



## LSC22-002N Loudspeaker Controller ASM-LSC22 Installation and Operation Manual Supplement

This supplement contains installation and operation information that is unique to the LSC22-002N Loudspeaker Controller. Installation and operation information common to the LSC22-001 base unit can be found in the ASM-LSC22 Installation and Operation Manual.

<b>Prepared By:</b>  Derrick Formosa Mechanical Designer 13-Sep-21	<b>Checked By:</b>  Steve Kempf Designer Sep 16/21	<b>Approved By:</b>  Tom Betzelt Product Support Manager Oct 5/21
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### Section 1.0 Description

The LSC22-002N 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: LSC22-002N

- b) The LSC22-002N has NVIS Green A compliant backlighting.
- c) The rear AUX LEFT Input (on the rear dmin connector) is removed and replaced by CHIME IN and the rear AUX RIGHT input is renamed as RESERVED.

Chime Input	(CHIME IN)
Quantity:	1
Circuit Type:	Single-Ended
Rated Level:	1.22 Vrms ± 10%
Impedance:	1 kOhm ± 10%

- 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:	≤ 1 Vdc
Sink Current:	250 mA maximum

- e) Power switch function on the front panel is removed. When power is applied to the LSC22-002N, the unit is powered on without any other action.



**LSC22-002N Loudspeaker Controller  
ASM-LSC22 Installation and Operation Manual Supplement**

**Section 2.0 Installation**

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**

DOCUMENT	REV.	DESCRIPTION	TYPE	SERIAL NO.
<b>Part No.</b>				
LSC22-002N-403-0	1.10	Loudspeaker Controller	Interconnect	70939+
LSC22-002N-403-0	1.00	Loudspeaker Controller	Interconnect	70938-70938
LSC22-002N-405-0	1.00	Loudspeaker Controller	Connector Map	70938 and up
LSC22-002N-922-0	1.00	Loudspeaker Controller	Mechanical Installation	70938 and up

**Section 3.0 Operation**

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

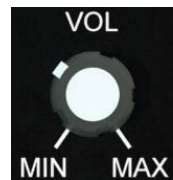
- a) Ignore any reference/functions to AUX audio input from the rear dmin connector.
- b) The CHIME input is only and always available on the INT PA audio output. It is not dependant on the front panel EXT PA/INT PA switch position or VOL control. It is summed with the appropriate inputs when the EXT PA/INT PA switch is set to INT PA:

Input Audio Selection					Summed With	Message/Siren Selection*				
1	MIC	or	AUX	or		RADIO	Message 1	or	Message 2	or
and										
2	CHIME									

\* - Requires MSG switch on side of unit to be in the up position.

- c) When the EXT PA/INT PA switch is set to the EXT PA position, a ground is output on EXT/INT.
- d) 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.

- e) The CHIME input is not affected by the -3dB Select discrete input.

End of Supplement

REVISIONS

REV	DESCRIPTION	DATE	BY
1.10	RAS #997 - MODIFY EQUIPMENT LIST FOR OBSOLESCENCE	AUG 19/21	DMF

LSC22-002N 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. EQUIVALENT SERIES PARALLEL SPEAKERS MAY BE USED.
9. +26.5VDC SUPPLIED AT 0.4 AMPS MAX.
10. REFER TO LSC22 INSTALLATION & OPERATION MANUAL FOR OUTPUT LEVEL CONFIG SWITCH SETTING.
11. APPLY GROUND TO REDUCE SPEAKER & EXT PA OUTPUTS BY 3DB.
12. ONLY +28VDC LIGHTS OR +5VDC LIGHTS MAY BE USED AT ONE TIME.
13. PROVIDES GROUND IN EXT PA FRONT PANEL SWITCH POSITION.




DEFINITIONS:

