

## ReDAC Input/Output Module (RED-200-IO)



- USB connection to computer
- Standard DB25 connection to hardware
- 23 Analog Inputs
- 46 Digital Inputs
- 24 Digital Outputs
- Supported by P.I. Engineering SDK

The *ReDAC I/O Module* simplifies connection of input hardware to any USB capable Operating System. Input and output ports use standard DB25 connectors. Connection to the computer is via standard USB type A plug.

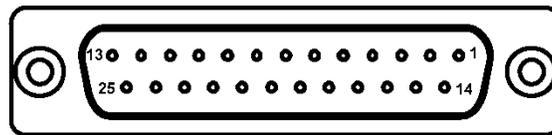
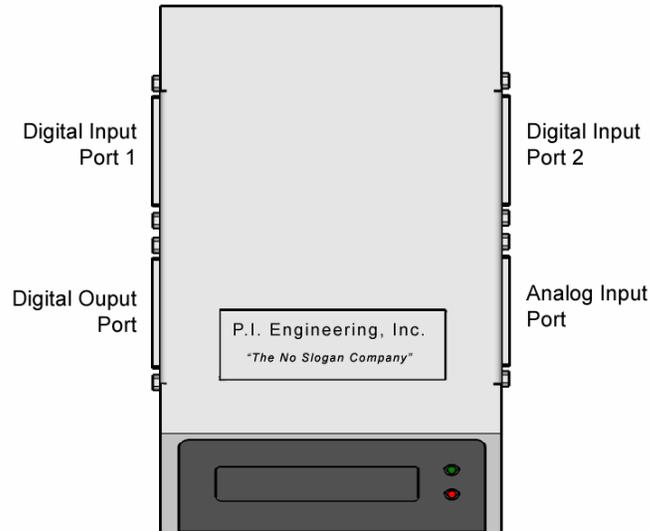
Software developers and hobbyists will appreciate the tools our Software Development Kit provides for converting 46 switch closures (signal to ground) and 23 variable levels (0-5 VDC) to data input for your software. The 24 digital outputs (0 or 5VDC) can be used to turn on LEDs, trigger optic relays, or actuate any low current device.

### Specifications

|                            |  |
|----------------------------|--|
| <b>Operating System</b>    | Any OS supporting USB HID  |
| <b>Included Software</b>   | P.I. Engineering SDK for Windows<br>Limited support for Mac OS X   |
| <b>Digital Input</b>       | (46) Signal to Ground<br>Wire length < 2,740 ft. (835 m)   |
| <b>Analog Input</b>        | (23) 0-5VDC<br>Recommended potentiometer: 10K – 50K center-tap   |
| <b>Digital Output</b>      | (24) 0 or 5VDC, 1K Ohm Impedance (5mA @ 5VDC)  |
| <b>Input Connector</b>     | (3) DB25 female  |
| <b>Output Connector</b>    | DB25 female  |
| <b>Computer Connection</b> | USB "A" plug (included)<br>Cable length: 10' (3 m)   |
| <b>Case Dimensions</b>     | 4.56" x 1.7" x 7.1", (51 mm x 44mm x 180mm)  |
| <b>Weight</b>              | 1.42 lbs. (0.62 kg)  |
| <b>Power Source</b>        | USB port power, nominal voltage = 5VDC   |
| <b>Power Consumption</b>   | Base Unit: Low power USB device, less than 15mA @ 5VDC<br>Digital Outputs: Up to 5mA @ 5VDC for each output used |

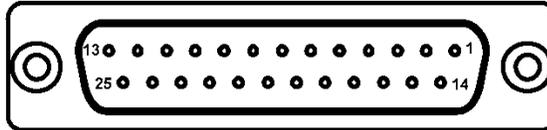
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## ReDAC Input/Output Module Pinout



