

### SiteControl

## A Full-Featured State-of-the-Art Commercial Central Control System for Single Site Applications

#### Applications

SiteControl is an easy to use, interactive central control system for landscape. It allows you to control your irrigation system with more precision than ever before using satellites via a 2-wire path or decoders via a 2-wire path. This multi-management central control system for single site applications uses a Microsoft Windows environment with advanced graphics and 32-bit architecture.

With state-of-the-art ET-based scheduling, customized site graphics, multiple mapping options and the ability to “see” the placement and operation of individual sprinklers, SiteControl makes controlling your turf’s irrigation system fast and intuitive.

#### Features

##### Advanced Graphical Tracking

- Maps generated by GPS technology or AutoCAD recreate your site. (Requires use of CAD Importer software).
- Interactive mapping and on-screen graphics show your complete site with location of individual sprinklers. Extensive status reporting is a click away.
- Map Utilities software module allows you to measure and calculate areas from your map. (Requires Map Utilities keycode).

##### Hybrid system

- Expand your system to two interface devices with Hybrid software module.
- Operate satellites and/or decoders.
- Requires Hybrid System keycode.

##### SiteControl Plus

- Expand your system with one to four Large Decoder Interfaces (LDI), each capable of operating up to 1,000 solenoids.
- With Hybrid system, can further expand capabilities by combining decoder and/or satellite options up to four total interface devices.
- Requires SiteControl Plus keycode.

##### Smart Sensors

- Allows use of pulse (flow) and static/switch sensors to monitor, alarm and take action on measured conditions.

- Requires Smart Sensor keycode.
- At this time, SiteControl is not set up to work with a standalone anemometer.

##### Smart Weather™

- Designed to take complete advantage of Rain Bird’s most advanced line of weather stations.
- Tracks ET rates with a weather station and reacts to current weather conditions through logical sequential steps.
- Advanced warning system accepts user-defined sensor thresholds. System operator is immediately alerted if thresholds are exceeded.
- Requires Automatic ET and Smart Weather keycodes.
- Messaging requires Rain Bird Messenger keycode.

##### RainWatch™

- Uses tipping bucket rain can(s) to detect and suspend irrigation while measuring rainfall. When rain stops, resumes irrigation with run times reduced according to measured rain.
- Requires Smart Sensor keycode.

##### Minimum ET

- Allows setting minimum ET threshold values for irrigation to take place. Promotes deep watering for optimum turf conditions.
- Requires Automatic ET keycode.

##### Automatic ET

- Automatically adjust run times in relation to fluctuations in evapotranspiration values.
- Requires Automatic ET keycode.

##### Expanded System Capability

- Utilizes the most advanced software development tools in the industry. SiteControl offers excellent performance and software/hardware compatibility.
- The new system architecture is designed to speed performance utilizing the most current software operating systems.
- System is modular in nature. Buy only what you need; expand at a later date.
- Increase wire path capacity by simply purchasing modules.



##### Remote System Control

- Take control of your system and operate SiteControl from anywhere on your site using the Rain Bird FREEDOM System. Available via cellular phone or radio.
- Requires FREEDOM System keycode.

##### Superior Monitoring & Scheduling

- Flo-Graph™ allows visibility of real-time graphics with individual station information presented in colorful charts.
- Flo-Manager™ balances system demands and maximum capacities with efficiency helping to lower water demand, reduce system wear and tear and save energy.
- Cycle + Soak™. Better control the application of water on slopes and in areas with poor drainage.
- QuickIRR™ Quick and easy method to build irrigation schedules and programs based on your parameters.

### How to Specify/Order:

#### SCON / ISCON

##### Model

SCON: SiteControl

ISCON: SiteControl (International)

\*please refer to software module options on next page

##### Interfaces

(TWI, SDI, LDI

ordered separately)



## System specifications

The computerized central control system shall be the Rain Bird SiteControl as hereinafter specified. It shall be capable of controlling a single site with up to 8 locations, upgradable to 16, each consisting of common areas and special areas. The control shall include a Rain Bird central controller system, as hereinafter specified. The control equipment shall include a satellite interface (TWI) or decoder interface unit (SDI). The satellite interface (TWI) shall control up to 28 channels per wire group and each wire group shall control up to 672 satellite stations. The satellite interface (TWI) shall be upgradable from 1 wire group to 4 wire groups with the purchase of an "additional wire path" software module.

The Small Decoder Interface Unit (SDI) shall have the capacity to control a maximum of 200 decoder addresses and up to 400 solenoids. The Large Decoder Interface Unit (LDI) shall have the capacity to control a maximum of 500 decoder addresses and up to 1,000 solenoids (specific performance parameters depend on system design). The hybrid module shall offer both types of system communication — satellite and decoder— on the same system. The hybrid module shall also allow expansion of the control system with the addition of 1 more TWI or SDI, doubling hardware capabilities. SiteControl Plus allows operating one to four LDI's or, combined with the hybrid module, up to four total decoder and/or satellite interface devices.

