PST Pico Specifications

Specifications summary optical tracker PST Pico[1]

- Minimum tracking distance: 5 cm
- Maximum tracking distance: 1.5 m
- Fanless and noiseless
- Calibration-free compact bar-tracker
- Adjustable infrared flash
- Adjustable frame rate up to 50 Hz

Performance

Accuracy Position: N/A

Latency: N/A

Refresh rate: Up to 50 Hz

Minimal tracking distance: 5 cm (tracking cone)

Intended use: Tracking in small and compact spaces (e.g. simulators, desktop)

Usability

Set up: Plug and play

Calibration: Pre-calibrated unit

Origin definition: One click process – dedicated tool included

Units needed for 6 DoF tracking

One; each PST Pico is a full 6 DoF motion tracker

Expandable tracking area: N/A

Aligning units: N/A

Ambient Conditions: Normal indoor lighting conditions

Illumination: Integrated IR LED illumination (wavelength 850nm).
 Flash illumination fully adjustable in PST Software Suite 5.0

Operating Temperature: 15 – 35 deg. C

Devices and Markers

Number of targets: At least 15 independent 6DoF bodies.

For instance: simultaneous head and object tracking

Markers

Passive (retro-reflective flat and spherical)– Active (LED)

Device creation

Simple procedure: mark, train and use new device in seconds

Interfaces

Processing

N/A

Tracking Application

PST Software Suite 5.0(license included with each PST tracker)

Client operating system

Windows (Windows 7, Windows 8, Windows 10), 32 and 64 bit and Linux.

Software interface

The tracker comes with an easy to use native C/C++ SDK and bindings for C# and Python. Interfacing is also supported via VRPN, trackd[2], Dtrack emulation, data export to .CSV

Hardware interface
Requires two USB 3 ports each with full bandwidth
 and capable of providing 2.7 Watts min. and 5 Watts max.
Output
Positional coordinates(x, y, z), orientation angles, Euclidean transformation matrix
Synchronization
N/A

Hardware
Weight:Approx. 0.5 kg

Size:15 x 4 x 4 cm (W x H x D)

Mounting: 1/4" -20 UNC tripod mounting point

Power supply

Output 5V, 12W. Input 100-240V, 50-60Hz + USB power

Power consumption

Max. 15 W
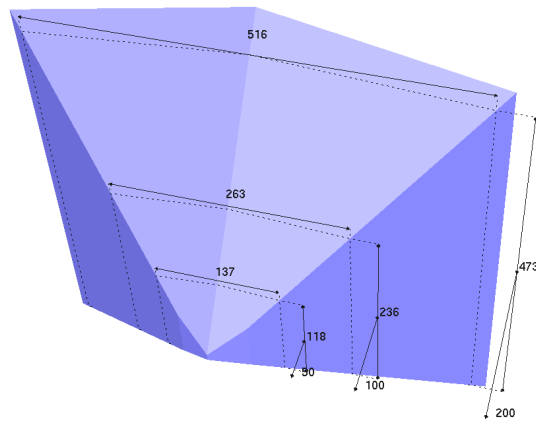

Measurement Area Configurations
The measurement volume is the area in which marked devices can be tracked. The distances in the images below are expressed in centimetres.

1. Preliminary Specifications, subject to change without notice.
2. trackd is a trademark of Mechdyne, Marshalltown, IA, USA.