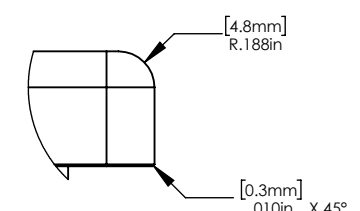
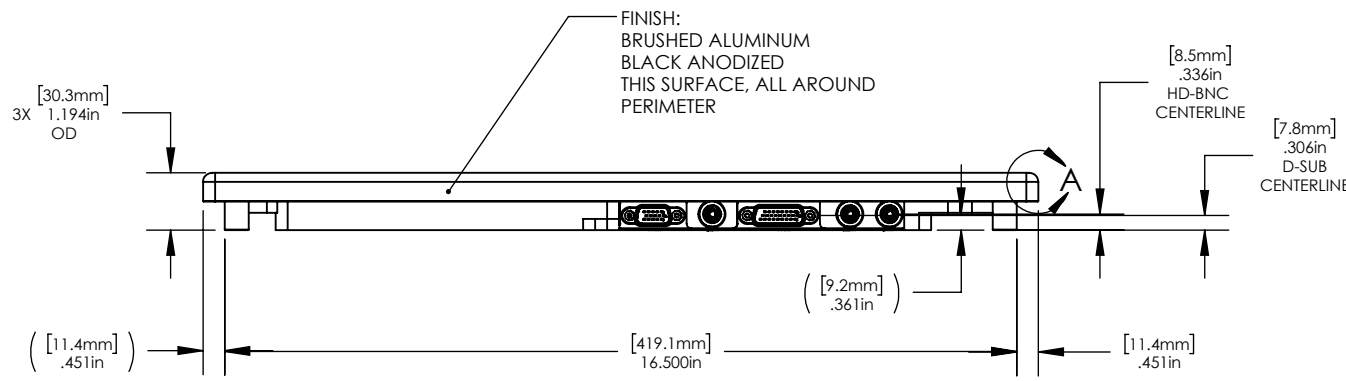
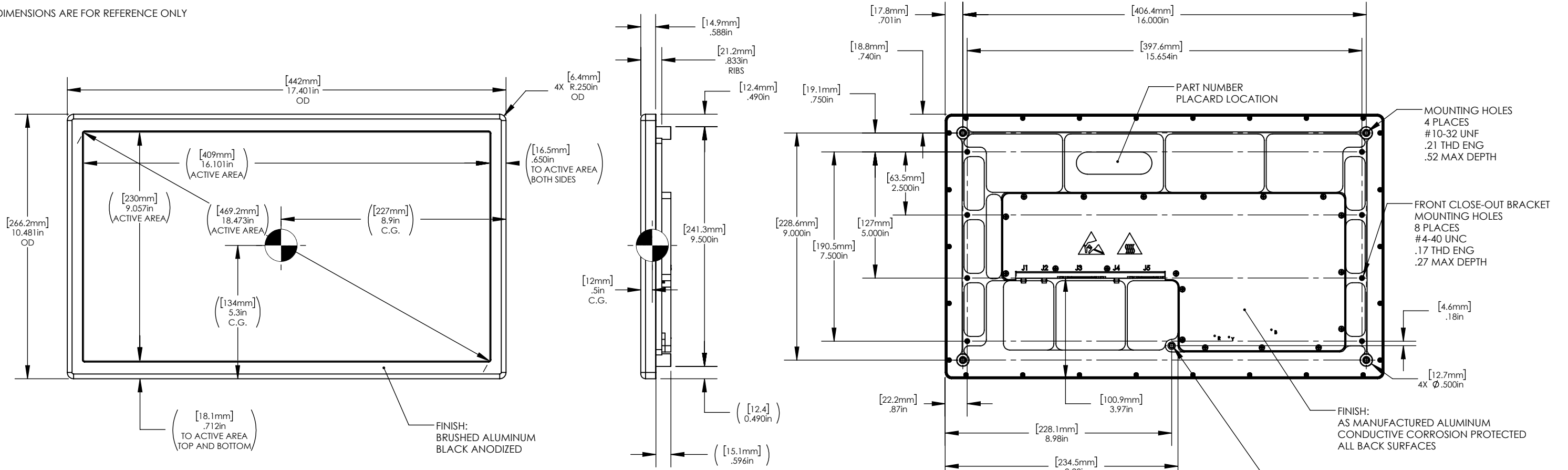


NOTES: (UNLESS OTHERWISE SPECIFIED)

