



Introduction to New Commercial Products

The Intelligent Use of Water.™

New COM Products!



ESP LX-IVM Controller



IQ4 Central Control

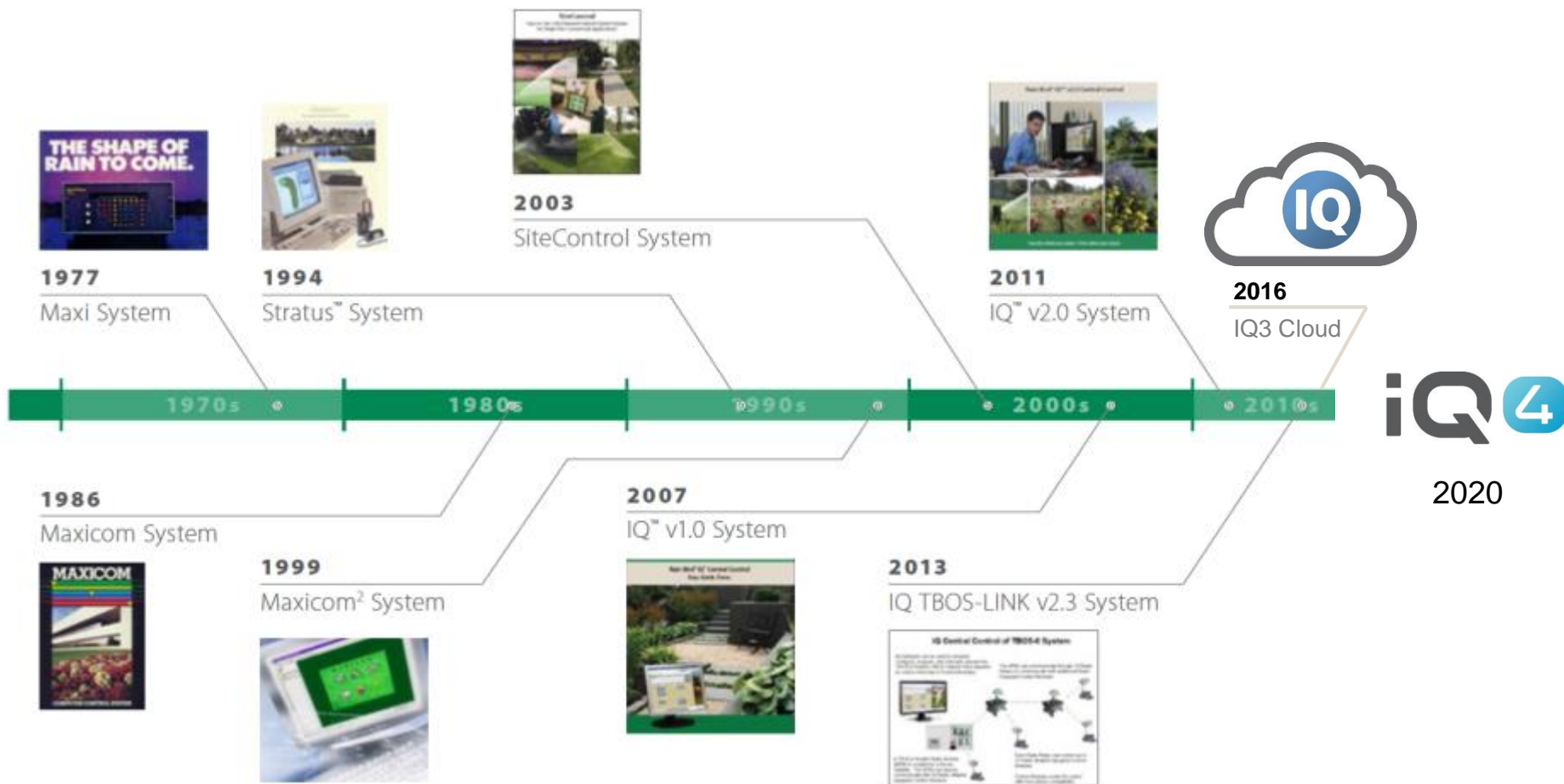
Rain Bird – Central Control



Ahwatukee Country Club
Phoenix, Arizona (1978)



