



# ESP LX-IVM Series Controllers


## Programming Guide




Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses
1				
2		Entry sprays	1	4
3		Color beds	2	5 & 6
4				
5				
6				
7				
8				
9				
10				
11				
12				

## Symbols & User Operation

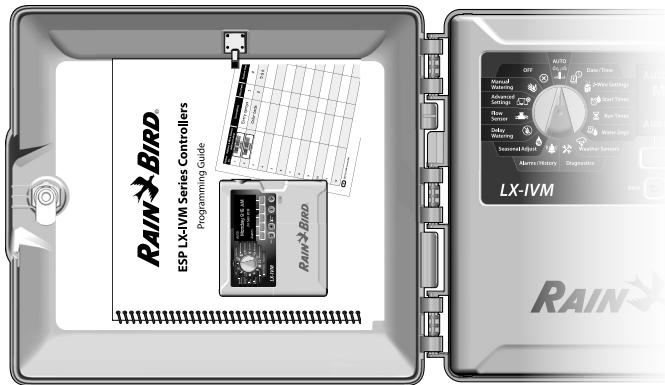
**1** **NUMBERS** define a series of steps for the user to follow in order to operate the controller.

 **NOTE:** Notifies the user of important operating instructions related to controller functionality, installation or maintenance.

 **REPEAT:** Indicates that a repetition of previous steps or actions may be required for further operation, or to complete a process.

## Storing the Programming Guide

Return the Programming Guide to a permanent, safe location when you're finished working with it. We recommend hanging it on the hook inside the controller cabinet door as shown below.



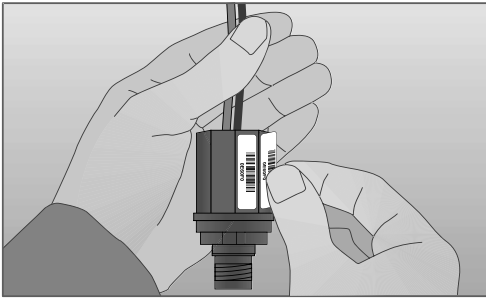
**For technical assistance contact  
Rain Bird at 1-800-247-3782  
[www.rainbird.com](http://www.rainbird.com)**

**2** *ESP LX-IVM Series Controllers*



## Apply 2-Wire Device Address Labels

Before you begin programming, apply your 2-Wire Device barcode labels to the appropriate fields on the Programming Guide.

- 1 Carefully peel off the station, master valve, flow or weather sensor device barcode label.



- 2 Apply the 2-Wire Device address labels in the appropriate fields on the Programming Guide.

Station No.	Station 2-Wire Device Address Label	Description
1	 40005	Entry sprays
2	 40006	Color beds

APPLY LABELS

- Repeat this process to apply additional barcode labels to the programming chart.

## Fill Out Programming Guide

Before you begin programming, fill out the Programming Guide. Sample Programming information is shown on the following pages.

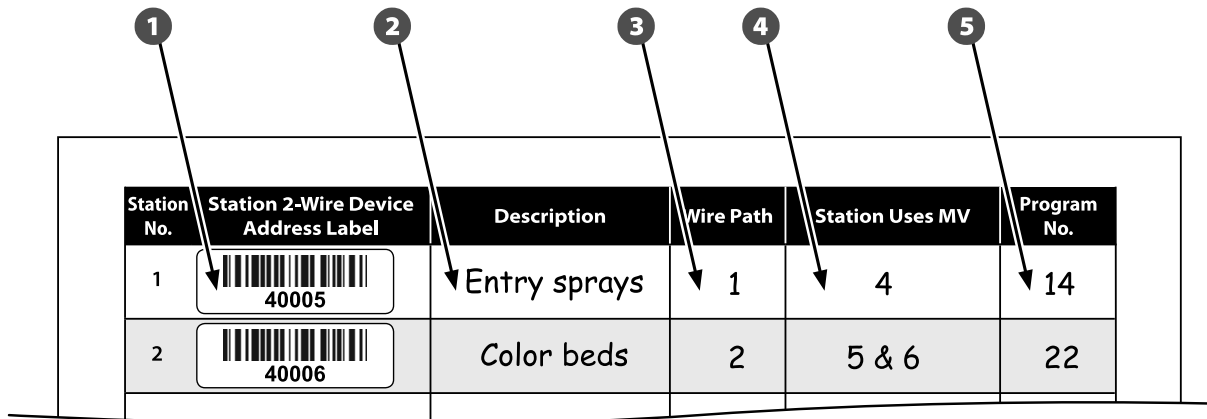
- 3 Enter information about your system hardware and settings in the appropriate fields on the Programming Guide.



