



Overview

1. Inspect Parts

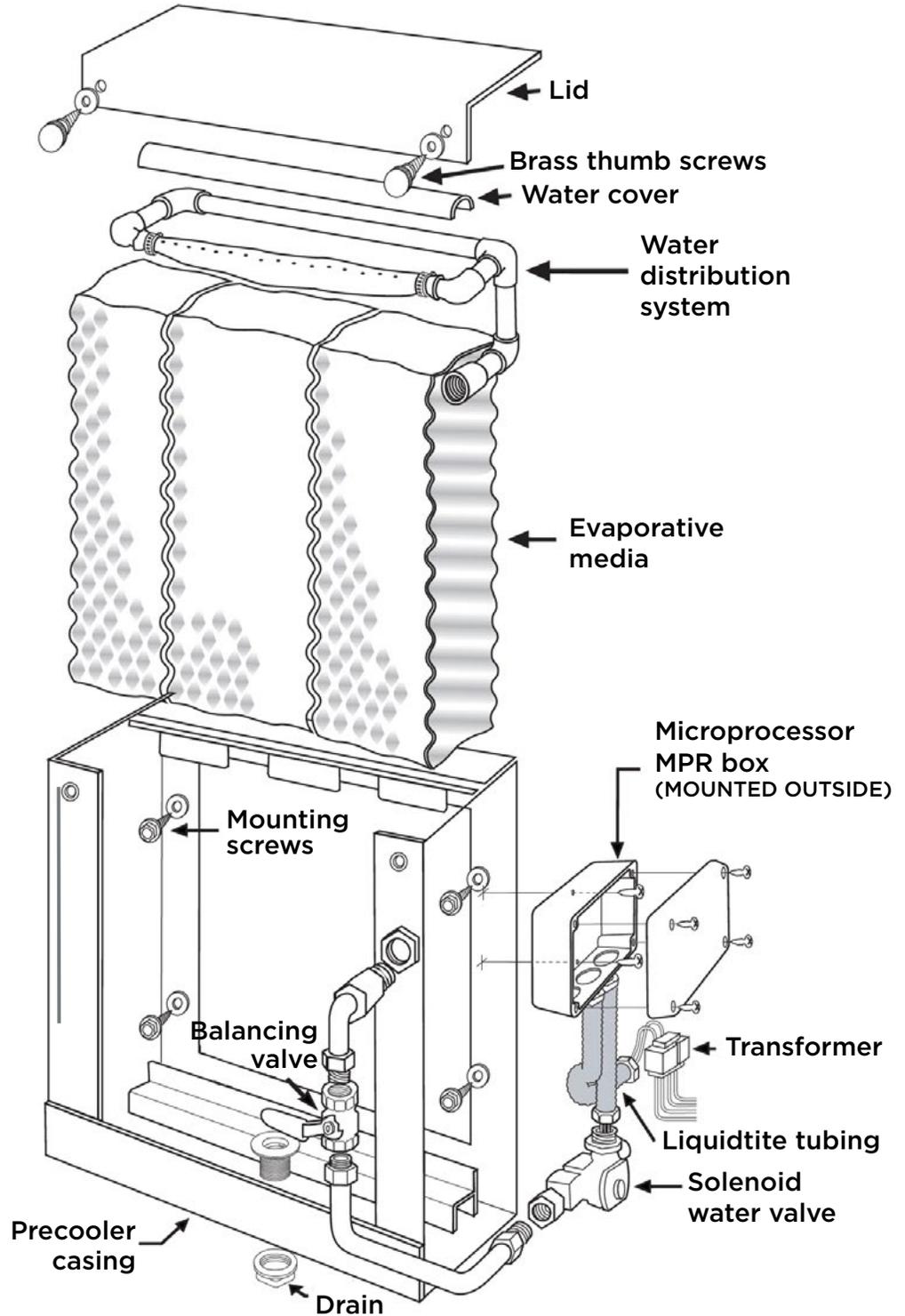
2. Verify Plumbing

- a. Drain
- b. Evaporative media
- c. Inlet plumbing

3. Electrical

- a. Mount control box
- b. Run liquidtite lines
- c. Hook up solenoid
- d. Install transformer
- e. Establish ground

