

RLC-3 FIELD PROGRAMMING SHEETS - QUICK REFERENCE SECTION

USAGE

DESCRIPTION

VERSION 1.78

12-18-1997

000 XY	CONNECT ONE PORT X TO ANOTHER PORT Y
001 XY	MONITOR ONE PORT X FROM ANOTHER PORT Y
002 XY	DISCONNECT ONE PORT X FROM ANOTHER PORT Y
003 X	INTERROGATE WHERE A RECEIVER IS ROUTED
004 X	INTERROGATE WHERE A TRANSMITTER IS ROUTED
005 X(PORT)Y(INPUT 0-5)Z(DTMF 0-5)	PORT'S ACCESS MODE Y & Z 0=NO ACCESS 1=COR 2=PL 3=COR&PL 4=CORORPL 5=ALWAYS ACTIVE (HF)
006 X	RECALL A PORT'S ACCESS MODE
007 X(PORT)M(0-1)C(0-1)U(0-1)	CONFIGURE DTMF MUTE FOR A SELECTED PORT M=MUTE C=COVER TONE U=MUTE BYPASS 1=RECALL
008 X	CHECK DTMF MUTE, COVER TONE, BYPASS SETTINGS FOR A PORT MAY EVENTUALLY BE REMOVED
009	RECALL ENTIRE CONTROLLER'S CROSSPOINT
010 XXXYYYYYY	RE-PROGRAM COMMAND NAMES XXX=CMD# Y=NEW NAME 1 TO 6 DIGITS
011 XXX	INTERROGATE INFORMATION ON A COMMAND NAME BY NUMBER
012 YYYYYY	RECALL INFORMATION ABOUT A COMMAND NAME BY NAME
013	RADIO PORT CARD CONDITIONS PORTS NOT ON SYSTEM OR PORT FAILURE
014..019	***NOT ACTIVE YET***
020 XXXY,YY,YYY,YYYY	PROGRAM A SELECTED TIMER X=SELECTED TIMER PORT # - Y=VALUE TO BE PROG. 000-007 = MESSAGE START TIMER PORT 1-8 / 10MS 001-999 - DEFAULT = 050 008-015 = COURTESY BEEP DELAY TIMER PORT 1-8 / 10MS 001-999 - DEFAULT = 100 016-023 = TRANSMITTER HANG TIMER PORT 1-8 / 10MS 001-999 - DEFAULT = 200 (2 SEC.) 024-031 = DTMF MUTE TIMER PORT 1-8 / 10MS 001-999 - DEFAULT = 100 (1 SEC.) 032-039 = DO NOT MESS WITH THIS TIMER - MOTHER BOARD SPI RETRY TIMER (005) 50 MS 040-047 = DO NOT MESS WITH THIS TIMER - MOTHER BOARD SPI TIME OUT TIMER (024) 240 MS 048 = I/O POLLING TIMER / 10 MS - DEFAULT = 100 (1 SEC.) 049-056 = COURTESY BEEP AFTER VOICE - 10 MS 001-999 - DEFAULT = 100 (1 SEC.) 057 = RBI-1 DELAYED SEND TIMER - 10 MS 001-999 - DEFAULT = 050 (1/2 SEC.) 058 = HF SCAN DELAY TIMER - 10 MS 001-999 - DEFAULT = 050 (1/2 SEC.) 059 = SMALL DVR TIMER - AUTOMATICALLY SET BY THE CONTROLLER 060-067 = MINI HANG TIMER TX PORT 1-8 - 10 MS 001-999 - DEFAULT = 050 (1/2 SEC.) 068-075 = KEYUP DELAY TIMER PORT 1-8 - 10 MS 001-999 - DEFAULT = 050 (1/2 SEC.) 076 = CALCULATING WIND SPEED TIMER 10 MS 001-999 - DEFAULT = 226 (2,26 SEC.) 077 = WORD TOO LONG TIMER 10 MS 001-999 - DEFAULT = 150 (1 1/2 SEC.) 100-107 = IMPOLITE ID TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 020 (20 SEC.) 108-115 = INITIAL ID TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 600 (10 MIN.) 116-123 = PENDING ID TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 540 (9 MIN.) 124-131 = TIMEOUT TIMERS RX PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 180 (3 MIN.) 132-139 = DIAL TONE TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 008 (8 SEC.) 140-147 = PREACCESS TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 008 (8 SEC.) 148-163 = USER TIMERS 00-15 (START WITH C022 STOP WITH C023) (SEE APPENDIX D) 164-171 = DTMF INTERDIGIT TIMER PORT 1-8 / 1 SEC - DEFAULT = 005 (5 SEC.) 172 = REVERSE PATCH RING TIMER / 1 SEC. 001-999 - DEFAULT = 010 (10 SEC.) 173 = PING CARD TIMER / 1 SEC. 001-999 - DEFAULT = 010 (10 SEC.) 174 = DVR START RECORDING TIMER / 1 SEC. 001-999 - DEFAULT = 010 (10 SEC.) 175 = DVR RECORD LENGTH LIMIT / 1 SEC. 001-999 - DEFAULT = 030 (30 SEC.) 176-184 = LOG ON TIMER PORT 1-8 / 1 SEC. 001-999 - DEFAULT = 060 (60 SEC.) 185 = BEACON TIMER / 1 SEC 000-999 - DEFAULT = 060 (60 SEC.) 186-193 = TAIL MSG. TIMER PORT 1-8 / 1 SEC. 000-999 - DEFAULT = 300 (5 MIN.) 194-201 = RE-ENABLE KEYUP DELAY 1-8 / 1 SEC. 000-999 - DEFAULT = 060 (60 SEC.)
021 XXX	RECALL A TIMER VALUE * SEE COMMAND C020 FOR TIMERS
022 XXX	START A SELECTED TIMER * SEE COMMAND C020 FOR TIMERS
023 XXX	STOP A SELECTED TIMER * SEE COMMAND C020 FOR TIMERS
024 X(PORT 0-8)Y(SPEED)	SET UP THE CONTROLLERS RS-232 SERIAL BAUD RATE X:0=MAIN Y=300-19200 PORT 1-8 <9600
025 XX(HOURS)YY(MIN)Z	SETS THE TIME OF DAY CLOCK * Z IS: 1 = PM , 0 = AM
026	RECALL THE TIME OF DAY CLOCK IN MALE SPEECH
027	RECALL THE TIME OF DAY CLOCK IN FEMALE SPEECH
028 XXYYZZD	SETS THE DATE - X=MONTH - Y=DAY - Z=YEAR - D: 1=SUNDAY THRU 7=SATURDAY
029	RECALL THE DATE
030 YY....YY	SEND A CW MESSAGE
031 YY....YY	SEND A DTMF SEQUENCE
032 Y.....Y	SEND A SERIAL MESSAGE OUT THE RLC-3 PORT
033 X(PORT)Y.....Y	SEND A SERIAL MESSAGE OUT A RADIO CARD'S SERIAL PORT Y=DATA
034 X(PORT)YYY...YYY	SEND A SERIAL MESSAGE OUT A RADIO CARD'S SERIAL PORT Y=DECIMAL DATA 000-255
035	REMOTELY RESET THE CONTROLLER
036 YYY...YYY	SEND A VOICE MESSAGE
037 X,XX,XXX,XXXX,IE.	SET AUDIO ROUTING VARIABLE FOR COMMANDS INSIDE A MACRO
038	KILL ALL VOICE/CW RESPONSES FOLLOWING THIS COMMAND IN MACRO
039	RECALL THE PORTS IN THE CURRENT AUDIO ROUTING VARIABLE
040 LLLDDDDXXXXYYYY	SEND ONE, TWO OR THREE TONE CHORD L=LENGTH 10MS 000-255 / D=DELAY 10MS 000-255 / X=TONE 1 (0350 HZ) / Y=TONE 2 (1200 HZ) / Z=TONE 3 NOT ACTIVE YET
041 X(PORT)Y(0-3)	COURTESY BEEP ENABLE/DISABLE FOR SELECTED PORT 0=NEVER 1=ONLY RPT. 2=& EVEN LINKS
042 X(PORT)YY(WPM)	SET CW SPEED FOR A SELECTED PORT Y=05-50 WPM
043 WXXXXYYYYZZZ	SET CW 3-TONE CHORD FREQUENCIES FOR SELECTED PORT W=PORT XYZ=(0000-9999 HZ)
044 WXXXXYYYY	SET UP DTMF REGENERATE PARAMETERS W=PORT X=DTMF LENGTH Y=PAUSE
045 SSMXXTTTTNNYD..D	SETUP BEACON TABLE S=SLOT #, M=MACRO, X=# OF TIMES, T=TIME TO WAIT, N=NEXT SLOT 01-50 0=STOP, Y=TYPE OF BEACON 0=RADIO PORT(S) 1=BEACON OUT OF THE AUTOPATCH, D=AUDIO PATH OR PHONE NUMBER
046 SS(01-50)	START BEACON
047	CANCEL BEACON
048 SS ENGLISH_WORDS	START BEACON USING ENGLISH WORDS EXAMPLE: 048 THIS_IS_A_TEST_ERROR_MESSAGE - SEE 066
049	COMMAND DESCRIPTIONS - ***NOT ACTIVE YET***
050 SS(01-12)X.X(PORTS)	SET UP DEFAULT AUDIO ROUTING VARIABLES SSO=CLEAR DEFAULT/AUDIO NOT TO BE SENT ANYWHERE 01-08 CMDS ENT FROM RECEIVERS 09=SERIAL 10=AUTOMATIC MACRO/EVENT TRIGGER 11=SCHEDULER 12=I/O ALARM
051	START DIAL-TONE DTMF DIGIT SENT WILL KILL DIAL TONE ON THAT PORT (SEE CMD 020)
052	COMMAND DESCRIPTIONS - ***NOT CURRENTLY USED***
053 WWWXXZZZ...ZZ	PROGRAM A SINGLE COMMAND MACRO SEQUENCE W=MACRO X=COMMAND Z=DATA CMD USES