Over 40 years of expertise



Reasons Customers Buy Central Control

- Program, monitor, adjust, and manually operate remote site controllers from a computer – Saves time & labor, do more with less
- Automatically adjust controller programming based on the weather conditions – Saves water, labor, money
- Automatically react to and be notified of problem flow conditions, shutting down the valve or water source – Saves water & limits liability
- Track water usage, create reports – Show your customer or organization how much water you have saved
- Track manual operation and programming changes made at the controller – Prevent unauthorized access

iq4

IQ4→4 Things to Know

- **Easy setup and access – 100% Web Browser Based**
 - Easy upgrade from IQ3
 - No time needed to train users
- **Complete control with mobile device**
 - Reporting and text notifications on phones
- **New features simplify programming and management of controllers**
- **Faster**

IQ4 Controllers Screen



ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP



0



2



0



0



0



49



CONTROLLERS

Select Site



Edit



Logs



Sync



Reverse



Stop



Delete



More



<input type="checkbox"/>	Status	Name	Site	Type	Stations Programmed	Programs Used
<input type="checkbox"/>		LXD with Flow	Flow Sites	LXD	14	1
<input type="checkbox"/>		LXME with Flow	Flow Sites	LXME	26	2
<input type="checkbox"/>		LX-IVM PRO 4G	Office IVM	LX-IVM Pro	1	1
<input type="checkbox"/>		Brown Test	Office LXME	LXME	1	2

Dashboard > Controllers

0 / 4 Selected

IQ4 Controller Program Screen



ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP

0

2

0

0

0

49



PROGRAMS

Select Site

Edit Start

Select Items to Batch Edit

- Program Adjust
- Delay Between Stations
- Start Days

CANCEL DONE

<input type="checkbox"/>	#	Name	Site	Status	Start	Water Days	Adjust		
<input type="checkbox"/>	A	Program A	Flow Sites		12:00 AM	Su M T W Th F S	100		
<input type="checkbox"/>	B	Program B	Flow Sites		-	Su M T W Th F S	100		
<input type="checkbox"/>	C	Program C	Flow Sites		-	-	100		
<input type="checkbox"/>	D	Program D	Flow Sites		-	-	100		
<input type="checkbox"/>	A	Program A	Flow Sites		4:30 AM	Su Th	100		
<input type="checkbox"/>	B	Program B	Flow Sites	LXME with Flow	4	-	6:15 AM	Su M T W Th F S	100
<input type="checkbox"/>	C	Program C	Flow Sites	LXME with Flow	-	-	-	-	100

Dashboard > Programs

0 / 52 Selected

Edit Program Screen

The screenshot displays the 'Edit Program Screen' in the iQ4 application. A modal window titled 'Add Stations' is open, showing a list of stations with checkboxes. Two red boxes highlight the 'Landscape' and 'Sprinkler' options. The 'Edit' button in the sidebar is also highlighted with a red box.

<input type="checkbox"/>	#	Name	Landscape	Sprinkler
<input type="checkbox"/>	8	Station 008		
<input type="checkbox"/>	9	Station 009		
<input type="checkbox"/>	10	Station 010		
<input type="checkbox"/>	11	Station 011		
<input type="checkbox"/>	12	Station 012		
<input type="checkbox"/>	13	Station 013		
<input type="checkbox"/>	14	Station 014		

Program Settings

- Program Name: Program A
- Program Adjust: 100
- ET Adjust: None
- Start Days: Su MTWThFS
- Start Times: 12:00 AM

Dashboard > Programs > P

Cancel Submit

0/7 Selected

Manual Operations

The screenshot displays the iQ4 software interface for a 'MALKIN RESIDENCE'. The top navigation bar includes 'ACTIVITY', 'CONTROLLERS', 'PROGRAMS', 'REPORTS', and 'SYSTEM SETUP'. The left sidebar shows 'Controller Settings' with a 'Flow' meter and 'Actual Flow Rate: 2.81 gal/min (87.95%)'. The main area features a 'Programs' table with columns for #, Name, Stations, Status, Start, Water Days, and Adjust. Program B is highlighted with a red box, showing a status of 'Running'.

