

# Direct Damper Controls

# User and Installer Manual Model MWC and R80DV

Rev B Mar 2018

The Manual Wall Control, MWC, controls airflow into a space using Model R80DV, a wired, variable position damper installed in the duct supplying airflow to the space.

- Airflow can be set from MIN, minimal airflow (Closed) to MAX, maximum airflow (100% Open).
- Installed in a wall or switch box using three low voltage wires connecting the MWC to the damper.
- One MWC can control up to six R80DV dampers.
- Dampers are powered by 24VAC transformer. 40VA transformer can power 10 dampers.
- Control airflow to home offices, garages, multi-media rooms or unused bedrooms.
- Control airflow to conference rooms, spare offices or any space that is not used continuously.
- Adjust airflow to spaces and eliminate overheating and overcooling and provide improved comfort.



Model MWC  
Manual Wall Control



Model R80DVXX  
Variable Position Damper

**Caution! These controls are not an alternative to zoning and can cause airflow and pressure problems if too many controls are used on a single HVAC system.**

## USER

### To Improve Comfort

To reduce airflow, move the knob towards the MIN (minimum) position until the desired comfort level is achieved.

To increase airflow, move the knob towards the MAX (maximum) position until the desired comfort level is achieved.

### To Increase Energy Savings

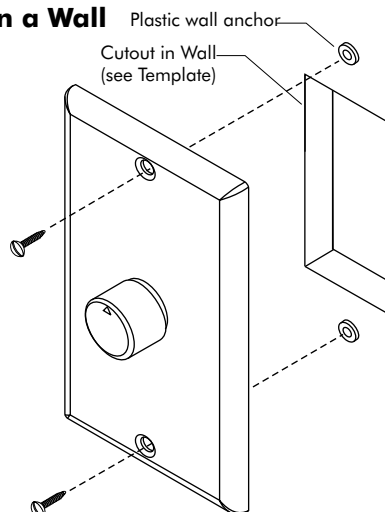
To reduce wasted airflow to a vacant space, move the knob to the full MIN position. This will close the damper to the space and eliminate unwanted heating or cooling of the vacant space.

## INSTALLER

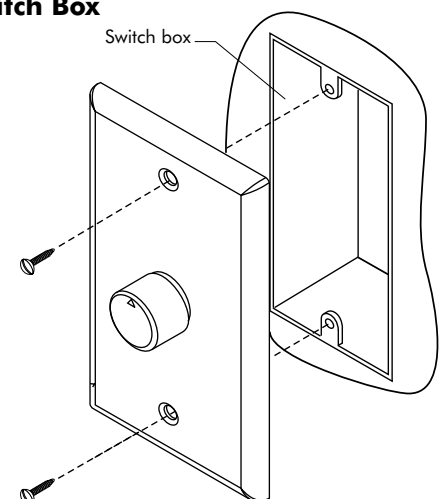
### Installing the Manual Wall Control

The MWC can be installed directly to a wall or in a switch box.

#### Installation Directly in a Wall



#### Installation In Switch Box



# INSTALLER

## ⚠ CAUTIONS

- Read and follow all instructions carefully.
  - Read entire manual before installing products.
  - Follow all local electrical codes during installation. All wiring must conform to local and national electrical codes.
  - Use cautions when mounting components to surfaces that may have concealed wiring beneath the surface.
- ❗ Ensure that the installation process does not alter the damper in a way that will cause interference to the blade moving freely.

**Caution! Direct Damper Controls are not an alternative to zoning. Installing too many controls on a single HVAC system could cause airflow and pressure problems.**

## Damper Installation

The damper or dampers controlling airflow to the space should be installed in the supply duct providing airflow to the space. In commercial installations the damper can be installed into the supply diffuser.