054 XXX RECALL MACRO CONTENTS M=MACRO#, N=# OF CMDS, C=CMD, D=DIGITS OF DATA, ? PERCENTAGE FILLED
055 XXX DELETE MACRO
056 WWWXXZZZ...ZZ APPEND A COMMAND TO A MACRO SAME ENTRY TYPE AS C053
057 XXXYYY COPY A MACRO X=SOURCE Y=DESTINATION
058 XXXYY DELETE A COMMAND IN A MACRO X=MACRO # - Y= # OF COMMANDS IN THE MACRO
059 XXXYYZZDDD INSERT A COMMAND IN A MACRO X=MACRO # - Y=NEW COMMAND LOCATION WITHIN THE MACRO
Z=NEW COMMAND # FOR INSERT D=DATA FOR THE COMMAND
060 XYZQ SERIAL PORTS U/L CASE & LINEFEED X=U CASE 1=U/L CASE Y=1 LF ON 0=LF OFF
Z=1 SUPPRESS SERIAL BY DTMF 0=SEND SERIAL FROM DTMF Q=1 QUEUED SERIAL 0= SEND BEFORE CONT.
061 X(PORTS) DISCONNECT ALL PORTS FROM A RADIO PORT
062 XXXYYYZ,ZZ,ZZZ CHANGE THE BEGINNING OF COMMAND NAMES X=FIRST CMD IN RANGE Y=LAST CMD IN RANGE
Z=NEW FIRST DIGITS FOR THE RANGE OF CMDS (062*000999# THEN CMDS ARE #000-#999)
063 YYY...YYY SEND A POLITE VOICE MESSAGE KERCHUNK WILL INTERRUPT MSG. - SAME AS CMD 036
064 XXXYYY...YYY SEND A POLITE VOICE MESSAGE AND IF INTERRUPTED EXECUTE COMMAND C=CMD Y=WORD
065 RESTORE THE AUDIO ROUTING VARIABLE (UNDO 037 AND 038)(MUST BE USED WITHIN A MACRO.)
066 VOICE_TEXT_ENGLISH SEND A VOICE MESSAGE USING ENGLISH WORDS WORD LIST 000-685 OR SPELLED IF NOT IN LIST
~~067..069~~ ~~COMMAND DESCRIPTION ***NOT CURRENTLY USED***~~
070 X(PORT) CONFIGURE A REPEATER FOR PREACCESS
071 X(PORT)Y(O-1)ZZ CONFIGURE A LINK FOR PREACCESS Y:1=DIAL TONE ON 0=OFF - Z=SITE ACCESS CODE#
072 X DISABLE PREACCESS REQUIREMENT FOR A PORT SETS PORT BACK TO FACTORY DEFAULTS
073 RECALL PORTS WITH PREACCESS REQUIREMENT
074 ALLOW ACCESS TO A PORT THAT REQUIRES PREACCESS
075 P(PORT)XYZIF(O-1) SET STOP ACCESS CONDITIONS 0=STOP ACCESS X=CMD EXEC Y=CMD INVALID
Z=WHEN COR DROPS AFTER DTMF ENTERED I=WHEN DTMF INTERDIGIT EXPIRES F=WHEN FORCE EXECUTION DIGIT IS PRESSED
RECALL STOP ACCESS CONDITIONS
076 P(PORT) ISOLATE A PORT FROM THE REST OF THE SYSTEM
077 X(PORT) SET THE COMMAND ENTRY FUNCTIONS 9=SERIAL IS "I", C=CHAIN, T=TIME, E=NEW DIGIT 0=OFF
078 X(PORT1-9)CTE RECALL THE COMMAND ENTRY SETUP FOR A PORT PORT-9=SERIAL C=CHAIN T=TIME E=DIGIT
079 X(PORT1-9) ~~COMMAND DESCRIPTION ***NOT CURRENTLY USED***~~
~~080..081~~
082 XXYYMM SET UP A SCHEDULER EVENT HOURLY X=SCHEDULER SLOT# Y=COMMAND # M=MIN.
082 XXXYYYHHMMMP SET UP A SCHEDULER EVENT DAILY H=HOUR P=0 AM 1 PM
082 XXXYYYWHMMMP SET UP A SCHEDULER EVENT WEEKLY W=DAY OF WEEK 1=SUNDAY THRU 7= SATURDAY
082 XXXYYYDDHHMM SET UP A SCHEDULER EVENT MONTHLY D=DAY OF MONTH 01-31
082 XXXYYNDDHHMMMP SET UP A SCHEDULER EVENT YEARLY N=MONTH OF THE YEAR 01-12
083 XX RECALL A SCHEDULER EVENT X=SLOT S=ON/OFF C=CMD FREQ 0=YEAR 1=MONTH 2=WK 3=DAILY 4=HR
084 XX(SLOT)Y(O-1) ENABLE/DISABLE A SCHEDULER EVENT X=SLOT - Y 0=EVENT OFF 1=EVENT ON
085 X(PORT)Y(O-1) ENABLE/DISABLE IDING A PORT 0=ID OFF - 1=ID ON
086 RECALL WHICH PORTS HAVE IDS ENABLED
087 X(PORT)Y(O-1) SET RANDOM OR ROTATING PENDING IDS 0=ROTATING 1=RANDOM
088 RECALL RANDOM OR ROTATING PENDING ID SELECTION VOICE WILL LIST ROTATE
~~089~~ ~~COMMAND DESCRIPTION ***NOT CURRENTLY USED***~~
090 XY,Y..Y READ WHETHER INPUT LINE IS HIGH OR LOW X=BOARD# (1 OR 2) Y=INPUT LINE# (1-8)
091 XY,Y..Y EXECUTE INPUT LINE HIGH OR LOW MACRO X=BOARD# (1 OR 2) Y=INPUT LINE# (1-8)
092 XYZQ* ENABLE/DISABLE INPUT LINE ALARM X=BOARD Y=LINE# Z:0=LOW/1=HIGH Q:0=ALARM OFF
1=ALARM ON
093 XY,Y..Y TURN OUTPUT LINE ON X=BOARD# (1 OR 2) Y=OUTPUT LINE# (1-8)
094 XY,Y..Y TURN OUTPUT LINE OFF X=BOARD# (1 OR 2) Y=OUTPUT LINE# (1-8)
095 XY,Y..Y RECALL WHETHER OUTPUT LINE IS ON OR OFF X=BOARD# (1 OR 2) Y=INPUT LINE# (1-8)
096 0-1,XX(00-64),XX(O-1) CONTROL/RECALL EXTENDED OUTPUT LINES 0=OFF XX=RECALL XX0=OUTPUT LINE OFF
I/O BOARD 1 LINE 6=LATCH 7=CLOCK 8=DATA H/L
~~097..099~~ ~~PULSE OUTPUT LINES ***NOT ACTIVE YET***~~
100 XY,Y..Y READ ANALOG INPUT LINE X=BOARD# (1 OR 2) Y=INPUT LINE# (1-8)
101 XYZ SET RESOLUTION FOR ANALOG INPUT X=BOARD# (1 OR 2) Y=INPUT LINE# (1-8) Z=#DIGITS
AFTER DECIMAL POINT
102-COMMAND-SEE BELOW SET CONVERSION RATIO FOR ANALOG INPUT

