



when reliability is critical™

How to Select a

Medical Mouse / Cleanroom Pointing Device

Congratulations! You have found the world's finest medical mouse and cleanroom pointing devices. Why? Because CTI Electronics Corporation completely designs and manufactures all of the critical sensors, components, circuitry, and firmware necessary to ensure our customers guaranteed long term availability. CTI's medical pointing devices have survive may years of service; this high durability of success is due to the design of the inductive sensor technology which has only three mechanical moving parts, shaft, spring, and spring guide. The reliability is unquestionable; 7x24x365 performance in the most critical of environments (Aviation, Marine, Military, Medical) require that these medical pointing devices be designed to a superior quality. That's why we say, "When Reliability is Critical" you need to talk with us. CTI's offers Commercial Off-The-Shelf (COTS) medical pointing devices as well as customized (Build to Print) manufacturing. Advanced rapid prototyping and optimization to your demanding requirements is available.

Simply, a medical pointing device is a computer mouse or cursor controller, allowing the operator to position the pointer on the display screen. It is CTI's goal to navigate you through the selection process in determining the best human machine interface device for your application. The selection of the most appropriate device requires a fundamental understanding of the application, Installation Details, Environmental Conditions, Operation, Usage, and Interface requirements. Other factors involved are budget & time constraints, time-to-market issues, etc which also affect the choice of an appropriate medical pointing device.

Medical pointing device selection is based upon operator's frequency of usage, cursor speed, fluidity of movement, and size of the targets:

Medical Mouse is based upon the **Industrial Mouse® (joystick cursor controller)** - Trademark first used in 1989, application of a Joystick mouse pointing device.
(High Usage, Rapid Speed, Smooth Movement of 360° in very fine detail, target size >1mm(0.04"))

Trackball - The Ball mouse pointing device provides an IP65 sealing (static) and IP54 sealing (rotating).
(Low to High Usage, Slow Speed, Precise Movement in exacting detail, target size ≤ 1mm(0.04"))
e.g. tracing/outlining objects

To allow CTI to optimize the medical pointing device solution to the specific requirements of your application we ask that you provide as much detailed information as possible.

Installation: OEM Panel Mount Plug-n-Play Other:
OEM – Open electronics parts which require mounting into an enclosure/panel.
Panel Mount – Open/Closed electronics with a metal plate requires mounting into an enclosure/panel.
Plug-n-Play – Enclosed electronics that can be a handheld or desktop version.

Describe any extraordinary Installation/Removal Requirements:
Ex. 1) The pointing device will be mounted on a vertical wall. Ex. 2) The pointing device needs to be easily plugged/unplugged into a panel that constantly requires cleaning with harsh chemicals and water.

[Understanding NEMA and IP Ratings](#)

Environmental Conditions: Indoor Outdoor Both Other:

Operating Temperature Range: (-40°C to 0°C) (0°C to +, 0°C) Other:

Will the Medical Pointing Device be subjected to Vibration/Movement: Yes No Not Sure
(check all that apply)
Liquids: Water Oil Grease Bio-Hazard Chemical Others:
Solids: Dirt Dust Food Bio-Hazard Chemical Others:
High Emission Signals: EMI RFI Specifics:

Will the Industrial Pointing Device be subjected to Vibration/Movement: Yes No Not Sure
Mobile applications subject pointing devices to high vibrations such as airplanes, helicopters, marine vessels, trucks, etc.

Operation:
Describe how and where the Medical Pointing Device will be used:

Ex. 1) The pointing device will be used to outline anatomical images from medical x-ray scans in a hospital.
Ex. 2) The pointing device will be used as a mouse cursor control for sizing targets onboard a Marine vessel.

Will the Operator of the Medical Pointing Device be using gloves? Yes No
Heavy/Thick Flexible/Thin Other

Usage:
Describe the tasks an Operator will perform while using the Medical Pointing Device:

Ex. 1) The operator will walk over to a monitor then quickly point and click (left mouse button) on large icons with the pointing device.
Ex. 2) The operator will be sitting at a desk to move the cursor up/down and across the display into fields of a spread-sheet type of application.

How many hours of an eight hour day will the Pointing Device be used?

Interface:
Select the computer Operating System: Windows Solaris Unix Linux Real-TimeY.....
.....CH YF

Describe any other requirements of the Medical Mouse / Cleanroom Pointing Device:

Contact Information:
First: _____ Last: _____
Company: _____
Address 1: _____
Address 2: _____
City: _____ State/Province: _____ Country: _____ ZIP: _____
Phone: _____ Fax: _____ E-mail: _____