



LSC22-105N Loudspeaker Controller ASM-LSC22 Installation and Operation Manual Supplement

This supplement contains installation and operation information that is unique to the LSC22-105N 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:  Duane Stewart Designer 27-Nov-2024	Checked By:  Tony Pearson Designer 28-Nov-2024	 Nathan Meade TSS Manger 28-NOV-2024	Approved By:  Todd Blackstock Program Manager 28-Nov-2024
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Section 1.0 Description

The LSC22-105N Loudspeaker Controller is identical to the LSC22-001 with the following exceptions:

- The LSC22-105N has NVIS Green B compliant backlighting.
- The MIC input circuitry is more sensitive to low level signals. A side switch setting (labeled "COMP") is provided to select two different sensitivity settings for the MIC input. Reference Section 2.1 of this supplement for more information.
- The SIREN and EXT PA side setting adjustments are set to maximum from the factory (factory set fully clockwise).

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 Adjustments and Connections

As referenced by the red arrow in Figure 1, the LSC22-105N Loudspeaker Controller has a user-accessible switch setting on the left side of the unit (labeled "COMP") that selects between two different MIC sensitivities (shown on next page).

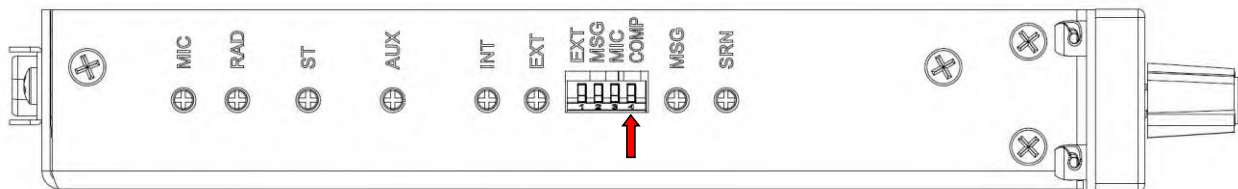


Figure 1 – LSC22-105N COMP MIC Sensitivity



LSC22-105N Loudspeaker Controller ASM-LSC22 Installation and Operation Manual Supplement

The MIC Input of the LSC22-105N is most sensitive when the COMP switch is in the UP position (COMP-1) and less sensitive in the DOWN position (COMP-2). Figure 2 provides an example of these sensitivity levels through the EXT PA Output compared to the LSC22-001. This increased MIC Input sensitivity is applied to all LSC22-105N outputs.

