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

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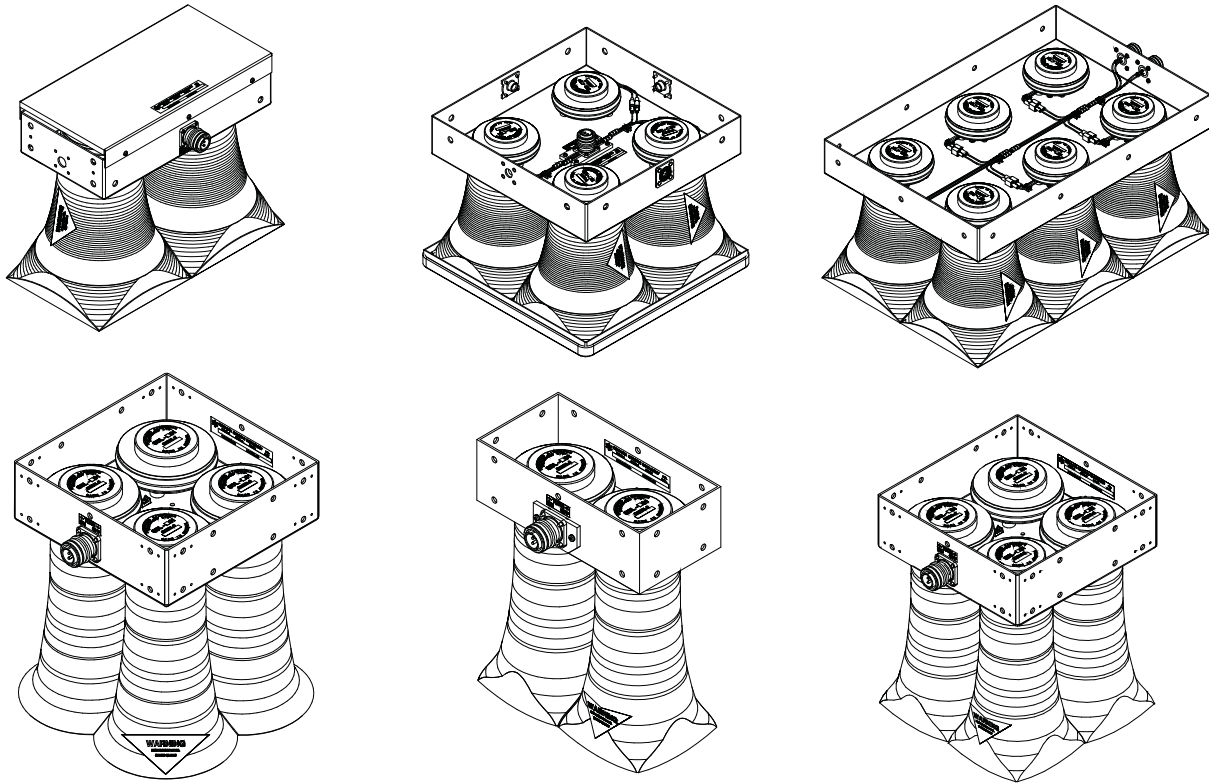
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TS9x Series Lightweight Speaker Array

SM51



INSTALLATION AND OPERATION MANUAL

REV 5.20 July 15, 2015

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TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

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TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

Prepared By:  Tony Pearson Designer Jul 15, 2015	Checked By:  Rick Gostlin Designer July 15/15	 Tom Betzelt Product Support Manager July 15, 2015	Approved By:  Todd Blackstock R&D Manager Jul 15/15
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The status of this installation and operation manual is controlled by the revision shown on the title page. The status of each section is controlled by revision shown in the footer of each page. All revisions affecting sections of this manual have been incorporated.

AEM MANUAL REVISIONS			
Section	Revision Number	Revision Description	Date
All	Rev 5.20	ECO1041 – Updated TS95-16DS-922-0 Revision	July 15, 2015
All	Rev 5.10	RAS#508 - Added TS95 speaker array series	April 2, 2015
All	Rev 5.00	Updated drawings and template	April 23, 2012



TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

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TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

Section 1.0 Description

1.1 Introduction

This manual contains information on the TS9x Lightweight Speaker arrays. Information in this section consists of purpose of equipment, features and specifications.

1.2 Purpose of Equipment

The TS9x speaker arrays are lightweight, high output power loudspeakers for use in air-to-ground, air-to-sea, or ground-to-ground audible communication systems. The TS92, TS93 and TS94 speaker array series are used with the PA250 and PA700 series amplifiers. The TS95 speaker array series are used with the LSA800 series amplifiers.

Magnetically shielded versions exist for the TS94-06 and TS95-16 speaker array series, where the model number ends in a 'S' (ie: TS94-06DS). These models utilize steel covers and chassis, and therefore are not considered lightweight speakers.

1.3 Features

This series of speakers is available in multiples of two bells, which allows the user to vary the range and/or dispersal pattern depending on the mounting configurations. TS92/TS95's are used for large area dispersion, and TS93/TS94's are for more focused applications. The driver assembly and mechanical parts are field replaceable for ease of maintenance.

1.4 Specifications

1.4.1 Electrical Specifications

Loudhailer	Total Bell Configuration	Amplifier	Input Power	Output Level @ 1m
TS92-02	2	PA250	28 Vdc	130dB
TS94-02	2	PA250	28 Vdc	128dB
TS92-04	4	PA250	28 Vdc	136dB
2 x TS92-02	4	PA250	28 Vdc	136dB
TS92-04	4	PA250	33 Vdc	137dB
2 x TS92-02	4	PA250	33 Vdc	137dB
TS93-04	4	PA250	28 Vdc	134dB
TS94-04	4	PA250	28 Vdc	134dB
TS93-04	4	PA250	33 Vdc	135dB
TS94-04	4	PA250	33 Vdc	135dB
TS95-16	6	LSA800	28 Vdc	142dB
2 x TS92-04	8	PA700	28 Vdc	140dB
2 x TS92-04	8	PA700	33 Vdc	141dB

At the time of publication, performance information was available only for the speakers listed above. For details of other units, please contact the Product Support department at AEM.



TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

1.4.2 Physical Specifications

See Mechanical Installation drawings (TS9x-xxxx\922-0) for speaker array physical specifications (where x is the model reference of the specific unit under consideration, i.e. TS92-04XN\922-0)

1.5 System Configuration

The TS9x Speaker Array should be chosen to match the audio output power of the PA System amplifier. As a general rule, the system should have one speaker driver (minimum) for each 100 watts of audio power.

For example: a 400 watt system requires 4 speaker drivers = TS9x-04xx

Failure to follow this rule can result in the speakers being overdriven, leading to high levels of distortion and premature failure of the speaker drivers. For further details, please contact the Product Support department at AEM.

End of Section 1.0



TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

Section 2.0 Installation

2.1 Introduction

Information in this section consists of: unpacking and inspection procedures, installation procedures, post-installation checks, and installation drawings.

2.2 Unpacking and Inspection

Unpack the equipment carefully. Inspect the unit visually for damage due to shipping and report all such claims immediately to the carrier involved. Note that each unit should have the following:

- TS9x Lightweight Speaker Array
- Product Information Card
- Release certification

Verify that all items are present before proceeding and report any shortage immediately to your supplier.

All Anodyne Electronics Manufacturing Corp. (AEM) products are warranted for 2 years. See the website www.aem-corp.com/warranty for complete details.

2.3 Installation Procedures

2.3.1 Warnings

Stand clear, this equipment operates at an intense sound level. Personnel must be kept away from the direct loudspeaker beam.

2.3.2 Cautions

Do not operate the equipment in a hangar or in confined areas.

Do not operate the equipment with snow, water or other foreign matter in the loudspeaker horn.

Do not clean the loudspeaker with compressed air.

2.3.3 Cabling and Wiring

All unshielded wire should be MIL-W-22759 or equivalent. For shielded wire applications, use Tefzel MIL-M-27500 or MIL-M-81044 shielded wire with solder sleeves (for shield terminations) to make the most compact and easily terminated interconnect. Follow the wiring diagrams in Section 2.5 as required.



TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

2.3.4 Mechanical Installation

The installing agency is responsible for the design, engineering and installation of the mounting bracket for the TS9x Speaker Array. Careful consideration should be given to the operating environment and the mechanical forces acting upon the TS9x unit(s).

2.3.5 Post-Installation Checks

Ensure all connectors are tight and the speaker array mechanical installation is sound.

When the PA system installation is complete, carry out a full performance test to ensure that all components of the system (including the loudspeaker array) are functioning correctly. For full post-installation check information, refer to the relevant PA System and Power Amplifier service manuals.

2.4 Continued Airworthiness

Maintenance of the TS9x is 'on condition' only. Periodic maintenance of this product is not required.

2.5 Installation Drawings

DRAWING	REV.	DESCRIPTION	TYPE
AA21\400\403-0	1.01	Cabin PA System	Interconnect
AA22\492\403-0	1.10	PA/Siren System	Interconnect
AA22\492\403-1	1.10	PA/Siren System	Interconnect
AA22\492\403-2	1.10	PA/Siren System	Interconnect
LSA800-001-403-1	1.00	PA/Siren 900 Watt System Interconnect	Interconnect
PA250\407-0	1.00	PA250 Amplifier	Cabling Diagram
PA700\001\407-0	1.00	700 Watt System	Cable Diagram
PA700\001\407-1	1.00	1400 Watt System	Cable Diagram
PA700\001\407-2	1.00	2100 Watt System	Cable Diagram
TS92\02XM\922-0	1.11	Speaker Array 2 Bell Standard W/Clutch Mount	Mechanical Installation
TS92\02XN\922-0	1.11	Speaker Array 2 Bell Standard	Mechanical Installation
TS92\04XN\922-0	1.02	Speaker Array 4 Bell Standard	Mechanical Installation
TS92\06XN\922-0	1.12	Speaker Array 6 Bell Standard	Mechanical Installation
TS93\04XN\922-0	1.11	Speaker Array 4 Bell Cloverleaf	Mechanical Installation
TS94\02XN\922-0	1.01	Speaker Array 2 Bell Mini	Mechanical Installation
TS94\04XN\922-0	1.11	Speaker Array 4 Bell Mini	Mechanical Installation
TS94-06xN-922-0	1.00	Speaker Array 6 Bell Mini	Mechanical Installation
TS95-16DS-922-0	1.10	Speaker Array 6 Bell High Power	Mechanical Installation

Section 2.0 ends following the above documents

AA21-400
CABIN PA SYSTEM J101



REVISIONS			
REV	DESCRIPTION	DATE	BY
1.01	ECR #1481 – CHANGED NOTES 1, 3 & 7; ADDED NOTES 8 & 9; FORMAT CHANGES.	SEP 26/00	TAT
1.10	DOCCR01476 – CHANGED TO SHOW OPTIONAL LO POWER PA CONNECTIONS. UPDATED TEMPLATE.	JUN 5/06	TAT

AA22-492 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. OPTIONAL. PARALLEL TO HEADPHONE (1 ONLY) CONNECTION FOR MONITORING RADIOS VIA EXTERNAL P.A. SPEAKER.
3. OR CARBON-EQUIVALENT/AMPLIFIED DYNAMIC MICROPHONE.
4. MIC INPUT LO (PIN 25) MUST GO TO EXTERNAL GROUND TO EXCITE MICROPHONE, IF NOT PROVIDED BY AUDIO SYSTEM.
5. FOR CYCLIC-SWITCH KEYING, WIRE AS SHOWN. FOR FRONT-PANEL AUTO-KEYING, GROUND PIN 10.
6. SHIELD TO REDUCE INTERFERENCE WITH OTHER SYSTEMS.
7. ISOLATED TRANSFORMER OUTPUT. 'AUDIO OUT LO' MUST BE TERMINATED AT P1 'C'.
8. SWITCH POWER OUT (PIN 8) RATED 400mA @ 28VDC.
9. K1 RELAY NAT P/N 65-80-200 OR EQUIVALENT. FLT1 RF FILTER NAT P/N 22-00-003A OR EQUIVALENT.
10. UP TO 5W PA INPUT FROM EXISTING SYSTEM.