## Software Specifications

The SiteControl software shall operate in the Microsoft® Windows® operating system environment and shall be capable of operating any one of the following types of field unit systems: 1) "hard-wired" satellite field units 2) "radio" operated link satellite field units 3) "hard-wired" decoder field units. The control system shall provide continuous "on-line", two-way communication between the central controller, the interface unit and the field satellites and/or decoder units — providing "true" central control. Continuous field unit "feedback" status information shall register at the central controller and also at the satellite interface unit (TWI).

The SiteControl software shall be capable of supporting up to six normally closed master valves. SiteControl system shall be capable of 100 programs residing in the system at any one time. The system shall provide up to

12 "start times" per individual schedule and up to 6 "start times" per individual program. SMART WEATHER shall provide automatic response or alarm to the central controller. Water Budget function shall adjust watering time from 0 to 300% in 1% increments. Automatic Rain Shutdown shall function with the integration of a Rain Sensor. "Dry run" feature shall provide data for testing and adjustments. Built-in rotor and spray-head database shall provide custom irrigation programs and automatically calculate precipitation rates for each sprinkler model. A "Cost estimator" shall provide projections of water and power costs for irrigation cycles. SiteControl shall provide three different flow measurements: m<sup>3</sup> per hour, liters per second, US Gallons per minute. SiteControl shall offer the selection of any one of eleven different languages including: English, French, German, Spanish, Swedish, Italian, Portuguese, Korean, Japanese, Chinese (traditional), Chinese (simplified). Freedom system shall allow wireless access via a phone or radio. Site Control systems shall be sold with a 1-year Global Support Plan (GSP).

(For North America, software comes pre-installed on a computer supplied by Rain Bird)

## Software Module Options

- Smart Weather
- Automatic ET
- Rain Bird Messenger
- Hybrid Module
- Smart Sensor
- SiteControl Plus
- Map Utilities
- Freedom
- 8 Additional Locations
- Additional Wire Path (2nd)
- Additional Wire Path (3rd)
- Additional Wire Path (4th)



Two-Wire Interface (TWI)

## TWI Hardware specifications

The Two-Wire Interface (TWI) shall serve as an interface between the central controller and Rain Bird commercial field satellites (ESP-MC SAT series) on the SiteControl System.

## Features

- TWI operates up to 28 satellites, pulse decoders or sensor decoders per wire group.
- TWI comes standard with one wire-path, upgradable to up to 4 wire paths with the purchase of additional wire path modules.
- One TWI is capable of interfacing with up to 5 pulse sensors or 28 static sensors per wire-path. Up to 15 total pulse sensors or 200 static sensors can be set up per system.
- Each Flow Sensor in a satellite two-wire system requires a Rain Bird PT322 or PT1502 Pulse Transmitter and a Rain Bird sensor decoder for pulse sensors (DECPULLR)
- Each static (switch) sensor requires a Rain Bird sensor decoder for switch sensors (DECSENLR).
- UL-Listed
- Wall Mount: drawn steel, seamless, cabinet with hinged front panel
- Computer data path: hardwire
- Satellite data path: hardwire/2-wire path (1500 Ω resistance)

## Electrical Specifications

### TWI Hardware

- Output: 2 x 26.5VAC @ 0.9A 60/50Hz or 4 x 26.5VAC @ 0.9A 50/60Hz
- Circuit Breaker: NA (Autoresettable)
- Grounding: All TWIs shall be grounded to a 5-ohm earth ground.
- Each wire path shall be grounded using a Rain Bird MSP-1 surge protector.

## Dimensions

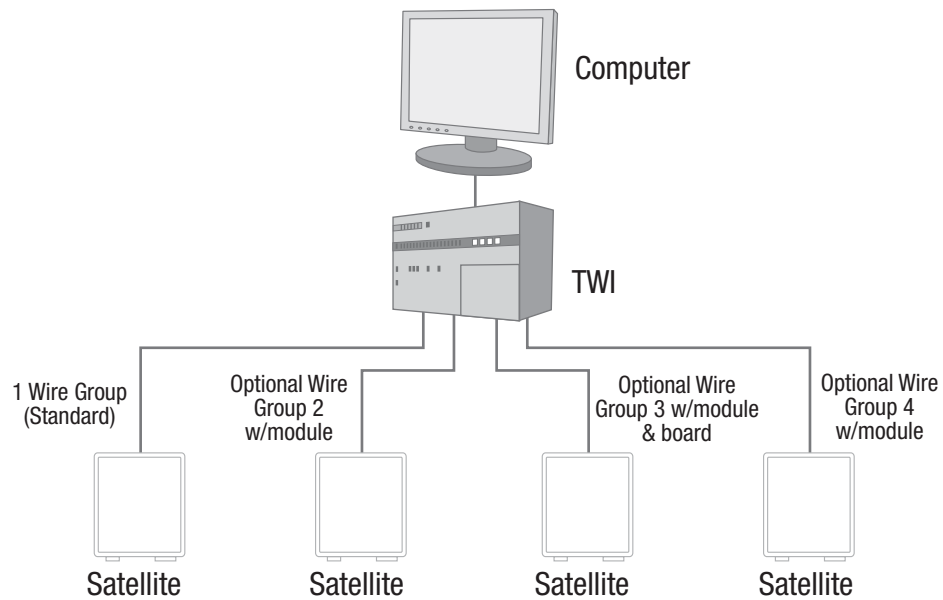
- Width: 15½" (39,4 cm)
- Height: 12½" (R31,7 cm)
- Depth: 6" (15,2 cm)

