

## DMUX <br> PWM To 4 or 8 Addressable Relays

The DMUX is a selectable output controller designed to expand the output capacity of an energy management or process controller. The DMUX has up to eight output relays which can be individually addressed by a single pulse width modulated input signal. Common (C), Normally Open (NO), and Normally Closed (NC) connections are available for each output. Three position On/Off/Auto jumpers are standard and allow manual override at the DMUX. It converts a relay, transistor or Triac input signal to operate an appropriate relay output based on the duration of the signal. Each relay output of the DMUX can be individually addressed by the controlling microprocessor. The relay output has an LED indicator for a visual verification of operation. There are also LED indicators to show the presence of power to the DMUX and the input pulse. This device is DIP switch selectable for sequencing or controlling up to 8 relays. DMUX-4-J: Sequence 4 relays or One of 4 or Individual Relay Control or Rooftop Unit Control. DMUX-8-J: Sequence 8 relays or One of 8 relays or Individual Relay Control or Rooftop Unit Control. DMUX-4N: Sequence 4 relays or One of 4. DMUX-4S: Sequence 4 relays or Reverse Sequence 4 relays or Rooftop Unit 4 relay control. DMUX-8S: Sequence 8 relays or Rooftop Unit 8 relay control or Rooftop Unit 5 relay control.

Applications: Input or Output Expander / Multiplexer, Building Automation Systems, Process Control Systems, HVAC Unit Control, Sprinkler Valve Operation, Lighting Control

The DMUX is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors \& Transmitters catalog, as well as on ACI's website, www.workaci.com.

## PRODUCT SPECIFICATIONS

| Supply Voltage: | 24 VAC or 24 VDC, (+/- 10\%), $50 / 60 \mathrm{~Hz}$ |
| :---: | :---: |
| Supply Current: | 260 mA maximum |
| Input Pulse Source: | Relay Contact Closure, Transistor or Triac (jumper selectable) |
| Input Pulse Trigger Level: | 5 to 24 volts AC or DC, 20 mA maximum |
| Input Pulse Timing: | See Ordering Grid |
| Off Time Between Pulses: | 10 milliseconds minimum |
| Digital Output Type: | Form "C" Relays |
| Relay Contact Rating: | 2A maximum @ 24 VDC |
| Relay Electrical Life: | 100,000 operations minimum |
| Relay Mechanical Life: | 1,000,000 operations |
| Output Relay: | 4 or 8 (See Ordering Grid) N.O. and N.C. contacts |
| Relay Override Jumpers: | Three-position (ON/OFF/AUTO) |
| Connections: | $45^{\circ}$ Captive screw Terminal Blocks |
| Wire Size: | 12 (3.31 mm²) to 22 AWG ( $0.33 \mathrm{~mm}^{2}$ ) |
| Terminal Block Torque Rating: | 0.5 Nm (Minimum); 0.6 Nm (Maximum) |
| Operating Temperature Range: | 35 to $120^{\circ} \mathrm{F}\left(1.7\right.$ to $\left.48.9^{\circ} \mathrm{C}\right)$ |
| Operating Humidity Range: | 10 to $95 \%$ non-condensing |
| Storage Temperature: | -20 to $150^{\circ} \mathrm{F}\left(-28.9\right.$ to $\left.65.5^{\circ} \mathrm{C}\right)$ |
| Snaptrack Material: | Polyvinyl Chloride (PVC) |
| Snaptrack Flammability Rating: | UL94 V-0 |
| Product Dimensions: | (L) $4.825^{\prime \prime}$ (W) $3.22^{\prime \prime}$ (H) $1.00^{\prime \prime}(122.55 \times 81.92 \times 25.4 \mathrm{~mm}$ ) |
| Product Weight (4 Relay Models): | $0.36 \mathrm{lbs} .(0.1616 \mathrm{Kg})$ |
| Product Weight (8 Relay Models): | $0.45 \mathrm{lbs} .(0.2041 \mathrm{Kg}$ ) |
| Agency Approvals: | RoHS2, WEEE |

DIMENSIONAL DRAWING


## STANDARD ORDERING

| Model \# | Item \# | Firmware Version \# | \# of Relays | Input Pulse |
| :---: | :---: | :---: | :---: | :---: |
| DMUX-4-J | 106318 | 0180100C.OBJ | 4 | 0.5 S or 15 Resolution |
| DMUX-8-J | 102425 | 0180100C.OBJ | 8 | 0.5 S or 1 S Resolution |
| DMUX-4N | 133907 | 0130YOB.HEX | 4 | Novar ${ }^{\text {TM }}$ 0.59-2.93 |
| DMUX-4S | 128206 | 0326yOa.HEX | 4 | Solidyne ${ }^{\text {TM }}$ Fast 4 Pulse |
| DMUX-8S | 129609 | 01804100.OBJ | 8 | Solidyne ${ }^{\text {TM }}$ Fast 5 Pulse |


| ACCESSORIES |  |  |  |
| :---: | :---: | :---: | :---: |
| Model \# | Item \# | Description |  |
| A/D0008 | 142583 | Transient Voltage Suppressor, Bi-directional, 56 VAC/DC, 1500W |  |
| A/DRC 4.69 X 3.25 | 142620 | DIN Rail Adapter Kit |  |