4. Calibrate

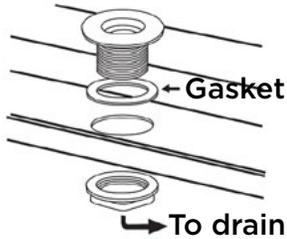


Step 1: Inspect Parts

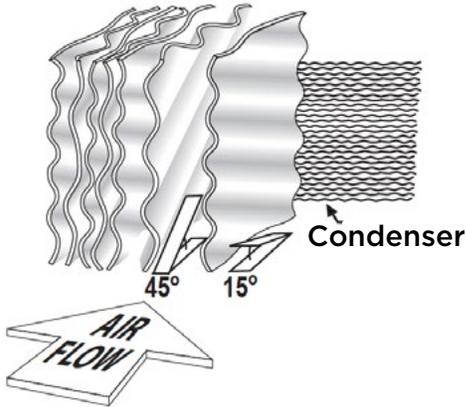
- Unpack box.
- Inspect for damage.
- Verify quantity and piece count.

Step 2: Verify Plumbing

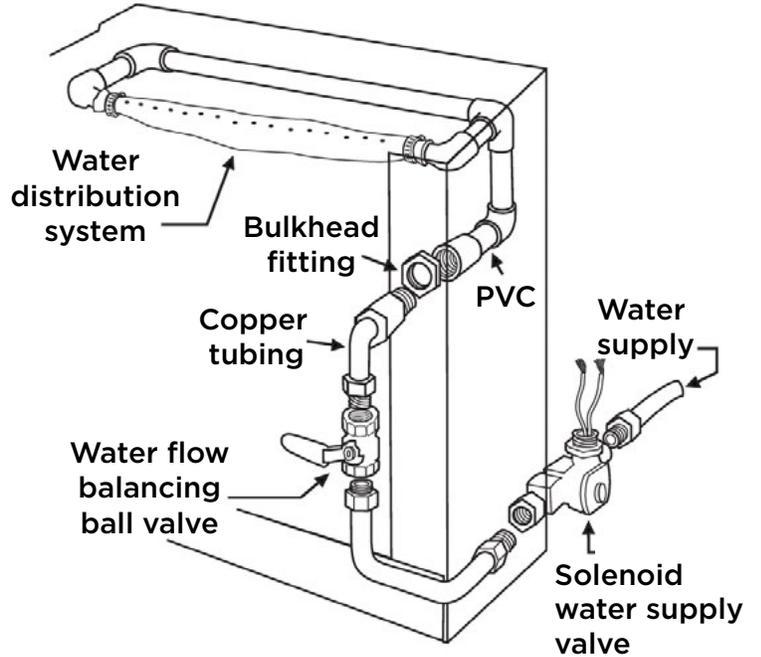
2a. Verify installation of drain fitting.



2b. Evaporative media flute angles alternate at 45° and 15° angles. Verify 15° media slopes down in direction of air flow.

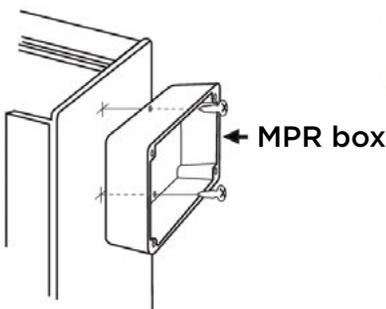


2c. Verify installation of inlet plumbing.