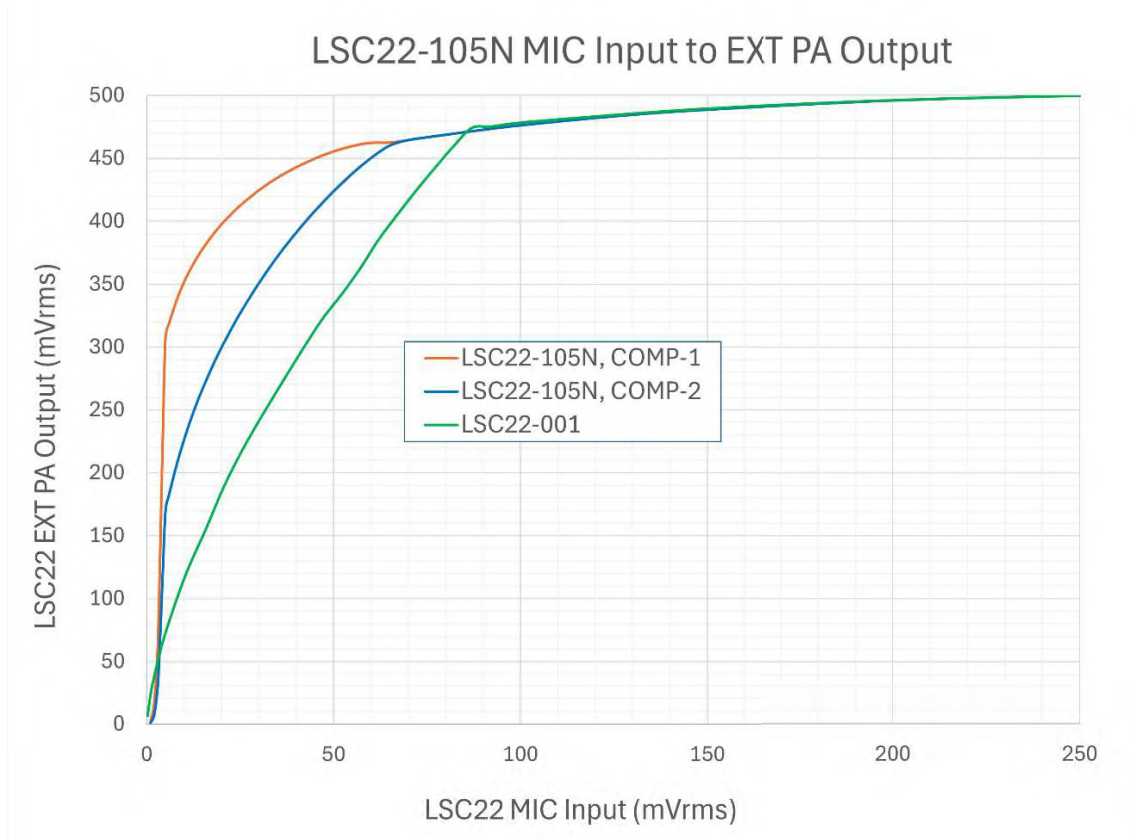


Figure 2 – LSC22-105N COMP-1 and COMP-2 MIC Sensitivity Comparison to LSC22-001

2.2 Installation Drawings

DOCUMENT NO.	REV.	DESCRIPTION	TYPE	SERIAL NO.
LSC22-105N-403-0	1.01	Loudspeaker Controller	Interconnect	111877 and up
LSC22-105N-405-0	1.00	Loudspeaker Controller	Connector Map	111877 and up
LSC22-105N-922-0	1.00	Loudspeaker Controller	Mechanical Installation	111877 and up

Section 3.0 Operation

For operation information, see ASM-LSC22 Section 3.0: There are no operational changes between the LSC22-105N and LSC22-001.

