



AEM LSC22-002N Loudspeaker Controller Installation Guide

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AEM LSC22-002N Loudspeaker Controller



LSC22-002N Loudspeaker Controller

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.

Prepared By:  Derrick Formosa Mechanical Designer 13-Sep-21	Checked By:  Steve Kempf Designer Sep 16/21	Approved By:  Tom Betzelt Product Support Manager Oct 5/21	Approved By:  Ron Briggs RD Manager Designate 01-Dec-21
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Description

The LSC22-002N Loudspeaker Controller is identical to the LSC22-001 with the following exceptions:

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



Figure 1: LSC22-001



Figure 2: LSC22-002N

- The LSC22-002N has NVIS Green A compliant backlighting.
- The INT PA speaker level output is replaced by a mic level CABIN PA MIC output.
- A new discrete output EXT/INT outputs a ground when front panel EXT PA is selected.
- 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.

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.

Installation Drawings

DOCUMENT	REV.	DESCRIPTION	TYPE	SERIAL NO.
Part No.				
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

- Ignore any reference/functions to AUX audio input from the rear dmin connector.
- 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		Message 2	or	Message 3
and											
2	CHIME										

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

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




INSTALLATION NOTES

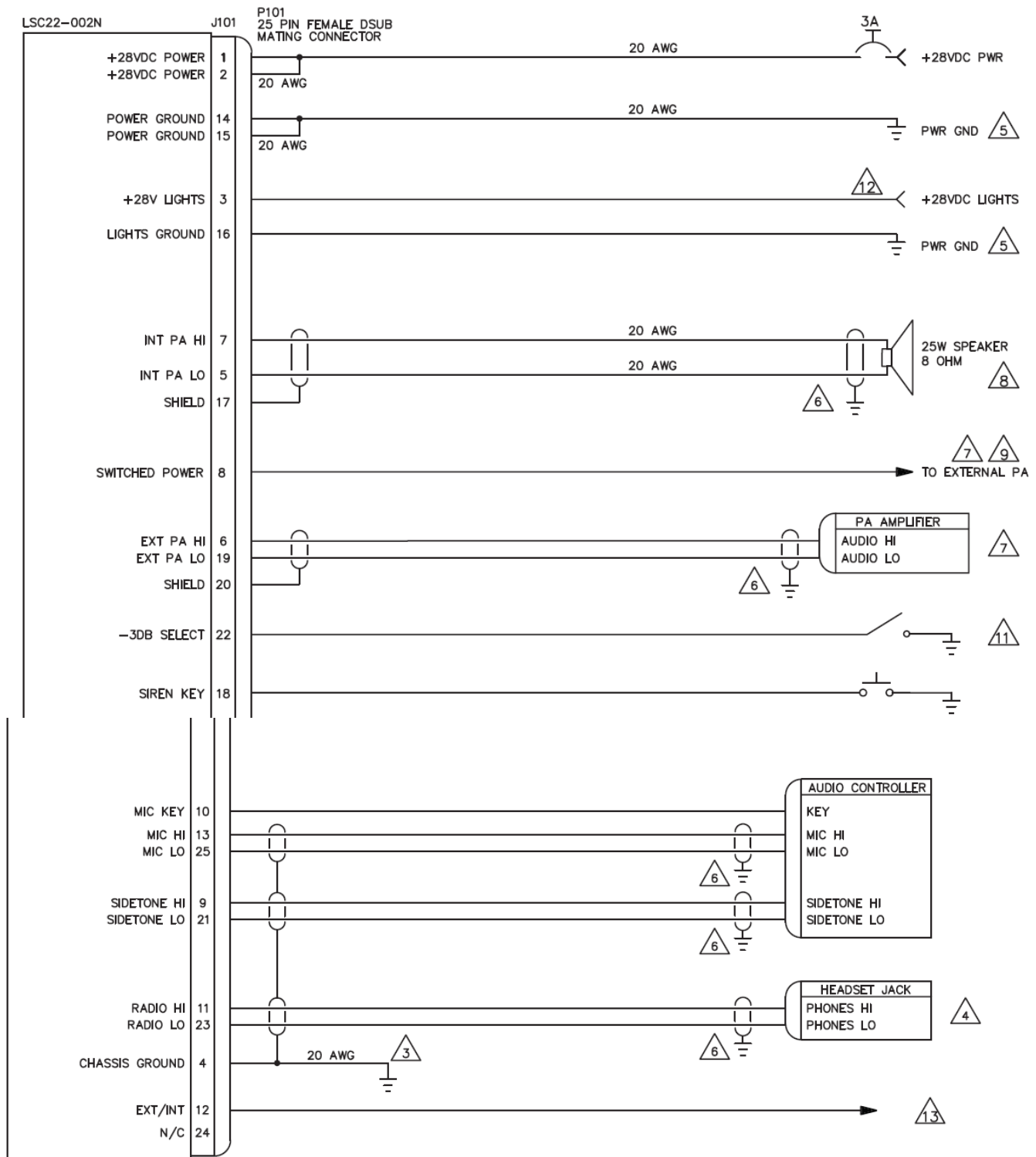
NOTES:




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 1.1], UNLESS OTHERWISE SPECIFIED.
3. CABLE LENGTH NOT TO EXCEED 1 FT [0.3 M].
4. SYSTEM CROSSTALK MAY BE AFFECTED BY STYLE OF THE HEADSET AND JACK. CHECK SPECIFICATIONS AND SYSTEM REQUIREMENTS BEFORE SELECTING AND INSTALUNG.
5. CABLE LENGTH NOT TO EXCEED 3.3 FT [1.0 MI]
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 SUPPUED 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 UGHTS MAY BE USED AT ONE TIME.
12. PROVIDES GROUND IN EXT PA FRONT PANEL SWITCH POSITION.

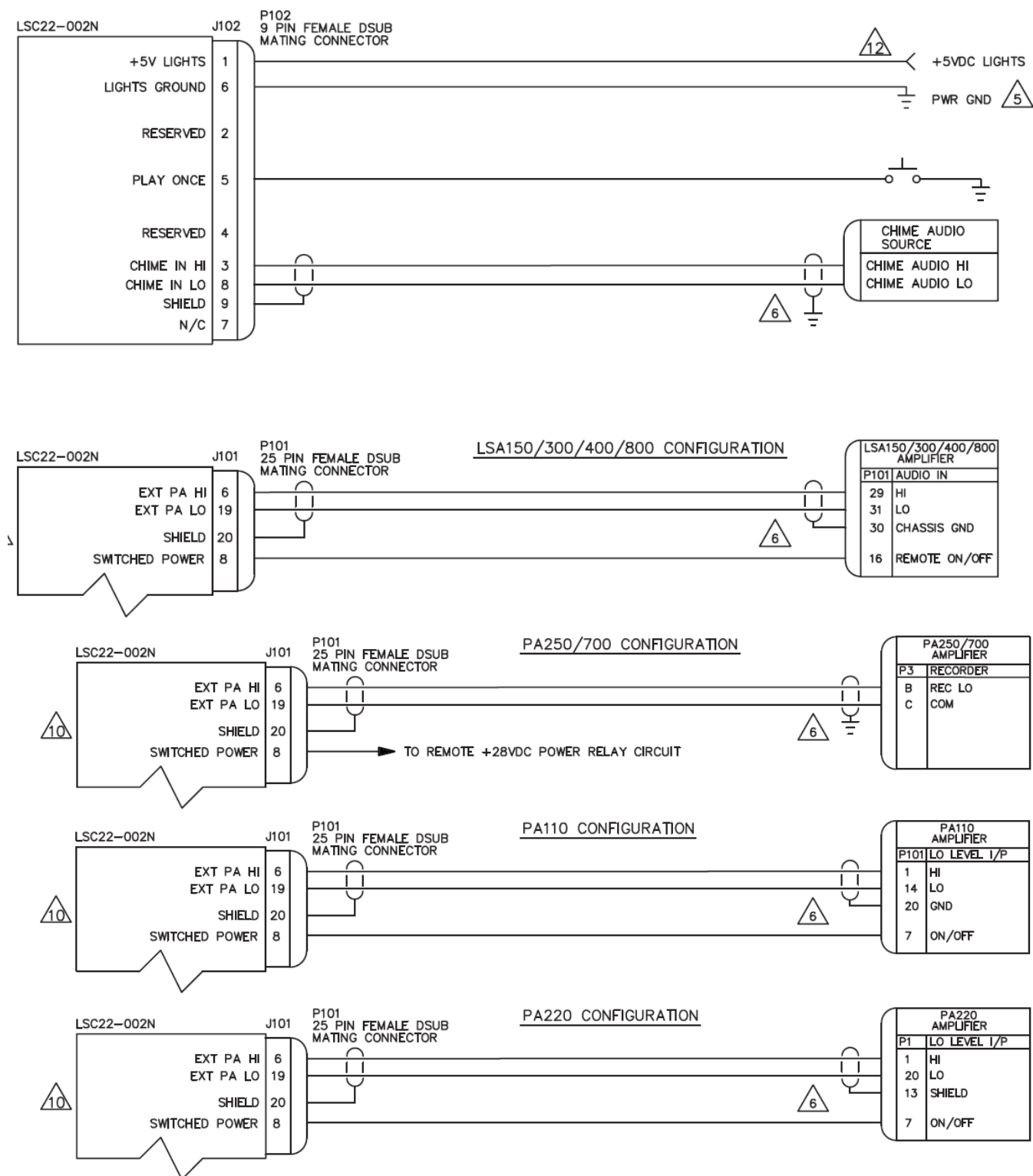
DEFINTIONS




- **N/C:** NO CONNECTION. THE PIN IS tat CONNECTED TO ANYTHING INTERNALLY, AND THEREFORE SHALL HAVE NO CONNECTION EXTERNALLY.
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- **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. THFRF IS NO FXTFRNAI CONNECTION
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	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP. KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM				
DRAWN	SK	OCT 2/17	DIMENSIONS ARE IN INCHES [MM] TOLERANCES: FRACTIONAL _____ ±0.0625" ANGULAR _____ ±0.5° TWO DECIMAL PLACE _____ ±0.010" THREE DECIMAL PLACE _____ ±0.005"	TITLE: LOUDSPEAKER CONTROLLER INTERCONNECT				
CHECKED	 H.	Aug 19/21						
APPROVED	 TB	Aug 30/21	MATERIAL: N/A	PAPER SIZE: A	CAGE CODE: L9015	PART No.: LSC22-002N	REVISION: 1.10	
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.			FINISH: N/A	SCALE: DO NOT SCALE DRAWING			DRAWING No.: 403-0	SHEET: 1 of 3
			N/A					



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			FINISH:			