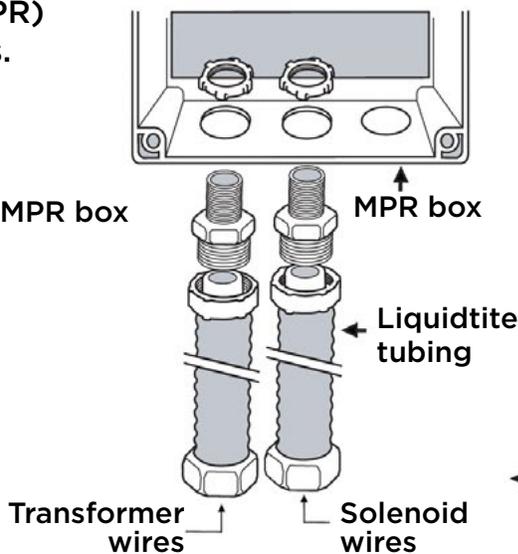


Step 3: Electrical

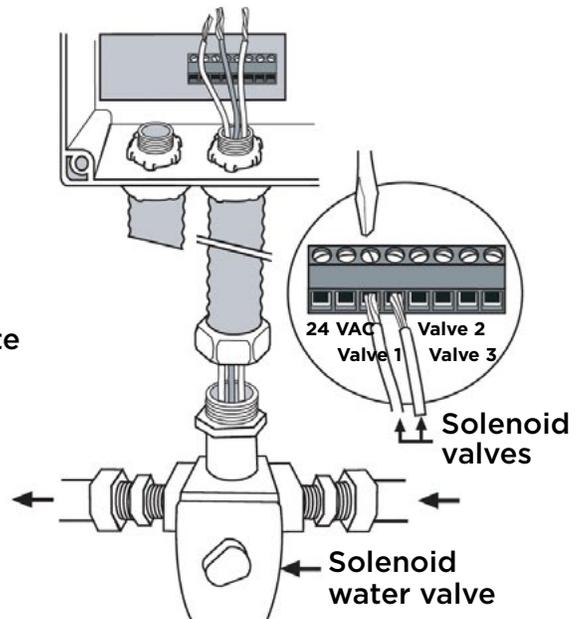
3a. Mount microprocessor regulator (MPR) box outdoors.



3b. Run liquidtite lines.



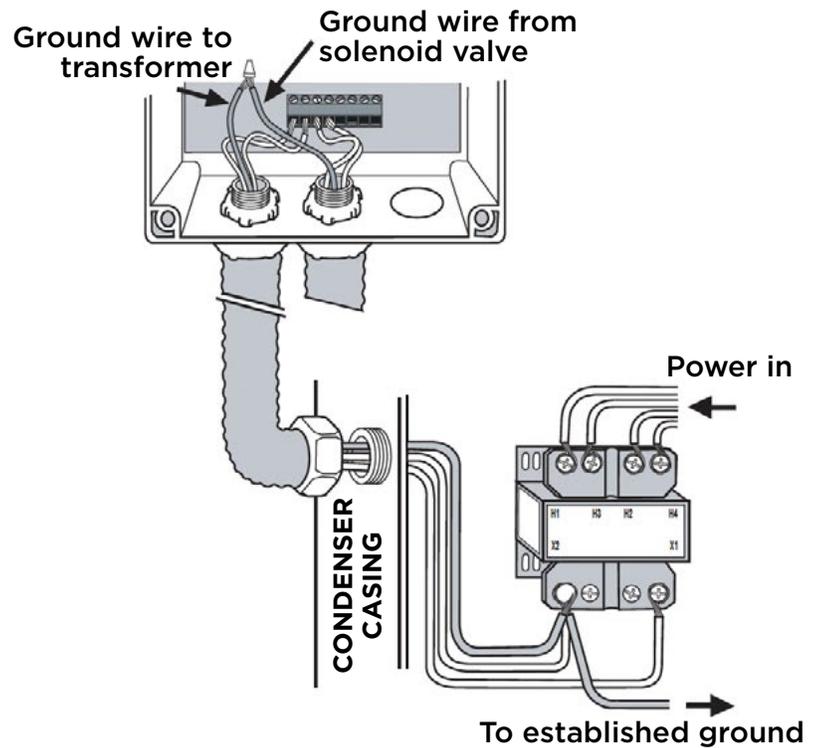
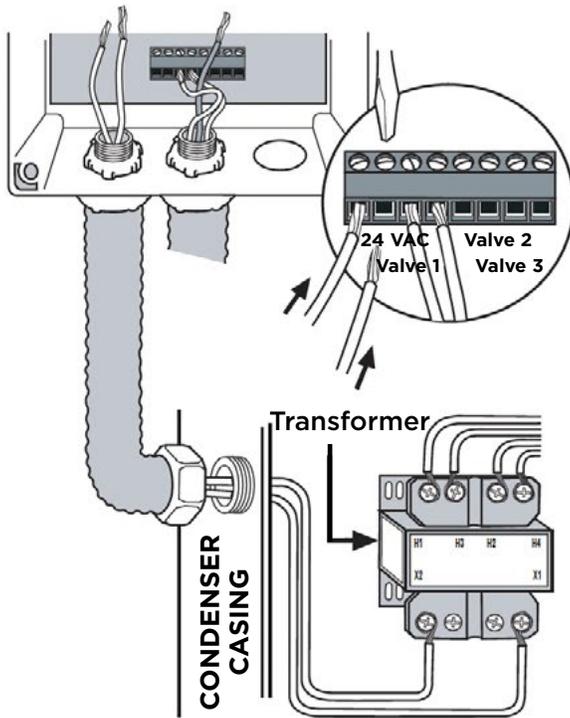
3c. Hook up solenoid wires.



