

Engineer: Bruce Page	Date: 8/9/06	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Bruce Page	Date: 8/9/06				
Approved: CTS	Date: 8/9/06	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 8/9/06	Size: A	Dwg. #: 5961-271314-APP	Rev: B	Sheet: 1 Of 1

APPLIES TO: Vertex VX820 Series Portable
Vertex VX920 Series Portable

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING:

1. VX920 Series Portable required Option 2 to be set for the external PTT to function.

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.

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 5961-291314	(5961-271314 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281314	(5961-271314 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271314	
RF Connector Type	NA	

DSP-1 JUMPERS:

JP1	Low Impedance *
JP2	Balanced *

DSP PROGRAMMING:

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
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)

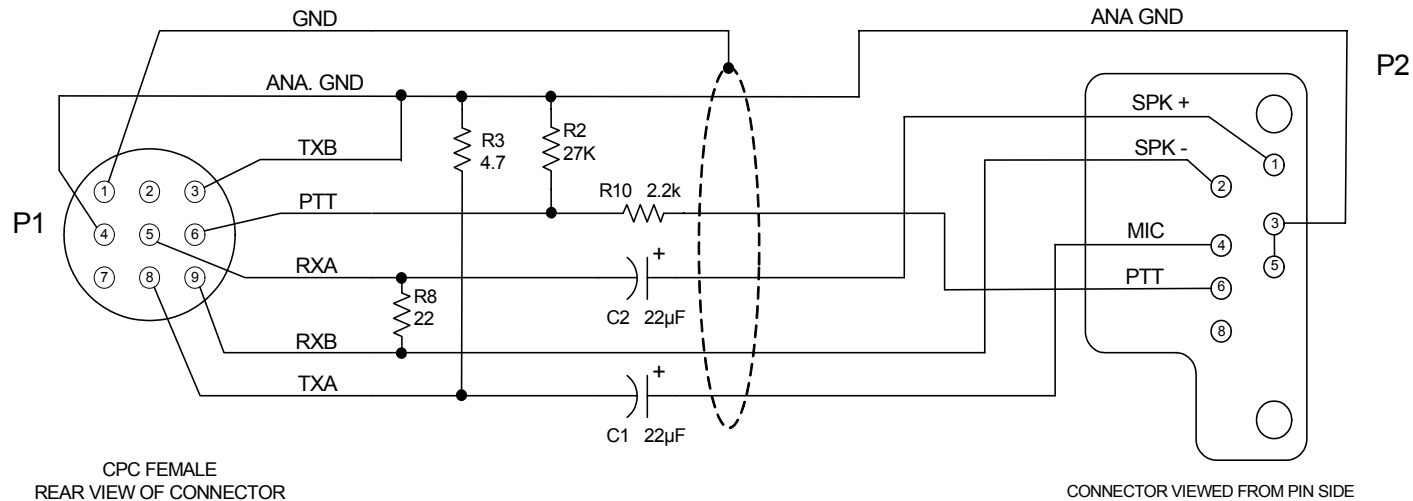
NOTES:

Rev	ECO	Date
B		8-9-06

PURCHASED PART

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

USE VERTEX EXTERNAL SPK/MIC
CURL CORD ASSY
P/N T9207208
(JPS P/N 0314-207208)



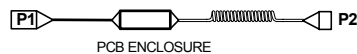
CPC FEMALE
REAR VIEW OF CONNECTOR

CONNECTOR VIEWED FROM PIN SIDE

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

FOR DETAILED CABLE ASSEMBLY INSTRUCTIONS SEE
5961-271001-CBL.

