

3 Dimension Tracking System for Virtual Reality The WinTracker® accurately computes the position and orientation of a small receiver as it moves through space. This device virtually eliminates the problem of latency as it provides dynamic, real-time six degrees of freedom (6DOF) measurement of position (X, Y, and Z Pitch, Yaw, Roll) and orientation (azimuth, elevation, and roll). WinTracker® is the perfect solution for interfacing with Virtual

Reality environments and controlling simulator projectors or other applications where real time response is critical.

WinTracker®

Contain: Main System

1 Transmitter

3 Receivers

Specification

VR Space Inc. WinTracker®

Position Coverage

Following specification were tested when distance between transmitter and receiver is 29.53" (75 cm). Operation at distance from 30" to 60" with reduced accuracy.

Angular Coverage

all-attitude

Static Accuracy

0.06" RMS for the X,Y,or Z receiver position, and 0.3 ° RMS for azimuth, elevation, or roll receiver orientation.

Resolution

0.01 cm, and 0.01 °.

Latency

7 milliseconds

Output

Cartesian coordinates of position.

Euler angles and Quaternion orientation.

metric units . Binary outputs.

Update Rate

One receiver: 90 outputs/second

Two receivers: 45 outputs/second

Three receivers: 30 outputs/second

Interface

USB port.

USB drivers for Windows® and included

Operating Environment

Large metallic objects like desks or cabinets near the operation area will degrade the performance of the tracker. Walls, floors or ceilings contain significant amounts of metal will affect the performance of the tracker too. To reduce the affect cause by metallic objects, keep metallic object away from transmitter or receiver three times the distance between transmitter and receiver.

Physical Characteristics

SEU: Width 9.84" (25 cm.), length 7.09" (18 cm.), height 2.95" (7.5 cm.), internal power supply. Transmitter: Width 2.15" (5.5 cm.), length 2.15" (5.5 cm.), height 2.3" (5.8 cm.), cable length 3.5M. Receiver: Width 1.1" (2.83 cm.), length 0.90" (2.29 cm.), height 0.60" (1.52 cm.), cable length 4.5M.

☆Driver for Virtools®, VRPN®, LINUX®, Windows®

WintrackerIII



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