

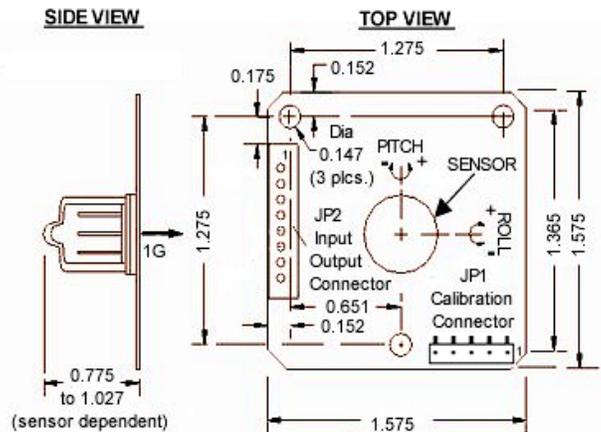
# TAD II – Threshold Angle Detector

The TAD II – Threshold Angle Detector is a Dual Axis Inclinometer, which functions as an electronic switch. It replaces antiquated mechanical/pendulum and mercury based switches with solid state/digital technology. Equipped with five discrete 1.0A open drain outputs, the TADII affords independent/bilateral trigger and hysteresis (reset) angle settings for both the X and Y axis, and a cumulative *threshold limit indication* for maximum versatility. The 1.0A outputs are ideal for driving external components such as solenoid valves. The hysteresis angle can be set at any point within the threshold limit, while the *trigger delay interval* setting helps prevent false triggering under dynamic conditions. Just over 1 ½ inches square, this compact open architecture design is perfect for space restrictive applications. An *optional* flame retardant, molded ABS plastic enclosure is also available. A *calibration board* (sold separately) is available which allows the user to adjust the X and Y axis trigger angles, hysteresis angles, and the *trigger delay interval*.



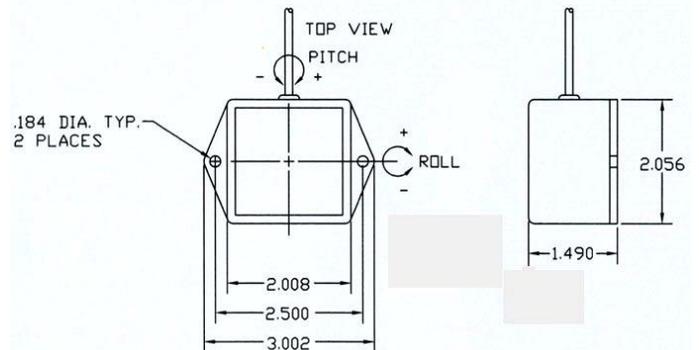
## Dimensions (inches)

### Open Architecture version



Mating Connectors		
#	Manufacturer	Part Number
JP1	Hirose	DF13-5S-1.25C
JP2	Tyco Elect. / AMP	3-640442-8

### ABS Plastic Housing version



## Applications

- Safety Systems (Manlifts, Roll-over protection)
- RV Leveling (Automatic and manual systems)
- Platform Monitoring and Control
- Alarm Systems

## General Specifications

Threshold Range ..... 0.2° to 40° \* (sensor dependent.)  
 Supply voltage (pin #s 7+8)..... +7.5 to +30VDC  
 Supply current ..... 10mA  
 Switch current ..... 1.0A (max)  
 Resolution..... > 1% of threshold angle  
 Repeatability ..... sensor and range dependent  
 Hysteresis (adjustable) ..... 1% to 100% of threshold angle.  
 Delay time (adjustable) ..... 10 seconds (max)  
 Response time ..... sensor dependent  
 Accuracy ..... 0.1°, or trip angle ÷ 200, whichever is greater  
 Operating temperature..... -30° to +70°C .  
 Storage temperature..... -55° to +125°C

\* Extended threshold angular ranges available. Consult factory for details!

## Electrical Connections

Pin #	Wire Color	Function
1	BLACK	GROUND
2	ORANGE	THRESHOLD LIMIT INDICATION (output)*
3	BROWN	PITCH POSITIVE (output)*
4	BLUE	PITCH NEGATIVE (output)*
5	YELLOW	ROLL POSITIVE (output)*
6	WHITE	ROLL NEGATIVE (output)*
7	GREEN	SUPPLY +Vdc
8	RED	SUPPLY +Vdc

\* Pin #'s 2 through 6 are the transistor outputs. Pin #'s 7 and 8 are supply voltage inputs, and are shorted together.

Consult factory for further technical information and ordering details!



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Specifications are subject to change without notice!



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