#	Name	Stations	Status	Start	Water Days	Adjust
A	Program A	2	-	07:00	M	200
B	Program B	2	Running	07:00	-	300
C	Program C	3	-	05:00	MFS	110
D	Program D	3	-	04:00	Su T Th	100

Manual Operations

The screenshot displays the iQ4 irrigation control interface. The top navigation bar includes 'ACTIVITY', 'CONTROLLERS', 'PROGRAMS', 'REPORTS', and 'SYSTEM SETUP'. The main header shows 'MALKIN RESIDENCE' and tabs for 'Programs', 'Stations', 'Master Valves', and 'Sensors'. The 'Stations' tab is active, showing a list of 12 stations. The 'Controller Settings' panel on the left is highlighted with a red box, showing a flow meter with an 'Actual Flow Rate' of 2.81 gal/min (87.95%) and an 'Expected Flow Rate' of 3.19 gal/min. The station list table has two rows highlighted with red boxes: Station 002 and Station 004, both showing a status of '58 min 53 sec'.

#	Station Name	Status	Landscape	Sprinkler	Notes
1	Station 001	Idle	Shrubs	Emitters	-
2	Station 002	58 min 53 sec	Trees	Emitters	-
3	Station 003	Idle	Shrubs	Emitters	-
4	Station 004	58 min 53 sec	Trees	Emitters	-
5	Station 005	Idle	Ground Cover	Dripline	-
6	Station 006	Idle	Shrubs	Emitters	-
7	Station 007	Idle	Turfgrass	Spray Heads	-
8	Station 008	Idle	Turfgrass	Rotors/Impacts	-
9	Station 009	Idle	Turfgrass	Rotors/Impacts	-
10	Station 010	Idle	Flowers/Garden	Emitters	-
11	Station 011	Idle	-	-	-
12	Station 012	Idle	-	-	-

Controller Settings

Flow: 0 to 6.38
Actual Flow Rate: 2.81 gal/min (87.95%)
Expected Flow Rate: 3.19 gal/min

Name: Malkin Residence
Controller Type: LXME
iQNet Type: Direct Satellite

Activity Screen



ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP



49

ACTIVITY

Scheduled

Completed

Alerts

Select Site

3 days

Start 10/21/2019



End 10/24/2019



Acknowledge

Controller Name	Site Name	Name	Status	Total Run Time	Start Time	End Time
LXD with Flow	Flow Sites	Program A	Completed	03:00:00	10/24/2019 12:00 AM	10/24/2019 3:00 AM
LXD with Flow	Flow Sites	Program A	Completed	03:00:01	10/23/2019 12:00 AM	10/23/2019 3:00 AM
LXD with Flow	Flow Sites	Program A	Completed	03:00:00	10/22/2019 12:00 AM	10/22/2019 3:00 AM

