

### Mason<sup>™</sup> Tracducer<sup>™</sup> Cursor Control Device (CCD)

High-reliability solution for precise cursor control in demanding environments.

# Tracducer CCD offers reliable input, smooth cursor control through superior ergonomics and user adjustability

The Tracducer CCD from Esterline is a multifunctional controller engineered for rugged performance and ease of use in aviation and ground applications. It is particularly adapted to high-vibration environments such as helicopters.

# Features and Benefits

- Precise cursor control for fast-slew, high-click usage in high-vibration environments
- Human factors design in accordance with MIL-STD-1472
- Rotational adjustability for operator comfort when location is constrained and space limited
- Right and left-hand units available
- Software development per DO-178B, Level C
- Environmental performance per MIL-STD-810 or RTCA/DO-160, with EMI per MIL-STD-461





# **Mason Tracducer CCD**

# **General Specifications**

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Dimensions	6.38 x 5.75 x 3.40 inches (162 x 146 x 86.3 mm) maximum (LxWxH)
Depth from mounting surface (including connector)	2.70 inches (68.5 mm) maximum
Overall height	6.10 inches (155 mm) maximum
Weight	2.75 pounds (1.25 kg) maximum
Mounting interface	Dimensions per MS25212 with six quarter-turn Dzus studs
Grip rotation	Right-hand grip rotates clockwise 25° in 5° increments, for six positions from center; left-hand grip mirrors this.
Digital interface	Two RS422 outputs and one USB 2.0
Power requirements	+28 VDC
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## Actuation

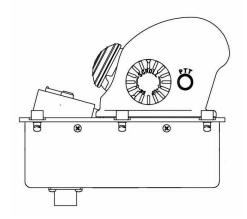
Joystick actuation force	12±4 ounces (340±113 g) slew and 60±10 ounces (1701±284 g) pushbutton
Joystick travel	Slewing ±25° (50° total) and pushbutton 0.04 inch (1.0 mm) minimum
Grip detent break-out force (torque)	6-18 inch pounds (0.67-2.03 newton meters)

# 25° ROTATION 1.40 inches (35.6 mm)

## Environmental

The Tracducer CCD is designed and developed specifically to meet the standards of MIL-STD-810 or RTCA/DO-160, and of MIL-STD-461 for EMI performance.

- Altitude
- Temperature variation
- Vibration
- Operational shock
- Limit loads
- Crash safety shock
- Ultimate loads
- Low temperature
- High temperature
- Humidity
- Magnetic effect
- Power input
- Voltage spike
- · Audio-frequency conducted susceptibility
- Induced signal susceptibility
- Radio-frequency susceptibility
- Emission of radio-frequency energy
- Lightning-induced transient susceptibility
- Electrostatic discharge
- Fungus resistance



For more information about the Tracducer CCD, call us at 818-361-3366 or email mason.sales@esterline.com.

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