



**ANODYNE  
ELECTRONICS  
MANUFACTURING CORP.**

## SPECIAL NOTICE

This product is now licensed to Anodyne Electronics Manufacturing (AEM) from Northern Airborne Technology (NAT)/Cobham Aerospace Communications (CAC). AEM is responsible for all matters related to this product, including sales, support and repair services.

Please note the transition to convert product manuals and supporting documentation is an ongoing process and is being addressed on an 'as needed' basis.

All references to NAT product part numbers (and associated images) are equivalent to AEM product part numbers.

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## AA21-408 Cabin PA System SM34 Installation and Operation Manual Supplement

This supplement contains installation and operation information that is unique to the AA21-408 Remote Mount Cabin PA system. Installation and operation information common to the AA21-400 base unit can be found in the **SM34** Installation and Operation Manual.

<p>Prepared By:</p> <div style="text-align: center;">   <b>AP</b>   </div> <p>Tony Pearson Designer Nov 14, 2016</p>	<p>Checked By:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <b>LAC</b>   </div> <div style="text-align: center;"> <p>Loen Clement Designer Nov 17, 2016</p> </div> <div style="text-align: center;">   <b>TBA</b>   </div> <div style="text-align: center;"> <p>Tom Betzell Product Support Manager Nov 17, 2016</p> </div> </div>	<p>Approved By:</p> <div style="text-align: center;">   <b>TB</b>   </div> <p>Todd Blackstock R&amp;D Manager Dec 7/16</p>
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### Section 1.0 Description

The AA21-408 is identical to the AA21-400 with the following exceptions:

- a) The speaker output is replaced with a CABIN PA MIC output.
- b) An INT/EXT discrete function is added.
- c) The standard white backlighting is changed to NVIS Green 'B' backlighting.
- d) The Power On LED indicator is not installed.
- e) The Volume knob is replaced by a grey edge lighted knob.
- f) The bat cover on the POWER switch is white instead of green.

### Section 2.0 Installation

For installation information and drawings, see **SM34** Section 2. Select the appropriate revision of the drawing for the serial number of the unit. The drawings specific to this derivative are listed below and can be found at the end of this supplement.

#### 2.1 Installation Drawings

DOCUMENT	REV.	DESCRIPTION	TYPE	SERIAL NO.
AA21-408-403-0	1.01	PA Controller	Interconnect	1588 and up
AA21-408-405-0	1.01	PA Controller	Connector Map	1588 and up
AA21-408-922-0	1.20	PA Controller	Mech. Installation	066274 and up
AA21-408-922-0	1.10	PA Controller	Mech. Installation	060512 to 066273
AA21-408-922-0	1.00	PA Controller	Mech. Installation	1588 to 060412