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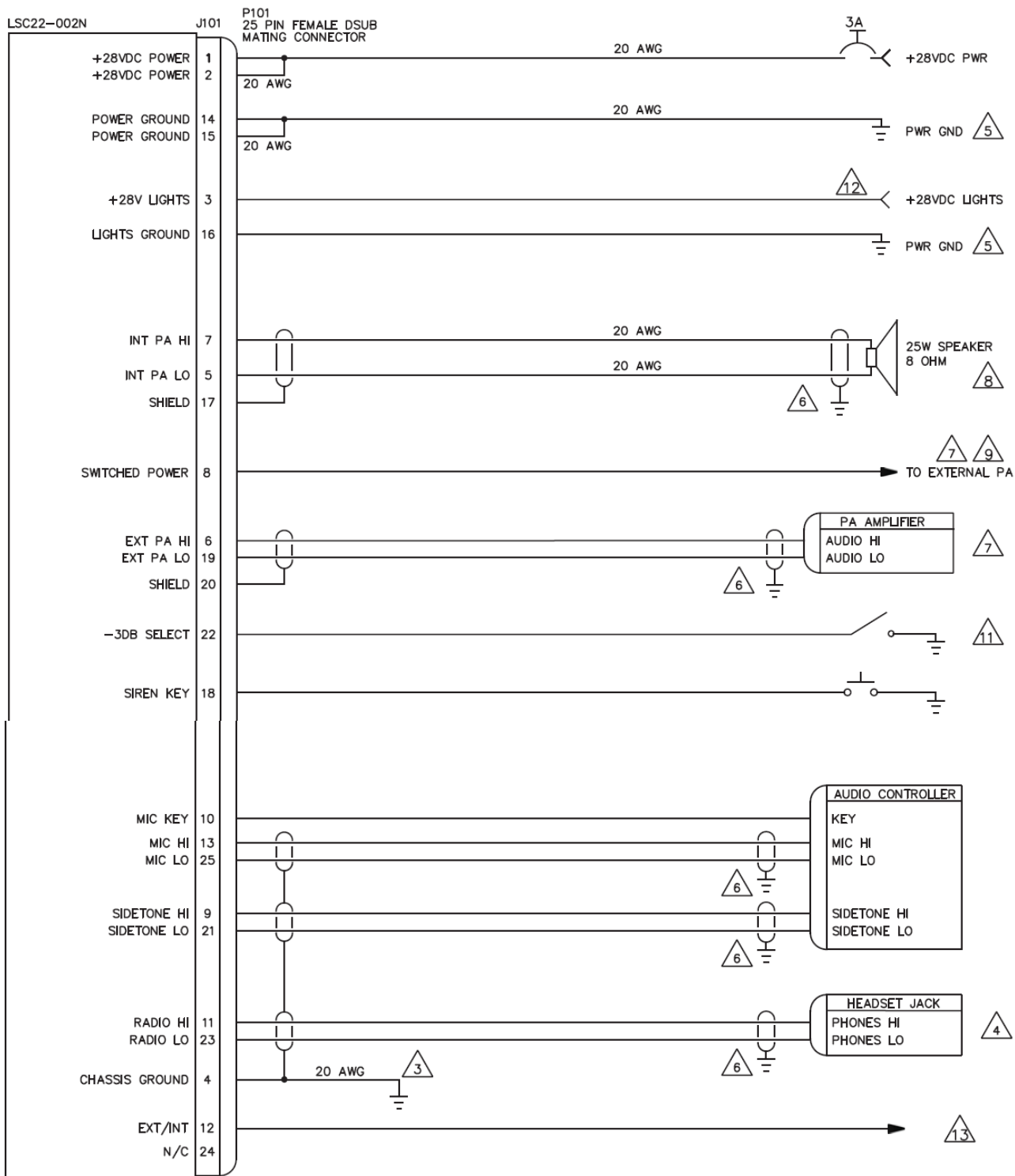
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
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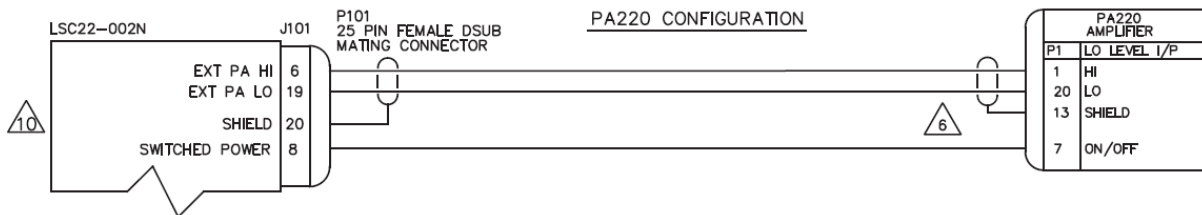
