SC17 -- 15K laser galvanometer

Instructions

SC17--15K laser galvanometer is composed of scan drive part and scan motor part.

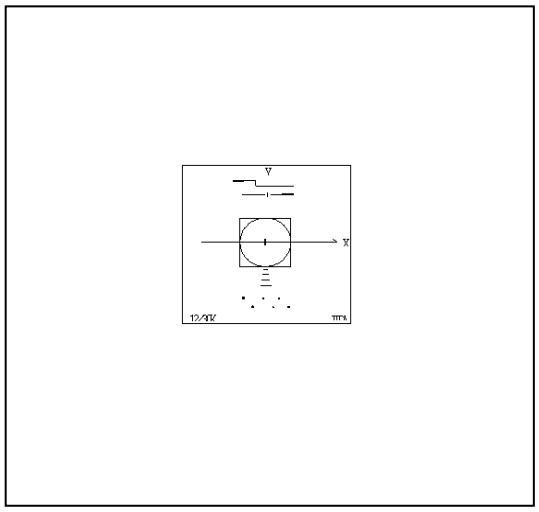
This system has a simple and efficient circuit with rigorous and beautiful layout.

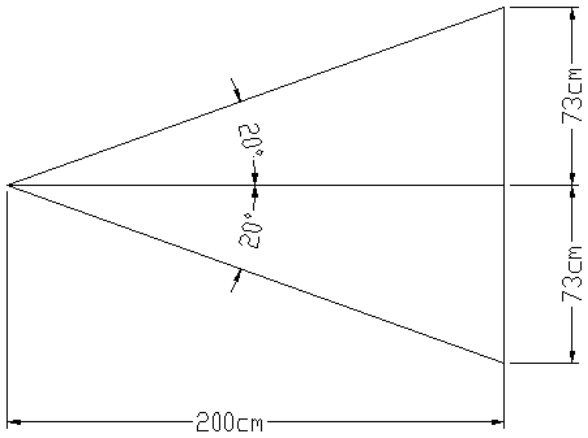
The Motor are manufactured from precision equipment and manufactured using sophisticated processes ,it is highly safe and does not hot for hundreds of hours.

Servo driver board parameters

- Supply voltage: +12V/1.0A, -12V/0.5A (±15V Optional)
- Analog signal input impedance: 100K±1%Ω (Single-ended input)
- Analog position input range: ±10 V, ±5 V (Optional)
- Working temperature: 0~50℃
- Scan Angle: Factory setting ±20° (Optional±30°)
- Scanning speed: >10Kpps(30k ILDA Standard test chart)
- Lens size: 7mm*11mm*0.6mm
- Lens Reflectance: >99% @45° Incident (Coverage wavelength: 380nm-700nm)
- Driving board size: 74mm×45mm×26mm

Test Methods:



