



ZONE SWITCH (TWO ZONE)

DAMPER CONTROL SYSTEM

Operation & Installation Instructions



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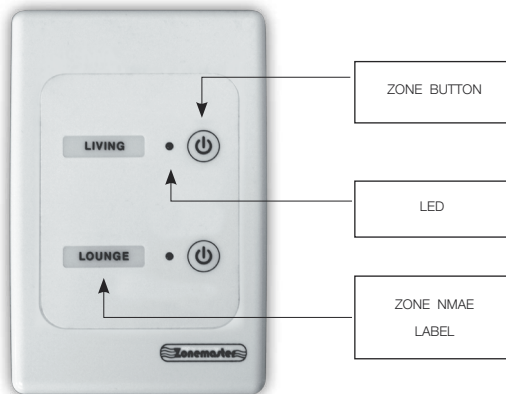
Liability

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 Zonemaster Zone Switch Control System.

OPERATION INSTRUCTIONS

1) Wall Controller Layout (Touchpad)



2) Turn Zone ON/OFF

- a) Press the zone button once to turn the zone ON.
The LED will light up indicating the zone is On (Zone Opened). The LED will stay on until the zone is turned OFF.
- b) Press the zone button again to turn the zone OFF.
The LED will turn OFF indicating the zone is OFF (Zone Closed).

Note: If power fails, zones will automatically resume their original position prior to failure once power is returned.

INSTALLATION INSTRUCTIONS

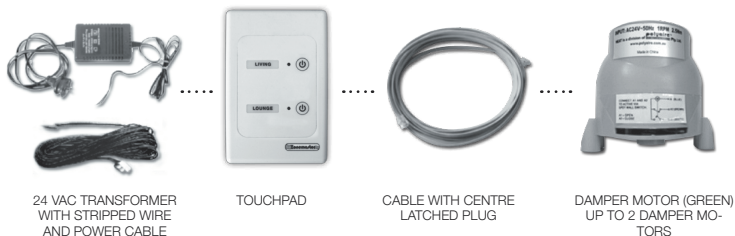
1) Application

The Zonemaster Zone Switch control system is a simple On/Off control system engineered to manage the air flow from the Air Conditioning unit to different outlets. This system is well suited to all ducted reverse cycle and ducted heating systems in light commercial, residential and apartment applications.

2) Features

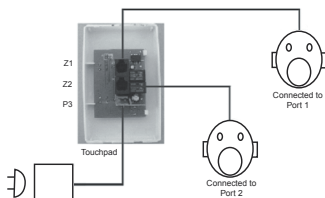
- Supports 2 individual zones.
- Dampers are directly connected to the touchpad module.
- LED indicators to show the ON/OFF status of the zones.
- Personalised zone labelling using stickers.
- All zones automatically resume their original on/off state once powered up after power outage.
- 24 Volt for easy and safe installation and maintenance.

3) Components



4) Wiring Schematic

NOTE: The zones on the touchpad are marked as Z1 and Z2 from the top of the touchpad



5) Zoning areas

Air conditioned areas can be zoned according to their functions and daily usage such as Family room, Lounge, Library, etc. These zone names are chosen as desired.

IMPORTANT NOTE: The Zone Switch system does not contain any safety features to prevent the pressure from building up and potentially causing duct damage. Please make sure a separate dedicated open spill zone is designed with this system to prevent the above from occurring.

6) Touchpad Preparation

a) Exploded Diagram

Figure 1 shows an exploded view of the touchpad assembly.

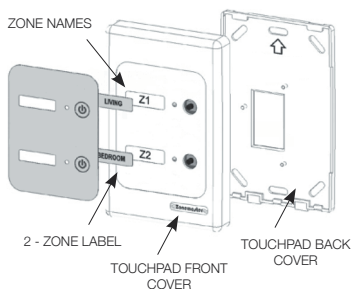


FIGURE 1 - Exploded view of touchpad assembly

b) Applying Zone Names to Zones

It is essential to apply correct names against the zones to make sure the end user is fully aware of the location of each zone. The zone names are printed on a sticker which is to be peeled off as desired and applied in the relevant zonename recess on the touchpad. There are 31 preset names which can be used or personal names can be written on the 2 blank stickers provided (Figure 2). After applying the zone name label on the touchpad, peel off the transparent protective covering film from the top of the label.

