

Roboteq

Motor Control Utility
 Rev 1.7. 10/27/16

View Pinout...
 Script: Run Pause Restart

Controller Model: MDC2230
 COM Port: Auto

☐ Work Offline

Configuration

Run

Console

Scripting

Inputs/Outputs

Start-up

Commands

Command Priorities

Priority 1: Pulse
 Priority 2: RS232
 Priority 3: None

Default Command Value

Command Adjustments

Command Safety

CAN

Encoders

Digital Inputs

Analog Inputs

Pulse Inputs

Pln1:

Capture Type: Pulse Width
 Input Use: Motor Command (1)

Range: Calibrate

Input Min: 1000
 Input Center: 1500
 Input Max: 2000
 Capture Polarity: Direct
 Input Deadband (%): 5
 Action on Min: No Action
 Action on Max: No Action

Pln2:

Pln3:

Pln4:

Pln5:

Pln6:

Digital Outputs

Power Output

General

PWM Frequency (kHz): 18.0

Voltage Limits

Over Voltage Limit (V): 35.0
 Over Voltage Hysteresis (V): 5.0
 Under Voltage Limit (V): 18.0
 Short Circuit Protection: Medium
 Brake Delay (ms): 250
 Mixing: Mixed Mode 1

Motor1 Output

Motor Configuration

Motor Direction: Direct
 Stall Detection: 500ms @ 25% Power

Amps Limits

Amps Limit (A): 40.0
 Amps Trigger (A): 60.0
 Amps Trigger Delay (ms): 500
 Amps Trigger Action: No Action

Power Adjust

Max Power Fwd (%): 100
 Max Power Rev (%): 100

Speed & Acceleration

Max Speed (RPM): 3500
 Acceleration (RPM/s): 2000.0
 Deceleration (RPM/s): 2000.0
 Operating Mode: Open Loop

Closed Loop Parameters

Motor2 Output

Load from Controller

Save to Controller

Reset Defaults ...

Add / Remove Lock

Found: COM1 COM4

COM4 is Open

Firmware ID: Roboteq v1.7 MDC2XXX 10/13/2016 Connected

Priority is to Pulse, the Traxxis Radio Controller, then RS232.

- Pulse Inputs 1-4 set like #1. They appear to be default settings.
- All others disabled.

- Voltage limits need to be set as shown
- Mixing set to Mode 1
- The rest of these values appear to be default values.

Current Commands to send to Roboteq	
Commands	Reason
^CPRI 1 1	Pulse In as first priority
^CPRI 2 0	Serial is second priority
^OVL 350	Set over voltage to 35.0 volts
^UVL 180	Set under voltage to 18.0 volts
^MAC 1 20000	Set acceleration rate for motor 1
^MAC 2 20000	Set acceleration rate for motor 2
^MXRPM 1 3500	Set maximum rpm for motor 1
^MXRPM 2 3500	Set maximum rpm for motor 2
^MXMD 1	Set mixed to Mode 1
^PMOD 0 1	Enable all Pln
^PMOD 5 0	Disable Pln 5