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MANUFACTURING CORP.**

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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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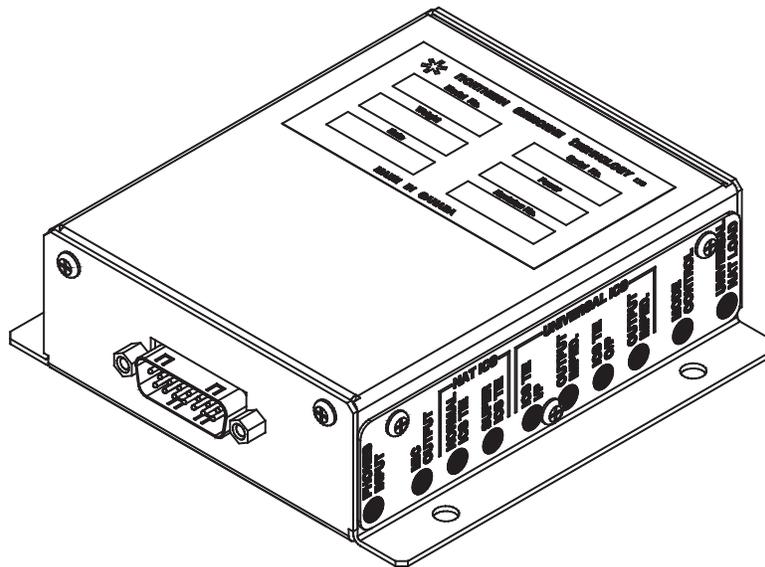
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**SM58**

**AA36-100  
Digital ICS Tie Line Adapter**



## **INSTALLATION AND OPERATION MANUAL**

**REV 5.00 April 15, 2012**

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**AA36-100 Digital ICS Tie Line Adapter  
SM58 Installation and Operation Manual**

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AA36-100 Digital ICS Tie Line Adapter  
SM58 Installation and Operation Manual

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## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### Section 1.0 Description

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#### 1.1 Introduction

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This manual contains information on the AA36-100 Digital ICS Tie Line Adapter. Information in this section consists of purpose of equipment, features and specifications, and unit nomenclature.

#### 1.2 Purpose of Equipment

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The AA36-100 will allow any AEM audio intercom product with an ICS tie line or SuperNAT tie line to be interfaced to other proprietary bi-directional and uni-directional ICS tie lines.

Typically, the AA36-100 is used to add AEM intercom/audio systems to an existing system that is not manufactured by AEM.

The AA36-100 can be set to work in a number of installation configurations. The typical application would have an NAT ICS tie line (or SuperNAT tie line) being interfaced to another 'universal' bi-directional tie line (e.g. dB Systems, Gemelli, Andrea, etc). Alternatively, the NAT tie line can be interfaced with the 'universal' uni-directional tie line (e.g. mic and phones).

#### 1.3 Features

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The AA36-100 is designed to be easy to install and set up.

The AA36-100 accepts intercom bi-directional audio from NAT standard ICS tie line (340 mVrms into 2 kOhms), and can accommodate up to three NAT loads in parallel. In NAT Super tie mode (1.2 Vrms into 2 kOhms), up to 3 NAT Super tie loads are allowed.

At installation or service, the following functions can be adjusted to suit the user:

- the universal microphone output levels (but not impedances)
- the universal bi-directional ICS tie line output levels and impedances
- the attenuation of the analog audio signal arriving on the universal ICS tie line or microphone input
- the attenuation of the analog audio signal arriving on the NAT ICS tie line
- the output level of the NAT bi-directional ICS tie line
- the universal bi-directional tie line can be configured to one of 4 possible proprietary tie lines

On power up, a burst of white noise is generated on each bi-directional ICS tie line, along with a short tie line identification message.



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### 1.4 Specifications

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#### 1.4.1 Electrical Specifications

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##### Power Supply

Multiple switchers and linear regulators with reverse and over voltage protection. Short circuit protected by internal fuse.

Input Power

+27.5 Vdc at 0.3 A max.

##### Input Signals

Quantity: 1 phones channel.  
Rated Level: 0.5 V to 8.5 Vrms (10 discrete levels).  
Impedance: 600 ohms  $\pm 10\%$ .  
Circuitry Type: Balanced input.

##### Output Signals

Quantity: 1 mic output.  
Rated Level: 0.25 V to 2.8 Vrms into 150  $\Omega$  (10 discrete levels).  
Circuitry Type: Balanced output.

##### Bi-directional Signals (2)

###### Rated Level:

NAT ICS Tie Line: 340 mVrms  $\pm 10\%$  into 2000  $\Omega$   $\pm 10\%$  (1 load).  
227 mVrms  $\pm 10\%$  into 1000  $\Omega$   $\pm 10\%$  (2 loads).  
170 mVrms  $\pm 10\%$  into 667  $\Omega$   $\pm 10\%$  (3 loads).

SuperNAT ICS Tie Line: 1.2 Vrms  $\pm 10\%$  into 2000  $\Omega$   $\pm 10\%$  (1 load).  
1.2 Vrms  $\pm 10\%$  into 1000  $\Omega$   $\pm 10\%$  (2 loads).  
1.2 Vrms  $\pm 10\%$  into 667  $\Omega$   $\pm 10\%$  (3 loads).

