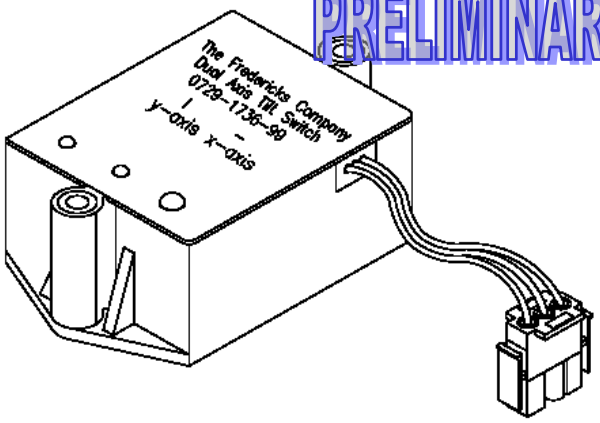
The Fredericks Company

PRELIMINARY



0729-1736-99
Dual Axis Tilt Safety Switch

Key Features

- 1 to 10 Degree Sensing Range
- Fast Installation via Infrared Light Source Programming
- Factory Programmed Trip Points, Damping and Delays
- OEM Reprogramming of Trip Point Angles
- Auto Zero on Power-up option, Eliminating need for Mechanical Zeroing
- Hermetic Sealing from Moisture and Dirt for years of Continuous Operation

Description

The Fredericks Programmable Tilt Switch is a direct replacement for electromechanical-type level sensors. This highly robust and compact unit combines Fredericks' field-proven Dual Axis TrueTilt™ sensor technology with a proprietary embedded microcontroller containing signal conditioning circuitry for accurate, repeatable, and safe tilt options. This design provides the user with an all-electronic switch solution with no moving parts. The assembly can be easily custom configured for a wide variety of angle range trip points.

Applications

- Vehicle Tip-Over Protection/ Warning
- Alarm System Activation
- Structural Threshold Monitoring
- Safety Cut Off Switch

The Fredericks Company
2400 Philmont Avenue Huntingdon Valley, Pennsylvania 19006-0067

Phone: (215) 947-2500
Fax: (215) 947-7464
Web: www.frederickscom.com
Email: sales@frederickscom.com

0729-1736-99

Dual Axis Tilt Safety Switch

PRELIMINARY

Specifications

Operating voltage:	10 to 30 VDC
Output:	Relay: 1A @ 30 VDC resistive load rating
Output Delay:	3 seconds *
Trip Angle:	1 to 10 degrees (independent X and Y trip angles)
Trip Accuracy:	0.2 degrees
Repeatability:	0.1 degrees
Hystersis:	0.1 degrees (max)
Operating Temperature:	-35 to +70 C
Power Protection:	Over-voltage and reverse voltage protected (re-settable fuse)
Mounting holes:	0.250 inches diameter; 3 inch. centers

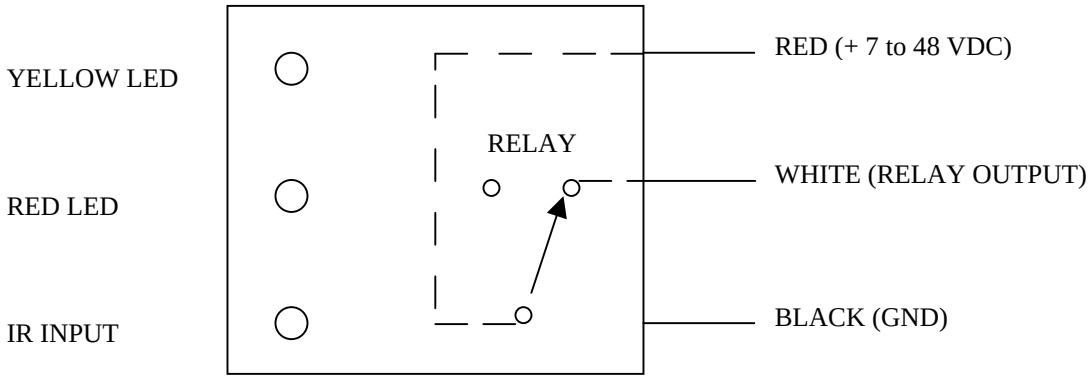
Operation

NOTE:
When the unit is first installed into the equipment it must be zeroed using the factory supplied light source. This is done using the IR zeroing source PN 0729-1739-99. Refer to the instruction supplied with this module. Another option is to have the factory preset the zeroing feature so that when the unit is first powered on it will auto zero. Trip point angles are factory programmed with an option of OEM reprogramming using IR trip-point source PN 0729-1738-99.

The following descriptions apply to the unit when it is in operation:

YELLOW LED:	Turns on when unit reached the trip angle.
RED LED:	Indicated the status of the output relay. On when relay is energizes.
IR INPUT:	IR input – used for zeroing the unit and programming set-points
RELAY:	Sourced with power input and connected to output when unit is in non-tripped position. When unit reaches the trip point, the relay is de-energized and disconnected from the output.

DUAL AXIS TILT SWITCH



NOTE: Relay shown with unit in non-tripped position. *

**Note: Custom applications are available upon request.*

The Fredericks Company
2400 Philmont Avenue Huntingdon Valley, Pennsylvania 19006-0067

Phone: (215) 947-2500
Fax: (215) 947-7464
Web: www.frederickscom.com
Email: sales@frederickscom.com