APPLIES TO: Vertex VX-4000 Mobile Radio
Vertex VX-6000 Mobile Radio

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING:

1. Mobile radios should normally be programmed for low transmit power.

RADIO CONTROLS:

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio.

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 5961-291236	(5961-271236 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281236	(5961-271236 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271236	
Radio RF Connector Type		

DSP PROGRAMMING: (See Notes)

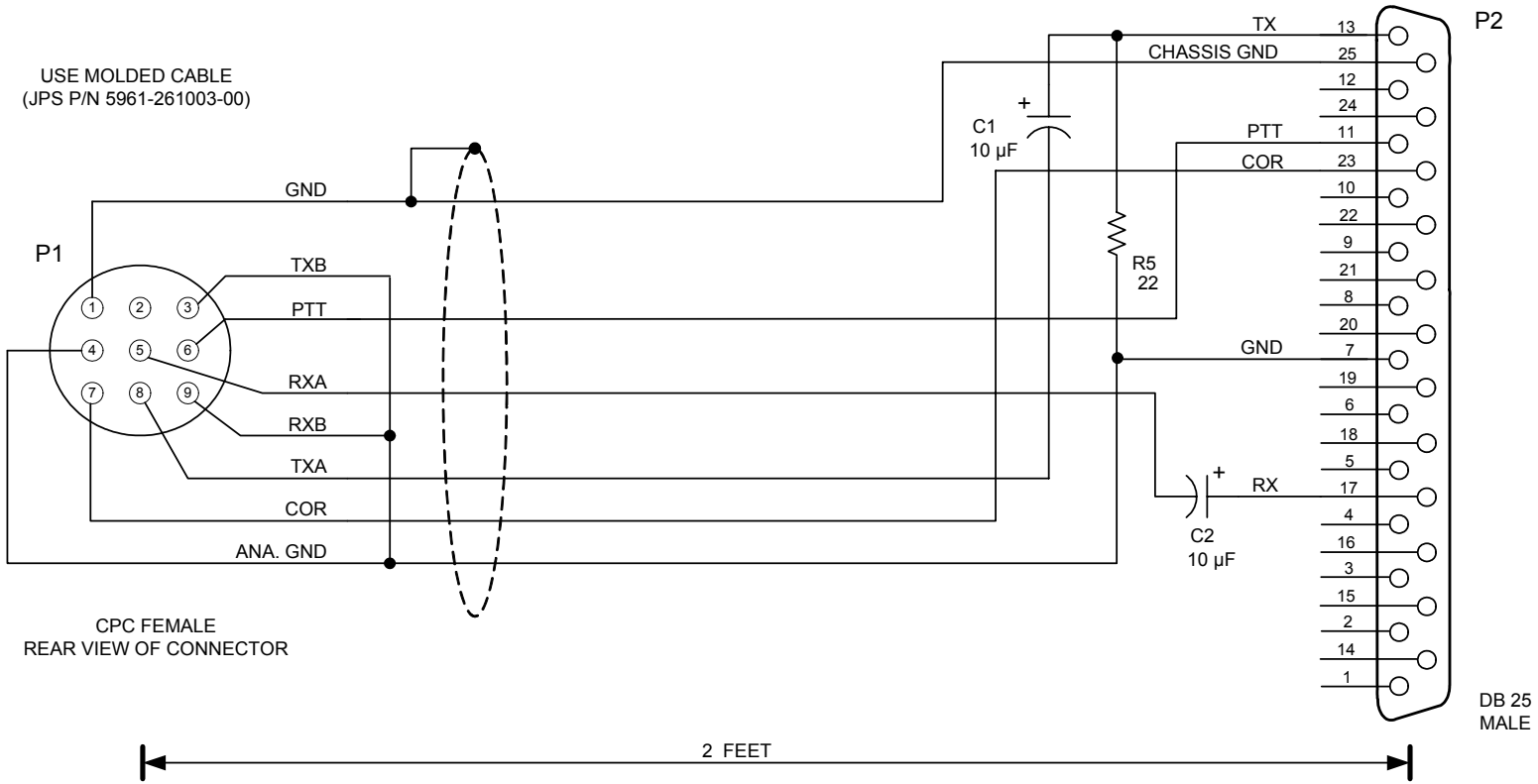|		
RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100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

(* Indicates Default Value)

NOTES:

Raytheon JPS Communications has not developed specific settings for this model of radio. Use the generic DSP Setup Procedure to optimize the default values.

