


Engineer: Chris Samios	Date: 5/13/02	 <b>JPS Communications</b> 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 5/13/02				
Approved: CTS	Date: 5/13/02	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 3/24/04	Size: A	Dwg. #: <b>5961-271120-APP</b>	Rev: A	Sheet: 1 Of 1

**APPLIES TO:** Bendix/King EMH VHF Mobile Radio  
Bendix/King GMH VHF Mobile Radio

**RADIO MODIFICATIONS:**

1. Provide an external COR signal by installing a wire from pin 5 of IC4 to pin 10 of the DSub-15 option connector.

**RADIO PROGRAMMING:**

1. Mobile radios should normally be programmed for low transmit power.
2. One of the front panel function buttons must be programmed for "SPK".

**RADIO CONTROLS:**

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio. Should be about in the mid-range (12 o'clock) position.
2. Press the "SPK" button until the triangular indicator directly above the button is displayed.

**CABLING:**

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291120	(5961-271120 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281120	(5961-271120 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271120	
Radio RF Connector Type	Mini UHF	

**DSP PROGRAMMING:**

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	COR	
COR Polarity	Active High	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

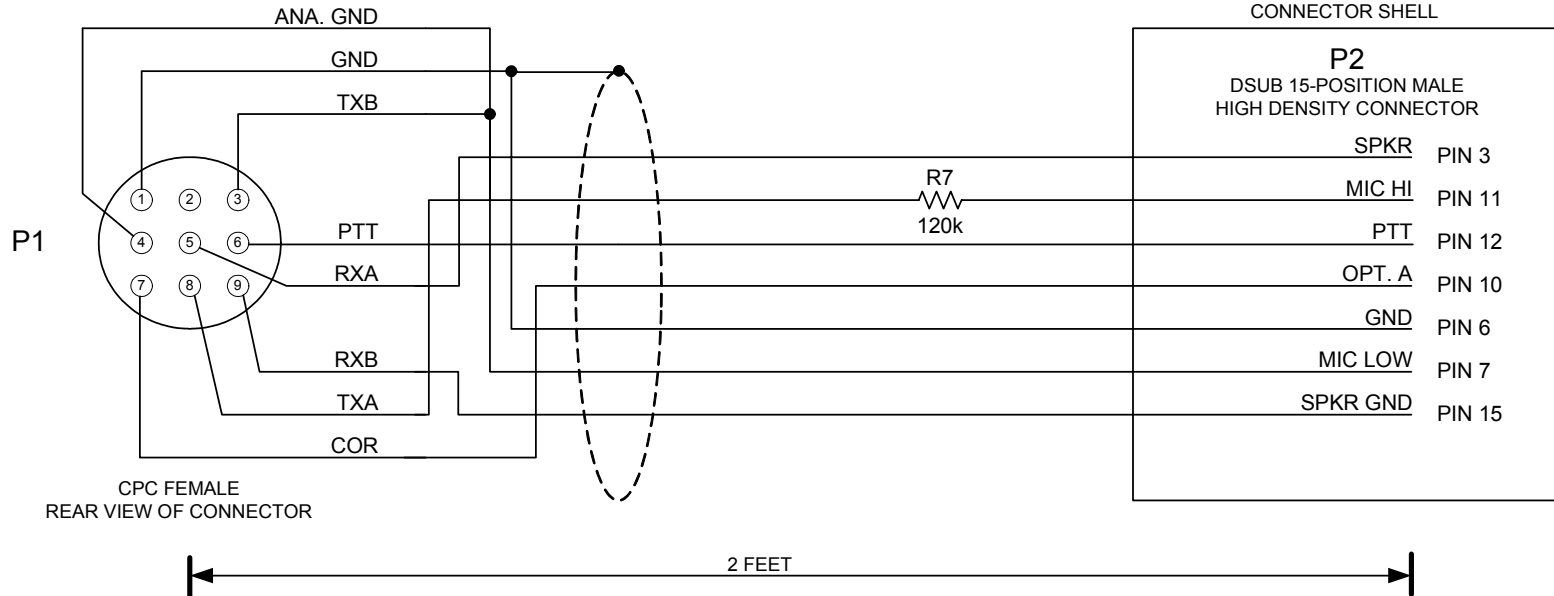
**NOTES:**

1. In lieu of the external COR modification, Squelch Type may be set to "VOX".

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PURCHASED PART

USE MOLDED CABLE  
(JPS P/N 5961-261003-00)



COMPONENT PCB  
(JPS P/N 5961-271000)