CABLE DETAIL



STRETCHED CABLE LENGTH MINIMUM 2 FEET

USED WITH:
VERTEX VX820 SERIES PORTABLES
VERTEX VX920 SERIES PORTABLES

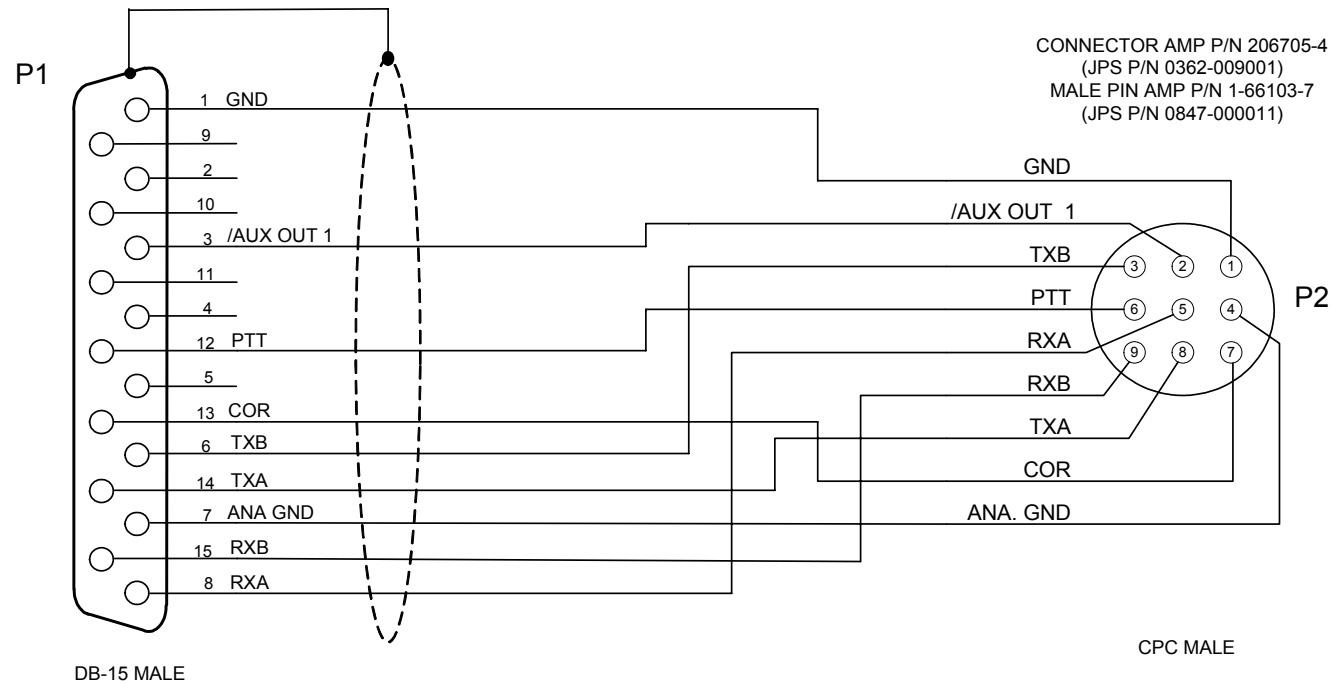
COMPONENT PCB (JPS P/N 5961-271000)

C1	JPS P/N 0321-220250
C2	JPS P/N 0321-220250
R2	JPS P/N 1820-273000
R3	JPS P/N 1820-047000
R8	JPS P/N 1820-220000
R10	JPS P/N 1820-222000
JU2	
JU5	

Designed By:	RBP	Raytheon JPS Communications Raleigh, NC USA		
Drawn By:	RBP	Title CABLE, CPC TO VERTEX VX820, VX920		
Checked By:	CTS	Size A	Document Number 5961-271314	Rev B
		Issued Date AUGUST 8, 2006	Sheet <u>1</u> of <u>1</u>	

PURCHASED PART

Rev	ECO	Date
A		



- 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).

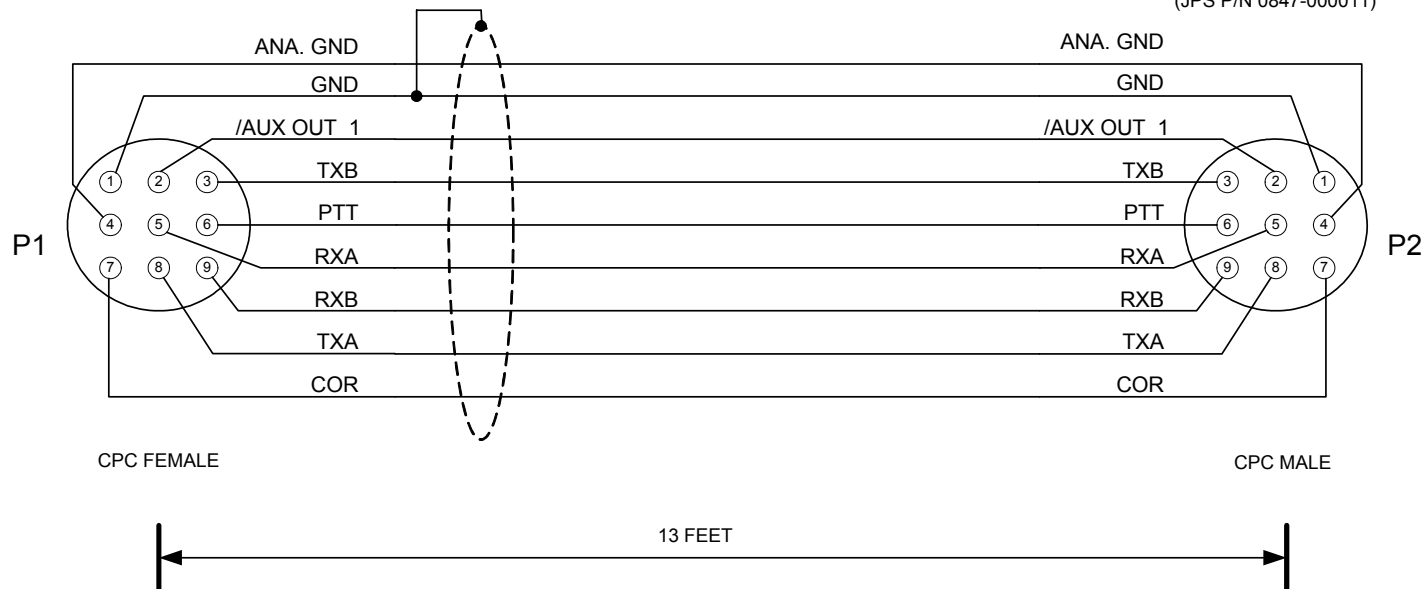
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
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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	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
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