COMMAND	DESCRIPTION	RESOLUTION	FORMAT:- C I O I IS THE DEFAULT COMMAND NAME.
102 X Y N WWW M ZZZZ	GENERAL FORM		X - IS THE I/O BOARD NUMBER (1-2)
102 X Y 1 0460 0 0440	TEMPERATURE	1 DEGREE F (0)	Y - IS THE ANALOG INPUT NUMBER (1-8)
102 X Y 1 0273 0 0227	TEMPERATURE	1 DEGREE C (0)	N IS 1 FOR NEGATIVE, 0 FOR POSITIVE FOR THE FOLLOWING NUMBER
102 X Y 0 0000 0 0005	(0)0 TO 5 VOLTS	1 VOLT (0)	W IS THE READING WITH A 0 VOLT INPUT WITH LEADING 0S IF NECESSARY-
102 X Y 0 0000 0 0050	(1)0 TO 5 VOLTS	1/10 VOLT (1)	M IS 1 FOR NEGATIVE, 0 FOR POSITIVE FOR THE FOLLOWING NUMBER
102 X Y 0 0000 0 0500	0 TO 5 VOLTS	1/100 VOLT (2)	Z IS THE READING WITH A 5 VOLT INPUT TO THE PROCESSOR WITH LEADING
102 X Y 0 0000 0 0025	0 TO 25 VOLTS	1 VOLT (0)	0S IF NECESSARY. IF THE VOLTAGE DIVIDER ON THE I/O BOARD IS
102 X Y 0 0000 0 0250	0 TO 25 VOLTS	1/10 VOLT (1)	TURNED ON, THIS IS THE READING WITH A 25 VOLT INPUT.
102 X Y 0 0000 0 2500	0 TO 25 VOLTS	1/100 VOLT (2)	
102 X Y 0 0000 0 0100	0 TO 100 %	1 PERCENT (0)	
102 X Y 0 0000 0 0360	0 TO 360 DEG	1 DEGREE (0)	