271236-APP.doc

PURCHASED PART

Rev	ECO	Date
A		

P2

TX 13
CHASSIS GND 25
12
24
PTT 11
COR 23
10
22
9
21
8
20
GND 7
19
6
18
5
RX 17
4
16
3
15
2
14
1

C1
10 µF

R5
22

C2
10 µF

DB 25
MALE

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

GND

P1

TXB
PTT
RXA
RXB
TXA
COR
ANA. GND

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨

CPC FEMALE
REAR VIEW OF CONNECTOR

2 FEET

COMPONENT PCB
(JPS P/N 5961-271000)

C1   JPS P/N 0320-100500
C2   JPS P/N 0320-100500
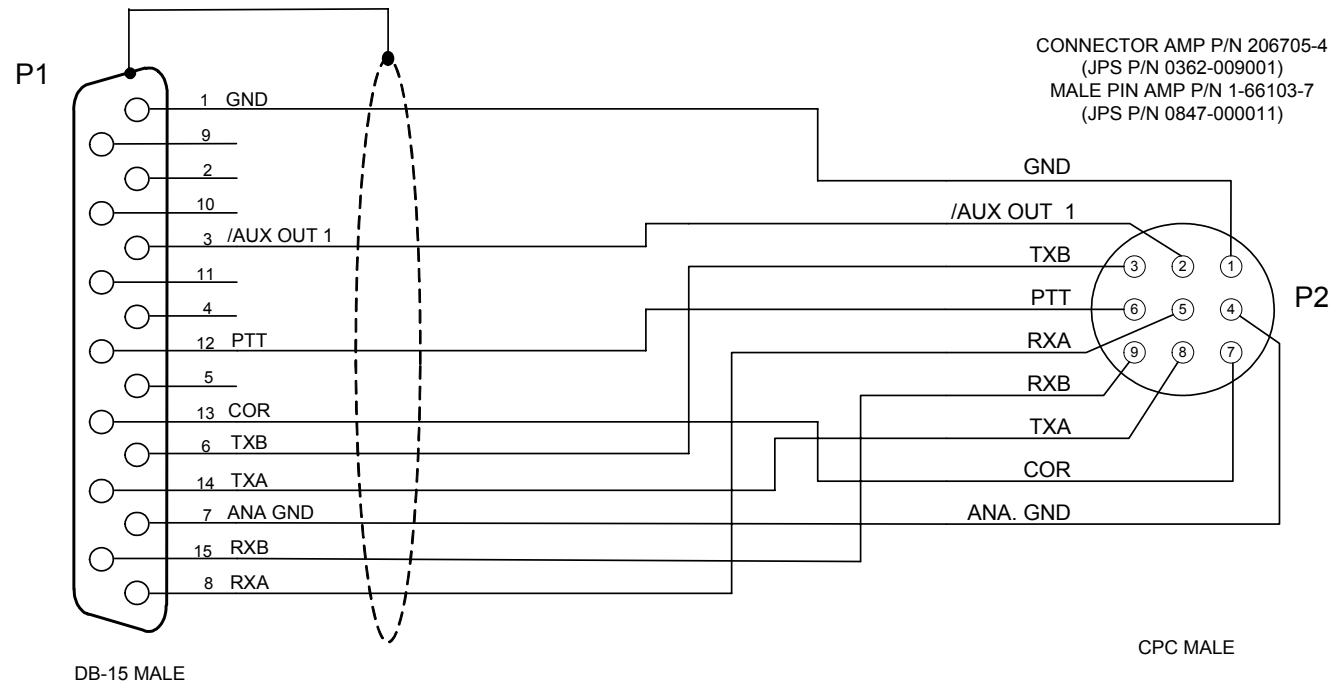R5   JPS P/N 1820-220000
JU2
JU5
JU6

