Engineer: Chris Samios	Date: 2/26/04	**Raytheon**			
Drawn: Jack Curtis	Date: 2/26/04	**JPS Communications** 5800 Departure Drive, Raleigh, NC 27616			
Approved: CTS	Date: 2/27/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 11/15/05	Size: A	Dwg. #: **5961-271131-APP**	Rev: **B**	Sheet: 1 Of 1

APPLIES TO: Motorola HT-600 Portable Radio
                                                 Motorola MT-1000 Portable Radio

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING: None required.

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 5961-291131	(5961-271131 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281131	(5961-271131 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271131	
Radio RF Connector Type		

DSP PROGRAMMING:

RX Level	4	-4dBm
TX Level	6	0dBm
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	6	3.5 dB Boost
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:

271131-APP Rev B.doc

Rev	ECO	Date
B		11-15-05

PURCHASED PART

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

P2

HT-600
MOTOROLA CABLE
P/N NKN6416B
(JPS P/N 0314-000207)

GND

ANA. GND

TXB

PTT

RXA

RXB

TXA

PIN 5

PIN 4

PIN 2

PIN 8

PIN 1

P1

R9   620

R3
10

C2   0.22µF

C1   22µF
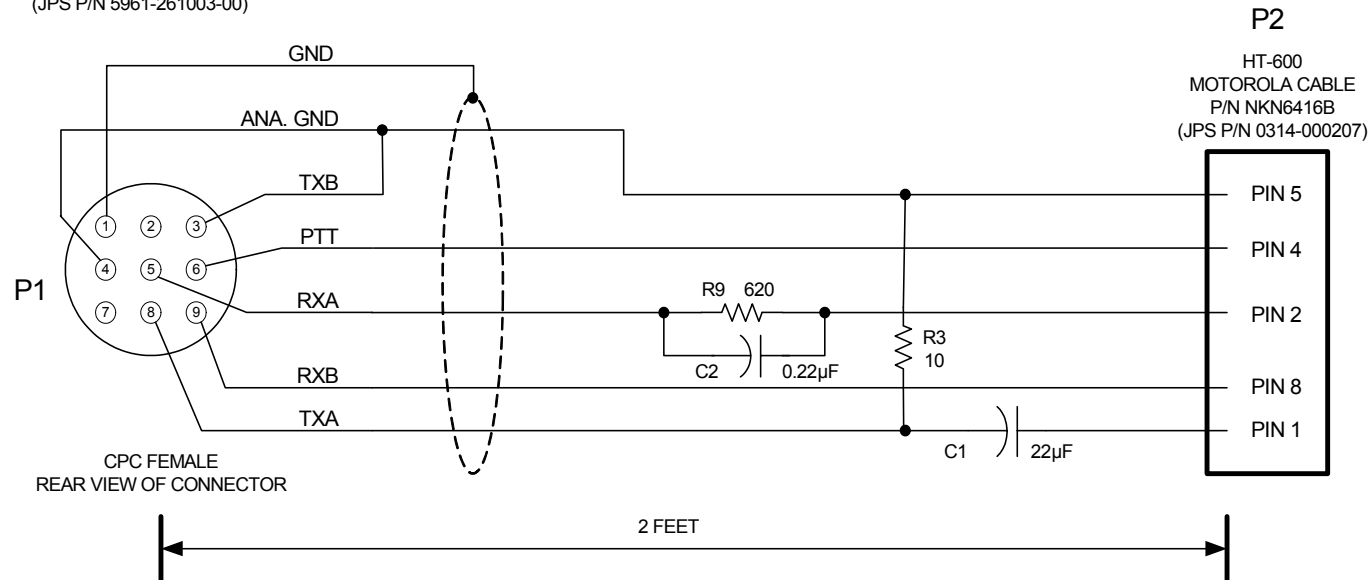
CPC FEMALE
REAR VIEW OF CONNECTOR

2 FEET

COMPONENT PCB
(JPS P/N 5961-271000)

C1   JPS P/N 0321-220250
C2   JPS P/N 0327-226500
R3   JPS P/N 1820-100000
R9   JPS P/N 1820-621000
JU2
JU5

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

Designed By: CTS	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: RBP	Title	CABLE, CPC TO MOTOROLA HT-600	
Checked By: JAC	Size A	Document Number 5961-271131	Rev B
	Issued Date NOVEMBER 14, 2003		Sheet _1_ of _1_

USED WITH:
MOTOROLA HT-600 PORTABLE
MOTOROLA MT-1000 PORTABLE

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

③ ② ①
⑥ ⑤ ④
⑨ ⑧ ⑦

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
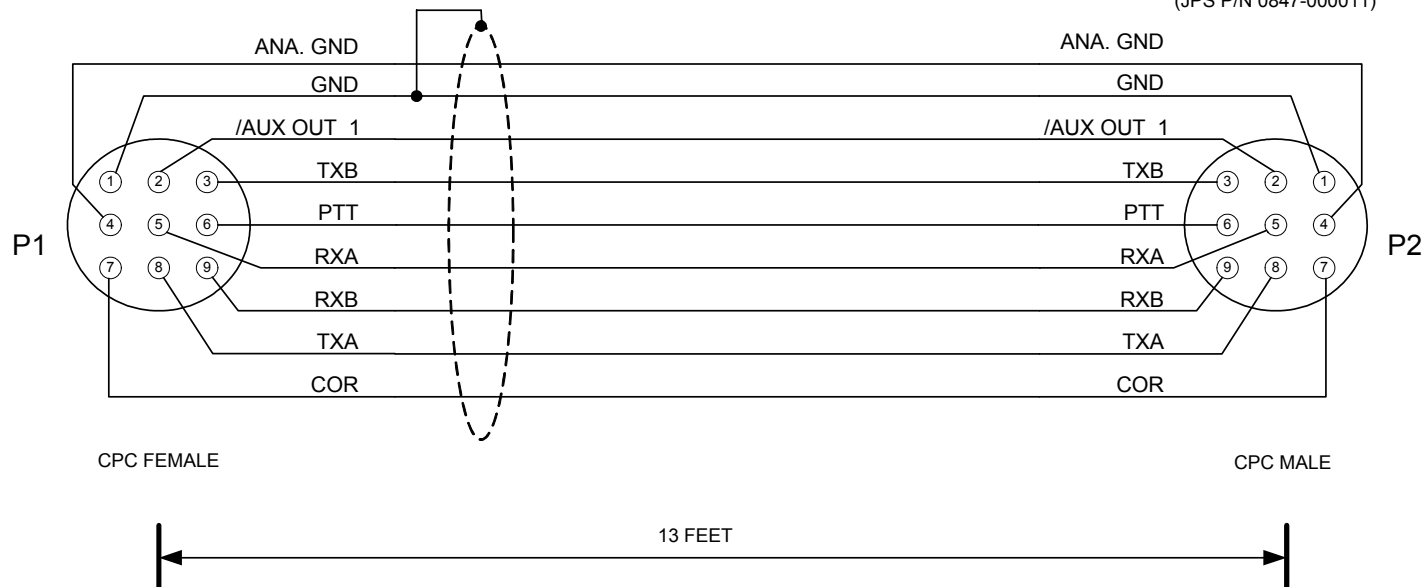   REV, VENDOR CODE AND DATE (MM/YY).

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)

P1 — CPC FEMALE

P1		P2
ANA. GND		ANA. GND
GND		GND
/AUX OUT 1		/AUX OUT 1
TXB		TXB
PTT		PTT
RXA		RXA
RXB		RXB
TXA		TXA
COR		COR

P2 — 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_