- ASSEMBLY WEIGHT 6.5 LBS MAX
- USE ESD SAFE HANDLING PRACTICES PER ANSI / ESD 520.20
- SOME MINOR PARTS, LABELS, AND INSTRUCTIONS OMITTED FOR CLARITY
- VENTING / CLEARANCE: NATURAL CONVECTION, CLEARANCE TO BACK OF UNIT 1/8"
- MINIMUM 4 FASTENERS REQUIRED FOR MOUNTING
- CONNECTOR KITS NOT INCLUDED
- SEE QUALITY CONTROL PLAN, IF APPLICABLE, FOR ANY CRITICAL ITEMS, SPECIAL PROCESSES, OR KEY CHARACTERISTICS THAT MAY EXIST
- METRIC DIMENSIONS ARE FOR REFERENCE ONLY

Electronic Revision Controlled

REVISIONS						
ZONE	REV	DESCRIPTION	DATE	BY	EC NO	APRV
	6.0	CORRECTED NOTE 5 TYPO	10/23/17	MCS	NEC17-0638	BEF
	A	INITIAL PRODUCTION RELEASE, CORRECTED TYPOS, UPDATED TOLERANCES AND REFERENCE DIMENSIONS, ADDED "*****" NOTE FOR SUPPORTED VIDEO RESOLUTIONS	02/23/18	MCS	18-0130	
SH2	B	UPD NOTE AUDIO OUTPUT LINE OUT, WAS 2V P-P	03/15/18	MCS	18-0175	SC
	C	ADD "MODEL" AND "CPN" TO TITLE BLOCK	11/09/18	SC	18-0763	BEF



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ROSEN AVIATION		1020 OWEN LOOP SOUTH EUGENE, OREGON 97402 TEL: (541) 342-3802 FAX: (541) 342-4912		APPROVALS	INITIAL	DATE
				DRAWN BY	MCS	04/11/17
				CHECKER	SC	02/22/18
				ENGINEER	MCS	02/22/18
				CUSTOMER PART NUMBER (CPN)		
				SDM185-001-CD		
				SIZE	MODEL	REV
				B	SDM185-001	C
				SCALE: 1:4	SHEET 1 OF 2	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 X = ±.1
 .XX = ±.03
 .XXX = ±.015
 \angle = ±.50°
 RADII ±.020
 INTERPRET DIM AND TOL PER ASME Y14.5M - 1994

FIRST CALLED FOR: (FCF)
362 - SDM 18.5

1

2

3

4

PERFORMANCE SPECIFICATIONS (REF)

LCD Performance	
Screen Resolution (pixels)	1920 x 1080
Display Viewing Area (mm)	408.96mm X 230.04mm
Horizontal Viewing Angle	±89°
Vertical Viewing Angle	±89°
Contrast Ratio (Typical)	1000:1
Screen Brightness (Typical)	350 cd/m ²

Power Requirements	
Operational Voltage Range	20 to 32 VDC
Max Current at Nominal Voltage*	1.0 AMP @ 28VDC
Inrush Peak	5.1 AMP
Inrush Duration	1 ms

Environmental Specifications	
Operating Temperature	-15°C - 55°C
Altitude	15,000ft
Humidity	95%RH
Vibration	DO-160G Cat S (Curve B)
Emission of RF Energy	DO-160G Cat M

Supported Video Resolutions	
480i@29.97	1080P@23.97
576i@25	1080P@24
720p@50	1080P@25
720P@59.94	1080P@29.97
720P@60	1080P@30
1080i@25	1080P@50
1080i@29.97	1080P@59.94
1080i@30	1080P@60

* Current Draw will increase as voltage decreases
 ** Audio output is Line Level (2V-RMS) but can be adjusted. See Tech Manual for details.
 ***Supported video resolutions include both standard SDI and SDI Scramble Protocol

J1	
SDI ***	
LRU CONNECTOR HD-BNC JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN FUNCTION	
CENTER	3G-SDI
OUTER	3G-SDI RETURN