DEFINITIONS:

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

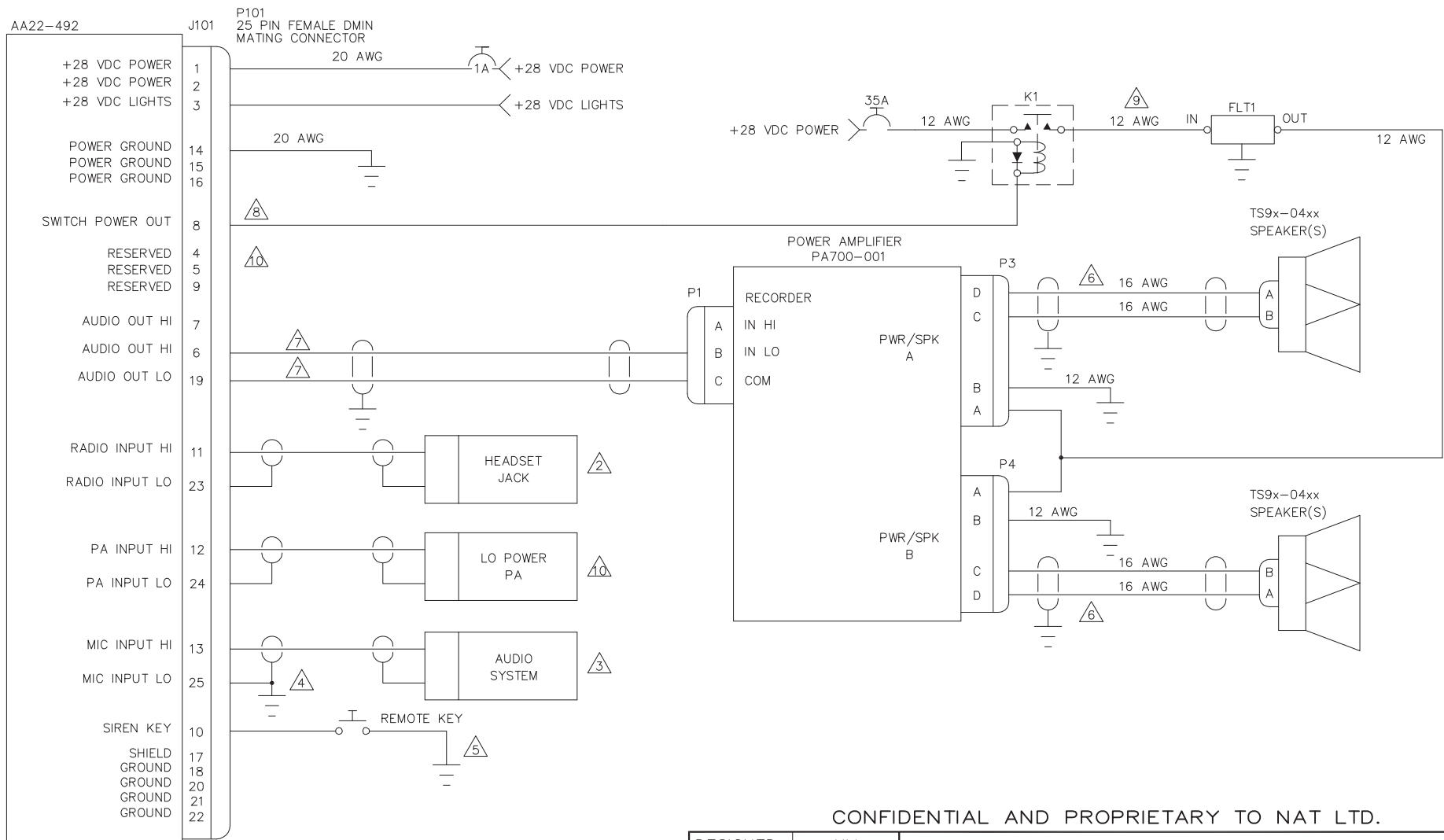
N/C SPARE: NO CONNECTION INTERNALLY, BUT A SPARE WIRE SHALL BE INSTALLED IN THE WIRE HARNESS.

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.

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DESIGNED	RL	 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	MAY 26/06	TITLE PA/SIREN SYSTEM				
CHECKED	NAT 255					
APPROVED	NAT 131	SIZE A	CAGE CODE 3AB01	PART NO. AA22-492	REV. 1.10	SHEET 1/3
FILE	403-0.DWG	DWG. TYPE	INTERCONNECT	DWG. NO.	AA22\492\403-0	



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DESIGNED	KV	 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	SEP 19/02	TITLE PA/SIREN SYSTEM 700 WATT				
CHECKED	NAT 255					
APPROVED	NAT 131	SIZE A	CAGE CODE 3AB01	PART NO. AA22-492	REV. 1.10	SHEET 3/3
FILE	403-0.DWG	DWG. TYPE	INTERCONNECT	DWG. NO.	AA22\492\403-2	

LSA800-001 INSTALLATION NOTES

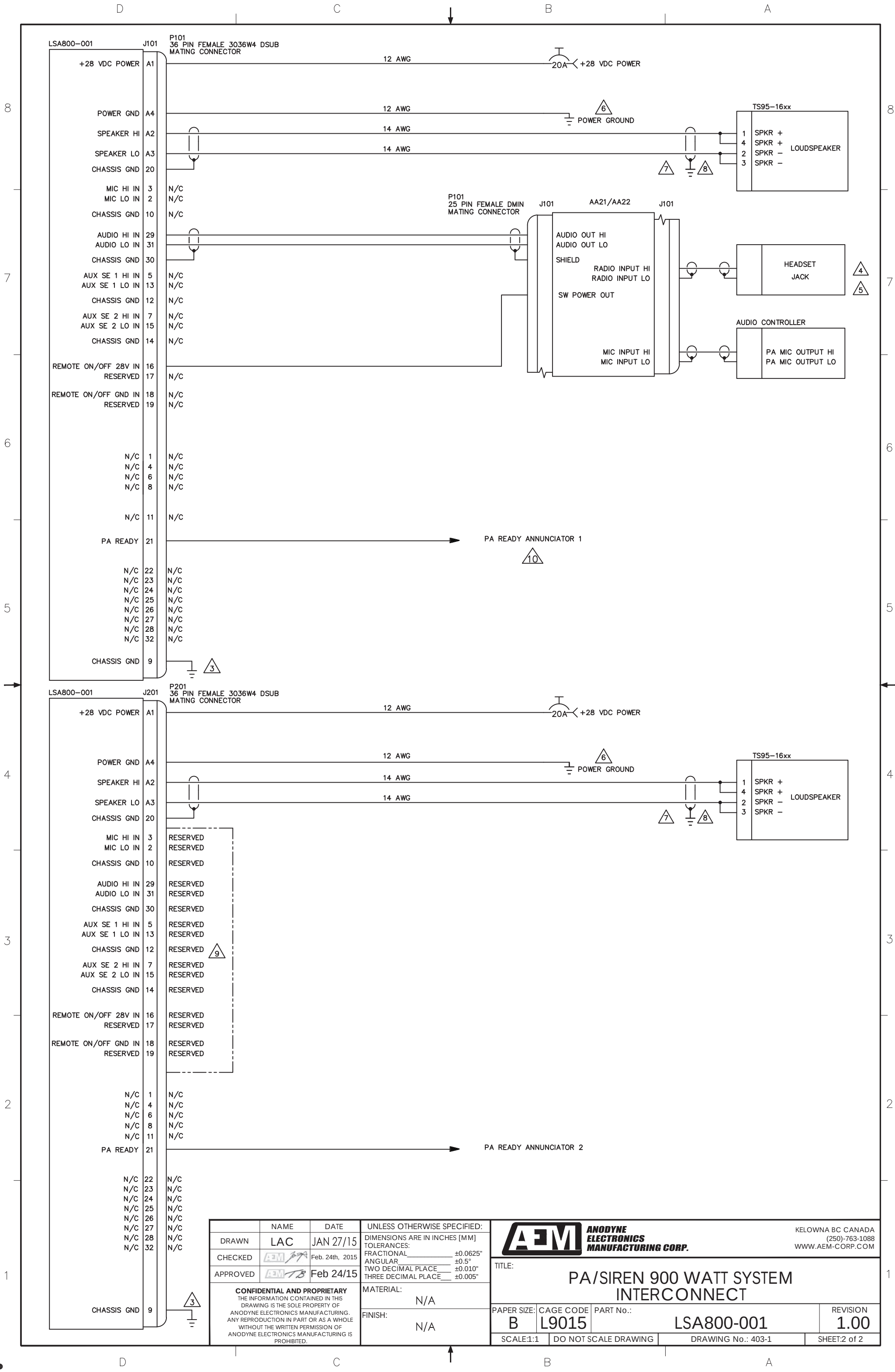
NOTES:

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 SAME.
5. OPTIONAL. PARALLEL TO HEADPHONE (1 ONLY) CONNECTION FOR MONITORING RADIOS VIA EXTERNAL P.A. SPEAKER.
6. CABLE LENGTH NOT TO EXCEED 3.3 FT [1.0 M].
7. SHIELDS SHOULD BE GROUNDED TO LOCAL AIRFRAME GROUND, UNLESS OTHERWISE SPECIFIED.
8. SHIELD LENGTH NOT TO EXCEED 1 FT [0.3 M]. SPEAKER OUTPUT WIRES TO BE BUNDLED AND ROUTED SEPERATELY FROM LOW LEVEL AUDIO INPUT LINES.
9. NO CONNECTION IN THE AIRCRAFT.
10. SWITCHED TO POWER GROUND WHEN ACTIVE. CURRENT (SINK) 0.4A MAX.

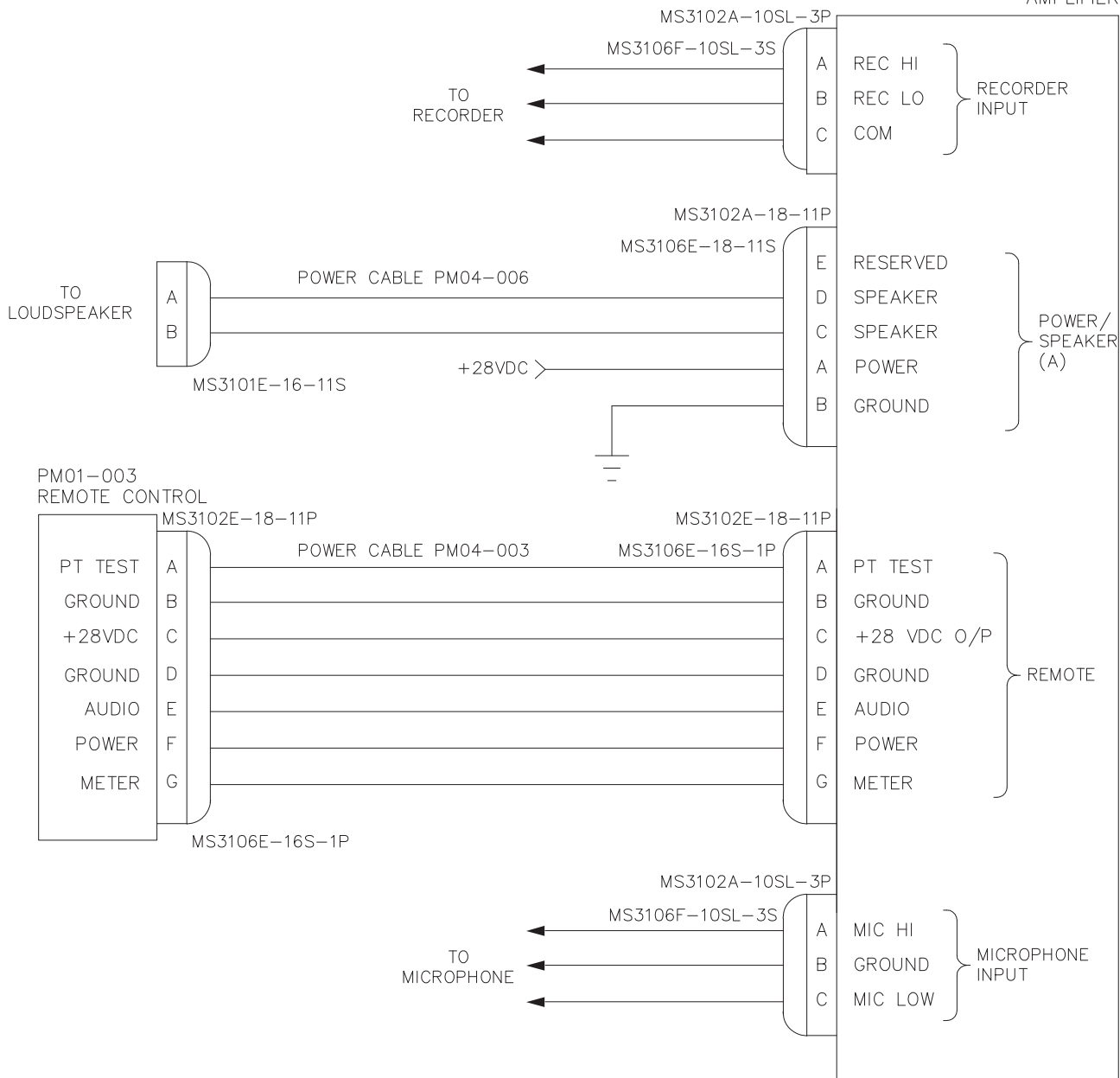
DEFINITIONS:

- 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.

