

PATRIOT DIGITIZER

FREE FORM DIGITIZING

THE AFFORDABLE ANSWER

The PATRIOT™ Digitizer is the most affordable digitizer on the market. The system includes everything you need to start digitizing objects from engineering prototypes to precious artwork.

FREEDOM TO MOVE

By utilizing proprietary magnetic tracking technology pioneered by Polhemus for advanced military applications, the digitizing stylus can be moved freely: around, under and behind objects big and small.

Digitize Freely - No Mechanical Arm

Use the PATRIOT Digitizer Stylus and capture data points in hard to reach places easily. Move around the object freely. The Stylus is tracked using Polhemus' magnetic 6 Degree-of-Freedom (6DOF) technology and requires no mechanical arm or optical markers.

Digitize Large Objects

Digitize a kayak, furniture, a kitchen counter top - no problem! The PATRIOT Digitizer has a range of up to 5 feet for a 10 foot diameter workspace.

Digitize Cost Effectively

Base system with all the hardware needed to start free-form digitizing is available at a very affordable price. Add the optional TX4 source for greater range, and the foot switch for ease-of-use, and this high-end system is still the most cost effective digitizer on the market.

Easy to Set-Up

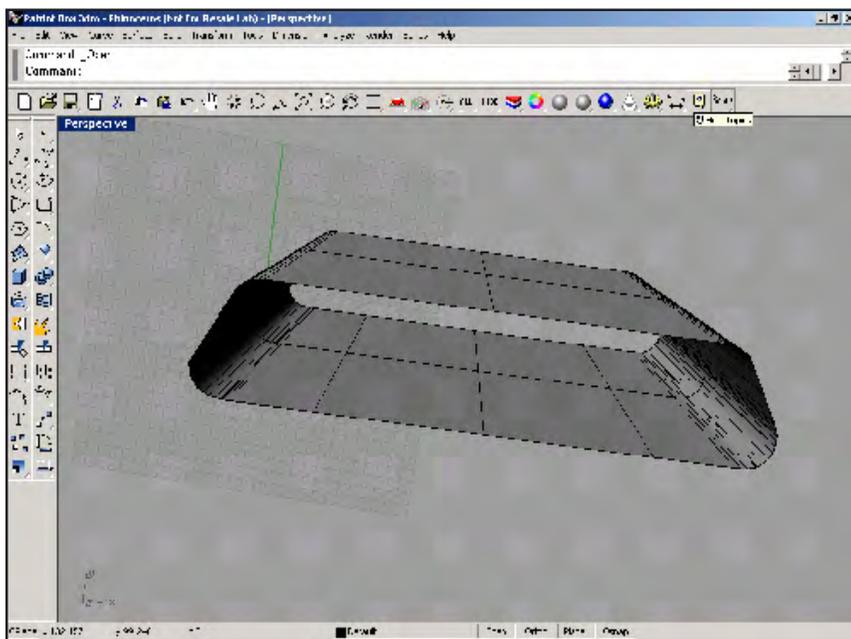
Installs in minutes using a standard PC and either USB or RS-232 port.

Easy to Use

Launch directly from Rhino® and start clicking!



Standard PATRIOT Digitizer includes TX2 Source, 8" stylus (shown above) and foot/ hand switch (as seen on the back page)



PATRIOT electronics box shell digitized within Rhino

PATRIOT DIGITIZER



Foot Switch



Hand Switch

► ACCESSORIES



TX4 Source



3" Stylus

POLHEMUS
INNOVATION IN MOTION™

Polhemus is a Good Manufacturing Practices (GMP) Contract Manufacturer under U.S. FDA Regulations. We are not a manufacturer of Medical Devices. Polhemus systems are not certified for medical or bio-medical use. Any references to medical or bio-medical use are examples of what medical companies have done with the Products after they have obtained all necessary or appropriate medical certifications. The end user/OEM/VAR must comply with all pertinent FDA/CE regulations pertaining to the development and sale of medical devices and all other regulatory requirements.

► SPECIFICATIONS

Range

Up to 6 ft. diameter with TX2 source; up to 10 ft. diameter with TX4 source

Interface

RS-232 with selectable baud rates up to 115.2 K. USB 2.0 (high speed)

Software Tools

GUI and SDK included

USB drivers for Microsoft Windows®, XP/Vista/Win7 included (32-bit and 64-bit)

Linux® - open source application available

Accuracy

Absolute: 0.05 in. (1.3mm); Relative: 0.019 in. (0.48mm)

Relative accuracy was determined by digitizing a bowling ball and calculating the variation in radius over the point cloud surface

Resolution

0.00046 inches, 0.0038 degrees at 12-inch source-to-stylus separation

Operating Temperature

10°C to 40°C at a relative humidity of 10% to 95%, noncondensing

Physical Characteristics

SEU - 6.75 in. L x 6.25 in. W x 1.75 in. H

Power Supply - 3.5 in. L x 2.4 in. W x 1.4 in. H

Source - 2.3 in. L x 2.2 in. W x 2.2 in. H (standard 2 in.)

Stylus - 7 in. L x 0.5 in. W x 0.75 in. H or 3.5 in. L x 0.5 in. W x 0.75 in. H

Power Requirements

10W, 100-240 VAC, 47-63 Hz

► COMPONENTS

System Electronics Unit

Contains the hardware and software necessary to generate and sense the magnetic fields, compute position and orientation, and interface with the host computer via an RS-232 or USB 2.0 interface

Source

The source contains electromagnetic coils enclosed in a plastic shell that emit the magnetic fields, the system's reference frame for stylus measurements

Stylus

The stylus is a free-form digitizing tool (available in both 3-inch and 8-inch sizes), with both single point and continuous line output modes

Includes:

USB Cable

Hand/Foot Switch for Stylus

Power Supply

CD with Rhino Plug-in (Rhino software not included)

PATRIOT System User Manual

Two Year Warranty

*Large metallic objects, such as desks or cabinets, located near the source or stylus, may adversely affect the performance of the system

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