

Commercial Central Control Systems



Rain Bird manufactured the first impact sprinkler. We were also the first to develop computerized central control for irrigation. No other system on the market can compare to the trusted reliability and proven performance of a Rain Bird central control system.

Water Management / Central Control Comparison Chart

Features	Maxicom ^{2®}	SiteControl	IQ™	MDC
Type of System	Multi-Site Satellite Control System	Single-Site Satellite/Decoder Control System	Multi-Site Satellite Control System	Single-Site Decoder Control System
Computer Included with Software	Yes	Yes	N/A	N/A
Computer Programming	Yes	Yes	Yes	Yes
Computer Monitoring	Yes	Yes	Yes	Yes
24/7 System Monitoring	CCU	Central Controller	Satellite	N/A
24/7 Communication & Feedback	CCU to Satellite	Yes	N/A	N/A
Local and/or Remote Site Control	Yes	N/A	Yes	Yes
Remote Site Telephone, Cellular, Radio, Fiber Optics, Ethernet Communication	All	With pcAnywhere only	All	Phone Only
Automatic Remote Site Communication	Yes	N/A	Semi-Automatic	Manual
Hardwire & Wireless Site Communication	Both	Hardwire Only	N/A	Hardwire Only
Satellite Controllers or Decoders	ESP-SAT or SITE Satellites	ESP-SAT Satellites & FD Decoders	LXM-DTC Satellites	FD Decoders
Modular Stations or Decoder Addresses	N/A	N/A	Yes - by 4 or 8	Yes by 50
Number of Sites per System	>200	1	25 Standard	1
Number of Site Interfaces per System	>200	4	N/A	1
Number of Satellites per System	>5,600	448	250	N/A
Number of Satellites per Site Interface	Up to 28 per CCU	Up to 112 Total	N/A	N/A
Number of Satellite Stations per Site	Up to 672 per CCU	Up to 10,752	Up to 32 per Satellite	N/A
Number of Decoder Addresses per Site	N/A	Up to 2,000	N/A	Up to 200
Max. Number of Active Solenoids (Decoders or Satellite Stations) per Site	224 Solenoids per CCU	160 Solenoids or 448 Stations	2 Stations per Satellite	10 Solenoids
Number of Weather (ET) Sources	1 per Site	1	25 - Manual ET	N/A
Database Interface	Yes	Yes	Yes	Yes
Interactive Map Interface	N/A	Yes	N/A	N/A
GPS, CAD, SHP, BMP Import	BMP Only	Yes	N/A	N/A
Valve Control - Stations or Decoders	Satellite Stations	Both -Hybrid System	Satellite Stations	Decoders
Program Adjustments by ET	Yes - Automatic	Yes - Automatic	Yes - Manual	N/A
Program Adjustments by Percentage	Yes	Yes	Yes	Yes
Programming by Volume/Gallons	Yes	N/A	N/A	N/A
Number of Programs	999 per CCU	100 Total per System	4 per Satellite	11 per Controller
Flow Management Capabilities	Yes	Yes	N/A	N/A
Flow Monitoring/Recording Capabilities	Yes	Yes	N/A	Yes
Estimated Water Usage Report	Yes	Yes	Yes	No
Sensor Input and Manual Bypass	Yes	Yes	Yes	Yes
Number of Sensor Inputs	Up to 56 per CCU	Up to 200 Total	1 per Satellite	3 per Controller
Number of Flow Sensor Inputs	6 per CCU	15 per System	N/A	1 per Controller
High-Flow Shut-Down	Yes	Yes	Yes	Yes
Alarm Low or Zero Flow	Mainline & Laterals	N/A	N/A	N/A
Cycle+Soak	Yes	Yes	Yes	Pause/Repeat Only
Water Window	Yes	Yes	Virtual Only	N/A
Event Recording (Station Operation)	Yes	Yes	Yes	Yes
Alarms	Yes	Yes	Yes	Yes
Software Password or Log On Protection	Yes	N/A	Yes	N/A
Remote Control Capabilities	Freedom System	Freedom System	Controller Remote	N/A
Projected Operation (Dry-Run) Utility	Yes	Yes	Yes	Yes
GSP Support Plan Included with Software	Yes	Yes	Yes	Yes



What are the Benefits?

Water Savings - Effective Evapotranspiration (ET) based system management can ultimately result in water savings of 25-45% per year, depending on current management practices. As an additional source of savings, pipeline breaks are automatically detected and isolated, preventing excessive water loss.

A Healthier Landscape - A central control system helps ensure your landscape receives the right amount of water. Good irrigation management can reduce leaching and run-off, and good plant health will reduce pest infestations and disease.

