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HRUSB-MaxSonar-EZ General Description of Operation

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Serial Output Format

The sensor output is provided over the COM port (or equivalent) in an ASCII character format. If a target is detected at 480 millimeters the output appears as follows: “R0480 <carriage return>”. The output is an ASCII capital “R”, followed

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Serial Terminal Configuration Con't

Windows Configuration Con't

If the provided software does not automatically find the first available HRUSB-MaxSonar-EZ ultrasonic rangefinder, use the following directions

1. Click the "Settings" option.
2. In the "Serial port settings" window, change the "Port" option to the COM port number assigned to the HRUSB-MaxSonar-EZ ultrasonic rangefinder.

For multiple sensor operation, use the following instruction set.

1. Open a terminal window
2. Click settings, if using the software provided for the HRUSB-MaxSonar-EZ ultrasonic rangefinder
3. Change the "Port" menu to match the newest "COM#"
4. Click ok.

Linux Configuration

This was written using Ubuntu 12.10 and MoSerial terminal software.

1. Download and install a terminal program. http://www.maxbotix.com/terminal.htm has a recommended program
2. Configure the HRUSB-MaxSonar-EZ
3. Click "Port Setup"
    a. Set "Device" menu to "/dev/ttyUSB0"
    b. Set Baud, Data Bits, Parity, and Stop Bits to match provided settings.
    f. Turn off all "Handshake" options
4. Click OK
5. Click "Connect"

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Serial Terminal Configuration Con't

USB Latency

Computer USB ports have latency and buffer sizes which can change the time between the range readings

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MB1423 HRUSB-MaxSonar®-EZ2™ Beam Pattern and Uses

The HRUSB-MaxSonar-EZ2 is a good compromise between

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MB1433 HRUSB-MaxSonar®-EZ3™ Beam Pattern and Uses

The HRUSB-MaxSonar-EZ3 is a narrow beam sensor with good side object rejection. The HRUSB-MaxSonar-EZ3 has slightly wider beam width than the MB1443 HRUSB-MaxSonar-EZ4 which makes it a good choice for when the HRUSB-MaxSonar-EZ4 does not have enough sensitivity for the application.

MB1433 Features and Benefits

- More sensitive then the HRUSB-MaxSonar-EZ4
- More noise tolerant acoustic sensitivity
- Ignores some small targets and medium targets
- Detects most targets to long distances
- Narrow beam width

MB1433 Applications and Uses

- Large target detection
- Short range medium target detection
- Applications requiring high noise tolerance

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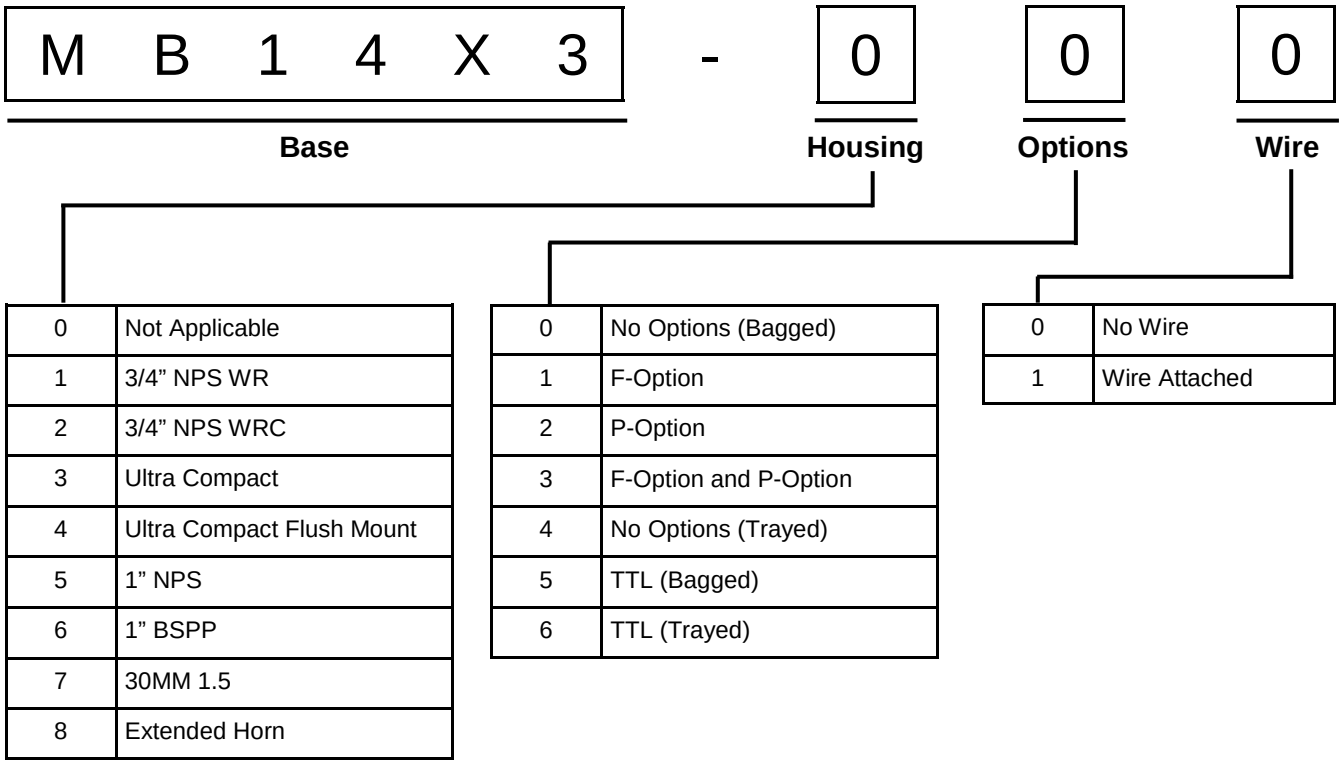
Part Numbers

All part numbers are a combination of a six-character base followed by a dash and a three-digit product code. Please review the following table for more information on the three-digit product code.



0	Not Applicable
1	3/4” NPS WR
2	3/4” NPS WRC
3	Ultra Compact
4	Ultra Compact Flush Mount
5	1” NPS
6	1” BSPP
7	30MM 1.5
8	Extended Horn

0	No Options (Bagged)
1	F-Option
2	P-Option
3	F-Option and P-Option
4	No Options (Trayed)
5	TTL (Bagged)
6	TTL (Trayed)

0	No Wire
1	Wire Attached

The following table displays all of the active and valid part numbers for this product.

Active Part Numbers for				
MB1403-000	MB1413-000	MB1423-000	MB1433-000	MB1443-000
MB1403-040	MB1413-040	MB1423-040	MB1433-040	MB1443-040

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