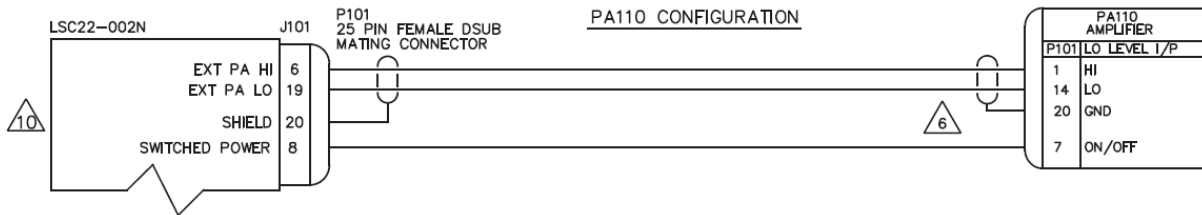
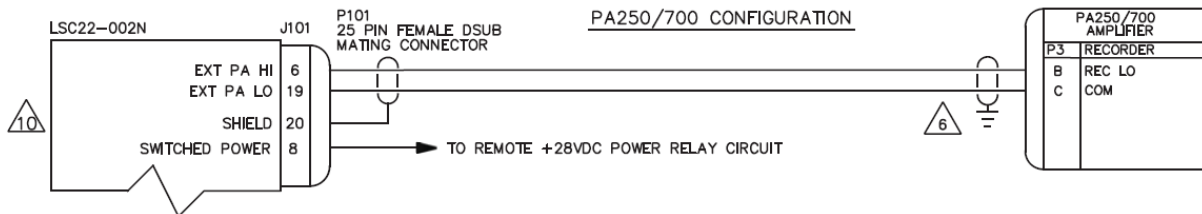
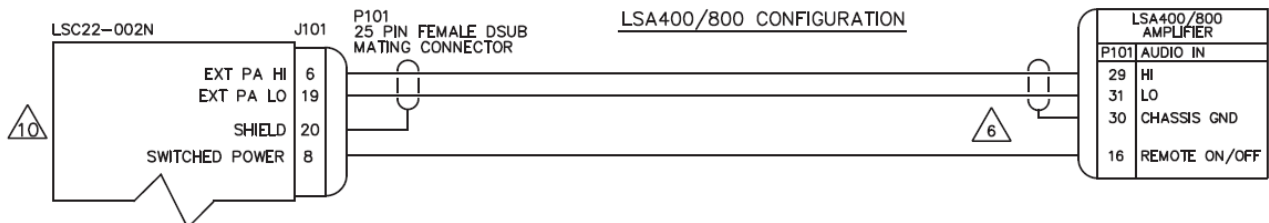
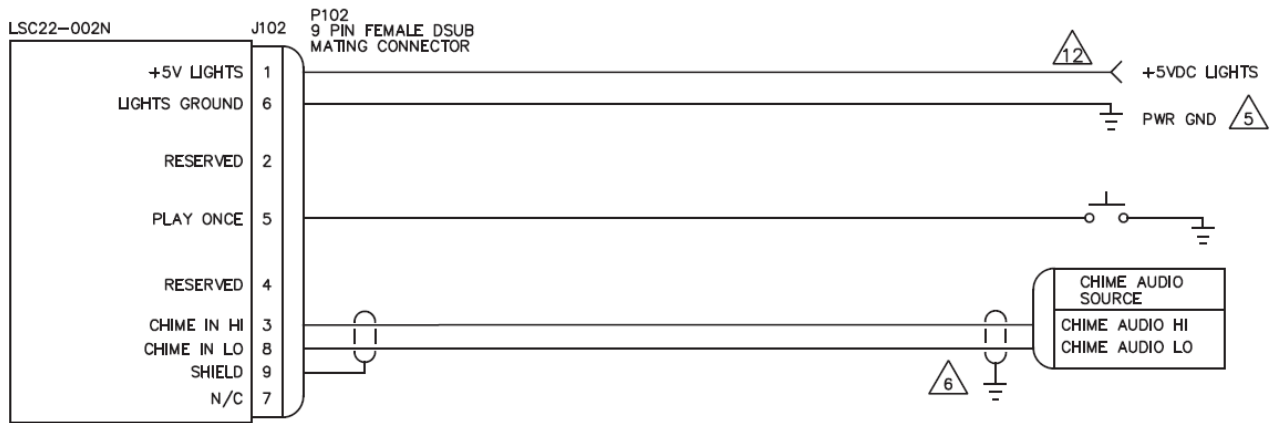
DEFINTIONS