End of Supplement

REVISIONS			
REV	DESCRIPTION	DATE	BY
1.01	ECO1224: CHANGED EQUIP. DESC. FOR RADIO HI/LO INPUT (SHEET 2)	27-NOV-2024	AMP




LSC22-105N INSTALLATION NOTES

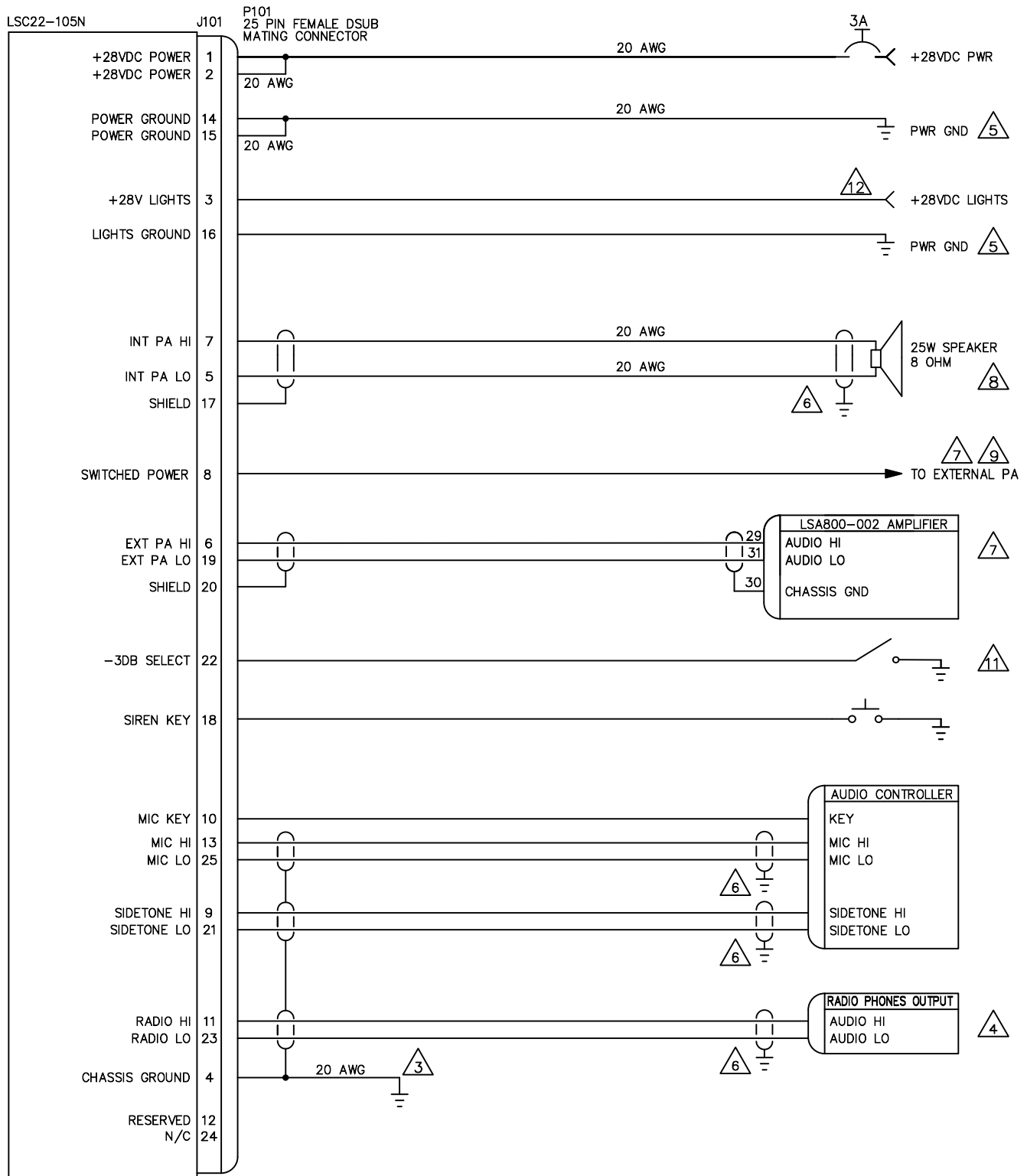
NOTES:

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 TYPE AND LEVEL OF RADIO PHONES OUTPUT. 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 LSA800-002-403-0 INTERCONNECT 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.

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: (RSV SP) RESERVED, BUT INSTRUCTIONS SHALL BE FOLLOWED TO ACTIVATE THE CIRCUITRY. A SPARE WIRE SHALL BE INSTALLED IN THE WIRE HARNESS.

NAME		DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP.	KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM	
DRAWN	LAC	18-Jan-2024	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		27-Nov-2024	MATERIAL: N/A	PAPER SIZE: A	CAGE CODE: L9015	PART No.: LSC22-105N
APPROVED		27-Nov-2024	FINISH: N/A	SCALE: DO NOT SCALE DRAWING	DRAWING No.: 403-0	REVISION 1.01
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.				SHEET: 1 of 3		



	NAME	DATE	UNLESS OTHERWISE SPECIFIED:
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CHECKED		27-Nov-2024	TOLERANCES:
APPROVED		27-Nov-2024	FRACTIONAL _____ ±0.0625"
			ANGULAR _____ ±0.5°
			TWO DECIMAL PLACE _____ ±0.010"
			THREE DECIMAL PLACE _____ ±0.005"



ANODYNE ELECTRONICS MANUFACTURING CORP.