###### Universal Bi-directional ICS Tie Line:

dB Systems 355-003 0.8 Vrms  $\pm 10\%$  into 300  $\Omega$   $\pm 10\%$ .  
Gemelli AG-06-1U5 1.4 Vrms  $\pm 10\%$  into 6800  $\Omega$   $\pm 10\%$ .  
Andrea A301A-6W 2.8 Vrms  $\pm 10\%$  into 600  $\Omega$   $\pm 10\%$ .  
NAT AA95-xxx 340 mVrms  $\pm 10\%$  into 2 k $\Omega$   $\pm 10\%$ .

Circuitry Type:

Balanced circuitry.

NAT ICS Tie Line input impedance:

2000  $\Omega$   $\pm 10\%$ .

Universal ICS Tie Line input impedance:

dB Systems 355-003 300  $\Omega$   $\pm 10\%$ .  
Gemelli AG-06-1U5 6800  $\Omega$   $\pm 10\%$ .  
Andrea A301-6W 225  $\Omega$   $\pm 10\%$ .  
NAT AA95-xxx 2000  $\Omega$   $\pm 10\%$ .



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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Audio Frequency Response:      ≤3 dB from 350 to 6000 Hz.  
 Distortion:                        ≤1% THD at rated output.  
 Audio Noise Level without Signal: ≤ -60 dB from rated output.

### 1.4.2      Physical Specifications

---

Height	1.40" (35.6 mm) max.
Depth	4.59" (116.6mm) max (not including connector)
Width	4.54" (115.3 mm) max.
Weight	0.59 lbs (0.27 kg)
Mounting	Bulk head x4 mounting holes 0.21" (5.4mm) diam
Material/Finish	Brushed aluminum with conversion coating finish
Connectors	One 15 pin male filtered D-min connector with jackposts

### 1.4.3      Environmental Specifications

---

Temperature:	
Operating	-20° C. to +55° C
Survival	-55° C. to + 85° C
Altitude	50,000 feet
Humidity	95%
Shock	Operational      6 g
	Crash Safety      15g

**DO-160D Env. Cat. [(A1)(D1)]-XXB[(SBM)(UF)]XXXXXXXXXX[UUX]MXXXX**

### 1.5      Unit Nomenclature

---

Model	Description / Distinction
AA36-100	2 Bi-directional ICS tie lines 1 Microphone output 1 Phone input

End of Section 1.0

---



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### 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:

- AA36-100 Digital ICS Tie Line Adapter
- Product Information Card
- Release certification

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

##### 2.2.1 Warranty

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

#### 2.3 Installation Procedures

---

##### 2.3.1 Warnings

---

Do not bundle any lines from this unit with transmitter coax lines. Do not bundle any audio or DC power lines from this unit with 400 Hz synchro wiring or AC power lines. Do not position this unit or wiring from this unit next to any device with a strong alternating magnetic field such as an inverter, or significant audio interference will result.

##### 2.3.2 Cautions

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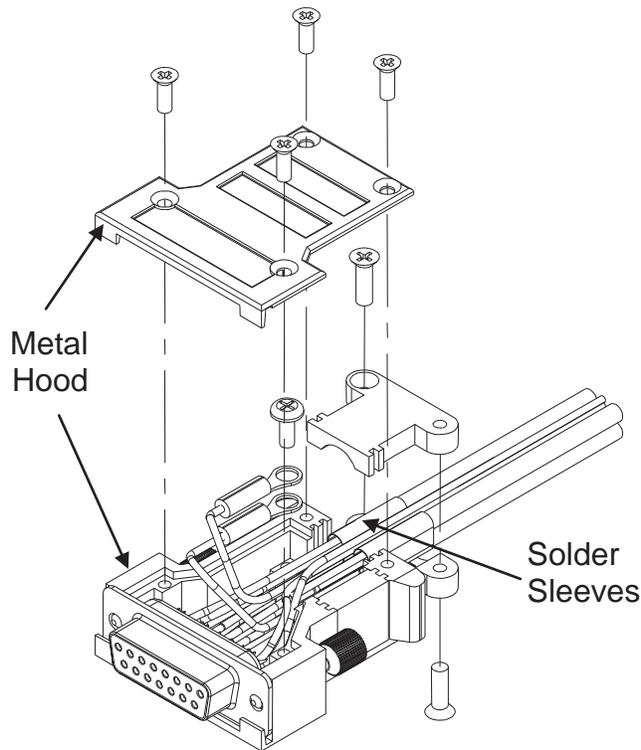
- ⇒ In all installations, use shielded cable exactly as shown and ground as indicated. Significant ground loop and noise problems may result from not following these guidelines. **Ensure chassis is grounded to provide proper shield terminations.**
- ⇒ Use caution when routing microphone wiring, as it carries low-level signals prone to coupling from other sources.
- ⇒ Do not take a ground from the instrument panel or similar location that shares a ground return with a turn and bank, horizon or other motor driven instrument. This may cause the unit to pick up the sound of the motor as ground loop interference.



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

### 2.3.3 Cabling and Wiring

All unshielded wire should be Tefzel MIL-M-22759 or equivalent. For shielded wire applications, use Tefzel MIL-C-27500 shielded wire with solder sleeves (for shield terminations) to make the most compact and easily terminated interconnect. Follow the wiring diagrams in Section 2.6 as required.