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DRAWN	SK	OCT 2/17	DIMENSIONS ARE IN INCHES (MM)	TITLE: LOUDSPEAKER CONTROLLER INTERCONNECT				
CHECKED		Jan 8/18	TOLERANCES:					
			FRACTIONAL _____ ±0.0625"					
			ANGULAR _____ ±0.5°					
APPROVED		Jan 08, 2017	TWO DECIMAL PLACE _____ ±0.010"					
			THREE DECIMAL PLACE _____ ±0.005"					
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			FINISH:					
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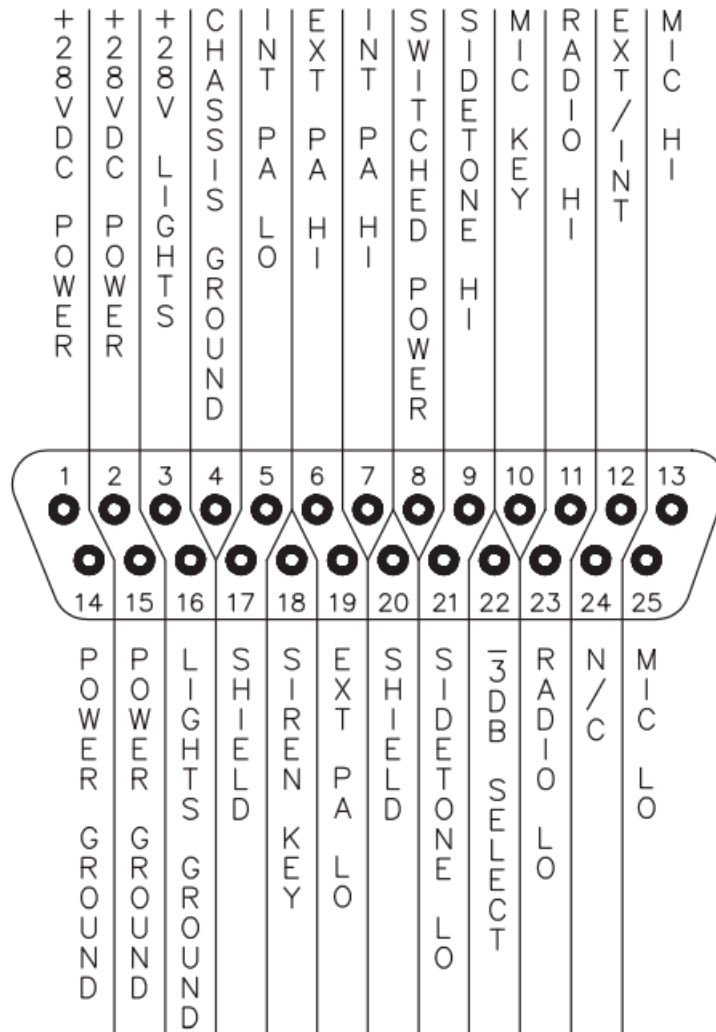
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APPROVED		Jan 08, 2017			
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		FINISH:	SCALE: DO NOT SCALE DRAWING DRAWING No.: 403-1 SHEET: 2 of 3		






