**Dagu Rover 5 Motor Controller**

Dagu motor controller 5V logic

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| **Dagu Rover 5 Motor Controller Interfaces** | | |
| Interface | Connector | Description |
| Control I/O | J1 CH1/2 | Channel 1 and 2 |
|  | J2 CH3/4 | Channel 1 and 2 |
| Encoder I/O | J3 | Encoder 1 |
|  | J4 | Encoder 2 |
|  | J5 | Encoder 3 |
|  | J6 | Encoder 4 |
| Power Input | J9 | Motor Power |
|  | J10 | Vlogic |
| Motor Output | CH1+/- | Channel 1 |
|  | CH2+/- | Channel 2 |
|  | CH3+/- | Channel 3 |
|  | CH4+/- | Channel 4 |

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| **Control Input/Output** | | | | | |
| J1: | CH1 | CH2 | Channel 1 / Channel 2 | | |
| J2: | CH3 | CH4 | Channel 3 / Channel 4 | | |
|  | Pin | Pin | Label | Description | Value |
|  | 1 | 5 | GND | Ground | 0 V |
|  | 2 | 6 | PWM | Motor speed input | 0 V off, 5 V max |
|  | 3 | 7 | CUR | Motor current output | 1 V/A, 5 V max |
|  | 4 | 8 | DIR | Motor direction input | 5 V forward, 0 V reverse |

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| **Encoder Input/Output** | | | |
| J3 | Encoder 1 I/O | | |
| J4 | Encoder 2 I/O | | |
| J5 | Encoder 3 I/O | | |
| J6 | Encoder 4 I/O | | |
| Pin | Label | Description | Value |
| 1 | VCC | 5V Power | 5 V |
| 2 | INT | Interrupt output |  |
| 3 | AIN | Signal A input |  |
| 4 | AOUT | Signal A output |  |
| 5 | BIN | Signal B input |  |
| 6 | BOUT | Signal B output |  |
| 7 | GND | Ground | 0 V |
| 8 | GND | Ground | 0 V |

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| **Encoder I/O** | | | | | |
|  |  |  |  |  |  |
| J3/J4/J5/J6 | | | | | |
| 5 V | VCC | 1 | 2 | INT | A XOR B |
| Signal A | ENC-A | 3 | 4 | ENC-A | Signal A |
| Signal B | ENC-B | 5 | 6 | ENC-B | Signal B |
| 0 V | GND | 7 | 8 | GND | 0 V |
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| **Power Input** | | | | |
| Connector | Pin | Label | Description | Value |
| J9 | 1 | +UB | Motor Power | 4.5-12 V |
|  | 2 | GND | Ground | 0 V |
| J10 | 1 | VCC | Vlogic Power | 5 V |
|  | 2 | GND | Ground | 0 V |

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| **Motor Output** | | |
| Pin | Description | Value |
| CH1+  CH1- | Channel 1 | 4.5-12 V,  4.5 A max  per channel |
| CH2+  CH2- | Channel 2 |
| CH3+  CH3- | Channel 3 |
| CH4+  CH4- | Channel 4 |

Summary:

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| **Dagu Rover 5 Motor Controller Interfaces** | | | | | | |
|  | Connector | | Pin | Label | Description | Value |
| Control I/O | J1 | CH1 / CH2 | 1/5 | GND | Ground | 0 V |
|  | J2 | CH3 / CH4 | 2/6 | PWM | Motor speed input | 0 V off, 5 V max |
|  |  |  | 3/7 | CUR | Motor current output | 1 V/A, 5 V max |
|  |  |  | 4/8 | DIR | Motor direction input | 5 V forward, 0 V reverse |
| Encoder I/O | J3 | Encoder 1 | 1 | VCC | Power | 5 V |
|  | J4 | Encoder 2 | 2 | INT | Interrupt output |  |
|  | J5 | Encoder 3 | 3 | AIN | Signal A input |  |
|  | J6 | Encoder 4 | 4 | AOUT | Signal A output |  |
|  |  |  | 5 | BIN | Signal B input |  |
|  |  |  | 6 | BOUT | Signal B output |  |
|  |  |  | 7 | GND | Ground | 0 V |
|  |  |  | 8 | GND | Ground | 0 V |
| Power Input | J9 | Motor | 1 | +UB | Power | 4.5-12 V |
|  |  |  | 2 | GND | Ground | 0 V |
|  | J10 | Vlogic | 1 | VCC | Power | 5 V |
|  |  |  | 2 | GND | Ground | 0 V |
| Motor Output | Motor 1 Output | | CH1+  CH1- | | Channel 1 | 4.5-12 V  4.5 A max |
|  | Motor 2 Output | | CH2+  CH2- | | Channel 2 | 4.5-12 V  4.5 A max |
|  | Motor 3 Output | | CH3+  CH3- | | Channel 3 | 4.5-12 V  4.5 A max |
|  | Motor 4 Output | | CH4+  CH4- | | Channel 4 | 4.5-12 V  4.5 A max |

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