Dashboard > Activity

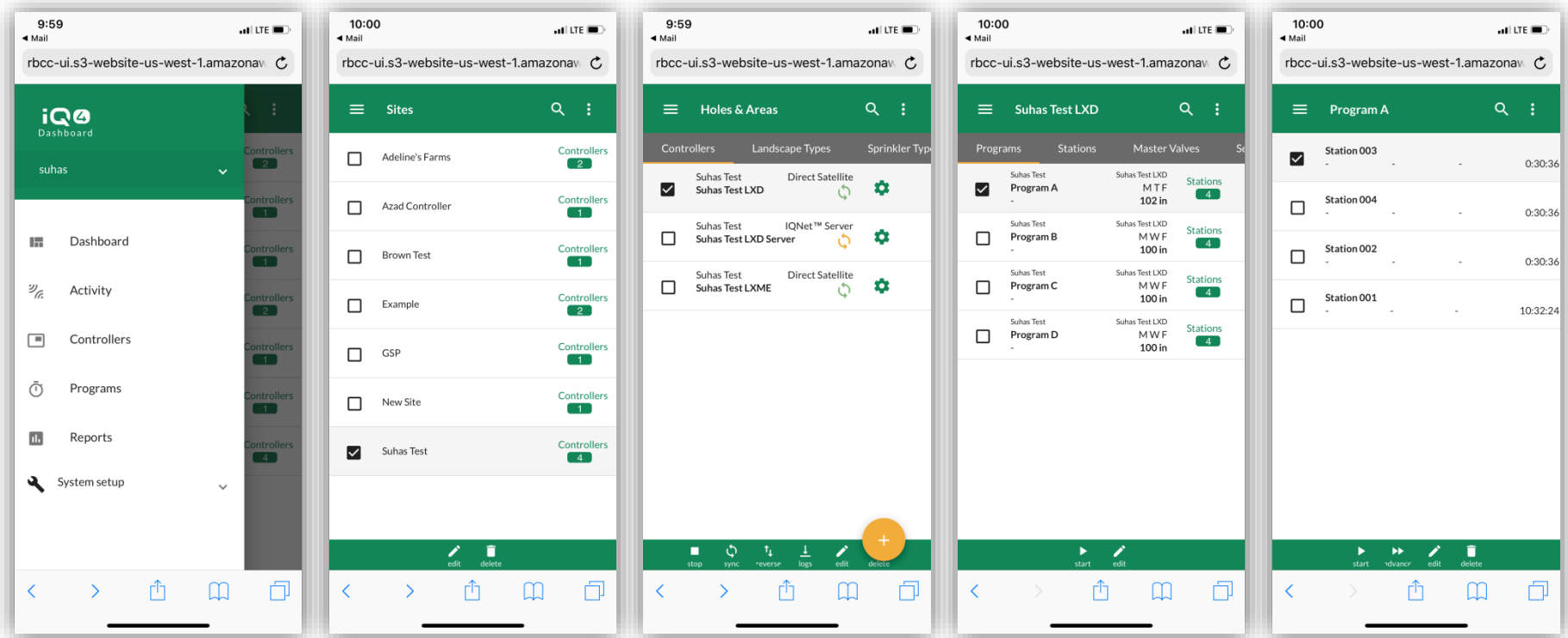
0/3 Selected

IQ4 Reports

The screenshot shows a web browser window with the URL `rbcc-uis3-website-us-west-1.amazonaws.com/reports/customreports/customreports`. The dashboard has a green header with the **iQ4 Dashboard** logo and navigation tabs for **ACTIVITY**, **CONTROLLERS**, **PROGRAMS**, **REPORTS**, and **SYSTEM SETUP**. Below the header, there are sub-tabs for **REPORTS**, **CUSTOM REPORTS**, and **DAILY REPORTS**, along with a **Select Site** dropdown menu. The main content area displays eight report cards in a grid:

- Station Run Time**: Program starts, Station Run Times, Total time, Estimated vs. Actual Total Flow
- Alarms and Warnings**: View the Alarms and Warnings notifications
- Monthly Report Card**: Program starts, Stations run, Total time, Estimated vs. Actual Total Flow
- Monthly Flow**: Compare previous vs current 30 day water consumption
- Flow Log Graph**: Compare previous vs current annual and monthly water consumption
- Water Management**: Compare previous vs current annual and monthly water consumption
- Water Use by FloZone™**: Compare previous vs current annual and monthly water consumption
- Yearly Water Consumption**: Compare previous vs current annual and monthly water consumption

Mobile Accessibility



Example Report

Report Name*
Station Run Time - 10/01/2019 - 01/15/2020

Flow Sites
LXD with Flow

Flow Sites
LXD with Flow

From: 10/01/2019 12:00 AM To: 01/15/2020 11:59 PM

Flow Sites

LXD with Flow **LXD - Direct Satellite**

#	Station Name	Program A					Manual	Total Run Time	Estimated Flow (gal)
1	Station 001	16:29:47					00:00:00	16:29:47	25,917.2
2	Station 002	16:30:08					00:00:00	16:30:08	27,621.3
3	Station 003	08:14:54	00:00:00	00:00:00	00:00:00	00:00:00	08:14:54	10,291.8	
4	Station 004	16:30:04	00:00:00	00:00:00	00:00:00	00:00:00	16:30:04	22,566.4	
5	Station 005	16:29:53	00:00:00	00:00:00	00:00:00	00:00:00	16:29:53	22,169.9	
6	Station 006	14:07:18	00:00:00	00:00:00	00:00:00	00:08:12	14:15:30	20,272.1	
7	Station 007	08:14:58	00:00:00	00:00:00	00:00:00	00:01:59	08:16:57	10,232.0	
	Satellite Total	96:37:02	00:00:00	00:00:00	00:00:00	00:10:11	96:47:13	139,070.7	

Select Recipients

Select recipients to receive the email:

- Select All
- Bert Wood

Cancel Submit

View PDF

Share

New COM Products!



