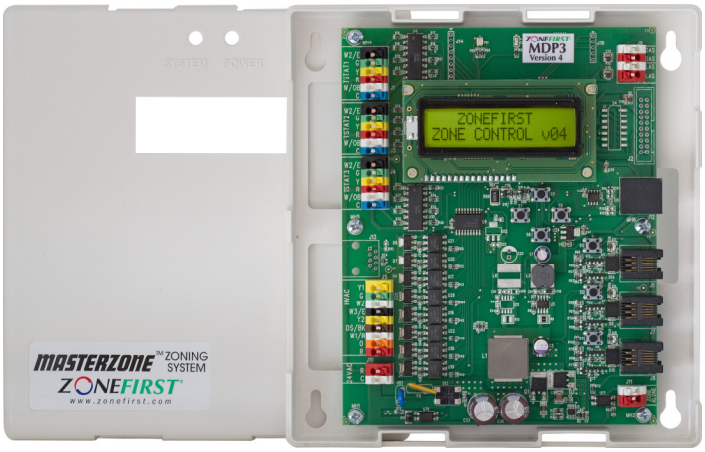
ZONEFIRST®

MASTERZONE™

HVAC Zoning System

Model MDP3 Ver. 4

- NEW LCD Digital Configuration
- Expandable to 103 Zones
- COLOR Coded Wiring Terminals
- Plug-In Damper Motors
- LED and Digital System Status
- Zone Damper Test Buttons
- Zone-A-Lone™ System Setback
- Single Stage, Two Stage, Heat Pump, Dual Fuel



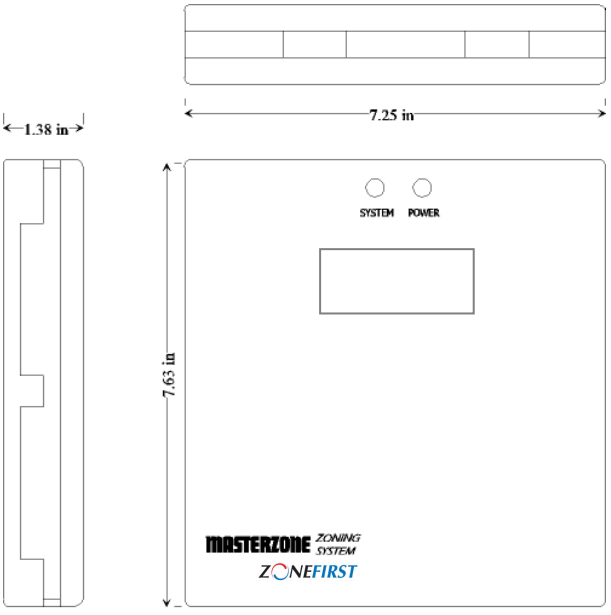
The NEW Digi-Zone™ Control Panel, Model MDP3 Ver. 4, is a two and three zone, expandable, all in-one zone control panel. The digital menu driven display simplifies system set-up and eliminates DIP Switches and adjustable dials to set timings and temperatures. The NEW MDP3 Ver. 4 controls only the New Plug-in Zone Motors that use modular cords, supplied with each damper. This panel is used exclusively with the ZDSP, ZDBP, OZD, RDP, RRP and RTP dampers.

The MDP3 Ver. 4 panel is designed to use a minimum of wires to make zoning simple and affordable, no matter what type of HVAC system it is used to zone. Each zone can use a standard 4/5 wire (Y-G-R-W(-C) thermostat for any type of system as the additional controls for staging, etc. are in the MDP3 Ver. 4. Heat pump thermostats can also be used when controlling the second stage and emergency heat are desired from the thermostat. All terminal blocks are color coded for each wire and have push–in connections making wiring even simpler and no need for a small screwdriver, as with all other zoning panels. The state of the art surface mount technology for all electronic components makes for a highly reliable control panel.

The MDP3 Ver. 4 is an all-in-one zone control panel that has following menu driven set-up features:

- System Type = Gas/Electric or Heat Pump
- Heat Pump Type = Conventional or Fossil/Dual Fuel
- Outdoor Balance Point (OBP) Adjustable – 5°F -53°F
- Thermostat Type – H/C or HP
- HP Stat RV – O or B
- Number of Zones – Adjustable 2 to 103
- Fan On In Heat – On or Off
- Fan On In Purge – On or Off
- Emergency Heat – On or Off
- Minimum Compressor On Timer – On (2 mins) or Off
- Staging – Adjustable Timer, # of zones calling or supply air temperature (stage optimization)
- Changeover Timer = Adjustable 10-30 Minutes
- Leaving Air Sensor – Capacity protection to shut off HVAC
- Centra-Zone™ - Zone 1 Master Changeover Disabled or Enabled
- DS-BK = Switch to low speed based on percentage of zones calling.
- Test – Enabled or Disabled

Dimensional Drawing



Panel and Case Specifications

Construction – ABS plastic

Dimensions – 7-5/8"x 7-1/4" x 1-3/8"

