




## LSC22-003N Loudspeaker Controller ASM-LSC22 Installation and Operation Manual Supplement

This supplement contains installation and operation information that is unique to the LSC22-003N Loudspeaker Controller. Installation and operation information common to the LSC22-001 base unit can be found in the ASM-LSC22 Installation and Operation Manual.

<p><b>Prepared By:</b></p>  Derrick Formosa Mechanical Designer 02-Dec-21	<p><b>Checked By:</b></p>  Steve Kempf Designer Dec 2/21	<p><b>Approved By:</b></p>  Tom Betzelt Product Support Manager Dec 2/21
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### Section 1.0 Description

The LSC22-003N Loudspeaker Controller is identical to the LSC22-001 with the following exceptions:

- a) Changes to the faceplate text can be found by comparing Figure 1 to Figure 2.



Figure 1: LSC22-001



Figure 2: LSC22-003N

- b) The LSC22-003N has NVIS Green A compliant backlighting.
- c) The INT PA speaker level output is replaced by a mic level CABIN PA MIC output.

Cabin PA Mic Output	(CABIN PA MIC)
Quantity:	1
Circuit Type:	Single-Ended
Rated Level:	250 mVrms $\pm$ 10%
Rate Load Impedance:	600 Ohms $\pm$ 10%
Output Impedance:	$\leq$ 75 Ohms
Frequency Response:	$\leq$ 3 dB from 200 Hz to 6 kHz
Distortion:	$\leq$ 10% @ rated output
Audio Noise Level:	$\geq$ -60 dB from rated output

- d) A new discrete output EXT/INT outputs a ground when front panel EXT PA is selected.

Ext/Int Discrete	(EXT/INT)
Quantity:	1
Rated Level:	Gnd (active low)
Output Active:	$\leq$ 1 Vdc
Sink Current:	250 mA maximum



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- e) Power switch function on the front panel is removed. When power is applied to the LSC22-003N, the unit is powered on without any other action.

### Section 2.0 Installation

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For installation information and drawings, see ASM-LSC22 Section 2.0. 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

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DOCUMENT Part No.	REV.	DESCRIPTION	TYPE	SERIAL NO.
LSC22-003N-403-0	1.10	Loudspeaker Controller	Interconnect	93348 and up
LSC22-003N-403-0	1.00	Loudspeaker Controller	Interconnect	70938-93347
LSC22-003N-405-0	1.00	Loudspeaker Controller	Connector Map	70938 and up
LSC22-003N-922-0	1.00	Loudspeaker Controller	Mechanical Installation	70938 and up

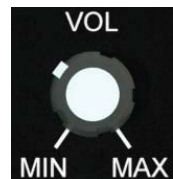
### Section 3.0 Operation

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For operation information, see ASM-LSC22 Section 3.0 with the following exceptions:

- a) References to INT PA should now be referenced as CABIN PA MIC.
- b) When the EXT PA/INT PA switch is set to the EXT PA position, a ground is output on EXT/INT.
- c) There is no front panel On/Off control in the detent position, unit is always on with power applied. However, the physical detent position on the control still exists.

Audio output remains at a minimum whether the volume knob is set ccw to the detent or fully ccw into the detent position.



Message 3 and Siren audio programming now require the power input to the LSC22 be removed and is not dependent on the VOL knob position.

