# Panel Mount or Stand Alone Trackball



BEI's TBS225 trackball is one of the industry's most popular man-machine interfaces. For critical applications that require a precise cursor control solution, the TBS225 trackball system has no match to its simple, intuitive, robust design. The trackball has found wide use in medical scanning systems, machine tool equipment, graphic displays, robotics, even military applications.

The TBS225 provides accurate, comfortable and reliable motion input to your system with a 2.25 inch ball and superior feel. The trackball's sealed ball prevents contaminates like dust, chips, ultrasound gels or industrial oils from entering the system. And because of its smooth, precise and responsive feedback, the unit offers a true sense of control, even when wearing gloves.

This trackball is versatile, easy to use and easy to design into your system. Custom options like integrated switches, various serial interfaces and special enclosures/mount-ing features can easily be incorporated into an OEM design.

Give one of our applications engineers a call and give your next product the proven control solution.

# TBS225 Panel Mount Ordering Options

## Specifications

### Mechanical

Weight: 11 oz MAX Ball Diameter: 2.25" Housing Size: 3.00" SQ. X 2.25" MAX Tracking Force: 1.0 to 2.2 oz Mounting Surface: 45° MAX from horizontal

### Electrical

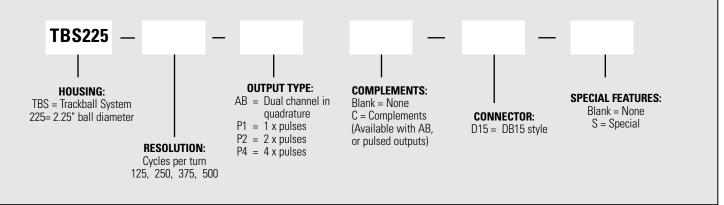
Resolution: Up to 500 cycles per one full revolution of ball Supply Voltage: +5 VDC @ 180mA, +12 VDC optional Output : 2 channels in quadrature (TTL/CMOS) Interface Connector: 15–Pin ( DA–15P with female screw locks, mates with DA15S)

### Environmental

**Temperature:** 0° to +50° **Vibration:** 5 to 60 Hz @ 5 G's **Shock:** 15 G's @ 11 msec duration

### For assistance, call 800-350-2727

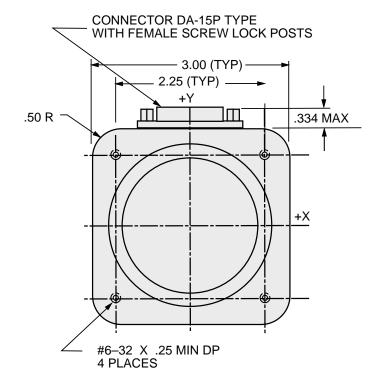
Use this diagram, working left to right to construct your model number. **Example:** TBS225-250-ABC-D15 (one possible configuration of the TBS225 Low-Profile)

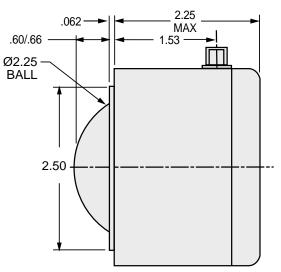


### Table 1 TBS225 Connector Pinout Functions

PIN #	AB FUNCTION	ABC FUNCTION	P1, P2, OR P4 FUNCTION	P1C, P2C, OR P4C FUNCTION
1	AY	AY	+Y	+Y
2	BY	AY	-Y	+Y
3	AX	BY	+X	-Y
4	BX	BY	-X	-Y
5	SPARE	AX	SPARE	+X
6	SPARE	AX	SPARE	+X
7	SPARE	BX	SPARE	-X
8	SPARE	BX	SPARE	-X
9	SPARE	SPARE	SPARE	SPARE
10	SPARE	SPARE	SPARE	SPARE
11	SPARE	SPARE	SPARE	SPARE
12	SPARE	SPARE	SPARE	SPARE
13	+ VDC RETURN	+ VDC RETURN	+ VDC RETURN	+ VDC RETURN
14	SPARE	SPARE	SPARE	SPARE
15	+ VDC	+ VDC	+ VDC	+ VDC

### TBS225 Dimensions





BEI INDUSTRIAL ENCODER DIVISION BEI TECHNOLOGIES, INC.