



Introduction to New Commercial Products

The Intelligent Use of Water.™

New COM Products!



ESP LX-IVM Controller



IQ4 Central Control

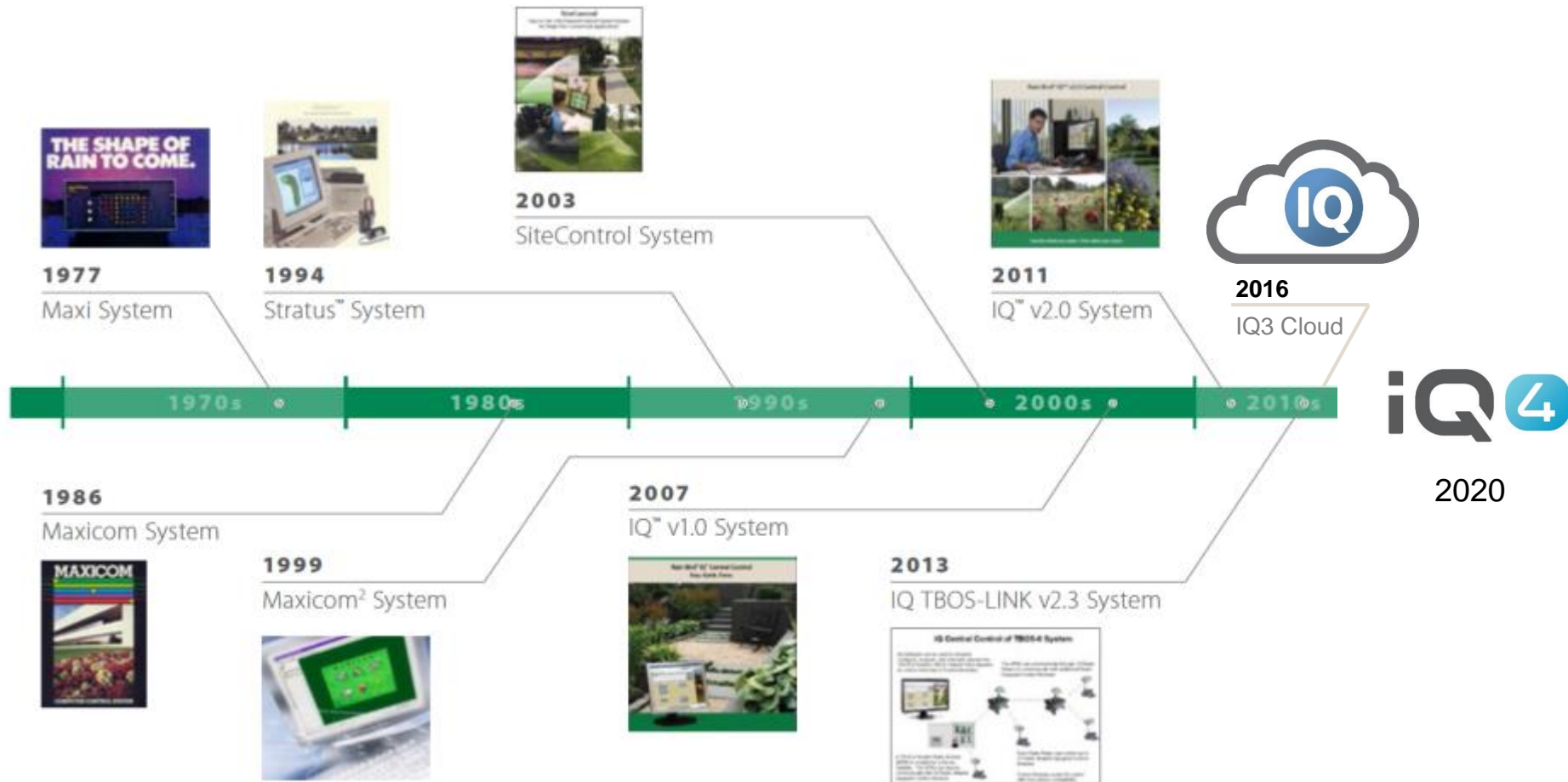
Rain Bird – Central Control



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→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



