APPLIES TO: Icom IC-A110 Mobile Radio

RADIO MODIFICATIONS:

A radio option cable must be installed per the Instruction Manual instructions for installation of the OPC 871 Headset Adaptor Option. After removal of DC power to the radio, unscrew the 4 screws and remove the bottom cover from the radio. The connector should be connected to the radio as shown below.
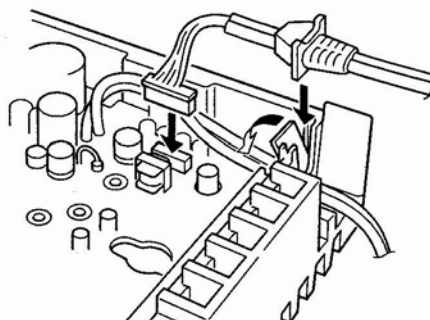
Bend the plastic dust cover before installing the strain relief into the notch.

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 5961-291257	(5961-271257 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281257	(5961-271257 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271257	
Radio RF Connector Type	UHF Female	

DSP PROGRAMMING:

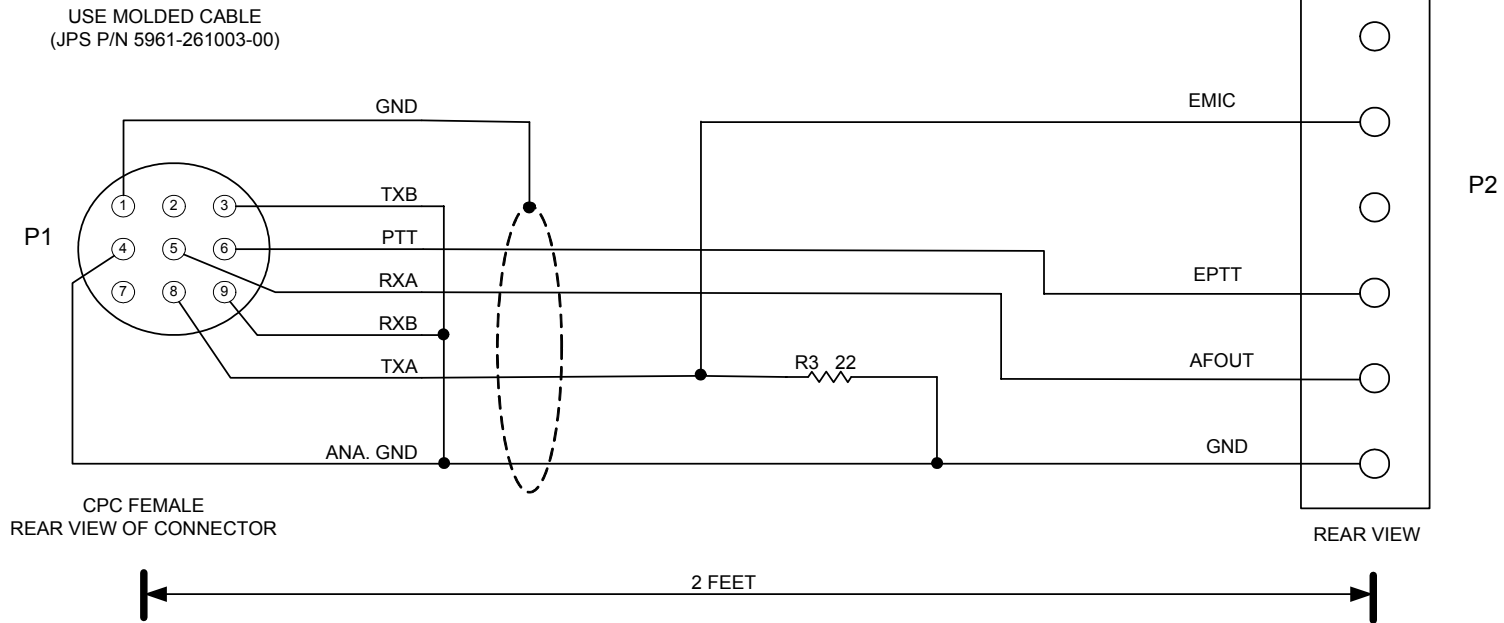|		
RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100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

(* Indicates Default Value)

NOTES:

PURCHASED PART

MAKE FROM ICOM OPC-871 HEADSET ADAPTER
(JPS P/N 0150-200003)

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

P1

GND

TXB

PTT

RXA

RXB

TXA

ANA. GND

R3 22

EMIC

P2

EPTT

AFOUT

GND

CPC FEMALE
REAR VIEW OF CONNECTOR

REAR VIEW

2 FEET

COMPONENT PCB
(JPS P/N 5961-271000)

