



**MAXIPOINT V 2.0**  
**DAMPER CONTROL SYSTEM**  
*Operation Manual*



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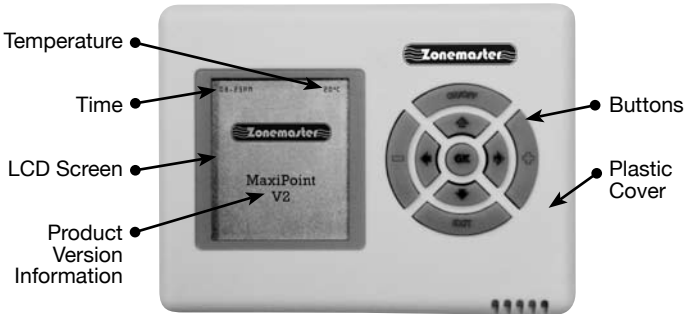
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## Liability

Please read the instructions before installing this Zonemaster Zoning Control System. Polyaire Pty Ltd does not accept any responsibility for loss or damage that may occur as a result of the incorrect installation of this Zoning Control System.

## 1) Wall Controller Layout (Touchpad)

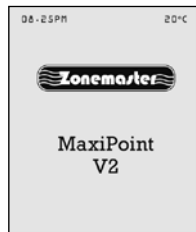
The Touchpad has a LCD screen with nine buttons as shown in the figure below. The LCD screen will normally display clock time, room temperature, product version information and the Zonemaster logo.



**Touchpad Layout**

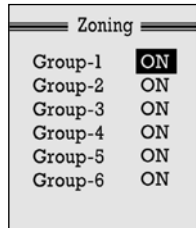
## 2) Manual On/Off Mode

In sleep mode, as shown on right figure, there are two ways to enter into zoning mode to manually turn the groups on or off. The first way is to press or button; the other one is to press button to get into the function selection mode and then press button again after selecting zoning by using or button.



### a) Group ON/OFF

- 1) In zoning mode, the touchpad displays group name and on/off status up to six groups in one screen as shown in the right figure.
- 2) Use the or button to select a group to be controlled. The on/off status of the group will be highlighted.



- 3) Press **ON/OFF** button to turn on/off the group. The group status will change from ON to OFF or vice versa and dampers of the selected group will open/close accordingly.
- 4) Scrolling down past the last group shown at the bottom using the **↓** button to show subsequent groups
- 5) Pressing **EXIT** button will exit the zoning mode. Alternatively, it will return to the sleep mode itself in 15 seconds if no key is being pressed.

Zoning	
Group-1	<b>OFF</b>
Group-2	ON
Group-3	ON
Group-4	ON
Group-5	ON
Group-6	ON

## b) Turbo Mode

Turbo function will give the selected group a full-opening while all the other group's (dampers) opening positions are reduced by 50% of their balanced value. This will bring a large volume of extra air into the designated area and cool or heat the area quicker. Typically this may be a family room, dining room or home theatre (or in commercial application a meeting, lunch or board room).

### 1) Assign a group as a Turbo Group



- a) Go to 'Setting' menu by holding **+** and **□** buttons at the same time for 5 seconds.
- b) Select 'Parameter' sub-menu by pressing **OK** button.
- c) Go to TURBO menu by pressing **↑** or **↓** button and highlight Group Name (the current name of the turbo group). If there is NONE, then there is no group assigned as Turbo group.
- d) Select desired group by pressing **+** or **□** button.
- e) Go back to 'Setting' menu by pressing **EXIT** button.
- f) Go back to normal display by pressing **EXIT** again.