Utilizing solder sleeves, create up to 3 shield pigtails in the wiring harness, as shown in the **Interconnect Diagram** (AA36\100\403-0, Rev 1.00 or higher). Each pigtail should be no more than 3.0" long.

**Note:** The hood is a 'two-piece' unit, and is assembled after the wiring is complete.

All wiring should be at least 24 AWG, except power and ground lines, which should be at least 20 AWG. Ensure that all ground connections are clean and well secured.

To prevent system failure or inadequate equipment protection, supply power from a dedicated 1.0 A circuit breaker.

### 2.3.4 Installation Options

The AA36-100 can be set to support the following installation configurations:

- NAT or SuperNAT bi-directional ICS tie to 'universal' bi-directional (e.g. dB systems, Gemelli, Andrea, etc.)
- NAT to SuperNAT bi-directional tie lines
- NAT or SuperNAT bi-directional to 'universal' unidirectional (e.g. mic and phones)

The PHONES source for the 'universal' unidirectional tie line may contain intercom and/or radio audio. Verify that this information will be acceptable for connection to the new audio/intercom system (i.e. AEM product) before proceeding with the planned installation.

The AA36-100 is designed for use with 4 different proprietary bi-directional tie lines. Each tie line has unique voltage and impedance levels. Driving these proprietary tie lines with incorrect power levels may damage the AA36-100 or the proprietary audio intercom system.



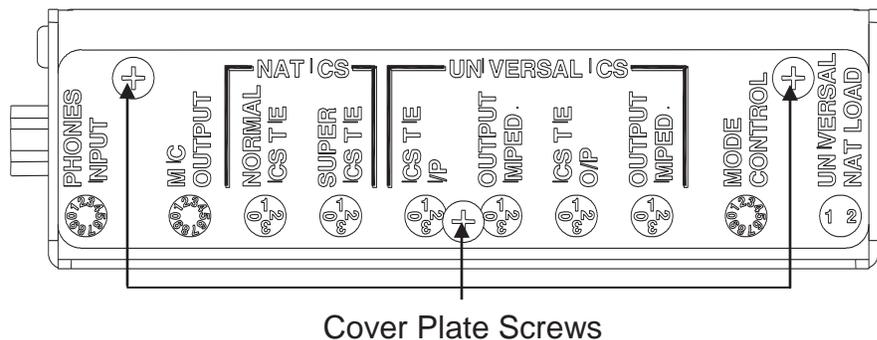
## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

### CAUTION

Be sure the correct tie line level and impedance is selected before applying power to the unit.

### 2.3.5 Adjustments

The unit ships from the factory with all internal adjustments set to the normal test levels. Once installed in the aircraft, it may be desirable to change these settings to suit the installed proprietary tie line.



The internal adjustments are located along the right side of the unit and can be identified from **Options** drawing AA36\100\404-0. To access the adjustment holes it is necessary to remove the Cover Plate by unfastening the three pan-head screws shown above.

#### 2.3.5.1 PHONES INPUT switch

This ten-position rotary switch is used to set the input level for the unidirectional tie line to suit the expected output from the audio panel. The rated inputs are 0.5, 1, 2, 2.5, 4, 4.5, 5.5, 6, 8 and 8.5 Vrms.

#### 2.3.5.2 MIC OUTPUT switch

This ten-position rotary switch is used for selecting the output level for the unidirectional tie line. The rated outputs are 0.25, 0.5, 1, 1.25, 1.5, 1.75, 2.25, 2.5, 2.65 and 2.8 Vrms. If the unidirectional tie line is used, this switch must be set to match the rated input of the audio panel.

#### 2.3.5.3 NORMAL ICS TIE switch

This four-position rotary switch is used to select the input level for the bi-directional NAT tie line. The selectable options are SuperNAT Tie Line, 1 NAT Load, 2 NAT Loads and 3 NAT Loads. For example, if the SuperNAT tie line is to be used, this switch must be set to the SuperNAT Tie Line position. If three AEM (NAT) intercoms are attached, the switch must be set to 3 NAT ICS.

#### 2.3.5.4 SUPER ICS TIE switch

This four-position rotary switch is used for selecting the output level for the bi-directional NAT tie line. The rated outputs are NAT Tie Line, 1 SuperNAT, 2 SuperNAT and 3 SuperNAT. For example, if the NAT tie line is to be used, this switch must be set to the NAT Tie Line position. If three SuperNAT intercoms are attached, the switch must be set to 3 SuperNAT.



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### **2.3.5.5 ICS TIE I/P switch**

This four-position rotary switch is used for selecting the input level for the universal bi-directional ICS tie line. The rated inputs are NAT Tie Line, Andrea, Gemelli and dB Systems. For example, if the NAT tie line is to be used, this switch must be set to position 0. If dB System's intercoms are attached, the switch must be set to position 3.

### **2.3.5.6 OUTPUT IMPED. HI switch**

This four-position rotary switch is used for selecting the high-side output impedance for the universal bi-directional ICS tie line. The rated outputs are NAT Tie Line, Andrea, Gemelli and dB Systems. For example, if the NAT tie line is to be used, this switch must be set to position 0. If dB System's intercoms are attached, the switch must be set to position 3.