	NAME	DATE	UNLESS OTHERWISE SPECIFIED:	ANODYNE ELECTRONICS MANUFACTURING CORP.			KELOWNA BC CANADA (250)-763-1088 WWW.AEM-CORP.COM												
DRAWN	LAC	JAN 27/15	DIMENSIONS ARE IN INCHES	TITLE: PA/SIREN 900 WATT SYSTEM INTERCONNECT															
CHECKED		Feb. 24th, 2015	TOLERANCES:																
APPROVED		Feb 24/15	FRACTIONAL ± 0.5 Deg ANGULAR: MACH $\pm$ BEND $\pm$ TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.005																
PROPRIETARY AND CONFIDENTIAL 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.			INTERPRET GEOMETRIC TOLERANCING PER:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">SIZE</td> <td style="width: 20%;">CAGE CODE</td> <td style="width: 25%;">PART No.</td> <td style="width: 40%;">REV</td> </tr> <tr> <td style="text-align: center; font-size: 2em;">A</td> <td style="text-align: center;">L9015</td> <td style="text-align: center;">LSA800-001</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td colspan="2">SCALE: 1:1</td> <td>DRAWING No.: 403-1</td> <td>SHEET 1 of 2</td> </tr> </table>				SIZE	CAGE CODE	PART No.	REV	A	L9015	LSA800-001	1.00	SCALE: 1:1		DRAWING No.: 403-1	SHEET 1 of 2
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FINISH																			
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			N/A																
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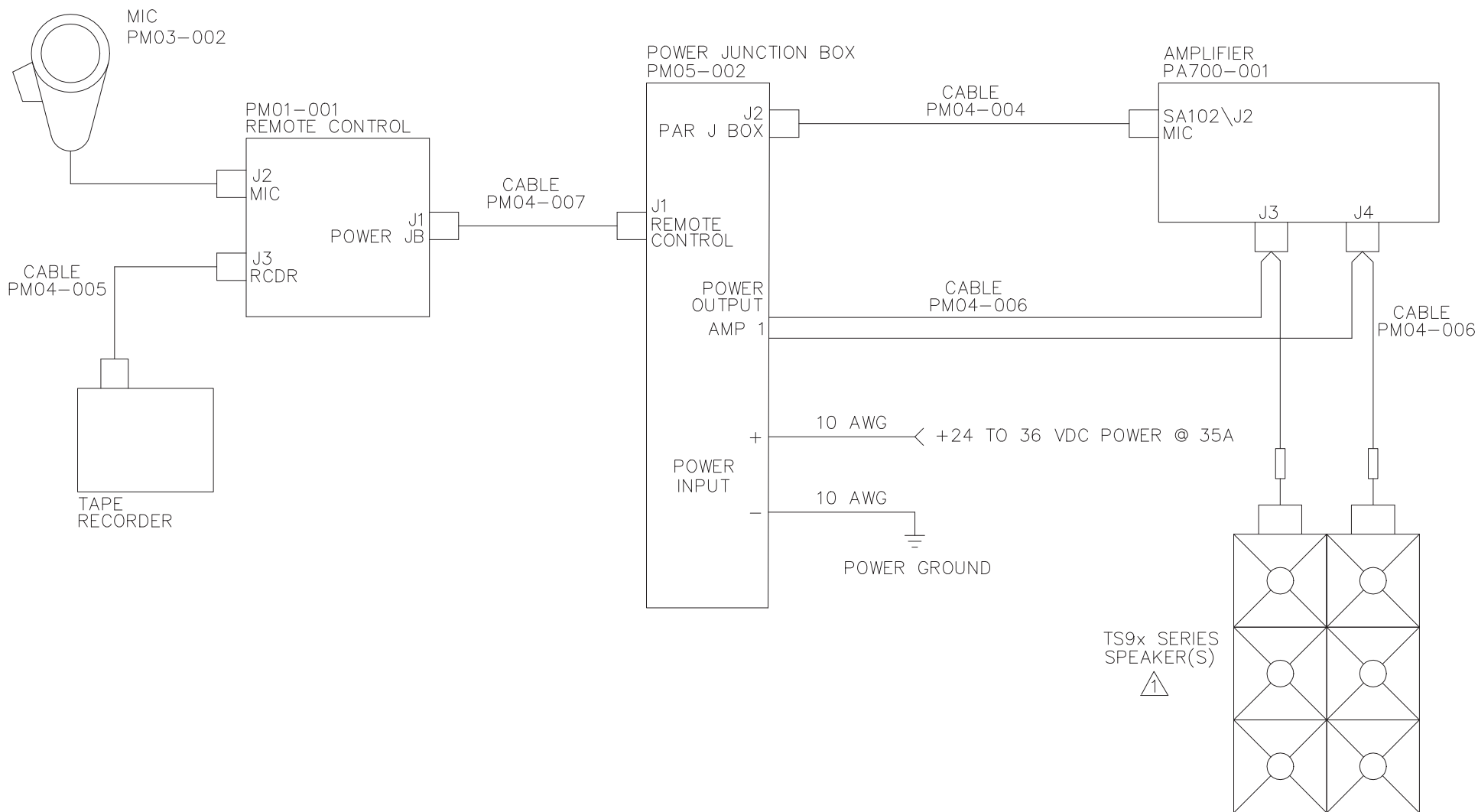


PA250-001
AMPLIFIER



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DATE	OCT 12/00	TITLE				
CHECKED	NAT 231	NAT 223	PA250 AMPLIFIER			
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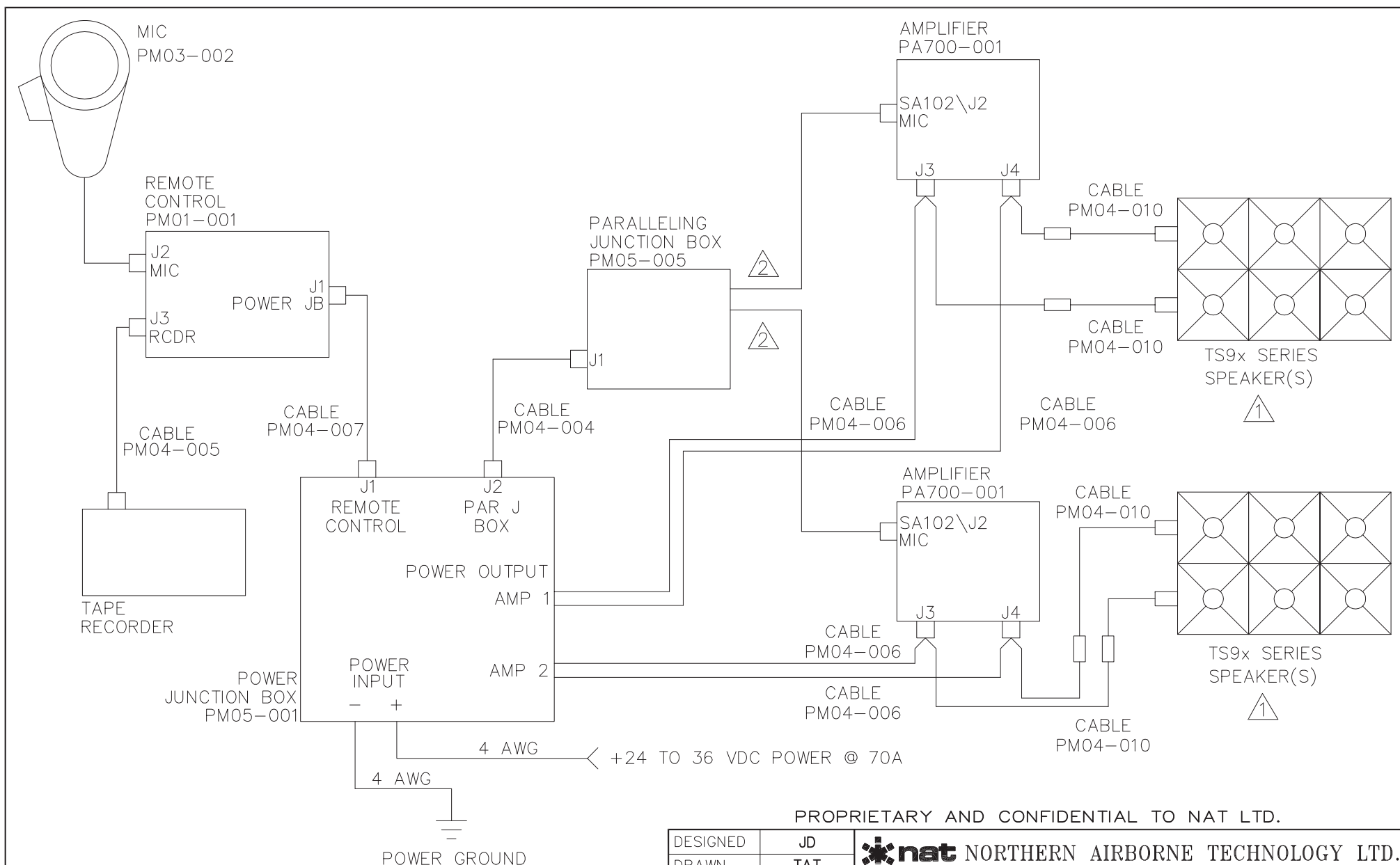
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1 CONSULT FACTORY FOR SPEAKER CONFIGURATION OPTIONS.

