

# PATRIOT DIGITIZER

FREE FORM DIGITIZING

## THE AFFORDABLE ANSWER

The PATRIOT™ Digitizer is the most affordable digitizer on the market. For \$3,075 you get everything you need to start digitizing objects from engineering prototypes to precious artwork.

## FREEDOM TO MOVE

By utilizing 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 \$3,075. With the TX4 source upgrade, the high end system is still only \$3,370.

## Easy to set-up

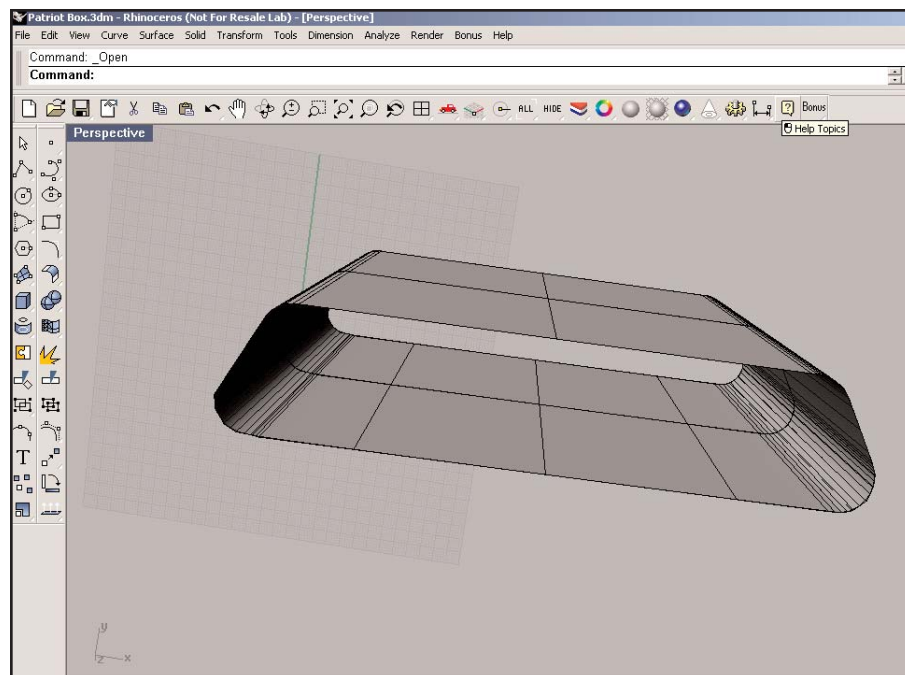
Installs in minutes using a standard PC and either USB or RS-232 port.

## 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

## TECHNICAL SUMMARY

### ► SPECIFICATIONS

#### ▷ Range

- Up to 6 feet diameter with the TX2 source
- Up to 10 feet diameter with the TX4 source

#### ▷ Interface

USB 1.2 or RS-232

#### ▷ Operating System

Windows® 2000, XP

#### ▷ Accuracy

Absolute: 0.05 in. (1.3mm)

Relative: 0.019 in. (0.48mm)

Accuracy's were determined by digitizing a bowling ball and calculating the variation in radius over the point cloud surface.

#### ▷ Resolution

0.0015 inch per inch of source and stylus separation

#### ▷ Operating Environment

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

#### ▷ 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 1.1 interface.

#### ▷ Source

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

#### ▷ Stylus

The stylus is your free-form digitizing tool with both single point and continuous line output modes. Stylus is available in both 3 inch and 8 inch sizes.

#### ▷ Includes:

USB Cable

Hand/Foot Switch for Stylus

Power Supply

CD with Rhino Plug-in (Rhino software not included) and User Manual

Two Year Warranty

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Foot Switch



Hand Switch

### ACCESSORIES



TX4 Source



3" Stylus

► ► **POLHEMUS**  
INNOVATION IN MOTION

The systems are not certified for medical or bio-medical use. Any reference to medical or bio-medical use are examples of what medical companies have done with the systems after obtaining all necessary or appropriate medical certifications. The end user/OEM must comply with all pertinent FDS/CE and all other regulatory requirements.