End of Supplement

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REVISIONS

REV	DESCRIPTION	DATE	BY
1.10	RAS #997 - MODIFY EQUIPMENT LIST FOR OBSOLESCENCE	AUG 24/21	DMF




LSC22-003N INSTALLATION NOTES

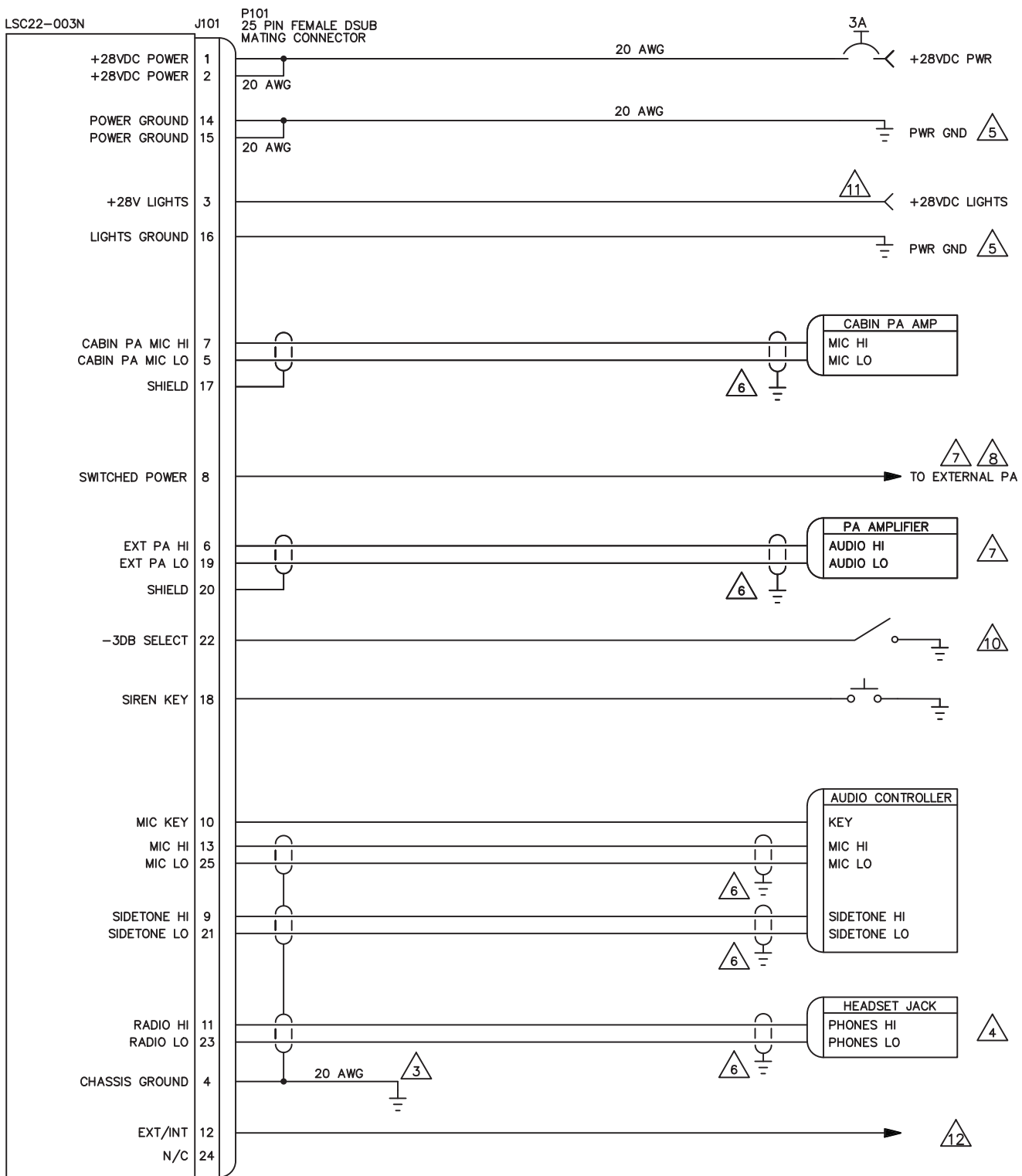
NOTES:




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. CABLE LENGTH NOT TO EXCEED 30 FT [9.14 M], UNLESS OTHERWISE SPECIFIED.
3. CABLE LENGTH NOT TO EXCEED 1 FT [0.3 M].
4. SYSTEM CROSSTALK MAY BE EFFECTED BY STYLE OF HEADSET AND JACK. CHECK SPECIFICATIONS AND SYSTEM REQUIREMENTS BEFORE SELECTING AND INSTALLING.
5. CABLE LENGTH NOT TO EXCEED 3.3 FT [1.0 M].
6. SHIELDS SHOULD BE GROUNDED TO LOCAL AIRFRAME GROUND, UNLESS OTHERWISE SPECIFIED. SHIELD TERMINATION LENGTH NOT TO EXCEED 1 FT [0.3 M].
7. REFERENCE SHEET 3 FOR AMPLIFIER WIRING CONFIGURATIONS.
8. +26.5VDC SUPPLIED AT 0.4 AMPS MAX.
9. REFER TO LSC22 INSTALLATION & OPERATION MANUAL FOR OUTPUT LEVEL CONFIG SWITCH SETTING.
10. APPLY GROUND TO REDUCE SPEAKER & EXT PA OUTPUTS BY 3DB.
11. ONLY +28VDC LIGHTS OR +5VDC LIGHTS MAY BE USED AT ONE TIME.
12. PROVIDES GROUND IN EXT PA FRONT PANEL SWITCH POSITION.

