



## WEATHERMATIC SMARTLINE® SMART SETTINGS

### SmartLine® Sprinkler Type Settings:

In order to calculate run time in the SMART Mode, the controller must know the expected precipitation rate for each zone. Use NEXT and BACK buttons to move between zones and the UP and DOWN buttons on the SmartLine® controller or the dropdown menu in the SmartLink® web application to set zone to OFF or to specify the precipitation rate.

Precipitation rate can be entered two ways: by sprinkler type or by specific precipitation rate. If you do not know the specific precipitation rate for the zone, you can select the sprinkler type, or watering equipment used on that zone: Spray, Rotor, Drip, or Bubbler irrigation. The SmartLine® controller will apply a default precipitation rate\* for the sprinkler type selected. If you know the specific precipitation rate expected for the zone, as stated by the sprinkler manufacturer, you can use the UP and DOWN buttons on the SmartLine® controller or the dropdown menu in the SmartLink® web application to scroll past the sprinkler types and select that number.

* SPRINKLER TYPE	DEFAULT PRECIPITATION RATE
SPRAY	1.5 inches per hour
ROTOR	0.5 inches per hour
DRIP	1.1 inches per hour
BUBBLER	2.3 inches per hour

For USA users, inches per hour will be displayed (.2 to 3.0 inches per hour). Numeric precipitation rate resolution is 0.01 in/hr below the 2.0 in/hr setting. For international users, the controller will display precipitation numbers in centimeters per hour. As a rule in SMART mode, the lower the precipitation rate entered, the longer the zone run time will be to achieve required plant life needs. For zones selected to use set Zone Run Times rather than SMART run times, select STD setting for Sprinkler Type.

Program features and operations are supported with STD zones, including Run/Soak, and STD zones may run within SMART programs or separately.

### SmartLine® Plant Type:

This position is used to specify the type of plant material to be watered by each zone as an important component of determining the watering needs for each zone. Use the UP and DOWN and NEXT and BACK buttons on the SmartLine® controller or the dropdown menu in the SmartLink® web application to select plant type\*\* or percent for each zone.

Plant type selections are: CTurf (cool season turf like bluegrass); WTurf (warm season turf like St. Augustine); Shrubs; Annuals (color beds); Trees; and Native plants. The SmartLine® controller formula uses cool turf mowed at 4 to 6 inches tall as the base watering number (100%) or crop factor. The cool turf default is 80% considering average mowing heights of 2 to 3 inches, which result in less transpiration and lower water requirements. If you

** PLANT TYPE	DEFAULT %
CTURF	80%
WTURF	60%
SHRUBS	60%
ANNUALS	100%
TREES	80%
NATIVE	25%



prefer more specific input, you can scroll past the plant types and use % designations of 10 to 300%. For example, a Native plant zone might be assigned 30% rather than the default of 25%. As a rule in SMART mode, the higher the plant type percentage entered, the longer the zone run time will be to achieve required plant life needs.

For maximum water savings, it is recommended that your sprinkler system be zoned with a separate valve for each type of plant material. If you have mixed types of plants in a single zone, you will need to select which type of plant to use in the determination of water requirements.

**SmartLine® Soil Type & Slope:**

Soil settings for soil type and degree of slope are used to enable your SmartLine® controller to automatically calculate the maximum length of a zone run time before pausing watering for a calculated period to allow the water to soak into the soil. These Run/Soak (also called Cycle/Soak) periods based on industry BASIC formulas reduce wasteful runoff caused by watering more than the soil can absorb.

The Run/Soak options in Advanced Menu on the SmartLine® controller allow for manually entering Run/Soak times by Program in the BASIC mode. However, in the SMART mode, the SmartLine® controller will automatically calculate Run/Soak times by zone with soil inputs made at the soil type position on the dial or through the dropdown menus in the SmartLink® web application. Run/Soak settings made in Advanced Menu are not active when controller is in SMART mode. Smart calculated run/soak schedules can be viewed on the SmartLine® controller by selecting Advanced Menu, Review and Run/Soak or in the SmartLink® web application.