Step 3: Electrical (cont.)

3d. Install transformer (with power off).

3e. Establish ground. (Ensure power is off before installing ground.)

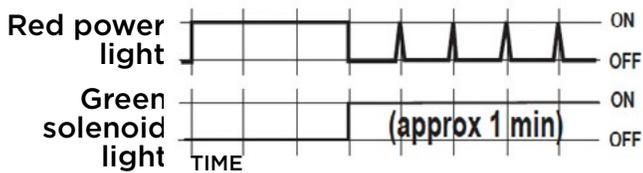


Step 4: Calibrate (MPR-01AW)

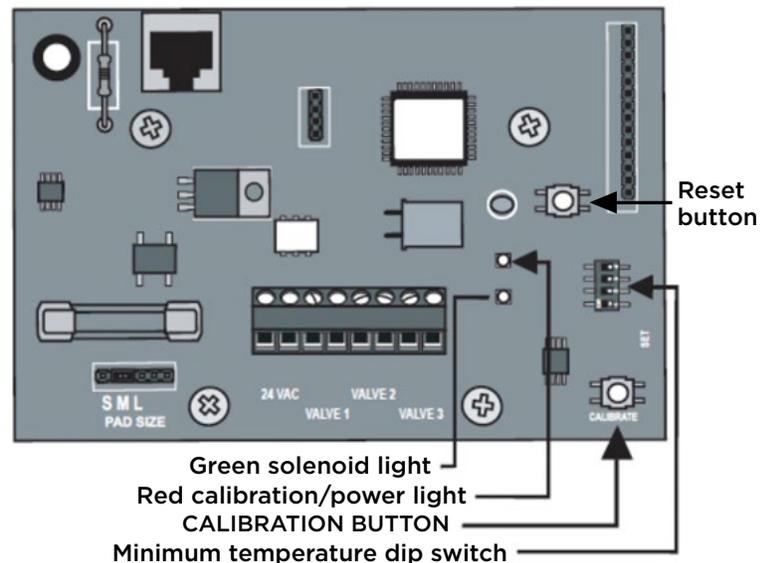
There are two lights on the MPR board: a red calibration/power light and a green solenoid light.

4a: Connect power supply.

Connect power supply:



Microprocessor Regulator (MPR) board



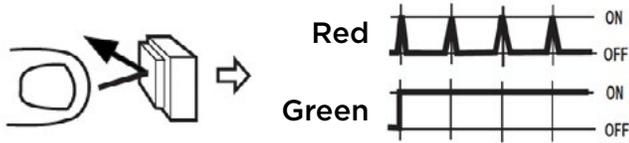
After power supply is connected, **red power light** will light red for approximately 3 seconds, then will start a long “off”/quick “on” blinking mode. At this time, **green solenoid light** will come on, indicating solenoid is activated and that water is passing through solenoid valve. Solenoid valve will stay on approximately 1 minute.

Step 4: Calibrate (MPR-01AW) (cont.)