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DRAWN	TAT				
DATE	AUG 30/00	TITLE 700 WATT SYSTEM			
CHECKED	NAT 114 NAT 223				
APPROVED	NAT 107	SIZE A	CAGE CODE 3AB01	PART NO. PA700-001	REV. 1.00
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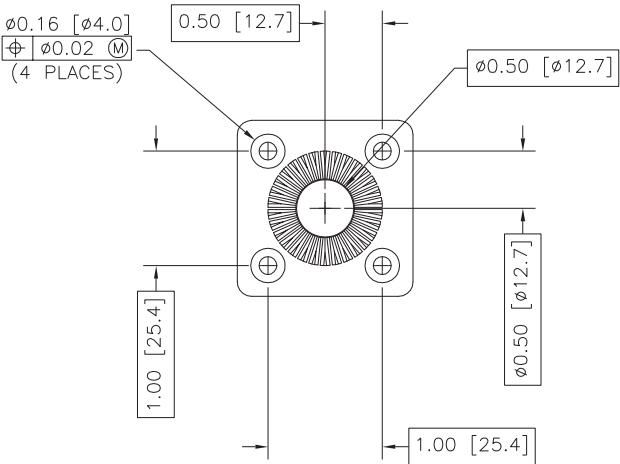
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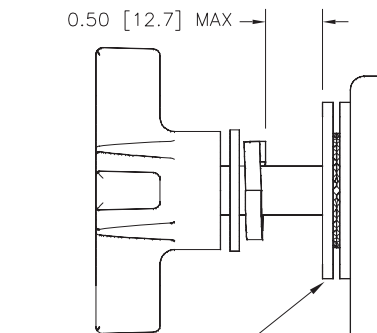
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CHECKED	 					
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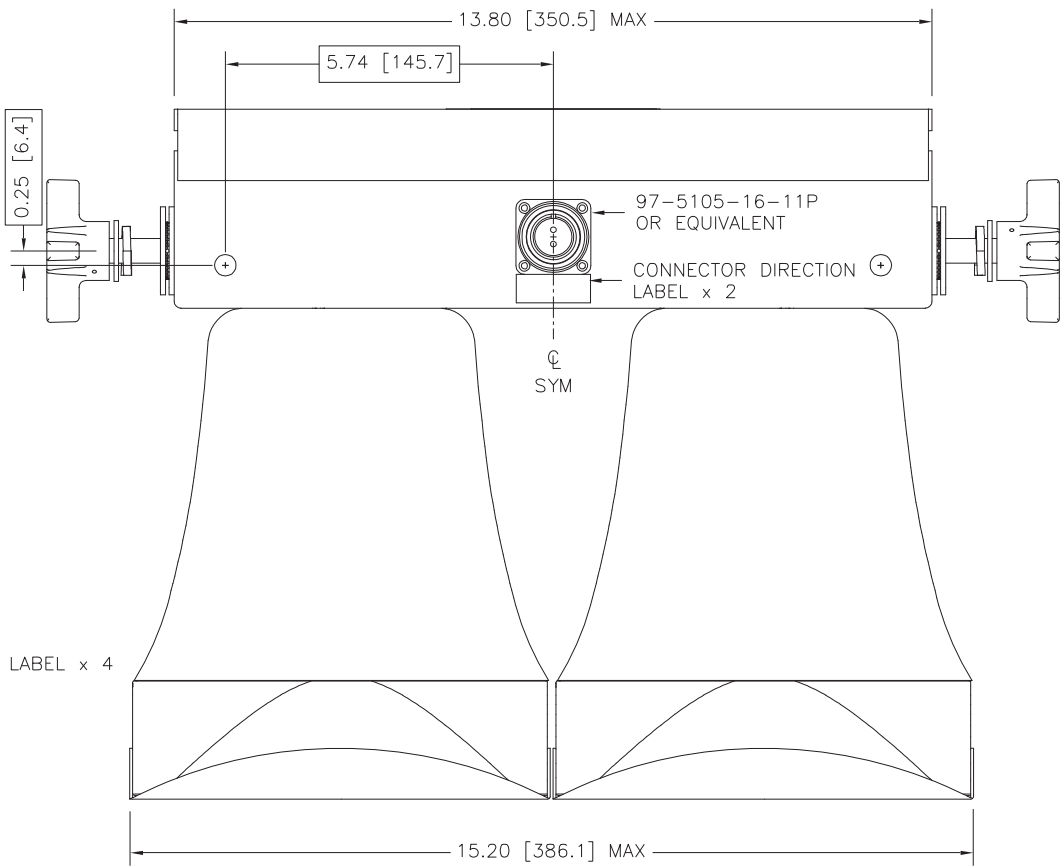
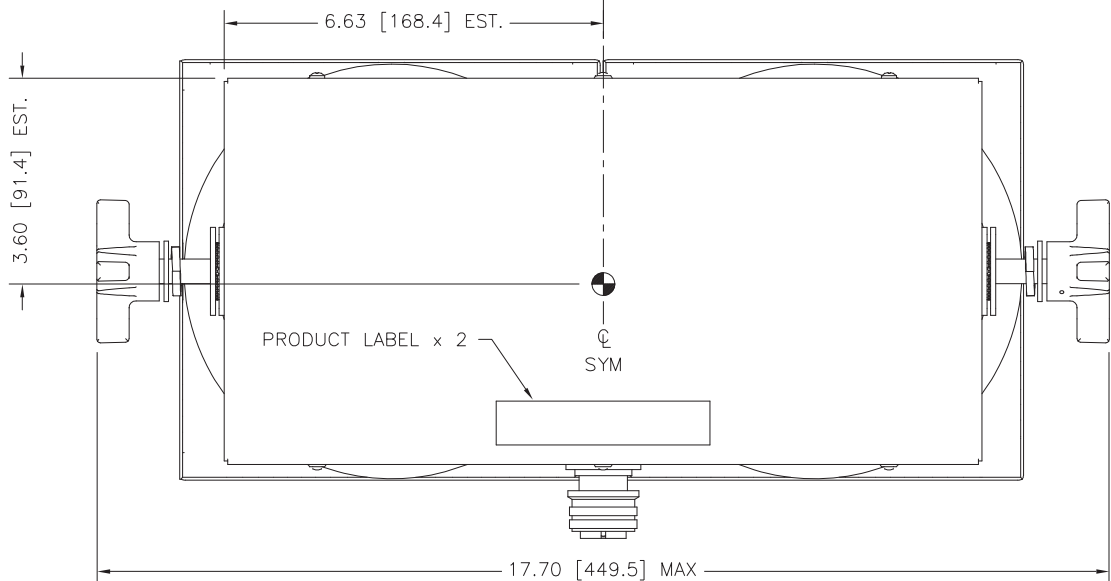
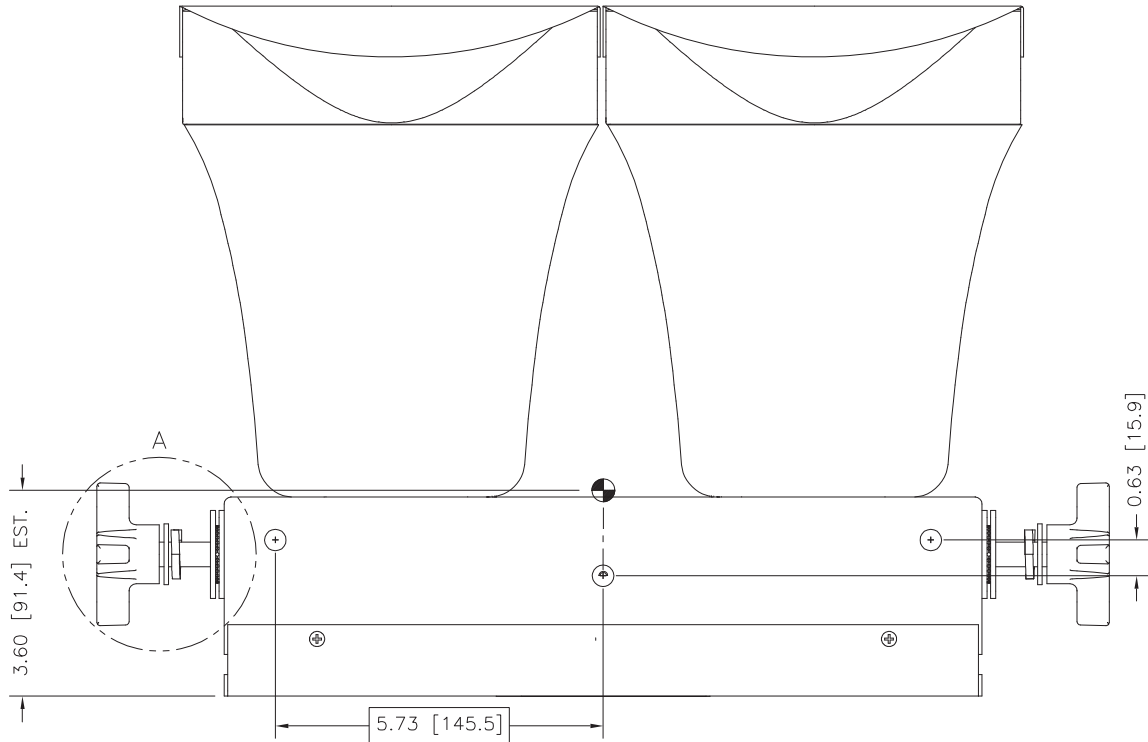
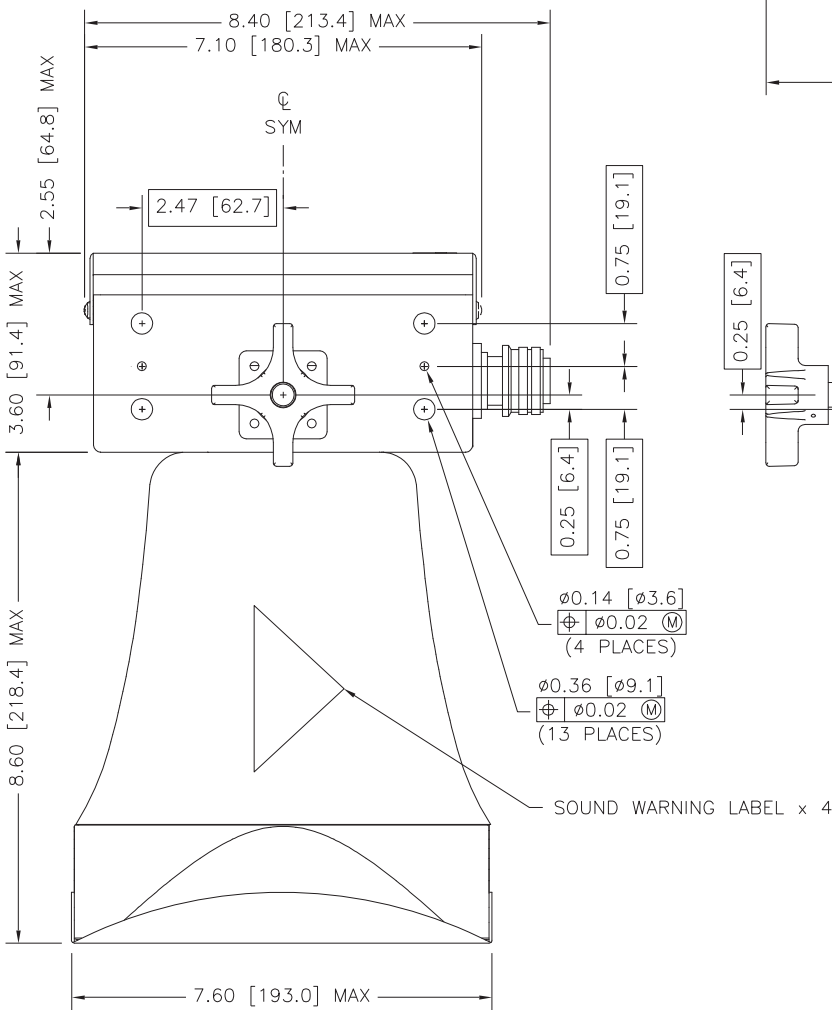
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1.10	ECR #1763 – 7.35 WAS 7.25, 14.75 WAS 14.55, 11.90 WAS 11.95, ADDED TOLERANCES.	FEB 14/01	MWS
1.11	ECR #2124 – CORRECTED LABELS, DIMENSIONS AND TOLERANCES, FORMAT CHANGES.	JUN 27/02	TAT



CLUTCH PLATE
SCALE 2:1



CLUTCH PLATE
DETAIL A
SCALE 2:1

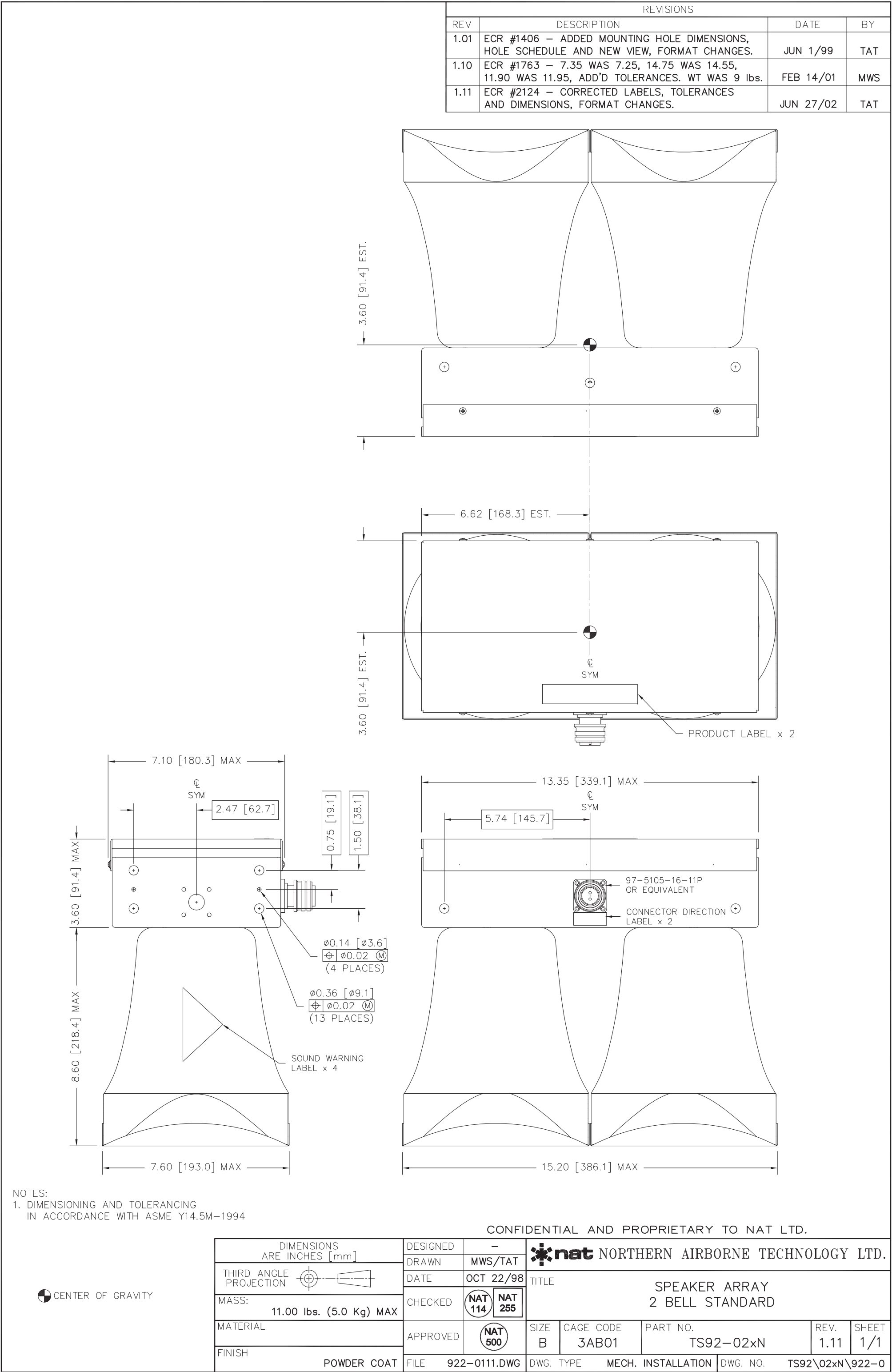


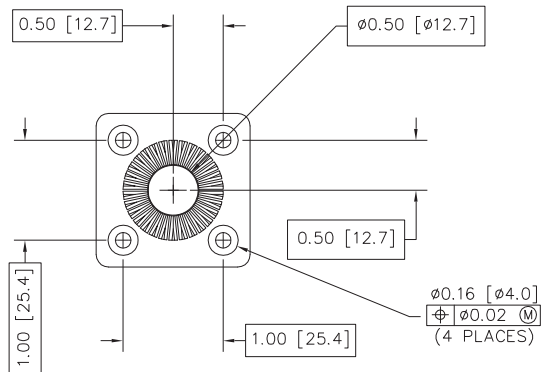
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IN ACCORDANCE WITH ASME Y14.5M-1994