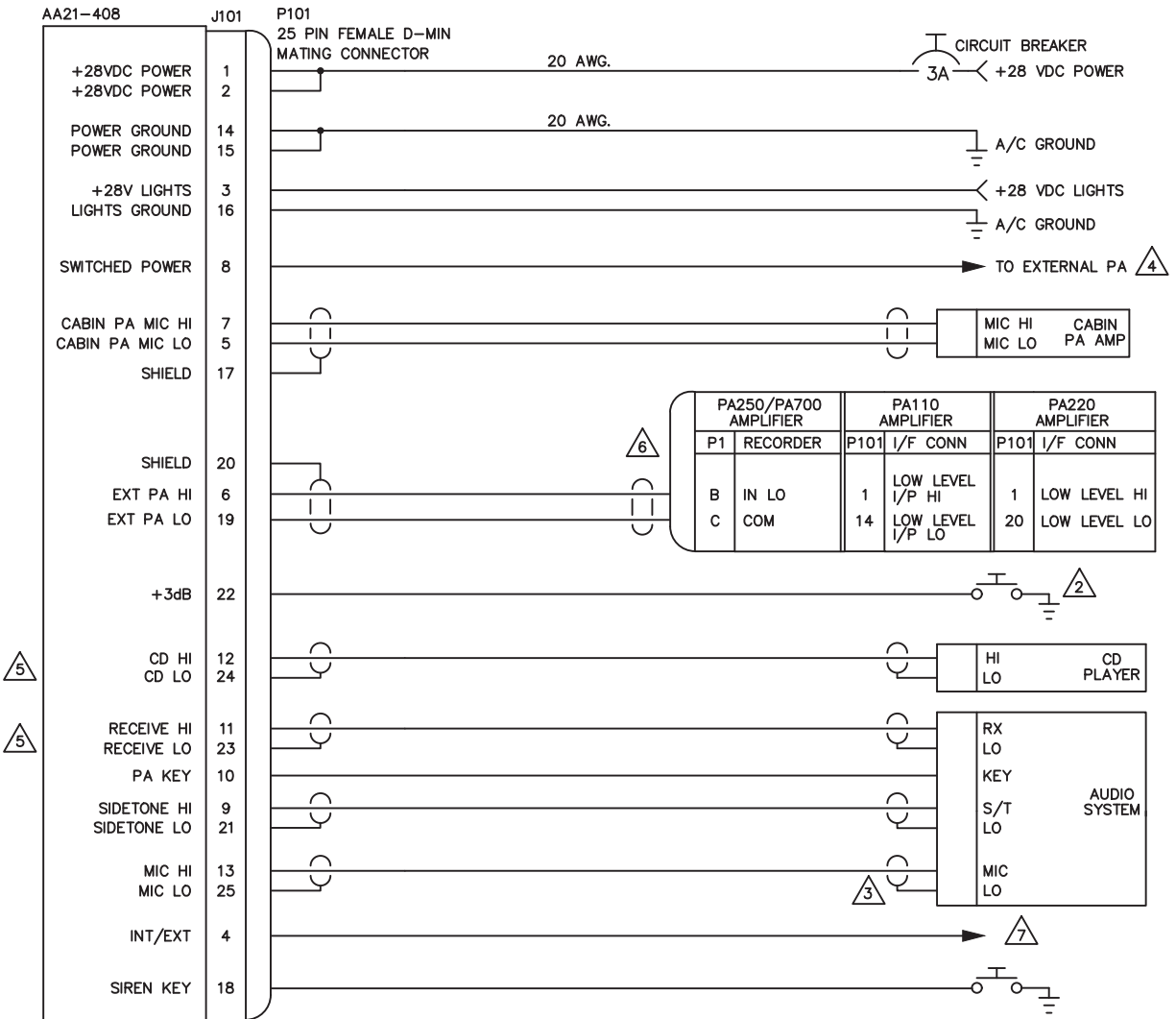
### Section 3.0 Operation

For operation information, see **SM34** Section 3, with the following exception.

End of Supplement

REVISIONS

REV	DESCRIPTION	DATE	BY
1.01	ECO1054 - UPDATED TO AEM TITLEBLOCK.	OCT 14/16	LAC



NOTES:

1. ALL WIRES SHOULD BE 22 AWG UNLESS OTHERWISE SPECIFIED. ALL UNSHIELDED WIRE SHALL BE SELECTED IN ACCORDANCE WITH AC43.13-1B CHANGE 1, PARAGRAPHS 11-76 THROUGH 11-78. WIRE TYPES SHOULD BE TO MIL-W-22759 AS SPECIFIED IN AC43.13-1B CHANGE 1, PARAGRAPHS 11-85, 11-86 AND LISTED IN TABLE 11-11. ALL SHIELDED WIRE/CABLE SHOULD BE IN ACCORDANCE WITH MIL-C-27500.

- 2. GROUND TO REDUCE OUTPUT BY 3dB.
- 3. MIC LO MUST BE GROUNDED AT AUDIO PANEL.
- 4. +28VDC @ 400mA MAX.
- 5. JUMPER CONFIGURED. ONLY RECEIVE OR CD MAY BE USED AT ONE TIME.
- 6. REFER TO AA21 INSTALLATION AND OPERATION MANUAL FOR CORRESPONDING AA21 JUMPER SETTING.
- 7. PROVIDES GROUND IN EXT POSITION.

DEFINITIONS:

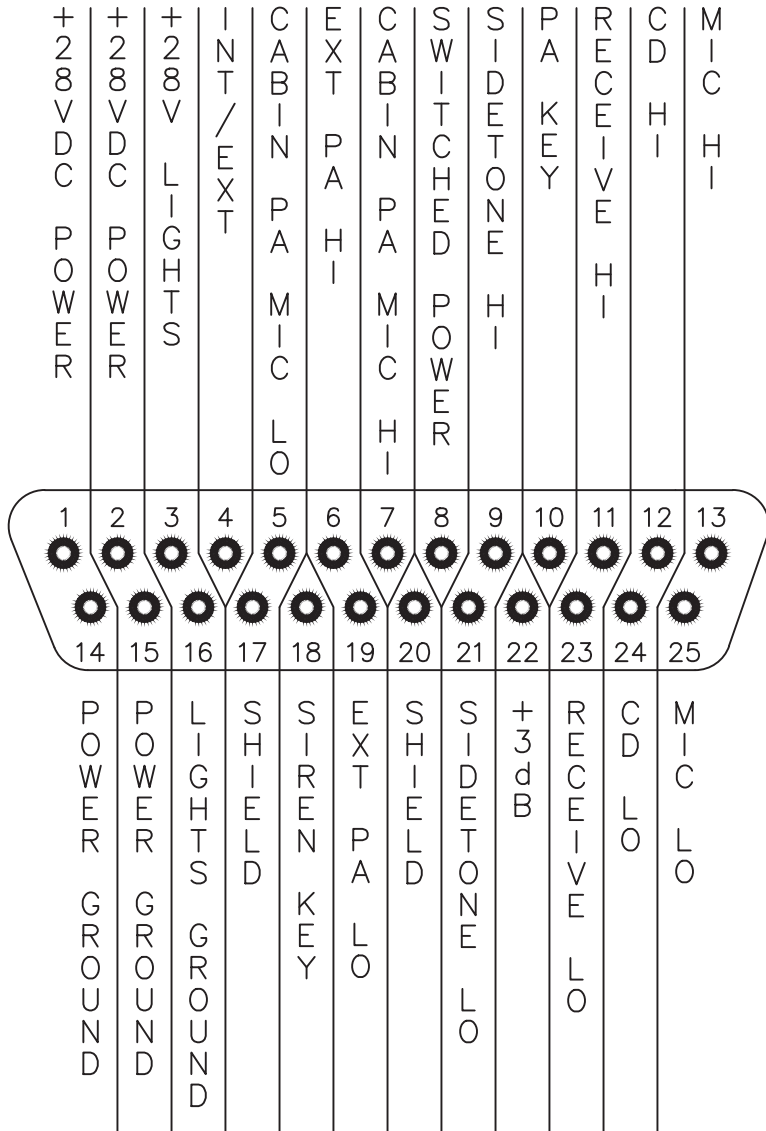
- N/C: NO CONNECTION. THE PIN IS NOT CONNECTED TO ANYTHING INTERNALLY, AND THEREFORE SHALL HAVE NO CONNECTION EXTERNALLY.
- RESERVED: MAY BE CONNECTED AND USED IN THE FUTURE. THE CIRCUITRY MAY BE PRESENT OR ADDED TO ACTIVATE THE FUNCTION. THE PIN MAY BE USED FOR TEST PURPOSES. THERE IS NO EXTERNAL CONNECTION.

NAME	DATE	UNLESS OTHERWISE SPECIFIED:	<b>ANODYNE ELECTRONICS MANUFACTURING CORP.</b> KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM			
DRAWN	NOV 22/07	DIMENSIONS ARE IN INCHES [MM] TOLERANCES: FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5° TWO DECIMAL PLACE _____ ±0.010" THREE DECIMAL PLACE _____ ±0.005"				
CHECKED	Oct 21, 2016		TITLE: <h2 style="text-align: center;">CABIN PA SYSTEM INTERCONNECT</h2>			
APPROVED	Oct 28/16					
CONFIDENTIAL AND PROPRIETARY THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ANODYNE ELECTRONICS MANUFACTURING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ANODYNE ELECTRONICS MANUFACTURING IS PROHIBITED.		MATERIAL:	PAPER SIZE: <b>A</b> CAGE CODE: <b>L9015</b> PART No.: <b>AA21-408</b> REVISION: <b>1.01</b>			
		FINISH:				
			SCALE: N/A	DO NOT SCALE DRAWING	DRAWING No.: 403-0	SHEET: 1 of 1




