

5DT Data Glove Series



5DT Data Glove 5



5DT Data Glove 16

Description

5DT Data Glove 5

The 5DT Data Glove 5 measures finger flexure (1 sensor per finger) and the orientation (pitch and roll) of the user's hand. It can emulate a mouse as well as a baseless joystick.

5DT Data Glove 16

The 5DT Data Glove 16 is (currently) a 14-sensor data glove that measures finger flexure (2 sensors per finger) as well as the abduction between fingers. It is the higher-end version of the 5DT Data Glove 5.

5DT Data Glove MRI

The 5DT Data Glove MRI is the 5DT Data Glove 5 optimized for use in Magnetic Resonance Imaging [MRI] environments. The glove itself does not contain any magnetic parts. It communicates with a control box (3m away) via optical fiber.

General Features of the 5DT Data Glove series

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|-------------------------------------------------------|-------------------------------------------|
| Affordable quality | Extreme comfort |
| One size fits many | Cross-platform software drivers |
| Bundled software | High update rate |
| On-board processor | Low crosstalk between fingers |
| Wireless versions available | Quick "hot release" connection |
| Platform independent - serial port interface (RS 232) | Right- and left-handed versions available |
| Open architecture | |

Specific Features

5DT Data Glove 5

- 8-bit flexure resolution
- Built-in 2-axis tilt sensor
- Mouse emulation mode (not for wireless model)

5DT Data Glove 16

- Automatic calibration - minimum 8-bit flexure resolution

5DT Data Glove MRI

- No magnetic parts in glove

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Technical Specifications

	5DT Data Glove 5	5DT Data Glove 16
Material:	Black stretch lycra	Black stretch lycra
Flexure resolution:	8-bit A/D	12-bit A/D. Minimum dynamic range is 8 bits.
Flexure sensors:	Fiber optics based 5 Sensors in total 1 Sensor per finger	Fiber optics based 14 Sensors in total 2 Sensors per finger. Abduction sensors between fingers.
Computer interface:	RS 232 (TX, RX, RTS, GND) 8 Data bits, 1 stop bit, no parity 19200 bps (transmit and receive) [9600 bps for wireless version]	RS 232 (TX, GND) 8 Data bits, 1 stop bit, no parity 19200 bps (transmit only) [9600 bps for wireless version]
Power supply:	7.5V DC center positive (150mA)	7.5V DC center positive (150mA)
Sampling rate:	The full hand (5 sensors plus 2 tilt angles) may be sampled at up to 200 times per second.	The full hand (14 sensors) may be sampled at up to 100 times per second.
2-Axis tilt sensor:	±60° Linear range (8-bit)	No tilt sensor
Wireless transmission frequency:		Right-handed wireless glove: 418MHz Left-handed wireless glove: 433.92MHz
Wireless range:		Up to 30m

Software

Calibration and testing software, drivers, demos and programming examples are supplied with the glove. Software drivers for Win 9X/NT/2000 (free), Linux (free) and Unix are available. The drivers (as well as highly detailed user manuals) may be downloaded from the 5DT web site. The 5DT Data Glove Series is also supported by most mainstream animation programs.

Options (right- and left-handed versions are available)

5DT Data Glove 5	5 Sensor data glove with 2-axis tilt sensor
5DT Data Glove 5-W	5 Sensor data glove with 2-axis tilt sensor; wireless
5DT Data Glove 16	14 Sensor data glove
5DT Data Glove 16-W	14 Sensor data glove; wireless
5DT Data Glove MRI	5 Sensor data glove for MRI environments (no tilt sensor)

About 5DT

5DT <Fifth Dimension Technologies> is a high technology company specializing in Virtual Reality [VR]. 5DT develops, produces, and distributes affordable VR hardware, software and systems. 5DT also develops custom systems for clients.

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