

## 1.0 AUTOYOKE® LED FOR SOURCE FOUR LED SPOTLIGHT



PART NUMBER 21591-100

### A. GENERAL

1. The unit shall be an integrally designed, remote controlled motorized yoke for LED spotlights.

### B. ENCLOSURE

1. The housing and yoke shall be convection cooled; the use of fans shall not be permitted. Enclosure shall be finished in black. When physically static the yoke shall be silent. It should be mounted on a horizontal surface only. The unit shall weigh approximately 48 pounds (21.77 kg) with LED fixture.

### C. ELECTRICAL

1. The unit shall operate on 100 - 240 VAC (autosensing) and 1.3A at 50/60Hz. The unit shall have two power cords: one six-foot long cord for control power, and one six-foot long cord for attaching the lamp to a remote dimmer.

2. Male and female XLR five pin connectors (in and through) shall be provided.
3. Data and power cables will be included on the cradle to plug into the fixture.
4. The unit will be CE, ETL, and cETL marked, and shall be so labeled when delivered to the job site.

#### D. CONTROL

1. Two stepper motors shall be provided to permit movement of the yoke through 360° in the horizontal plane (pan axis) and 270° in the vertical plane (tilt axis). The pan and tilt shall be belt driven, providing positional resolution and repeatability within 0.1° on their axis. Pan speed for 360° shall be 7.5 seconds. Tilt speed for 270° shall be 4 seconds. Manual override under power shall result in no harm to the drive mechanism. The yoke shall return to its programmed position if moved out of place. Control cabling shall be run internally to prevent tangling.
2. A seven-pin outlet for a DMX-controlled iris shall be provided.
3. A mechanical 18-leaf iris option (PART NUMBER 5010) shall be available to adjust the range of aperture of the degree field angle. This mechanism shall be controlled by the AutoYoke power supply and shall plug into the AutoYoke with a male seven pin XLR connector.
4. A mechanical focus option (PART NUMBER 5020) shall be available as a factory installation that will allow precise lens movement within its full range, allowing for variations of sharpness and softness in the beam of light. This mechanism shall be controlled by the AutoYoke power supply.
5. Each unit shall be equipped with an on-board microprocessor providing diagnostic and self-calibration functions. User-controllable functions shall include addressing, invert display, timeout display, software release number, choice of 8 or 16 bit resolution, error display, restore factory defaults, invert axes, and travel limits on pan, tilt, iris, and focus. Calibration options available through the control panel shall include calibration of each axis individually, as well as an option to auto-calibrate upon power up. A front panel display shall show a variety of functions including user-selected DMX address, software version number, and other menus.
7. A "Control Channel" shall be provided in the seventh DMX address of the AutoYoke's DMX control sequence, allowing user control from a lighting desk of the following functions: calibration of individual attributes, calibration of all attributes together and individual travel limits for pan, tilt, iris, and focus.
8. The yoke shall have a user selectable choice of 8 or 16-bit resolution on the pan and tilt functions and 8-bit resolution on iris and focus.

#### E. FIXTURES

1. The unit shall be installed with the following fixture:
  - A. Electronic Theatre Controls, Inc.; Source Four™ LED Spotlight:
    1. 10 degree field angle
    2. 14 degree field angle

3. 19 degree field angle
4. 26 degree field angle
5. 36 degree field angle
6. 50 degree field angle
7. 70 degree field angle
8. 90 degree field angle