Setting	
<b>Parameter</b>	
Grouping	
Naming	
Balancing	
Service	

Parameter	
Touchpad Add	1
Total Groups	16
H-limit	Disable
L-limit	Disable
Safety	Spill 30%
Turbo	<b>None</b>

Parameter	
Touchpad Add	1
Total Groups	16
H-limit	Disable
L-limit	Disable
Safety	Spill 30%
Turbo	<b>Group-1</b>

## 2) Turn Turbo On

- a) Select the group which is assigned as turbo group by highlighting it from the normal display mode by pressing  or  button.
- b) If the group is showing ON, press the **ON/OFF** button once to activate Turbo function. The group will now show Turbo. Then press **EXIT** to go back to Sleep Mode.
- c) If the group is showing OFF, press **ON/OFF** twice to activate Turbo function. The group will show Turbo. Then press **EXIT** to go back to Sleep Mode.

Zoning	
Group-1	<b>Turbo</b>
Group-2	ON
Group-3	ON
Group-4	ON
Group-5	ON
Group-6	OFF

## 3) Turn Turbo Off

- a) Select the Turbo group by highlighting it and it should show Turbo.
- b) Press **ON/OFF** once. The group and Turbo function will be turned off and will now show OFF.

Zoning	
Group-1	<b>OFF</b>
Group-2	ON
Group-3	ON
Group-4	ON
Group-5	ON
Group-6	ON

***IMPORTANT NOTE: The Parameter mode is used to set up and balance your system, this will have been done by your installer. Any attempt to change the parameter settings may result in your system not performing at its best. If you wish to change any parameters we suggest you consult your installer or service provider.***

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### 3) Programming On/Off Mode

Programmable on/off time control for each group is an important feature of the MaxiPoint V 2 system. This system has a 5-1-1 program capability with three possible program settings; one for weekdays (Monday to Friday), one for Saturday and one for Sunday respectively.

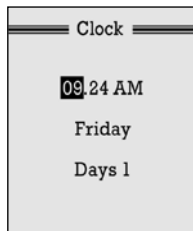
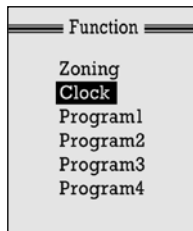
Each program has 4 programmable events per day: On time 1, Off time 1, On time 2 and Off time 2. Each program event can be enabled/disabled and their times can be adjusted as desired. They may have been set up by the installer. Check Page 10 for program details. If any changes are made to the program, please modify the tables accordingly.

**NOTE: The Turbo function cannot be programmed in this mode.**  
It is activated manually from the touchpad as needed.

#### a) Set Clock and Day

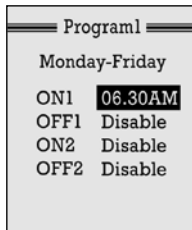
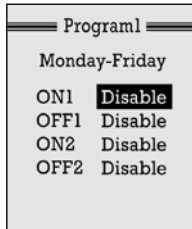
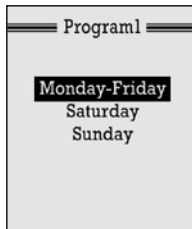
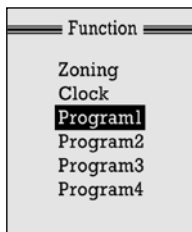
- 1) Press the **OK** button once to enter into the 'Function' Screen.
- 2) Use the **↑** or **↓** button to select the 'Clock', and then press **OK** button to enter into the clock setting sub menu.
- 3) Use **←** and **→** button to select hours, minutes and weekdays. Press **+** and **-** button to change hours, minutes and weekdays.
- 4) Pressing **EXIT** button can exit the clock and week setting mode. Alternatively, it will return to the sleep mode itself in 15 seconds if no key is being pressed.

