

# WEEP-MASTER

## USER'S MANUAL



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### **\*Weep-Master Default Settings**

The Weep-Master is shipped with all the dip switches in the off position. The default parameters are:

- 1) the system will start to cycle the weep solenoid @ 35°
- 2) the cycle length will be 60 seconds
- 3) it is set for Zone 1
- 4) auxiliary output low temperature activation is set for 35°
- 5) auxiliary output high temperature activation is set for no activation
- 6) set for normal run mode
- 7) temperature display set for °F

## **Weep Master Display**

The Weep Master display has 3 automatic functions.

1. Current outside temperature.
2. Lowest outside temperature since last re-set.
3. Highest outside temperature since last re-set.

The display has rotating information displayed, it will show the current outside temperature for 10 seconds, then it will show the lowest temperature for 1 second and then show the highest temperature for 1 second, then back to current temperature.

The high and low temperature can be reset by pushing the button on the control board or by cycling the power to the Weep Master. When reset, the display will only show the current temperature until there is a temperature change for it to record and report.

This feature cannot be turned off.

## **Temperature Probe**

The Weep Master only requires one probe to operate.

Additional probe connections are supplied on the control board. Adding another probe can be useful, but the system will only read the lowest temperature of all probes used.

An example of using 2 probes would be, having 1 probe on opposite sides of a building. That way if one probe was in the sun (or near something warmed by the sun) the other would detect the lower temperature.

**NOTICE: ONLY use temperature probes supplied by Dilling-Harris!**

**Dip Switches - Number and function for each.**  
Factory Dip Switch Setting = All Switches OFF

Dip Switch number:

**1.** Temperature at which the system starts to cycle.  
Off position starts at 35°  
On position starts at 40°

**2 & 3.** They are combined to set up the cycle length in seconds.  
2 & 3 Off = 60 seconds cycle  
2 Off, 3 On = 30 seconds cycle  
2 On, 3 Off = 90 seconds cycle  
2 On, 3 On = 120 seconds cycle

**4 & 5.** They are combined to set up Zone area.

4 & 5 Off = Zone 1  
4 Off, 5 On = Zone 2  
4 On, 5 Off = Zone 3  
4 On, 5 On = Zone 4

(See "WEEP CYCLE CHARTS" for more information)

**6 & 7.** They are combined to turn on the Auxiliary Output Low temperature activation:

Ex: Close automatic bay doors

6 & 7 Off = On at 35° and below  
6 Off, 7 On = On at 40° and below  
6 On, 7 Off = On at 45° and below  
6 On, 7 On = On at 50° and below

**8,9 & 10.** They are combined to turn on the Auxiliary Output High Temperature activation:

Ex: Open automatic bay doors

8, 9, & 10 Off = No activation  
8 Off, 9 Off, 10 On = 55° and above  
8 Off, 9 On, 10 Off = 60° and above  
8 Off, 9 On, 10 On = 65° and above  
8 On, 9 Off, 10 Off = 70° and above  
8 On, 9 Off, 10 On = 75° and above  
8 On, 9 On, 10 Off = 80° and above  
8, 9, & 10 On = 90° and above