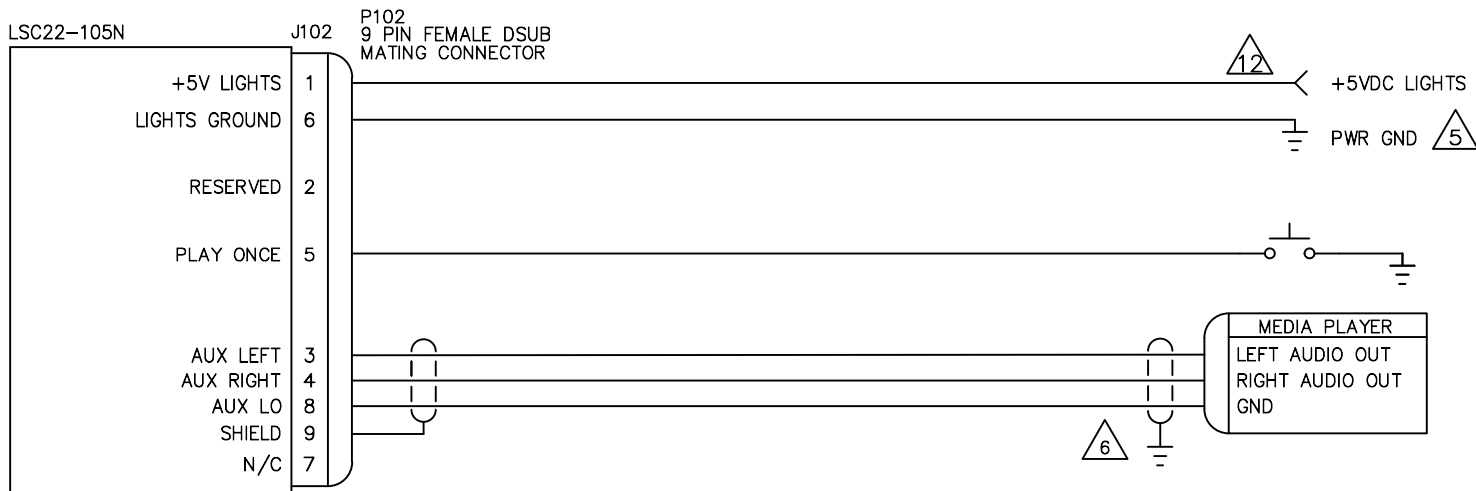
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TITLE: **LOUDSPEAKER CONTROLLER INTERCONNECT**

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FINISH: N/A

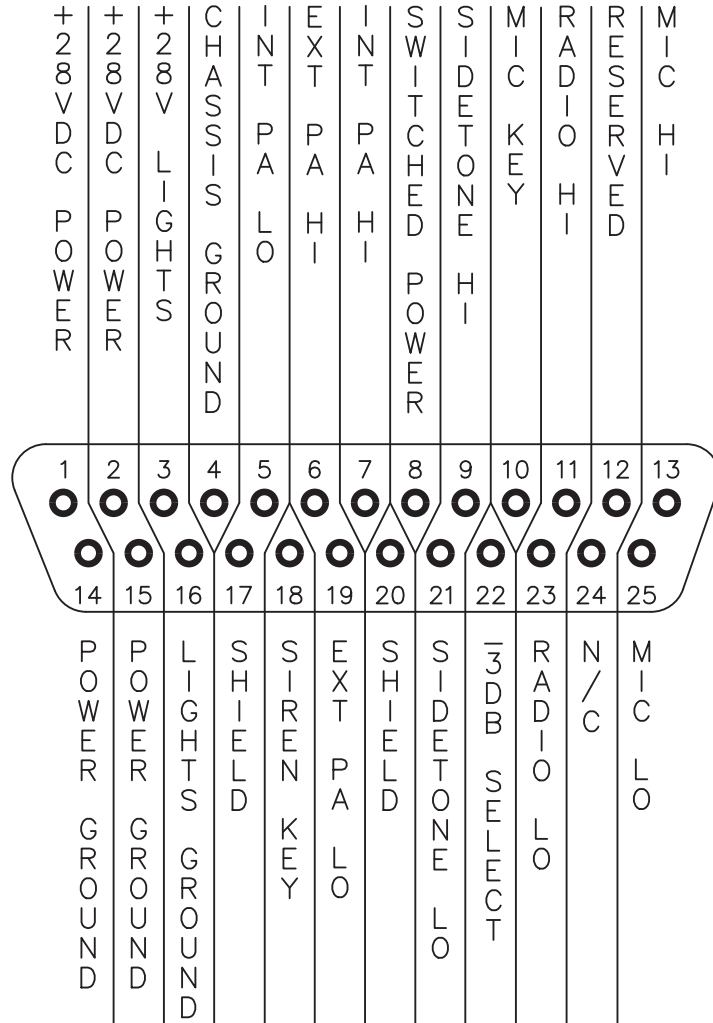
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CHECKED		27-Nov-2024	TOLERANCES:					
APPROVED		27-Nov-2024	FRACTIONAL _____ ±0.0625"	TITLE: LOUDSPEAKER CONTROLLER INTERCONNECT				
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			TWO DECIMAL PLACE _____ ±0.010"	PAPER SIZE: A	CAGE CODE: L9015	PART No.: LSC22-105N	REVISION: 1.01	
			THREE DECIMAL PLACE _____ ±0.005"	SCALE:	DO NOT SCALE DRAWING		DRAWING No.: 403-2	SHEET: 3 of 3
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			FINISH: N/A					

