

Managed Air Flow

The air flow to each zone is managed via a **Motorized Damper** which can be turned on or off by the Electronic management system. The Motorized Damper can be a simple in line version, or the more sophisticated **Polyaire Diffusion Fitting** which expertly manages the airflow to 4 outlets from a central point close to the Air Conditioning unit for optimum airflow to all outlets.

'Quick Fix' Motorised Dampers

With Polyaire's unique cable tie duct fixing for faster, more positive duct attachment and no leaks

4 Sizes 250/300/350/400mm

- All metal shaft & motor. Folded 'Hi-Torque' metal blade: For long life, strength and durability
- 2.4Nm (tested) to take large loads/velocities
- Casing robust industrial plastic for durability, strength and easy fitment
- Outside insulation protects and insulates
- Unique No-Slip cable tie attachment
- 4 sizes - 250/300/350/400mm
- 5 year warranty



Polyaire Diffusion Fitting (PDF)

The latest design complete air management fitting from Polyaire.

Fully externally insulated, no joins to leak and designed to take motorized or manual dampers to tune your system for optimum efficiency, this fitting also uses a specially designed Zip Tie connector system to virtually eliminate duct join leakage and provide the best possible seal against air loss.

The Zip Tie connector system won't loosen with time and ensures that all the airflow goes into your rooms, not into the ceiling.



Installing A Zone Management System to manage the Airflow from your Ducted Air Conditioning Unit can:

1) Reduce your energy costs

Zoning permits you to reduce energy costs by not heating or cooling an area of the home or office that is vacant. Shutting unused zones off sends all available capacity of the heating or cooling system to areas that are occupied, enabling them to reach set temperature more economically.

2) Contribute to more rapid temperature recovery

By shutting down less important zones on particularly hot or cold days will bring more important zones closer to desired temperature more quickly.

3) Help you save money by allowing for the use of a smaller Air Conditioning Unit

If a large house is calculated to need a 20 Kilowatt (For Example) Unit to effectively heat & cool the entire structure but further examination shows that, at any given time, only two thirds of the rooms/space are in use, then with well designed zoning it is possible for the house to be satisfactorily serviced by a much smaller unit, providing a major up-front cost saving and ongoing power saving through the life of the unit.

How well each zone can be regulated depends on the sophistication of the Damper Control System being used.

NOTE - Many Ducted Air Conditioning Systems now come with basic Zone Management Systems included but few, if any, feature the sophisticated electronics of the Zonemaster UniPoint RF & MaxiPoint V2. These two systems can actually regulate the amount that each damper opens so that the whole system can be 'balanced' by your installer to ensure sufficient flow to every zone all the time. These systems work independently from the Air Conditioning Unit.

Now turn the page to learn about the



Product Range



Air Conditioning Zone Management Systems

The Zonemaster range is manufactured under licence from Polyaire, one of Australia's largest and most established air conditioning fittings and components manufacturers with over 30 years experience in the business.

Polyaire's head office is based in Adelaide, South Australia (Along with it's major manufacturing plant) so you can specify Zonemaster or any other Polyaire brand with the confidence that you are dealing with an Australian based company that will work hard to ensure your satisfaction with our products. For our customer's convenience Polyaire has 14 branches located across Australia.

www.zonemaster.com.au

HEAD OFFICE	11-13 White Rd GEPPS CROSS SA	Ph: (08) 8349 8466 Fax: (08) 8349 8446
SALES OFFICES		
NSW	Unit 6/167 Prospect Hwy SEVEN HILLS NSW Unit 2/6 Church Rd MOOREBANK NSW Unit 10/33 Maddox St ALEXANDRIA NSW 70 Mitchell Rd CARDIFF NSW 299 Copland St WAGGA WAGGA NSW 4 Young St DUBBO NSW	Ph: (02) 8811 1333 Fax: (02) 9620 8088 Ph: (02) 9600 8799 Fax: (02) 9600 8115 Ph: (02) 9557 6948 Fax: (02) 9557 6954 Ph: (02) 4954 6677 Fax: (02) 4954 6033 Ph: (02) 6921 7606 Fax: (02) 6921 1987 Ph: (02) 6884 4328 Fax: (02) 6884 4362
QLD	81-89 Northlink Place VIRGINIA QLD 14 Leda Drv ANDREWS QLD	Ph: (07) 3866 8700 Fax: (07) 3256 8718 Ph: (07) 5576 8955 Fax: (07) 5576 8975
SA	5 White Road GEPPS CROSS SA	Ph: (08) 8349 5959 Fax: (08) 8349 6659

