

Maxicom²® Central Controller Multi-Site Central Control System

Applications

Maxicom² Central Control Systems are designed for multi-site commercial or industrial irrigation applications. Hundreds of sites and weather sources can be controlled and monitored from one location through telephone, radio, cellular telephone, direct-connect, fiber-optic, or Ethernet communication.

Automated ET based irrigation control and the most flexible scheduling system allows control of multiple sites to exact specifications, making it ideal for municipalities, school districts, housing associations, and park and recreation departments.

Multiple Sites

A Maxicom² system utilizes the Central Controller installed at a primary location.

Information is transmitted from this Central Controller to a Cluster Control Unit (CCU) or ESP-SITE Satellite in the field. The CCU acts as the system's "computer-in-the-field," allowing the ability to control hundreds of sites from one Central Controller. The CCU can monitor, communicate to, and manage as many as 28 ESP-Satellite controllers or other field devices via a hardwire or a wireless communications method

Control Features

- From the Maxicom² central controller, irrigation systems at multiple sites can be scheduled for days to water, run times, cyclical scheduling, linking schedules, sensor starts, cycle and soak schedules, etc.
- Irrigation start days are easily scheduled to meet complex watering requirements. Start days can be based on a custom day pattern per a weekly calendar (MTWTFSS), odd/even/odd31 days, or skip days (starting on a designated date and skipping X days between irrigation starts). Event days off allow designation of non-water days (mow days, special events, etc).
- Station operating times can be automatically adjusted in response to changing daily ET (evapotranspiration) values supplied by a Rain Bird Weather Station or user input.
- Irrigation and weather factors, such as soil infiltration rate and rainfall intensity, can be compared to determine the exact effect weather has on irrigation needs.
- Cycle+Soak™ feature optimizes the watering of poor drainage sites, slopes, and heavy soil areas. Water is applied at or below soil intake rates automatically, even during high water-use periods.

- Manual operation of system from the central controller or from the field satellite units.
- Operation of lighting systems (such as athletic field lighting), security gates, fountains, pumps, sensors, or other systems can also be managed from one central Maxicom² location.

Monitor Features

- Weather sources can be monitored by Maxicom² calculating daily ET values and automatically adjusting station run times to replace only the water used.
- Flo-Watch™ monitors hydraulic conditions in the field, checking for breaks in system piping or valve malfunctions. In the event of an overflow problem (line break, etc), the system will automatically identify where the problem is located, initiate valve or mainline shutdown, and send an alarm message identifying where the problem occurred and the action taken to isolate the problem. For low or no flow conditions, the system will send an alarm message identifying the condition and currently operating valves in the problem zone, and automatically take any follow-up actions designated.
- Flo-Manager™ monitors and sequences valves scheduled to be turned on, so expected demand does not exceed hydraulic capacity. Flo-Manager facilitates multi-station operation, which may shorten the total runtime and watering window.
- Schedules can start, advance, pause, or cancel according to sensor input (rain, wind, etc) from the field.
- Alarm message automatically alerts the user of problems in the field.

Software Features:

- Graphical User Interface (Windows)
- Automated ET
- ET Checkbook™
- Flo-Manager™
- Flo-Watch™
- Cycle+Soak™
- Rain Watch™
- Schedule Audit
- Manual station control
- Irrigation water windows
- Control of non-irrigation applications
- Event calendar scheduling
- Water usage logs
- Station run time & water cost logs
- Fail-safe redundant back-up systems
- FREEDOM Remote Control System
- Multiple communication types



- Operates with all existing Rain Bird Central Control Hardware Products
- pcAnywhere32 included (for tech support)

Remote System Control

- Take control of your system and operate Maxicom² from anywhere using the Rain Bird FREEDOM System. Available via phone or radio.

Central Control Support

Every Central Controller purchase comes with one-year Global Support Plan (GSP). Following that first year, three support plan renewal lengths are offered. Select the coverage plan that best suits your needs - 5 years, 3 years, or 1 year.

