

## ZONE CONTROL PANEL

The ZP4-ESP is a 4 zone panel that integrates our award winning ESP technology to completely eliminate the need to install a bypass damper. This 3H/2C zone panel comes with a static pressure sensor. The system works like any standard zone control system with one exception; a static pressure sensor continuously monitors the system static pressure. If the static pressure goes above setpoint, the ESP panel will power the selected non-calling zone dampers open just enough to relieve the excess pressure. Tests indicate that bleeding a small amount of conditioned air for a short time into non-calling zones has little to no impact on the zone temperature.

The panel can be used with single-stage, multi-stage, heat pump or dual fuel equipment. A wide range of control options provide ultimate application flexibility including adjustable high/low limits, adjustable high/low balance point, and 2 zone, 2nd stage capacity control.



**Also available as kit including:**

- ✓ Zone Panel
- ✓ Duct Temperature Sensors
- ✓ Static Pressure Sensor
- ✓ 40VA Transformer

## NO BYPASS REQUIRED!

### Features and Benefits:

- 4 zone universal panel with ESP capability
- Smallest universal panel offered by iO
- Up to 2H/2C conventional or 3H/2C heat pump and dual fuel
- Auto changeover
- First call priority with time share
- 2 zone, 2nd stage capacity control
- Purge cycle option
- Adjustable high and low limits
- Adjustable high and low balance points
- Easy switch configuration
- Fused protected inputs and outputs

### Warranty:

- 10 Years

Static pressure sensor & panel cover included

\*For ESP functionality, 3-wire MD dampers and static pressure sensor must be used

## Specifications:

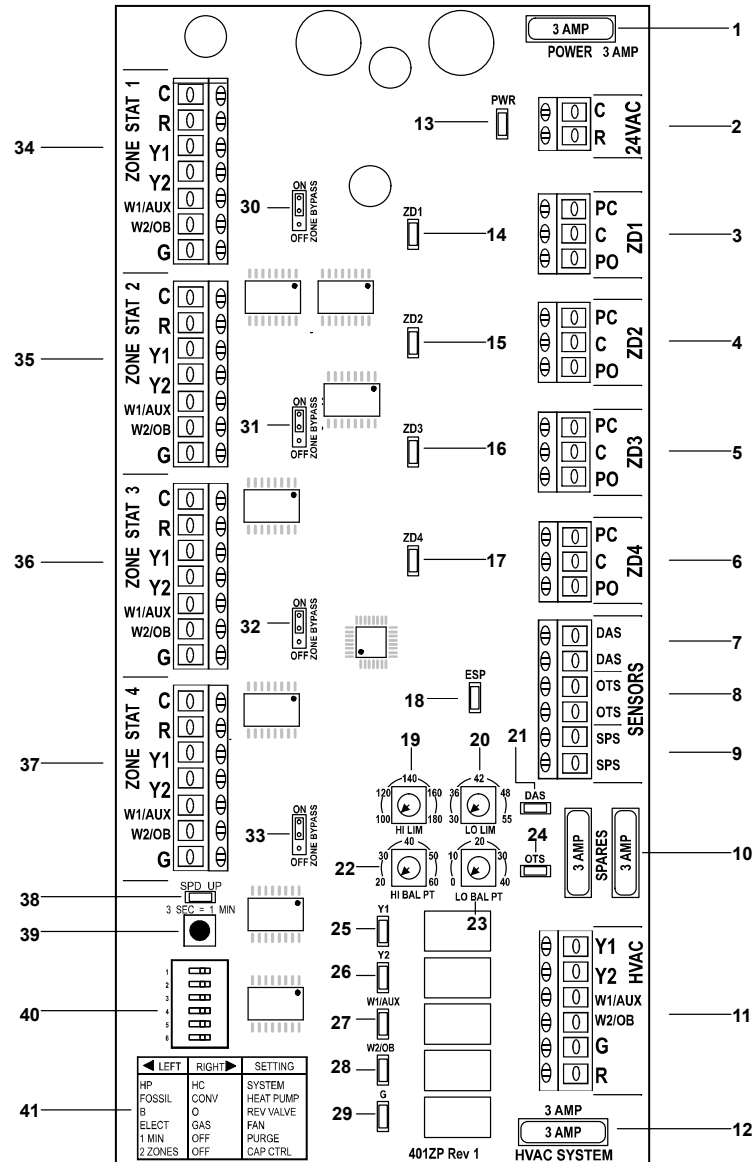
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|------------------------------|--|
| <b>Construction</b>          | Plastic ABS enclosure with snap-on panel cover                                 |
| <b>Mounting</b>              | Snap track with 2 back plate screws  |
| <b>Dimensions</b>            | 8.75" Height x 7" Width x 1.5" Depth   |
| <b>Operating Temperature</b> | -40° F to 150° F   |
| <b>Time Delays</b>           | 5 minute changeover; 3 minute off on high or low limit<br>20 minute time share |
| <b>Discharge Air Limits</b>  | Low Limit (30° F to 55° F); High Limit (100° F to 180° F)                      |



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# BOARD DIAGRAM



1. 3 AMP FUSE PROTECTS PRINTED CIRCUIT BOARD
2. 24 VOLT TRANSFORMER TERMINALS
3. ZONE 1 DAMPER TERMINALS
4. ZONE 2 DAMPER TERMINALS
5. ZONE 3 DAMPER TERMINALS
6. ZONE 4 DAMPER TERMINALS
7. DISCHARGE AIR SENSOR TERMINALS
8. OUTDOOR TEMPERATURE SENSOR TERMINALS
9. STATIC PRESSURE SENSOR TERMINALS
10. SPARE 3 AMP FUSES
11. HVAC EQUIPMENT TERMINALS
12. 3 AMP FUSE PROTECTS THE RELAY CONTACTS
13. PANEL POWER LED
14. ZONE DAMPER 1 LED
15. ZONE DAMPER 2 LED
16. ZONE DAMPER 3 LED
17. ZONE DAMPER 4 LED
18. ESP LED
19. HIGH LIMIT POTENTIOMETER
20. LOW LIMIT POTENTIOMETER
21. DISCHARGE AIR SENSOR LED
22. HIGH BALANCE POINT POTENTIOMETER
23. LOW BALANCE POINT POTENTIOMETER
24. OUTDOOR TEMPERATURE SENSOR LED
25. Y1 RELAY LED
26. Y2 RELAY LED
27. W1/AUX RELAY LED
28. W2/OB RELAY LED
29. G FAN RELAY LED
30. ZONE 1 BYPASS JUMPER
31. ZONE 2 BYPASS JUMPER
32. ZONE 3 BYPASS JUMPER
33. ZONE 4 BYPASS JUMPER
34. ZONE 1 THERMOSTAT TERMINALS
35. ZONE 2 THERMOSTAT TERMINALS
36. ZONE 3 THERMOSTAT TERMINALS
37. ZONE 4 THERMOSTAT TERMINALS
38. TIME DELAY SPEED UP LED
39. TIME DELAY SPEED UP BUTTON
40. SYSTEM CONFIGURATION SELECTOR SWITCHES
41. SYSTEM CONFIGURATION SWITCH DEFINITIONS



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