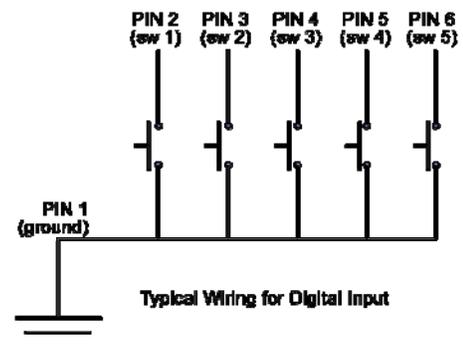
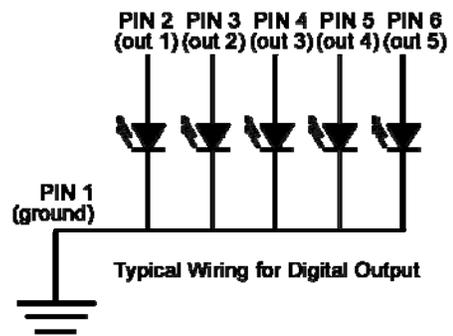
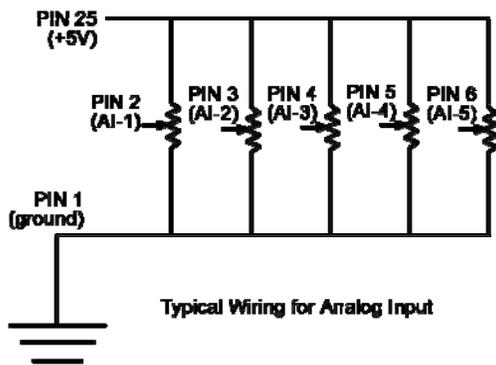
| Digital Input Port1 |                         |
|---------------------|-------------------------|
| PIN #               | Definition              |
| 1                   | Ground                  |
| 2                   | Digital In 1            |
| 3                   | Digital In 2            |
| 4                   | Digital In 3            |
| 5                   | Digital In 4            |
| 6                   | Digital In 5            |
| 7                   | Digital In 6            |
| 8                   | Digital In 7            |
| 9                   | Digital In 8            |
| 10                  | Digital In 9            |
| 11                  | Digital In 10           |
| 12                  | Digital In 11           |
| 13                  | Digital In 12           |
| 14                  | Digital In 13           |
| 15                  | Digital In 14           |
| 16                  | Digital In 15           |
| 17                  | Digital In 16           |
| 18                  | Digital In 17           |
| 19                  | Digital In 18           |
| 20                  | Digital In 19           |
| 21                  | Digital In 20           |
| 22                  | Digital In 21           |
| 23                  | Digital In 22           |
| 24                  | Digital In 23           |
| 25                  | + 5VDC 1K Ohm Impedance |

| Digital Input 2 |                         |
|-----------------|-------------------------|
| PIN #           | Definition              |
| 1               | Ground                  |
| 2               | Digital In 24           |
| 3               | Digital In 25           |
| 4               | Digital In 26           |
| 5               | Digital In 27           |
| 6               | Digital In 28           |
| 7               | Digital In 29           |
| 8               | Digital In 30           |
| 9               | Digital In 31           |
| 10              | Digital In 32           |
| 11              | Digital In 33           |
| 12              | Digital In 34           |
| 13              | Digital In 35           |
| 14              | Digital In 36           |
| 15              | Digital In 37           |
| 16              | Digital In 38           |
| 17              | Digital In 39           |
| 18              | Digital In 40           |
| 19              | Digital In 41           |
| 20              | Digital In 42           |
| 21              | Digital In 43           |
| 22              | Digital In 44           |
| 23              | Digital In 45           |
| 24              | Digital In 46           |
| 25              | + 5VDC 1K Ohm Impedance |



| Analog Input Port |                         |
|-------------------|-------------------------|
| PIN #             | Definition              |
| 1                 | Ground                  |
| 2                 | Analog In 1             |
| 3                 | Analog In 2             |
| 4                 | Analog In 3             |
| 5                 | Analog In 4             |
| 6                 | Analog In 5             |
| 7                 | Analog In 6             |
| 8                 | Analog In 7             |
| 9                 | Analog In 8             |
| 10                | Analog In 9             |
| 11                | Analog In 10            |
| 12                | Analog In 11            |
| 13                | Analog In 12            |
| 14                | Analog In 13            |
| 15                | Analog In 14            |
| 16                | Analog In 15            |
| 17                | Analog In 16            |
| 18                | Analog In 17            |
| 19                | Analog In 18            |
| 20                | Analog In 19            |
| 21                | Analog In 20            |
| 22                | Analog In 21            |
| 23                | Analog In 22            |
| 24                | Analog In 23            |
| 25                | + 5VDC 1K Ohm Impedance |

| Digital Output Port |                |
|---------------------|----------------|
| PIN #               | Definition     |
| 1                   | Ground         |
| 2                   | Digital Out 1  |
| 3                   | Digital Out 2  |
| 4                   | Digital Out 3  |
| 5                   | Digital Out 4  |
| 6                   | Digital Out 5  |
| 7                   | Digital Out 6  |
| 8                   | Digital Out 7  |
| 9                   | Digital Out 8  |
| 10                  | Digital Out 9  |
| 11                  | Digital Out 10 |
| 12                  | Digital Out 11 |
| 13                  | Digital Out 12 |
| 14                  | Digital Out 13 |
| 15                  | Digital Out 14 |
| 16                  | Digital Out 15 |
| 17                  | Digital Out 16 |
| 18                  | Digital Out 17 |
| 19                  | Digital Out 18 |
| 20                  | Digital Out 19 |
| 21                  | Digital Out 20 |
| 22                  | Digital Out 21 |
| 23                  | Digital Out 22 |
| 24                  | Digital Out 23 |
| 25                  | Digital Out 24 |



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