Central Control Technologies
The Right Level of Control — Right Now.

Designed to deliver real-time responses to changing conditions, Rain Bird® Central Control systems simplify irrigation management. Easy-to-use programming, advanced features like Rain Watch™, and MI Series™ mobile control helps your crew quickly create detailed programs that efficiently manage water.

Timeless Compatibility™ assures your Rain Bird software and its future updates will work with your existing Rain Bird field hardware.

Options to Fit Any Course

Our Central Control products are compatible with all Rain Bird golf field control systems.

- Cirrus™
- Nimbus™ II
- Stratus™ II
- StratusLT™

Cirrus™

Our most advanced option, Cirrus controls many of golf's most sophisticated irrigation systems. GPS geo-referenced images. State-of-the-art ET-based scheduling. Cirrus delivers the most innovative features in an intuitive package that lets you spend less time dealing with issues and more time achieving solutions.

Nimbus™ II

Nimbus delivers advanced features with simple administration, ideal for saving time and effort while maintaining premier playing conditions. ET-based scheduling, precise flow management and real-time adjustments help you get the most out of every drop of water.

Stratus™ II and StratusLT™

Offering two options, the Stratus platform is an excellent choice for simple-time or ET-based scheduling. Choose to start with the basics, or upgrade to more advanced capabilities. With either system, Rain Bird delivers the ease and convenience you want in a Central Control system, aiding superior turf and playing conditions throughout the year.

Specifications	Cirrus	Nimbus II	Stratus II	StratusLT
Map-Based Control	Up to 3 Courses (54 Holes)	Up to 3 Courses (54 Holes)	Up to 2 Courses (27 Holes)	Up to 18 Holes
Programs	Unlimited	Unlimited	500	250
Schedules	Up to 50 per Program	Up to 50 per Program	Up to 25 per Program	Up to 25 per Program
Interfaces	Up to 12	Up to 8	Up to 2	1 (Not expandable)
Satellite Stations	Up to 32,256	Up to 21,504	Up to 5,376	Up to 672
IC™ Stations	Up to 36,000	Up to 24,000	Up to 6,000	Up to 750
Pump Stations	Up to 6	Up to 6	Up to 6	Up to 2
Weather Stations	Up to 5	Up to 5	1	1 (WS-PRO LT only)
Hybrid Communication	Up to 12 Interfaces	Up to 8 Interfaces	Up to 2 Interfaces	—