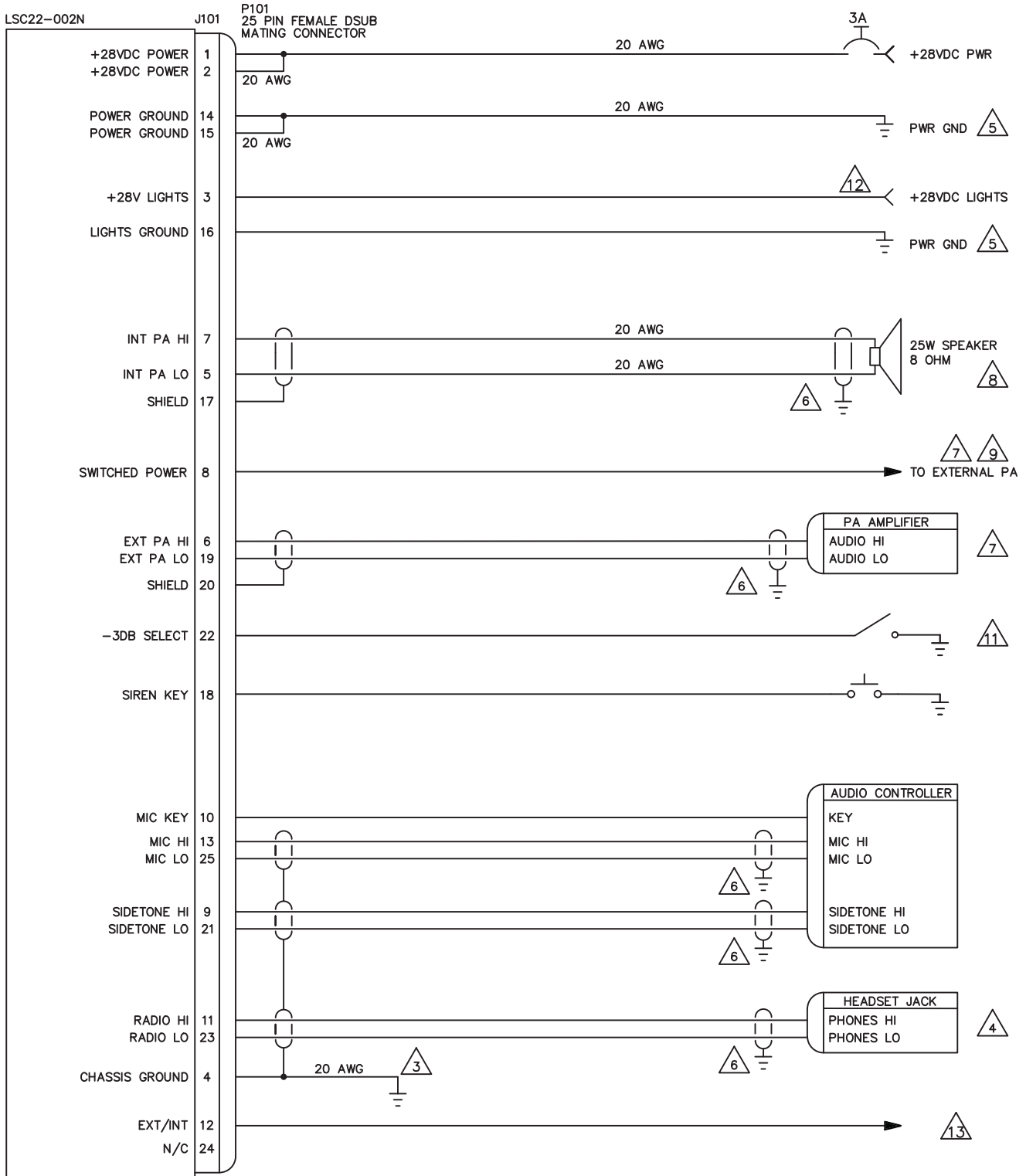
N/C: NO CONNECTION. THE PIN IS NOT CONNECTED TO ANYTHING INTERNALLY, AND THEREFORE SHALL HAVE NO CONNECTION EXTERNALLY.




N/C SPARE: NO CONNECTION INTERNALLY, BUT A SPARE WIRE SHALL BE INSTALLED IN THE WIRE HARNESS.