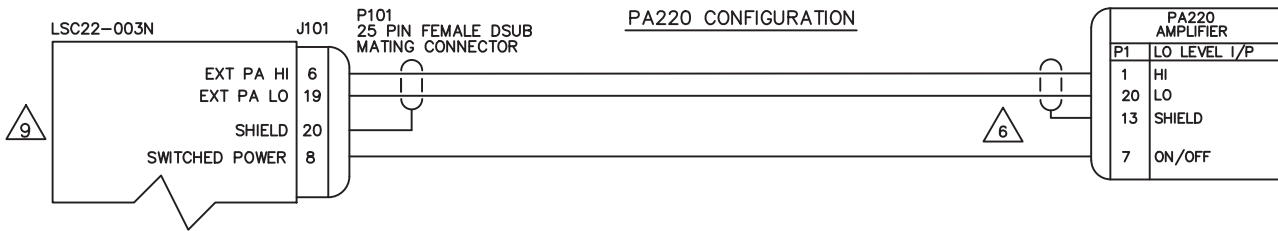
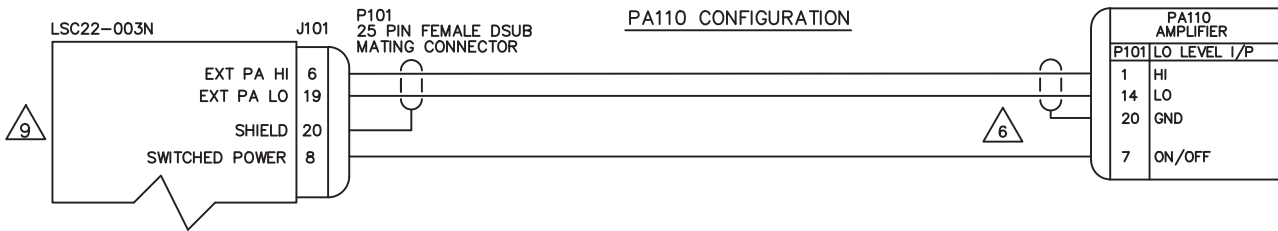
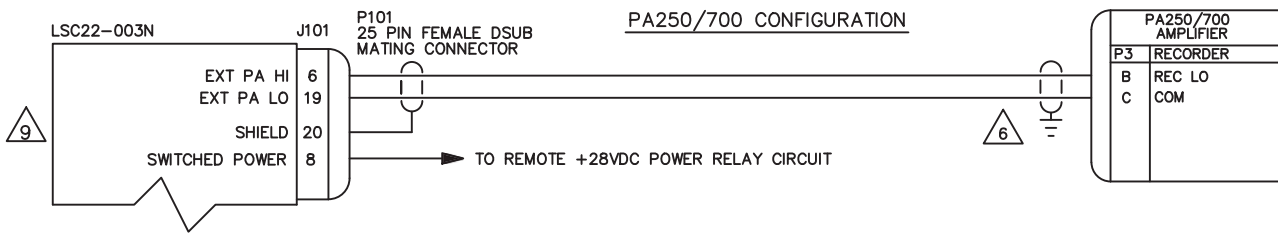
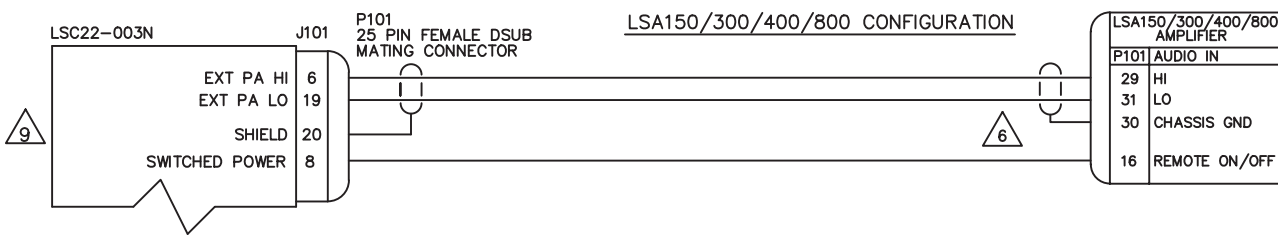
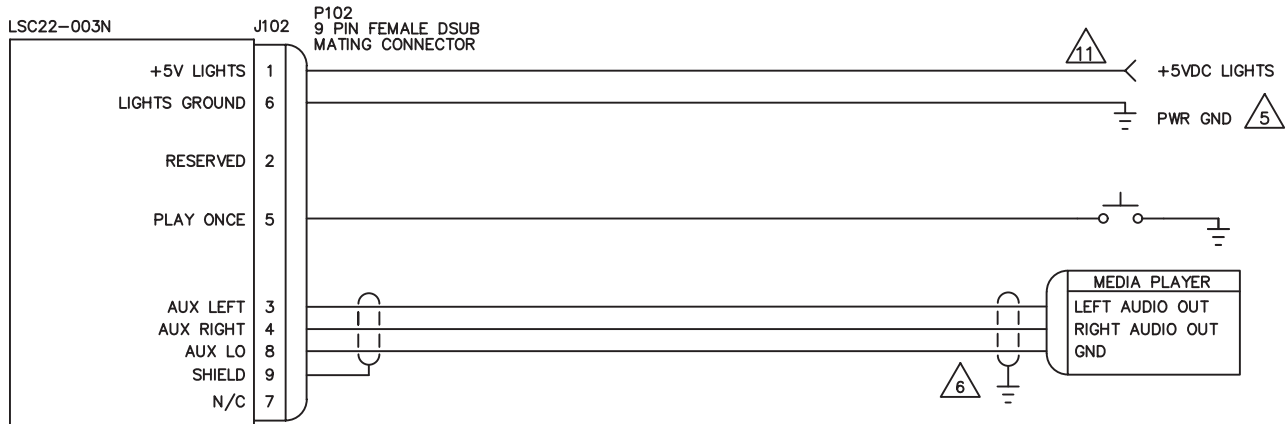
DEFINITIONS:

- N/C: NO CONNECTION. THE PIN IS NOT CONNECTED TO ANYTHING INTERNALLY, AND THEREFORE SHALL HAVE NO CONNECTION EXTERNALLY.
- N/C SPARE: NO CONNECTION INTERNALLY, BUT A SPARE WIRE SHALL BE INSTALLED IN THE WIRE HARNESS.
- 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.
- RESERVED SPARE: RESERVED, BUT INSTRUCTIONS SHALL BE FOLLOWED TO ACTIVATE THE CIRCUITRY. A SPARE WIRE SHALL BE INSTALLED IN THE WIRE HARNESS.