REVISIONS			
REV	DESCRIPTION	DATE	BY
1.01	ECO1054 - UPDATED TO AEM TITLEBLOCK.	OCT 14/16	LAC

P101

25 PIN FEMALE D-MIN  
MATING CONNECTOR

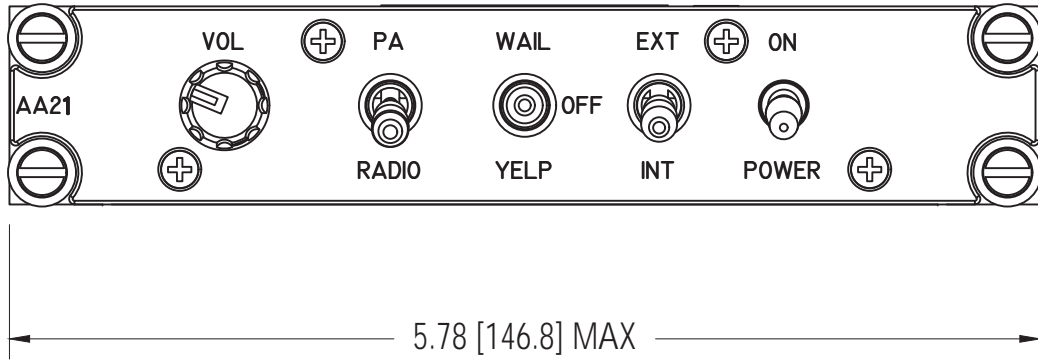
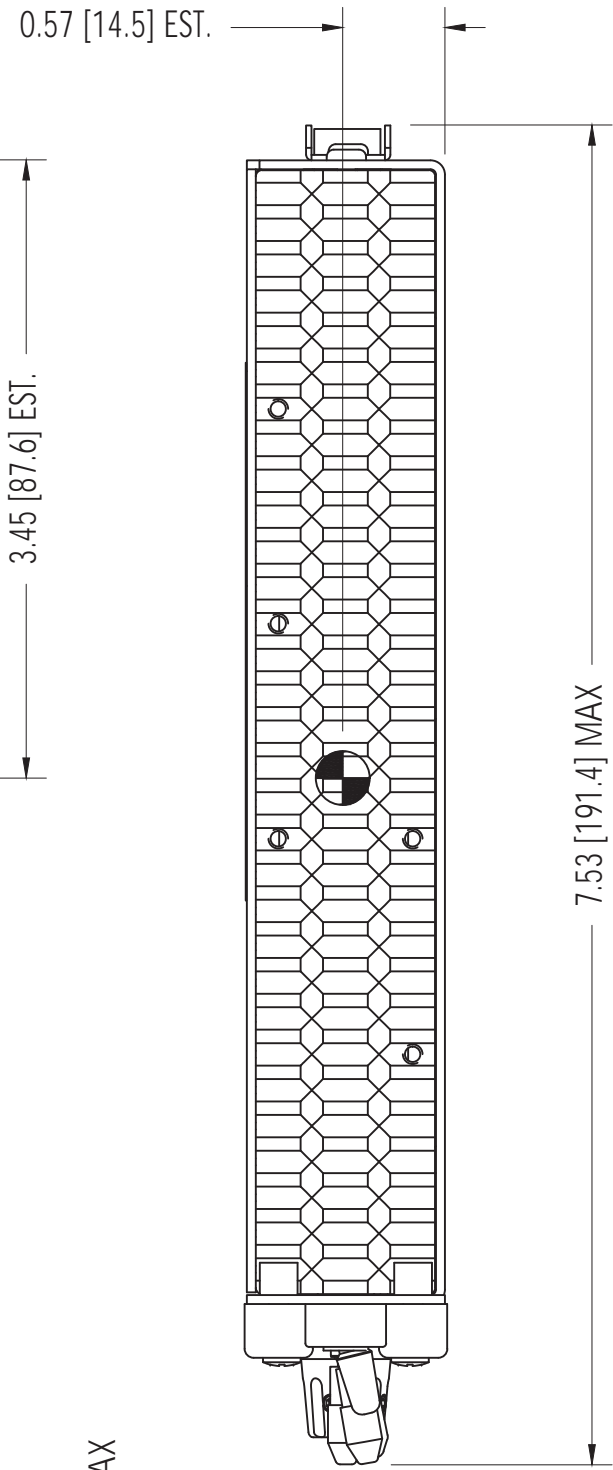
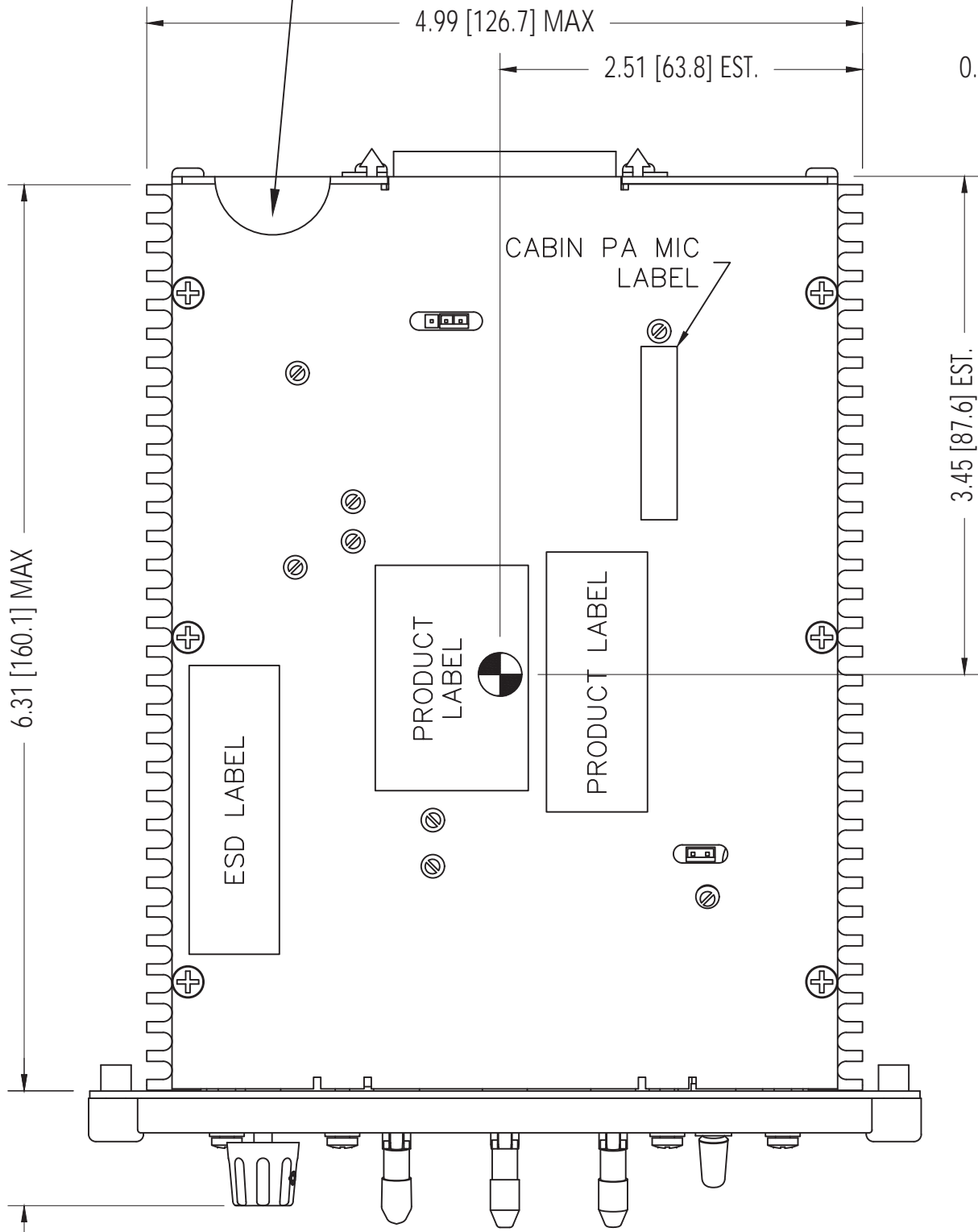