**Note:** Both output impedance switches must be set to the same position.

### **2.3.5.7 OUTPUT IMPED. LO switch**

This four-position rotary switch is used for selecting the low-side output impedance for the universal bi-directional ICS tie line. The rated outputs are NAT Tie Line, Andrea, Gemelli and dB Systems. For example, if the NAT tie line is to be used, this switch must be set to position 0. If dB System's intercoms are attached, the switch must be set to position 3.

**Note:** Both output impedance switches must be set to the same position.

### **2.3.5.8 ICS TIE O/P switch**

This four-position rotary switch is used for selecting the output level for the universal bi-directional ICS tie line. The rated outputs are NAT Tie Line, Andrea, Gemelli and dB Systems. For example, if the NAT tie line is to be used, this switch must be set to position 0. If dB System's intercoms are attached, the switch must be set to position 3.

### **2.3.5.9 MODE CONTROL**

This ten-position rotary switch is used to select between the Universal bi-directional ICS tie line and the Universal unidirectional ICS tie line. Only one is active at a time.

### **2.3.5.10 UNIVERSAL AEM LOAD Switch**

This two-position rotary switch switches in the correct impedance for the selected ICS tie line on the Universal ICS tie line.

## **2.3.6 Mechanical Installation**

---

The AA36-100 Digital ICS Tie Line Adapter can be installed in any attitude, using either the AA36-100-IKC or AA36-100-IKS Installation kits (refer to Section 2.5 for details). For proper installation, refer to **Mechanical Installation** drawing (AA36\100\922-0).



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### 2.3.7 Post-Installation Checks

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#### 2.3.7.1 Voltage/Resistance checks

Do not attach the AA36-100 until the following conditions are met.

Check the following:

- a) Check P1, pin <1> for +24 to 30 Vdc relative to ground.
- b) Check P1, pins <9> for continuity to ground (less than 0.5  $\Omega$ ).

#### 2.3.7.2 Power On checks

Install the AA36-100 and power up the ship's systems. Verify normal operation of all functions.

- a) Begin with the AEM audio system connected to the AA36-100. When the Digital ICS Tie Line Adapter is powered on, a noise burst followed by a 'NAT Intercom Tie Line' message will be heard in the AEM intercom system. This audio will adapt the internal filters of the AA36-100 for the Universal tie line characteristics. Power-off the AA36-100
- b) Next, confirm the operation of the audio system connected to the universal ICS tie line of the AA36-100. When the Digital ICS Tie Line Adapter is powered on, a noise burst followed by a 'Universal Intercom Tie Line' message will be heard in the second intercom system.
- c) To verify proper operation, all functions and levels should be checked in-flight.

**Upon satisfactory completion of all performance checks, make the required log entries and complete the necessary Regulatory Agency paperwork before releasing the aircraft for service.**

## 2.4 Continued Airworthiness

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Maintenance of the AA36-100 Digital ICS Tie Line Adapter is 'on condition' only. Periodic maintenance of this product is not required.

## 2.5 Accessories Required But Not Supplied

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An installation kit p/n AA36-100-IKC is required to complete the installation. The kit consists of the following:

AA36-100-IKC (AEM Part # D15SM-IKC)

Quantity	Description	AEM Part #
1	D-min 15 Socket Housing	20-21-015
15	MS Crimp Socket	20-26-901
1	Strain Relief (SET)	20-27-008
1	Metal Hood	20-28-015



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### 2.6 Installation Drawings