103 XYNWWW CALIBRATE AN ANALOG INPUT XY2=RESET
104 XYLNWWW SET AN ANALOG ALARM L:0=ALARM LOW 1=ALARM HIGH
105 XYWWW SET ANALOG ALARM HYSTERESIS
106 XYLN ENABLE/DISABLE AN ANALOG ALARM L:0=ALARM LOW 1=HIGH N:0=DISABLE 1=ENABLE
107 X RECALL ANALOG LINES IN ALARM
108 XY RECALL ANALOG LINE CONFIGURATION X,Y,W,Z,CALIBRATE,LO,L1,HYSTERESIS,LO ON/OFF, L1 ON/OFF
109 PULSE INPUT LINE COUNTER ANEMOMETER-WIND SPEED COUNTER - COUNTS CONTACT CLOSURES
110 X(PORT)Y(O-3) CONFIGURE THE AUTOPATCH 0=NO READ BACK 1=READ ALL# 2=READ AND MUST BE KERCHUNKED BEFORE,
DURING OR SHORTLY AFTER NUMBER READBACK TO DIAL 3=READ BACK AND STOP DIAL IF KERCHUNKED
MANUAL OFF HOOK
111 NORMAL FORWARD DIAL X=AUTODIAL SLOT (000-999) OR Y=1 1 DIGIT PHONE # OFF HOOK PATCH TIMER RESET
112 XXX,ORYYY...YYYY FORWARD DIAL WITH NO LONG DISTANCE CHECKING X=AUTODIAL SLOT OR Y=1 1 DIGIT 053xxx03018
PHONE # 053xxx038
114 HANG UP THE AUTOPATCH 053xxx022131
115 HANG UP FROM ONLY PORTS THAT ARE CONNECTED AND THAT CAN HEAR AUTOPATCH 010xxx*3
116 IIIAAAD...D SET AND RECALL PREDIAL DIGITS AND TIMING I=INITIAL DELAY 10MS A=AFTER PREDIAL 10MS
D=ANY UP TO 10 DIGITS FOR PREDIAL