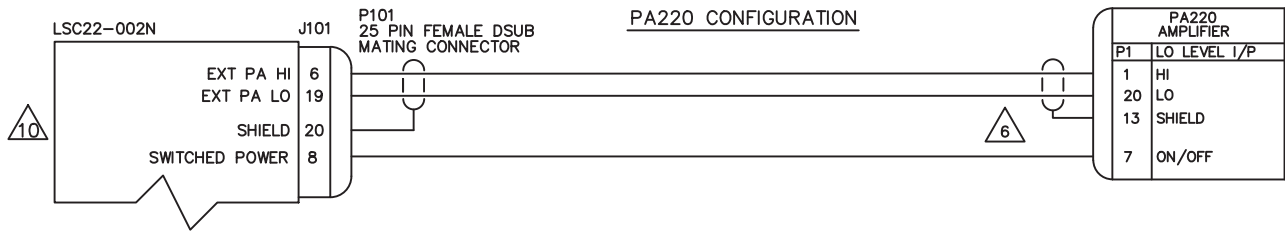
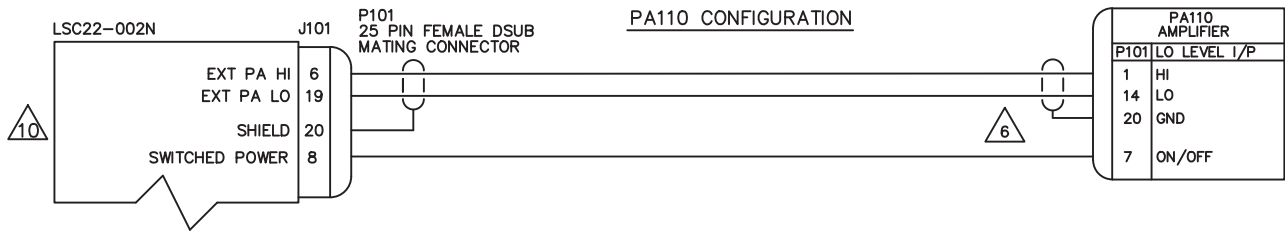
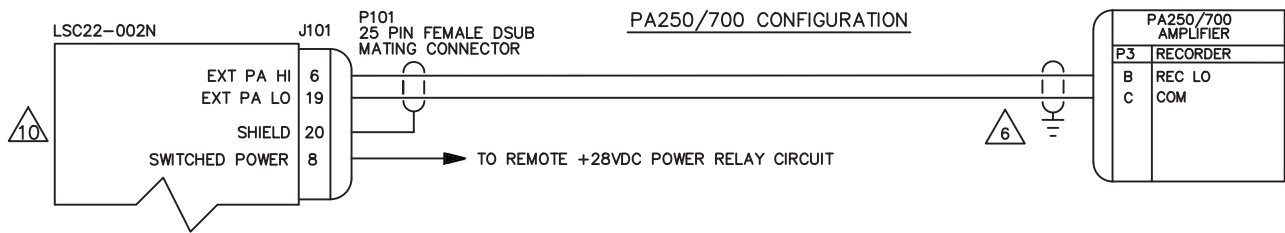
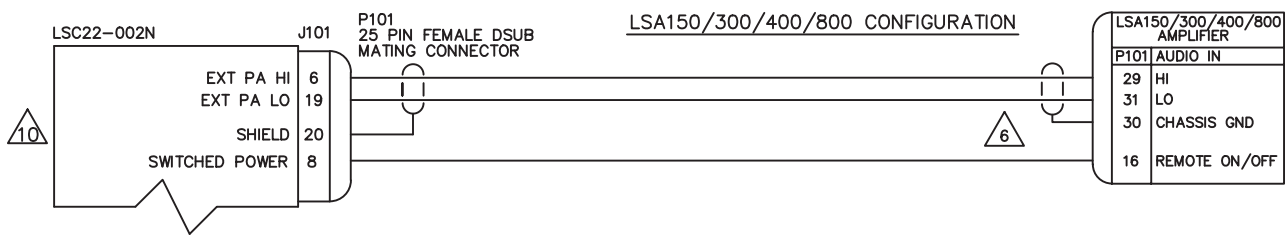
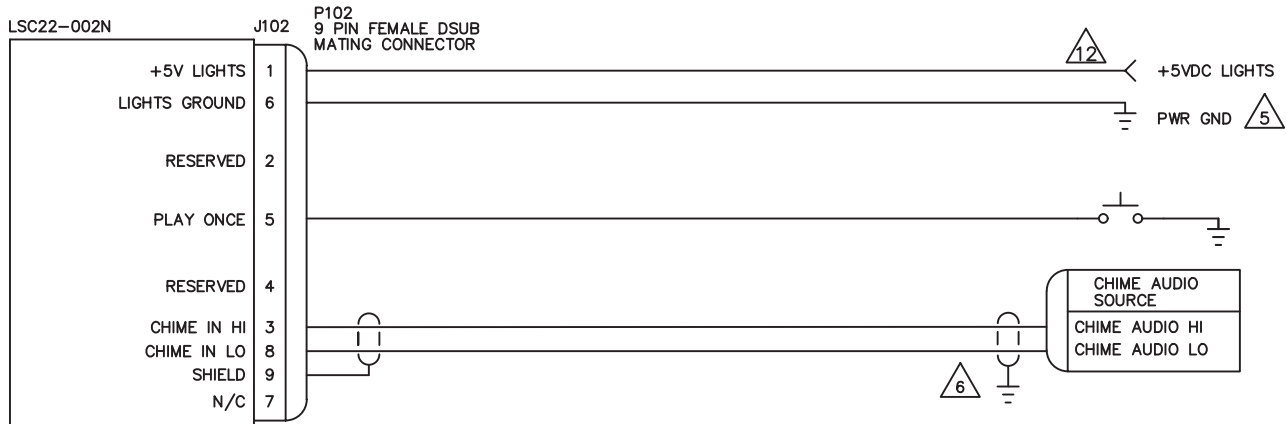
RESERVED: MAY BE CONNECTED AND USED IN THE FUTURE. THE CIRCUITRY MAY BE PRESENT OR ADDED TO ACTIVATE THE FUNCTION. THE PIN MAY BE USED FOR TEST PURPOSES. THERE IS NO EXTERNAL CONNECTION.