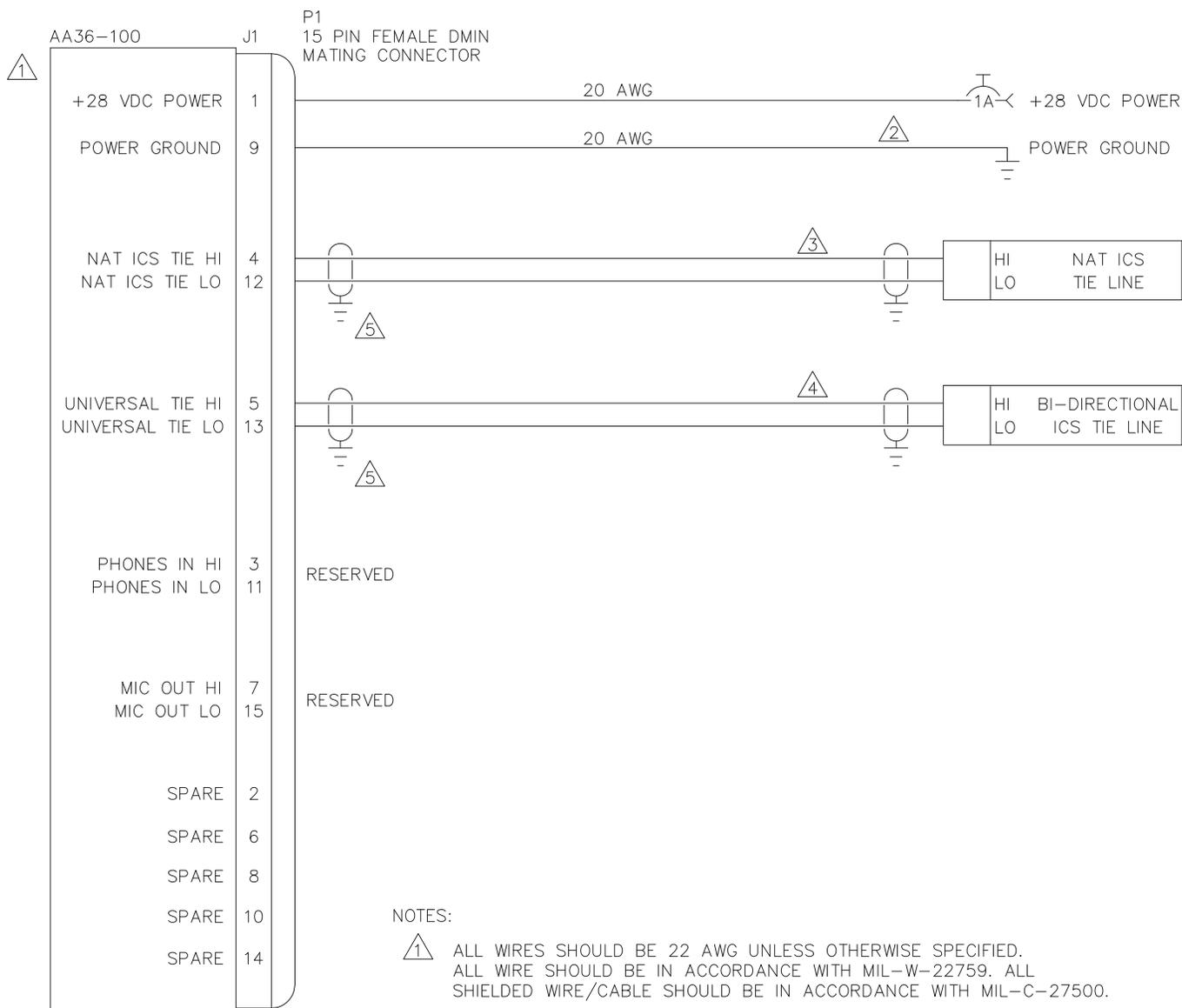
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<b>DRAWING</b>	<b>REV.</b>	<b>DESCRIPTION</b>	<b>TYPE</b>	<b>Serial #'s</b>
AA36\100\403-0	1.00	Digital ICS Tie Line Adapter Bi-directional ICS Tie to Bi-directional ICS Tie	Interconnect	1001 and up
AA36\100\403-1	1.00	Digital ICS Tie Line Adapter Bi-directional ICS Tie to Mic and Phones	Interconnect	1001 and up
AA36\100\404-0	1.00	Digital ICS Tie Line Adapter	Options	1001 and up
AA36\100\405-0	1.00	Digital ICS Tie Line Adapter	Connector Map	1001 and up
AA36\100\922-0	1.00	Digital ICS Tie Line Adapter	Mech. Installation	1001 and up

Section 2.0 ends following the above documents

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NOTES:

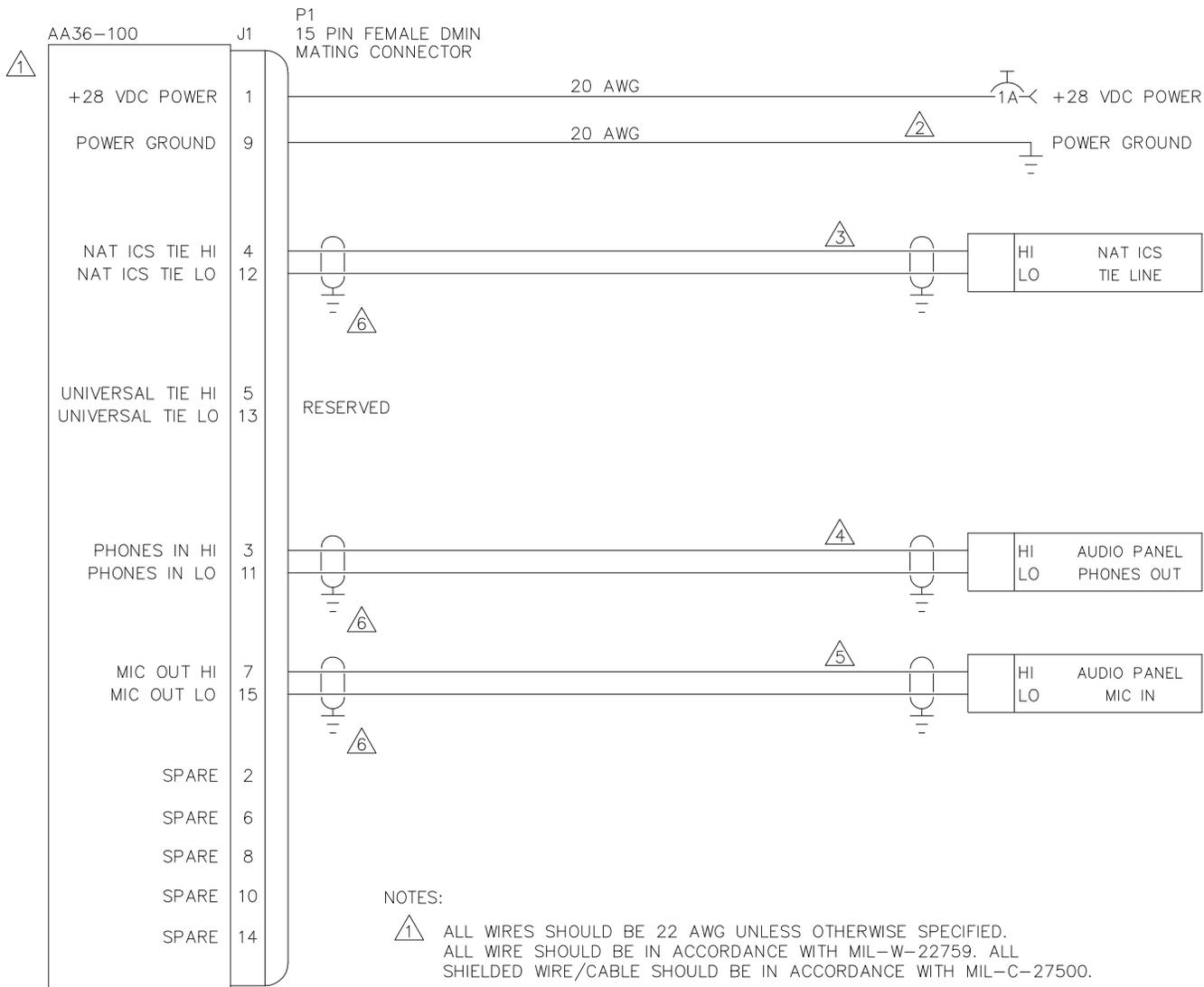
- ① ALL WIRES SHOULD BE 22 AWG UNLESS OTHERWISE SPECIFIED. ALL WIRE SHOULD BE IN ACCORDANCE WITH MIL-W-22759. ALL SHIELDED WIRE/CABLE SHOULD BE IN ACCORDANCE WITH MIL-C-27500.
- ② BOND TO AIRFRAME GROUND NOT MORE THAN 1 METER FROM UNIT.
- ③ ADJUST AA36-100 TO A MAXIMUM OF 3 NAT INTERCOMS OR NAT AUDIO PANELS. REFER TO INSTALLATION MANUAL FOR DETAILS.
- ④ ADJUST AA36-100 TO 1 OF 4 PROPRIETARY BI-DIRECTIONAL ICS TIE LINES. REFER TO INSTALLATION MANUAL FOR DETAILS.
- ⑤ GROUND SHIELD TO METAL HOOD OF CONNECTOR.