VIEW IS FROM REAR OF AIRFRAME CONNECTOR

	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 <b>ANODYNE ELECTRONICS MANUFACTURING CORP.</b> KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM
DRAWN	TAT	NOV 19/07	DIMENSIONS ARE IN INCHES [MM] TOLERANCES:	
CHECKED		Oct 21, 2016	FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5° TWO DECIMAL PLACE _____ ±0.010° THREE DECIMAL PLACE _____ ±0.005"	
APPROVED		Oct 28/16	TITLE:	<b>CABIN PA SYSTEM CONNECTOR MAP</b>
CONFIDENTIAL AND PROPRIETARY THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ANODYNE ELECTRONICS MANUFACTURING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ANODYNE ELECTRONICS MANUFACTURING IS PROHIBITED.			MATERIAL:	
			FINISH:	SCALE: N/A    DO NOT SCALE DRAWING    DRAWING No.: 405-0    SHEET: 1 of 1

REVISIONS			
REV	DESCRIPTION	DATE	BY
1.10	SEE PREVIOUS REV FOR DETAILS.	MAY 31/12	KPM
1.20	ECO1054 - UPDATED TO AEM FORMAT AND REMOVED NAT LOGO.	OCT 20/16	LAC

WARRANTY VOID LABEL

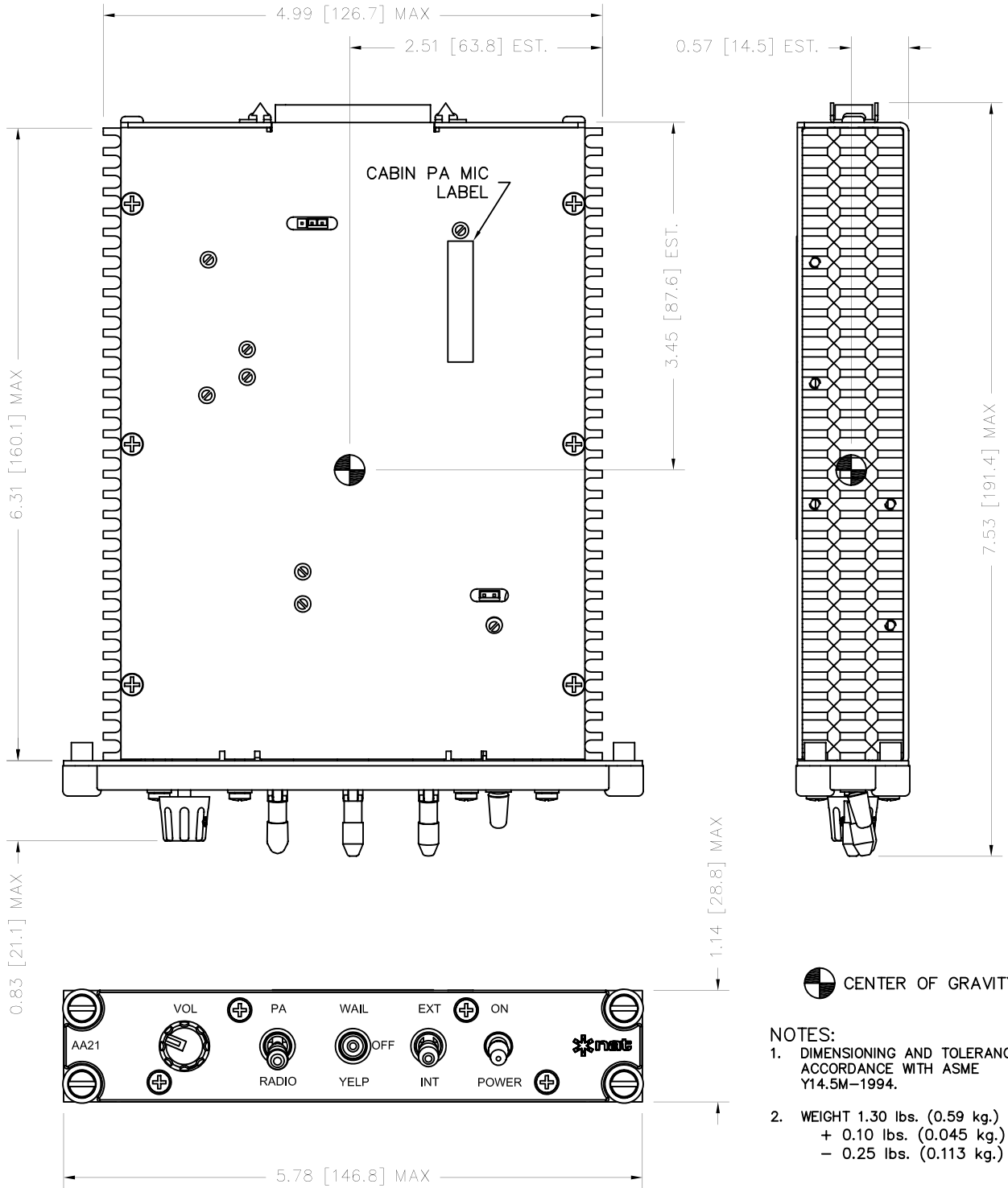


CENTER OF GRAVITY

- NOTES:
- DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M-1994.
  - WEIGHT 1.30 lbs. (0.59 kg.)  
+ 0.10 lbs. (0.045 kg.) MAX  
- 0.25 lbs. (0.113 kg.) MIN