Status

Name

Site

Type

Stations Programmed

Programs Used



LXD with Flow

Flow Sites

LXD

14

1



LXME with Flow

Flow Sites

LXME

26

2



LX-IVM PRO 4G

Office IVM

LX-IVM Pro

1

1



Brown Test

Office LXME

LXME

1

2

Dashboard > Controllers

0 / 4 Selected

IQ4 Controller Program Screen



ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP



PROGRAMS

Select Site



Edit

Start

Select Items to Batch Edit

☐ Program Adjust

☐ Delay Between Stations

☐ Start Days

CANCEL

DONE



#

Name

Site



A

Program A

Flow Sites



B

Program B

Flow Sites



C

Program C

Flow Sites



D

Program D

Flow Sites



A

Program A

Flow Sites



B

Program B

Flow Sites

LXME with Flow

4

-

6:15 AM

Su M T W Th F S

100



C

Program C

Flow Sites

LXME with Flow

-

-

-

-

100

Dashboard > Programs

0 / 52 Selected

Edit Program Screen

The screenshot displays the iQ4 'Edit Program' interface. On the left, a sidebar contains the 'Edit' button (pencil icon) and 'Program Settings' (Program Name: Program A, Program Adjust: 100, ET Adjust: None, Start Days: Su MTWThFS, Start Times: 12:00 AM). The main area features an 'Add Stations' dialog with a table of stations. The 'Landscape' and 'Sprinkler' headers are highlighted with red boxes. A red box also highlights a '+' button on the right side of the screen. The bottom right shows 'Cancel' and 'Submit' buttons, and a status bar indicates '0/7 Selected'.

<input type="checkbox"/>	#	Name
<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

Manual Operations

ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP

58

12

0

0

1

99+

← MALKIN RESIDENCE

Edit

Control

Logs

Sync

Reverse

More

Controller Settings

Flow

06.38

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

Programs

Stations

Master Valves

Sensors

Edit

Start

<input type="checkbox"/>	#	Name	Stations	Status	Start	Water Days	Adjust
<input type="checkbox"/>	A	Program A	2	-	07:00	M	200
<input type="checkbox"/>	B	Program B	2	Running	07:00	-	300
<input type="checkbox"/>	C	Program C	3	-	05:00	M F S	110
<input type="checkbox"/>	D	Program D	3	-	04:00	Su T Th	100

Manual Operations

ACTIVITY

CONTROLLERS

PROGRAMS

REPORTS

SYSTEM SETUP

58

12

0

0

1

99+

← MALKIN RESIDENCE

Programs

Stations

Master Valves

Sensors

Controller Settings

Flow

06.38

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

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

Activity Screen

[ACTIVITY](#)[CONTROLLERS](#)[PROGRAMS](#)[REPORTS](#)[SYSTEM SETUP](#)

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](#)