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time
1	10 min.	52	5 min.
2	20 min.	26	10 min.

ENTER INFO

## Sample Programming Guide Information

- 1 Apply Station 2-Wire Device Address labels in these fields.
- 2 Enter description of the Station.
- 3 Enter the Wire Path number for that station.
- 4 Enter which Master Valves (MV) the station uses.
- 5 Enter the Program number.





Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
1	 40005	Entry sprays	1	4	14
2	 40006	Color beds	2	5 & 6	22

- 6** Enter the Station Run Time
- 7** Enter the Station Flow Rate.
- 8** Enter the Station Cycle Time (if you're using Cycle+Soak™).
- 9** Enter the Station Soak Time (if you're using Cycle+Soak).
- 10** Enter notes if desired.



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
1	10 min.	52	5 min.	30 min.	
2	20 min.	26	10 min.	40 min.	

## Sample Programming Guide Information



- 1** Apply Master Valve (MV) 2-Wire Device Address Labels in these fields.
- 2** Enter Description of the MV.
- 3** Enter the FloZone number for the MV.
- 4** Check if the MV is normally open (N/O) or normally closed (N/C).
- 5** Check if the MV is allowed to open during the MV Manual Water Window.

MV No.	Master Valve Device Address Label	Description	Flo-zone No.	MV Valve Type Normally Open / Closed	Open In Water Window
1	 107326	Pump	FZ-1	<input checked="" type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
2	 107327	Meter	FZ-2	<input type="checkbox"/> N/O <input checked="" type="checkbox"/> N/C	<input checked="" type="checkbox"/> YES
3				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
4					

- 6** Apply Weather Sensor 2-Wire Device Address Labels in these fields.
- 7** Enter Description of the weather sensor.
- 8** Enter the FloZone number for the sensor.
- 9** Enter the Type of weather sensor.
- 10** Check if the sensor is ON or OFF.

W-SEN No.	Weather Sensor Device Address Label	Description	Flo-zone No.	Sensor Type	Action
					<input checked="" type="checkbox"/> ON
1	 240938	WR2-RC	FZ-1	RAIN	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
2	 240939	WR2-RFC	FZ-2	FREEZE	<input type="checkbox"/> ON <input checked="" type="checkbox"/> OFF
3					<input type="checkbox"/> ON <input type="checkbox"/> OFF
4					

- 11 Apply Flow Sensor 2-Wire Device Address Labels in these fields.
- 12 Enter Description of the flow sensor.
- 13 Enter the Type of flow sensor.
- 14 Enter the FloZone number for the sensor.
- 15 Specifies which Master Valve (MV) the weather sensor is connected to.

F-SEN No.	Flow Sensor Device Address Label	Description	Sensor Type	Flo-zone No.	Uses MV No.
1		Pump	FS400P	FZ-1	1
2		Meter	FS200P	FZ-2	2
3					3
4					

- 16 Enter the Maximum Additional Flow Rate.
- 17 Enter Days of the Week for the water window to be active.
- 18 Enter the Master Valve (MV) Manual Water Window Open and Close Time(s). Circle either "am" or "pm".

MV Manual Water Window	
Window Open Time	7:00 (am/pm)
Window Closed Time	4:00 (am/pm)
Max. Flow Rate	Active Days Per Week
120	<input checked="" type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> T <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> S

Pipe Size Units	Flow Units
<input checked="" type="checkbox"/> INCH	<input checked="" type="checkbox"/> GPM
<input type="checkbox"/> MM	<input type="checkbox"/> LPS
	<input type="checkbox"/> LPM
	<input type="checkbox"/> M3/HR

- 19 Enter the Maximum Flow Rate for each FloZone in these fields.
- 20 List of Rain Bird flow sensors.
- 21 Check Pipe Size Units of measurement that you're using; inches or metric.
- 22 Enter the Flow Units that you're using; GPM or other.

FloZone Max. Flow Rate		Flow Sensors	
FZ-1	120	Type	Description
FZ-2	80	FS050P	½" PVC Tee
FZ-3		FS075P	¾" PVC Tee
FZ-4		FS100P	1" PVC Tee
FZ-5		FS150P	1 ½" PVC Tee
FZ-6		FS200P	2" PVC Tee
FZ-7		FS300P	3" PVC Tee
FZ-8		FS400P	4" PVC Tee
FZ-9		FS100B	1" Brass Tee
FZ-10		FS150B	1 ½" Brass Tee
		FS200B	2" Brass Tee
		FS350B	Brass Insert
		FS350SS	Stainless Steel Insert
		Custom	User Defined