DRAWN		SK	OCT 2/17	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] TOLERANCES: FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5° TWO DECIMAL PLACE _____ ±0.010" THREE DECIMAL PLACE _____ ±0.005"	 <b>ANODYNE ELECTRONICS MANUFACTURING CORP.</b>	KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM				
CHECKED			Aug 24/21			TITLE: <b>LOUDSPEAKER CONTROLLER INTERCONNECT</b>	PAPER SIZE: <b>A</b>	CAGE CODE: <b>L9015</b>	PART No.: <b>LSC22-003N</b>	REVISION: <b>1.10</b>
APPROVED			Aug 26/21							
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			SHEET: 2 of 3	



NAME	DATE	UNLESS OTHERWISE SPECIFIED:
SK	OCT 2/17	DIMENSIONS ARE IN INCHES [MM]
AEM/A	Aug 24/21	TOLERANCES:
AEM/TB	Aug 26/21	FRACTIONAL ±0.0625"
		ANGULAR ±0.5°
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LSC22-003N INSTALLATION NOTES

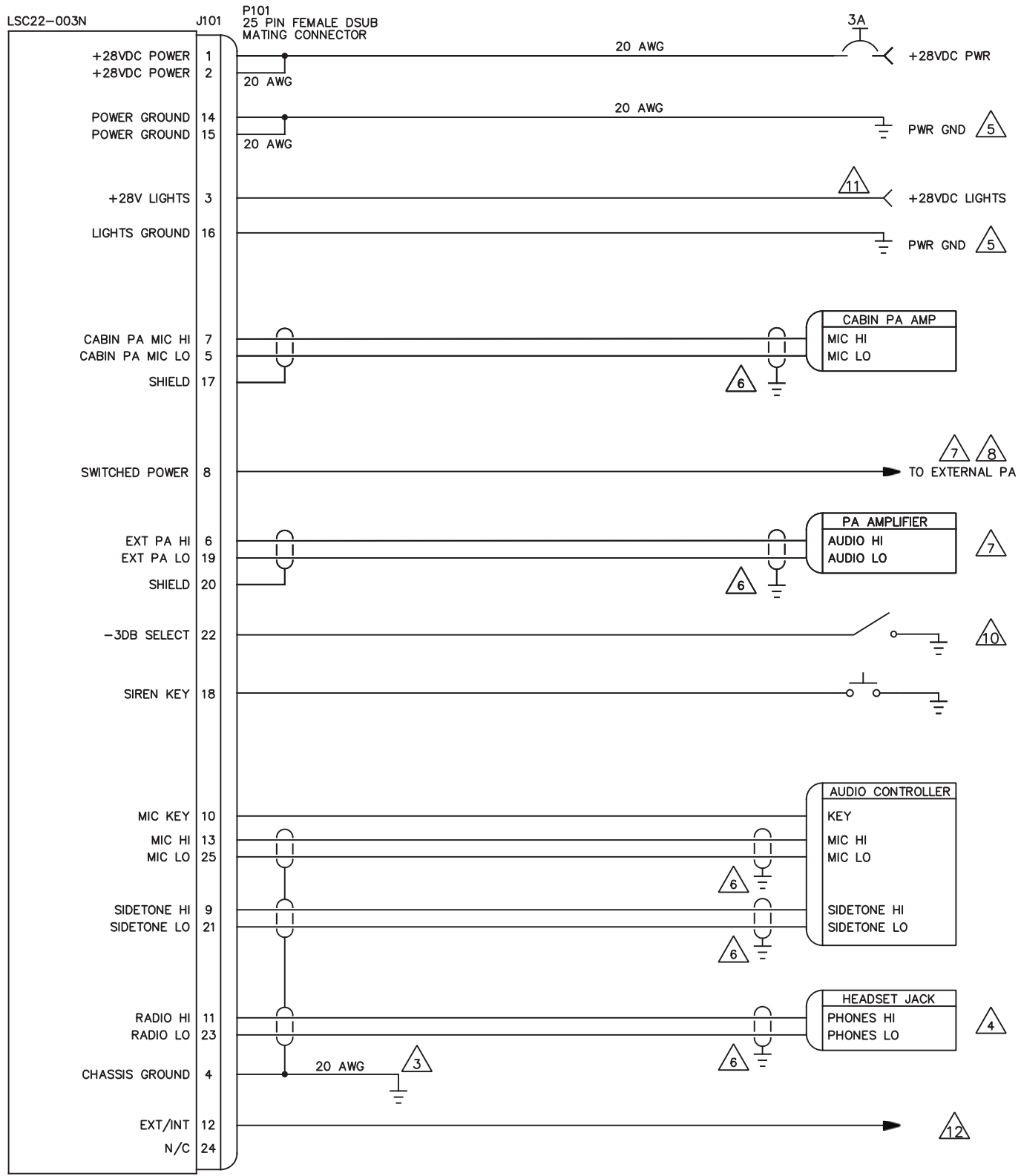
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APPROVED <i>[Signature]</i>	Jan 08, 2017	ANGULAR _____ ±0.5°
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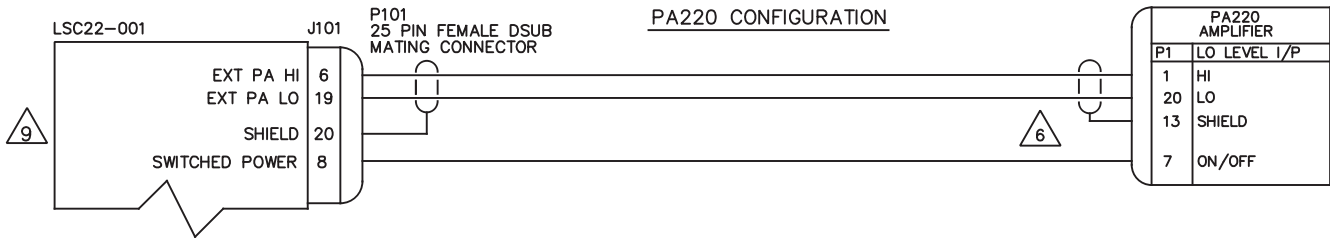
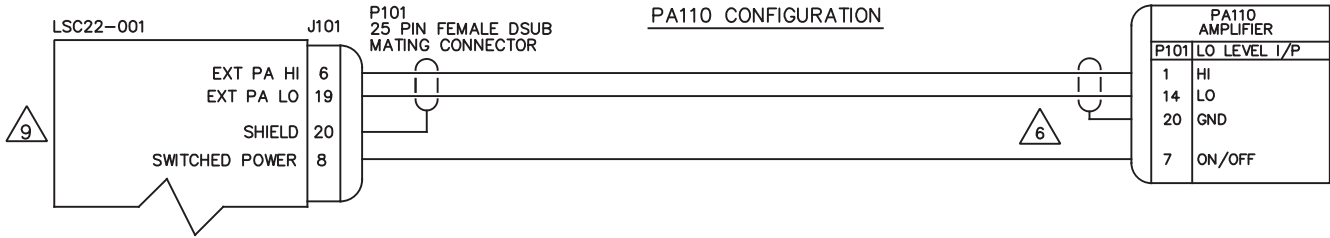
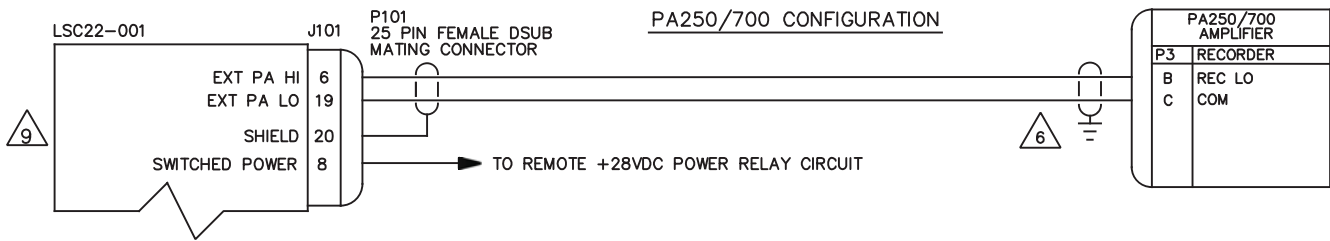
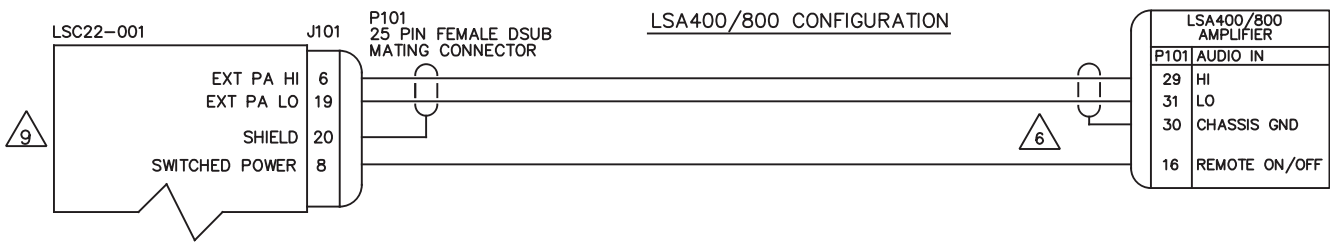
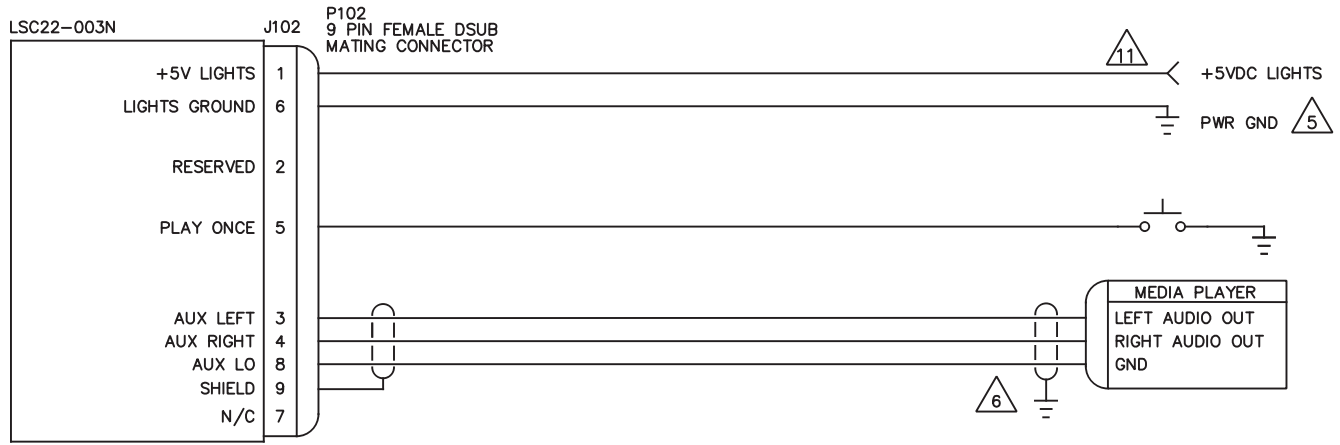


