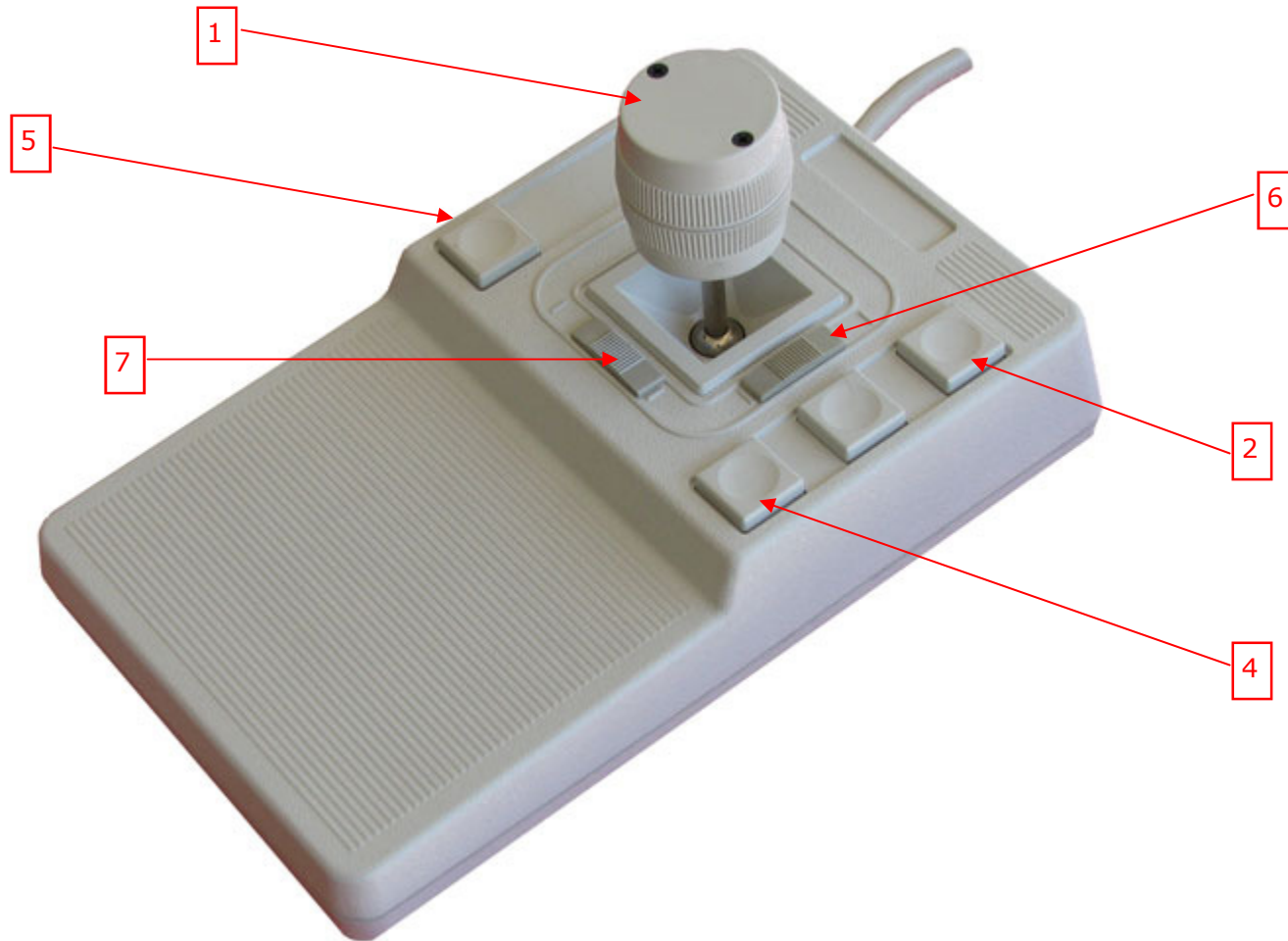


## Four-axis Joystick Motion Controller with Quadrature Signal Outputs, JMC-4-02



**Optimal Engineering Systems, Inc.**  
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**Four-axis Pre-wired Joystick with 3 Speed Selection Keys, Quadrature Signal Outputs per Axis**

25-pin DB-25, Male Connector

Cable Length = 5.5 ft (168 cm)

All output signals are TTL compatible. All other pins are not connected.

PIN	SIGNAL	DESCRIPTION
7	CHA-X	Channel-A of Quadrature Signal Output of X-Axis
8	CHB-X	Channel-B of Quadrature Signal Output of X-Axis
10	CHA-Y	Channel-A of Quadrature Signal Output of Y-Axis
11	CHB-Y	Channel-B of Quadrature Signal Output of Y-Axis
17	GND	System Ground
19	+5 VDC	+5 VDC Input
20	CHA-W	Channel-A of Quadrature Signal Output of W-Axis
21	CHB-W	Channel-B of Quadrature Signal Output of W-Axis
22	CHA-Z	Channel-A of Quadrature Signal Output of Z-Axis
23	CHB-Z	Channel-B of Quadrature Signal Output of Z-Axis



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- 1- Move the joystick to left and right to move the X-axis motor.  
Move the joystick to up and down to move the Y-axis motor. Press key 5 to move the W-axis motor.  
Turn the knob CW and CCW move the Z-axis motor.
- 2- Press this button to select the high speed mode.
- 4- Press this button to select the low speed mode.
- 5- Press this button and move the joystick up and down to move the W-motor.
- 6- Push the slide downward to engage the joystick.
- 7- Push the slide to the right to engage the joystick.

Channel-A Output



Channel-B Output



Tilt Angle



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