ACT	Unit 21/1 Pirie St FYSHWICK ACT	Ph: (02) 6126 3600 Fax: (02) 6228 1338
VIC	72-76 Nissan Drv DANDENONG VIC 108-110 Northgate Drv THOMASTOWN VIC	Ph: (03) 8710 7000 Fax: (03) 9769 2799 Ph: (03) 9465 8022 Fax: (03) 9465 5484
WA	1 Booth Place BALCATTA WA	Ph: (08) 6241 0555 Fax: (08) 9240 1484
UK	Unit 17 Enterprise Court Park Farm Industrial Estate Wellingborough Northants ENGLAND NN8 6UW	Ph: (44) 1933 402 666 Fax: (44) 1933 402 777
Asia	102, Jalan Dua, Kawasan Perindustrian Olak Lempit 42700 Banting, Selangor WEST MALAYSIA	Ph: +603 3149 4100 Fax: +603 3149 4101
Internet	www.polyaire.com.au	

polyaire™
AIRCONDITIONING PRODUCTS

Distributed by:



**Air Conditioning
Zone Management
Systems**

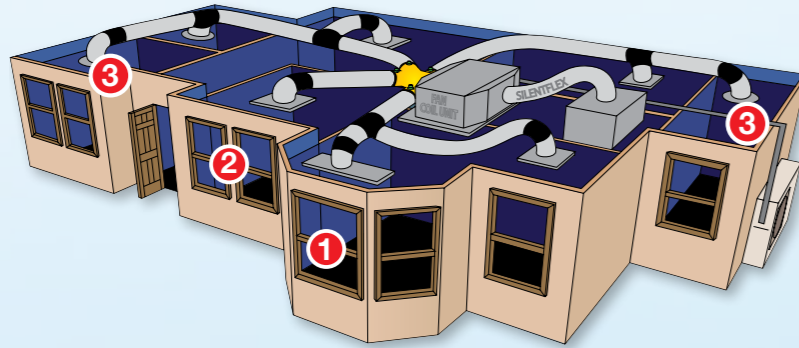


Improving the efficiency of your Ducted Air Conditioning System

The Principles of Zone Management to achieve higher efficiency & **SAVE MONEY** on energy usage

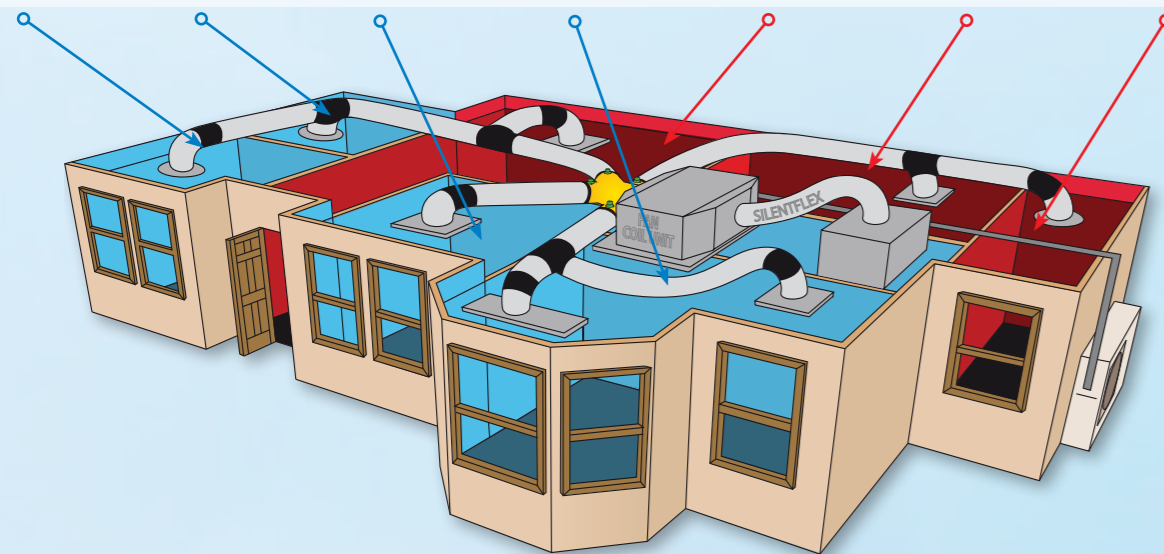
A basic **Ducted Air Conditioning Unit** is installed with duct and outlets to all spaces requiring heating or cooling. The temperature will be regulated by the single temperature gauge in one spot in the building, usually the Kitchen or Hall and there is no regulation as to how much air will go into each room. **This doesn't take into account variables such as:**

- 1) Rooms with a lot of large glass windows may be hotter than rooms with only a few small windows.
- 2) Rooms getting afternoon sun will be hotter than rooms on the shady side of the house.
- 3) In large houses, outlets a long way from the Air Conditioning Unit may not receive a sufficient amount of air flow.



Any house, office or other space consisting of various rooms can, for the purpose of Air Conditioning Efficiency, be divided into sections (Or Zones) and the air flow to each controlled by a motorised damper(s) that will, in turn, better manage temperature level.

ZONE 1 (ON) ZONE 2 (ON) ZONE 3 (ON) ZONE 4 (ON) ZONE 5 (OFF) ZONE 6 (OFF) ZONE 7 (OFF)



These Zones could include:

- 1) Day & Night Zones
- 2) Separate Usage Zones (Kitchen & Lounge/Kitchen & Bedrooms/Kitchen & Dining/Games)
- 3) Specific Work Usage (Offices/Boardroom)

The air conditioned space can then be selectively regulated via the dampers so that only the spaces in use have airflow. **For example:**

- 1) When there is little need to heat or cool bedrooms that are not in use during the day
- 2) An office boardroom doesn't need continuous airflow when it may only be used once a week.