*NOTE: The days displayed at the bottom of the screen are the days the air conditioning system has been operating since being commissioned or last serviced. Adjust the clock regularly to ensure its accuracy.*









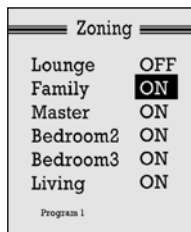
## b) Adjust Program Time

- 1) Press the **OK** button once to enter into the 'Function' Screen.
- 2) Use the **▲** or **▼** button to select the program to be modified, and then press **OK** button to enter into its sub menu.
- 3) Use the **▲** or **▼** button to select Monday-Friday, Saturday or Sunday program. Then press **OK** button to enter into its sub menu.
- 4) Press **ON/OFF** button to enable the setting for ON/OFF times. The LCD will show the start time of the first turning on event of the program.
- 5) Press **+** and **-** button to change its ON1 settings.
- 6) Press **←** or **→** to move between hours and minutes.
- 7) Press the **▲** or **▼** button to select other ON/OFF settings. Follow steps 4) to 5) to set the off time or disable the event.
- 8) Press the **EXIT** button to go back to program setting menu.
- 9) Follow steps 3) to 6) to set the off time or disable the event for other times in the program.
- 10) Repeat steps 2) to 8) to set all the time for the other programs.
- 11) Pressing **EXIT** button returns back to programming mode. Alternatively, it will return to the sleep mode itself in 15 seconds if no key is being pressed.



### c) Select Program for a Group

- 1) Make sure that at least one of the four programs is enabled by setting up all the parameters in the program.
- 2) Press the  or  button to get into zoning screen, and then press  or  button to select the group.
- 3) Use  and  button to select the enabled program. The program will be shown at the bottom of the screen.
- 4) Repeat steps 2) and 3) to choose programs for other groups.
- 5) Press button to exit. Alternatively, it will return to the sleep mode itself in 15 seconds if no key is being pressed.

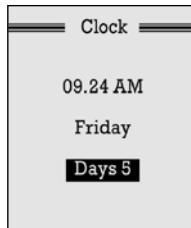
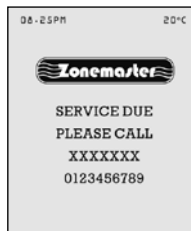


**Record the programs and groups to Table 5 on Page 10**

### 4) Service Reminder

There is a built-in service reminder in MaxiPoint V 2 system to automatically display an alert to tell customers that the air conditioning system is due for service. If the service reminder has been enabled during commissioning by the installer, then the service reminder (if enabled) will display 'SERVICE DUE' and installer's name and contact number on LCD screen for 5 consecutive days if it has been for 6 months (180 days) since the air conditioning system being commissioned or serviced as shown in the right figure.

To clear the displayed alert before the set days reaches, go to 'CLOCK' menu (see the CLOCK menu on page 5), highlight the 'Days' line, and press ON/OFF button once. The alert will disappear after exiting from CLOCK menu.



## 5) Information Sheets

These should be filled out by the installer

**Table 1: System Configuration**

Total Groups	Bypass Damper Installed	Supply Air Sensor Installed
	Yes/No	Yes/No

**Table 2: Grouping**

Group	Group Name	Zones Included	Turbo Function
1			
2			
3			
4			
5			
6			
7			
8			
9			
A			
B			
C			
D			
E			
F			
G			

**Table 3: Balance**

<b>Zone</b>	<b>Balance Percentage</b>
Zone 1	
Zone 2	
Zone 3	
Zone 4	
Zone 5	
Zone 6	
Zone 7	
Zone 8	
Zone 9	
Zone A	
Zone B	
Zone C	
Zone D	
Zone E	
Zone F	
Zone G	

**Table 4: Installer Details**

<b>Installer</b>	<b>Contact Number</b>	<b>Date</b>

**Table 5: Programs**

<b>PROGRAM 1</b>	<b>On time 1</b>	<b>Off time 1</b>	<b>On time 2</b>	<b>Off time 2</b>
Monday-Friday				
Saturday				
Sunday				
Groups				

<b>PROGRAM 2</b>	<b>On time 1</b>	<b>Off time 1</b>	<b>On time 2</b>	<b>Off time 2</b>
Monday-Friday				
Saturday				
Sunday				
Groups				

