

# ***PUCK™ POINTER***

***2D and 3D Position Control***

## ***What is the Puck™ Pointer?***

The Puck™ Pointer is a natural, intuitive point-and-select device that can be integrated into a keyboard; its fully digital design gives it a low height of 0.55" or lower.

The Puck™ Pointer is the first pointing device that has the promise of becoming an industry standard. That's because it can be integrated into almost all keyboards—even briefcase portable's—at a price that is astonishingly low.

Using proprietary technology, our Puck™ Pointer performs all the functions of a pointing device. It is designed for high volume manufacture and it can be custom shaped to your needs.

Please make sure you fill out and return the enclosed survey questionnaire to us. Your comments will help us in improving the Puck™ Pointer.

- **Graphics Systems**
- **Keyboards**
- **Instrumentation Systems**



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## Applications

### ■ Puck Hosts

Personal Computers  
CAD/CAM Systems  
Home Computers  
Portable Computers  
Microprocessor Controlled Instrumentation (i.e. logic analyzers, medical equipment, liquid chromatographics, etc.)  
Terminals  
Any microcomputer device that uses a keyboard

### ■ Puck Capabilities

Cursor movement  
Menu selection  
Drawing  
Color palette selection

### ■ Software Applications

Word processing  
Spreadsheets  
Graphics packages and much more

## Features

Finally, a pointing device that can be integrated into a keyboard.

Here's a high-quality pointing device that's so natural and intuitive, it becomes an extension of your hand. Best of all, this point-and-select device can be integrated into a keyboard. Here's why:

**Low Height:** Only 0.55 inches in height for the 3D version, the Puck™ Pointer can be easily integrated into standard keyboards.

**Fully Digital:** All the ruggedness and reliability of a digital device.

**3D Puck™ Pointers:** The Puck™ Pointer can be ordered in two versions: a 2D version, and a 3D version for graphics applications.

**Effective Footprint: Zero** You don't have to increase keyboard size to accommodate the Puck™ Pointer. It can go right where your cursor keys or numeric keypad are.

**Great for Portable Machines:** More and more devices are becoming portable. The Puck™ Pointer fits easily into a portable's keyboard.

**Fully Customizable:** The upper portion of the Puck™ Pointer can be fully customized to meet required shape, size, and color.

**Better than Membrane Pointing Devices:** Unlike membrane pointing devices, the Puck™ Pointer is built to last. It's made of high temperature plastic and will last as long as standard keyboard keys.

## Custom Pucks

### Puck Pointers for Small Portables

The Puck™ Pointer is right at home in a small computer. Puck pointers can be made as small as 0.625" x 0.625" (dimensions of the lower, hidden part of the Puck pointer that resides in the keyboard). At this size the resolution will be 32 x 32. The Puck™ Pointer can also be made rectangularly with different resolutions in each axis. Call us for minimum dimensions on the resolution you require.

The Puck™ Pointer can be used in briefcase size portables, hand-held portables, transportables. . . . It's so flexible, it can fit into most computers on the market.

### The Puck™ Pointer for High Resolution Systems

Usable resolutions as high as 4096 x 4096 are available. High resolution is obtained by smoothly mapping the Puck™ Pointer's output, rather than increasing the size of the Puck™ Pointer. The maximum suggested dimensions of the lower part of the Puck™ Pointer are 3" x 3", regardless of the resolution, while travel for the upper part of the Puck™ Pointer is 1" in any direction.

## Specifications

### The Puck™ Pointer

Please inquire for higher resolutions (1 part in 4096), custom data formats, and other custom options.

Input Voltage:	5 volts
Output Voltage:	5 V TTL
Resolution:	1 part in 128
Output Data Format:	8-bit parallel with handshake, compatible with most microprocessor busses. RS-232 format optional.
Switch:	Optical, non-contact select switch
Travel Distance:	1" in any direction.
Power Consumption:	Less than 1/2 watt.
Dimensions:	
(a) Base	Height: 3D version 0.55" Length: 3" for 1 in 128 Width: 3" for 1 in 128
(b) Puck™ Pointer, key cap	Custom Min. height: 1/8" Length: custom Width: custom

Specification subject to change without notice.

## Price List

3D Keyboard Puck™ Pointer Mechanical parts and components	\$15.00/unit for 10,000 units/yr.
2D Keyboard Puck™ Pointer Mechanical parts and components	\$14.00/unit for 10,000 units/yr.

Gate array drive chip available in 1985.  
Tentatively priced at \$5.95 in quantities of 5,000 units.

2D Single Piece Evaluation Unit	\$25.00
3D Single Piece Evaluation Unit	\$30.00
RS-232 Output Evaluation Unit	\$795.00

Supersedes all previous price lists. Subject to change without notice.