By confining air flow to the spaces being occupied the air conditioning unit is allowed to work more efficiently and because the whole volume of air is going into a smaller area, desired temperatures are reached quicker and maintained more easily.

Zonemaster UniPoint RF System

Increasing the efficiency of your Ducted Air Conditioning System

The UniPoint RF System makes any ducted system more efficient by allowing air flow to rooms being used and stopping wasteful flow to unoccupied spaces.

Imagine you are sitting in the lounge after dinner and the kids have gone to bed. It's been a hot day and everyone will need maximum cooling to get a good night's rest. You use your Zonemaster UniPoint control to shut off all zones except the bedrooms. Restricting the airflow to the areas you need increases the available cool air and doesn't waste power on cooling unoccupied rooms.

Maximum cooling for a comfortable night.

The UniPoint RF System is an on/off controller for up to 8 zones with sophisticated programming and system balancing features. It is ideally suited to homes that require 8 zones or less and for users who like the convenience of a remote control that they can use anywhere in the home.

- **Manual and programmable on/off time control**
So you can programme it to turn on and off at set times but still manually override
- **LCD indicator for zone status/parameter display.**
Gives you easily visible indicators of system activity
- **Real time clock with battery backup**
- **5-1-1 zone on/off program (5 Weekdays + Sat/Sun)**
One programme to set up for weekdays and separate ones for Saturday and Sunday allow for different work and leisure needs
- **Personalised Zone Labelling** Lets you call each zone its proper name (e.g. Kitchen, Boardroom, Sue's Bedroom, Games Room, Bill's Office)
- **Easy Installation (24 volt plug in)**
Low voltage installations don't require a qualified electrician which is a big saving
- **Safety Protection**
 - o Stops damage to the duct system
 - o Auto spill/ bypass – the designated spill zone is forced open if all zones switched off (to prevent duct blow off)
 - o Temperature override – opens all dampers if air supply temperature is lower than low limit or exceeds high limit
 - o After power loss all zones automatically return to previous on or off state when power is restored

Benefits:

- Managing airflow so that the (cool or warm) air is only directed where you need it creates energy savings and greater comfort
- The programmable timer means that the zones can be set to open and shut at specific times for maximum efficiency

Plus the following additional features:

- No messy wall installation problems (ideal for older houses with hard plaster walls)
- Variable frequency (so it doesn't interfere with the neighbour's unit)
- RF remote control handset so you can keep it by your chair or bedside
- Backlit LCD screen for easy reference (on the handset for zone status and parameter display)
- Turbo zone for quick cooling of one designated room or space (so you can cool a room down quickly if needed - ideal for a boardroom or games room that might have an unexpected influx of people)
- **Remote Balancing (See Opposite Page), is unique to Zonemaster Products**



Zonemaster MaxiPoint Version 2.0

All the features of the UniPoint RF - with extra features for convenience in larger houses



All the features of the UniPoint RF plus:

- From 1 to 4 hard wired wall controllers strategically placed through the house. (No more having to go downstairs in the middle of the night to turn off the system with a controller in the master bedroom AND the kitchen)
- Up to 8 zones with the ability (via an expansion module) to go to 16 zones (for large or two story buildings)
- The ability to group zones together for convenient usage (if you have a big family room with, maybe, three outlets, they can be programmed to open to different levels to give varied flow around the space BUT still all open or close at the same time (programming zones into a group gives you better control and more convenient operating)
- A programmed service reminder. Your installer can programme in a forward service reminder for up to 180 days away so you are reminded to get your filters cleaned, routine maintenance BEFORE the system gets choked with everyday dirt and starts using more power/working less efficiently.

NOTE: Air Conditioning Systems are not 'set and forget' systems, they require similar regular servicing to a car or any other large machinery to continue operating at peak efficiency.

System Balancing - The most difficult part of installing a Ducted A/C System

The Installer may spend hours climbing in and out of the roof to adjust airflow to each room to make sure all rooms get adequate flow. Unfortunately, in many cases this may be difficult to achieve in the allotted time.

Example: Often the room that is at the end of the longest duct run gets little or no air because of improper balancing. **UniPoint RF & MaxiPoint V2.0 solves the difficult job of zone/system balancing**

With the unique Zone balancing ability of UniPoint RF and MaxiPoint V2.0 this difficult task becomes simple and easy, guaranteeing a good result every time. The installer uses the wall mounted (MaxiPoint), or the handheld (UniPoint RF) controller to adjust the dampers in the roof WHILE HE'S IN THE ROOM checking the airflow. No more climbing in and out of the roof. He just stands in the room to check airflow is satisfactory as he adjusts all the dampers from the control. Fast and easy for him, a far better result for the client.

Note: The volume of available air is dependant on the size of the Air Conditioning Unit and also on satisfactory ducting design.