Use the UP and DOWN buttons on the SmartLine® controller or the dropdown menus in the SmartLink® web application to select Clay, Loam or Sand soil type for each zone. After you have selected a soil type for a zone, push NEXT button and then the UP and DOWN buttons on the SmartLine® controller or the dropdown menus in the SmartLink® web application to select degrees of slope (elevation change) for each zone. Set each zone for 0 to 25 degrees of slope based on the chart provided\*\*\*. Push NEXT again on the SmartLine® controller after making the slope entry to advance to the next zone. Use NEXT and BACK buttons to move between zones.

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STEEP	DEGREE OF SLOPE	
SLIGHT	1-5°	
MILD	6-10°	
MODERATE	11-15°	
STEEP	16-20°	
EXTREME	21-25°	

To determine minutes and seconds of run time, cross reference Slope with Precipitation Rate for each zone (Example: 9' 36" represents 9 minutes and 36 seconds of run time). Soak times are listed at the bottom of soil table.

SANDY SOIL													
Slope	Degrees	Slope Factor	Precipitation Rate										
			0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0	100%	N/A	N/A	30'	27'	24'	20'	17'	15'	12'	11'	10'	
1	82%	N/A	N/A	24' 36"	22' 8"	19' 41"	16' 0"	13' 56"	12' 18"	9' 50"	9' 1"	8' 12"	
2	75%	N/A	N/A	22' 30"	20' 15"	18' 0"	15' 0"	12' 45"	11' 15"	9' 0"	8' 15"	7' 30"	
3	69%	N/A	N/A	20' 42"	18' 38"	16' 34"	13' 48"	11' 44"	10' 21"	8' 17"	7' 35"	6' 54"	
4	65%	N/A	N/A	19' 30"	17' 33"	15' 36"	13' 0"	11' 3"	9' 45"	7' 48"	7' 9"	6' 30"	
5	60%	N/A	N/A	18" 0"	16' 0"	14' 0"	12' 0"	10' 12"	9' 0"	7' 12"	6' 36"	6' 0"	
