

	Doc or ECO #:	ECO-71152-004	Date:	06/14/2021	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	6/14/2021	Quality Approval:	aeg

P/N #:	71152	Effective Date:	June 15, 2021
Title:	Pro 4 Ultra USB Hub Replacement		

1.0 Purpose / Summary

- There appears to be a conflict with current windows updates and the USB hub used in the ultra panel.
- The purpose of this ECO is to replace USB Hub previously used on the Pro 4 Ultra Lite Panel with our standard Pro 4 USB Hub

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
71152	Top Level ICB	☐	☐	☒	H
71124	Accessory Board	☐	☐	☒	B
PN4-014	D-Link Hub	☒	☐	☐	COTS
52085	Saberant USB Hub	☐	☒	☐	COTS
602-1853-100-03	Red Wire 2"	☐	☒	☐	COTS
52083	4 slot Retainer	☒	☐	☐	A
52082	7 slot Retainer	☐	☒	☐	A
94639101	Remove qty two #4-1/8 Nylon Spacer	☒	☐	☐	COTS
94639A187	Add qty one #2-1/8 Nylon Spacer	☐	☒	☐	COTS
90295A020	Add qty three #2 x 0.02" Nylon Washer	☐	☒	☐	COTS
91831A002	Add qty one #2-56 Nylock Nut	☒	☒	☐	COTS
91772A110	Remove qty two #4-40 x 1/2 PHPS	☒	☐	☐	COTS
91772A108	Remove qty one #4-40 x 3/8 PHPS	☒	☐	☐	COTS
91831A005	Remove qty three #4-40 Nylock Nut	☒	☐	☐	COTS
7130K52	Zip Tie	☐	☒	☐	COTS
517-5508	1/2" Shrink Tube	☐	☒	☐	COTS

3.0 Detail

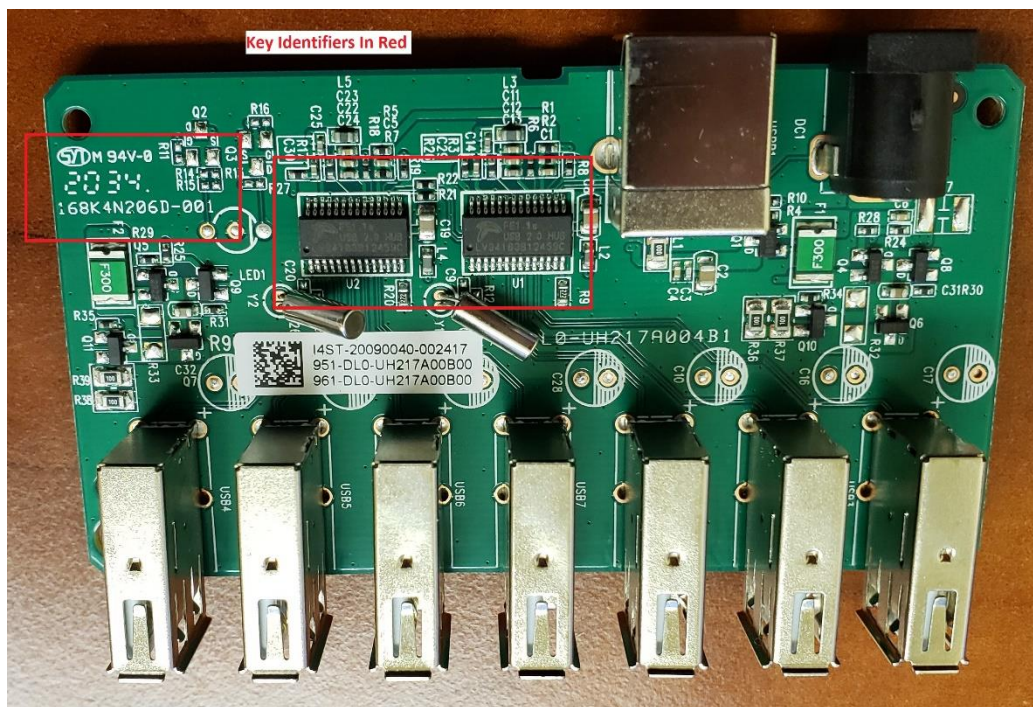
- Due to a PCB Revision update on the D-Link USB Hub **[PN4-014]**, the system was no longer stable and conflicting with Windows 10 Updates. The D-Link Hub was replaced with the Saberant USB Hub which comes standard on the base Pro 4 ICB.
- The Pro 4 Ultra Accessory Board **[71122]** has been updated to accommodate the Hub change.

	Doc or ECO #:	ECO-71152-004	Date:	06/14/2021	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	6/14/2021	Quality Approval:	aeg

- All current stock of the Pro 4 Ultra ICB [71152] including those in process in production should be updated to the standards of this ECO.
- Added Missing Shrink Tube Part Number to BOM
- Any Pro 4 Ultra system in the field exhibiting the following issues that a standard driver reinstallation does not fix should be inspected for the problematic USB Hub. If the problematic USB Hub is discovered in the system, the ICB should be sent to VideoRay for a warranty replacement. Due to the nature of the replacement, in field replacements are not advised. The photo below should be used to identify the problematic USB Hub.

»

- No video in VideoRay Cockpit
- No text overlay in VideoRay Cockpit
- No USB devices in Device Manager (USB 2861 & VideoRay Ultra Serial Device)
- Video Capture Device Driver Issue in Device Manager



	Doc or ECO #:	ECO-71152-004	Date:	06/14/2021	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	6/14/2021	Quality Approval:	aeg



4.0 Disposition of Material

- Rework all systems in house, including repairs and production (in process as of 6/14)
- Discard Revision of 71124
- Discard or Return PN4-014

5.0 Action Items

Action	Department	Acknowledgement Initials
Update BOMs	Engineering	SL
Update Epicor	Engineering	SL
Update Drawings	Engineering	SL
Update WI	Engineering	SL

6.0 Modified / Referenced Documents:

Document	Current Revision
WI-71152	E
BOM-71152	H
ME-71124	B

	Doc or ECO #:	ECO-71152-004	Date:	06/14/2021	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	6/14/2021	Quality Approval:	aeg

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
6/14/2021	All	Init	SL