		Cirrus™	Nimbus™ II	Stratus™ II	StratusLT™
Features	Real-time decision making	✓	✓	✓	✓
	Radio communication option	✓	✓	✓	✓
	Works with Rain Bird Integrated Control™ System (ICS)	✓	✓	✓	✓
	Works with all Rain Bird satellites	✓	✓	✓	✓
	Works with Rain Bird decoders	✓	✓	✓	✓
	Works with Rain Bird MI Series™ Mobile Controller	✓	✓	✓	✓
	Works with The FREEDOM System™	✓	✓	✓	✓
	Maximum number of interfaces - Hybrid (same or mix)	12	8	2	1
	Number of ICS™ wire groups (paths) standard	4	4	1	1
	Maximum number of ICS™ stations	36,000*	24,000‡	6,000§	750
	Number of 2-wire satellite wire groups (paths) standard	4	4	2	1
	Maximum number of 2-wire satellite wire groups	48**	32**	8**	1
	Maximum number of 2-wire satellite stations	32,256**	21,504**	5,376**†	672
	Maximum number of wireless satellite stations	32,256**	21,504**	5,376**†	672
	Number of decoders/solenoids standard	500/1,000	500/1,000	500/1,000	200/400◊
	Maximum number of decoders/solenoids	6,000/12,000∆	4,000/8,000∆	700/1,400∆	300/600 with LDI
	Number of simultaneously active decoder solenoids per interface	40/LDI	40/LDI	40/LDI	15/LDI
	Maximum number of weather stations	5	5	1	1 (WS-PRO LT only)
	Maximum number of pump stations	6	6	6	2
Programming	Standard/QuickIRR™/SimpleIRR™	✓	✓	✓	✓
	Number of courses	3	3	2	1
	Number of holes	54	54	27	18
	Number of Flo-Zones™	999	999	999	999
	Programs	Unlimited	Unlimited	500	250
	Schedules	50 per program	50 per program	25 per program	25 per program
	Irrigation programs - active simultaneous	50	50	20	10
	Temporary Program adjust	✓	✓	✓	✓
	Temporary Schedule adjust	✓	✓	✓	✓
	Temporary Station adjust	✓	✓	✓	✓
Software Features	Flo-Manager® - Dynamic Power and Hydraulic Optimization	✓	✓	✓	✓
	Flo-Guard™	✓	✓	✓	✓
	ET Management (Fully Automatic)	✓	✓	✓	✓
	ET-Based Scheduling - Irrigation by Volume	✓	✓	✓	✓
	Minimum ET Operation	✓	✓	✓	✓
	ET Spreadsheet™ Analysis	✓	✓	✓	✓
	Advanced IC™ diagnostics with pinpoint accuracy	✓	✓	✓	✓
	Wireless satellite radio diagnostics	✓	✓	✓	✓
	Comprehensive decoder diagnostics	✓	✓	✓	✓
	Real-Time Operation Log	✓	✓	✓	✓
	Report Generation	✓	✓	✓	–
	Water budgeting 0-300%	✓	✓	✓	✓
	Rain Bucket™ - accumulated rainfall allowance	✓	✓	✓	✓
	Rain Sensor	✓	✓	✓	✓
	Rain Watch™ - respond and use rain events immediately	✓	✓	✓	✓
	QuickStart™ - system setup ands run irrigations in minutes	✓	✓	✓	✓
	Help Screens	✓	✓	✓	✓
	Course Monitor™	✓	✓	✓	✓
	Hole View	✓	✓	✓	✓
	DryRun™ - projected flow and runtimes	✓	✓	✓	✓
	Course View™ - map based graphical view of course	✓	✓	✓	✓
	Import GPS, CAD, and/or Aerial photos	✓	✓	✓	✓
	Virtual Monitoring and Control - area	✓	✓	✓	✓
	Virtual Monitoring and Control - individual stations	✓	✓	✓	–
	Smart Weather™ - monitoring and alarms	✓	✓	✓	–
	Precipitation Data	✓	✓	✓	✓
	Rotor Data	✓	✓	✓	✓
	Cycle + Soak™	✓	✓	✓	✓
	Smart Weather	✓	✓	✓	✓
	Multiple Weather Stations	✓	✓	✓	–
	Hybrid - System expansion with additional interfaces (same or mix)	✓	✓	✓	–
	Station Layers - Map/Operations	✓	✓	✓	–
	Rain Bird Messenger - email alerts	✓	✓	✓	✓
	Smart Pump™	✓	Keycode Module Option	Keycode Module Option	Keycode Module Option
	Additional Wire Groups (path) - expand from standard	✓	✓	Keycode Module Option	–

*With additional ICS(s)   **Possible with additional MIM™(s)   †Possible with additional Wire Group keycodes   ‡Possible with additional ICI(s)
∆Possible with additional LDI(s)   ◊Possible using a LDI instead of SDI   §Possible with additional ICI(s) and IC Wire Path keycodes

CENTRAL CONTROL TECHNOLOGIES

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MI Series™ Mobile Controllers

Remote access to your central control is now as convenient as the Internet, with mobile control. This software runs on your central control computer to provide remote irrigation control via a web-enabled device or smartphone.

Rain Bird® MI Series mobile controllers are designed to work on a smartphone or tablet with Internet connectivity and offer greater remote operation capabilities than anything else available.

When connected to the Internet, up to nine (9) remote users can simultaneously control sprinklers and programs, review system activity or directly change settings on both sprinklers and irrigation programs. All activity is logged and viewable in MI at the central control for convenient review.

MI Series mobile controllers also include the MI FREEDOM user interface. MI FREEDOM provides two smartphone interfaces for users to implement traditional FREEDOM commands: 1) Handheld radio keypad for users with handheld radio keypad experience. 2) Soft keyboard interface for use of The FREEDOM System™ commands on a standard smartphone virtual keyboard.

