Data Glove Ultra Series

The 5DT Data Glove Ultra has been designed to satisfy the stringent requirements of modern Motion Capture and Animation Professionals.

It offers comfort, ease of use, a small form factor and multiple application drivers. The high data quality, low cross-correlation and high data rate make it ideal for realistic realtime animation.

Features

- **Advanced Sensor Technology**
  This new range of data gloves from 5DT features a completely redesigned sensor technology. The new sensors make these gloves more comfortable and give more consistent data across a large range of hand sizes. Cross-correlation has been reduced significantly.

- **5 and 14 Sensor Gloves Available**
  The 5DT Data Glove Ultra range is available in a 5 sensor and 14 sensor configuration with a host of options such as right- and left-handed versions.

- **Interface Options**
  The Ultra range of data gloves now comes standard with a USB interface, eliminating the need for an external power supply. An open-source, open-platform serial interface is available for workstation or embedded applications.

- **Bluetooth Wireless Option**
  A wireless option is available, based on the latest Bluetooth technology for high bandwidth, wireless connectivity up to a range of 20m. The wireless kit can run for 8 hours off a single battery pack. The battery pack can be exchanged in seconds when necessary.

- **Cross-Platform SDK**
  The glove SDK is available for Windows as well as Linux and UNIX. It is also possible to interface the glove without the SDK since it has an open-source communications protocol.

- **Wide Application Support**
  The 5DT Data Glove is now supported in most of the leading 3D modeling and animation packages.

Options

- 5 & 14 Sensor Gloves
- Wireless Kit
- Serial Interface Kit
- MRI Glove Versions
- Kaydara MOCAP Driver
- Discreet 3DS Max Driver
- Alias Maya Driver
- Softimage|XSI Driver
- UNIX Driver

Specifications

<table>
<thead>
<tr>
<th></th>
<th>5DT Data Glove 5 Ultra</th>
<th>5DT Data Glove 14 Ultra</th>
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<tbody>
<tr>
<td>Material</td>
<td>Black Stretch Lycra</td>
<td>Black Stretch Lycra</td>
</tr>
<tr>
<td>Sensor Resolution</td>
<td>12-bit A/D (typical range 10 bits)</td>
<td>12-bit A/D (typical range 10 bits)</td>
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<tr>
<td>Flexure Sensors</td>
<td>Fiber Optics Based</td>
<td>Fiber Optics Based</td>
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<tr>
<td></td>
<td>5 Sensors in total</td>
<td>14 Sensors in total</td>
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<tr>
<td></td>
<td>1 Sensor per finger, measures average of knuckle and first joint.</td>
<td>2 Sensors per finger, one sensor for knuckle and one for first joint.</td>
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<tr>
<td>Computer Interface</td>
<td>Full-speed USB 1.1</td>
<td>Full-speed USB 1.1</td>
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<tr>
<td></td>
<td>RS-232 (via optional serial interface kit)</td>
<td>RS-232 (via optional serial interface kit)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Via USB Interface</td>
<td>Via USB Interface</td>
</tr>
<tr>
<td>Sampling Rate</td>
<td>Minimum 75Hz</td>
<td>Minimum 75Hz</td>
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Application Drivers
The 5DT Data Glove is now supported in more applications than ever before, including
- Kaydara MOCAP
- Discreet 3D Studio Max
- Alias Maya
- SoftImage|XSI
The drivers allow for the animation of hands as well as using the glove as a puppeteering tool.

SDK and GloveManager Utility
The 5DT Data Glove Ultra series is supported by a cross-platform SDK for Windows, Linux and UNIX operating systems. Included as standard for Windows is the GloveManager utility which allows you to do the following:
- Perform glove diagnostics
- Record glove data to file
- Support multiple gloves simultaneously
- Stream TCP/IP data for remote operation
- Perform automatic calibration
- Fine-tune calibration
- Create, save & load calibration

5DT Ultra Wireless Kit
The 5DT Ultra Wireless Kit is a plug-and-play kit for the 5DT Ultra series of data gloves. Each belt-worn wireless kit is designed to transmit the data for 2 gloves simultaneously. This means that a single wireless transceiver and single battery pack is used for both gloves, saving both space and power. Up to 4 wireless kits (8 gloves) can be used at the same time.
- Latest 2.4GHz Bluetooth spread-spectrum technology
- Long battery life - more than 8 hours
- Small form factor - 4.33x3.27x1.65in (110x83x42mm)
- Light weight - 10.6oz (300g) with battery pack
- Belt included as standard
- Spare battery pack included

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 offers a wide range of Training Simulators and Computer Based Training (CBT) Systems in the Aerospace, Automotive, Defense, Entertainment, High Voltage, Marine, Medical, Mining, Sensor Modeling, Terrain Database and Visualization arenas.