DEFINITIONS:

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.

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

DESIGNED	KV	<b>NAT</b> NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	NOV 28/02	TITLE				DIGITAL ICS TIE LINE ADAPTER
CHECKED	NAT 200	NAT 241	BI-DIRECTIONAL ICS TIE TO BI-DIRECTIONAL ICS TIE			
APPROVED			SIZE	CAGE CODE	PART NO.	REV. SHEET
			A	3AB01	AA36-100	1.00 1/2
FILE	403-0100.DWG		DWG. TYPE	INTERCONNECT	DWG. NO.	AA36\100\403-0



NOTES:

- 1 ALL WIRES SHOULD BE 22 AWG UNLESS OTHERWISE SPECIFIED. ALL WIRE SHOULD BE IN ACCORDANCE WITH MIL-W-22759. ALL SHIELDED WIRE/CABLE SHOULD BE IN ACCORDANCE WITH MIL-C-27500.
- 2 BOND TO AIRFRAME GROUND NOT MORE THAN 1 METER FROM UNIT.
- 3 CONNECT TO A MAXIMUM OF 3 NAT INTERCOMS OR NAT AUDIO PANELS. REFER TO INSTALLATION MANUAL FOR DETAILS.
- 4 ADJUST AA36-100 'PHONES IN' TO MATCH LEVEL FROM AUDIO PANEL. REFER TO INSTALLATION MANUAL FOR DETAILS.
- 5 ADJUST AA36-100 'MIC OUT' TO MATCH REQUIRED INPUT LEVEL FOR AUDIO PANEL. REFER TO INSTALLATION MANUAL FOR DETAILS.
- 6 GROUND SHIELD TO METAL HOOD OF CONNECTOR.

DEFINITIONS:

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.

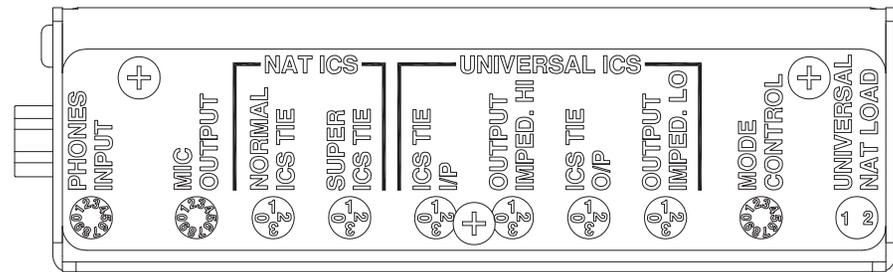
CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

DESIGNED	KV	<b>NAT</b> NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	NOV 28/02	TITLE				DIGITAL ICS TIE LINE ADAPTER
CHECKED	NAT 200	NAT 241	BI-DIRECTIONAL ICS TIE TO MIC AND PHONES			
APPROVED		SIZE	CAGE CODE	PART NO.	REV.	SHEET
		A	3AB01	AA36-100	1.00	2/2
FILE	403-0100.DWG	DWG. TYPE	INTERCONNECT	DWG. NO.	AA36\100\403-1	

