



Impulse Stick[®]

Force Feedback Joystick

(CIS-56000-SYS)



Overview

The Impulse Stick is a robust joystick designed for rugged applications including location based entertainment and industrial control. In this device a local microprocessor loads and plays haptic effects. This microprocessor closes the haptic control loop, relieving your host computer of this burden. You can update forces that are being played by the microprocessor approximately 100 times per second. Impulse Stick is Windows DirectX and Immersion I-Force 2.0 compatible. Communication is via a USB 1.1 interface. The Immersion Studio[®] for Gaming Software Development Kit (Windows-only, optional) can be used as a rich, real-time graphical development and test tool for the device.

Specifications

Construction Features

- Heavy duty steel chassis:
 - 12" w x 9.5" d x 4" h
- Belt transmission: 4:1
- Range of motion: 40 degrees
- Positional resolution: .01 degrees
- Molded plastic handle with trigger and thumb buttons:
 - handle length: 5.5"
 - attaches 1" up from top of chassis
 - total length 6.5" from top of chassis
- Power: 24VDC, 6.5A

Forces

- Max force: 14.5N (3.5 lbf)
- Continuous force: 8.5N (1.9lbf)
- Torque sensitivity: 14.8 oz-in/A

Host Compatibility

Communications

- USB 1.1

Protocol

- Windows DirectX
- Immersion I-Force 2.0

Operating System

- Windows XP
- Windows 2000

Supported Effects

Position Effects

- Spring
- Slope
- Damper
- Friction
- Inertia
- Axis and angle walls

Time Based Effects

- Vector (constant) force
- Periodic
- Pulse

Included Items

- High power joystick (CIS-56000-SYS)
- Driver for Windows XP and 2000
- 110VAC/220VAC input, 24VDC output power supply (CPS24-U)
- Country specific power cable (CCABLE-IEC-xxx)
- *optional*: Immersion Studio for Gaming SDK (CS-Immersion Studio-SDK)

Contact Information

- Immersion Corporation, 801 Fox Lane, San Jose, CA 95131 USA
- Phone: +1 408 467-1900
- Fax: +1 408 467-1901
- Email: controls@immersion.com
- Web Site: www.immersion.com

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