

Title of Change:	Update to the Most Likely Filter
Product Category:	Ultrasonic Sensor
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Change Effective on Lot #:	74498

Change Category	Type of Change
Firmware	Updates to provide greater stability when ranging with the most likely filter.

Description and Purpose:

The most likely filter has been updated to increase stability of range readings.

Changed Item	Before Change Description	After Change Description
Firmware	If two targets with similar but different amplitudes are detected, it is possible for the output to alternate between the two distances.	If two targets of similar size are found, the range to the closer target will be reported.

Reason / Motivation for Change:	Certain targets can present a double peaked return that can cause range readings to alternate by ~20cm.
Anticipated impact on fit, form, function, reliability, product safety, electrical characteristics, or manufacturability:	Improved stability of range readings when multiple similar targets are found.

List of Affected Parts:

Part Number	New Firmware Revision
MB7388-1XX	1.3b
MB7388-8XX	1.5b