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 19/21			TITLE: <b>LOUDSPEAKER CONTROLLER INTERCONNECT</b>	PAPER SIZE: <b>A</b>	CAGE CODE: <b>L9015</b>	PART No.: <b>LSC22-002N</b>	REVISION: <b>1.10</b>
APPROVED			Aug 30/21							
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SK	Aug 19/21	TOLERANCES:
SK	Aug 30/21	FRACTIONAL _____ ±0.0625"
		ANGULAR _____ ±0.5°
		TWO DECIMAL PLACE _____ ±0.010"
		THREE DECIMAL PLACE _____ ±0.005"



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LSC22-002N INSTALLATION NOTES

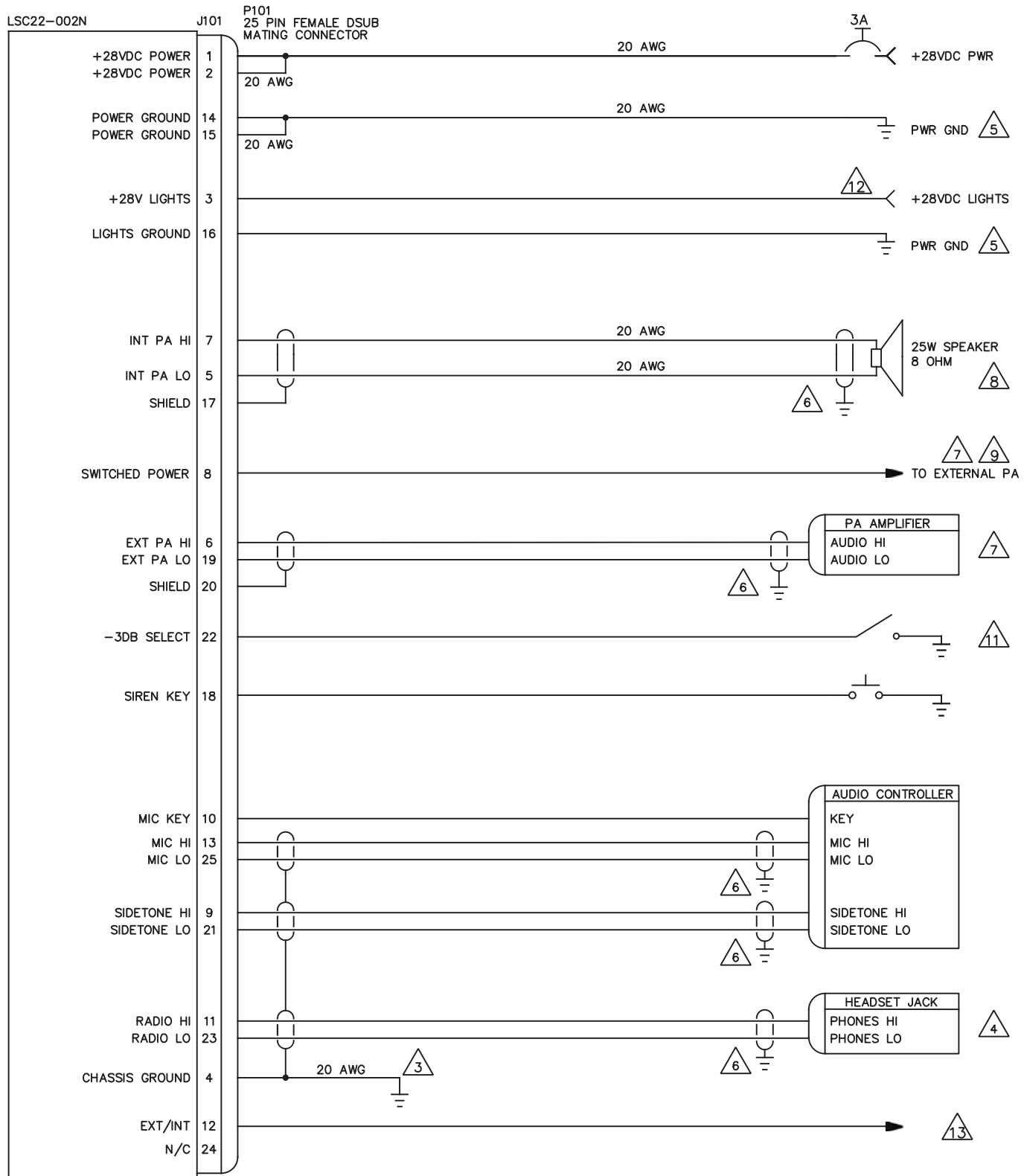
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DRAWN	SK	OCT 2/17	DIMENSIONS ARE IN INCHES (MM) TOLERANCES:		TITLE:					
