Ultralyd-sonar LV-EZ2

Produktkode: 337
Tilgjengelighet: Opp til 1 mnd leveringstid

Pris: kr. 460,00

Short Description
MB1020 LV-MaxSonar-EZ2 Range Finder

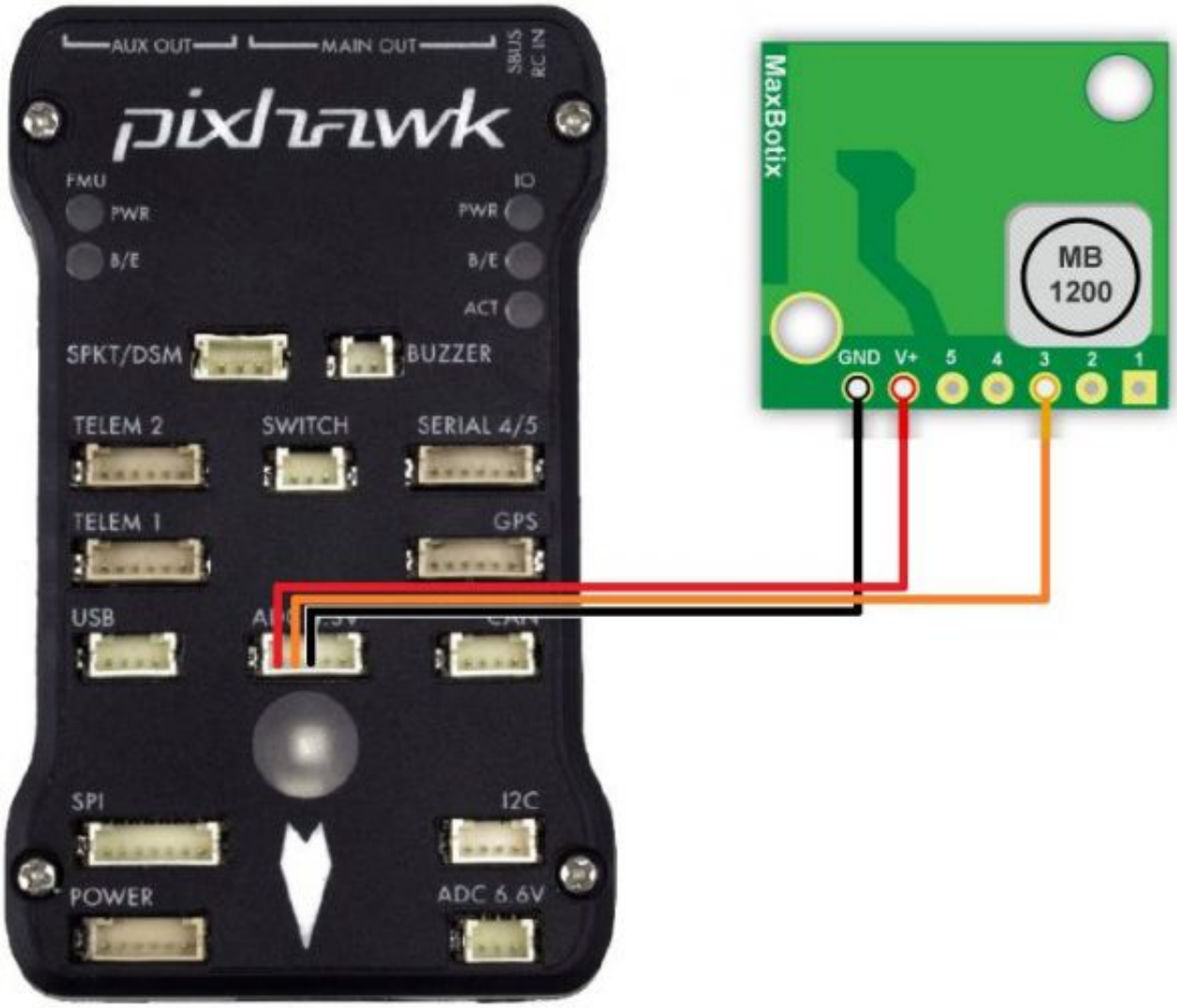
Beskrivelse
This easy to use sensor is from the Maxbotix company. The LV-MaxSonar-EZ2 offers very short to long-range detection and ranging, in an incredibly small package with ultra low power consumption. The LV-MaxSonar-EZ2 detects objects from 0-inches to 254-inches (6.45-meters) and provides sonar range information from 6-inches out to 254-inches with 1-inch resolution. Objects between 0-inches and 6-inches range as 6-inches. The interface output formats included are pulse width output, analog voltage output, and asynchronous serial digital output.
Many Applications require a more narrow beam than the EZ0 and EZ1. The EZ2 offers progressively narrower beam angle allowing the sensor to match the application.