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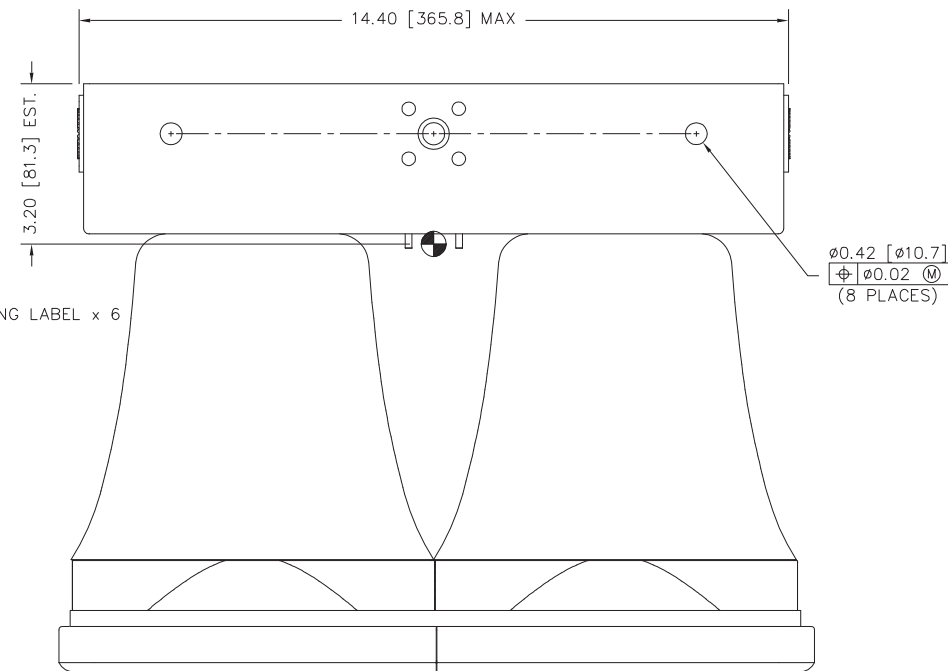
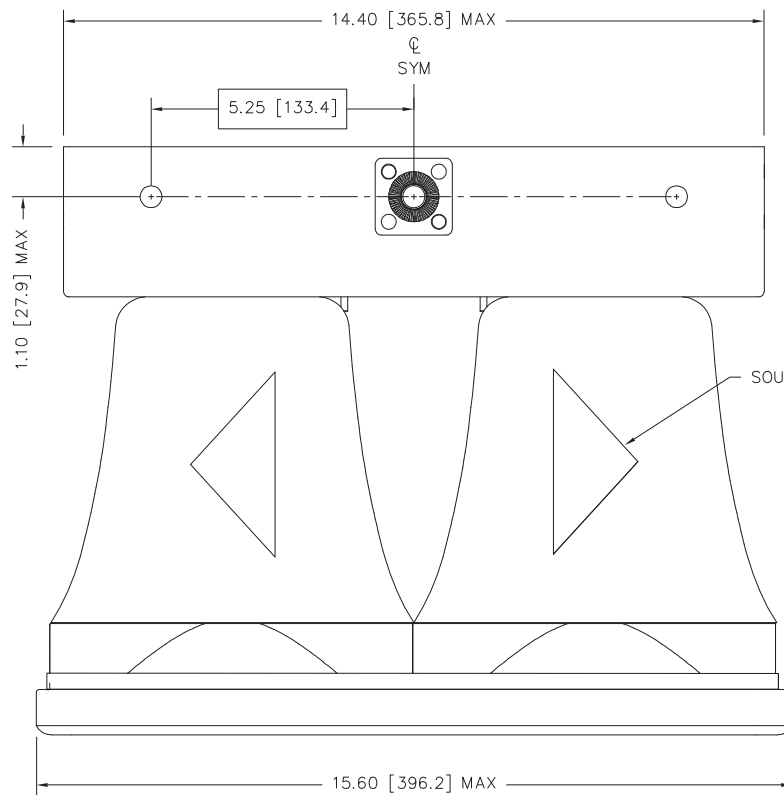
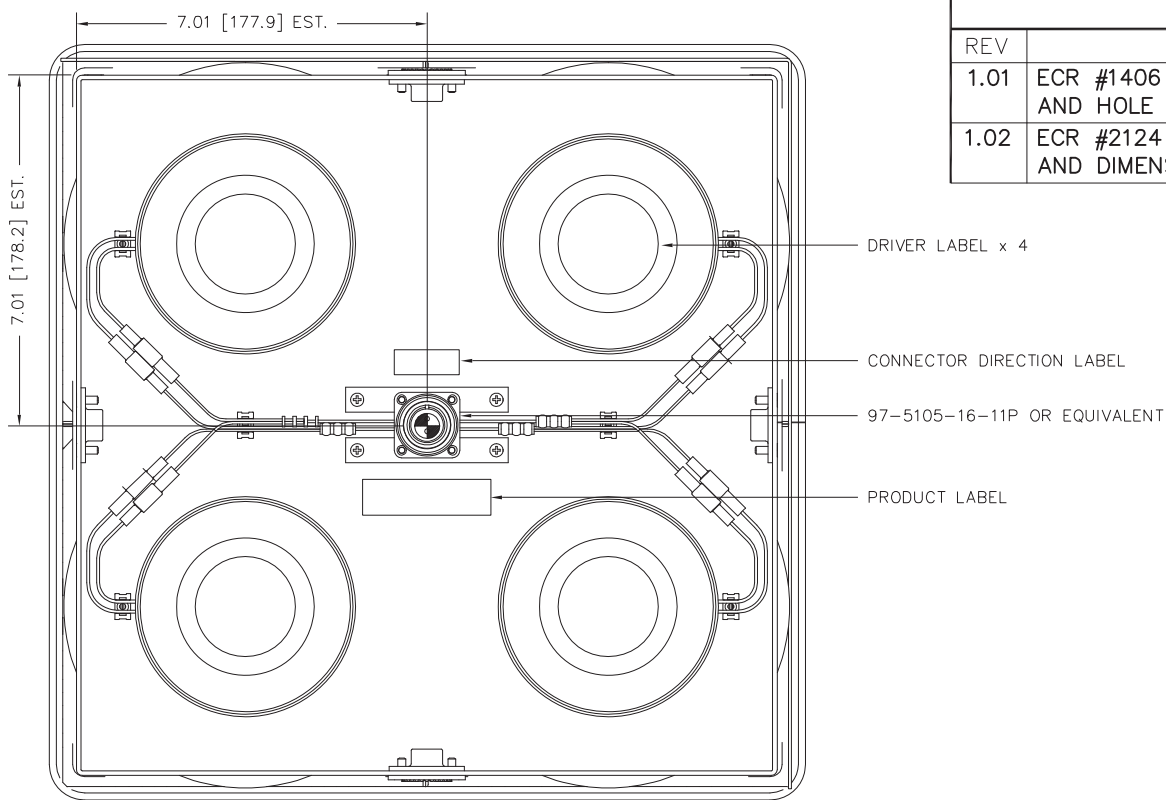
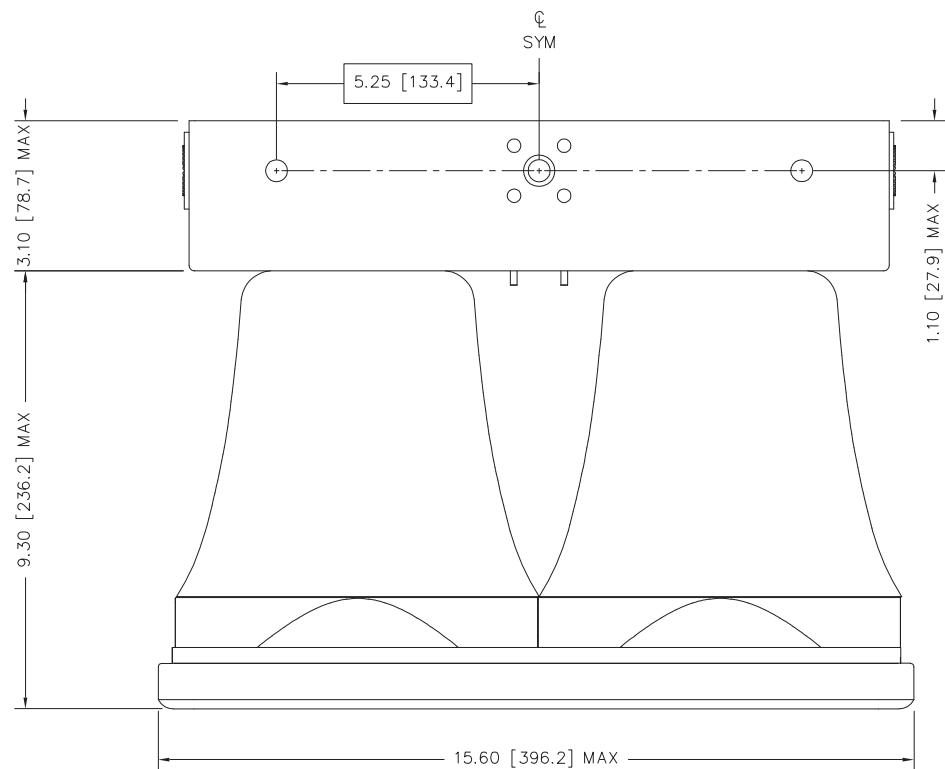
CENTER OF GRAVITY

DIMENSIONS ARE INCHES [mm]		DESIGNED	—		 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.				
THIRD ANGLE PROJECTION 		DRAWN	TGM						
MASS: 11.50 lbs. (5.2 Kg) MAX		DATE	JAN 15/99		TITLE SPEAKER ARRAY 2 BELL STANDARD WITH CLUTCH MOUNT				
MATERIAL		CHECKED	 						
FINISH POWDER COAT		APPROVED			SIZE B	CAGE CODE 3AB01	PART NO. TS92—02xM	REV. 1.11	SHEET 1/1
FILE		922—0111.DWG		DWG. TYPE	MECH. INSTALLATION		DWG. NO.	TS92\02XM\922—0	





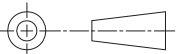
CLUTCH PLATE
SCALE 2:1

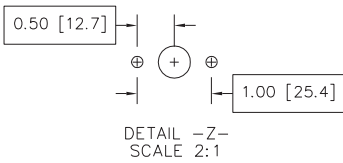


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1. DIMENSIONING AND TOLERANCING
IN ACCORDANCE WITH ASME Y14.5M-1994

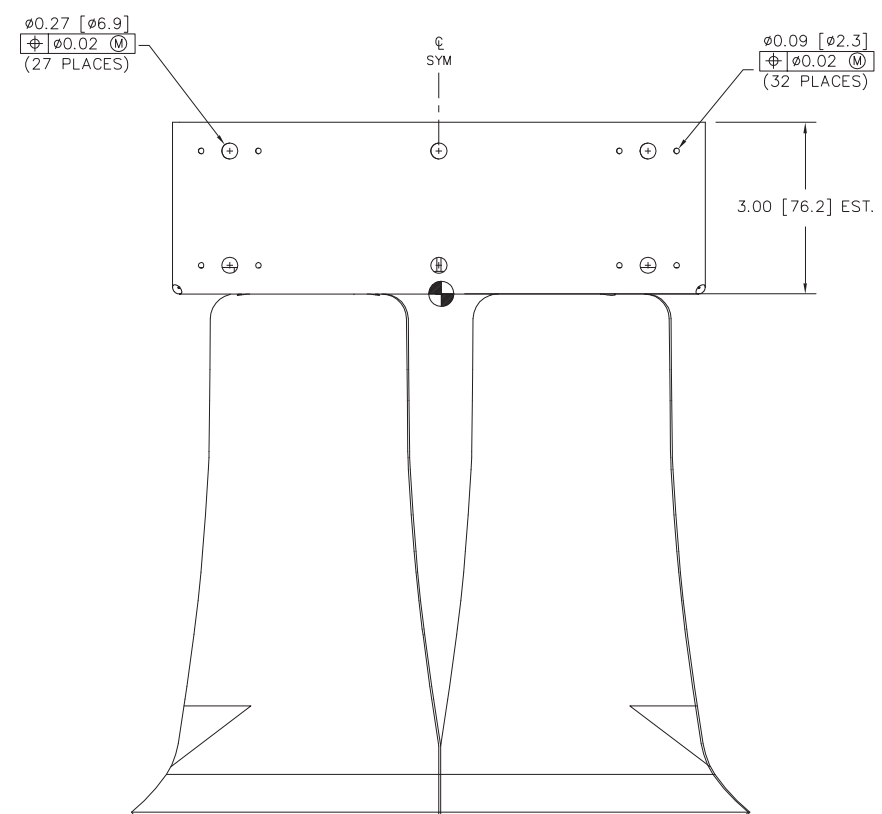
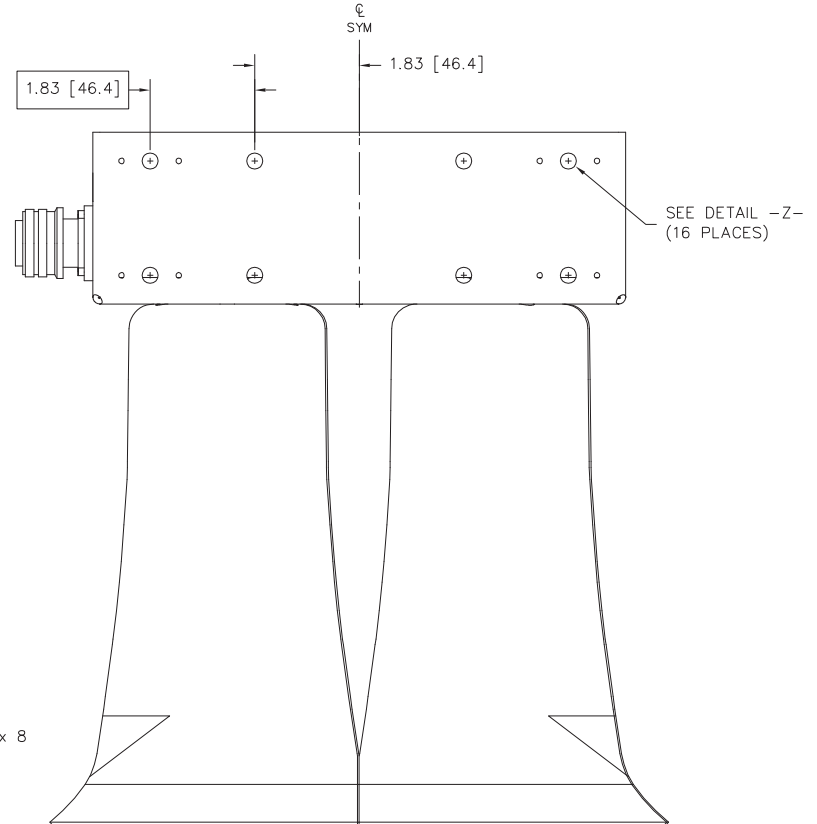
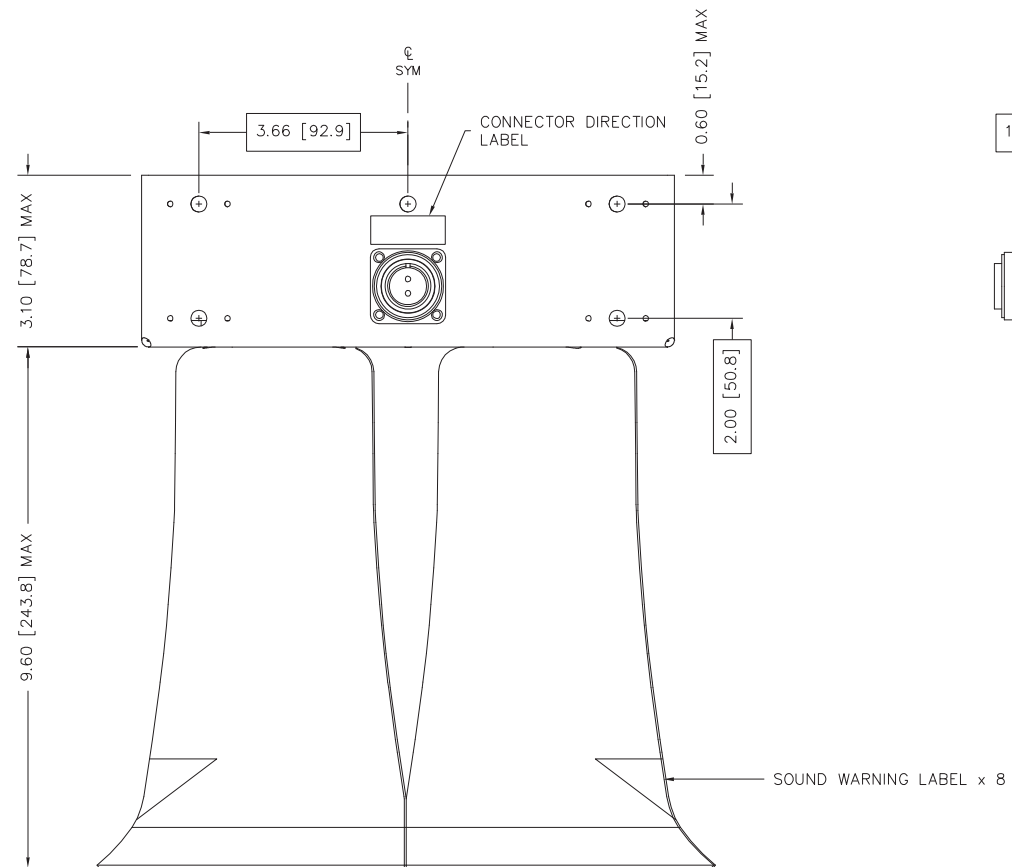
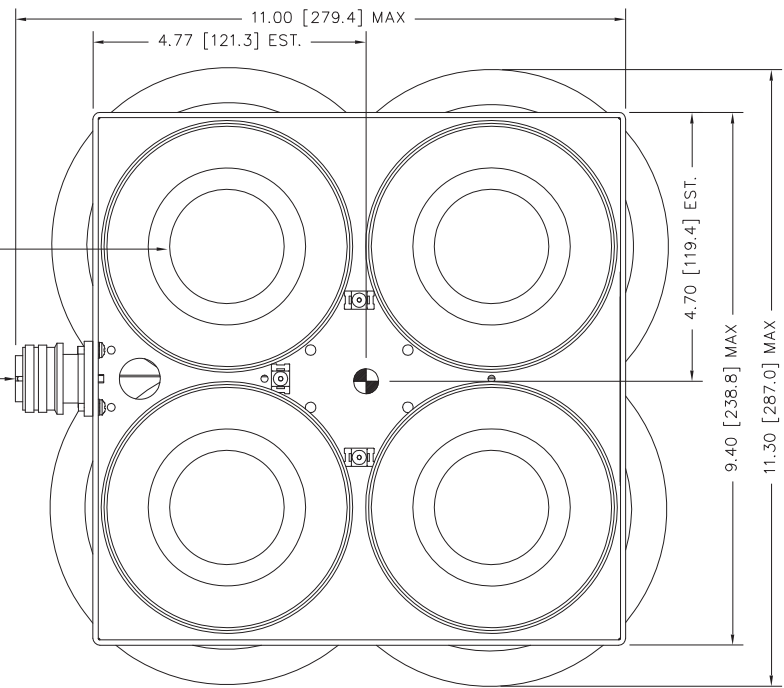
REVISIONS			
REV	DESCRIPTION	DATE	BY
1.01	ECR #1406 - ADDED MOUNTING HOLE DIMENSIONS AND HOLE SCHEDULE, FORMAT CHANGES.	JUN 2/99	TAT
1.02	ECR #2124 - CORRECTED LABELS, TOLERANCES AND DIMENSIONS, FORMAT CHANGES	JUN 27/02	TAT