PHONES INPUT	
SWITCH POSITION	RATED INPUT
0	500 mVrms
1	1 Vrms
2	2 Vrms
3	2.5 Vrms
4	4 Vrms
5	4.5 Vrms
6	5.5 Vrms
7	6 Vrms
8	8 Vrms
9	8.5 Vrms

MIC OUTPUT	
SWITCH POSITION	RATED OUTPUT
0	250 mVrms
1	500 mVrms
2	1 Vrms
3	1.25 Vrms
4	1.50 Vrms
5	1.75 Vrms
6	2.25 Vrms
7	2.50 Vrms
8	2.65 Vrms
9	2.80 Vrms

MODE CONTROL	
SWITCH POSITION	FUNCTION
0	PHONES IN
1	UNI TIE IN
2	RESERVED
3	RESERVED
4	RESERVED
5	RESERVED
6	RESERVED
7	RESERVED
8	RESERVED
9	RESERVED



UNIVERSAL NAT LOAD	
SWITCH POSITION	SYSTEM TYPE
1 CCW	NAT ICS TIE
2 CW	ALL OTHERS

NORMAL ICS TIE	
SWITCH POSITION	ICS LOADS
0	SUPER NAT TIE
1	1 NAT LOAD
2	2 NAT LOAD
3	3 NAT LOAD

SUPER ICS TIE	
SWITCH POSITION	ICS LOADS
0	NAT TIE
1	1 NAT LOAD
2	2 NAT LOAD
3	3 NAT LOAD

ICS TIE I/P	
SWITCH POSITION	SYSTEM TYPE
0	NAT
1	ANDREA
2	GEMELLI
3	dB SYSTEM

OUTPUT IMPED. HI	
SWITCH POSITION	SYSTEM TYPE
0	NAT
1	ANDREA
2	GEMELLI
3	dB SYSTEM

ICS TIE OUTPUT	
SWITCH POSITION	SYSTEM TYPE
0	NAT
1	ANDREA
2	GEMELLI
3	dB SYSTEM

OUTPUT IMPED. LO	
SWITCH POSITION	SYSTEM TYPE
0	NAT
1	ANDREA
2	GEMELLI
3	dB SYSTEM

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

NOTES:

\* DENOTES DEFAULT SETTINGS

SYSTEM PART NUMBERS FOR UNIVERSAL ICS

ANDREA A301-6W

GEMELLI AG-06-1U5

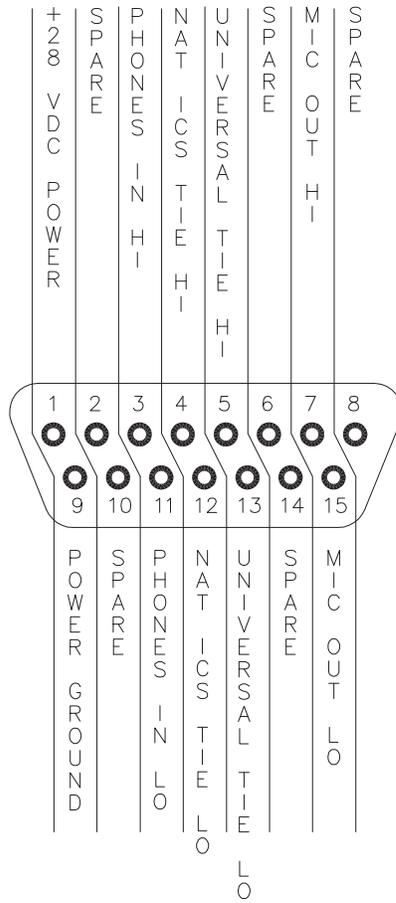
dB SYSTEMS 355-003

NAT AA95-xxx

DESIGNED	KV	<b>NAT</b> NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	OCT 18/02	TITLE				
CHECKED	NAT 200	NAT 241	DIGITAL ICS TIE LINE ADAPTER			
APPROVED	NAT 114	SIZE	CAGE CODE	PART NO.	REV.	SHEET
FILE	404-0100.DWG	A	3AB01	AA36-100	1.00	1/1
DWG. TYPE		OPTIONS		DWG. NO.		AA36\100\404-0

