



AP010-2 controller component designation & glossary of terms

SW1 - Consists of 8 DIP switches.

- **DAI INV** - This reverses the polarity. DIP 6 inverts DA-2, DIP-1 inverts DA-1. When operating a 3-way valve or by-pass damper (swaps open and closed)
- **O INV** - This inverts the meaning of the O input from thermostat. Some heat pumps have a default O.
- **D INV** - This inverts the D input. Some front end humidity controllers make on rise (MOR) and some break on rise (BOR). Turn on for BOR and off for MOR.
- **PURGE** – Sends 24V to relays K6, K7 & K8 to energize pumps for purging loops without energizing other functions.
- **BYPASS** - By-passes the internal time delays. **FOR SERVICE ONLY.**

SW2 - Consists of 10 programmable positions for different applications.

- 0 - Dry-Air T Geothermal G-T-0-P-CL & G-T-0-P-OL (analog 1 & 2 capable)
- 0 - Dry-Air T Air Cooled AC-TEP-P W/Dip #4 ON (analog 1 & 2 capable)
- 0 - Dry-Air HGR Geothermal G-HGR-P-OL W/Dip #5 ON G-HGR-P-CL W/Dip #5 OFF (analog 1 & 2 capable)
- 1 - Dry-Air AC-P-S & AC-P-NC (Dip #5 ON when second temperature sensor is used)
- 1 - Dry-Air AC-P-100 W/Dip #4 ON
- 4 - Dry-Air G-100-P Open & Closed loop
- 6 - Veri-Dry V-DRY-Heat Pump (analog 1 & 2 capable for twinning units)
- 6 - Veri-Dry V-DRY- Non Heat Pump W/Dip #4 ON (analog 1 & 2 capable for twinning units)
- 9 - Dry-Air AC-OEM (analog 1 & 2 capable)

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| 1. | G-T-0-P2-CL |
| 2. | G = GEOTHERMAL |
| 3. | T = TAX CREDIT |
| 4. | 0 = AP CONTROLLER PROGRAM |
| 5. | P2 = 2 ND GENERATION CONTROLLER |
| 6. | CL = CLOSED LOOP |
| 7. | 100 = 100% POOL HEATING OPTION |
| 8. | OEM = OUTDOOR ENERGY MODULE |
| 9. | S = STANDARD |
| 10. | NC = NO COOLING |
| 11. | HGR = HOT GAS REHEAT |

SW3 - Consists of 8 DIP switches.

- K5 - K11 When turned on, energizes the C terminal with 24 volts.
- ISP - This is for uploading software to the controller. This switch must be **OFF** for normal operation

Status light:

For normal operation, the status light should be blinking continuously. If there are two blinks, check all dip switches and temperature sensor connections.

Relays:

There are 11 on board relays. K1 thru K4 are programmable to the CN1 output connections. K5 thru K11 are programmable switching relays for controlling peripherals.

CN1 – Output terminal connections to external equipment.

CN8 – Analog Input connection

CN12 – Input terminals for front end controllers i.e. thermostat, humidistat, pool heat inputs.

CN13 & CN14 – Digital input connections

CN16 – Two analog output connections (0-10 volt outputs for modulating actuators or sequencers)

NOTE: Some DRY-AIR units, Humidistat's and Thermostats will not show certain lettering. Assume it does not apply.