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

DIMENSIONS ARE INCHES [mm]		DESIGNED -	 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.			
THIRD ANGLE PROJECTION		DRAWN MWS/TAT				
MASS: 20.00 lbs. (9.1 Kg) MAX		DATE OCT 22/98	CHECKED  	TITLE SPEAKER ARRAY 4 BELL STANDARD		
MATERIAL		APPROVED 	SIZE B	CAGE CODE 3AB01	PART NO. TS92-04xN	REV. 1.02
FINISH POWDER COAT		FILE 922-0102.DWG	DWG. TYPE MECH. INSTALLATION	DWG. NO. TS92\04xN\922-0	SHEET 1/1	



DRIVER LABEL x 4
97-5105-16-11P
OR EQUIVALENT

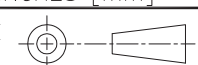


REVISIONS			
REV	DESCRIPTION	DATE	BY
1.10	ECR #1763 - WEIGHT WAS 16 lbs.	SEP 29/00	MWS
1.11	ECR #2124 - CORRECTED LABELS, TOLERANCES AND DIMENSIONS, FORMAT CHANGES.	JUN 27/02	TAT

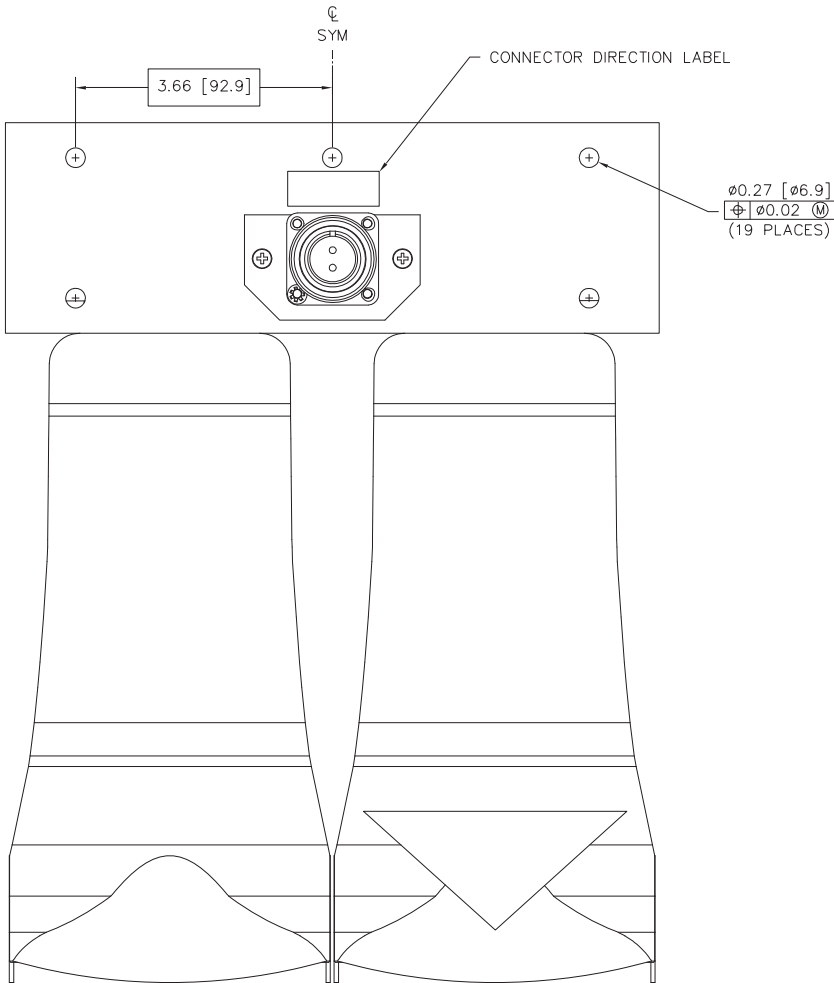
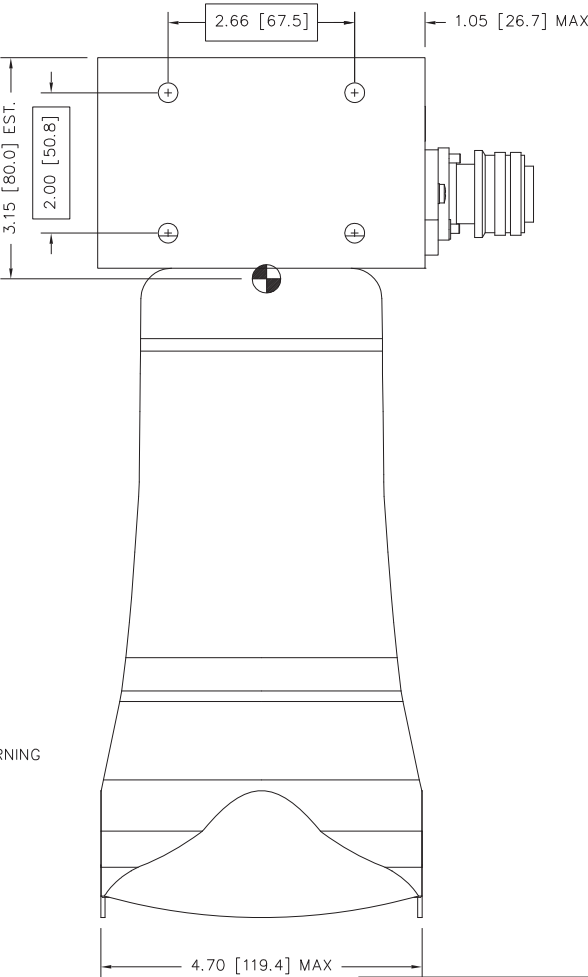
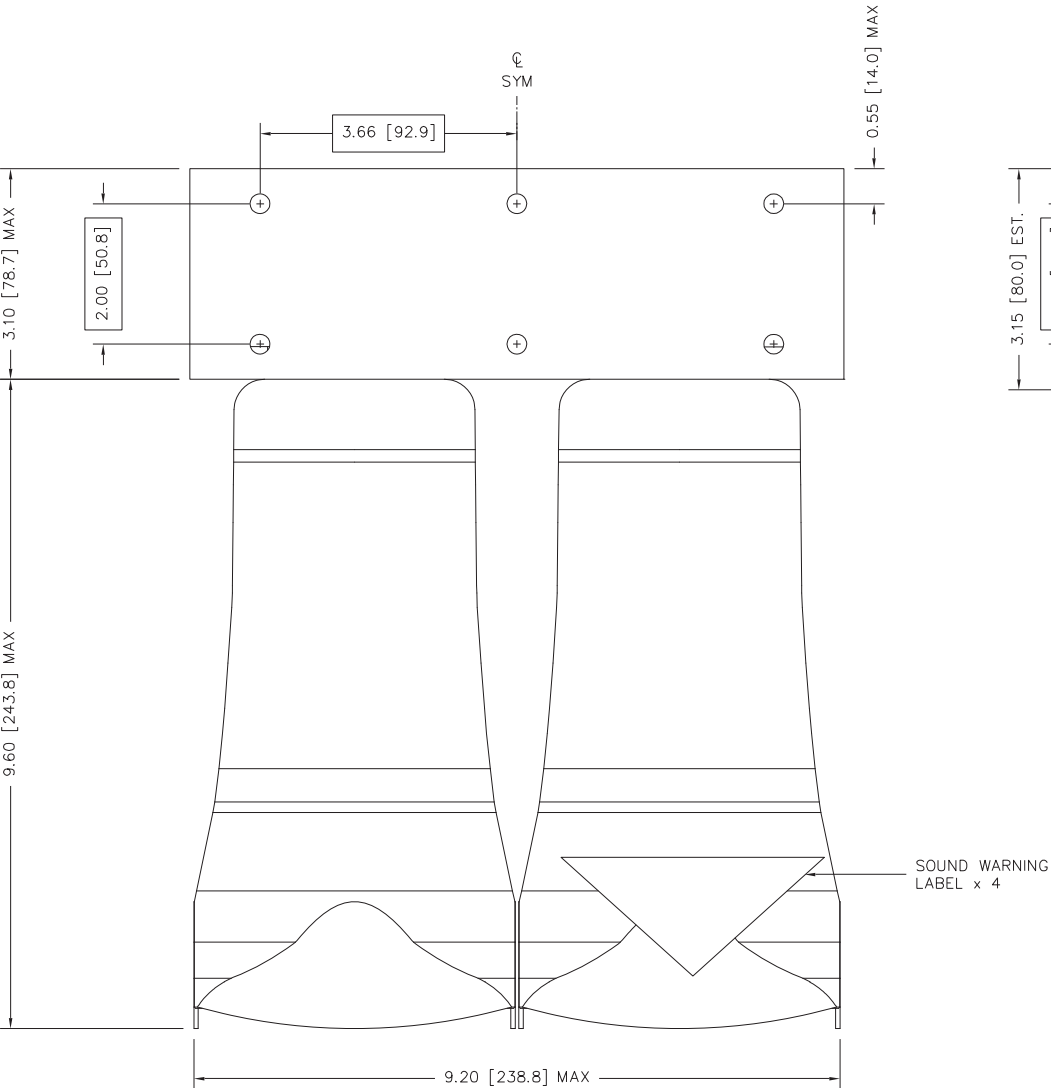
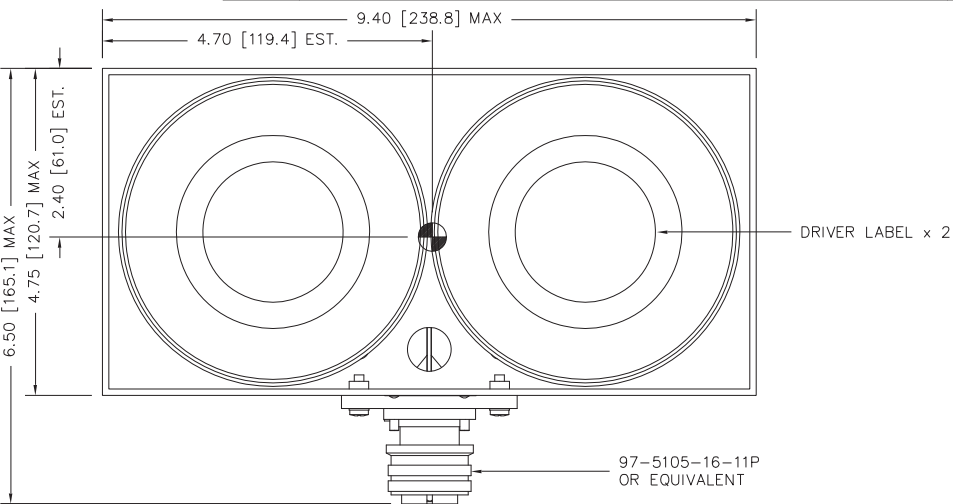
CENTER OF GRAVITY