MI Series Mobile controllers now include the Command Console input method. Combining the speed of MI FREEDOM keypad input with the convenience of drop down action menus, Command Console is the most powerful and fastest activity control method available for manual activation, deactivation, status checks and remote programming.

SYSTEM REQUIREMENTS
• Rain Bird® Central Control.
• Requires an Internet connection to the central control.
• Requires a web-enabled smartphone or tablet with a data plan.

HOW TO SPECIFY

MI – **XXXX(X)**
MODEL | CONTROL TYPE
MI | ADVAN = Advanced
| PROF = Professional

Software license only —
phone or tablet not included.

Feature Comparison

Link Name	Advanced	Professional
Satellites (Areas)/Stations	X	X
Programs/Schedules	X	X
Diagnostics		X
Accessories		X
Alarm Log		X
Cancel All	X	X

Accessories

Link Name	Advanced	Professional
Water Budget		X
Demand Flow	X	X
Smart Pump™		X
Smart Weather™		X
Activity Log	X	X
Online Users	X	X

Available Options

	Advanced	Professional
PROGRAMS		
Execute	X	X
Get Status	X	X
Edit Data	X	X
SCHEDULES		
Execute	X	X
Get Status	X	X
Edit Data	X	X

The FREEDOM System™

The FREEDOM System handheld provides reliable, two-way communication with your Rain Bird system. Use it to choose from command-based or schedule-based operations, making irrigation adjustments a snap. Either way, The FREEDOM System puts you in control of your irrigation management system wherever you are.

SYSTEM FEATURES AND BENEFITS

- **Two-way Communication with Rain Bird Centrals.** Audio response at radio indicates command received by central.

- **Station- and Program-Based Commands.** Provides the flexibility to turn ON or OFF any station or an entire area with the click of a few buttons.

- **FREEDOM-Based Commands Recorded at Central.** Irrigation activity logged at the central whether stations turned ON with FREEDOM System or with central.

- **Optional Flo-Manager® Bypass.** Permits FREEDOM user to bypass Flo-Manager.

- **Optional Operating Window.** Allows user to define FREEDOM usage hours, which helps superintendents to control irrigation activity.

- **Two-Way Voice Communication.**

- **Telephone Operation.** All FREEDOM commands can be activated using a telephone connection.

RADIO FEATURES AND BENEFITS

Weather-resistant and reliable. The NX-3320-k3 handheld radio is built to survive the drops, hard-knocks and weather environments of its users. The NX-3320-k3 meets or exceeds the demanding MIL-STD "driven rain" standard, which guarantees water-resistant performance even in wet weather.

- **LCD Display.** 4-line basic (2-line main/sub-LCD, icon & key guide) with 14 characters; 5-line text message frame (3 lines of text, icon & key guide).

- **Extra-Long Battery Life.** 1400 mAh batteries deliver more than nine (9) hours of operating time on a single charge (5-5-90 duty).

- **One-Year Warranty.**

- **MIL-STD 810 C/D/E/F Environmental Tests.** Meets or exceeds the stringent IP/54/55 dust and IP67 water intrusion standards and full range of tough MIL-STD 810 C, D, E, F and G environmental standards in categories such as vibration, shock, dust, humidity, rain, temperature, solar radiation and atmospheric pressure.

SPECIFICATIONS

Frequency: 450 – 470 MHz (Narrowband)

NOTE: Site survey and license required

Power:
   100 V/110 V: 60 Hz

HOW TO SPECIFY

FREEDOM	–	SP
MODEL		CONTROL TYPE
FREEDOM		SP

Rain Can

A rain can working in tandem with our patented Rain Bird® Rain Watch™ technology responds in real time to rain events; reducing wear and tear and creating a more efficient, intelligent system.

FEATURES AND BENEFITS

• The industry's first active rainfall monitoring and response system.

• The only system designed to automatically react to rainfall and adjust sprinkler application rates to take full advantage of natural rain, thereby eliminating over-watering.

• Saves water and electricity, while keeping the course drier and more playable, by pausing, adjusting or canceling irrigation in the event of rainfall.

• Results in reduced wear and tear on irrigation system components.

• An integral part of Rain Bird® Central Control Software versions 4.0 and higher.