<b>PROGRAM 3</b>	<b>On time 1</b>	<b>Off time 1</b>	<b>On time 2</b>	<b>Off time 2</b>
Monday-Friday				
Saturday				
Sunday				
Groups				

<b>PROGRAM 4</b>	<b>On time 1</b>	<b>Off time 1</b>	<b>On time 2</b>	<b>Off time 2</b>
Monday-Friday				
Saturday				
Sunday				
Groups				

## 6) Troubleshooting Guide

PROBLEM	SUGGESTED ACTION
<p><b>Dampers have no response when turned on or off</b></p>	<ul style="list-style-type: none"> <li>• Check if 'SAFETY CONTROL' displays at the bottom of the screen. If yes, the H-limit (Heating) or L-limit (Cooling) may have reached, check Air Conditioner to see if air supply is normal and rectify the problem with the conditioner. MaxiPoint V 2 system will return back to operational after the supply air back to normal.</li> <li>• Check if the cable from touchpad to the main control module is faulty. If yes, then the cable might have to be replaced.</li> <li>• Check if the Supply air sensor is plugged and H-Limit &amp; L-Limit is enabled. If the sensor is not plugged, plug the sensor and the system will be operational in a minute. If the sensor is not required, disable the H-limit and L-limit from the touchpad and the system will return back to operational in a minute.</li> <li>• Check if the LEDs on the main module light up for the relevant zones when the zone dampers are being turned on/off. If no, there might be a faulty control module and the control module would have to be replaced.</li> </ul>
<p><b>Some zones cannot be turned off</b></p>	<p>See if 'Spill Control' displays at the bottom of LCD screen. If YES:</p> <ul style="list-style-type: none"> <li>• Check spill set-point.</li> <li>• Check if it is a spill zone (with lower address) and spill set-point has reached. If YES, opening other zones will resolve the problem.</li> </ul>
<p><b>No display on the LCD</b></p>	<ul style="list-style-type: none"> <li>• Check if the cable is plugged in properly.</li> <li>• See if there is power failure.</li> </ul>
<p><b>Some zones not operational</b></p>	<ul style="list-style-type: none"> <li>• Check the Grouping on the touchpad against the records on Page 8, Table 2 and find out if the right zones have been assigned to the right groups and have been turned ON/OFF in the Zoning section.</li> <li>• Check if total group numbers and zone numbers are right.</li> <li>• Check if the LEDs on the main module light up for the relevant zones when the zone dampers are being turned on/off. If yes, there might be a faulty cable and the cable would have to be replaced. If the zone is still non-functional then there might be a faulty damper motor.</li> </ul>

*Note: Some of the checks in the guide should be carried out by qualified personnel. If you have any doubt regarding the above please contact your installer.*

## 6) Specifications

### Electrical Requirements

Power supply:	24VAC $\pm$ 10%
Line frequency:	50 Hz

### Components Power Consumption

Touchpad:	0.5 VA
Main Control Module:	5 VA

### Environmental Requirements

Operating temperature:	0°C to 60°C
Altitude:	0 to 2000 meters
Operating relative humidity:	10% to 80%
Avoid static electricity hazards	
Avoid electromagnetic radiation sources	
Avoid dust contamination	
Avoid highly corrosive environments	

### Zone Output

Output voltage:	24VAC, 50Hz
Current:	500mA (2 damper motors)

### Transformer

Input Voltage:	240VAC, 50Hz
Output Voltage:	24VAC, 50Hz
Wattage:	40W

<b>Supply Air Sensor:</b>	NTC type, 10 k $\Omega$ at 25°C
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<b>Battery:</b>	3.6V, 3xAAAM Rechargeable for Main Module
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<b>Fuse:</b>	Dimension 5x20 mm, Fast-Acting 3A, 250V
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<b>Clock:</b>	$\pm$ 1 second/day
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