

The CyberGlove\* is a fully instrumented glove that provides up to 22 high-accuracy joint-angle measurements. It uses proprietary resistive bend-sensing technology to accurately transform hand and finger motions into real-time digital joint-angle data.

The 22-sensor CyberGlove has three flexion sensors per finger, four abduction sensors, a palm-arch sensor, and sensors to measure flexion and abduction. Each sensor is extremely thin and flexible being virtually undetectable in the lightweight elastic glove.

The CyberGlove has been used in a wide variety of real-world applications, including digital prototype evaluation, virtual reality biomechanics, and animation. The CyberGlove has become the *de facto* standard for high-performance hand measurement and real-time motion capture.

## **Specifications**

- Sensor Resolution: 0.5 degrees (typical)
- Sensor Repeatability: I degree (typical std. dev. between glove wearings)
- Sensor Linearity: 0.6% maximum nonlinearity over full joint range
- Sensor Data Rate: 150 records/sec (unfiltered); 112 records/sec (filtered). Programmable sample period of polled I/O (Rates listed are for 18-sensor records at 115.2 kbaud. Higher rates possible with fewer sensors enabled)
- CyberGlove: One size fits most; 3 oz, 10 ft glove cable standard (25 ft cable optional)
- Instrumentation Unit: 10.00" x 6.25" x 2.75"; 27 oz
- Interface: RS-232 (115.2 kbaud max).
   Analog sensor outputs also provided

## **About Immersion Corporation**

Founded in 1993, Immersion Corporation develops hardware and software technologies that enable users to interact with computers using their sense of touch. In 2000, Immersion acquired Virtual Technologies (VTi) and its products, including CyberGlove.

## CyberGlove®

The CyberGlove uses
proprietary resistive bend-sensing
technology to accurately transform
hand and finger motions into
real-time digital joint-angle data.
Our family of VirtualHand®
software offerings
converts the data
into a graphical
hand which

mirrors the subtle movements of the physical hand.

