

# MODEL TBS200

## Low-Profile Panel Mount Trackball

With the drive to ever more compact systems, the TBS200 provides an ideal solution for highly precise control in a smaller package. The TBS200 offers many of the same attributes as the TBS225, but its lower profile consumes a mere 1.5 inches of below panel space. This trackball series has found wide use in industrial machine control, medical equipment, video mixing machines and graphic workstations.



The TBS200's sealed ball, 3-point stainless steel ball suspension, and precision encoders provide excellent feel and reliable operation in less than ideal environments. With a built-in drain plug for ease in spills cleanup, the TBS200 is one of BEI's most versatile trackballs. And it is easily used "by feel" or with gloves due to its large 2" diameter ball.

The TBS200 is easily integrated into a wide variety of systems. Its low profile allows easy integration in compact systems, and its low power consumption makes it ideal for battery powered applications.

This trackball is an excellent choice for commercial or industrial applications.

Call one of our applications engineers today and get the precision low-profile option.

## Specifications

### Mechanical

**Weight:** 8 oz. MAX

**Ball Diameter:** 2.00"

**Housing Size:** 3.25" SQ. X 1.5"

**Tracking Force:** 1.5 to 2.0 oz

**Mounting Surface:** 45° MAX from horizontal

### Electrical

**Resolution:** 200 cycles per one full revolution of ball

**Supply Voltage:** +5 VDC @ 10mA

**Output :** 2 channels in quadrature (TTL/CMOS)

**Mouse Compatibility:** PS/2

**Interface Connector:**

8 Pin Modular Phone Jack (Molex connector P/N 95001 or equivalent, mates with FCC-68 Type Male Locking Plug)

10-pin dual row (Thomas & Betts connector P/N 622-1001M or equivalent, mates with standard 0.100" grid pcb headers)

### Environmental

**Temperature:**

0° to +50° standard, -20° to +60° extended

**Vibration:** 5 to 60 Hz @ 5 G's

**Shock:** 15 G's 11 msec duration

## TBS200 Low-Profile Ordering Options

*For assistance, call 800-350-2727*

*Use this diagram, working left to right to construct your model number.*

**Example:** *TBS200-200-AB-6-PR10* (one possible configuration of the TBS200 Low-Profile)

**TBS200** — [ ] — [ ] — [ ] — [ ] — [ ]

**HOUSING:**

TBS = Trackball System  
200 = 2.0" ball diameter

**RESOLUTION:**

Cycles per turn  
200 = 200 CPT

**OUTPUT TYPE:**

AB = Dual channel in quadrature  
PS = PS/2 compatible mouse

**CABLE LENGTH:**

Specify in inches  
(i.e. 6 = 6inches)  
for PR10 option only

**SPECIAL FEATURES:**

Blank = None  
S = Special

**CONNECTOR:**

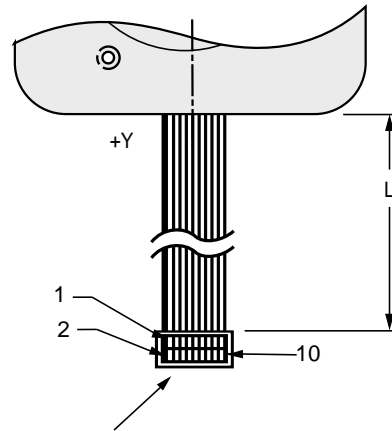
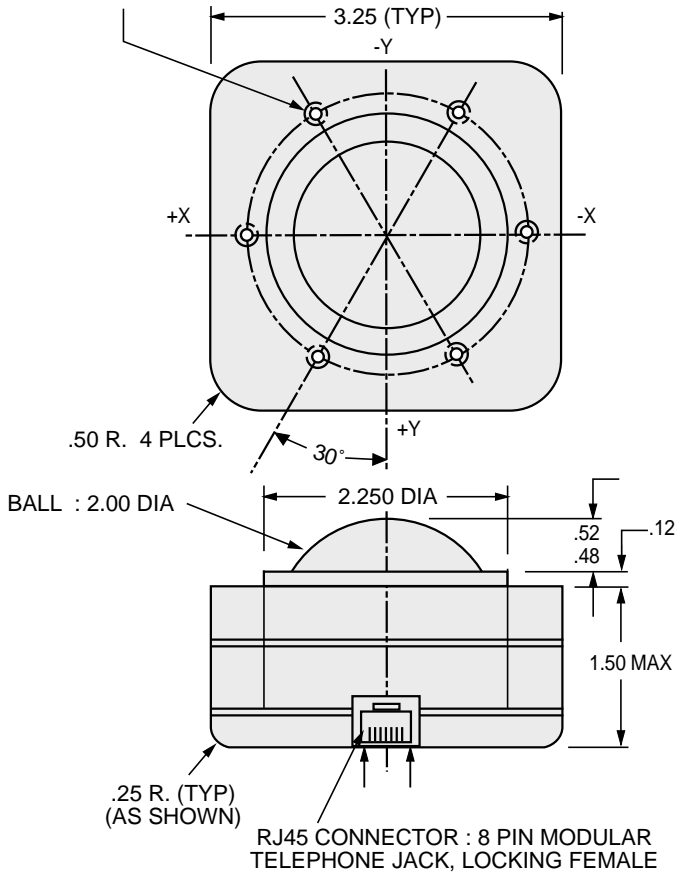
RJ45 = 8 pin phone jack (AB versions only)  
PR10 = 10-pin dual row receptacle

Table 1 TBS200 Connector Pinout Functions

PIN #	RJ45 CONNECTOR AB FUNCTION	PR10 CONNECTOR AB FUNCTION	PR10 CONNECTOR PS FUNCTION
1	BY (-Y AXIS)	+5 VDC	PS/2 DATA
2	AY (+Y AXIS)	GROUND	+5 VDC
3	+5 VDC	BY (-Y AXIS)	CLOCK IN
4	NC	AY (+Y AXIS)	GROUND
5	BX (-X AXIS)	BX (-X AXIS)	NC
6	AX (+X AXIS)	AX (+X AXIS)	NC
7	GROUND	NC	SWITCH GROUND
8	GROUND	NC	SWITCH INPUT-LEFT
9		NC	SWITCH INPUT-MIDDLE
10		NC	SWITCH INPUT-RIGHT

TBS200 Low-Profile Dimensions

#4 - 40 UNC-2B THREAD  
 X .20 MIN DP, 6 PLCS  
 EQUALLY SPACED (AS SHOWN)  
 ON A 2.625 DIA B.C.



PR 10 CONNECTOR: 10 PIN IDC THOMAS & BETTS CONNECTOR PART NO. 622-1001M OR EQUIV.

These commodities, technology or software if exported from the United States must be in accordance with the Bureau of Industry, and Security, Export Administration regulations. Diversion contrary to U.S law is prohibited.