

Ultrasonic Applications

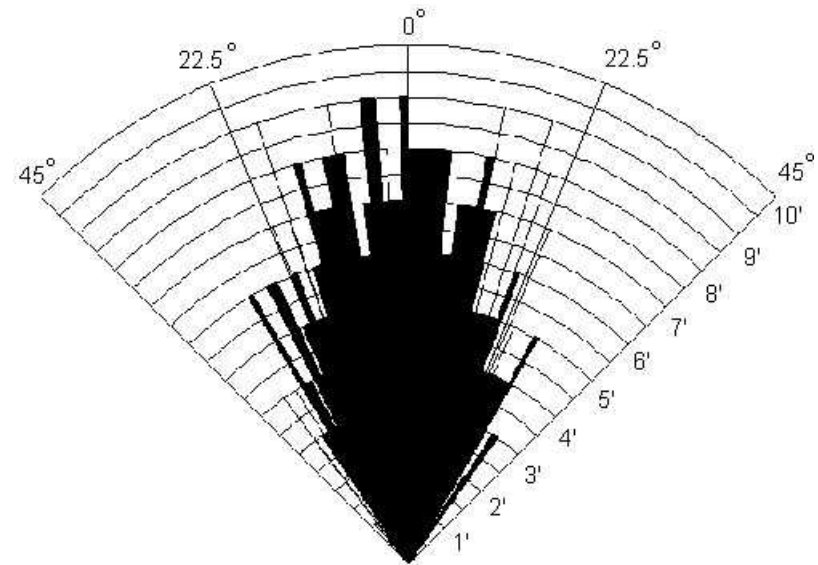
- Detecting range from sensor to objects
 - Cameras
 - Robotics
 - Industry
- Motion detection – Active sensing
- Toys with sensors

Ultrasonic Sensor Advantages

- Measures and detects distances to moving objects.
- Impervious to target materials, surface and color.
- Solid-state units have virtually unlimited, maintenance-free lifespan.
- Detects small objects over long operating distances.
- Resistant to external disturbances such as vibration, infrared radiation, ambient noise and EMI radiation.
- Ultrasonic sensors are not affected by dust, dirt or high-moisture environments.

Ultrasonic Sensor Disadvantages

- Minimum distance that can be detected
- Beam width causes different levels of accuracy
- Distorted readings from diminished wave cause objects to look farther
- Lower maximum range than LIDAR
- Slow measuring rate (compared to light sensors)
- Blind range (when transmitter/receiver in the same sensor)



False Readings from the Sensor

