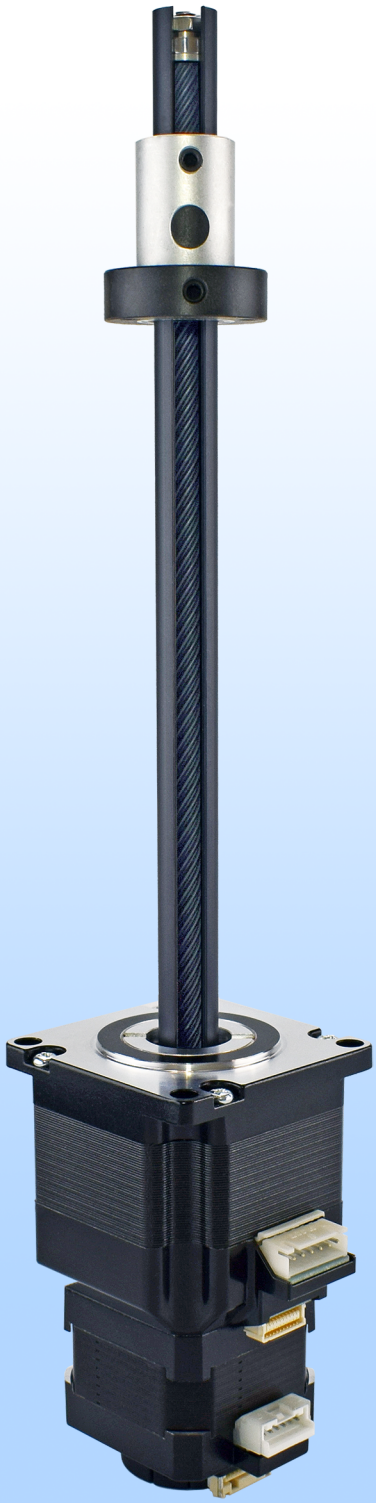
Haydon kerk Motion Solutions

PITTMAN

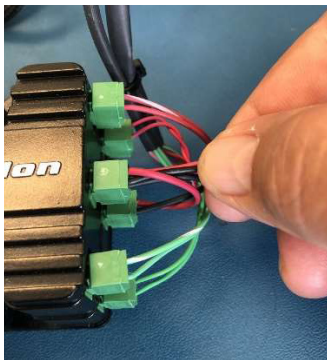
Quick Start Guide

Z-Theta Dual-Motion Actuator

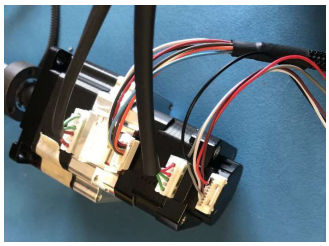


Hardware Setup / Connections

1. Connect the two power supply cable plugs into the connectors located in the center of the dual-axis drive unit. Wire the power cable red lead wire to the positive terminal of the DC power supply. Then, wire the power cable black lead wire to the ground or negative terminal of the DC power supply rated for 5Amp current. Drive input voltage range is between 12VDC and 60 VDC.



2. Connect the encoder and motor phase lead cables eminating from the dual-axis drive unit to the Z-Theta actuator assembly. Cable plugs are unique for each connector type.



3. Plug the USB / RS-485 converter into a PC USB port.

4. Connect the RS-485 communications cable to the unit.

5. Copy the Z-Theta program onto the PC. Apply DC supply voltage to the unit and double-click the icon to launch the dual-axis motion control interface program.

Set-Up / Configuration Procedure

1. Enter the lead of the linear screw in units of inches traveled per revolution of the screw.

2. Select the desired units of display for linear and angular position.

3. Enable **End-of-Move** position correction if desired. End-of-Move position correction uses encoder feedback to correct for final position error at the end of the move.

Homing Procedure (If Desired)

1. Enable homing by clicking **Homing** button.

2. Command a slow move with minimum motor current to run into a physical stop.

3. After the move completes, command a new move from the physical stop to the desired position of origin.

4. Zero the origin position by clicking **Set Origin Position** button.

Executing Motion

1. Motions commanded are in units of relative distance from the current resting position.

2. Linear or rotary moves must be commanded independently:
   - Enter a zero for distance in rotary column when commanding a linear move.
   - Enter a zero for distance in linear column when commanding a rotary move.

3. Enter the desired motion command profile parameters.

4. Click the **Run** button to execute the motion.

5. Click the **Stop** button to immediately stop motion and hold the instantaneous position.

6. Click the **Abort** button to de-energize the motor.

GUI Dual-Axis Command Interface Descriptions

Configuration / Set-Up Parameter

Homing Command Parameter

Motion Command Parameter