OmniVR™ Virtual Rehabilitation System

TECHNOLOGY OVERVIEW

The OmniVR™ is the first virtual rehabilitation system developed to accommodate the needs of medically complex patients, including aging adults. This easy-to-use technology uses an advanced 3D camera and specialized computer software to track the patient’s precise movements and allow them to interact in a virtual world. The system includes a variety of “skilled” exercise programs for physical, occupational and speech therapy applications. Research indicates that patients enjoy performing virtual exercises and activities, therefore motivating them to exercise harder and longer. As a result, virtual rehabilitation treatment outcomes can equal or even exceed those achieved with traditional therapeutic exercise alone.

OmniVR™ System Highlights

- An advanced 3D camera captures the patient’s movements automatically, and eliminates the need for hand controllers, mats or special platforms

- Specialized computer software creates a “real-time” interactive environment providing positive feedback throughout the exercise session for increased patient motivation and repetitions

- Offers six “skilled” exercise categories with multiple difficulty levels for balance, gait training, wheelchair mobility, seated exercises, upper extremity exercises and cognitive activities

- Exercise protocols target large motor movements such as leaning, knee extension-flexion, reaching, sit to stand, squatting, stepping and marching

- Adjustable parameters enable therapists to match the exercise difficulty and visual stimuli to each patient’s specific abilities

- Can accommodate multiple patients for clinically sound Group Therapy that enhances social interaction and exercise activity

- Printable “Performance Summary” is produced at the end of each exercise program for objective documentation of patient performance and progress
SKILLED THERAPY OPERATION

The OmniVR™ is very easy-to-use and no technical computer skills are required for operation. The system turns on at the press of a button, and using a wireless mouse, therapists simply choose an activity from one of 6 different therapeutic exercise categories. The clinician has the option of adjusting system parameters to suit the patient's individual physical capabilities and treatment plan. These settings may determine how far a patient must lean, reach, or step to accomplish certain goals or what obstacles they must avoid to optimize their performance in the simulated environment.

OmniVR™ Exercise and Activity Programs

**Exercises While Seated**
While seated, patients reach with their arms, move their legs, and/or lean in multiple directions.

**Walking Exercises**
Patients march in place, start and stop, move left or right or step higher to avoid obstacles and accomplish activity goals.

**Balance Exercises**
Depending on the activity and parameters selected, patients may utilize a combination of ankle, hip, and/or stepping strategies to address static and dynamic balance.

**Wheelchair Control Exercises**
Patients maneuver their wheelchairs forward, backwards or in multiple directions to address wheelchair mobility.

**Upper Extremity Exercises**
Patients move one or both arms while seated or in standing position to accomplish activity goals.

**Cognitive Activities**
Patients use memory and cognitive skills, as well as coordination to successfully complete program activity goals.

OmniVR™ Clinical Applications

- Post-stroke rehabilitation
- General debility
- Muscle weakness
- Imbalance
- Sitting balance and posture
- Neurodegenerative conditions
- Cognitive impairment
- Wheelchair mobility

MODEL NUMBER: 300600A

PRODUCT SPECIFICATIONS

- Metal stand on wheels
- 42” LCD screen
- Computer unit
- Infrared 3D time-of-flight camera
- OmniVR™ rehabilitation software package
- Air mouse remote control
- Power, sound, video, and camera cables
- Laser Printer