

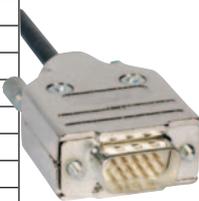
## DC Servo Motorized Ø1" Mirror Mounts

- Motorized Pitch and Yaw Adjustment for 1" Optics
- Compact Design Allows for Use in Tight Locations
- Angular Resolution <30arcsec
- 12,288 Counts/Revolutions Rotary Encoder
- Limit Switches to Prevent Damage

The KS1-Z7 is a KS1 mirror mount, but the manual actuators that control the pitch and yaw on the KS1 have been replaced with the new Z706 motorized actuators. The KS1-Z7 mirror mount features a thick back plate with heavy-duty springs for excellent optical stability. Counterbored #8-32 (M4) holes allow the KS1-Z7 to be mounted on a TR series post in a right- or left-handed configuration. The motorized actuators have 6mm of travel and increase the angular adjustment precision to better than 30arcsec. The manual translation actuator can be easily replaced with a Z706 motorized actuator. This substitution can be done in the lab, or the KS1-Z7 mount can be custom ordered with all three actuators motorized. The overall depth of the KS1-Z7 is approximately 96mm (3.8") while both the width and height measure 50mm (1.97").

The motorized actuators can be connected to the T-Cube apt™ USB DC Driver for plug-and-play compatibility via the graphical interface software. The power and control cable is nine feet long; the end attached to the motorized actuator has a strain relief feature while the other end of the Ø4.6mm shielded cable is terminated with a male 15-pin, high-density D-sub connector.

PIN	DESCRIPTION
1	Ground (Limit and Vcc)
2	Forward Limit
3	Reverse Limit
4	No Connection
5	Motor (-)
6	No Connection
7	Motor (+)
8	No Connection
9	Identification Resistor
10	5V Vcc
11	Encoder Channel A
12	No Connection
13	Encoder Channel B
14	No Connection
15	No Connection



**10% SAVINGS!**  
Priced 10% below the cost of the kinematic mounts and actuators



KS1-Z7

ITEM#	\$	£	€	RMB	DESCRIPTION
KS1-Z7*	\$ 918.40	£ 578.60	€ 854.10	¥ 8,770.70	Motorized Ultra-Stable Kinematic Mount for 1" Optics

Price shown includes a 10% discount below the cost of the KM100 or KS1 and two Z706 or three Z712 actuators if purchased separately. \*Imperial and Metric Compatible.

## Stepper Motorized Ø1" Mirror Mount



KS1-ZST

The KS1-ZST combines our traditional KS1 kinematic mount with our ZST13 stepper motor actuator. By using the same body as our standard KS1 kinematic mount, the KS1-ZST works as a drop-in replacement when automating an optical setup. Additionally, the motorized actuators enable finer, more precise positioning than possible with manual adjusters. Integrated electromechanical limit switches prevent damage if the actuator is over driven, while providing homing better than 15arcsec.

- **Resolution:** <1arcsec
- **Range:** ±3°
- **Limit Switching:** Electromechanical
- **Leadcrew Pitch:** 0.5mm
- **Gear Reduction:** 76:1
- **Speed:** 1arcsec/s to 0.5°/sec
- 25,600 Steps per Revolutions Using Thorlabs' Stepper Motor Controller (See Below)

**10% SAVINGS!**  
Priced 10% below the cost of the kinematic mounts and actuators.

ITEM#	\$	£	€	RMB	DESCRIPTION
KS1-ZST*	\$ 1,261.40	£ 794.70	€ 1,173.10	¥ 12,046.40	Stepper Motorized Kinematic Mirror Mount for 1" Optics

Price shown includes a 10% discount off the cost of the KS1 and two ZST13 actuators if purchased separately. \*Imperial and Metric Compatible.

## T-Cube apt™ USB Single Channel DC Servo and Stepper Motor Controllers

The new unique T-Cube USB apt™ motor controllers are compact (2.4" x 2.4" x 1.8"), high resolution, single channel drivers for easy manual or automated control of the Z7 or ZST13 motor series.

SEE PAGE 352 FOR MORE DETAILS



- Mounting Basics
- Optical Rails
- Mirror Mounts
- Lens Mounts
- Filter Mounts
- Rotation Mounts
- Adapters
- V-Mounts
- Apertures & Iris Diaphragms
- Lens Tubes
- Cage Systems