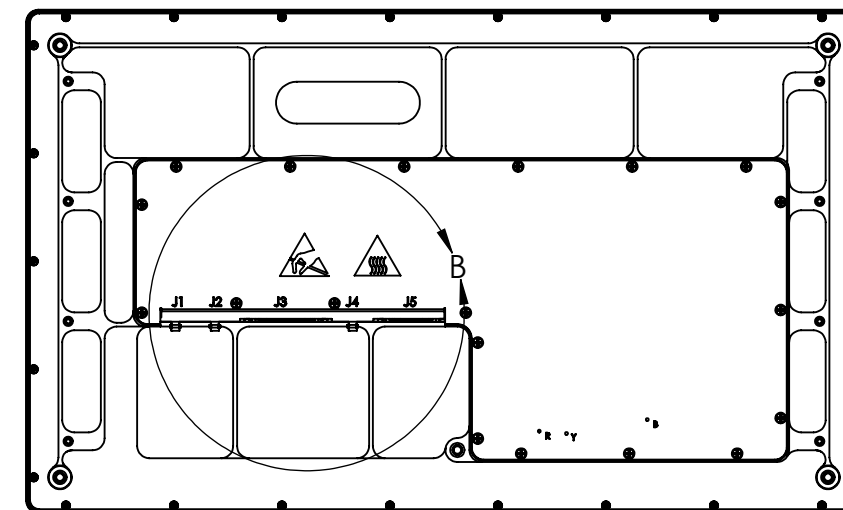
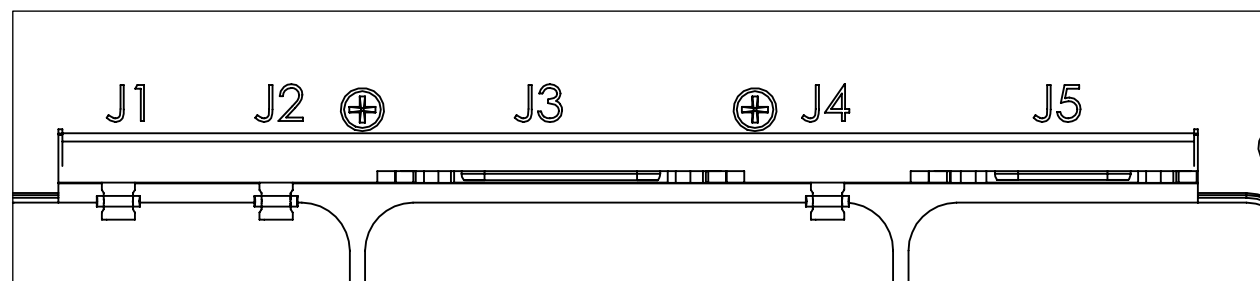
J2	
SDI ***	
LRU CONNECTOR HD-BNC, JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN FUNCTION	
CENTER	3G-SDI
OUTER	3G-SDI RETURN

J3	
MAIN CONNECTOR	
LRU CONNECTOR 26 POS. DSUB-HD. MALE PINS	
SUGGESTED MATE HARDWARE	
HOUSING	AMP - 1658682-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9215
Pin Signal	
1	Return 28 VDC
2	28 VDC In
3	Chassis GND
4	Analog Audio Return**
5	Analog Audio out Left**
6	Analog Audio out Right**
7	RS232 Control TX
8	RS232 Control RX
9	Signal GND
10	ARINC-429 in 1 A
11	ARINC-429 in 1 B
12	ARINC-429 in 2 A
13	ARINC-429 in 2 B
14	RS232 GPS TX
15	RS232 GPS RX
16	Signal GND
17	USB GND
18	Pwr Control in
19	Select in
20	Discrete out / Extra in
21	Audio Mute Control in
22	RS485+
23	RS485-
24	USB VBUS
25	USB D+
26	USB D-

J4	
COMPOSITE	
LRU CONNECTOR HD-BNC JACK	
SUGGESTED MATE HARDWARE	
TYPE	HDBNC
MATE	AMP - 034-1042
IMPEDANCE	75-Ohms
PIN FUNCTION	
CENTER	VIDEO SIGNAL
OUTER	VIDEO RETURN

J5	
ETHERNET	
LRU CONNECTOR 15 POS. DSUB-HD. MALE PINS	
SUGGESTED MATE HARDWARE	
HOUSING	AMP - 1658681-1
CONTACT	AMP - 1658686-1
SHELL	3M - 3357-9209
Pin Signal	
1	ENET C+
2	CHASSIS GND
3	ENET B- (RX-)
4	ENET A- (TX-)
5	ENET D-
6	CHASSIS GND
7	ENET C-
8	ENET B+ (RX+)
9	ENET A+ (TX+)
10	ENET D+
11	IR in
12	IR +5V out
13	Signal GND
14	RS232 Debug TX
15	RS232 Debug RX

DETAIL B
SCALE 1 : 1



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		B	SDM185-001-CD	C
SCALE: 1:4		SHEET 2 OF 2		

A

A

B

B

1

2

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