Voltage – 24 Volts AC, 50/60 Hz

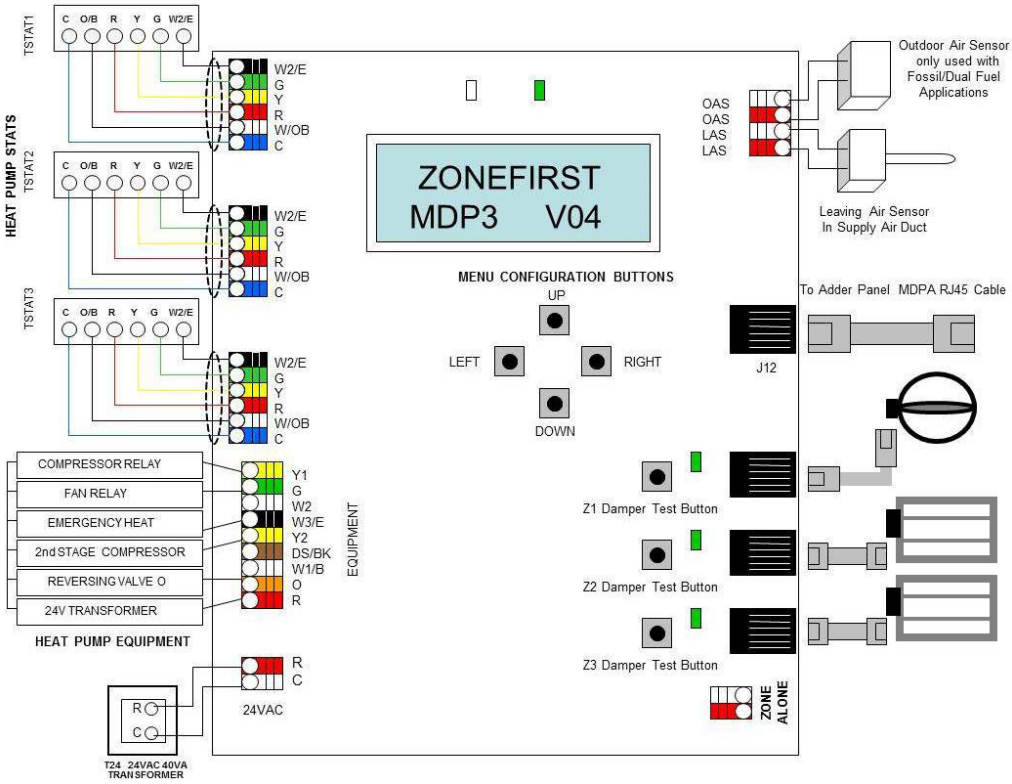
Temperature Rating - 0°F to 160°F Operating, -20°F to 180°F Storage

Humidity – 5% to 95% Non-Condensing

Connection: Colored Screwless Push-In terminal blocks

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WIRING DIAGRAM



WIRING

Zone Thermostats – Each zone thermostat requires the basic Y-GR-W connections for the respective Y-Cool, G-Fan, R-24V and WHeat functions. A terminal is provided for the C-Common 24V to power the thermostat, if required. For Heating Only, only R and W are required. For Cooling Only, R, G and Y are required. When using heat pump thermostats, all zone thermostats must be heat pump thermostats and wired the same. Also the proper selection on the LCD Menu must be made for the appropriate thermostats.

Zone Damper Motors – The MDP3 Ver. 4 requires the use of ZONEFIRST'S Plug-In Damper Motors. These motors use a modular cord with RJ11 plug-in connectors to the motor and the panel. A 25' cord is supplied with each damper and is plugged in at the damper and at the panel. Additional dampers, up to 10, can be wired in a "daisy chain" from one damper to the next via the second connection on each motor.

Motor Test Button – The damper motor(s) on each zone can be tested by simply pressing the button on each zone. This button can only be pressed when the Zone LED is lit. By doing so the damper motor powers closed. Releasing the button drives the damper motor back to open.

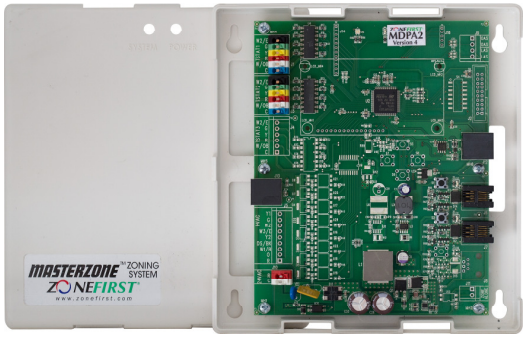
Leaving Air Sensor – The optional Leaving Air Sensor, Model ZPS requires two wires. When the ZPS is installed and wired to the panel, this must be entered in the LCD Menu, LAS, Enabled. Once enabled the menu allows you to set a heating limit, and cooling limit. If the ZPS is not used, the LAS setting should be set to Disabled.

Outdoor Air Sensor – The Outdoor Air Sensor, Model OAS, is used for Dual/Fossil Fuel Heat Pump operation. Sensing outdoor air temperature it will switch between the heat pump and back-up furnace.

Transformer – The MDP3 Ver.4 requires 24VAC to power the panel and damper motors. Two wires from the transformer R and C connections wires to the Red and White terminals on the MDP3 Ver. 4. In some instances the transformer in the HVAC Unit may be used due to the low power requirement of the panel and damper motors.

HVAC Equipment – The control wires from the furnace/air conditioner or heat pump are required to the MDP3 Ver. 4. These connections are similar to the thermostat, normally used with the HVAC when not being zoned. Instead of wiring these connections to the main thermostat wire to the MDP3 Ver. 4 Control Panel.

Systems Over Three Zones – The MDP3 Ver 4. is a two and three zone only panel and can be added on to by adding the MDPA2 Ver. 4. The MDPA2 Ver. 4 is a two zone adder control panel. Multiple MDPA2 Ver. 4 panels can be wired together in a "daisy chain" connecting one to another with an RJ45 Ethernet Cable, supplied with each MDPA2 Ver. 4. A total of 50 – MDPA2 Ver. 4 panels can be wired together to get up to 100 Zones additional to the MDP3 Ver. 4 for a total of 103 Zones.



Model MDPA2 Ver. 4 Zone-Adder™

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