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APPROVED	Jan 08, 2017	ANGULAR _____ ±0.5°
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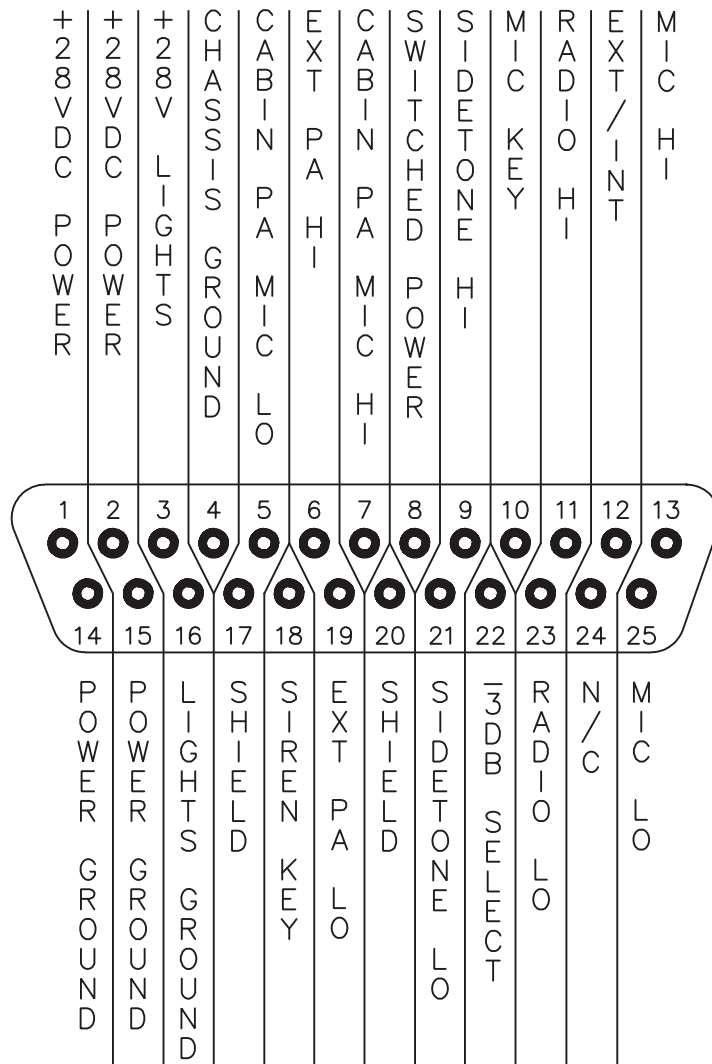
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P101

25 PIN D-MIN SOCKET  
MATING CONNECTOR

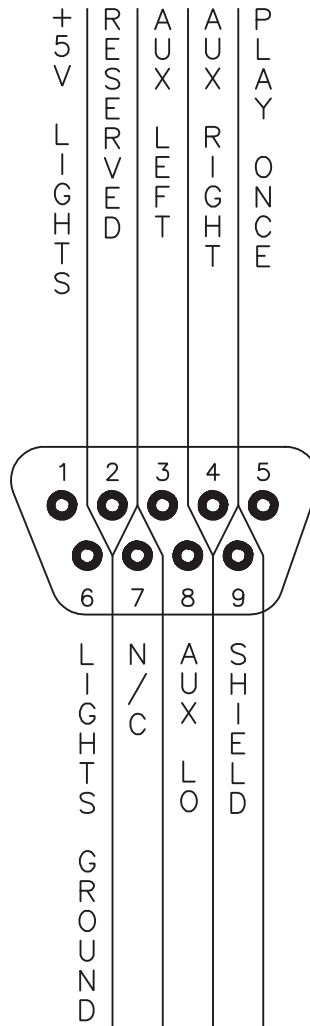


VIEW IS FROM REAR OF AIRFRAME CONNECTOR




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APPROVED		Jan 08, 2017	MATERIAL: N/A	PAPER SIZE: A	CAGE CODE: L9015
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P102