## What do you think?

Your answers will help us in defining the product to suit your needs and in planning a better introduction. Please indicate whether you are interested in the 2D Puck™ Pointer or the 3D Puck™ Pointer. Please feel free to call us at (415) 654-6300 if you have any questions.

1. What percentage of your keyboards will, in your estimate, use the Puck™ Pointer?: in 1985 \_\_\_\_\_ % in 1986 \_\_\_\_\_ %
2. Would you be interested in licensing the technology?  
\_\_\_Yes \_\_\_No (We estimate that your approximate manufacturing cost for the Puck™ Pointer will be \$15.00/unit in volumes of 10,000 units.)
3. Would you be interested in buying the Puck™ Pointer?  
\_\_\_Yes \_\_\_No
4. Please estimate the number of Puck™ Pointers that you expect to use:  
1985 Qtr 1    Qtr 2    Qtr 3    Qtr 4    Total 1985  
\_\_\_\_\_
5. New design could reduce the cost of the Puck™ Pointer. What approximate volume do you expect to use at the following prices?

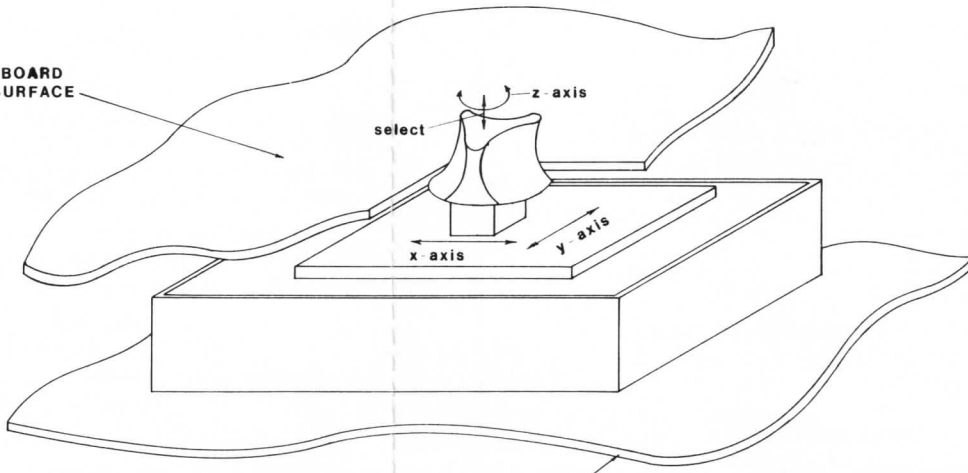
Under license		Purchased Units	
1985	1986	1985	1986
\$8	_____	\$15	_____
\$5	_____	\$10	_____
6. Who, in your organization, specifies keyboards?  
Please give likely job titles (e.g. Project Engineer).  
\_\_\_\_\_
7. Overall reaction to the Puck™ Pointer.  
\_\_\_\_\_ Excellent \_\_\_\_\_ Good \_\_\_\_\_ Fair \_\_\_\_\_ Poor
8. Other comments on the Puck™ Pointer, including comments on specifications:  
\_\_\_\_\_  
\_\_\_\_\_

Your company name: \_\_\_\_\_

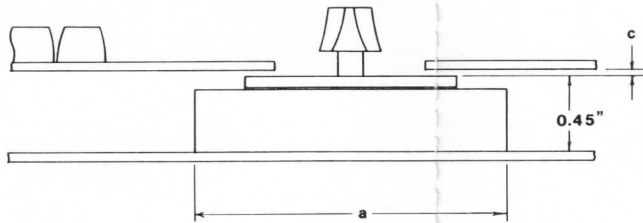
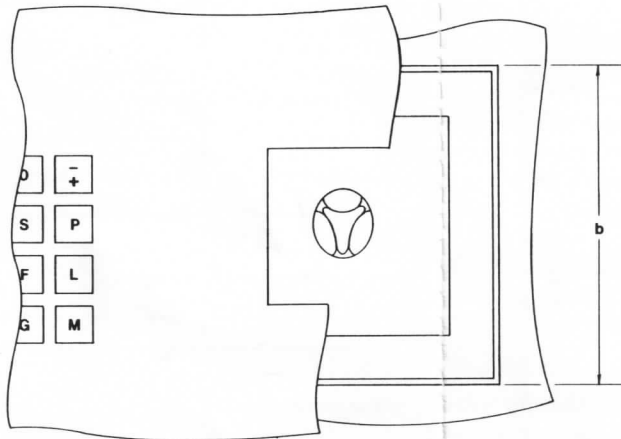


KA Design Group  
6300 Telegraph Avenue  
Oakland, CA 94609  
Telephone (415)654-6300

KEYBOARD SURFACE



KEYBOARD P.C.B.



**KA**

**KA Design Group**  
6300 Telegraph Avenue  
Oakland, CA 94609  
Telephone (415)654-6300