HOW RAIN WATCH MANAGES RAINFALL

• Stationed throughout the course, up to four (4) high-resolution Rain Watch rain cans collect rainfall data.

• Each irrigation program can be set to react to any one of the available rain cans.

• The central control system continuously polls each rain can.

• Rainfall data received by the system is used to make intelligent decisions based on user-defined responses:

System Response: For course-wide reactions

Program Response: For program-specific responses

No-Action Response: For monitoring only

Intelligent Responses Include:

  • Pause

  • Resume

  • Adjust runtimes and resume

  • Cancel

AN EXAMPLE OF RAIN WATCH IN ACTION

• Your daily irrigation schedule calls for 0.20 inches (0.51 cm) of precipitation.

• A storm begins and once accumulated rainfall reaches your desired 0.04-inch (0.10 cm) threshold, Rain Watch suspends irrigation.

• The storm passes after putting down 0.11 inches (0.28 cm) of rain.

• Rain Bird software automatically adjusts remaining runtimes for active stations, as well as those stations yet to run.

• Natural precipitation is seamlessly integrated into scheduled irrigation, resulting in a water savings of 0.11 inches (0.28 cm).

Weather Stations

Rain Bird offers two Weather Station options to help meet your course's unique irrigation management needs. Both WS-PRO2 and the WS-PRO LT provide evapotranspiration (ET) management and reporting capabilities; while only the WS-PRO2 offers optional intelligent alarm and irrigation control responses through Rain Bird's powerful Smart Weather™ software.

FEATURES AND BENEFITS

Superior ET Model. Rain Bird Central Control systems use weather sensor input to determine ET rates based upon a field-proven proprietary equation for ET.

Automatic ET Download/Selective Usage. Automatically download weather data daily and calculate ET to determine irrigation times for the entire system or by specific areas, holes or stations.

ET Override. Allows you to easily set certain programs to ignore ET values when determining run times.

Rain Bucket. Allows rainfall from one day to be carried over to the following day(s) for more accurate ET calculations.

Multiple Station Capacity. Connect up to five (5) weather stations to one central control system for more precise ET values based upon different weather conditions and micro climates around the golf course.

Max Rainfall. User-defined maximum rainfall can be set to limit the amount of acceptable rainfall for specific soil types or other areas that are subject to high run-off.

Weather Data Reports. Generate reports to show current or past weather conditions by the hour, day, week, month or year.

Unlimited Data Storage. Store unlimited weather data at the central control.

Multiple Languages. Choose from 10 different languages (English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, Swedish or Chinese).

English or Metric Measurement Units. Easily select between English or Metric units of measure.

The WS-PRO2 Weather Station along with Rain Bird's Smart Weather Software supports alarms when thresholds are exceeded in:
– Rain
– High or low ambient temperatures
– High winds
– Rainfall intensity

When any of these alarms exceed user-defined thresholds in a programmed time period, the system will initiate an alarm condition. The alarms will automatically reset when temperature, rain or wind conditions are again within acceptable ranges for irrigation.

Automatic Shut Off/Turn On. Rain Bird Central Control systems automatically shut OFF irrigation operation for the entire system or in specific areas of the course (tee box, fairway, green, etc.) when alarm conditions are detected at the weather station. They also automatically turn ON irrigation when weather conditions return to the acceptable range for irrigation.

Automatic Pause/Resume. Rain Bird Central Control systems automatically suspend irrigation to the entire system or specific areas (tee box, fairway, greens, etc.) when alarm conditions are detected. They also automatically resume irrigation when weather conditions return to the acceptable range for irrigation.

Automatic Notification. The WS-PRO2 Weather Station, using Rain Bird® Messenger,™ can automatically notify you wherever you are — at the central control, via text messaging or e-mail — when alarm conditions exist.

HOW TO SPECIFY

WS – XXXX (XX) – XX – X

MODEL
PRO2 = Professional Series
PRO LT = Professional Light Series

CONNECTION
SH = Short Haul

POWER
Blank = User Supplied
S = Solar Powered

WS-PRO LT

WS-PRO2

CENTRAL CONTROL TECHNOLOGIES