117..118	COMMAND DESCRIPTION ***NOT CURRENTLY USED***
119 SSSN..N	SET ALLOWED PREFIX SLOT S=SLOT # N=AREA CODE/PREFIX #=WILDCARD DIGITS
120 SSS(000-999)	RECALL ALLOWED PREFIX SLOT
121 SSS(000-099)N..N	SET NUISANCE NUMBER SLOT S=SLOT # N=AREA CODE/PREFIX #=WILDCARD DIGITS
122 SSS(000-099)	RECALL NUISANCE NUMBER SLOT
123 N..N	TEST DIALING TABLES N=NUMBER WITH DIALING TABLE
124 SSS(000-999)N..N	SET - PROGRAM AUTODIAL SLOT S=SLOT # N=UP TO ANY 11 DIGIT PHONE #
125 SSS(000-999)	RECALL AUTODIAL SLOT
126 SSS(000-999)X(0-1)C(0-1)	SET WHETHER TO SEND PREDIAL DIGITS FOR AUTODIAL SLOT AND CALL SIGN S=SLOT # X 0=NO 1=SEND PREDIAL C 1=CALL SIGN OF USER ASSIGNED TO THAT SLOT IS SENT 0=AUTODIAL SLOT NUMBER IS SENT
127 SSS(000-999)X(0-1)	AUTODIAL SLOT S=SLOT # X: 0=DISABLE 1=ENABLE SLOT
128 X(PORT)Y(0-1)	SET HALF-FULL DUPLEX MODE FOR A PORT Y: 1= HALF DUPLEX 0= FULL DUPLEX
129 X	RECALL ALL HALF DUPLEX PORTS
130 PCCC,&DDD	BLOCK COMMAND EXECUTION FROM PORT P=PORT C=CMD RANGE LOW# D=CMD RANGE HIGH#
131 PCCC,&DDD	ALLOW COMMAND EXECUTION FROM PORT P=PORT C=CMD RANGE LOW# D=CMD RANGE HIGH#
132 CCC	RECALL BLOCKED PORTS C=COMMAND NUMBER TO BLOCK
133 0	DISABLE REVERSE PATCH MODE
1 XX(RINGS)Y....Y	RING OVER THE AIR MODE AFTER XX RINGS Y=PORTS
2 XX(RINGS)N....N	CONTROL MODE 9 SECONDS TO ENTER ACCESS CODE N..N AND 134(DTMF "ABCD" WILL HAVE TO BE RENAMED)
134	ACCESS REVERSE PATCH CONTROL MODE (FOR THE CONTROLLERS INTERNAL USE)
135	ANSWER A REVERSE AUTOPATCH OVER THE AIR (MUST BE RINGING TO ANSWER)
136 XXXYYYYZZZZ	REVERSE AUTOPATCH RING X=RING LENGTH Y=TONE 1 FREQ 0660 HZ Z=TONE 2 FREQ 1000 HZ
137 XXX(000-999)	DIAL A AUTODIAL SLOT NUMBER
138 P(PORT)XX...XX	DIRECT SPI SEND OUT OF RADIO CARD'S SERIAL PORT A HEX NUMBER 00-FF (BYTE OF DATA)
139 C SS OR 000	SETUP RBI-1 / RLC - ICOM 900/901 INTERFACE 000= DEFAULT FOR THE RBI-1 C=CONNECTOR 1-4 SS=SET UP CODE - BAND OFFSET TX/RX 28MHZ=00 50MHZ=05 140-160MHZ=10 220MHZ=15 430-440MHZ=20 1200MHZ=25 OFFSET 100KHZ=30 500KHZ=35 600KHZ=40 1MHZ=45 1.6MHZ=50 1.7MHZ=55 5MHZ=60 12MHZ=65 20MHZ=70 TRANSCIVE ENABLE=85 RECEIVE ONLY=90 DISABLE MODULE=95
140 P(PORT)	SET A PORT FOR RBI-1 (MUST BE SET FOR RBI-1 COMMANDS TO WORK)
141 X,X(0-1)	CONTROL / RECALL RBI-1 OUTPUT LINES X=RECALL X0=OUTPUT OFF X1=OUTPUT ON
142 XXXXXXY	RBI-1 OR RLC-ICM SET FREQUENCY X=NEW FREQUENCY Y=OPTIONAL OFFSET
143 X(0-3)	RBI-1 OR RLC-ICM SET OFFSET FORMAT 0 0=-,1=+,2=SIMP,3=-20 FORMAT 1 0=-20,1=-,2=SIMP,3=+
144 X	RBI-1 OR RLC-ICM SET OFFSET FORMAT 0(FORMAT 0(DEFAULT)) 1=FORMAT 1
145 X(0-2)	RBI-1 SET RF POWER LEVEL 0=LOW 1=MEDIUM 2=HIGH
146 XXXX	RBI-1 OR RLC-ICM SET PL TONE FREQ. 67.0= 67,670,6700 / 250.3=250,2503 RLC-ICM=33.0/254.1
147 X(0-1)	RBI-1 OR RLC-ICM TURN PL ENCODE OFF / ON 0=OFF 1=ON
148 X(0-1)	RBI-1 OR RLC-ICM TURN PL DECODE OFF / ON 0=OFF 1=ON
149	RBI-1 OR RLC-ICM RECALL BAND, FREQUENCY, AND OFFSET VOICE RESPONSE XXX.YYY 0
150	RBI-1 OR RLC-ICM RECALL ALL RBI-1 SETTINGS PORT,FREQ.,OFFSET,POWER,PL,PL-TX,PL-RX
151 X	RBI-1 TURN RADIO POWER ON OR OFF 0=OFF 1+ON
152 X..X	RBI-1 GOTO RADIO MEMORY X=MEMORY CHANNEL SUPPORTED BY THE RADIO
153	COMMAND DESCRIPTION ***NOT CURRENTLY USED***
154	COMMAND DESCRIPTION ***NOT CURRENTLY USED***
155 P(PORT)F(0-1)	PTT ENABLE OR DISABLE 0=PTT LINE OFF 1=PTT LINE ON (DEFAULT)
156	RECALL WHICH PTT LINES ARE ENABLED
157 YYY(000-252)ZZZ	EVENT MACRO ASSIGN Y=EVENT NUMBER (SEE EVENT TABLE) Z=COMMAND NUMBER
158 XXX	RECALL EVENT MACRO X=EVENT NUMBER
159 XXX(000-252)Y(0-1)	EVENT MACRO ENABLE/DISABLE 0=OFF 1=ON
160 I(1-2)H(0-2)L(1-8)	CLEAR ANALOG HIGHS/LOWS I=I/O BOARD H:0=LOW 1=HIGH 2=BOTH L=I/O LINE
161 I(1-2)L(1-8)XX(TIME)	SET ANALOG SMOOTHING 50=9SEC,60=13,70=18,80=30,90=50,95=120,97=220,98=325,99=11 MIN
162 Y....Y	ALWAYS SEND A SERIAL MESSAGE OUT THE MOTHER BOARD PORT IMPOLITE - LIKE 0032
163 X....X	KEYPAD TEST TO CHECK DTMF DIGITS "*"=S "# "=P
164	RECALL CONTROLLERS SOFTWARE VERSION
165	RESET COP WATCHDOG TIMER COP=COMPUTER OPERATING PROPERLY - MACRO TOO LONG CAUSES RESET
166	DISPLAY STATUS SCREEN FORMATTED SCREENS OF SERIAL INFORMATION OUT THE MOTHER BOARD PORT
167	DO NOTHING RETURNS THE OK ERROR CODE - DEFAULT COMMAND TO EXECUTE COMMANDS LIKE C164
168 PX	SET DTMF ACCEPTANCE REQUIREMENTS P=PORT X= 0=COR OR PL 1=PORT ACTIVE
169 CCC...CCC	ALWAYS SEND SERIAL OUT MAIN SERIAL PORT BY ASCII CODE 032 IE.
170	DVR - RECORD AND PLAY AUDIO TEST
171 T,TT,TTT	DVR - RECORD TRACK (NON-PROMPTED)
172 T,TT,TTT	DVR - RECORD TRACK (PROMPTED)
173 TTT,T..T,TTT..TTT	DVR - PLAY TRACKS TTT=PLAY SINGLE T..T=PLAY MULTIPLE TTT...TTT...=PLAY MULTIPLE SEPARATE
174 TTT,T..T,TTT..TTT	DVR - ERASE TRACKS TTT=SINGLE T..T=MULTI IN A ROW TTT...TTT=START THRU FINISH
175	DVR - RECORD PUBLIC MAIL
176	DVR - CHECK PUBLIC MAIL
177 S(1-9)	DVR - RETRIEVE PUBLIC MAIL
178	DVR - ERASE PUBLIC MAIL ERASES ONLY THE LAST MESSAGE THAT WAS RETRIEVED
179 SSS	DVR - RECORD PRIVATE MAIL SSS=NUMBER OF THE MAIL BOX TO LEAVE MESSAGE IN
180 SSS	DVR - RETRIEVE PRIVATE MAIL SSS=NUMBER OF THE MAIL BOX TO GET THE MAIL FROM
181	DVR - ERASE PRIVATE MAIL ERASES ALL THE CONTENTS OF A MAIL BOX THAT WAS RETRIEVED
182 X	DVR - SELECT DVR TYPE 0=NONE INSTALLED 1=LARGE DVR INSTALLED 2=SMALL DVR INSTALLED
183 SS,SS..EE	DVR - RECORD A MESSAGE ON THE SMALL DVR SS=START SLOT NUMBER EE=END SLOT (OPTIONAL)
184 S,SS,SS..SS	DVR - PLAYBACK A SMALL DVR MESSAGE S=SINGLE 0-9 SS=SINGLE 00-34 SS..SS=MULTI 00-34
185 SS,SS..EE	DVR - ERASE SMALL DVR MESSAGE SS=SLOT TO ERASE SS(START)..EE(END)=MULTI-EE(OPTIONAL)
186 UUU,E,L,T,P..P	SET UP USER PASSWORD U=USER # E=ENABLE/DISABLE L=LEVEL 1-7 T=TYPE 0=NONE/FIXED 1-8=DIGITS OF CHALLENGE PASSWORDS P..P=PASSWORD (A MAXIMUM OF UP TO 8 DIGITS 0-9 & A-D CAN BE USED) 186 UUU=RECALLS PASSWORD INFO FOR A USER (IT IS NOT A GOOD IDEA BROADCAST THIS INFO OVER THE AIR) ENABLE THE SECURITY PASSWORD SYSTEM - LEVEL 0=186 000 1 0 LEVEL 2=186 000 12 DISABLE=18600017

187 UUUP..P USER LOG-ON U=USER NUMBER P=PASSWORD (7 TO 4 DECAY DIGITS CAN BE ADDED WITH TYPE 1-4 CHALLENGED PASSWORD ENTRY REQUESTS - A MAXIMUM OF 8 PASSWORD DIGITS FOR ENTRY IS ALLOWED)