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25 PIN D-MIN SOCKET
MATING CONNECTOR

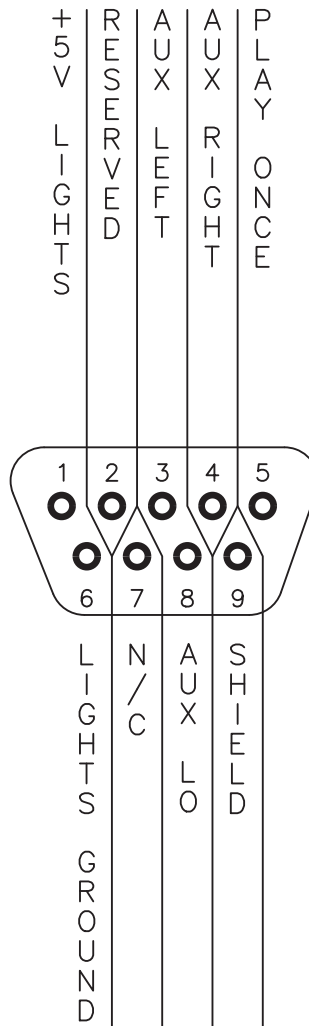


VIEW IS FROM REAR OF AIRFRAME CONNECTOR




	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP.		KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM	
DRAWN	LAC	18-Jan-2024	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 CONNECTOR MAP	
CHECKED		19-Jan-2024	MATERIAL: N/A	PAPER SIZE:	CAGE CODE		
APPROVED		16-Apr-2024	FINISH: N/A	A	L9015	LSC22-105N	
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9 PIN D-MIN SOCKET
MATING CONNECTOR