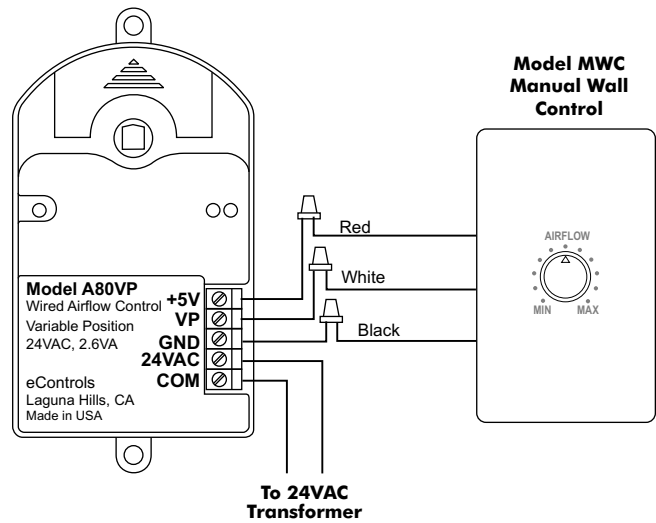
The dampers should be mechanically supported and sealed after installation. Although the dampers can be installed in any orientation, it is desirable to install them where the LED indicators on the damper actuators can be seen to verify they are opening and closing.

## Damper Installation (Continued)

- ❗ Solid green LED indicates open damper position.
- ❗ Solid red LED indicates closed damper position.
- ❗ No LEDs on indicates the damper is in a position between Open and Closed.
- ❗ Power Failure - When power is restored, the damper remains at the position set by the MWC.

## Wiring Using One MWC to Control One R80DV Damper

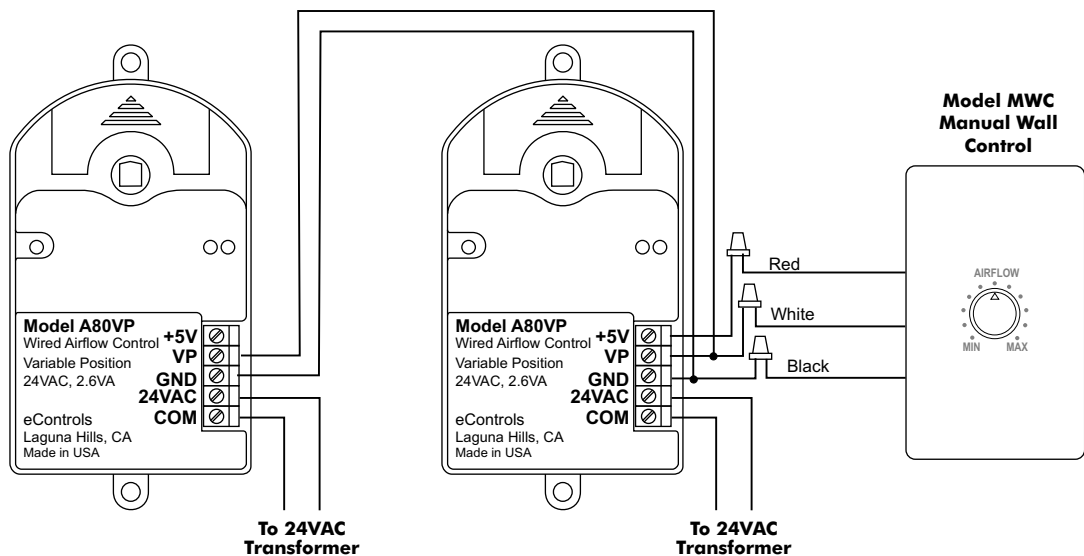
A single Manual Wall Control and a single R80DV damper are connected using the GND, VP and +5V terminals.



## Wiring Using One MWC to Control Multiple R80DV Dampers

A single Manual Wall Control can control up to 10 R80DV dampers using the VP and GND terminals.

- ❗ **IMPORTANT!** The +5V terminal on only the first damper is connected to the Manual Wall Control.



## Limited 5-Year Warranty

The 5-year warranty is limited to the repair or replacement of defective product due to parts failure or defective workmanship.

# eControls

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