6	57%	N/A	N/A	17' 6"	15' 23"	13' 41"	11' 24"	9' 41"	8' 33"	6' 50"	6' 16"	5' 42"	
7	53%	N/A	N/A	15' 54"	14' 19"	12' 43"	10' 36"	9' 1"	7' 57"	6' 22"	5' 50"	5' 18"	
8	50%	N/A	N/A	15' 0"	13' 0"	12' 0"	10' 0"	8' 30"	7' 30"	6' 0"	5' 30"	5' 0"	
9	47%	N/A	N/A	14' 6"	12' 41"	11' 17"	9' 24"	7' 59"	7' 3"	5' 38"	5' 10"	4' 42"	
10	44%	N/A	N/A	13' 12"	11' 53"	10' 34"	8' 48"	7' 29"	6' 36"	5' 17"	4' 50"	4' 24"	
11	42%	N/A	N/A	12' 36"	11' 20"	10' 5"	8' 24"	7' 8"	6' 18"	5' 2"	4' 37"	4' 12"	
12	39%	N/A	N/A	11' 42"	10' 32"	9' 22"	7' 48"	6' 38"	5' 51"	4' 41"	4' 17"	3' 54"	
13	37%	N/A	N/A	11' 6"	9' 59"	8' 53"	7' 24"	6' 17"	5' 33"	4' 26"	4' 4"	3' 42"	
14	34%	N/A	N/A	10' 12"	9' 11"	8' 10"	6' 48"	5' 47"	5' 6"	4' 5"	3' 44"	3' 24"	
15	32%	N/A	N/A	9' 36"	8' 38"	7' 41"	6' 24"	5' 26"	4' 48"	3' 50"	3' 31"	3' 12"	
16	30%	N/A	N/A	9' 0"	8' 0"	7' 12"	6' 0"	5' 6"	4' 30"	3' 36"	3' 18"	3' 0"	
17	28%	N/A	N/A	8' 24"	7' 34"	6' 43"	5' 36"	4' 46"	4' 12"	3' 22"	3' 5"	2' 48"	
18	26%	N/A	N/A	7' 48"	7' 1"	6' 14"	5' 12"	4' 25"	3' 54"	3' 7"	2' 52"	2' 36"	
19	24%	N/A	N/A	7' 12"	6' 29"	5' 46"	4' 48"	4' 5"	3' 36"	2' 53"	2' 38"	2' 24"	
20	22%	N/A	N/A	6' 36"	5' 56"	5' 17"	4' 24"	3' 44"	3' 18"	2' 38"	2' 25"	2' 12"	
21	20%	N/A	N/A	6' 0"	5' 0"	4' 48"	4' 0"	3' 24"	3' 0"	2' 24"	2' 12"	2' 0"	
22	19%	N/A	N/A	5' 42"	5' 8"	4' 34"	3' 48"	3' 14"	2' 51"	2' 17"	2' 5"	1' 54"	
23	17%	N/A	N/A	5' 6"	4' 35"	4' 5"	3' 24"	2' 53"	2' 33"	2' 2"	1' 52"	1' 42"	
24	16%	N/A	N/A	4' 48"	4' 19"	3' 50"	3' 12"	2' 43"	2' 24"	1' 55"	1' 46"	1' 36"	
25	14%	N/A	N/A	4' 12"	3' 47"	3' 22"	2' 48"	2' 23"	2' 6"	1' 41"	1' 32"	1' 24"	
Soak Time			0'	0'	8'	14'	18'	20'	22'	23'	23'	24'	24'