R3   JPS P/N 1820-220000
JU1
JU2
JU4
JU5
JU6
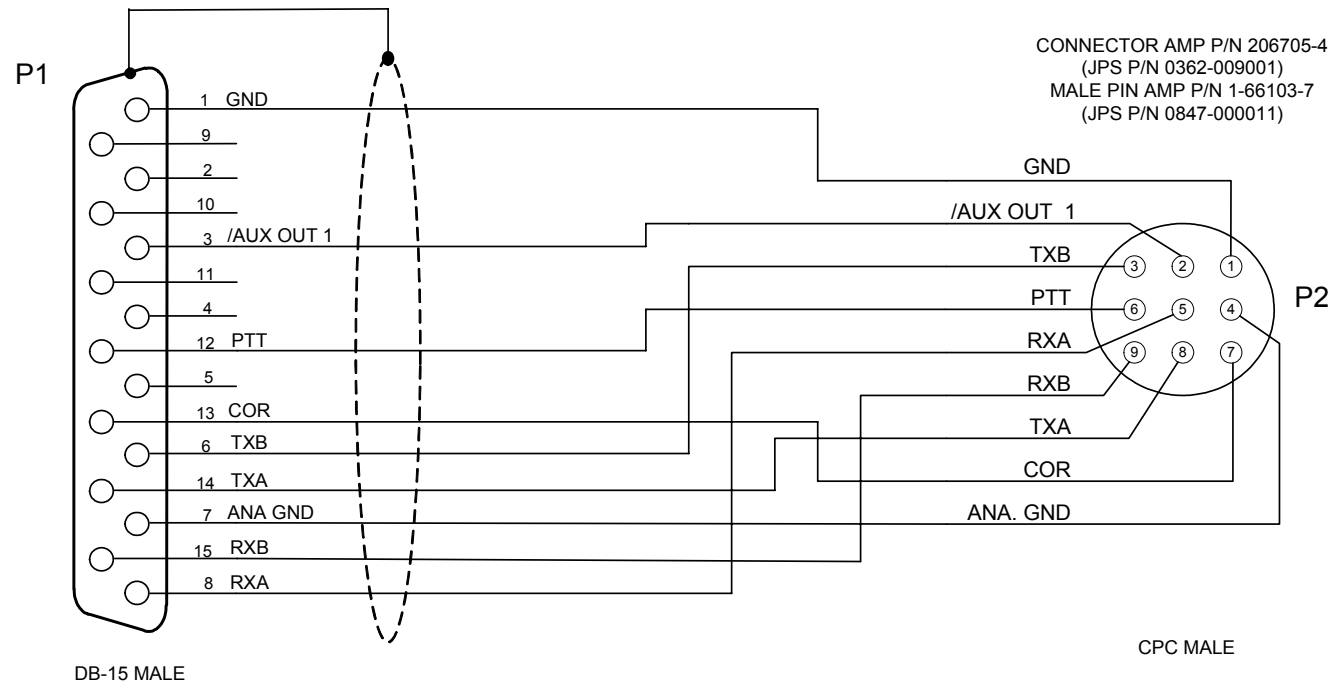
USED WITH:
ICOM IC-A110 MOBILE

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

Designed By:	RBP	**Raytheon** **JPS Communications**		
Drawn By:	RBP	Title	CABLE, ACU TO ICOM IC-A110 MOBILE	
Checked By:	JAC	Size A	Document Number **5961-271257**	Rev A
		Issued Date	DECEMBER 18, 2003	Sheet _1_of_1_

PURCHASED PART

Rev	ECO	Date
A		

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

P1

Pin	Signal
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

DB-15 MALE

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

P2

③ ② ①
⑥ ⑤ ④
⑨ ⑧ ⑦

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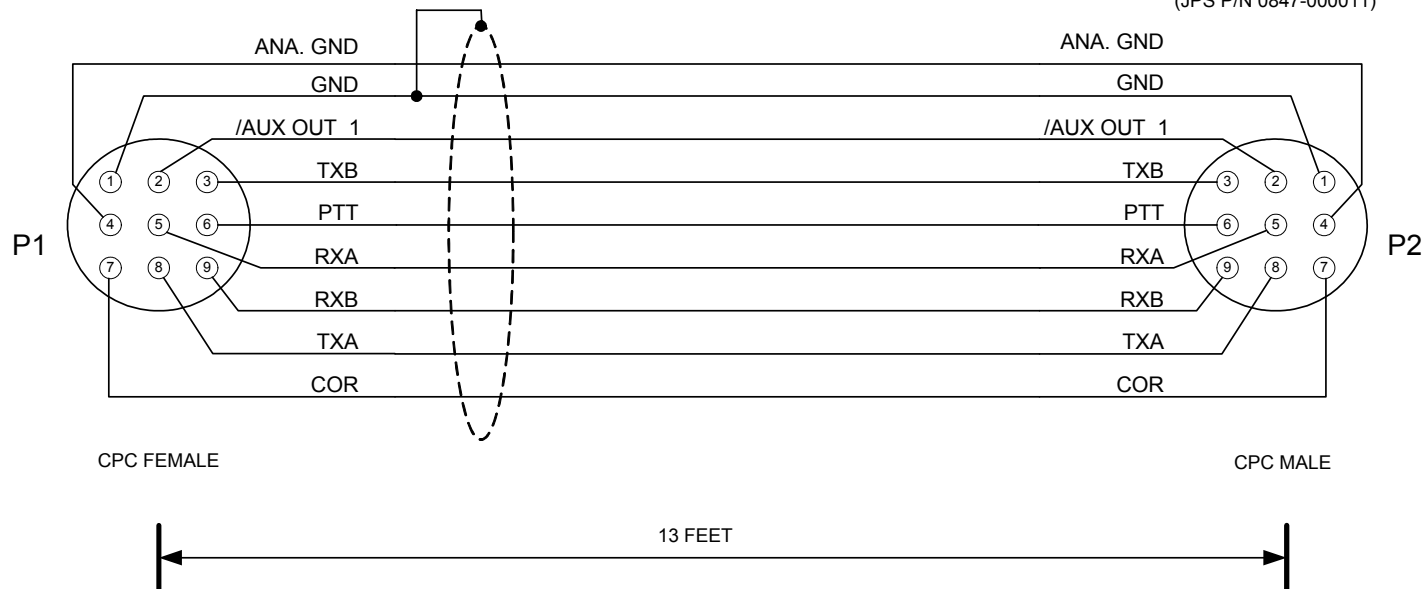
Designed By: JAC	**Raytheon** JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number **5961-261002-00**	Rev A
	Issued Date JANUARY 5, 2004		Sheet _1_ of _1_

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

Pins: 1 2 3 / 4 5 6 / 7 8 9

P2

Pins: 3 2 1 / 6 5 4 / 9 8 7

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