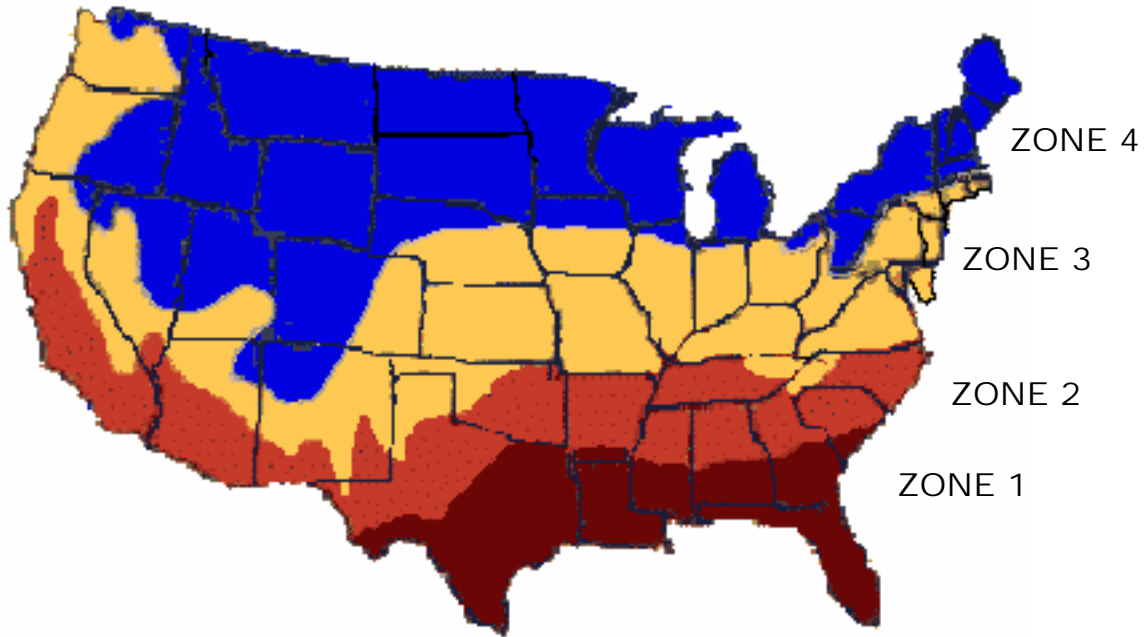
**11.** Mode Switch

11 Off = normal run mode  
11 On = Probe Calibration mode

**12.** Temperature in °F or °C

12 Off = °F  
12 On = °C

# WEEP MASTER ZONE CHART



FIND THE ZONE FOR YOUR LOCATION AND CHOOSE SETTINGS FROM THE LIST BELOW.

WITH 35° START TEMP SETTING

**ZONE 1:**

ALL SW "OFF" (STANDARD)

**ZONE 2:**

SW #5 "ON"

**ZONE 3:**

SW #4 "ON"

**ZONE 4:**

SW #4, 5 "ON"

ZONE 3 WITH A START TEMP OF 40° WILL ALSO BE GOOD FOR ZONE 4

WITH 40° START TEMP SETTING

SW #1 "ON"

SW #1, 5 "ON"

SW #1, 4 "ON"

SW #1, 4, 5 "ON"

WEEP CYCLE CHART  
 AT 30 SECOND CYCLE @ 35° START TEMP  
 (= DIP SWITCH: 1 OFF, 2 OFF, 3 ON)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	35° - 31°	3	27
30%	30° - 26°	9	21
50%	25° - 21°	15	15
70%	20° - 16°	21	9
90%	15°	27	3
100%	14° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	35° - 31°	6	24
40%	30° - 26°	12	18
60%	25° - 21°	18	12
80%	20° - 16°	24	6
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	35° - 31°	9	21
50%	30° - 26°	15	15
70%	25° - 21°	21	9
90%	20° - 16°	27	3
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20° - 16°	CONTINUOUS	0
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 60 SECOND CYCLE @ 35° START TEMP  
 (= DIP SWITCH: 1, 2, 3 OFF)

FACTORY SETTING = ALL DIP SWITCHES OFF.

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	35° - 31°	6	54
30%	30° - 26°	18	42
50%	25° - 21°	30	30
70%	20° - 16°	42	18
90%	15°	54	6
100%	14° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	35° - 31°	12	48
40%	30° - 26°	24	36
60%	25° - 21°	36	24
80%	20° - 16°	48	12
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	35° - 31°	18	42
50%	30° - 26°	30	30
70%	25° - 21°	42	18
90%	20° - 16°	54	6
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20° - 16°	CONTINUOUS	0
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 90 SECOND CYCLE @ 35° START TEMP  
 (= DIP SWITCH 1 OFF, 2 ON, 3 OFF)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	35° - 31°	9	81
30%	30° - 26°	27	63
50%	25° - 21°	45	45
70%	20° - 16°	63	27
90%	15°	81	9
100%	14° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	35° - 31°	18	72
40%	30° - 26°	36	54
60%	25° - 21°	54	36
80%	20° - 16°	72	18
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	35° - 31°	27	63
50%	30° - 26°	45	45
70%	25° - 21°	63	27
90%	20° - 16°	81	9
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20° - 16°	CONTINUOUS	0
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0