188 RECALL THE USER THAT IS CURRENTLY LOGGED INTO THE CONTROLLER

189 USER LOG-OFF

190 CCC,L OR CCCEEE,L ASSIGN A USER LEVEL TO A COMMAND CCC=RECALL CCCL=ASSIGN EEE=END OF RANGE OF CMDS

191 UUU OR UUUWWW...WWW ASSIGN / RECALL A CALLSIGN TO A USER U=USER # W=WORDS FROM WORD LIST < 255 8 WORD MAX

192..194 COMMAND DESCRIPTION ****NOT CURRENTLY USED****

195 D(O-3)P CONFIGURE HF MODE 0=DISABLE 1=ENABLE/P=PREFIX DIGIT 2=HF OFF W/O DISABLING 3=RECALL SETTINGS

196 O,PRX.XX CONFIGURE HF RADIO 0=RECALL CONFIG, P=PORT, R=RIG MANF/1=ICOM 2=KENWOOD 3=YAESU, X=RIG MODEL
 ICOM 735=04 R7000=08 275=16 375=18 475=20 575=22 1275=24 R71=26 751=2761=30 271=32
 471=34 1271=36 781=38 725=40 R9000=42 765=44 970=46 726=48 R72=50 7100=52 706=72
 XX..OTHER
 KENWOOD 450,850,870,570,690,950 AND OTHER RECENT RADIOS=0 TS-50,940,440,140,680,711,790A,B11,
 R5000 AND OTHER EARLY RADIOS=1
 YAESU 736=0 757=1 767=2 890,900,990,747,FT1000=3 NOT SUPPORTED ARE 727 AND FR68800

197E(O-1),C(NOV=0 EXTRA=4) SET/RECALL TRANSMIT/SCAN BAND EDGES E=RECALL BAND EDGES C=SET BANDS-CLASS OF LICENSE
 EBB(OO-15) RECALL EDGES FOR ONE BAND BB OO=160 O1=80 O2=40 O3=30 O4=20 O5=17 O6=15 O7=12 O8=28
 O9=29 10=6 11=2 12=1.25CM 13=70CM 14=33CM 15=23CM 16=USER DEFINED
 EBB0 SET EDGES FOR ONE BAND FOR A CLASS
 EBBUF..F*F..F SET UPPER OR LOWER EDGE FOR ONE BAND TO A SPECIFIC FREQUENCY U O=LOWER EDGE /
 1=UPPER EDGE F=FREQUENCY *=SEPARATOR BETWEEN MHZ AND KHZ

198 HF MODE ENABLE TURNS ON THE RE-DEFINED HF DTMF REMOTE ACCESS KEYBOARD PAD
 "KEYPAD" DIRECT ENTRY P(PREFIX)29*600# OR UNKEY - RECALL MEM P(PREFIX)5(RECALL)15(MEM CH)#
 1=REMOTE IN RECEIVE ONLY OR WITH ADDED DATA DIGIT 1=USB 2=LSB 3=AM 4=FM 5=CW
 2=RECEIVE AND TRANSMIT ON OR WITH ADDED DATA DIGIT(S) 1=TOGGLE PL RX 2=TOGGLE PL TX 3=PL OFF
 8=RECALL PL <HZ>=SET PL FREQUENCY
 3=HF MODE OFF/EXIT HF MODE - RECEIVE AND TRANSMIT OFF
 4=REMOTE DOWN 100 HZ OR ADDED DATA DIGITS <XXX>=MACRO CMD EXAMPLE: 026 RECALLS THE TIME
 5=SELECT VFO A OR ADDED DATA DIGITS RECALL MEMORY CHANNEL ## OO..99
 6=REMOTE UP 100 HZ
 7=REMOTE DOWN 500 HZ OR ADDED DATA START SCAN 1=DOWN SLOW 3=UP SLOW 4=DOWN MED. 6=UP MED.
 7=DOWN FAST 9=UP FAST
 8=RECALL FREQUENCY OF CURRENT VFO OR ADDED DATA DIGIT(S) 0=OFFSET OFF 1=OFFSET ON 11=MINUS OFFSET
 10=PLUS OFFSET 1XY=SET SIZE OF OFFSET FOR THIS BAND OO=0 O1=100KHZ O2=500KHZ O3=600KHZ
 O4=1MHZ O5=1.6MHZ O7=5MHZ O8=12MHZ O9=20MHZ
 9=REMOTE UP 500 HZ
 0=SELECT VFO B OR ADDED DATA DIGITS WRITE MEMORY CHANNEL ## OO..99
 *=FREQUENCY <POINT> KEY
 #=ENTER / FORCE-EXECUTION DIGIT
 A=REMOTE UP 20 HZ
 B=REMOTE DOWN 20 HZ
 C=NOT DEFINED
 D=NOT DEFINED

ENTER HF COMMAND W/O BEING IN HF MODE P=PREFIX H=HF KEYPAD 198 COMMANDS
 EXECUTE AN INTERNAL MACRO (CAN BE UTILIZED AS USER MACROS)
 EXECUTE A USER MACRO