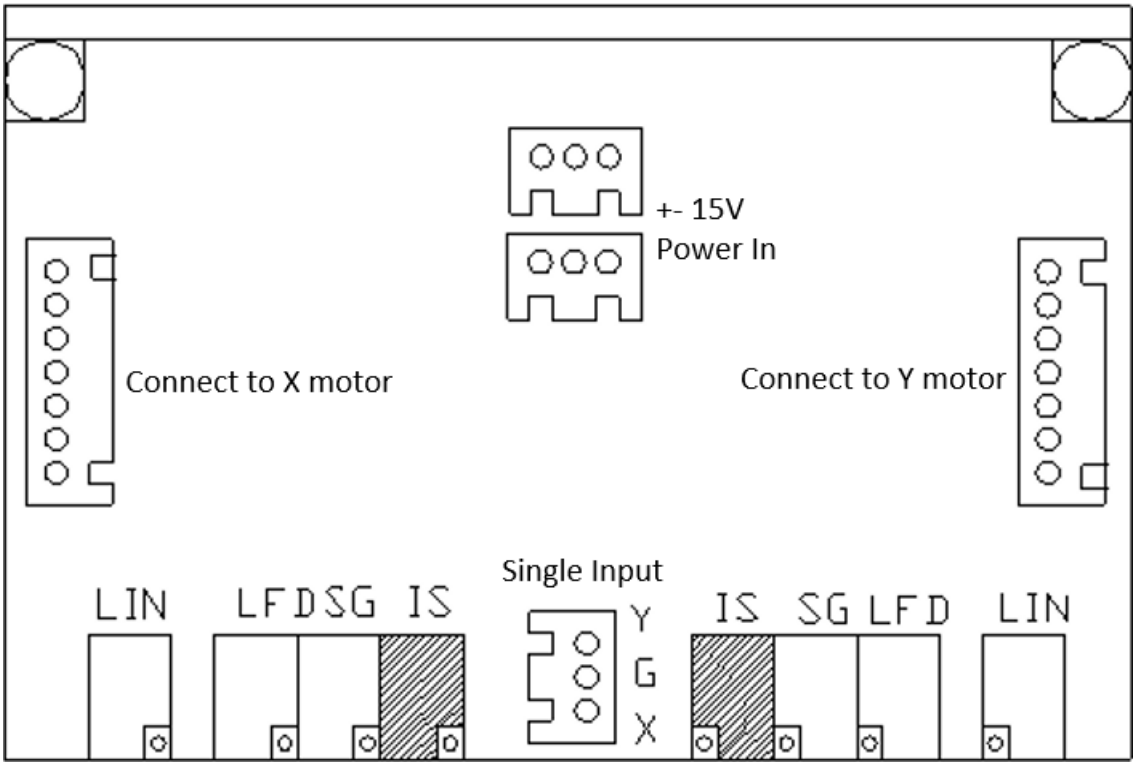


Test chart: ILDA/30K (Round inner box) Test angle: ±20°

Scanning speed

Test angle	Operating Voltage	Speed@Lens size	Test pattern
±20° Opt	±15 VDC	15Kpps @ 7*11*0.6	ILDA 30K
±15° Opt	±15 VDC	18Kpps @ 7*11*0.6	ILDA 30K

Wiring diagram



Precautions:

1、Unpacking Checking. According to the product name, model specification, and the type and quantity of accessories shown on the label on the outer packing carton, check one by one to see if there is any missing or missing error. Check for signs of damage due to shipping, especially if the lens is loose or damaged.

2、Before the work, the driver board and the motor base must be fixed on a large area of the metal plate. At the same time, care must be taken to maintain good air convection in order to dissipate heat.

3、The scanning system is equipped with various connection lines at the factory. If users use other lines to connect themselves, please pay attention to the wiring diagram of the reference driver board. The motor serial number and the scanning board serial number must be the same. The X and Y driving boards and the motor respectively correspond.

Otherwise, the pattern asymmetry may occur, such as a circle changing ellipse.

4、The scanner board has been calibrated at the factory. Except the IS potentiometer, the user must not adjust other potentiometers, otherwise the galvanometer may be damaged. According to the requirements of use, the size of the pattern can be adjusted with the potentiometer IS, and the reverse rotation will increase the pattern, but it cannot be increased without limit, otherwise it may damage the galvo mirror. And to X and Y plate at the same time to adjust the symmetry, otherwise the pattern deformed, such as the circle becomes elliptical.

5、Do not hot plug various cables, otherwise it will damage the galvanometer

6、Pay attention to protect the lens. The lens is fragile. Care should be taken not to collide the lens during the installation process. There must not be any material that contacts the reflective surface of the lens. Otherwise, the lens or the lens may become dirty, affecting the reflectivity of the lens, or even burning the lens. When laser dimming, pay attention to the laser beam do not hit the lens glue, because the glue absorbs heat, it is easy to cause the lens to blow. When the lens is dirty, use a cotton swab dampened with acetone.

7、When abnormal noise or other abnormal phenomenon occurs while the power on, please immediately shut down, troubleshoot, and then boot, so as not to damage the galvanometer.