Arduino Relay

This is another in a series of Arduino Nano breakout boards which feature a Nano, some supporting circuitry and connectors intended to solve a particular task. In this case we needed to control a group of “Arduino Relays” which in turn controlled a group of Sound Animation modules. The board has a socket for the Nano and 4 sets of male headers which correspond to the +5, GND and inputs for various configurations of Arduino Relay. Power filtering is provided as are a choice of 2.1 mm barrel jack and 3.5mm screw terminals.

* 2 x 10 position 0.100 headers for either 2 8 position or 1 16 position Arduino Relay (D2-D13 + A0-A3) Each header has Ground, +5 and 8 outputs
* 4 x 6 position 0.100 headers for 4 position Arduino Relays (D2-D13 + A0-A3)
* 4 x 4 position 0.100 headers for 2 position Arduino Relays
* 4 x 3 position 0.100 headers for single Arduino Relays (note the pattern is different for the singlets)
* Barrel Jack for 5VDC (1A recommended) as well as 2 pairs of +5/GND on the 3.5 mm screw terminal, you can use either or use the screw terminal to distribute power to adjacent modules
* 0.100” Pads are provided for the unused Arduino i/o pins and +5 and Ground

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Arduino  Pin | 8/16 | 4 | 2 | 1 |
| D2 | 0 | 0 | 0 |  |
| D3 |  |
| D4 | 1 |  |
| D5 |  |
| D6 | 1 | 2 |  |
| D7 |  |
| D8 | 3 |  |
| D9 |  |
| D10 | 1 | 2 |  | 0 |
| D11 |  | 1 |
| D12 |  | 2 |
| D13 |  | 3 |
| A0 | 3 |  |  |
| A1 |  |  |
| A2 |  |  |
| A3 |  |  |

Note that there is no magic about Arduino Relays: this board can be used to consolidate i/o and power to any type of device you like and there are many sensors and output devices compatible with Arduinos that may use this cabling.