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

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

DIMENSIONS ARE INCHES [mm]		DESIGNED	-		 nat NORTHERN AIRBORNE TECHNOLOGY LTD.						
THIRD ANGLE PROJECTION 		DRAWN	TAT/TGM								
MASS: 16.00 lbs. (7.3 Kg) MAX		DATE	JAN 4/99		TITLE SPEAKER ARRAY 4 BELL CLOVERLEAF						
		CHECKED	 								
MATERIAL		APPROVED			SIZE	CAGE CODE	PART NO.	REV.	SHEET		
					B	3AB01	TS93-04xN	1.11	1/1		
FINISH POWDER COAT		FILE	922-0111.DWG		DWG. TYPE	MECH. INSTALLATION	DWG. NO.	TS93\04xN\922-0			

REVISIONS			
REV	DESCRIPTION	DATE	BY
1.01	ECR #2124 – CORRECTED LABELS, DIMENSIONS AND TOLERANCES, FORMAT CHANGES.	JUN 28/02	TAT



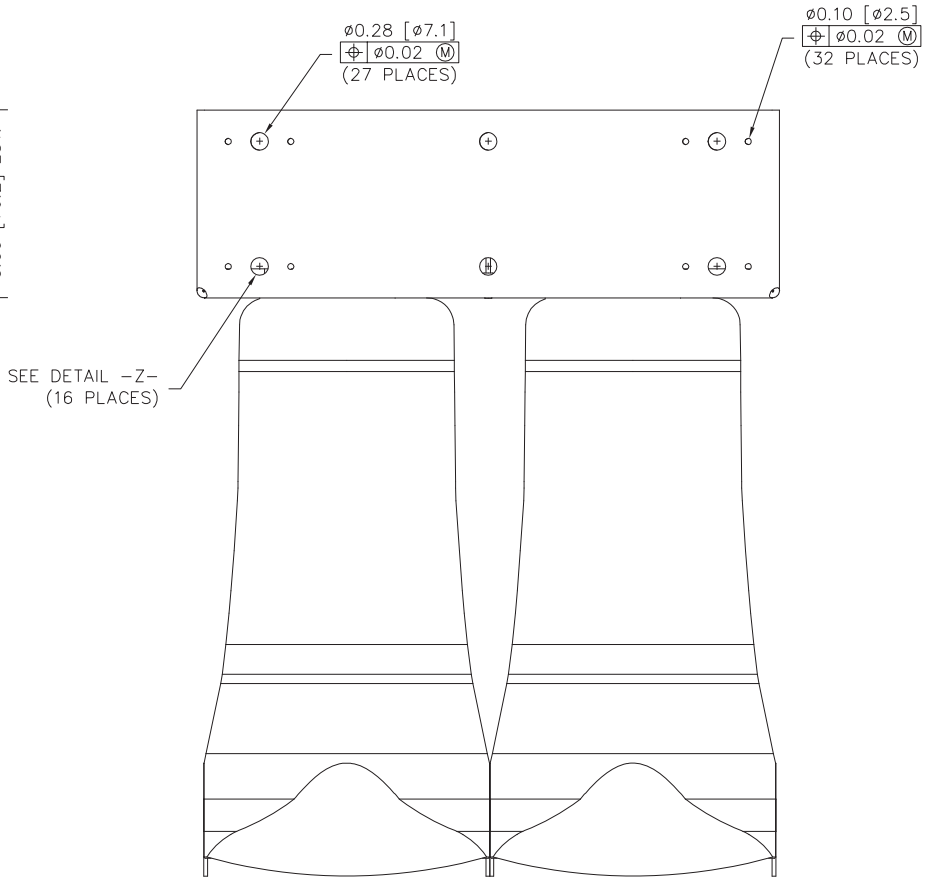
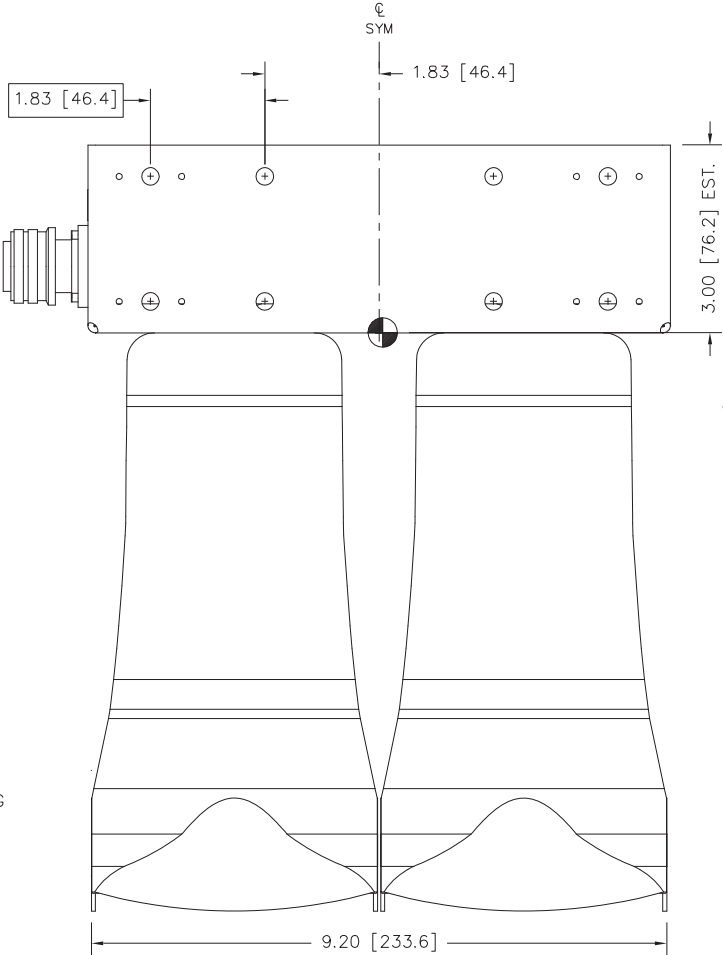
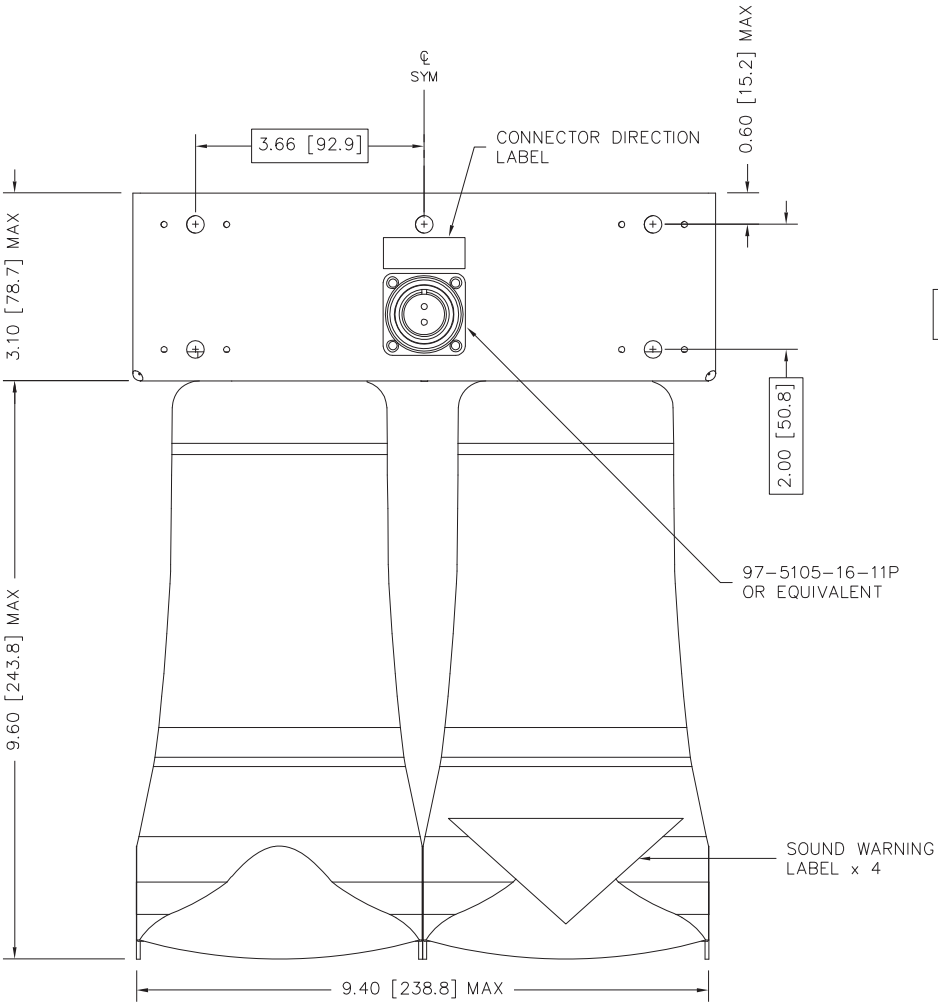
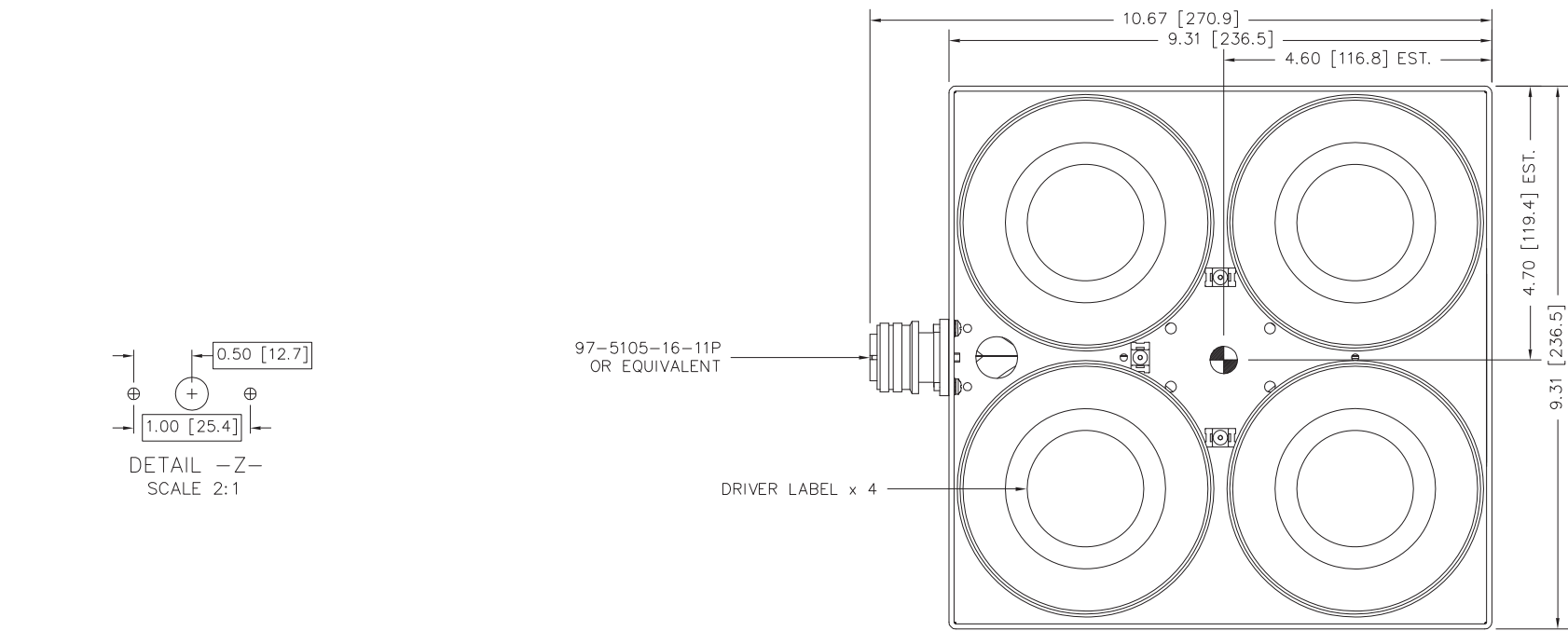
CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