P1

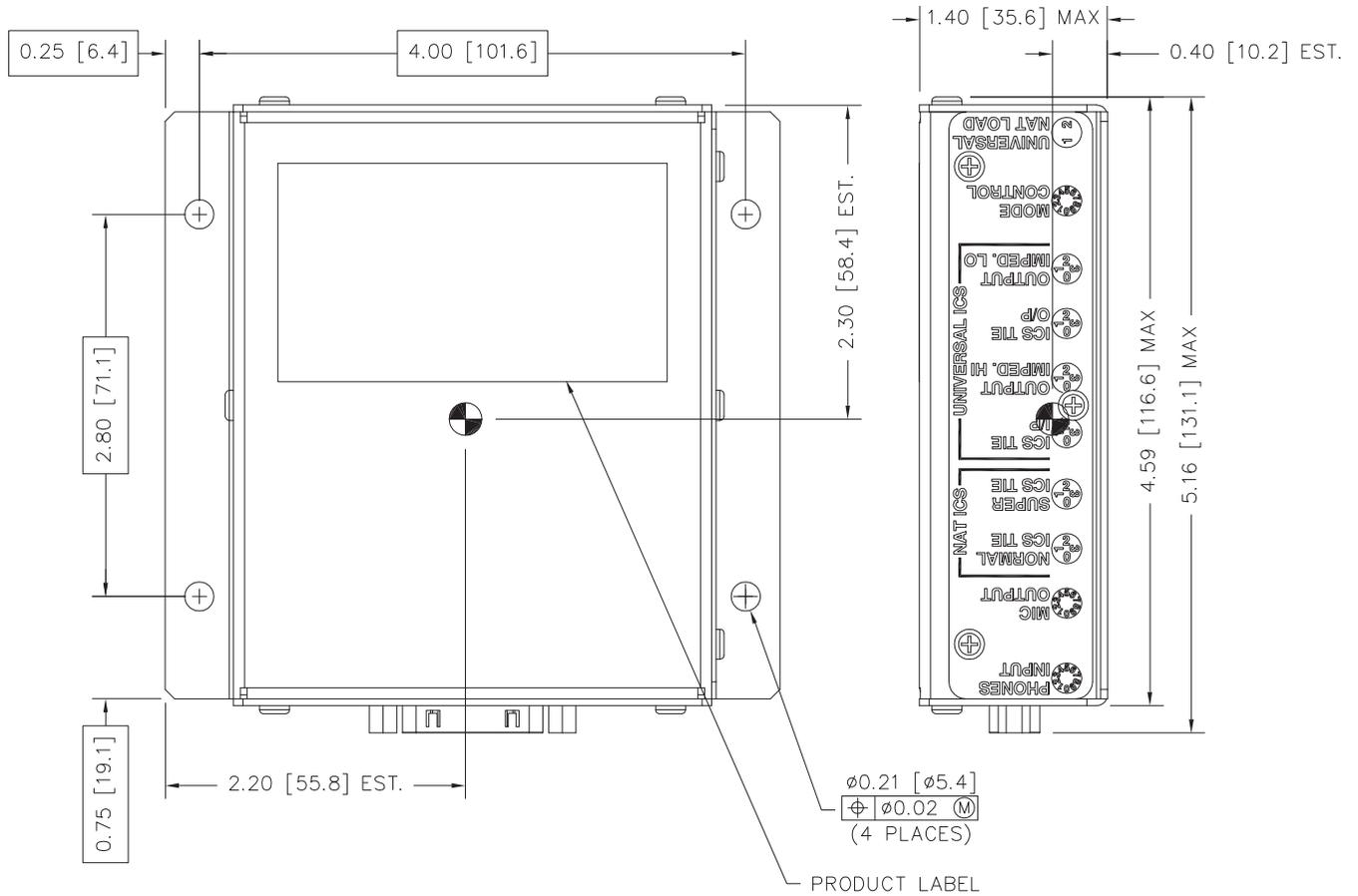
15 PIN FEMALE DMIN  
MATING CONNECTOR



NOTE: VIEW IS FROM REAR OF AIRFRAME CONNECTOR

CONFIDENTIAL AND PROPRIETARY TO NAT LTD.

DESIGNED	KV	<b>NAT</b> NORTHERN AIRBORNE TECHNOLOGY LTD.				
DRAWN	TAT					
DATE	NOV 6/02	TITLE DIGITAL ICS TIE LINE ADAPTER				
CHECKED	<b>NAT 200</b>   <b>NAT 241</b>					
APPROVED		SIZE A	CAGE CODE 3AB01	PART NO. AA36-100	REV. 1.00	SHEET 1/1
FILE	405-0100.DWG	DWG. TYPE	CONNECTOR MAP	DWG. NO.	AA36/100/405-0	



☉ CENTER OF GRAVITY

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

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DIMENSIONS ARE INCHES [mm]	DESIGNED	KV		<b>NAT</b> NORTHERN AIRBORNE TECHNOLOGY LTD.				
	DRAWN	TAT						
THIRD ANGLE PROJECTION	DATE	NOV 6/02		TITLE DIGITAL ICS TIE LINE ADAPTER				
MASS: 0.59 lbs. (0.3 Kg) MAX	CHECKED	NAT 200	NAT 241					
MATERIAL:	APPROVED			SIZE	CAGE CODE	PART NO.	REV.	SHEET
FINISH:	FILE	922-0100.DWG		A	3AB01	AA36-100	1.00	1/1
CHROMATE CONVERSION				DWG. TYPE	MECH. INSTALLATION	DWG. NO.	AA36\100\922-0	



## AA36-100 Digital ICS Tie Line Adapter SM58 Installation and Operation Manual

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### Section 3.0 Operation

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#### 3.1 Introduction

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Information in this section consists of the functional and operational procedures for the AA36-100 Digital ICS Tie Line Adapter.

#### 3.2 General

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The AA36-100 Digital ICS Tie Line Adapter provides a simple interface between incompatible proprietary intercom tie lines.

#### 3.3 Operation

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The **AA36-100** has no normal user operational aspects. During installation, or if the unit has been exchanged, it may be a requirement to change internal adjustments. This should be done **ONLY BY FULLY QUALIFIED PERSONNEL**.

End of section 3.0

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