4b: Adjust water column height:

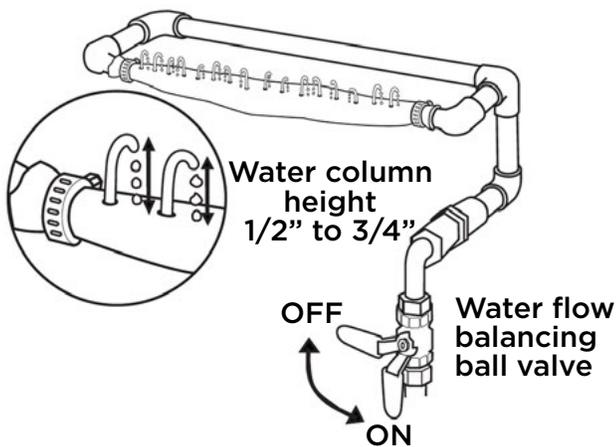
Turn on main water supply (if not already on).
Turn on solenoid valve:

Press & release



Solenoid valve is turned on by pressing and releasing calibration button. Red calibration light will start long “off”/short “on” blink mode and green solenoid light will come on.

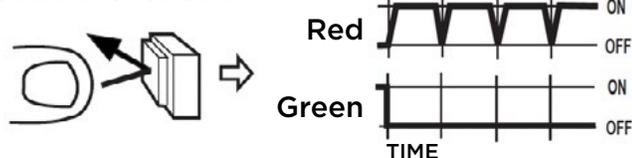
Adjust column height:



Use balancing valve to adjust height of water columns to between 1/2”- 3/4”.
After adjustment, remove handle to prevent tampering.

Turn off solenoid valve:

Press & release



Solenoid power supply is turned off by pressing and releasing calibration button. Red calibration/power light will begin long “on”/short “off” blinking mode. Green solenoid light will be off.

If using factory default “ON” and “OFF” cycle times, no further adjustments need be made. System will revert to default settings. Default settings may result in excess wetting and drying.

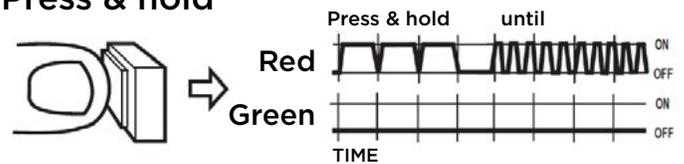
Calibrating “ON” and “OFF” settings will prevent excess wetting and drying.

If no calibration cycles have been set, system will automatically revert to factory default “ON” and “OFF” cycle settings. Also, at any time, factory default settings may be restored.

4c: Calibrate length of “ON” cycle.

Set calibration mode:

Press & hold

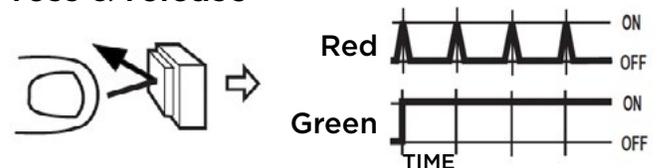


(Approx 3 sec)

Calibration mode is set by pressing and holding calibration button until red light begins a rapid blink (approximately 3 seconds).

Start “ON” cycle:

Press & release



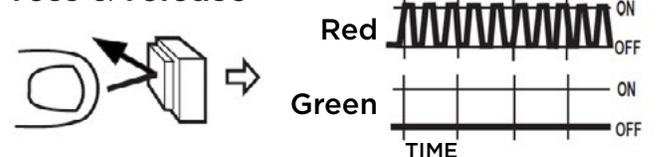
“ON” cycle is started by pressing and releasing calibration button. Solenoid valve opens and system starts timing “ON” cycle. Red light will begin long “on”/short “off” blinking mode and green solenoid light will be on.

Observe water flowing down pre-cooler pads.

End “ON” cycle:

(when first water reaches bottom of pad)

Press & release



When first water reaches bottom of pad, press and release calibration button. (This will take from 30 seconds to a few minutes depending on height of evaporative media.)

“ON” time calibration is complete.

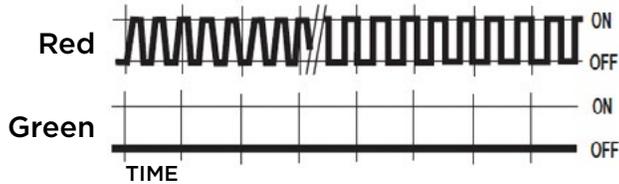
Step 4: Calibrate (MPR-01AW) (cont.)