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

CENTER OF GRAVITY

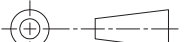
DIMENSIONS ARE INCHES [mm]		DESIGNED	-	 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.			
THIRD ANGLE PROJECTION		DRAWN	TAT				
MASS: 8.50 lbs. (3.9 Kg) MAX		DATE	JUN 9/99	TITLE SPEAKER ARRAY 2 BELL MINI			
MATERIAL		CHECKED	 NAT 114  NAT 255				
FINISH POWDER COAT		APPROVED	 NAT 500	SIZE B	CAGE CODE 3AB01	PART NO. TS94-02xN	REV. 1.01
FILE 922-0101.DWG		DWG. TYPE MECH. INSTALLATION		DWG. NO. TS94\02xN\922-0		SHEET 1/1	

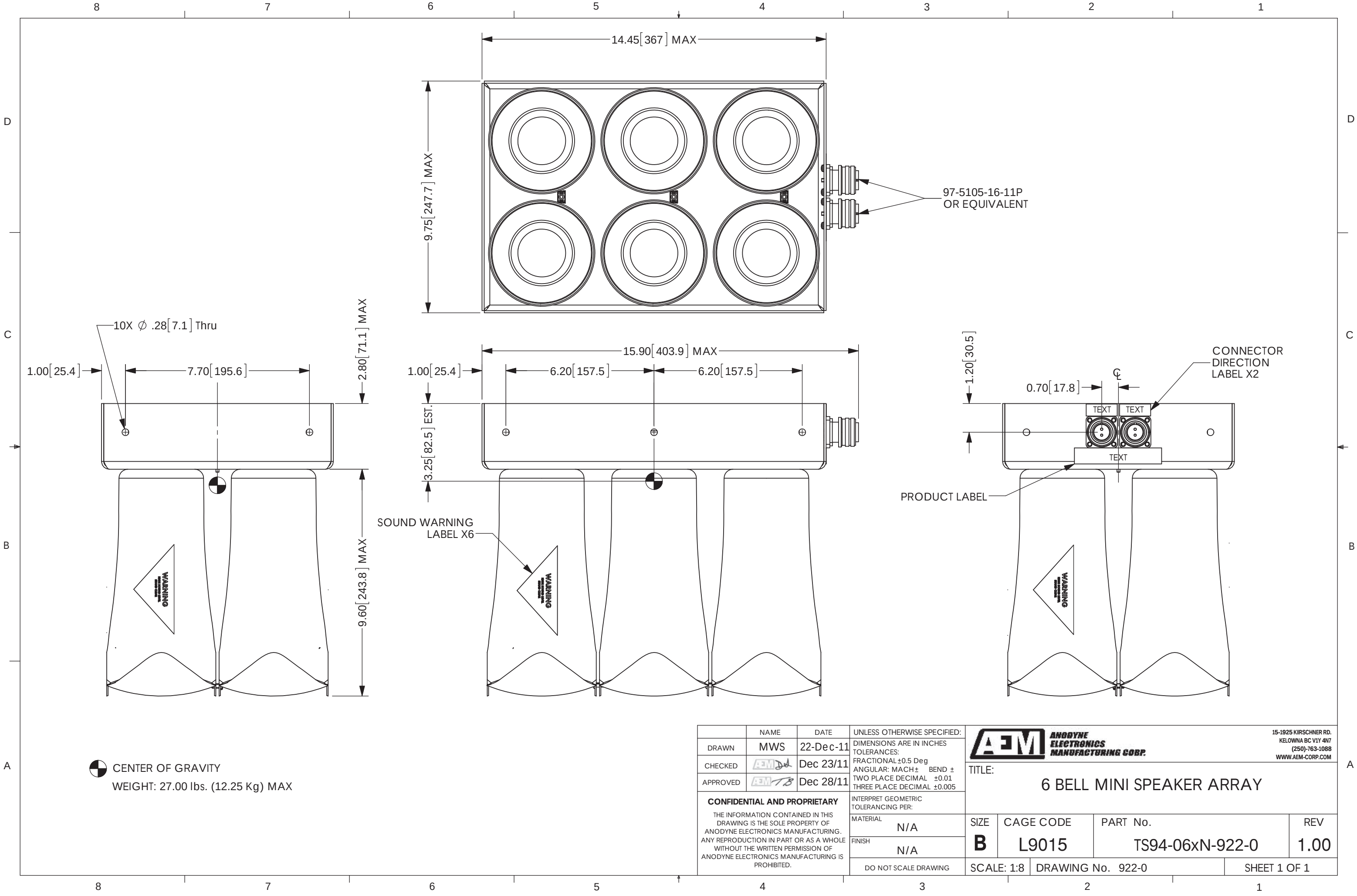
REVISIONS			
REV	DESCRIPTION	DATE	BY
1.10	ECR #1763 – WEIGHT WAS 16 lbs.	SEP 29/00	MWS
1.11	ECR #2124 – CORRECTED LABELS, DIMENSIONS AND TOLERANCES, FORMAT CHANGES.	JUN 27/02	TAT

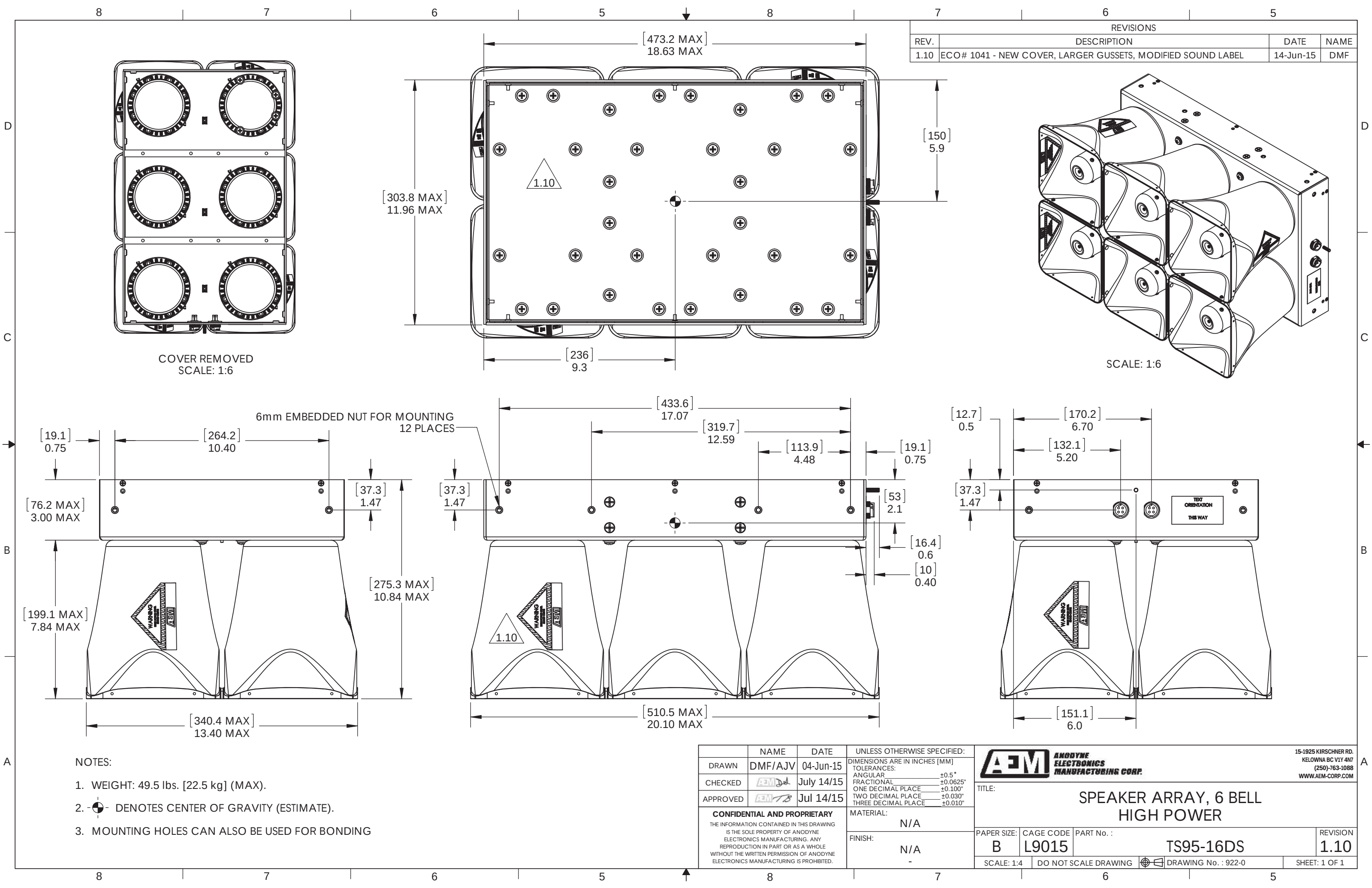


CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

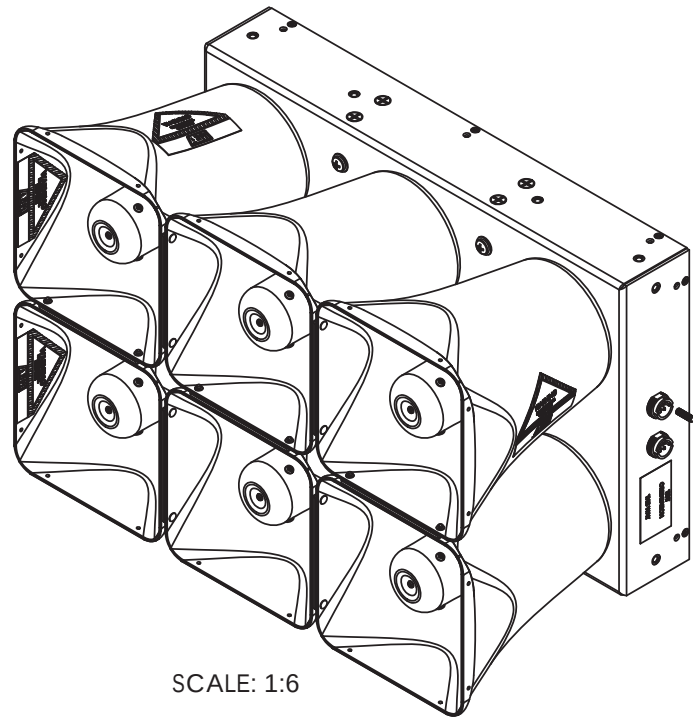
 CENTER OF GRAVITY
 NOTES:
 1. DIMENSIONING AND TOLERANCING
 IN ACCORDANCE WITH ASME Y14.5M-1994

DIMENSIONS ARE INCHES [mm]		DESIGNED —		 NAT NORTHERN AIRBORNE TECHNOLOGY LTD.						
		DRAWN TAT								
THIRD ANGLE PROJECTION		DATE JUN 9/99		TITLE SPEAKER ARRAY 4 BELL MINI						
MASS: 16.00 lbs. (7.3 Kg) MAX		CHECKED							NAT 114 NAT 255	
MATERIAL		APPROVED		NAT 500		SIZE B	CAGE CODE 3AB01	PART NO. TS94—04xN	REV. 1.11	SHEET 1/1
FINISH POWDER COAT		FILE 922—0111.DWG		DWG. TYPE MECH. INSTALLATION		DWG. NO. TS94\04xN\922—0				





REVISIONS			
REV.	DESCRIPTION	DATE	NAME
1.10	ECO# 1041 - NEW COVER, LARGER GUSSETS, MODIFIED SOUND LABEL	14-Jun-15	DMF



SCALE: 1:6

- NOTES:
- WEIGHT: 49.5 lbs. [22.5 kg] (MAX).
 -  DENOTES CENTER OF GRAVITY (ESTIMATE).
 - MOUNTING HOLES CAN ALSO BE USED FOR BONDING

	NAME	DATE	UNLESS OTHERWISE SPECIFIED:		 ANODYNE ELECTRONICS MANUFACTURING CORP.		15-1925 KIRSCHNER RD. KELOWNA BC V1Y 4N7 (250)-763-1088 WWW.AEM-CORP.COM					
DRAWN	DMF/AJV	04-Jun-15	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"									
CHECKED		July 14/15			TITLE: SPEAKER ARRAY, 6 BELL HIGH POWER							
APPROVED		Jul 14/15										
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: N/A		PAPER SIZE:		CAGE CODE	PART No. :	REVISION			
					B		L9015		TS95-16DS		1.10	
			FINISH: N/A				SCALE: 1:4		DO NOT SCALE DRAWING		 DRAWING No. : 922-0	SHEET: 1 OF 1
					-							



TS9x Series Lightweight Speaker Array SM51 Installation and Operation Manual

Section 3.0 Operation

3.1 Operation Specifics

The TS9x Lightweight Speaker Array has no normal user operational aspects.

End of Section 3.0
