



Irrigation System Maintenance Check Sheet

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
Central Control Systems				
Database Back-up	Back-up current program and map databases.		Back-up all historical log and weather data files.	Contact GSP for back-up on Rain Bird servers.
Programming	Fine tune program water budgets and station runtimes to account for micro-climates, seasonal, and daily changes.			Follow weather station maintenance schedules to ensure accurate ET data when operating automatically.
Station Data Accuracy	Update station data tables to match hardware changes in the field.			Verify that all sprinkler, precipitation and default run time data is accurate.
CPU Housekeeping	Reboot computer every 1-2 weeks.	Delete temp files, and perform scan disk and defragmentation utilities. Remove any unused programs.	Remove dust from CPU tower. (Don't use shop compressor. Use air duster cans. Stay clear of microprocessor)	Keep serial cables and components labeled for ease of troubleshooting.
Battery Back-up			Run battery runtime test to ensure long lasting operation. Replace batteries as needed	Install smart application shutdown software for batteries that are so equipped.
Earth Ground Testing			Check earth ground resistance during dry periods. Use clamp on tester. (< 5 Ohms)	Physically check all connections. Enhance grounding as needed.
Central Grounding Grid			Check wire splice connections. Repair as needed.	Clean valve box of debris.
Rain Bird Global Service Plan (GSP)			Renew Rain Bird GSP subscription, or check status and verify expiration date.	Ensures factory support, hardware warranty, and up to date software to take advantage of latest features.

Maintenance Check Sheets

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Designed to Provide Easy Reference for Regular Maintenance Tasks 				
<ul style="list-style-type: none"> – Central Control Systems 			<ul style="list-style-type: none"> – Rain Cans 	
<ul style="list-style-type: none"> – Field Control Systems 			<ul style="list-style-type: none"> – Sensors 	
<ul style="list-style-type: none"> – Radio Systems 			<ul style="list-style-type: none"> – Sprinklers 	
<ul style="list-style-type: none"> – Weather Stations 			<ul style="list-style-type: none"> – Valves 	
<ul style="list-style-type: none"> – Pump Stations 			<ul style="list-style-type: none"> – Valve Boxes 	
<ul style="list-style-type: none"> – Grounding Grids 			<ul style="list-style-type: none"> – Wire Splices 	

Irrigation System Maintenance

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Irrigation systems require maintenance 				
<ul style="list-style-type: none"> ▪ They are not a Static System, but a Dynamic System 				
<ul style="list-style-type: none"> ▪ They require <u>REGULAR</u> maintenance 				
<ul style="list-style-type: none"> – Daily 				
<ul style="list-style-type: none"> – Weekly 				
<ul style="list-style-type: none"> – Monthly 				
<ul style="list-style-type: none"> – Annually 				
<ul style="list-style-type: none"> – Other intervals as well 				

Central Control Systems

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
▪ Fine Tune Programs				
▪ Accurate Station Data				
▪ Database Back-ups				
▪ Label the PC Cables and Connections				
▪ Battery Back-up Protection				
▪ Test Earth Ground Resistance (10 Ohms - Clamp on meter)				
▪ Factory Support (GSP)				

Sprinklers

Maintenance Description	Frequency			
	<i>Weekly</i>	<i>Monthly</i>	<i>Annually</i>	<i>Other</i>
▪ Inspecting Operation				
▪ Checking Rotation				
▪ Leveling				
▪ Trimming				
▪ Clearing Clogged Nozzles				
▪ Checking Pressure				
▪ Maintaining Spare Parts				

Valves

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Checking Combo Vacuum / Air Release Valves 				
<ul style="list-style-type: none"> ▪ Inspecting Electric Valves 				
<ul style="list-style-type: none"> ▪ Ensuring Proper Pressure Regulation 				
<ul style="list-style-type: none"> ▪ Maintaining Spare Parts 				
<ul style="list-style-type: none"> ▪ Exercising Isolation Valves <ul style="list-style-type: none"> – Close the valve – Fully Open the valve – Turn one rotation to the closed position to prevent valve from being “locked” 				