WEEP CYCLE CHART  
 AT 120 SECOND CYCLE @ 35° START TEMP  
 (= DIP SWITCH 1 OFF, 2 ON, 3 ON)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	35° - 31°	12	108
30%	30° - 26°	36	84
50%	25° - 21°	60	60
70%	20° - 16°	84	36
90%	15°	108	12
100%	14° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	35° - 31°	24	96
40%	30° - 26°	48	72
60%	25° - 21°	72	48
80%	20° - 16°	96	24
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	35° - 31°	36	84
50%	30° - 26°	60	60
70%	25° - 21°	84	36
90%	20° - 16°	108	12
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20° - 16°	CONTINUOUS	0
100%	15°	CONTINUOUS	0
100%	14° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 30 SECOND CYCLE @ 40° START TEMP  
 (= DIP SWITCH 1 ON, 2 OFF, 3 ON)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPERATURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	40° - 36°	3	27
30%	35° - 31°	9	21
50%	30° - 26°	15	15
70%	25° - 21°	21	9
90%	20°	27	3
100%	19° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPERATURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	40° - 36°	6	24
40%	35° - 31°	12	18
60%	30° - 26°	18	12
80%	25° - 21°	24	6
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPERATURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	40° - 36°	9	21
50%	35° - 31°	15	15
70%	30° - 26°	21	9
90%	25° - 21°	27	3
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPERATURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	40° - 36°	CONTINUOUS	0
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 60 SECOND CYCLE @ 40° START TEMP  
 (= DIP SWITCH 1 ON, 2 OFF, 3 OFF)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	40° - 36°	6	54
30%	35° - 31°	18	42
50%	30° - 26°	30	30
70%	25° - 21°	42	18
90%	20°	54	6
100%	19° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	40° - 36°	12	48
40%	35° - 31°	24	36
60%	30° - 26°	36	24
80%	25° - 21°	48	12
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	40° - 36°	18	42
50%	35° - 31°	30	30
70%	30° - 26°	42	18
90%	25° - 21°	54	6
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	40° - 36°	CONTINUOUS	0
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 90 SECOND CYCLE @ 40° START TEMP  
 (= DIP SWITCH 1 ON, 2 ON, 3 OFF)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	40° - 36°	9	81
30%	35° - 31°	27	63
50%	30° - 26°	45	45
70%	25° - 21°	63	27
90%	20°	81	9
100%	19° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	40° - 36°	18	72
40%	35° - 31°	36	54
60%	30° - 26°	54	36
80%	25° - 21°	72	18
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	40° - 36°	27	63
50%	35° - 31°	45	45
70%	30° - 26°	63	27
90%	25° - 21°	81	9
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	40° - 36°	CONTINUOUS	0
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

WEEP CYCLE CHART  
 AT 120 SECOND CYCLE @ 40° START TEMP  
 (= DIP SWITCH 1 ON, 2 ON, 3 ON)

ZONE 1 = DIP SWITCH 4 OFF, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
10%	40° - 36°	12	108
30%	35° - 31°	36	84
50%	30° - 26°	60	60
70%	25° - 21°	84	36
90%	20°	108	12
100%	19° AND UNDER	CONTINUOUS	0

ZONE 2 = DIP SWITCH 4 OFF, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
20%	40° - 36°	24	96
40%	35° - 31°	48	72
60%	30° - 26°	72	48
80%	25° - 21°	96	24
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 3 = DIP SWITCH 4 ON, 5 OFF

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
30%	40° - 36°	36	84
50%	35° - 31°	60	60
70%	30° - 26°	84	36
90%	25° - 21°	108	12
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

ZONE 4 = DIP SWITCH 4 ON, 5 ON

FLOW %	TEMPETURE RANGE	FLOW ON (SEC.)	FLOW OFF (SEC.)
100%	40° - 36°	CONTINUOUS	0
100%	35° - 31°	CONTINUOUS	0
100%	30° - 26°	CONTINUOUS	0
100%	25° - 21°	CONTINUOUS	0
100%	20°	CONTINUOUS	0
100%	19° AND UNDER	CONTINUOUS	0

## Temperature Probe Adjustment

The Temperature Probe should not need adjustment, If you find that the temperature is off by a degree or two, you can fine tune it.

### Instructions:

1. Disconnect power to the Weep-Master.
2. Find the row of "DIP" switches on the Weep Master control board. Change the #11 dip switch to the "on" position, Restore power, the display will show "0.0". There are 9 possible correction "off sets" available.
3. Using the yellow push button on the back of the Weep Master's control board, you can toggle through the off sets.

Display:

0.0  
0.5  
1.0  
1.5  
2.0  
-2.0  
-1.5  
-1.0  
-0.5

Repeats back to 0.0

3. After an off set is selected, cut power, change the #11 dip switch back to the off position. Restore power.

# WEEP MASTER CONNECTIONS