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APPROVED		Jan 08, 2017	ANGULAR	±0.5°						
			TWO DECIMAL PLACE	±0.010"					PAPER SIZE:	CAGE CODE
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CHECKED		Jan 8/18	FRACTIONAL _____ ±0.0625"
APPROVED		Jan 08, 2017	ANGULAR _____ ±0.5°
			TWO DECIMAL PLACE _____ ±0.010"
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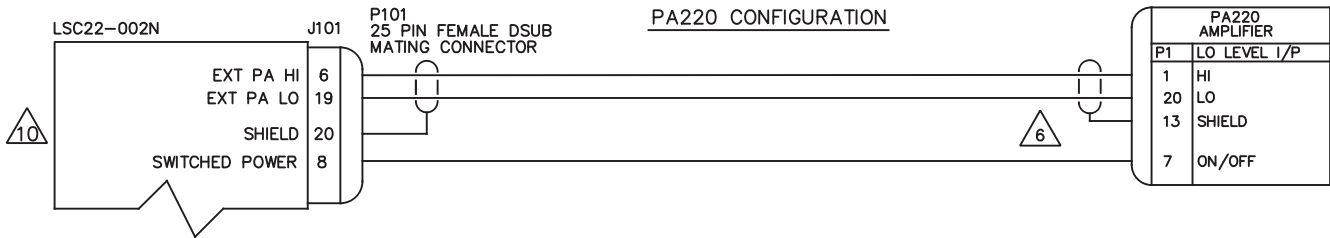
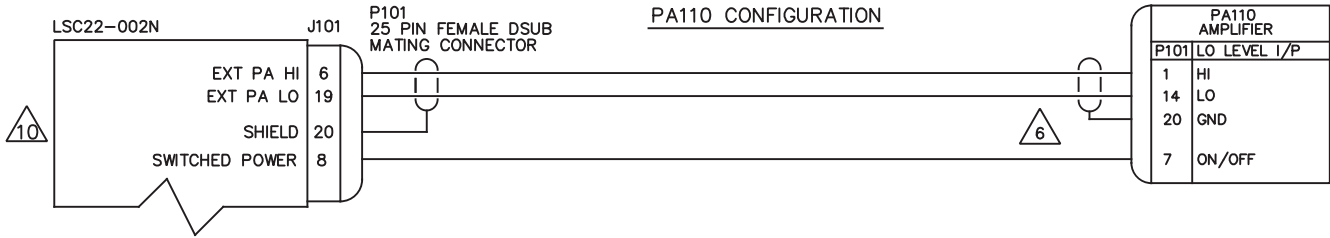
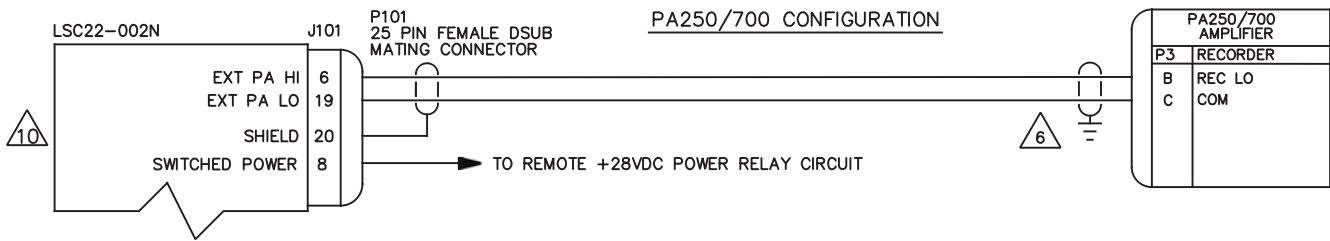
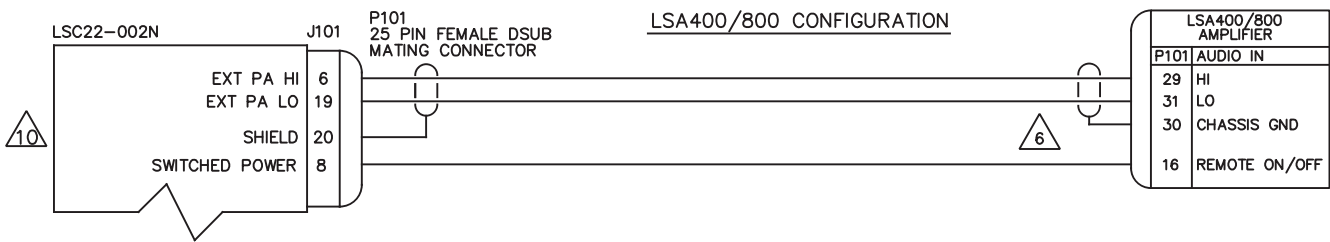
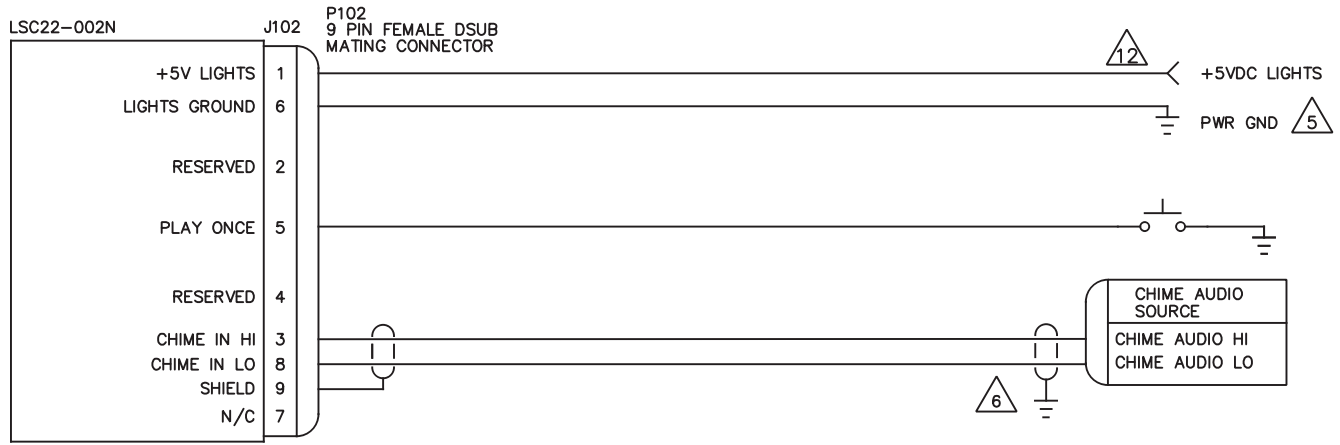
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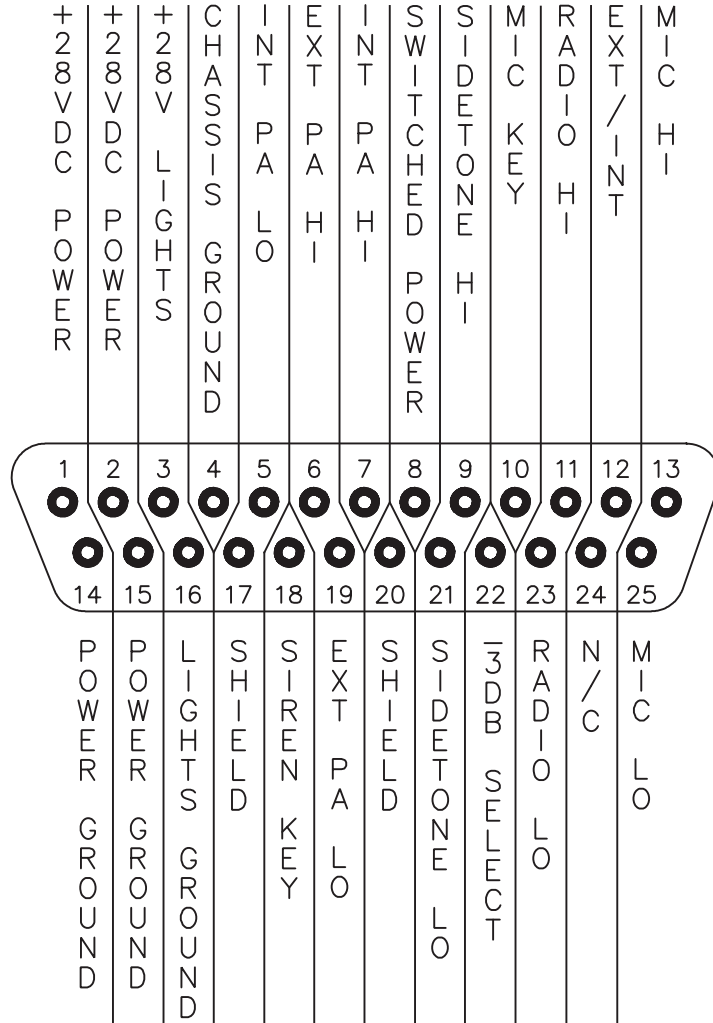
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25 PIN D-MIN SOCKET  
MATING CONNECTOR