Valve & Splice Boxes

Maintenance Description	Frequency			
	<i>Weekly</i>	<i>Monthly</i>	<i>Annually</i>	<i>Other</i>
▪ Locating				
▪ Trimming				
▪ Levelling				
▪ Cleaning				
▪ Inspecting and Replacing Broken Lids				
▪ Labelling Communication and Power Wires				
▪ Checking Splices and Using Direct Burial Kits				
▪ Use Color Coded Lids to Identify Electric vs Valve Boxes				

Field Interface Devices

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Checking Communication with PC 				
<ul style="list-style-type: none"> ▪ Inspecting LED Indicators for Proper Operation 				
<ul style="list-style-type: none"> ▪ Checking Communication to Field Devices 				
<ul style="list-style-type: none"> – Satellites 				
<ul style="list-style-type: none"> – Decoders 				
<ul style="list-style-type: none"> – ICMs 				
<ul style="list-style-type: none"> ▪ Ensuring Proper Feedback from Field Devices 				
<ul style="list-style-type: none"> ▪ Maintaining Spare Parts and Fuse Inventory 				

Satellite Controllers

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
▪ Inspecting for Damage or Infestation				
▪ Ensure Doors & Lids Close & Seal Properly				
▪ Verifying Station Operation and Voltage Outputs				
▪ Testing Solenoid Resistance (20 – 60 Ohms)				
▪ Test Earth Ground Resistance (10 Ohms - Clamp on meter)				
▪ Maintaining a Spare Parts Inventory				

Decoders

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Perform Regular Diagnostic Testing from the PC <ul style="list-style-type: none"> – Run an ON/OFF test weekly or after storms 				
<ul style="list-style-type: none"> ▪ Maintain Proper Wire Path Current Draw 				
<ul style="list-style-type: none"> ▪ Maintain Solenoid Health <ul style="list-style-type: none"> – Check running current draw of active stations 				
<ul style="list-style-type: none"> ▪ Check Surge Arrestor Ground Connections 				
<ul style="list-style-type: none"> ▪ Test Earth Ground Resistance (<i>50 Ohms - 3 point meter</i>) 				
<ul style="list-style-type: none"> ▪ Maintain a Spare Parts Inventory 				

IC System

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Perform Regular Diagnostic Testing from the PC <ul style="list-style-type: none"> – Poll the ICM Rotors and Valves daily to verify proper response – Measure the ICM voltages weekly to identify field issues 				
▪ Maintain Proper Wire Path Current Draw				
▪ Check Surge Arrestor Ground Connections				
▪ Test Earth Ground Resistance (<i>50 Ohms – 3 point meter</i>)				
▪ Maintain a Spare Parts Inventory				

Radio Systems

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
▪ Ensure Clear Line of Site for Proper Signal Strengths				
▪ Deep Cycle Handheld Radio Batteries				
▪ Inspect Antenna & Mounts for Damage				
▪ Check Coaxial Cable Connections. Use Waterproof Mastic Tape				
▪ Test Earth Ground Resistance (10 Ohms - Clamp on meter)				

Weather Stations

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Sensor maintenance should be performed regularly <ul style="list-style-type: none"> – Temperature relative humidity sensor – Solar radiation sensor – Wind speed sensor – Rain cans – Solar Panel – Battery – Sensor Cables 				
▪ Clean Solar Panels & Check Output Voltage (16-18 VDC)				
▪ Check Splices or Ensure Line of Site				
▪ Test Earth Ground Resistance (10 Ohms - Clamp on meter)				

Pump Stations

Maintenance Description	Frequency			
	Weekly	Monthly	Annually	Other
<ul style="list-style-type: none"> ▪ Visually Inspect Pump Components for Leaks 				
<ul style="list-style-type: none"> ▪ Grease and Oil Pumps and Motors per Manufacturer's Recommendations 				
<ul style="list-style-type: none"> ▪ Clean Wye Strainers, Basket Strainers, and Pressure Wash Stainless Steel Screen Filters Annually 				
<ul style="list-style-type: none"> ▪ Inspect Foot Valve and Flappers for Proper Seal 				
<ul style="list-style-type: none"> ▪ Inspect Wet Well and Pump Intakes for Debris 				
<ul style="list-style-type: none"> ▪ Test Earth Ground Resistance (<i>10 Ohms - Clamp on meter</i>) 				
<ul style="list-style-type: none"> ▪ Schedule Professional Pump Station Maintenance 				

Thank You