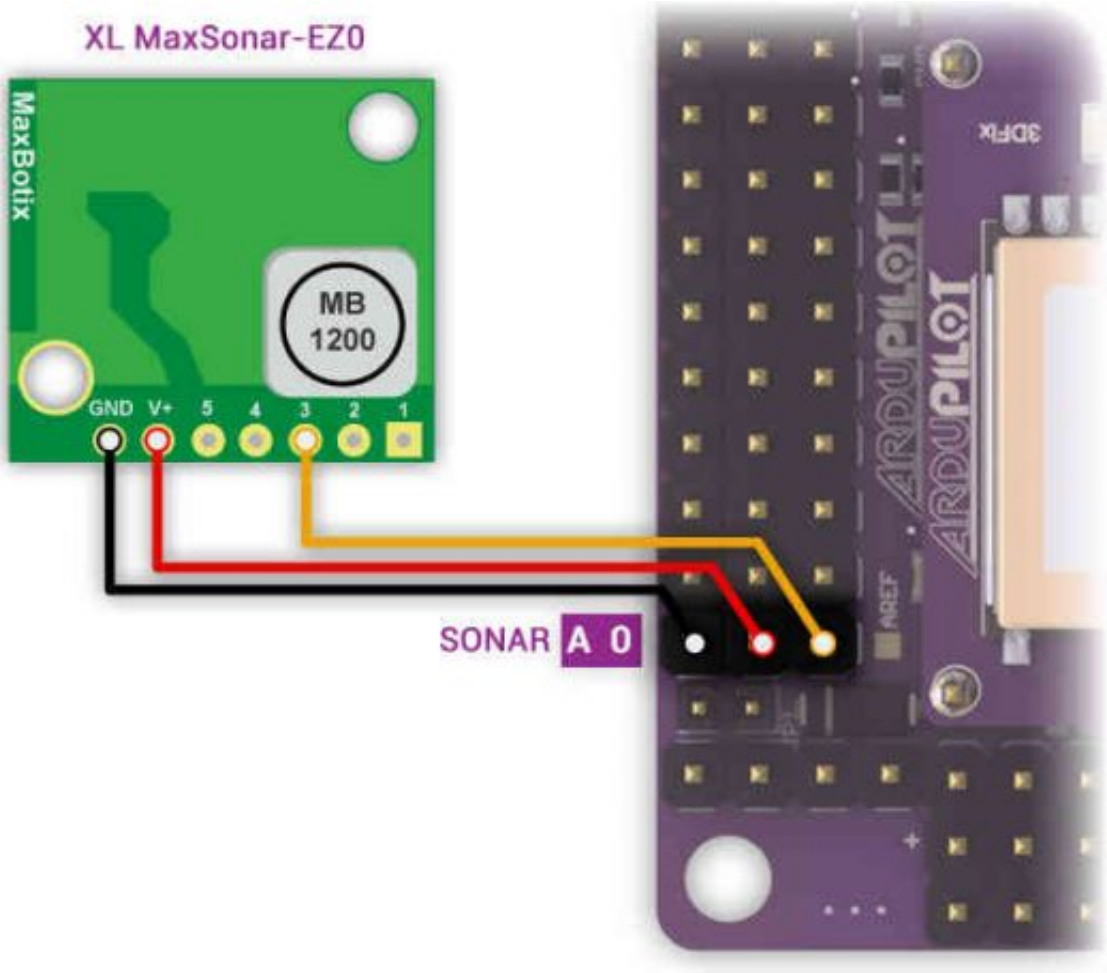
MaxSonar-EZ2 detects objects from 0" to 254".
- 2.5-5.5V operation range. Low 2mA supply current.
- 42kHz Ultrasonic sensor with 20Hz reading rate.
- Incredibly Small Package Sonar Range Finder.
- Serial Output, PWM output, Analog Output.
- Product Dimensions: 0.6 x 0.9 x 0.8 inches ; 5 ounces