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
97					
98					
99					
100					
101					
102					
103					
104					
105					
106					
107					
108					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
109					
110					
111					
112					
113					
114					
115					
116					
117					
118					
119					
120					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
109					
110					
111					
112					
113					
114					
115					
116					
117					
118					
119					
120					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					
131					
132					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
121					
122					
123					
124					
125					
126					
127					
128					
129					
130					
131					
132					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
133					
134					
135					
136					
137					
138					
139					
140					
141					
142					
143					
144					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
133					
134					
135					
136					
137					
138					
139					
140					
141					
142					
143					
144					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
145					
146					
147					
148					
149					
150					
151					
152					
153					
154					
155					
156					



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
145					
146					
147					
148					
149					
150					
151					
152					
153					
154					
155					
156					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
157					
158					
159					
160					
161					
162					
163					
164					
165					
166					
167					
168					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
157					
158					
159					
160					
161					
162					
163					
164					
165					
166					
167					
168					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
169					
170					
171					
172					
173					
174					
175					
176					
177					
178					
179					
180					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
169					
170					
171					
172					
173					
174					
175					
176					
177					
178					
179					
180					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
181					
182					
183					
184					
185					
186					
187					
188					
189					
190					
191					
192					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
181					
182					
183					
184					
185					
186					
187					
188					
189					
190					
191					
192					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					
203					
204					



Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					
203					
204					

<b>Station No.</b>	<b>Station 2-Wire Device Address Label</b>	<b>Description</b>	<b>Wire Path</b>	<b>Station Uses MV</b>	<b>Program No.</b>
205					
206					
207					
208					
209					
210					
211					
212					
213					
214					
215					
216					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
205					
206					
207					
208					
209					
210					
211					
212					
213					
214					
215					
216					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
217					
218					
219					
220					
221					
222					
223					
224					
225					
226					
227					
228					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
217					
218					
219					
220					
221					
222					
223					
224					
225					
226					
227					
228					

Station No.	Station 2-Wire Device Address Label	Description	Wire Path	Station Uses MV	Program No.
229					
230					
231					
232					
233					
234					
235					
236					
237					
238					
239					
240					

Station No.	Station Run Time	Station Flow Rate	Station Cycle Time	Station Soak Time	Notes
229					
230					
231					
232					
233					
234					
235					
236					
237					
238					
239					
240					

## Master Valve Devices

MV No.	Master Valve Device Address Label	Description	FloZone No.	MV Valve Type Normally Open / Closed	Open In Water Window
1				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
2				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
3				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
4				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
5				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
6				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
7				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
8				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
9				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES
10				<input type="checkbox"/> N/O <input type="checkbox"/> N/C	<input type="checkbox"/> YES



## Flow Sensor Devices

F-SEN No.	Flow Sensor Device Address Label	Description	Sensor Type	FloZone No.	Uses MV No.
1					1
2					2
3					3
4					4
5					5
6					6
7					7
8					8
9					9
10					10

# Weather Sensor Devices

W-SEN No.	Weather Sensor Device Address Label	Description	FloZone No.	Sensor Type	Action
					<input checked="" type="checkbox"/> ON
1					<input type="checkbox"/> ON <input type="checkbox"/> OFF
2					<input type="checkbox"/> ON <input type="checkbox"/> OFF
3					<input type="checkbox"/> ON <input type="checkbox"/> OFF
4					<input type="checkbox"/> ON <input type="checkbox"/> OFF
5					<input type="checkbox"/> ON <input type="checkbox"/> OFF
6					<input type="checkbox"/> ON <input type="checkbox"/> OFF
7					<input type="checkbox"/> ON <input type="checkbox"/> OFF

# MV Manual Water Window / FloZone

MV Manual Water Window	
Window Open Time	am / pm
Window Closed Time	am / pm
Max. Flow Rate	Active Days Per Week M T W T F S S <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Pipe Size Units	
<input type="checkbox"/>	INCH
<input type="checkbox"/>	MM

Flow Units	
<input type="checkbox"/>	GPM
<input type="checkbox"/>	LPS
<input type="checkbox"/>	LPM
<input type="checkbox"/>	M3/HR

FloZone Max. Flow Rate	
FZ-1	
FZ-2	
FZ-3	
FZ-4	
FZ-5	
FZ-6	
FZ-7	
FZ-8	
FZ-9	
FZ-10	

Flow Sensors	
Type	Description
FS050P	½" PVC Tee
FS075P	¾" PVC Tee
FS100P	1" PVC Tee
FS150P	1 ½" PVC Tee
FS200P	2" PVC Tee
FS300P	3" PVC Tee
FS400P	4" PVC Tee
FS100B	1" Brass Tee
FS150B	1 ½" Brass Tee
FS200B	2" Brass Tee
FS350B	Brass Insert
FS350SS	Stainless Steel Insert
Custom	User Defined



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