Reduced Labor Costs – By regulating all irrigation schedules from a single PC, the user no longer needs to make schedule adjustments at each controller. System shut-downs for maintenance occur quickly, allowing more effective use of time.

Damage Prevention – The system monitors current hydraulic conditions and takes action to prevent washout in the event of pipeline breaks. Detection and isolation of breaks occurs in minutes instead of hours.

Gas and Vehicle Wear Savings – The user no longer has to drive around to all the controllers to make programming changes.

Non-irrigation System Controls – Lighting, fountains, security gates, and pumps can all be controlled and monitored through the system.

What is Central Control?

Irrigation central control enables the programming, monitoring, and operation of irrigation systems from a central location. Central control systems are designed to allow a user to control a single site or a set of sites from a single PC. Central control software allows the water manager to set up programming to automatically control satellite controllers or decoders which operate the irrigation valves. A central control system can monitor and adapt system operation and irrigation run times in response to conditions in the system or surrounding area (weather conditions, pipe breaks, etc.) The system will also provide historical data to allow analysis and reporting of what ran when, how much water was used, and field problems.

Key Features

System Monitoring - System monitoring can incorporate many different sensors such as weather stations, flow meters, rain gauges, and wind sensors. These sensors monitor site conditions and report to the central computer. The central system automatically responds if any field conditions are outside the pre-defined limits set by the system operator.

System Control - A central control system allows all actions to be carried out easily and efficiently from a central location. Control actions such as adjusting watering or stopping irrigation in the event of rain or high wind can be automatically accomplished without requiring a technician to visit individual field controllers. A weather station can be connected to the system to precisely calculate the amount of water required based on climatic conditions. Rainfall intensity is monitored and compared to the soil infiltration rate to determine how much rain actually makes it to the plant root zone, thus optimizing irrigation.

System Communications - A central control system consists of a central computer, irrigation satellite controllers or decoders, sensors and weather stations, and a communication system to connect them all. Communications methods will depend on whether a computer is located on-site or remotely located, and can include hardwire, direct-connect, fiber-optics, telephone, cellular, radio or Ethernet.

Central Control Options

Trust that when you have identified your irrigation management requirements, there is a Rain Bird Central Control System that best meets those requirements.

Maxicom^{2*} - If you're in charge of multi-site commercial or industrial irrigation, you know the challenges of water management. And, if you're like other irrigation professionals, you've wanted a "smart" irrigation system that lets you control multiple sites to your exact specifications. Maxicom² by Rain Bird makes irrigation management a simple, accurate, and labor-efficient task. It's a central control system that helps you achieve superior water management effectiveness - at up to hundreds of locations. Maxicom² is ideal for municipalities, school districts, universities, and park and recreation departments. SiteControl - If you need powerful central control for a large, single contiguous site, SiteControl provides dynamic map-based control and real-time communication between the field and central computer. With customized site graphics, multiple mapping options and the ability to "see" the placement and real-time operation of individual controllers, decoders, valves and sprinklers, SiteControl makes controlling your landscape irrigation system fast and intuitive. Plus, the system is modular, allowing you to invest in only what you need and expand at a later date. Offering both satellite controller and two-wire decoder solutions, SiteControl provides unmatched features and expandability. It is ideal for college or corporate campuses, housing communities, cemeteries, sports fields, resorts and hotels.

Other Options

If a full-featured, fully-automated central control system is more than you need, trust Rain Bird to have a water management solution to fit your requirements.

IQ"- Smaller commercial or even residential sites can also receive the benefits of central control with the IQ system. IQ is the perfect tool for the Landscape Maintenance Contractor, Property Manager, or Public Agency managing multiple, single irrigation controller sites. IQ is a modular, simple to program and install, cost-effective system that can grow over time with your needs. IQ lets you do anything you could do standing at the controller from the computer, including manual operation, program adjustment and even controlling the dial and switch settings. It has powerful water management features like ET Adjust, Seasonal Adjust, and Cycle+Soak to help you save water while you're saving time.

MDC - MDC is a single-site, two-wire decoder system offering unmatched expandability in a cost-effective system that provides fast and easy installation. High flow shut-off, alarms, sensor inputs, modular expandability, and diagnostic tools are just some of the features of the system. Programming software allows you to remotely download the irrigation schedules from the controller, review system data, make changes, and then upload the new schedules. MDC is ideal for corporate sites, apartments or condominiums, median strips, and other commercial site applications.

Multi-Site Systems

Maxicom^{2®}





Rain Bird Computerized Central Control System Timeline



Single-Site Systems

SiteControl™



MDC



Intelligent Use of Water™

At Rain Bird, we believe it is our responsibility to develop products and technologies that use water efficiently. Our commitment also extends to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit www.rainbird.com for more information about The Intelligent Use of Water.™



www.rainbird.com/landscape/products/central/index.htm

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