GSP Features

- Toll-free phone support
- pcANYWHERE remote system diagnostics
- Extended warranty
- 24-hour hardware replacement
- Future upgrades to Maxicom² at no charge
- Training credits
- Incidence and other support

Central Controller Models

- Gold - Desktop

How to Specify

MC2GOLD1 - Gold Computer



Specifications

The automatic sprinkler system controls shall be the Maxicom² Central Control System as hereinafter specified and as shown on the drawings. The system shall be fully programmable providing the operator with absolute and full control of the entire control system. The system shall provide a degree of flexibility such that, in effect, each station of the satellites is capable of being controlled as if completely independent.

The system shall be capable of integrating with Weather Sources (including the Rain Bird WS-PRO) for the purpose of monitoring daily weather conditions and automatically calculating a daily evapotranspiration (ET) value.

The system shall be able to compare duration and intensity (rate) of rainfall with soil infiltration rate to determine the effective rainfall.

The system shall be able to pause, advance, cancel, or otherwise control irrigation based on sensor inputs like rain, windspeed, and temperature.

The system shall not be limited to the control or irrigation only, but shall also be capable of controlling other functions such as lighting, security systems, valves, fountains, etc. In addition, control-type instruments for the monitoring of such things as pressure, flow, moisture, rainfall, wind speed, pumps, etc., shall be able to be integrated into the system.

The system shall include an ET Checkbook[™] feature that automatically calculates an ET value for each day to be used by the system. The ET Checkbook shall be displayed in a "checkbook" format for ease of use and understanding. It shall keep record of approximate amount of water in the soil profile as a percentage of "field capacity."

The system shall include a Flo-Watch[™] feature to automatically locate excessive flow in the irrigation system and respond with a user-defined action. The system operator shall have the ability to set a flow rate for each station in the system and a percentage overage which Maxicom² shall watch.

The system shall include a Flo-Manager[™] feature to automatically manage flow demand on the water source(s). The system operator shall have the ability to set a maximum flow rate for a water source(s). The system shall be capable of monitoring and sequencing valves scheduled to be turned on, so expected demand does not exceed hydraulic capacity.

The system shall include a feature called Cycle+Soak[™], which will readjust the total station run time into smaller increments (maximum station cycle times) to prevent puddling and runoff. If more than one cycle is required to achieve the total run time, a minimum soak time is automatically inserted between cycles.

The system shall have a graphical user interface (GUI) that allows easy programming. The system shall operate in the Windows environment. The system shall be able to pre-program events in advance to prevent irrigation as required. The system shall be able to display notes automatically as reminders to the user on pre-programmed days.

The system shall provide for a user-controlled "rain shutdown" of irrigation at a site. This feature can be used for emergency shutdown of all satellite units that may be operating at the time.

A time window shall provide for confining the schedule operation to a specific time period by allowing the operator to specify the earliest and latest time between which a schedule can operate.

The system shall provide feedback information as to exactly what each satellite currently is doing if the user is monitoring the site, and/or what it has done in the past, giving the length of time each station has operated and indicating when a station was scheduled to operate but did not operate for some reason. A flow log shall also be maintained for each Flow Zone (flow sensor or sensors) to indicate what the system flow demand has been for each minute of operation of the system.

The Maxicom² Central Control System shall be as manufactured by Rain Bird Corporation, Glendora, California.

Rain Bird Corporation

6991 E. Southpoint Road, Tucson, AZ, 85706, U.S.A
Phone: (520) 741-6100 Fax: (520) 741-6522

Rain Bird Corporation

970 W. Sierra Madre Avenue, Azusa, CA, 91702, U.S.A
Phone: (626) 812-3400 Fax: (626) 812-3411

Rain Bird International, Inc.

145 North Grand Avenue, Glendora, CA, 91741, U.S.A
Phone: (626) 963-9311 Fax: (626) 963-4287

Technical Service and Support

(800) RAINBIRD (U.S. and Canada only)

Specification Hotline

(800) 458-3005 (U.S. and Canada only)

www.rainbird.com

The Intelligent Use of Water[™] — Visit www.rainbird.com to learn about our efforts