9 PIN D-MIN SOCKET  
MATING CONNECTOR

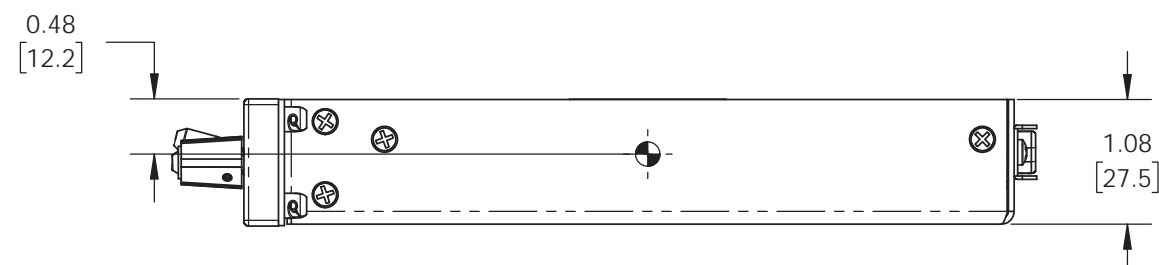
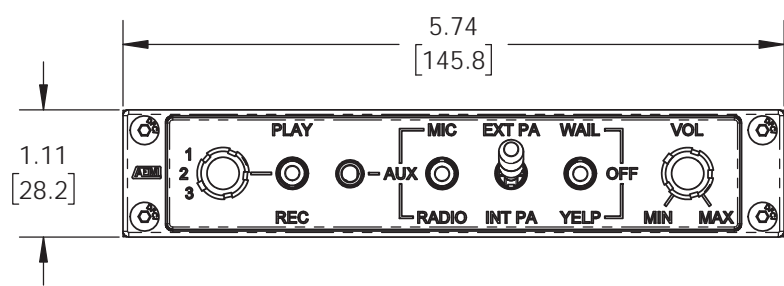
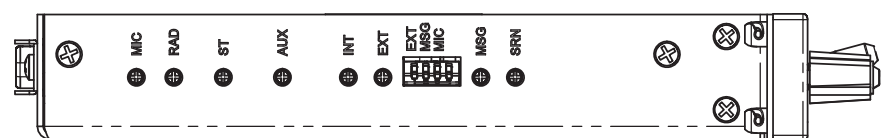
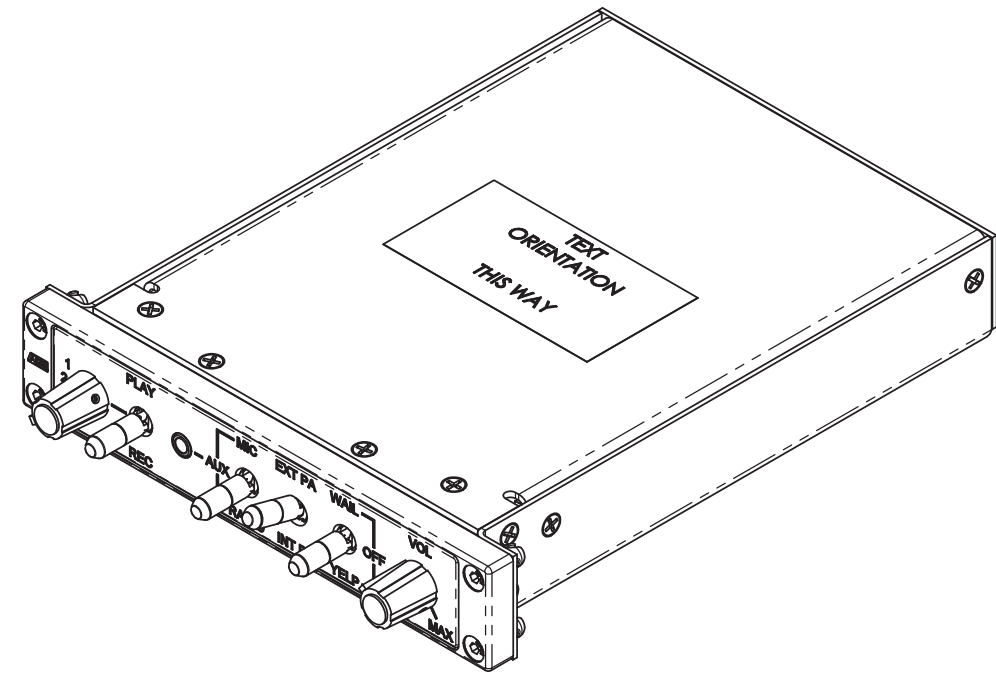
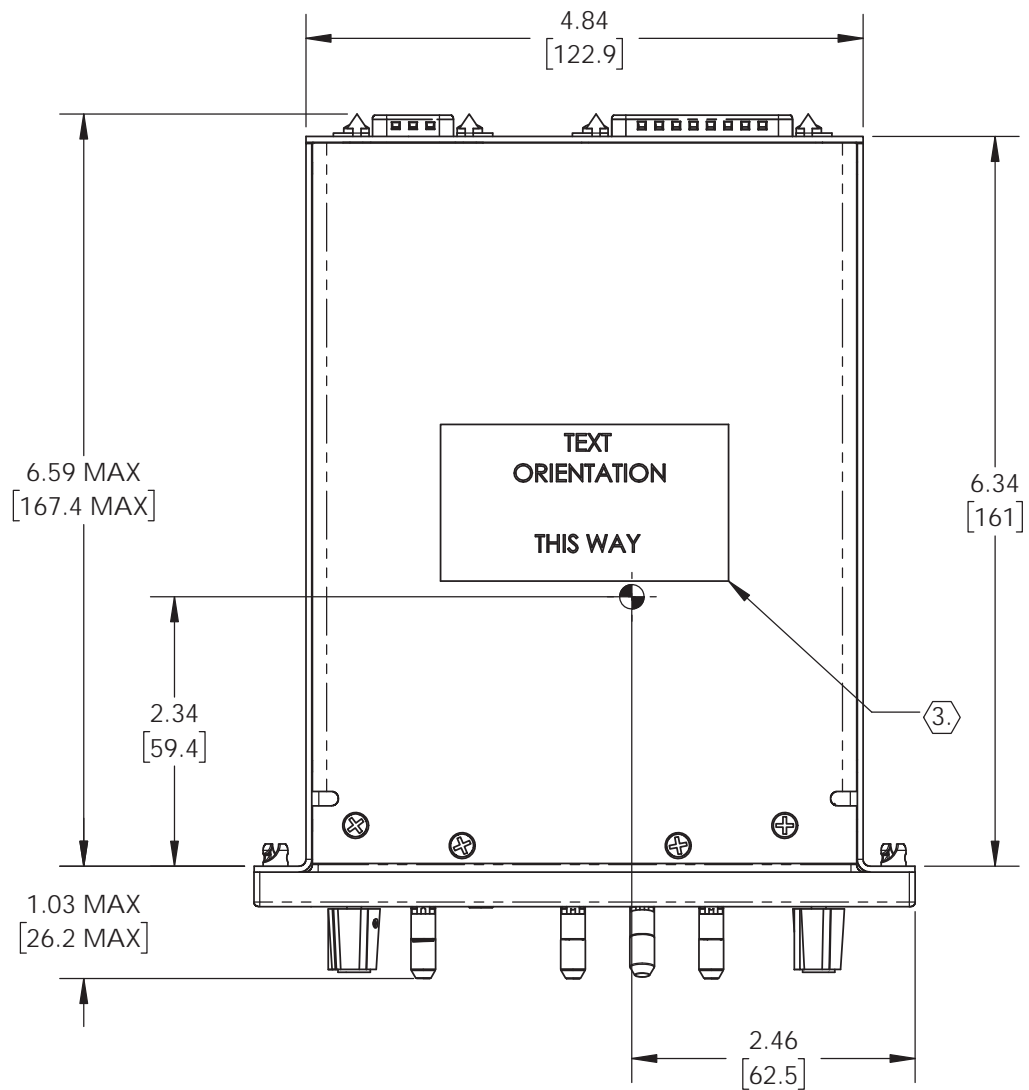