To determine minutes and seconds of run time, cross reference Slope with Precipitation Rate for each zone (Example: 9' 36" represents 9 minutes and 36 seconds of run time). Soak times are listed at the bottom of soil table.

LOAM SOIL													
Slope	Degrees	Slope Factor	Precipitation Rate										
			0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0	100%	N/A	24'	20'	17'	15'	12'	12'	10'	8'	6'	5'	
1	82%	N/A	19' 40"	16' 24"	13' 56"	12' 18"	9' 50"	9' 50"	8' 12"	6' 34"	4' 55"	4' 6"	
2	75%	N/A	18' 0"	15' 0"	12' 45"	11' 15"	9' 0"	9' 0"	7' 30"	6' 0"	4' 30"	3' 45"	
3	69%	N/A	16' 33"	13' 48"	11' 44"	10' 21"	8' 17"	8' 17"	6' 54"	5' 31"	4' 8"	3' 27"	
4	65%	N/A	15' 36"	13' 0"	11' 3"	9' 45"	7' 48"	7' 48"	6' 30"	5' 12"	3' 54"	3' 15"	
5	60%	N/A	14' 24"	12' 0"	10' 0"	9' 0"	7' 12"	7' 12"	6' 0"	4' 48"	3' 36"	3' 0"	
6	57%	N/A	13' 40"	11' 24"	9' 41"	8' 33"	6' 50"	6' 50"	5' 42"	4' 34"	3' 25"	2' 51"	
7	53%	N/A	12' 43"	10' 36"	9' 1"	7' 57"	6' 22"	6' 22"	5' 18"	4' 14"	3' 11"	2' 39"	
8	50%	N/A	12' 0"	10' 0"	8' 0"	7' 30"	6' 0"	6' 0"	5' 0"	4' 0"	3' 0"	2' 30"	
9	47%	N/A	11' 16"	9' 24"	7' 59"	7' 3"	5' 38"	5' 38"	4' 42"	3' 46"	2' 49"	2' 21"	
10	44%	N/A	10' 33"	8' 48"	7' 29"	6' 36"	5' 17"	5' 17"	4' 24"	3' 31"	2' 38"	2' 12"	
11	42%	N/A	10' 4"	8' 24"	7' 8"	6' 18"	5' 2"	5' 2"	4' 12"	3' 22"	2' 31"	2' 6"	
12	39%	N/A	9' 21"	7' 48"	6' 38"	5' 51"	4' 41"	4' 41"	3' 54"	3' 7"	2' 20"	1' 57"	
13	37%	N/A	8' 52"	7' 24"	6' 17"	5' 33"	4' 26"	4' 26"	3' 42"	2' 58"	2' 13"	1' 51"	
14	34%	N/A	8' 9"	6' 48"	5' 47"	5' 6"	4' 5"	4' 5"	3' 24"	2' 43"	2' 2"	1' 42"	
15	32%	N/A	7' 40"	6' 24"	5' 26"	4' 48"	3' 50"	3' 50"	3' 12"	2' 34"	1' 55"	1' 36"	
16	30%	N/A	7' 12"	6' 0"	5' 0"	4' 30"	3' 36"	3' 36"	3' 0"	2' 24"	1' 48"	1' 30"	
17	28%	N/A	6' 43"	5' 36"	4' 46"	4' 12"	3' 22"	3' 22"	2' 48"	2' 14"	1' 41"	1' 24"	
18	26%	N/A	6' 14"	5' 12"	4' 25"	3' 54"	3' 7"	3' 7"	2' 36"	2' 5"	1' 34"	1' 18"	
19	24%	N/A	5' 45"	4' 48"	4' 5"	3' 36"	2' 53"	2' 53"	2' 24"	1' 55"	1' 26"	1' 12"	
20	22%	N/A	5' 16"	4' 24"	3' 44"	3' 18"	2' 38"	2' 38"	2' 12"	1' 46"	1' 19"	1' 6"	
21	20%	N/A	4' 48"	4' 0"	3' 0"	3' 0"	2' 24"	2' 24"	2' 0"	1' 36"	1' 12"	1' 0"	
22	19%	N/A	4' 33"	3' 48"	3' 14"	2' 51"	2' 17"	2' 17"	1' 54"	1' 31"	1' 8"	0' 57"	
23	17%	N/A	4' 4"	3' 24"	2' 53"	2' 33"	2' 2"	2' 2"	1' 42"	1' 22"	1' 1"	0' 51"	
24	16%	N/A	3' 50"	3' 12"	2' 43"	2' 24"	1' 55"	1' 55"	1' 36"	1' 17"	0' 58"	0' 48"	
25	14%	N/A	3' 21"	2' 48"	2' 23"	2' 6"	1' 41"	1' 41"	1' 24"	1' 7"	0' 50"	0' 42"	
Soak Time			0'	10'	13'	15'	17'	17'	20'	19'	17'	14'	13'

To determine minutes and seconds of run time, cross reference Slope with Precipitation Rate for each zone (Example: 9' 36" represents 9 minutes and 36 seconds of run time). Soak times are listed at the bottom of soil table.