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APPROVED		Jan 08, 2017	FRACTIONAL ±0.0625"			
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			TWO DECIMAL PLACE ±0.010"			
			THREE DECIMAL PLACE ±0.005"	REVISION: 1.00		
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P101

25 PIN D-MIN SOCKET
MATING CONNECTOR

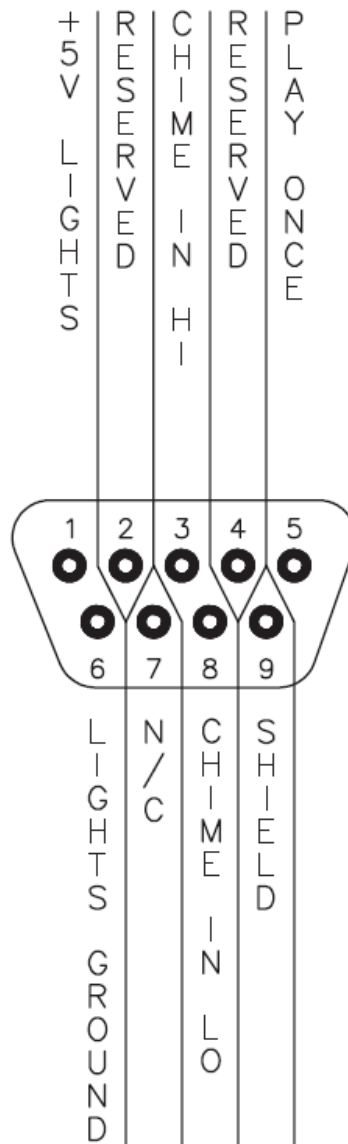


VIEW IS FROM REAR OF AIRFRAME CONNECTOR




NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP. KELOWNA, BC CANADA (250)-763-1088 WWW.AEM-CORP.COM	
DRAWN	SK	OCT 2/17		
CHECKED		Jan 8/18	TITLE: LOUDSPEAKER CONTROLLER CONNECTOR MAP	
APPROVED		Jan 08, 2017	MATERIAL: N/A FINISH: N/A N/A	
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P102

9 PIN D-MIN SOCKET
MATING CONNECTOR





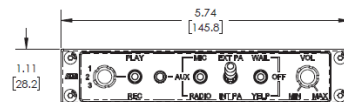
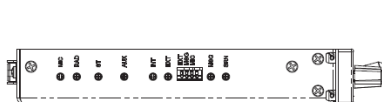
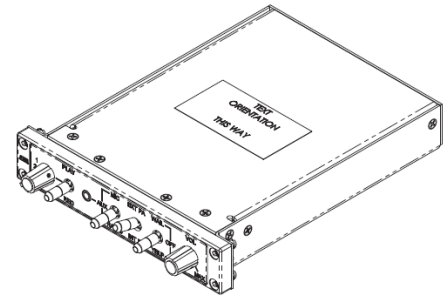
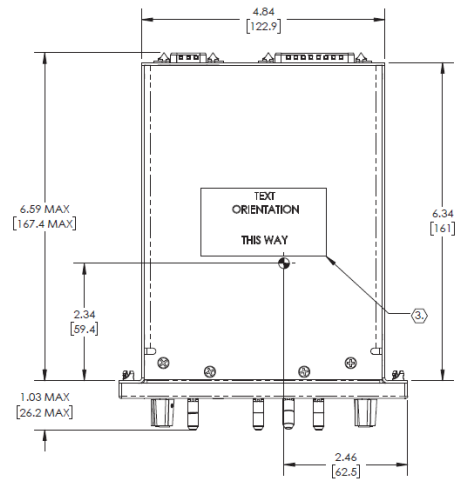
VIEW IS FROM REAR OF AIRFRAME CONNECTOR





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DIMENSION

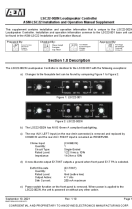
NOTES:

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



	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP. 15-1925 KIRSCHNER RD. KELOONA BC V1Y 4N7 (250) 763-1088 WWW.AEM-CORP.COM		
DRAWN	LAC/AJV	04-Oct-17	DIMENSIONS ARE IN INCHES [MM]	TITLE: LOUDSPEAKER CONTROLLER MECHANICAL INSTALLATION		
CHECKED		Oct 5/17	TOLERANCES:			
APPROVED		Jan 08, 2017	ANGULAR ±0.5°			
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			ONE DECIMAL PLACE ±0.100"			
			TWO DECIMAL PLACE ±0.030"	SCALE: 3:5 DO NOT SCALE DRAWING  DRAWING No.: 922-0 SHEET: 1 OF 1		
			THREE DECIMAL PLACE ±0.010"			
			MATERIAL: N/A			
			FINISH: N/A			

Documents / Resources

	<p>AEM LSC22-002N Loudspeaker Controller [pdf] Installation Guide</p> <p>LSC22-002N Loudspeaker Controller, ASM-LSC22, LSC22-002N, LSC22-002N Loudspeaker, Loudspeaker Controller, Loudspeaker</p>
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References

-  [Anodyne Electronics Manufacturing Corp. \(AEM\)](#)