AUTOMATIC MACRO NUMBERS

200 - COMMAND LENGTH NOT MATCHED	248 - PENDING ID #3 PORT 5	296 - I/O #1 ANALOG LOW ALARM #5
201 - TOO FEW DATA DIGITS ENTERED	249 - PENDING ID #3 PORT 6	297 - I/O #1 ANALOG LOW ALARM #6
202 - TOO MANY DATA DIGITS ENTERED	250 - PENDING ID #3 PORT 7	298 - I/O #1 ANALOG LOW ALARM #7
203 - INVALID # OF DATA DIGITS ENTERED	251 - PENDING ID #3 PORT 8	299 - I/O #1 ANALOG LOW ALARM #8
204 - EXECUTION BLOCKED FROM THIS PORT	252 - PENDING ID #4 PORT 1	300 - I/O #2 ANALOG LOW ALARM #1
205 - USER LEVEL TO LOW TO EXECUTE CMD	253 - PENDING ID #4 PORT 2	301 - I/O #2 ANALOG LOW ALARM #2
206 - MACRO RESERVED FOR INTERNAL USE	254 - PENDING ID #4 PORT 3	302 - I/O #2 ANALOG LOW ALARM #3
207 - COMMAND EXECUTED OK	255 - PENDING ID #4 PORT 4	303 - I/O #2 ANALOG LOW ALARM #4
208 - INTERNAL ERROR JUST OCCURRED	256 - PENDING ID #4 PORT 5	304 - I/O #2 ANALOG LOW ALARM #5
209 - NESTED MACRO DEPTH LIMIT REACHED	257 - PENDING ID #4 PORT 6	305 - I/O #2 ANALOG LOW ALARM #6
210 - INVALID VALUE ENTERED	258 - PENDING ID #4 PORT 7	306 - I/O #2 ANALOG LOW ALARM #7
211 - COMMAND DOESN'T EXIST	259 - PENDING ID #4 PORT 8	307 - I/O #2 ANALOG LOW ALARM #8
212 - BAD AUTOPATCH NUMBER	260 - IMPOLITE ID PORT 1	308 - I/O #1 ANALOG ALARM TO NORMAL #1
213 - GENERAL AUTOPATCH ERROR	261 - IMPOLITE ID PORT 2	309 - I/O #1 ANALOG ALARM TO NORMAL #2
214 - USER REQUESTED DISABLED- INVALID	262 - IMPOLITE ID PORT 3	310 - I/O #1 ANALOG ALARM TO NORMAL #3
215 - DIGITAL VOICE RECORDER IS BUSY	263 - IMPOLITE ID PORT 4	311 - I/O #1 ANALOG ALARM TO NORMAL #4
216 - MACRO IS FULL	264 - IMPOLITE ID PORT 5	312 - I/O #1 ANALOG ALARM TO NORMAL #5
217 - HF ERROR	265 - IMPOLITE ID PORT 6	313 - I/O #1 ANALOG ALARM TO NORMAL #6
218 - RESERVED	266 - IMPOLITE ID PORT 7	314 - I/O #1 ANALOG ALARM TO NORMAL #7
219 - RESERVED	267 - IMPOLITE ID PORT 8	315 - I/O #1 ANALOG ALARM TO NORMAL #8
220 - INITIAL ID PORT 1	268 COURTESY BEEP COMMAND SLOT PORT 1	316 - I/O #2 ANALOG ALARM TO NORMAL #1
221 - INITIAL ID PORT 2	269 COURTESY BEEP COMMAND SLOT PORT 2	317 - I/O #2 ANALOG ALARM TO NORMAL #2
222 - INITIAL ID PORT 3	270 COURTESY BEEP COMMAND SLOT PORT 3	318 - I/O #2 ANALOG ALARM TO NORMAL #3
223 - INITIAL ID PORT 4	271 COURTESY BEEP COMMAND SLOT PORT 4	319 - I/O #2 ANALOG ALARM TO NORMAL #4
224 - INITIAL ID PORT 5	272 COURTESY BEEP COMMAND SLOT PORT 5	320 - I/O #2 ANALOG ALARM TO NORMAL #5
225 - INITIAL ID PORT 6	273 COURTESY BEEP COMMAND SLOT PORT 6	321 - I/O #2 ANALOG ALARM TO NORMAL #6
226 - INITIAL ID PORT 7	274 COURTESY BEEP COMMAND SLOT PORT 7	322 - I/O #2 ANALOG ALARM TO NORMAL #7
227 - INITIAL ID PORT 8	275 COURTESY BEEP COMMAND SLOT PORT 8	323 - I/O #2 ANALOG ALARM TO NORMAL #8
228 - PENDING ID #1 PORT 1	276 - I/O #1 ANALOG HIGH ALARM #1	324 - I/O #1 INPUT LINE HIGH #1
229 - PENDING ID #1 PORT 2	277 - I/O #1 ANALOG HIGH ALARM #2	325 - I/O #1 INPUT LINE HIGH #2
230 - PENDING ID #1 PORT 3	278 - I/O #1 ANALOG HIGH ALARM #3	326 - I/O #1 INPUT LINE HIGH #3
231 - PENDING ID #1 PORT 4	279 - I/O #1 ANALOG HIGH ALARM #4	327 - I/O #1 INPUT LINE HIGH #4
232 - PENDING ID #1 PORT 5	280 - I/O #1 ANALOG HIGH ALARM #5	328 - I/O #1 INPUT LINE HIGH #5
233 - PENDING ID #1 PORT 6	281 - I/O #1 ANALOG HIGH ALARM #6	329 - I/O #1 INPUT LINE HIGH #6
234 - PENDING ID #1 PORT 7	282 - I/O #1 ANALOG HIGH ALARM #7	330 - I/O #1 INPUT LINE HIGH #7
235 - PENDING ID #1 PORT 8	283 - I/O #1 ANALOG HIGH ALARM #8	331 - I/O #1 INPUT LINE HIGH #8
236 - PENDING ID #2 PORT 1	284 - I/O #2 ANALOG HIGH ALARM #1	332 - I/O #2 INPUT LINE HIGH #1
237 - PENDING ID #2 PORT 2	285 - I/O #2 ANALOG HIGH ALARM #2	333 - I/O #2 INPUT LINE HIGH #2
238 - PENDING ID #2 PORT 3	286 - I/O #2 ANALOG HIGH ALARM #3	334 - I/O #2 INPUT LINE HIGH #3
239 - PENDING ID #2 PORT 4	287 - I/O #2 ANALOG HIGH ALARM #4	335 - I/O #2 INPUT LINE HIGH #4
240 - PENDING ID #2 PORT 5	288 - I/O #2 ANALOG HIGH ALARM #5	336 - I/O #2 INPUT LINE HIGH #5
241 - PENDING ID #2 PORT 6	289 - I/O #2 ANALOG HIGH ALARM #6	337 - I/O #2 INPUT LINE HIGH #6
242 - PENDING ID #2 PORT 7	290 - I/O #2 ANALOG HIGH ALARM #7	338 - I/O #2 INPUT LINE HIGH #7
243 - PENDING ID #2 PORT 8	291 - I/O #2 ANALOG HIGH ALARM #8	339 - I/O #2 INPUT LINE HIGH #8
244 - PENDING ID #3 PORT 1	292 - I/O #1 ANALOG LOW ALARM #1	340 - I/O #1 INPUT LINE LOW #1
245 - PENDING ID #3 PORT 2	293 - I/O #1 ANALOG LOW ALARM #2	341 - I/O #1 INPUT LINE LOW #2
246 - PENDING ID #3 PORT 3	294 - I/O #1 ANALOG LOW ALARM #3	342 - I/O #1 INPUT LINE LOW #3
247 - PENDING ID #3 PORT 4	295 - I/O #1 ANALOG LOW ALARM #4	343 - I/O #1 INPUT LINE LOW #4

