

	Doc or ECO #:	ECO-72984-001	Date:	09/21/2020	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	10/2/2020	Quality Approval:	aeg

P/N #:	72984	Effective Date:	October 2, 2020
Title:	Serial Number Labeling		

1.0 Purpose / Summary

- The purpose of this ECO is to create a professional and standard serial number label template that can be used across all our products to quickly identify parts.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
72984	Blank Serial Label	☐	☒	☐	A
70023	LED	☐	☐	☒	C
70044	Camera	☐	☐	☒	C
70160	Power Module	☐	☐	☒	G
70191	Communications Module	☐	☐	☒	D
70273	AHRS	☐	☐	☒	G
70503	Thruster	☐	☐	☒	F
70809	GPS	☐	☐	☒	C
71006	Combo Box	☐	☐	☒	E
71095	OCC Panel Only	☐	☐	☒	I
71652	Bare Hand Controller	☐	☐	☒	B

3.0 Detail

- Labels will be printed on demand in production.
- Only new product is to be labeled as we cannot be sure of the revision of used or returned parts without a thorough investigation
- A high-quality label was selected so that we can standardize our product identification across our product line up. The following information will be placed on the label
 - Part Number which will help the customer quickly identify a part
 - Serial Number which will aid in trackability
 - Revision Number which will aid Support in identifying exactly what parts the customer has in their system.
 - VideoRay support number so customers can easily contact support if needed
 - A QR code that contains the PN, SN, and revision number which we intend to use to decrease the time involved with manual data entry.

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- A brady i3300 industrial label printer is used.
- The B434 label selected is a metalized polyester that has a strong resistance to alcohols, cleaners, oils, fuels, abrasions, and temperature. Some of the most common elements our systems see had no visible effects to the quality of the label. The below test results had little to no effect on the label, a full detailed result list can be found in the data sheet.
 - 5% Salt Spray
 - 30 Days at 194F
 - Taber Abrasion CS10 Abrasion Wheel 500g/arm (print scratched, but still eligible)
 - 30 Days 100% UV Sunlight with no effect to print, but slight yellowing of label
 - Mineral Spirits had no visible effect
 - SAE 20WT oil had no visible effect
- The label was tested in house with a 48-hour soak in a 3.5% salt solution (average salinity found in the ocean) with no effect observed to the label or its adhesion



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- The label was attached to a power module in open air and left at 180F for 7 hours with no effect to the label or its adhesion



- Work Instructions and Drawings will be updated on an ongoing basis as parts are being updated for other changes
- UID labels for the US Navy were also developed for the OCC, TDS, ROV, and Thruster Spare kit.
 - These are intended to be used only for US Navy deliveries and may change in the future.
 - 72987 Raised Profile Labels - Black 0.59" x 1.77"



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4.0 Disposition of Material

- N/A

5.0 Action Items

Action	Department	Acknowledgement Initials
Update Instructions and Drawings as other changes are being made	Engineering	ENG
Train production on sticker installation	Engineering	KK

6.0 Modified / Referenced Documents:

Document	Current Revision
	Click here to enter text.

7.0 Revision History

Date Revised (mm-dd-yyyy)	Location of Change (section, paragraph no., step no., etc.)	Description of Change Made	Name of Person making the Change