. flow meter) upgrade module
- 16-station housing and back plane

Electrical Specifications

- Heavy-duty lightning protection with both relays and MOVs on each field wire circuit
- Diagnostic circuit breaker shuts down short circuits while continuing to run operable stations
- Nonvolatile memory maintains the time, date, and the irrigation schedule for up to 10 years during a power outage
- Self-contained internal electrical junction box
- Input required: 115 VAC +/- 10%, 60Hz (also available as 230 VAC +/- 10%, 50Hz)
- Output: 24 VAC
- Overload, backup fuse: 3.0 Amp SLO-BLO
- UL, CSA, CE, TUV, NEC Class 2, FCC Class A and C-Tick certifications
- NEMA-4 rated weatherproof cabinet

Dimensions

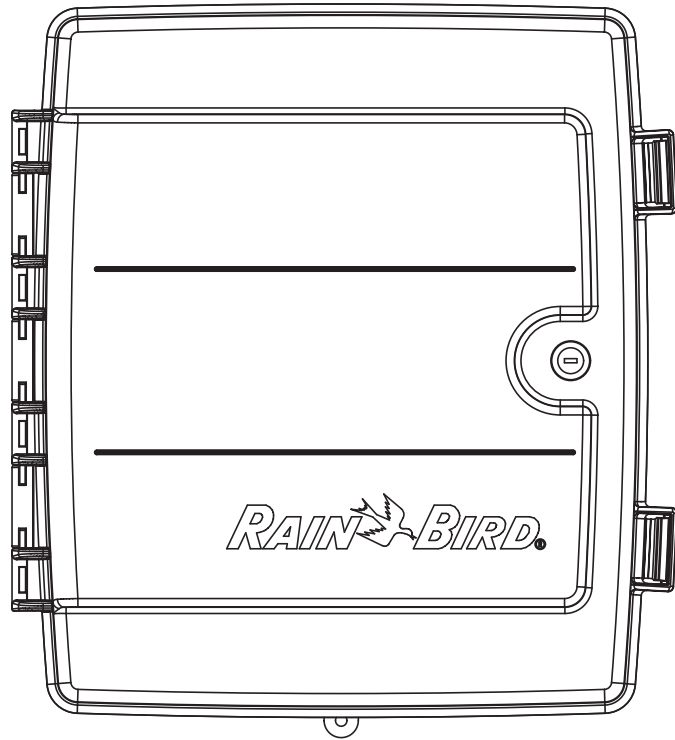
The Rain Bird IM is available with up to 48 stations and 12 sensors in one compact cabinet.

- Wall-mount cabinet
 - Width: 15³/₄" (40,0 cm)
 - Height: 17" (43,2 cm)
 - Depth: 8³/₄" (21,3 cm)

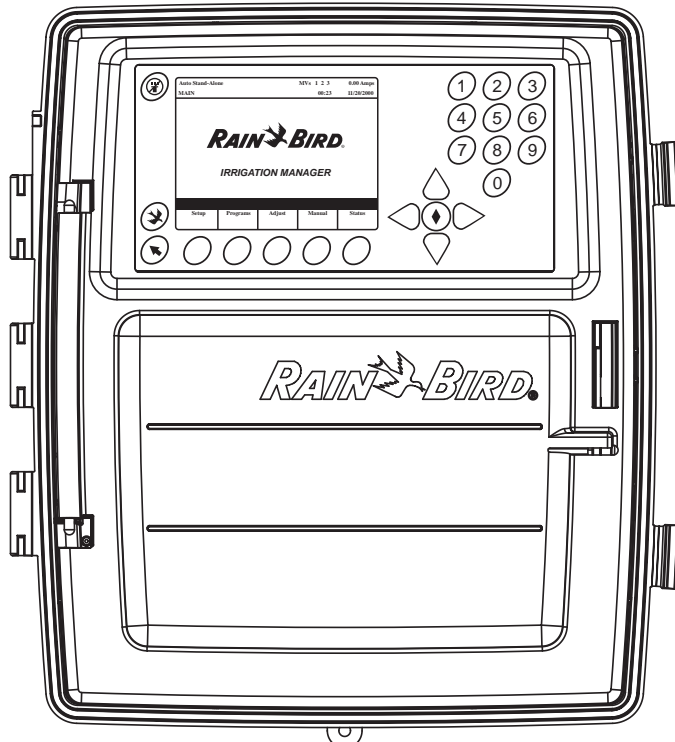
Models

- | | |
|---------|---------|
| • IM-12 | • IM-32 |
| • IM-16 | • IM-36 |
| • IM-20 | • IM-40 |
| • IM-24 | • IM-44 |
| • IM-28 | • IM-48 |

Note: Future upgrades will plug into the existing architecture.