ESP LX-IVM Controller



IQ4 Central Control

The future is Two-Wire Systems

- **Adaptable to phased projects**
- **Reduced installation time**
- **Reduced wire costs**
- **Increased wire run lengths**
- **Higher Capacity**
 - Larger station counts
 - More Sensors (Flow and weather)
 - More simultaneous stations



Next Generation Controller

- **Goal**

- Create the easiest to use controller
- Best in class specs
- Revolutionize two-wire systems with innovative technology
 - Simplify installation
 - Improve reliability
 - Set a new standard with diagnostic capabilities

- **Result → The new ESP LX-IVM Controller and IVM field devices**

What is IVM?

- IVM → Integrated Valve Module
- New Two-Wire device → NO MORE DECODERS, it's built into the solenoid which fits Rain Bird valves
- It's more than a solenoid or a decoder...It's an entire controller
- Two way communication with faster response times and enhanced diagnostics
- Eliminates decoder and 50% of wire connections



Smart Valve

New LX Controller



ESP LX-IVM Series 2-Wire Controllers

■ ESP LX-IVM

- 60 Stations
- 5 Master Valves
- 5 Flow Sensors
- 4 Weather Sensors (1 local)
- 8 SimulStations
- 10 Programs

■ ESP LX-IVM PRO

- 240 Stations
- 10 Master Valves
- 10 Flow Sensors
- 8 Weather Sensors (1 local)
- 16 SimulStations
- 40 Programs

“No Expansion Modules”