<table border="1"> <tr> <th>NAME</th> <th>DATE</th> <th>UNLESS OTHERWISE SPECIFIED:</th> </tr> <tr> <td>DRAWN TAT</td> <td>NOV 22/07</td> <td>DIMENSIONS ARE IN INCHES [MM]</td> </tr> <tr> <td>CHECKED </td> <td>21-Oct-16</td> <td>TOLERANCES:</td> </tr> <tr> <td>APPROVED </td> <td>Oct 21/16</td> <td>FRACTIONAL ±0.0625"</td> </tr> <tr> <td></td> <td></td> <td>ANGULAR ±0.5°</td> </tr> <tr> <td></td> <td></td> <td>TWO DECIMAL PLACE ±0.010"</td> </tr> <tr> <td></td> <td></td> <td>THREE DECIMAL PLACE ±0.005"</td> </tr> </table>	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	DRAWN TAT	NOV 22/07	DIMENSIONS ARE IN INCHES [MM]	CHECKED	21-Oct-16	TOLERANCES:	APPROVED	Oct 21/16	FRACTIONAL ±0.0625"			ANGULAR ±0.5°			TWO DECIMAL PLACE ±0.010"			THREE DECIMAL PLACE ±0.005"	<p><b>AEM</b> ANODYNE ELECTRONICS MANUFACTURING CORP.</p> <p>KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM</p>
NAME	DATE	UNLESS OTHERWISE SPECIFIED:																				
DRAWN TAT	NOV 22/07	DIMENSIONS ARE IN INCHES [MM]																				
CHECKED	21-Oct-16	TOLERANCES:																				
APPROVED	Oct 21/16	FRACTIONAL ±0.0625"																				
		ANGULAR ±0.5°																				
		TWO DECIMAL PLACE ±0.010"																				
		THREE DECIMAL PLACE ±0.005"																				
<p>CONFIDENTIAL AND PROPRIETARY THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ANODYNE ELECTRONICS MANUFACTURING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ANODYNE ELECTRONICS MANUFACTURING IS PROHIBITED.</p>	<p>MATERIAL: N/A</p> <p>FINISH: N/A</p>																					
<p>TITLE: CABIN PA SYSTEM MECHANICAL INSTALLATION</p>																						
<p>PAPER SIZE: B</p>	<p>CAGE CODE: L9015</p>	<p>PART No.: AA21-408</p>	<p>REVISION: 1.20</p>																			
<p>SCALE: 1:1</p>	<p>DO NOT SCALE DRAWING</p>	<p>DRAWING No.: 922-0</p>	<p>SHEET: 1 of 1</p>																			

REVISIONS			
REV	DESCRIPTION	DATE	BY
1.10	W12265 - REMOVED PRODUCT LABEL, ADDED WEIGHT TOLERANCES. CHANGED DIMENSION TOLERANCE FROM ±0.010 TO ±0.030.	MAY 31/12	KPM