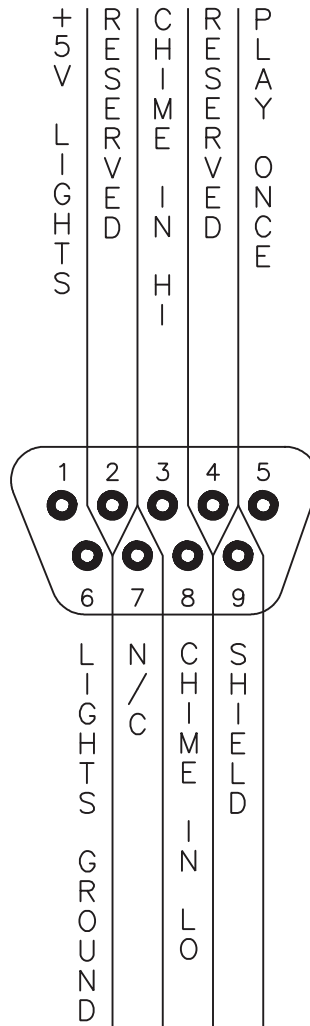


VIEW IS FROM REAR OF AIRFRAME CONNECTOR




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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	PART No.:	LSC22-002N
			N/A	SCALE:	DO NOT SCALE DRAWING
				DRAWING No.:	405-0
				SHEET: 1 of 2	