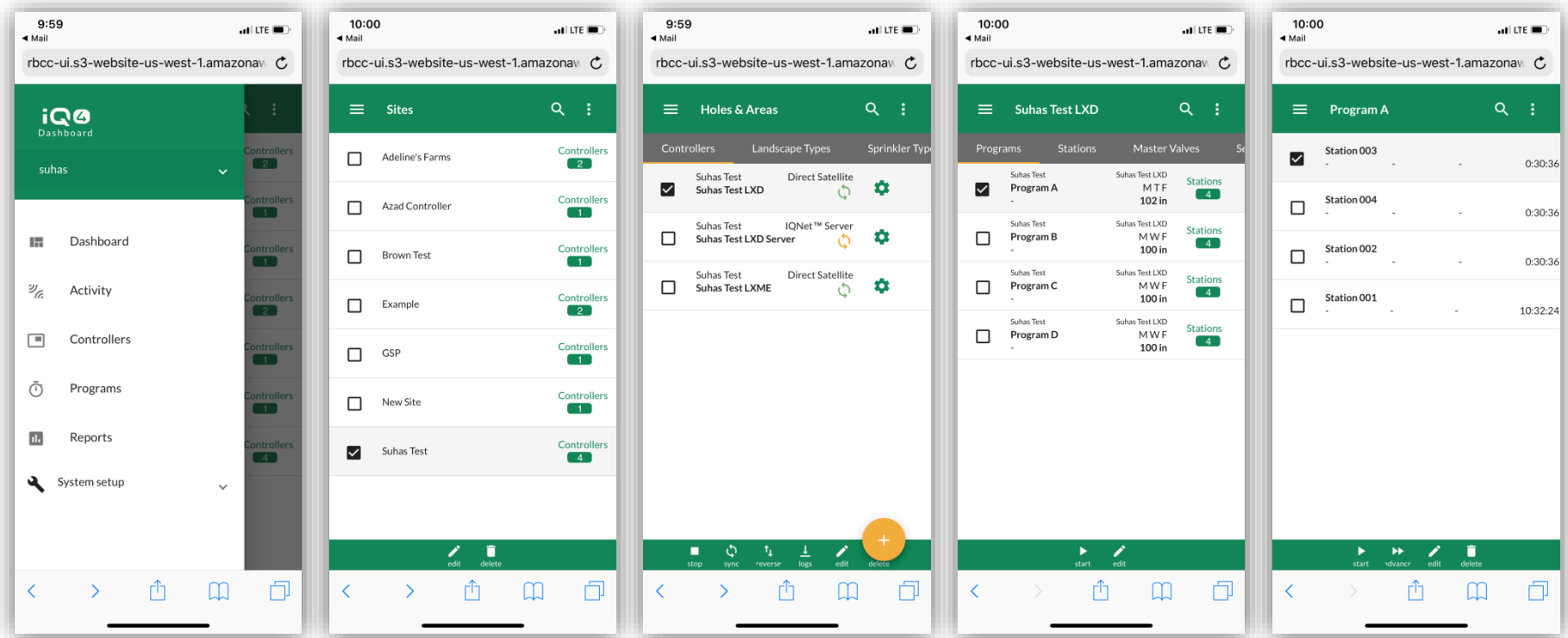
0/3 Selected

IQ4 Reports


The screenshot displays the IQ4 Reports dashboard within a web browser. The browser's address bar shows the URL `rbcc-uis3-website-us-west-1.amazonaws.com/reports/customreports/customreports`. The dashboard features a green header with the 'iQ4 Dashboard' logo and navigation tabs for 'ACTIVITY', 'CONTROLLERS', 'PROGRAMS', 'REPORTS' (which is selected), and 'SYSTEM SETUP'. Below the header, there are sub-tabs for 'REPORTS', 'CUSTOM REPORTS' (which is active), and 'DAILY REPORTS'. A 'Select Site' dropdown menu is located on the right side of the sub-tab bar. The main content area contains eight report cards arranged in a 2x4 grid:

- Station Run Time**: Program starts, Station Run Times, Total time, Estimated vs. Actual Total Flow. Icon: Stopwatch.
- Alarms and Warnings**: View the Alarms and Warnings notifications. Icon: Alarm bell.
- Monthly Report Card**: Program starts, Stations run, Total time, Estimated vs. Actual Total Flow. Icon: A+ grade.
- Monthly Flow**: Compare previous vs current 30 day water consumption. Icon: Calendar with a bar chart.
- Flow Log Graph**: Compare previous vs current annual and monthly water consumption. Icon: Line graph with an upward arrow.
- Water Management**: Compare previous vs current annual and monthly water consumption. Icon: Water tap and a magnifying glass.
- Water Use by FloZone™**: Compare previous vs current annual and monthly water consumption. Icon: Up and down arrows.
- Yearly Water Consumption**: Compare previous vs current annual and monthly water consumption. Icon: Calendar with a bar chart.

Mobile Accessibility



Example Report

 ACTIVITY CONTROLLERS PROGRAMS **REPORTS** SYSTEM SETUP Playground

← STATION RUN TIME

1 Controllers Selected Custom Start 10/01/2019 End 01/15/2020 Run Report

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

Flow Sites
LXD with Flow

Flow Sites

LXD with FlowLXD - Direct Satellite

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

#	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	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	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	00:00:00	16:29:53	22,169.9
6	Station 006	14:07:18	00:00:00	00:00:00	00:00:00	00:00:00	00:08:12	14:15:30	20,272.1
7	Station 007	08:14:58	00:00:00	00:00:00	00:00:00	00:00:00	00:01:59	08:16:57	10,232.0
	Satellite Total	96:37:02	00:00:00	00:00:00	00:00:00	00:00:00	00:10:11	96:47:13	139,070.7