R7 JPS P/N 1820-124000  
JU1  
JU4  
JU5

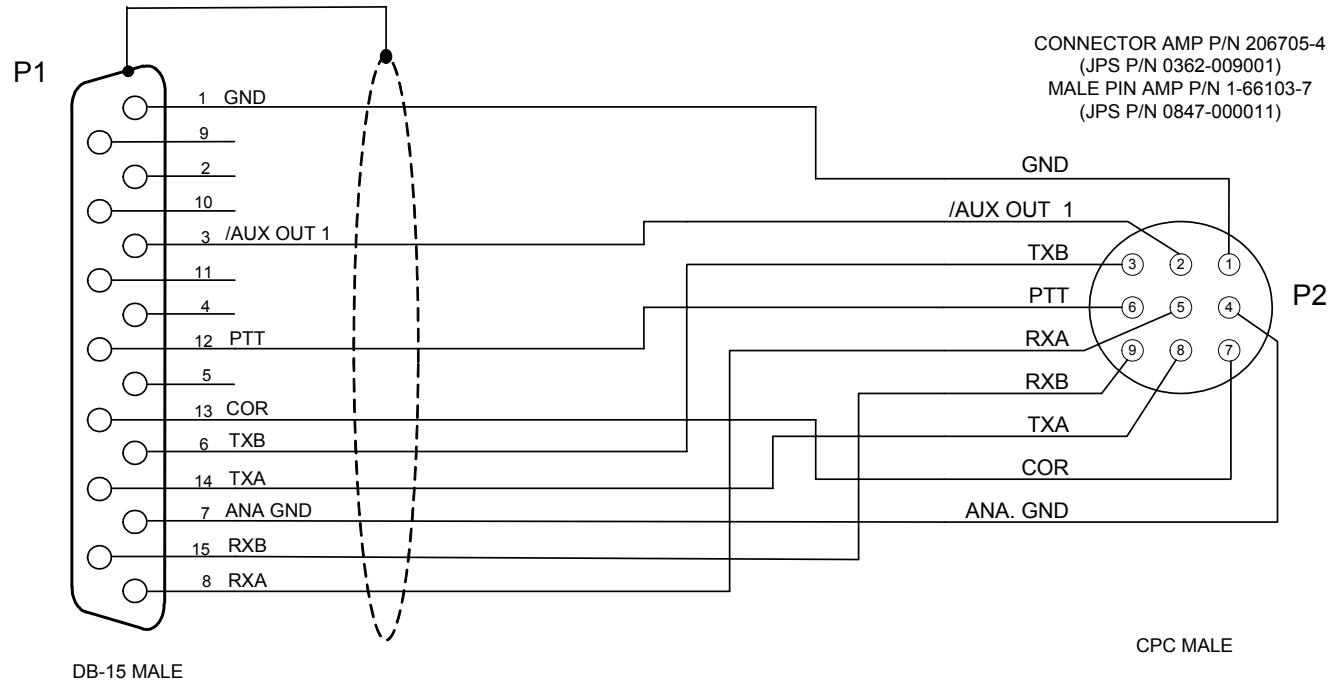
NOTE: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

USED WITH:  
BENDIX/KING EMH MOBILE  
BENDIX/KING GMH MOBILE

Designed By:	CTS			<b>Raytheon JPS Communications</b> Raleigh, NC USA	
Drawn By:	EDV		Title CABLE, CPC TO BK RADIO EMG (VHF)		
Checked By:	JAC	Size A	Document Number <b>5961-271120</b>	Rev A	
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# PURCHASED PART

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CONNECTOR AMP P/N 206705-4  
 (JPS P/N 0362-009001)  
 MALE PIN AMP P/N 1-66103-7  
 (JPS P/N 0847-000011)

DB-15 MALE

CPC MALE



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
 2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.  
 3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
 4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

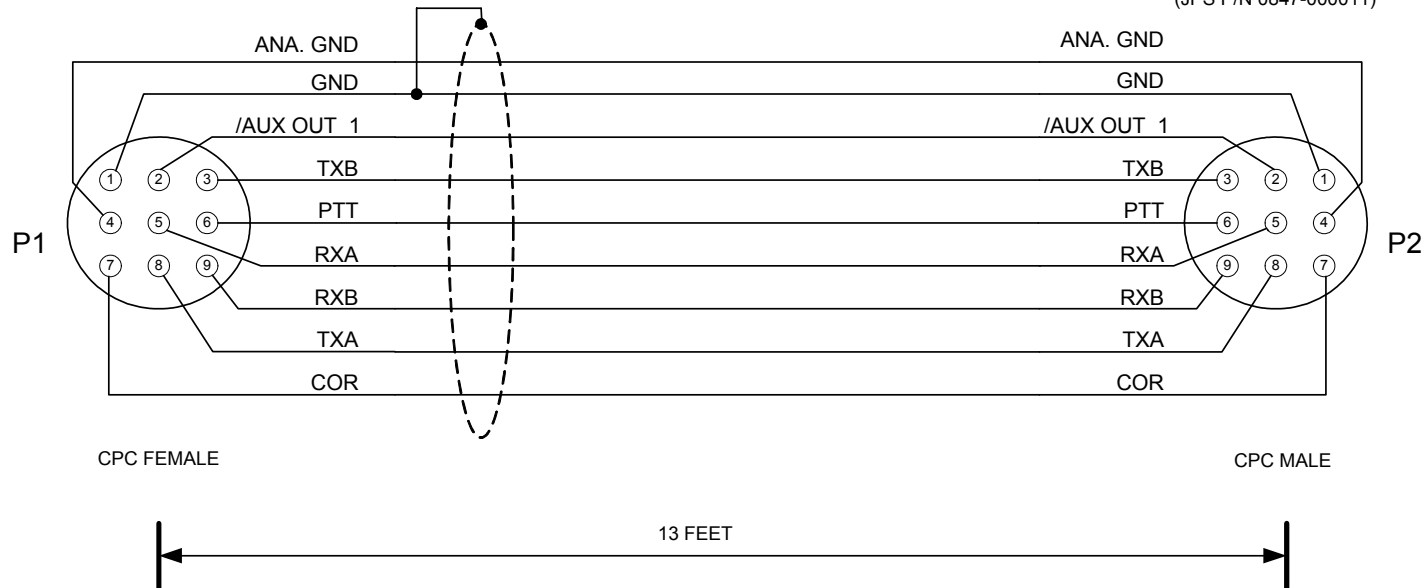
Designed By: JAC	<b>Raytheon JPS Communications</b>		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-261002-00</b>	Rev A
	Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>

Rev	ECO	Date
A		

## PURCHASED PART

CONNECTOR AMP P/N 206708-1  
 (JPS P/N 0362-005003)  
 FEMALE PIN AMP P/N 1-66105-8  
 (JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4  
 (JPS P/N 0362-009001)  
 MALE PIN AMP P/N 1-66103-7  
 (JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
 2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.  
 3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
 4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-281013-00</b>	Rev A
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