P102



9 PIN D-MIN SOCKET  
MATING CONNECTOR

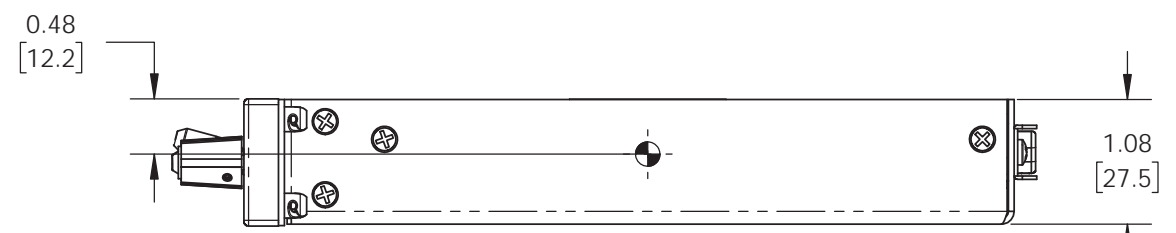
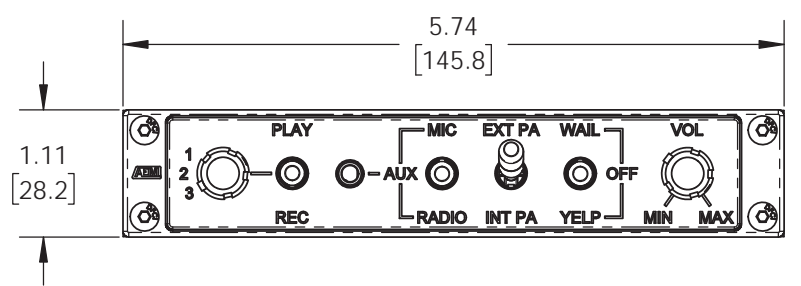
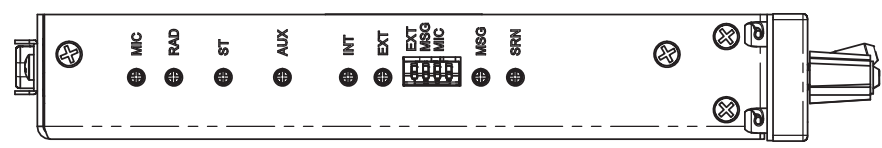
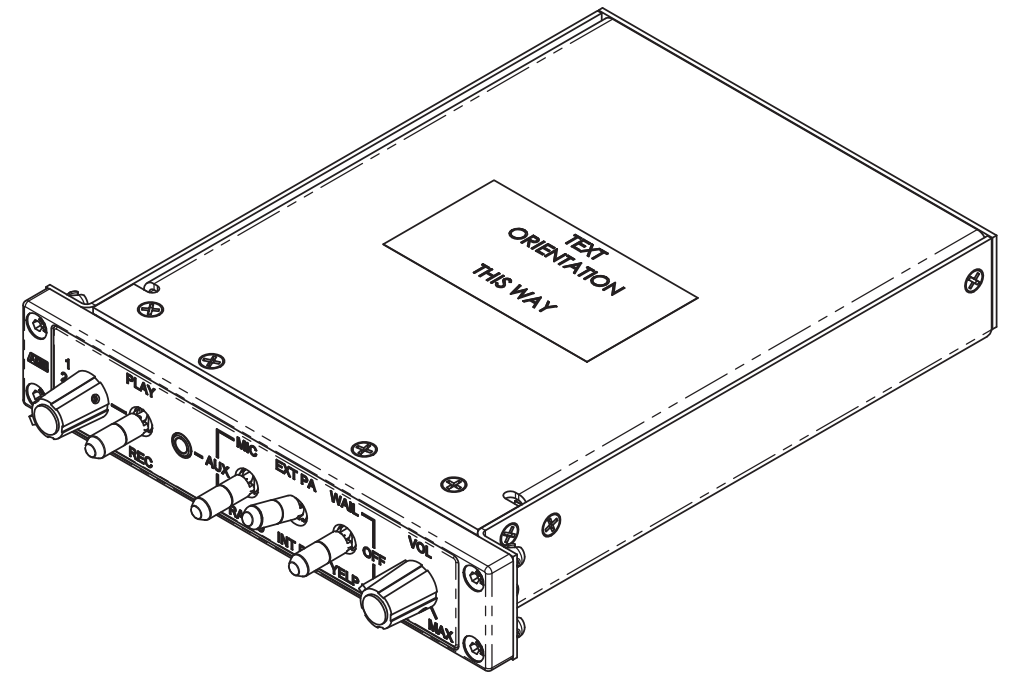
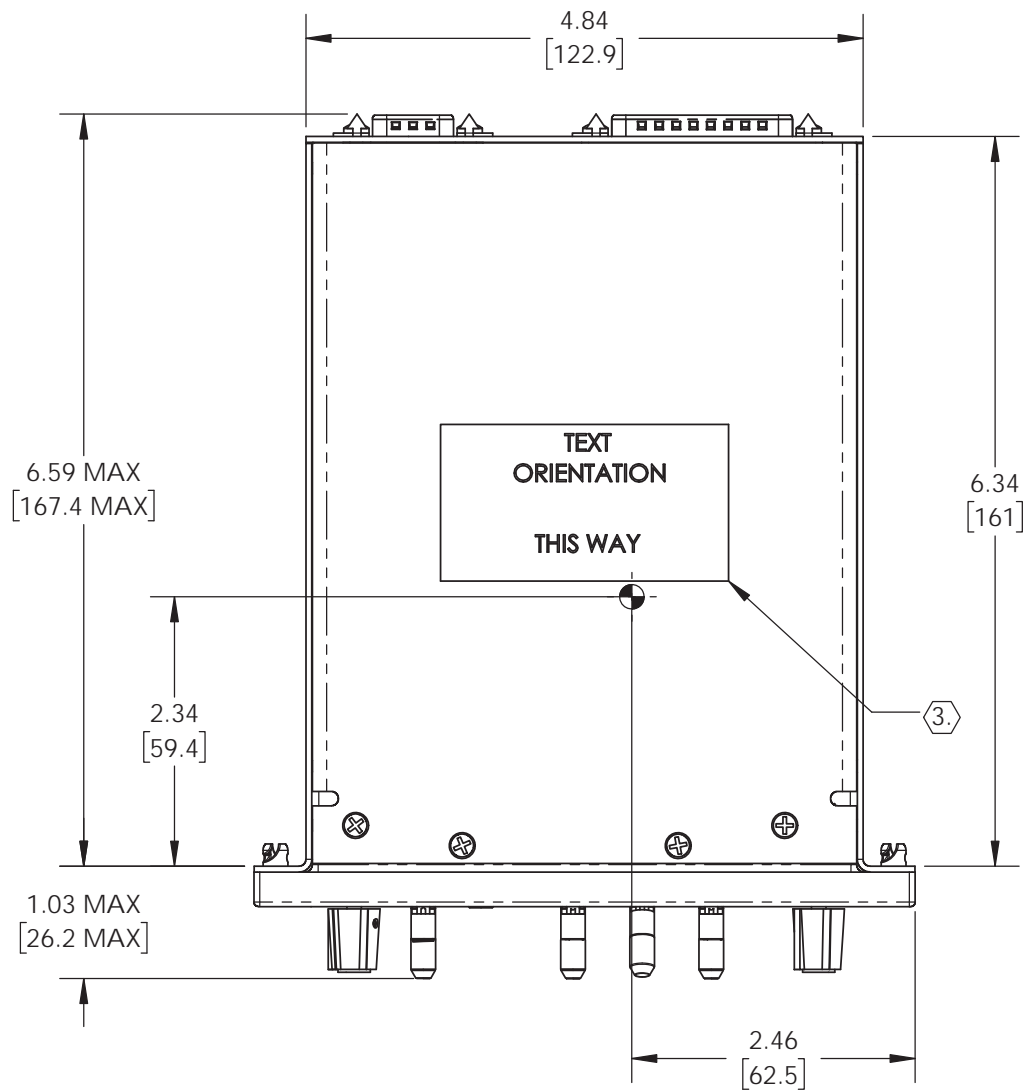





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CHECKED		Jan 8/18	FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5°	TITLE: <b>LOUDSPEAKER CONTROLLER CONNECTOR MAP</b>				
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			N/A	A		L9015	LSC22-002N	1.00
			FINISH:	SCALE:		DO NOT SCALE DRAWING		DRAWING No.: 405-1
			N/A N/A					SHEET: 2 of 2

NOTES:

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



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DRAWN	LAC/AJV 04-Oct-17	DIMENSIONS ARE IN INCHES [MM]			
CHECKED	 Oct 5/17	TOLERANCES:	TITLE: <b>LOUDSPEAKER CONTROLLER MECHANICAL INSTALLATION</b>		
APPROVED	 Jan 08, 2017	ANGULAR: ±0.5°			
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			MATERIAL: N/A	SCALE: 3:5 DO NOT SCALE DRAWING DRAWING No.: 922-0 SHEET: 1 OF 1	
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