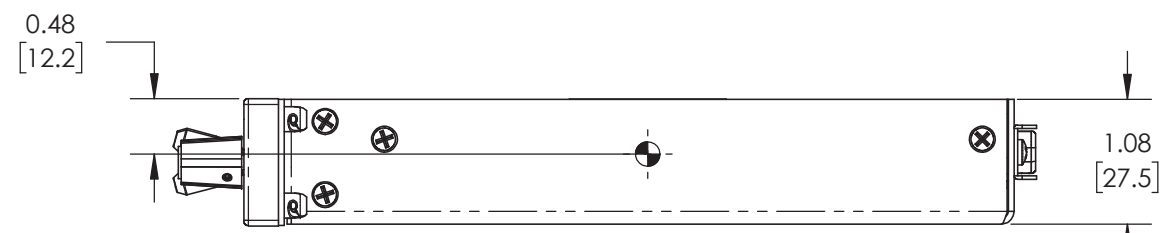
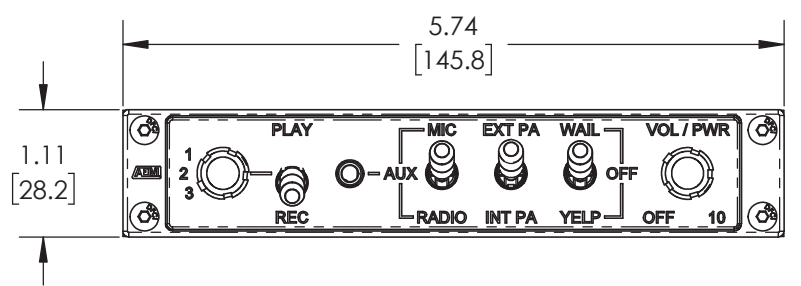
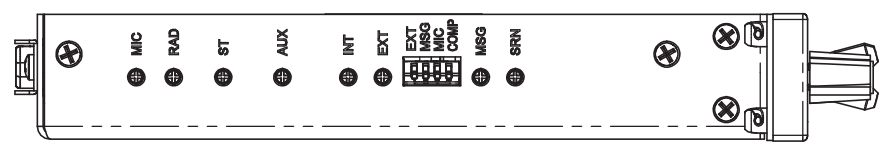
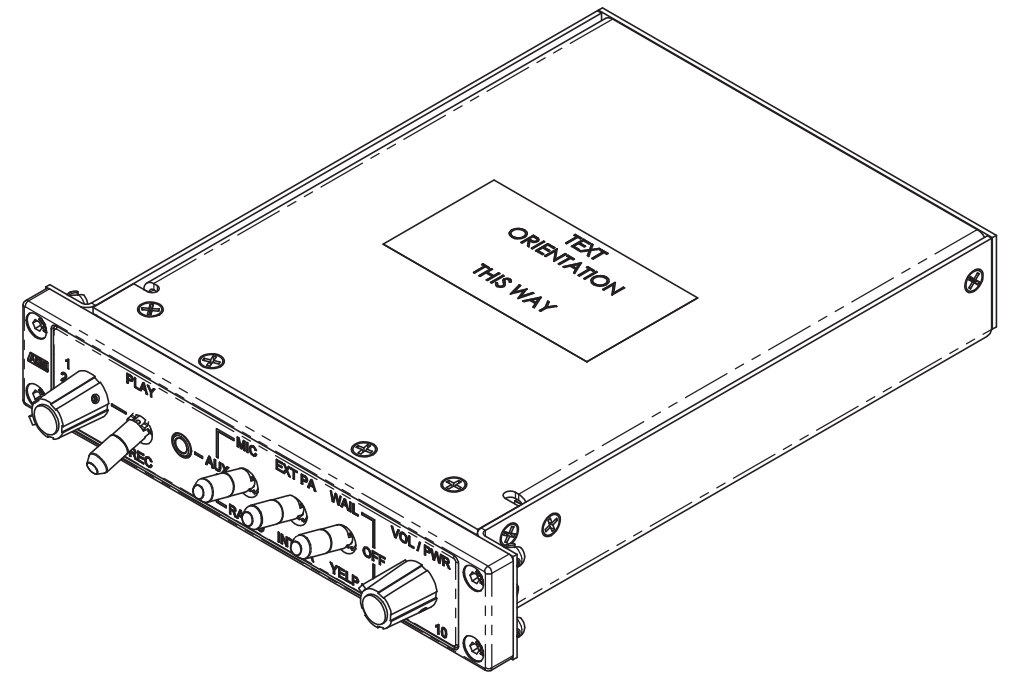
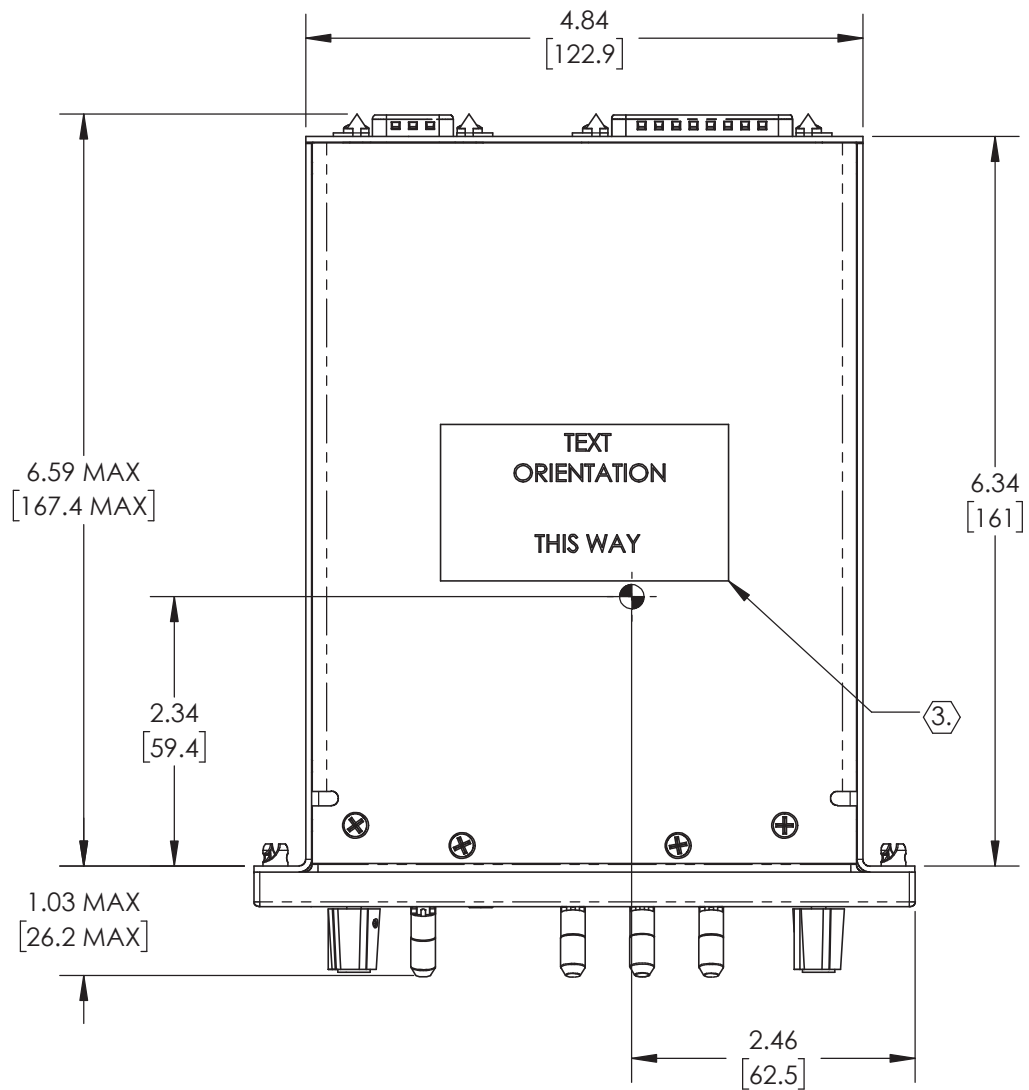
VIEW IS FROM REAR OF AIRFRAME CONNECTOR