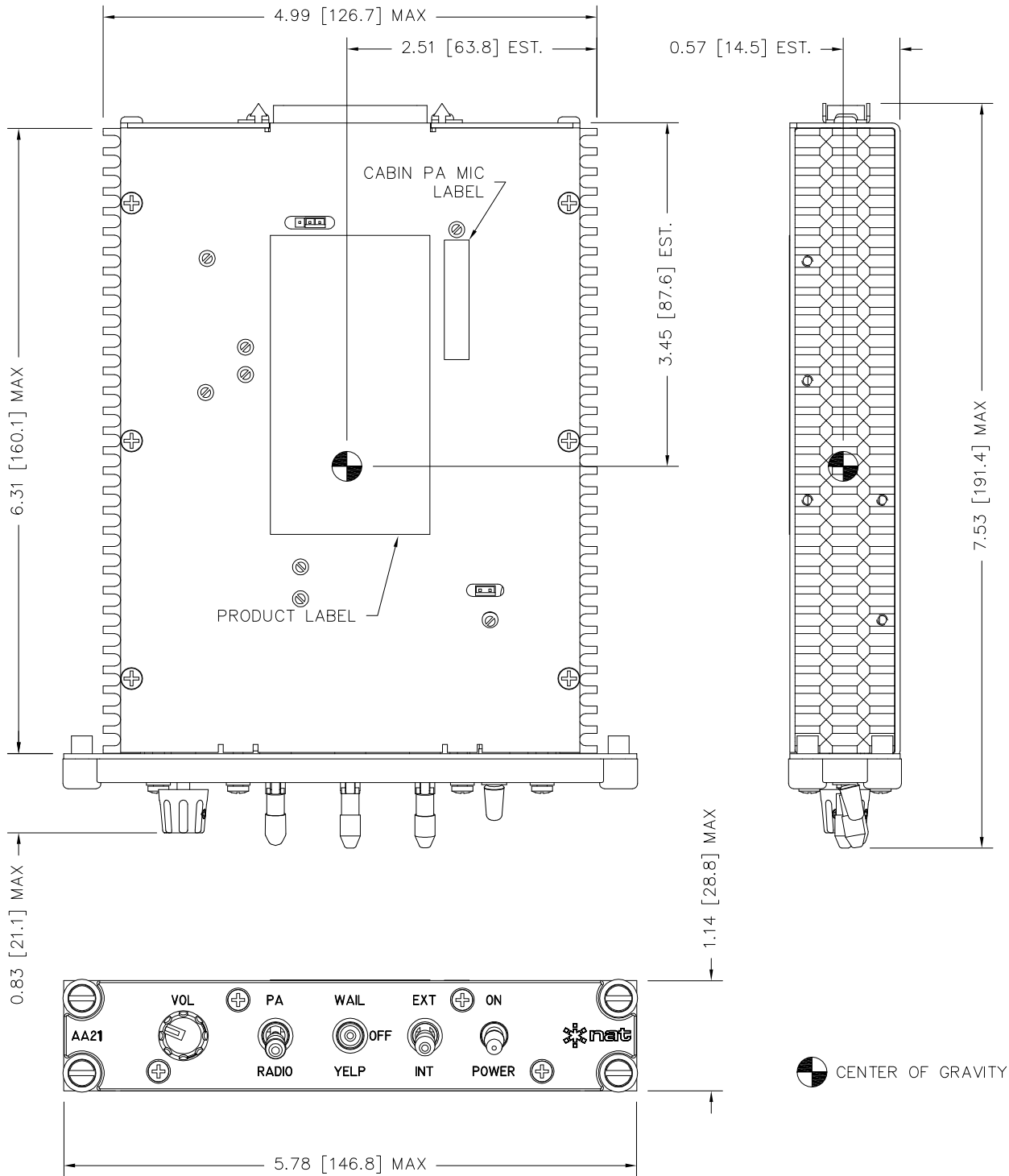


CENTER OF GRAVITY

- NOTES:
- DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M-1994.
  - WEIGHT 1.30 lbs. (0.59 kg.)  
+ 0.10 lbs. (0.045 kg.) MAX  
- 0.25 lbs. (0.113 kg.) MIN

CONFIDENTIAL AND PROPRIETARY TO COBHAM.

TOLERANCES UNLESS STATED OTHERWISE 0.X=+/-0.030 0.XX=+/-0.030 0.XXX=+/-0.005 0.XXXX=+/-0.002 ANGLE=+/- 0.5 DEG.	DIMENSIONS IN INCHES	DESIGNED	SRK	<b>COBHAM</b>				
	THIRD ANGLE PROJECTION	DRAWN	TAT					
		DATE	NOV 22/07	TITLE	CABIN PA SYSTEM			
		CHECKED	<i>[Signature]</i>					
MASS:	-	APPROVED	<i>[Signature]</i>	SIZE	CAGE CODE	PART NO.	REV.	SHEET
MATERIAL:	-			A	3AB01	AA21-408	1.10	1/1
FINISH:	-	FILE	922-0.DWG	DWG. TYPE	MECH. INSTALLATION	DWG. NO.	AA21-408-922-0	



NOTES:  
 1. DIMENSIONING AND TOLERANCING  
 IN ACCORDANCE WITH ASME Y14.5M-1994

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

TOLERANCES UNLESS STATED OTHERWISE 0.X=+/-0.030 0.XX=+/-0.010 0.XXX=+/-0.005 0.XXXX=+/-0.002 ANGLE=+/- 0.5 DEG.	DIMENSIONS IN INCHES	DESIGNED	SRK	<b>NORTHERN AIRBORNE TECHNOLOGY LTD.</b>					
	THIRD ANGLE PROJECTION	DRAWN	TAT						
		DATE	NOV 22/07	TITLE					
		CHECKED	NAT 284	NAT 255	CABIN PA SYSTEM				
MASS: 1.4 lbs. (0.64 Kg) MAX		APPROVED	NAT 114	SIZE	CAGE CODE	PART NO.	REV.	SHEET	
MATERIAL: -				A	3AB01	AA21-408	1.00	1/1	
FINISH: -		FILE	922-0.DWG	DWG. TYPE	MECH. INSTALLATION	DWG. NO.	AA21\408\922-0		