Mason™ Tracducer™ 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

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

Actuation

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joystick actuation force</td>
<td>12±4 ounces (340±113 g) slew and 60±10 ounces (1701±284 g) pushbutton</td>
</tr>
<tr>
<td>Joystick travel</td>
<td>Slewing ±25° (50° total) and pushbutton 0.04 inch (1.0 mm) minimum</td>
</tr>
<tr>
<td>Grip detent break-out force (torque)</td>
<td>6-18 inch pounds (0.67-2.03 newton meters)</td>
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</tbody>
</table>

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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