


Engineer: Bruce Page	Date: 3/11/04	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Bruce Page	Date: 3/11/04				
Approved: Jack Curtis	Date: 3/11/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 3/11/04	Size: A	Dwg. #: 5961-271138-APP	Rev: A	Sheet: 1 Of 1

APPLIES TO: Motorola GM-300 Mobile

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING:

1. The radio should be programmed to the lowest programmable power range.
2. The "Microphone Off-Hook PL" disable function must be turned off using the programming software to allow the radio to transmit and receive PL tones. Under "Conventional Configuration" set "Hub Defeats PL" to Disable (no check mark in the feature selection block).

RADIO CONTROLS:

1. The Volume Control setting has no effect on the level of receive audio to the ACU-1000.

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 5961-291138	(5961-271138 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281138	(5961-271138 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271138	
RF Connector Type	Mini-UHF	

DSP JUMPERS:

JP1	Hi Impedance – (See notes)
JP2	Unbalanced – (See notes)

DSP PROGRAMMING:

RX Level	4	-4dBm - (See notes)
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	5	+2dB
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	

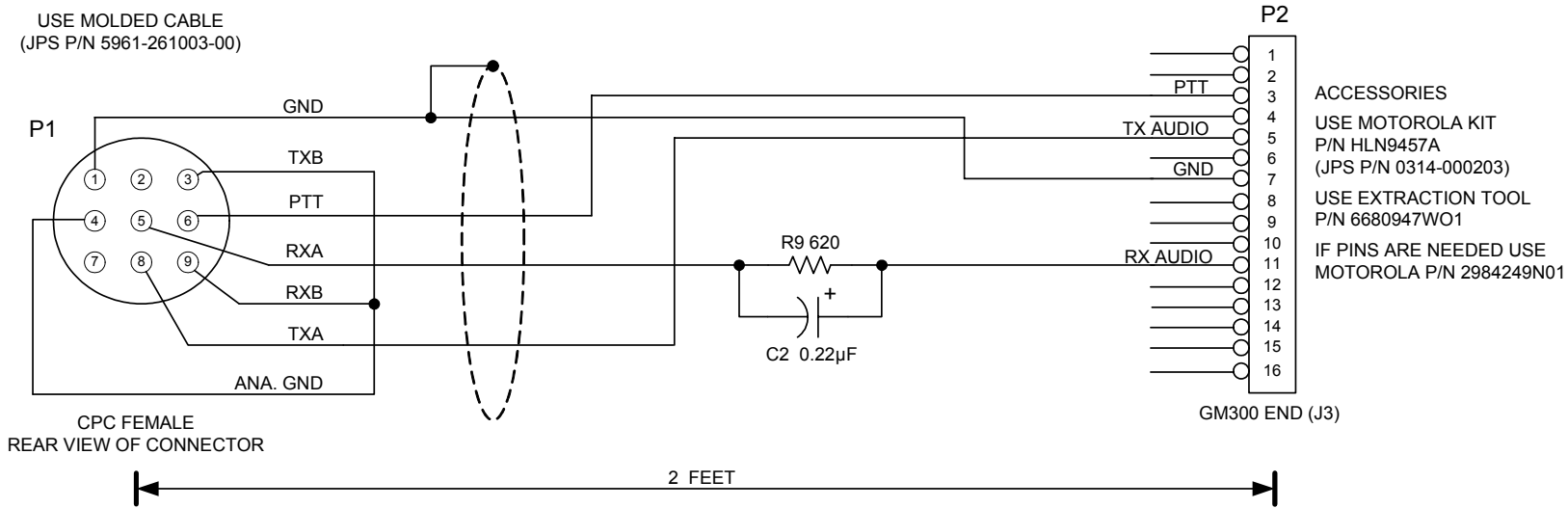
(* Indicates Default Value)

NOTES: If the DSP Jumpers are left in the default positions (Lo Impedance and Balanced), the RX Level must be set at 7.