USED WITH:
VERTEX VX-4000 MOBILE
VERTEX VX-6000 MOBILE

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

Designed By: CTS	**Raytheon JPS Communications** Raleigh, NC USA		
Drawn By: EDV	Title CABLE, CPC TO VERTEX VX-4000 MOBILE		
Checked By: JAC	Size A	Document Number 5961-271236	Rev A
	Issued Date NOVEMBER 5, 2003		Sheet 1 of 1

PURCHASED PART

Rev	ECO	Date
A		

P1

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

1　GND
9
2
10
3　/AUX OUT 1
11
4
12　PTT
5
13　COR
6　TXB
14　TXA
7　ANA GND
15　RXB
8　RXA

GND
/AUX OUT 1
TXB
PTT
RXA
RXB
TXA
COR
ANA. GND

P2

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨

DB-15 MALE

CPC MALE

13 FEET

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).
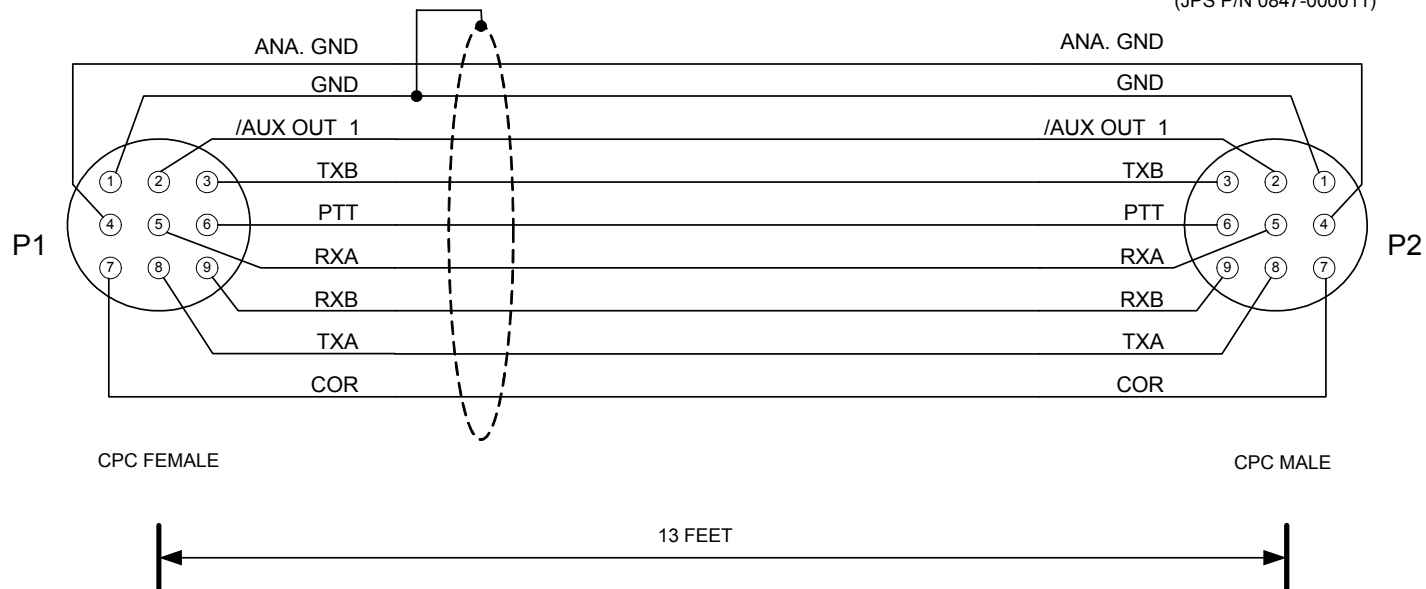
Designed By: JAC	**Raytheon** JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number **5961-261002-00**	Rev A
	Issued Date　JANUARY 5, 2004		Sheet _1_ of _1_

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)

ANA. GND		ANA. GND
GND		GND
/AUX OUT 1		/AUX OUT 1
TXB		TXB
PTT		PTT
RXA		RXA
RXB		RXB
TXA		TXA
COR		COR

P1

P2

CPC FEMALE

CPC MALE

13 FEET

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		
Checked By: RBP	Size A	Document Number **5961-281013-00**	Rev A
	Issued Date JANUARY 5, 2004		Sheet _1_ of _1_