CLAY SOIL													
Slope	Degrees	Slope Factor	Precipitation Rate										
			0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0	100%	100%	15'	12'	10'	9'	8'	7'	6'	5'	4'	3'	3'
1	82%	82%	12' 18"	9' 50"	8' 12"	7' 23"	6' 34"	5' 44"	4' 55"	4' 6"	3' 17"	2' 28"	2' 28"
2	75%	75%	11' 15"	9' 0"	7' 30"	6' 45"	6' 0"	5' 15"	4' 30"	3' 45"	3' 0"	2' 15"	2' 15"
3	69%	69%	10' 21"	8' 16"	6' 54"	6' 13"	5' 31"	4' 50"	4' 8"	3' 27"	2' 46"	2' 4"	2' 4"
4	65%	65%	9' 45"	7' 48"	6' 30"	5' 51"	5' 12"	4' 33"	3' 54"	3' 15"	2' 36"	1' 57"	1' 57"
5	60%	60%	9'	7' 12"	6' 0"	5' 0"	4' 48"	4' 12"	3' 36"	3' 0"	2' 24"	1' 48"	1' 48"
6	57%	57%	8' 33"	6' 50"	5' 42"	5' 8"	4' 34"	3' 59"	3' 25"	2' 51"	2' 17"	1' 43"	1' 43"
7	53%	53%	7' 57"	6' 21"	5' 18"	4' 46"	4' 14"	3' 43"	3' 11"	2' 39"	2' 7"	1' 35"	1' 35"
8	50%	50%	7' 30"	6' 0"	5' 0"	4' 0"	4' 0"	3' 30"	3' 0"	2' 30"	2' 0"	1' 30"	1' 30"
9	47%	47%	7' 3"	5' 38"	4' 42"	4' 14"	3' 46"	3' 17"	2' 49"	2' 21"	1' 53"	1' 25"	1' 25"
10	44%	44%	6' 36"	5' 16"	4' 24"	3' 58"	3' 31"	3' 5"	2' 38"	2' 12"	1' 46"	1' 19"	1' 19"
11	42%	42%	6' 18"	5' 2"	4' 12"	3' 47"	3' 22"	2' 56"	2' 31"	2' 6"	1' 41"	1' 16"	1' 16"
12	39%	39%	5' 51"	4' 40"	3' 54"	3' 31"	3' 7"	2' 44"	2' 20"	1' 57"	1' 34"	1' 10"	1' 10"
13	37%	37%	5' 33"	4' 26"	3' 42"	3' 20"	2' 58"	2' 35"	2' 13"	1' 51"	1' 29"	1' 7"	1' 7"
14	34%	34%	5' 6"	4' 4"	3' 24"	3' 4"	2' 43"	2' 23"	2' 2"	1' 42"	1' 22"	1' 1"	1' 1"
15	32%	32%	4' 48"	3' 50"	3' 12"	2' 53"	2' 34"	2' 14"	1' 55"	1' 36"	1' 17"	0' 58"	0' 58"
16	30%	30%	4' 30"	3' 36"	3' 0"	2' 0"	2' 24"	2' 6"	1' 48"	1' 30"	1' 12"	0' 54"	0' 54"
17	28%	28%	4' 12"	3' 21"	2' 48"	2' 31"	2' 14"	1' 58"	1' 41"	1' 24"	1' 7"	0' 50"	0' 50"
18	26%	26%	3' 54"	3' 7"	2' 36"	2' 20"	2' 5"	1' 49"	1' 34"	1' 18"	1' 2"	0' 47"	0' 47"
19	24%	24%	3' 36"	2' 52"	2' 24"	2' 10"	1' 55"	1' 41"	1' 26"	1' 12"	0' 58"	0' 43"	0' 43"
20	22%	22%	3' 18"	2' 38"	2' 12"	1' 59"	1' 46"	1' 32"	1' 19"	1' 6"	0' 53"	0' 40"	0' 40"
21	20%	20%	3'	2' 24"	2' 0"	1' 0"	1' 36"	1' 24"	1' 12"	1' 0"	0' 48"	0' 36"	0' 36"
22	19%	19%	2' 51"	2' 16"	1' 54"	1' 43"	1' 31"	1' 20"	1' 8"	0' 57"	0' 46"	0' 34"	0' 34"
23	17%	17%	2' 33"	2' 2"	1' 42"	1' 32"	1' 22"	1' 11"	1' 1"	0' 51"	0' 41"	0' 31"	0' 31"
24	16%	16%	2' 24"	1' 55"	1' 36"	1' 26"	1' 17"	1' 7"	0' 58"	0' 48"	0' 38"	0' 29"	0' 29"
25	14%	14%	2' 6"	1' 40"	1' 24"	1' 16"	1' 7"	0' 59"	0' 50"	0' 42"	0' 34"	0' 25"	0' 25"
Soak Time			6'	8'	9'	10'	11'	12'	12'	11'	10'	10'	10'