PURCHASED PART

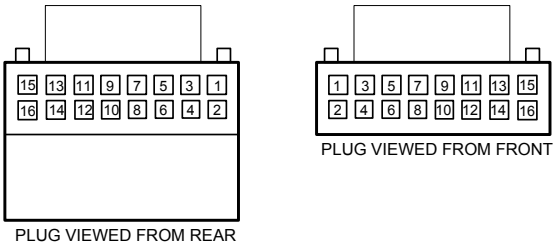
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USE MOLDED CABLE
(JPS P/N 5961-261003-00)



ACCESSORIES
USE MOTOROLA KIT
P/N HLN9457A
(JPS P/N 0314-000203)
USE EXTRACTION TOOL
P/N 6680947WO1
IF PINS ARE NEEDED USE
MOTOROLA P/N 2984249N01

COMPONENT PCB (JPS P/N 5961-271000)	
C2	JPS P/N 0327-226500
R9	JPS P/N 1820-621000
JU1	
JU2	
JU5	
JU6	



USED WITH:
MOTOROLA GM-300 MOBILE

NOTE: 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 MOTOROLA GM-300		
Checked By:	JAC	Size A	Document Number 5961-271138	Rev A
		Issued Date NOVEMBER 16, 2003		Sheet 1 of 1

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- 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).

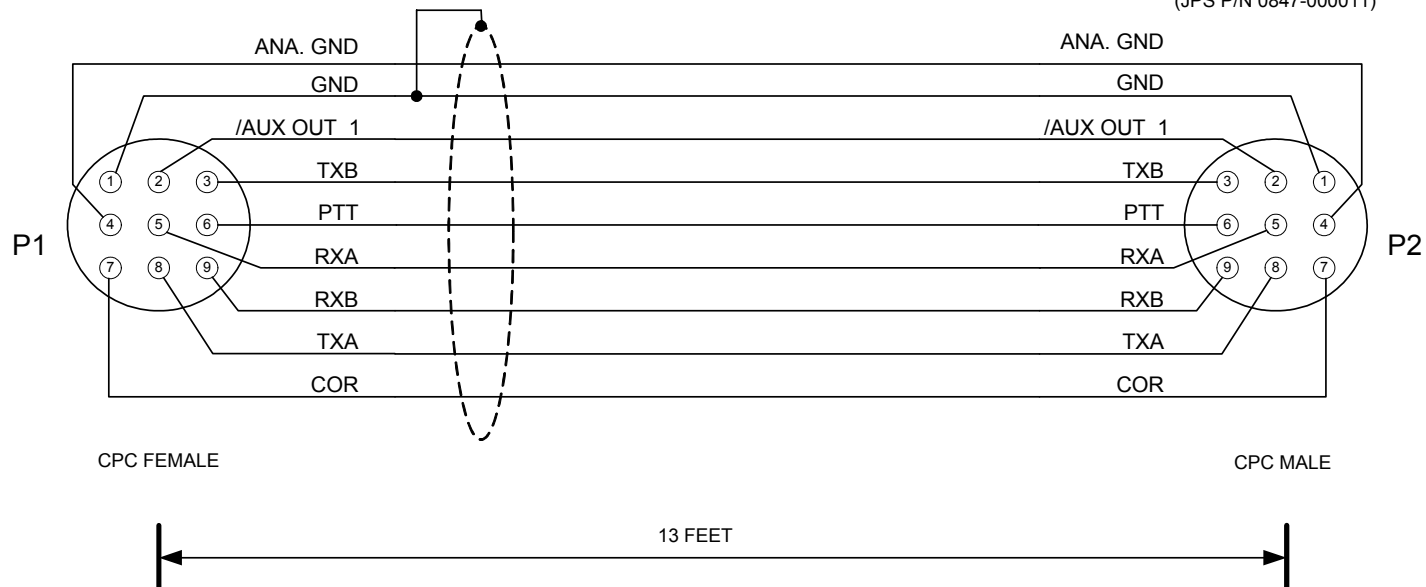
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

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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		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
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