## Models

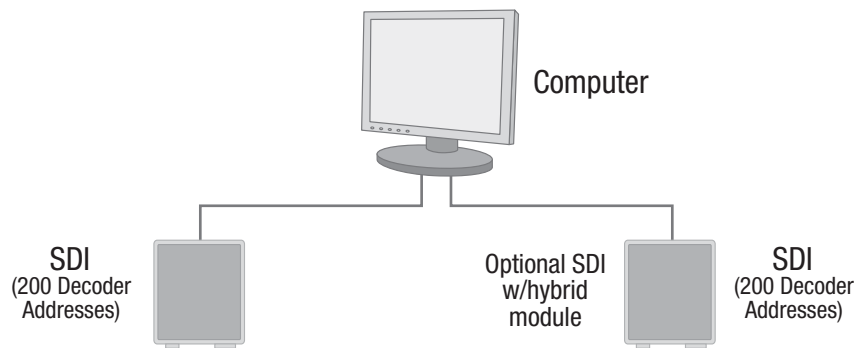
- 120 VAC (60 Hz)
- TWISAT
- 220/240/260 VAC (50 Hz)
- ITWISAT

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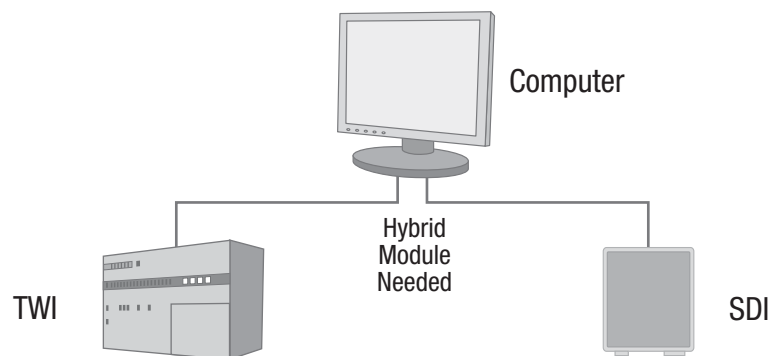
## SATELLITE SYSTEM



## DECODER SYSTEM



## HYBRID SYSTEM





## Decoder Hardware Specifications

- The Large Decoder Interface (LDI) or Small Decoder Interface (SDI) shall serve as an interface between the central controller and Rain Bird commercial field and sensor decoders (FD-101TURF, FD-102TURF, FD-202TURF, FD-401TURF, FD-601TURF, SD-210TURF) on the SiteControl System.
- LDI can interface with up to 500 decoder addresses and can activate up to 1,000 solenoids (specific performance depends on system design – please consult Rain Bird Decoder Design Guide).
- SDI can interface with up to 200 decoder addresses and can activate up to 400 solenoids (specific performance depends on system design – please consult Rain Bird Decoder Design Guide).
- Above solenoid specifications are based on those for the following Rain Bird products: PGA, PEB, EFB-CP, GB, and 300BPE valves, and 115-E rotors.
- LDI and SDI come standard with terminals for 4 wire paths.
- Up to 15 total pulse and 200 static (switch) sensors can be set up per system (specific capacity on SDI or LDI wire paths depends on system design).
- Each decoder wire path shall be grounded using a Rain Bird MSP-1 surge protector.
- All LDIs and SDIs shall be grounded to a 5-ohm or less earth ground.
- LDI and SDI are UL and CE listed
- Each Flow Sensor in a decoder system currently requires Rain Bird PT322 or PT1502 pulse transmitter.

## LDI Electrical Specifications

### North America

- Input: 120 VAC  $\pm$  10% @ .75A 60Hz
- Output: 24VAC @ 3.12A 60Hz

### International Recommended Specifications (Transformer not supplied)

- Input: 220, 230, 240 VAC  $\pm$  10% , 50Hz
- Output: 24 VAC @ 3.12A 50Hz

## SDI Electrical Specifications

### North America

- Input: 120 VAC  $\pm$  10% @ .59A 60Hz
- Output: 24VAC @ 2A 60Hz

### International Recommended Specifications (Transformer not supplied)

- Input: 220, 230, 240 VAC  $\pm$  10%, @ 0.36A 50Hz
- Output: 24 VAC @ 2A 50Hz

## LDI and SDI Dimensions

- Width: 9 ½" (24,1 cm)
- Height: 10 ¼" (26 cm)
- Depth: 4 ¾" (11,1 cm)

## Models

- LDITURF (w/ transformer)
- ILDITURF (no transformer)
- SDITURF (w/ transformer)
- ISDITURF (no transformer)



Small-Decoder Interface (SDI)

### Rain Bird Corporation

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### Rain Bird Corporation

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### Rain Bird International, Inc.

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### Technical Service and Support

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

### Specification Hotline

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

[www.rainbird.com](http://www.rainbird.com)

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