



Modellsport GmbH & Co. KG

Robonova-1 Tilt Sensor



Features

- Capacitive Liquid Based Sensor
- Compact size: 15 × 19mm
- Rugged plastic housing
- Lightweight: 5g

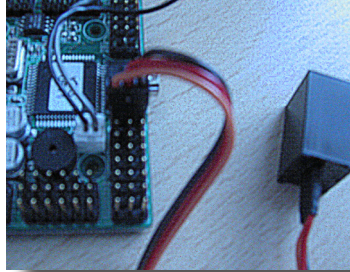
Performance Specification

- Measuring range ±60°
- Resolution <0.1 degrees
- Non-inearity <1% FS
- Transverse Sensitivity <0.5% at ±60° tilt
- Response time <0.5 second
- Power supply (Regulated) 5 Vdc
- Min.to Max.supply 3 to 6 Vdc
- Current consumption 5V <1 mA
- Operating Temperature -30 to .. +60°C
- Storage Temperature -45 to .. +90°C
- Weight approx. 5 g

Performance Specification

- Sensitivity approx 30 us/ °
- Zero offset at 5V 1.25mS ± 0.30mS
- Temperature Drift of sensitivity 1% /°C
- Temperature Drift of Zero ±0.05 mV/°C
- Output impedance 10 kOhm

1. Connection

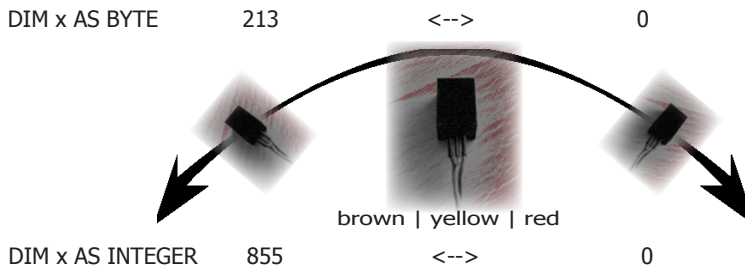


yellow | red | brown
 signal + -

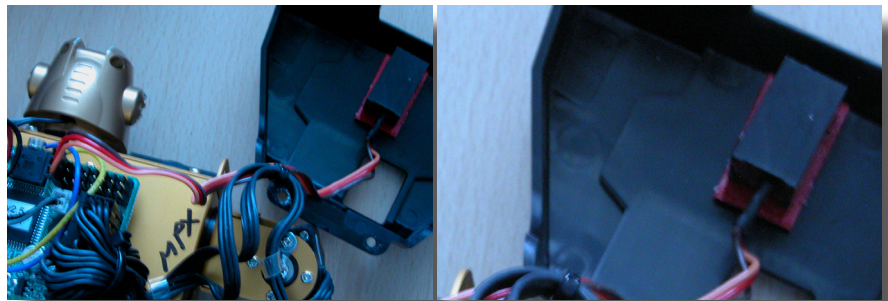
AD0 - robobasic-> AD(0)
 AD1 - robobasic-> AD(1)
 AD2 - robobasic-> AD(2)
 ...
 ..
 .

-> Tilt Sensor
 -> 3024 Controller AD Port

2. Value



3. Mount/Installation



Code Example :

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.....
robot_tilt:
  A = AD(0)
  IF A > 250 THEN RETURN

  IF A < 30 THEN GOTO tilt_low
  IF A > 200 THEN GOTO tilt_high

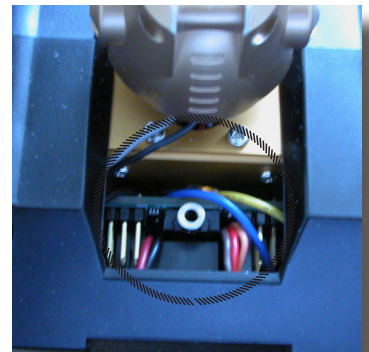
  RETURN

tilt_low:
  A = AD(0)
  IF A < 30 THEN GOTO forward_standup
  IF A > 30 THEN GOTO backward_standup
  RETURN

tilt_high:
  A = AD(0)
  IF A > 200 THEN GOTO backward_standup
  IF A < 200 THEN GOTO forward_standup
  RETURN

.....

```



For more information : www.robnova.de
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