4d: Calibrate length of "OFF" cycle:

Two choices are available for setting "OFF" cycle: cycle may be field calibrated or factory default may be used.

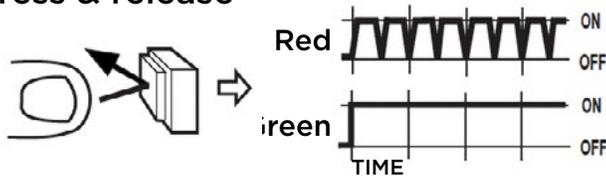
Field calibration:

After "ON" calibration is complete, wait for pre-cooler pad drying. During wait, red calibration light will change to slightly slower blink.



When pads look slightly dry on top of entering airside, press and release calibration button to end "OFF" cycle.

Press & release

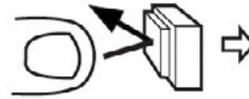


OR

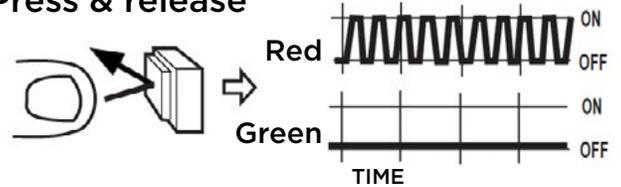
Factory default:

After "ON" time calibration is complete, press and release calibration button twice.

Press & release



Press & release



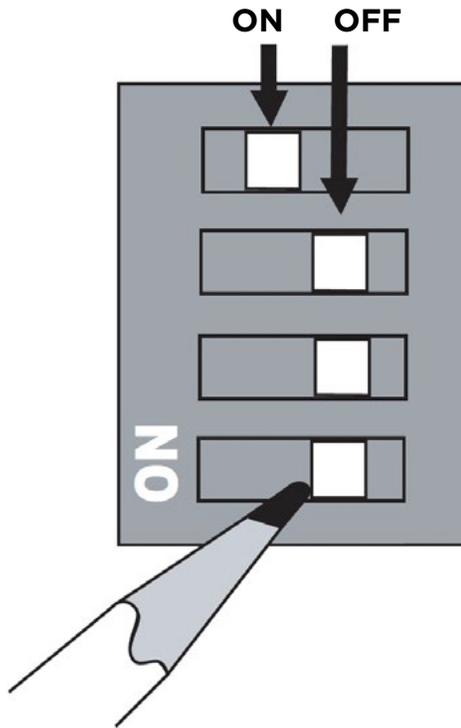
Red calibration light will blink rapidly and green solenoid light will be off.

4e: Restoring factory default times.

To restore factory settings, press the reset button.

4f: Set minimum operating temperature.

Dial in minimum operating temperature on Microprocessor (MPR) Board.
 Set temperature dip switch to desired minimum temperature according to Minimum Operating Temperature SWITCH POSITION TABLE.
 A typical minimum operating temperature is 70.7°F.



Minimum Temperature

The minimum operating temperature is now adjustable over a wider range. Please set the four switch positions to the desired temperature according to the table below:

Minimum Temperature		SWITCH POSITIONS (S2)			
°C	°F	1	2	3	4
33.5	92.3	OFF	OFF	OFF	OFF
32.0	89.6	ON	OFF	OFF	OFF
30.5	86.9	OFF	ON	OFF	OFF
29.0	84.2	ON	ON	OFF	OFF
27.5	81.5	OFF	OFF	ON	OFF
26.0	78.8	ON	OFF	ON	OFF
24.5	76.1	OFF	ON	ON	OFF
23.0	73.4	ON	ON	ON	OFF
21.5	70.7	OFF	OFF	OFF	ON
20.0	68.0	ON	OFF	OFF	ON
18.5	65.3	OFF	ON	OFF	ON
17.0	62.6	ON	ON	OFF	ON
15.5	59.9	OFF	OFF	ON	ON
14.0	57.2	ON	OFF	ON	ON
12.5	54.5	OFF	ON	ON	ON
11.0	51.8	ON	ON	ON	ON