	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	 ANODYNE ELECTRONICS MANUFACTURING CORP.		KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM	
DRAWN	LAC	18-Jan-2024	DIMENSIONS ARE IN INCHES [MM]				
CHECKED		19-Jan-2024	TOLERANCES:	TITLE: LOUDSPEAKER CONTROLLER CONNECTOR MAP			
APPROVED		16-Apr-2024	FRACTIONAL _____ ±0.0625"				
			ANGULAR _____ ±0.5°				
			TWO DECIMAL PLACE _____ ±0.010"	PAPER SIZE: A		CAGE CODE: L9015	
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			FINISH: N/A	SCALE:		SHEET: 2 of 2	
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NOTES:

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



DRAWN	NAME	DATE	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] TOLERANCES: ANGULAR: ±0.5° FRACTIONAL: ±0.0625" ONE DECIMAL PLACE: ±0.100" TWO DECIMAL PLACE: ±0.010" THREE DECIMAL PLACE: ±0.005"	 ANODYNE ELECTRONICS MANUFACTURING CORP.	100-966 Crowley Ave. KELOWNA, BC V1Y 0L1 (250)-763-1088 WWW.AEM-CORP.COM				
	CHECKED	18-Jan-2024			TITLE: LOUDSPEAKER CONTROLLER MECHANICAL INSTALLATION				
CHECKED		19-Jan-2024	MATERIAL: N/A	FINISH: N/A	PAPER SIZE:	CAGE CODE	PART No. :	REVISION	
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