ESP LX-IVM



ESP LX-IVM PRO



IVM-Series Field Devices

IVM-SOL

Commercial Valves interface — *Fits PGA, PEB, EFB, & BPE Valves*



IVM-SEN

For weather and flow sensors



IVM-OUT

Adapts third party valves to work in our system
-Requires DC Latching Solenoid

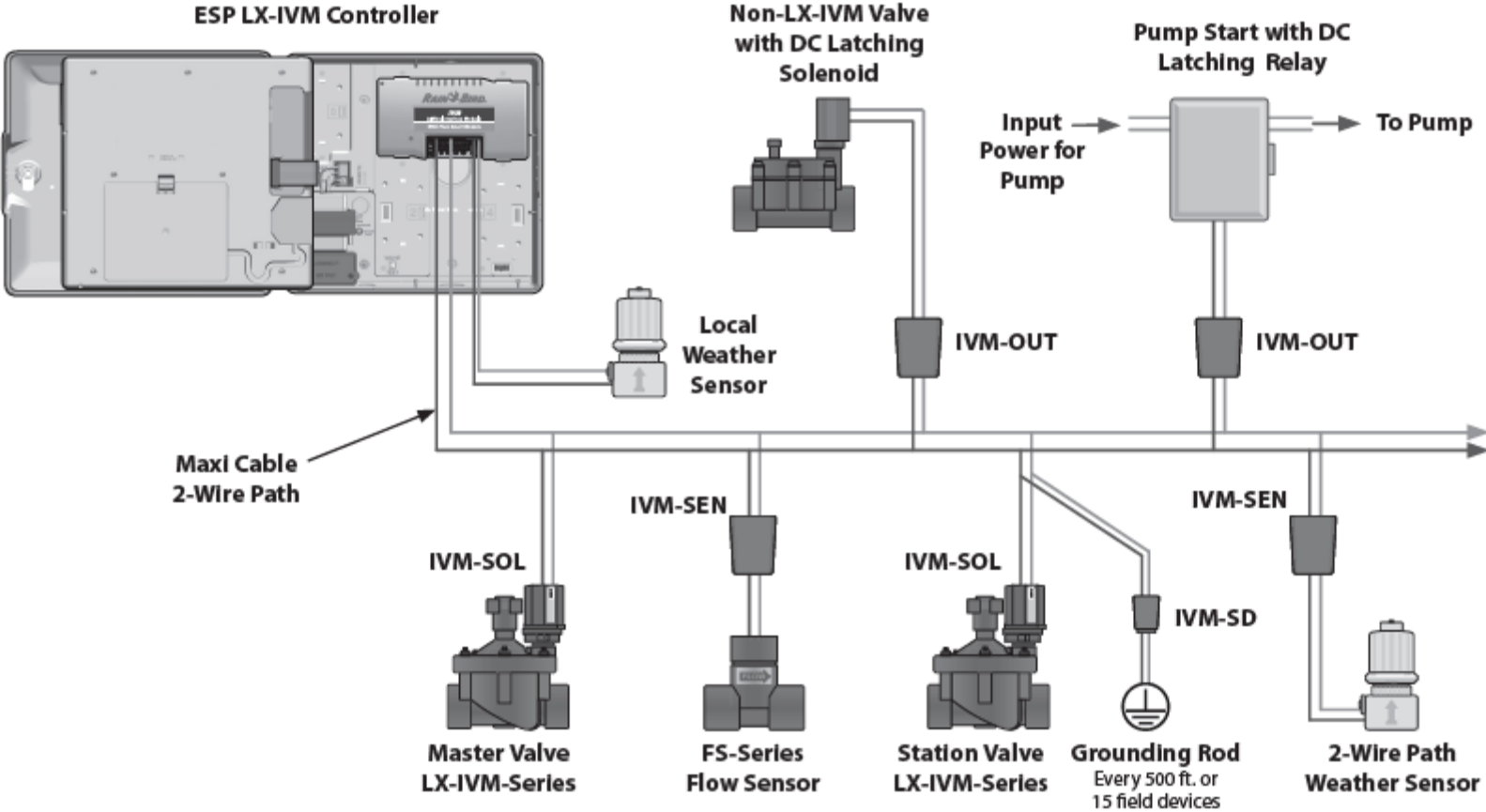


IVM-SD

Surge Protection
Install every 500' or 15 field devices.



IVM System Layout



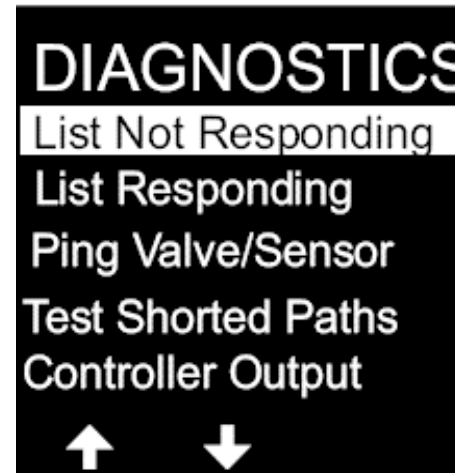
LX Series Features

- **FloWatch → Leak detection**
- **FloManager → Compressed Water Schedules**
- **Learn Flow**
- **Assignable Master Valve**
- **Assignable Weather Sensors**
- **Cycle & Soak and Station Delay**
- **Water Windows**
- **Seasonal Adjust**

Familiar User-friendly Interface!



Key Point – Diagnostics / Self-Healing!



- 4 Isolated Wire Paths ensure that shorts don't take down the full system
- 2-Wire Mapping and List-Not-Responding identifies device failures
- Trending 12-month electrical history reports and proactive action
- Self-healing and restart after 2-Wire shorts
- Two-Way Communication with devices activates self-shutoff when power is absent

IVM – 4 Things to know

■ Controller

- This is the best and most advanced controller on the market
- New User Interface is a lot easier to use
 - 2.5x Bigger screen, backlight
 - Less Dial Positions and backlit buttons

■ IVM SOL

- The IVM Technology is a game changer for two wire and will be the future
 - 50% less wire splices = 200% more reliable
 - Advanced diagnostics pinpoint problems
- Can't be mixed with other decoder systems

What about the LXD?



LXD



LX-IVM



LX IVM PRO