Outer Door Closed



Inner Door Closed

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Specifications

The irrigation system controller shall be of a solid-state microprocessor type, capable of fully automatic, semi-automatic or manual operation. The controller will be housed in a NEMA-4 rated, lockable, plastic cabinet suitable for wall mounting.

The controller shall operate on 115 VAC +/- 10% at 60Hz or 230 VAC +/- 10% at 50Hz and be capable of actuating up to 48 stations plus up to three master valves or pump station relays. Each station may operate up to eight 24 VAC solenoid valves.

The controller shall operate up to eight stations plus the three master valves simultaneously. Controller output and input shall be protected against severe electrical surge.

The controller shall be capable of either grouped station programming or independent station programming. The grouped programming mode shall have seven grouped programs, which may have different start times, watering days and station timing. Each program shall be capable of up to eight start times per day, and be capable of running as irrigation, non-irrigation or drip program types. Irrigation programs may each be run based on time, volume or ET.

The controller shall have up to 48 stations, each capable of an operating time of 1 second to 24 hours in second, minute, or hour increments. The controller shall be capable of either automatic sequential stacking or overlapping program.

The controller shall provide a separate water budget feature for each of the programs, allowing simultaneous adjustment of all stations on a program from 0% to 999% of set running time. Adjustments shall be in 1% increments.

The controller shall have a 365-day calendar with calendar days and day-of-the-week OFF features. Programs will run on an ODD/EVEN day cycle, a 14-day ON/OFF cycle, or in cycles from 1 to 31 days. The controller shall also have a programmable rain shutdown from 1 to 99 days.

The controller shall have three master valve/pump start circuits for use with a master valve to pressurize the system when the irrigation cycle starts, or to activate a remote pump start relay to run the pump during the irrigation cycle. The master valve/pump start circuit shall be ON/OFF programmable by station.

The controller shall have the ability to run non-irrigation schedules for site specific accessories such as outdoor lighting or decorative fountains.

The controller shall be capable of ET-based programming via the selection of preinstalled ET values for specific climate conditions, user-entered values for each month of the year, or direct input from an electronic accessory such as an ET gauge.

The controller shall be capable of manual operation at any time. A single station, group of stations, or program can be selected to run for a programmed time or a new time setting without affecting the normal program. The controller shall also provide an additional manual pause-and-resume operation feature for maintenance situations. The controller shall be capable of running a variable system test program without affecting the normal program, and the test cycle may be programmed for various run times.

The controller shall have Cycle+Soak™ water management software that is capable of operating each station for a maximum cycle time and a minimum soak time to reduce water runoff and puddling. The maximum cycle time shall not be extended by water budgeting.

The controller shall have a 365-day calendar with a day-of-the-year OFF. A date set to OFF shall override the normal, repeating day schedule, shall remain off on that date, and shall display to the operator that the current day is a non-watering day. The user shall have the option of having the date remain OFF, or be reset to ON after the date has passed.

The controller shall have three sensor inputs as standard, upgradeable to up to 12 sensor inputs. Sensors can be either switched output or pulse output. Sensor inputs shall either cancel or interrupt irrigation by station.

The controller shall provide for easy and accurate setup for flow meters and the amperage used by each station for direction of out-of-parameter conditions. The controller shall have a water usage log based on either theoretical or monitored flows. The controller shall be able to limit the total demand on the hydraulic system to a user-entered maximum flow.

The controller shall feature event logs and alarm conditions. It shall be capable of automatically actuating a strobe light on the outside of the cabinet or pedestal in case an alarm condition occurs.

The controller shall feature three selectable languages for the operator (English, Spanish and French). There shall be a back-lit LCD display for use in low light conditions. Each station and each master valve will be protected by a diagnostic circuit breaker which will allow that station to be bypassed during a program.

The controller will have an internal nonvolatile memory that will protect the program from power outages for up to ten years, and for counting down the program-in-progress during a power outage.

The controller shall be manufactured by Rain Bird Corporation, Glendora, California.

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