View PDF

Share

Select Recipients

Select recipients to receive the email:

☐ Select All

☐ Bert Wood

Cancel Submit

Rain Bird Dashboard > Reports > Station Run Time

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

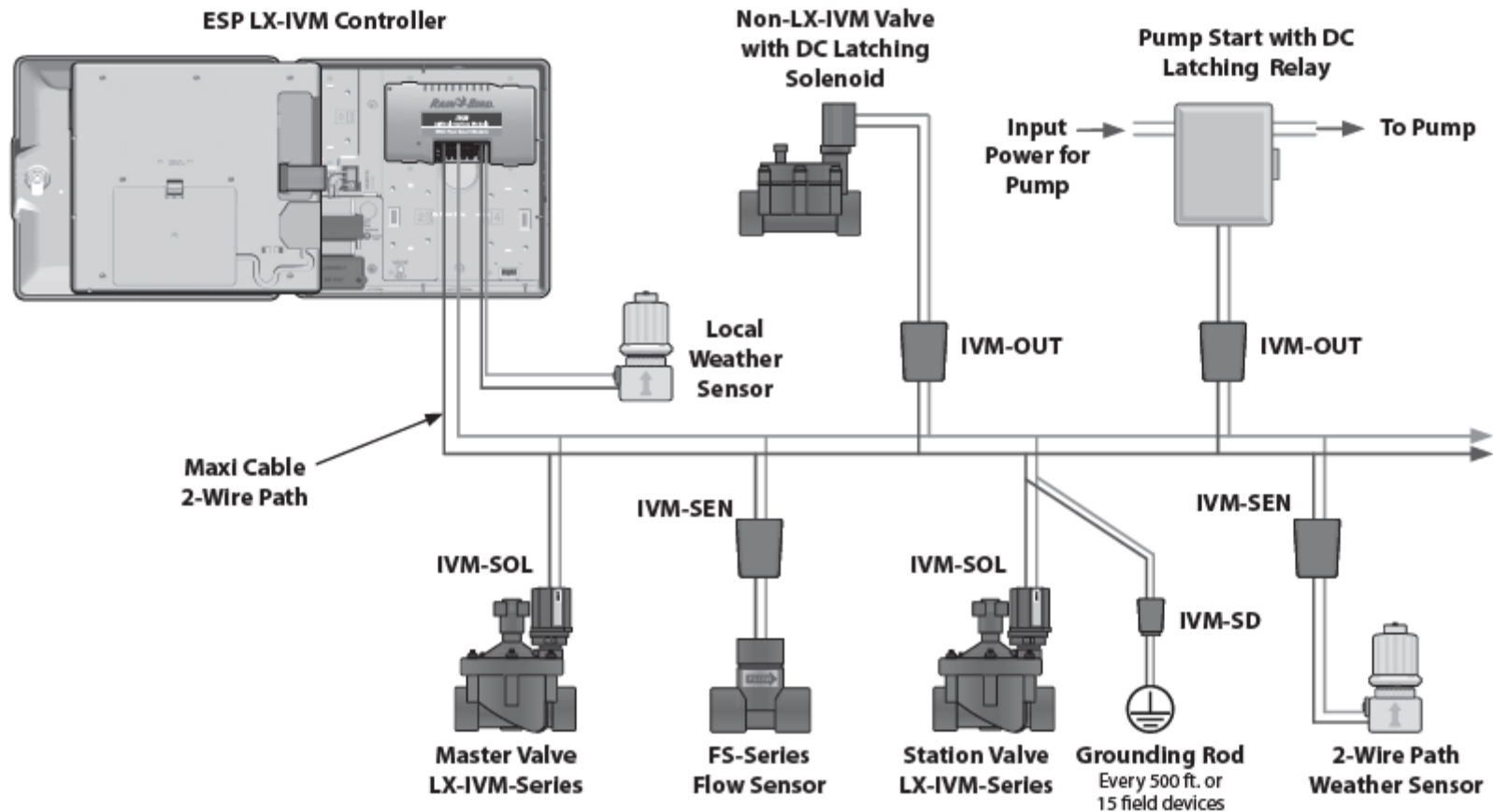


IVM-SD

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



GOOD



LX-IVM



BETTER



LX IVM PRO



BEST