VIEW IS FROM REAR OF AIRFRAME CONNECTOR

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DRAWN	SK	OCT 2/17	DIMENSIONS ARE IN INCHES (MM) TOLERANCES:					
CHECKED		Jan 8/18	FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5°	TITLE: <b>LOUDSPEAKER CONTROLLER CONNECTOR MAP</b>				
APPROVED		Jan 08, 2017	TWO DECIMAL PLACE _____ ±0.010" THREE DECIMAL PLACE _____ ±0.005"					
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			N/A	A	L9015	LSC22-003N	1.00	
			FINISH:	SCALE:	DO NOT SCALE DRAWING		DRAWING No.: 405-1	SHEET: 2 of 2
			N/A					
			N/A					

NOTES:

1. MASS: 1.3 lb [0.6 kg] MAX.
2.  APPROXIMATE CENTER OF GRAVITY.
3.  PRODUCT LABEL.



<table border="1"> <tr> <td>NAME</td> <td>AJV</td> <td>DATE</td> <td>04-Oct-17</td> </tr> <tr> <td>CHECKED</td> <td></td> <td>DATE</td> <td>Oct 5/17</td> </tr> <tr> <td>APPROVED</td> <td></td> <td>DATE</td> <td>Jan 08, 2017</td> </tr> </table>	NAME	AJV	DATE	04-Oct-17	CHECKED		DATE	Oct 5/17	APPROVED		DATE	Jan 08, 2017	<p>UNLESS OTHERWISE SPECIFIED:          DIMENSIONS ARE IN INCHES [MM]          TOLERANCES:          ANGULAR: ±0.5°          FRACTIONAL: ±0.0625"          ONE DECIMAL PLACE: ±0.100"          TWO DECIMAL PLACE: ±0.030"          THREE DECIMAL PLACE: ±0.010"</p>	<p><b>AEM</b> ANODYNE ELECTRONICS MANUFACTURING CORP.</p> <p>15-1925 KIRSCHNER RD.          KELOWNA BC V1Y 4N7          (250)-763-1088          WWW.AEM-CORP.COM</p>
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<p>PAPER SIZE: B</p>	<p>CAGE CODE: L9015</p>	<p>PART No.: LSC22-003N</p>	<p>REVISION: 1.00</p>											
<p>SCALE: 3:5</p>	<p>DO NOT SCALE DRAWING</p>	<p>DRAWING No.: 922-0</p>	<p>SHEET: 1 OF 1</p>											