Oppsett kontroller:
https://ardupilot.org/copter/docs/sonar.html

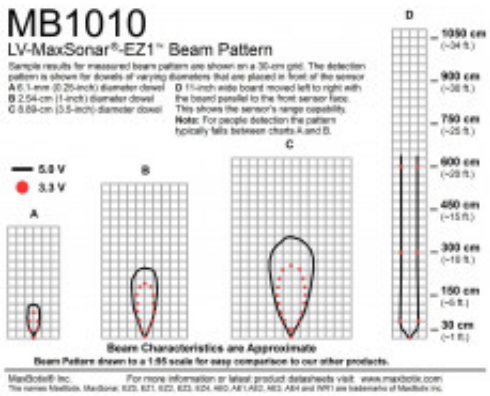
Tilkoblinger

[Oppsett i Ardupilot]





Product Gallery



LV-MaxSonar®-EZ1™ High Performance Sonar Range Finder

With 2.5V - 5.5V power the LV-MaxSonar®-EZ1™ provides very short to long range detection and ranging, in an unbelievably small package. The LV-MaxSonar®-EZ1™ detects objects from 0 inches to 254 inches (6.45 meters) and provides sonar range information from 6 inches out to 254 inches with 1-inch resolution. Objects from 0 inches to 6 inches will read 6 inches and may require a shielded cover. For virtually no additional cost users may choose from several interface formats: serial output, analog voltage output, and pulse width output. Voltage output and pulse width output operate directly from the internal MaxBotix® sensor gain setting. Serial output provides additional range resolution.

Features

- Continuously variable gain for better object detection
- Object detection includes close range objects
- 2.5V to 5.5V supply with 3mA typical current draw
- Readings can occur up to every 50mS, (20Hz) rate
- Free run operates can continually measure and output range information
- Triggered operation provides the range reading as desired
- All interfaces are active simultaneously
- Serial, 9600 baud, RS232 format
- Analog, (Vcc/512)/inch
- Pulse width, 147uS/inch
- Learns ringdown pattern when commanded to range
- Designed to be protected inside an enclosure
- Sensor operates at 42kHz
- High output square wave sensor drive (double Vcc)

Benefits

- Very low cost ultrasonic ranger
- Reliable and stable range data
- Sensor dead zone virtually zero
- Lowest power ranger
- Quality beam characteristics
- Mounting holes provided on the circuit board
- Very low power ranger, excellent for multiple sensor or battery based systems
- Fast for triggered externally or internally
- Sensor reports the range reading directly. Interface your processor
- Fast measurements up to 20 per second
- Users may choose one of the three sensor outputs

Beam Characteristics

People detection requires high sensitivity, yet a narrow beam angle requires less sensitivity. The LV-MaxSonar®-EZ1™ balances the detection of people with a narrow beam width.

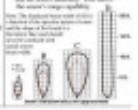
Variable results for measured beam patterns are shown below on a 15 inch grid. The detection patterns shown for:

LV-1) Front (shaded) detect zone for sensor beam to close small objects.

HL-1) Inch diameter dowel, axis in long axis detection pattern.

LV-1) 3/4 inch diameter rod, axis the long centerline detection pattern.

LV-1) 1 inch wide board mounted tall to right side the board parallel to the front sensor face and the sensor centerline. This shows the sensor's range capability.



Beam pattern for the LV-MaxSonar®-EZ1™

Page 1 of 2

MaxBotix, MaxSonar & EZ1 are trademarks of MaxBotix Inc.
Patent 7,679,996 - Copyright 2006 - 2011

LV-MaxSonar®-EZ1™ Pin Out

GND – Ground, the 0V power supply. GND (0 Vcc) must be supplied and must be the first operation.

+5V – Vcc – Operates on 2.5V – 5.5V. Recommended current capability of 3mA for 5V and 1mA for 3V.

TX – When the +5V is open or held Vcc, the TX output delivers asynchronous serial with an RS-232 format, except voltage up to Vcc. The output is an RS-232 signal. "0" (character 0) data will be transmitted when detecting the range in inches as a hundredths of a