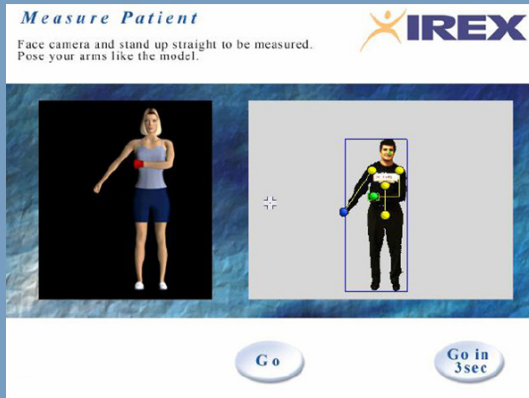


**IREX™** Interactive Rehabilitation and Exercise System places the patient in a computer generated world that allows for isolated joint movement, combined joint movements and full body functional movement of both the upper and lower body and then measures, records and reports the kinematic data of various activities.



**IREX™** utilizes patented immersive video technology to submerge patients into a virtual sport or game environment, where they are guided through clinician-prescribed therapeutic exercise programs. Patient performance and compliance is measured and recorded on a real-time basis by the system's sophisticated camera technology.

**IREX™** systems can be tailored to the specific clinical needs of the patient by isolating certain body parts and/or movements. Through the interaction with on-screen objects, patients complete a comprehensive and clinician-controlled exercise program in which the performance and compliance is objectively measured and recorded in real time by the system's patented camera technology.

## History and Application

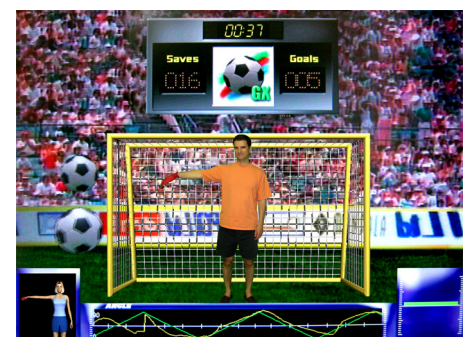
The development of **IREX™** is the result of thousands of hours of work by highly skilled software and vision programmers and clinical advisors.

Sophisticated camera technology captures the patient's image in front of a green screen and displays it on a computer monitor, thus allowing the patient or patients to see themselves move and interact with objects in a virtual environment.



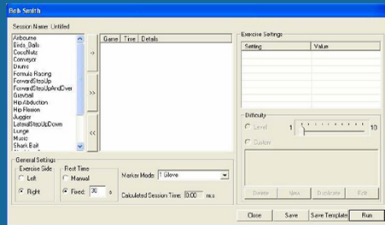
## Upper, Lower and Full Body Tracking

The **IREX™ System** is unique in that it does not require the use of wires or other peripheral devices, which hinder total freedom of movement. The patient can be guided through a clinician prescribed, on-screen exercise routine. The exercise programs consist of sports games, such as soccer, volleyball, snowboarding and other adventure-oriented exercises. The programs incorporate many facets of human movement that include balance, hand-eye coordination, flexion, rotation and other functional movements.

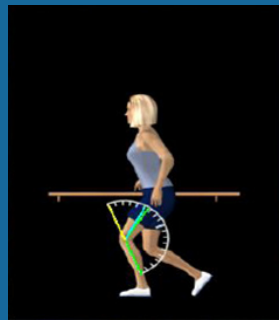


All trademarks and registered trademarks are the property of their respective owners.

**GestureTek** technology is protected under numerous comprehensive patents in the United States and other countries. U.S. patents include 5,534,917 (Video image based control system) and 7,058,204 (Multiple camera control system).



Session Management Software



Virtual Goniometer

Organizations utilizing **IREX™** have identified the following benefits:

- Greater compliance to exercise regimes
- Increased throughput and capacity
- Therapeutic exercise is more enjoyable
- Encouragement of experiential and active learning
- A challenging and safe environment
- Flexibility of individualized and graded treatment protocols
- Capacity to objectively measure and record performance

## Compelling Research

In a study entitled “Benefits of Activity and Virtual Reality Based Balance Exercise Programs for Adults with Traumatic Brain Injury,” published in the Brain Injury Month Journal in 2005, researchers concluded “there was evidence of substantially stronger, more positive perceptions of impact elicited from the virtual reality group and participants and that their participation increased their independence and confidence.” SCHOOL OF HUMAN KINETICS, UNIVERSITY OF OTTAWA

Similar research has been conducted using Virtual Reality Systems in the areas of:

- Virtual Reality Cortical Reorganization and Associated Locomotor Recovery in Chronic Stroke. AMERICAN HEART ASSOCIATION
- The Influence of a Virtual Reality Leisure Intervention Program on the Motivation of Older Stroke Survivors. DENISE REID PH.D., UNIVERSITY OF TORONTO
- The Use of Virtual Reality to Improve Upper-Extremity Efficiency Skills in Children with Cerebral Palsy. DENISE REID, UNIVERSITY OF TORONTO
- Motor Rehabilitation Using Virtual Reality. DR. HEIDI SVEITSTRUP, UNIVERSITY OF OTTAWA
- Benefits of Activity and Virtual Reality Based Balance Exercise Programmes for Adults with Traumatic Brain Injury. M. THORNTON AND S. MARSHAL, UNIVERSITY OF OTTAWA
- Immersion without Encumbrance: Adapting a Virtual Reality system for the Rehabilitation of Stroke and Spinal Cord Injury. R. KIZONY, HADASSAH-HEBREW UNIVERSITY
- Video Capture Virtual Reality Systems for Patients with Paraplegic Spinal Cord Injury. R. KIZONY, UNIVERSITY OF HAIFA
- Virtual Reality and Neurorehabilitation. PATRICE L. WEISS PH.D. AND R.KIZONY, UNIVERSITY OF HAIFA



## About GestureTek

**GestureTek Health** is a business unit of **GestureTek Inc.**—the world leader in computer vision for gesture-based control of interactive display systems. **GestureTek's** gesture recognition technology is employed in a wide array of applications and environments, where the user is either stepping on or into interactive floor/wall projections, pointing at a display from any distance, or has their real-time actual video image immersed on the screen. **GestureTek Health** delivers the benefits of virtual therapy and gesture control to patients and care givers. Headquarters are in Sunnyvale, California, with additional offices in Toronto, Ottawa, and New York.