BEDROOMS	FAMILY	OFFICE
BEDROOM 1	GAME	PLAYROOM
BEDROOM 2	GIRLS	RUMPUS
BEDROOM 3	GUEST	STUDY
BEDROOM 4	KIDS	TV ROOM
BEDROOM 5	KITCHEN	UPSTAIRS
COMPUTER	BOYS	THEATRE
DAY	LIVING	ACTIVITY
DINING	LOUNGE	GARAGE
DNSTAIRS	MASTER	
ENSUITE	NIGHT	

FIGURE 2 - ZONE NAME STICKER SHEET

c) Applying 2 - Zone Label

The 2-zone label is applied after the zone names have been applied on the touchpad. The 2-zone label is peeled off from the backing and then applied on to the touchpad. Ensure the label has been applied within the recess provided. After the label is applied on the touchpad, peel off the transparent protective covering film from the top of the label.

7) Installing the Touchpad

a) Insert a flat head screw driver into the two gaps at the bottom of the casing and turn the screw driver blade just enough to open the cover as shown in Figure 3 then remove the back cover by sliding it out.

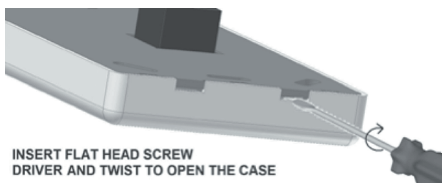


FIGURE 3

b) Position the back cover on the wall (about 1.5m high from the floor) and mark the positions for screws and the cut-out hole for the socket. Cut the hole and retrieve the power and control cables and plug them into the touchpad. Mount the back cover to the wall on the previously marked location.

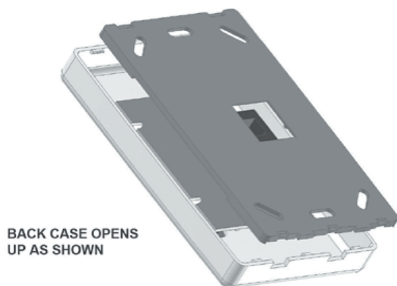


FIGURE 4

c) Attach the front cover to the back cover

8) Troubleshooting Guide

Problem	Suggested Action
No response from the touchpad / The LED does not turn On/Off.	<ul style="list-style-type: none">• Check the power supply is on.• Check the fuse in the power supply is not blown.
Dampers have no response when turned on or off	<ul style="list-style-type: none">• Check if the cable from the touchpad to the damper motor is plugged in properly.• Check if the cable is faulty with a cable tester. If the cable tests as faulty replace the cable.• Check if the damper motor is faulty by connecting the same zone output port to a spare damper motor. If the motor tests faulty, replace the damper motor.
Zones don't open/close as desired	<ul style="list-style-type: none">• Check if the damper motor of that particular zone is connected to the right port on the touchpad.
Damper Motor drives the wrong way	<ul style="list-style-type: none">• Damper blade might be installed in the wrong position. If the blade position is incorrect, reposition the blade by removing the damper motor and then re-align to the respective position.• Check if the cable connecting the damper motor and the touchpad is faulty. If the cable tests as faulty, replace the cable.

APPENDIX A – SPECIFICATIONS

Electrical Requirements

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

Transformer

Input Voltage:	240VAC, 50 Hz
Output Voltage:	24VAC, 50 Hz
Power:	24W

Components Power Consumption

Touchpad:	1VA
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Zone Output

Output Voltage:	24VAC, 50 Hz
Current:	200mA (1 damper motor)

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	

Maximum Single Cable Length

Control Cable (Centre Latched):	20 meters
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APPENDIX B – ZONEMASTER CABLE TESTER



Cable Tester (Item Number: 657089)

1) Application of the Cable Tester

Zonemaster cable tester is used to test all RJ12 cables before the start of the installation process thus reducing considerable diagnostic time if the fully installed system is subsequently found to have a problem.

2) Features of the Cable Tester

- Tests Centre Latched and Left Latched RJ12 cables.
- Portable, quick and easy to test cables.
- Bright LED's to indicate a faulty cable in the dark roof spaces.
- 9V battery operated.
- User Instructions provide



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