344 - I/O #1 INPUT LINE LOW #5
345 - I/O #1 INPUT LINE LOW #6
346 - I/O #1 INPUT LINE LOW #7
347 - I/O #1 INPUT LINE LOW #8
348 - I/O #2 INPUT LINE LOW #1
349 - I/O #2 INPUT LINE LOW #2
350 - I/O #2 INPUT LINE LOW #3
351 - I/O #2 INPUT LINE LOW #4
352 - I/O #2 INPUT LINE LOW #5
353 - I/O #2 INPUT LINE LOW #6
354 - I/O #2 INPUT LINE LOW #7
355 - I/O #2 INPUT LINE LOW #8
356 - TIME-OUT TIMER MESSAGE #1
357 - TIME-OUT TIMER MESSAGE #2
358 - TIME-OUT TIMER MESSAGE #3
359 - TIME-OUT TIMER MESSAGE #4
360 - TIME-OUT TIMER MESSAGE #5
361 - TIME-OUT TIMER MESSAGE #6
362 - TIME-OUT TIMER MESSAGE #7
363 - TIME-OUT TIMER MESSAGE #8
364 - TIME-OUT CLEAR MESSAGE #1
365 - TIME-OUT CLEAR MESSAGE #2
366 - TIME-OUT CLEAR MESSAGE #3
367 - TIME-OUT CLEAR MESSAGE #4
368 - TIME-OUT CLEAR MESSAGE #5
369 - TIME-OUT CLEAR MESSAGE #6
370 - TIME-OUT CLEAR MESSAGE #7
371 - TIME-OUT CLEAR MESSAGE #8
372 - PRE-ACCESS PORT 1
373 - PRE-ACCESS PORT 2
374 - PRE-ACCESS PORT 3
375 - PRE-ACCESS PORT 4
376 - PRE-ACCESS PORT 5
377 - PRE-ACCESS PORT 6
378 - PRE-ACCESS PORT 7
379 - PRE-ACCESS PORT 8
380 - POWER ON RESET MACRO
381 - TEMPORARY MACRO
382 - USER TIMER 00 EXPIRED
383 - USER TIMER 01 EXPIRED
384 - USER TIMER 02 EXPIRED
385 - USER TIMER 03 EXPIRED
386 - USER TIMER 04 EXPIRED
387 - USER TIMER 05 EXPIRED
388 - USER TIMER 06 EXPIRED
389 - USER TIMER 07 EXPIRED
390 - USER TIMER 08 EXPIRED
391 - USER TIMER 09 EXPIRED
392 - USER TIMER 10 EXPIRED
393 - USER TIMER 11 EXPIRED
394 - USER TIMER 12 EXPIRED
395 - USER TIMER 13 EXPIRED
396 - USER TIMER 14 EXPIRED
397 - USER TIMER 15 EXPIRED
398 - BEFORE PATCH OFF HOOK
399 - AFTER PATCH ON HOOK
400 - PATCH BUSY MESSAGE
401 - BEFORE PATCH NUMBER READBACK
402 - AFTER PATCH NUMBER READBACK
403 - DIAL PATCH IF READBACK INTERRUPT
404 - VOICE MESSAGE "AUTOPATCH OFF"
405 - DTMF COVER TONE
406 - USER LOG-ON MESSAGE
407 - USER LOG-ON FAIL MESSAGE
408 - USER LOG-OFF MESSAGE
409 - BEACONING MESSAGE MACRO
410 - BEACONING MESSAGE MACRO
411 - SPEAK "AUTODIAL" LIKE 401
412..499 - RESERVED
500..999 - USER MACROS

035 - PORT ACTIVE PORT 4
036 - PORT ACTIVE PORT 5
037 - PORT ACTIVE PORT 6
038 - PORT ACTIVE PORT 7
039 - PORT ACTIVE PORT 8
040 - PORT INACTIVE PORT 1
041 - PORT INACTIVE PORT 2
042 - PORT INACTIVE PORT 3
043 - PORT INACTIVE PORT 4
044 - PORT INACTIVE PORT 5
045 - PORT INACTIVE PORT 6
046 - PORT INACTIVE PORT 7
047 - PORT INACTIVE PORT 8
048 - ANY CONNECTED RX ACTIVE 1
049 - ANY CONNECTED RX ACTIVE 2
050 - ANY CONNECTED RX ACTIVE 3
051 - ANY CONNECTED RX ACTIVE 4
052 - ANY CONNECTED RX ACTIVE 5
053 - ANY CONNECTED RX ACTIVE 6
054 - ANY CONNECTED RX ACTIVE 7
055 - ANY CONNECTED RX ACTIVE 8
056 - ALL CONNECTED RX INACTIVE 1
057 - ALL CONNECTED RX INACTIVE 2
058 - ALL CONNECTED RX INACTIVE 3
059 - ALL CONNECTED RX INACTIVE 4
060 - ALL CONNECTED RX INACTIVE 5
061 - ALL CONNECTED RX INACTIVE 6
062 - ALL CONNECTED RX INACTIVE 7
063 - ALL CONNECTED RX INACTIVE 8
064 - ANY DTMF ACTIVE PORT 1
065 - ANY DTMF ACTIVE PORT 2
066 - ANY DTMF ACTIVE PORT 3
067 - ANY DTMF ACTIVE PORT 4
068 - ANY DTMF ACTIVE PORT 5
069 - ANY DTMF ACTIVE PORT 6
070 - ANY DTMF ACTIVE PORT 7
071 - ANY DTMF ACTIVE PORT 8
072 - ANY DTMF INACTIVE PORT 1
073 - ANY DTMF INACTIVE PORT 2
074 - ANY DTMF INACTIVE PORT 3
075 - ANY DTMF INACTIVE PORT 4
076 - ANY DTMF INACTIVE PORT 5
077 - ANY DTMF INACTIVE PORT 6
078 - ANY DTMF INACTIVE PORT 7
079 - ANY DTMF INACTIVE PORT 8
080 - PORT 1 DTMF ACTIVE 0
081 - PORT 1 DTMF ACTIVE 1
082 - PORT 1 DTMF ACTIVE 2
083 - PORT 1 DTMF ACTIVE 3
084 - PORT 1 DTMF ACTIVE 4
085 - PORT 1 DTMF ACTIVE 5
086 - PORT 1 DTMF ACTIVE 6
087 - PORT 1 DTMF ACTIVE 7
088 - PORT 1 DTMF ACTIVE 8
089 - PORT 1 DTMF ACTIVE 9
090 - PORT 1 DTMF ACTIVE A
091 - PORT 1 DTMF ACTIVE B
092 - PORT 1 DTMF ACTIVE C
093 - PORT 1 DTMF ACTIVE D
094 - PORT 1 DTMF ACTIVE #
095 - PORT 1 DTMF ACTIVE *
096 - PORT 2 DTMF ACTIVE 0
097 - PORT 2 DTMF ACTIVE 1
098 - PORT 2 DTMF ACTIVE 2
099 - PORT 2 DTMF ACTIVE 3
100 - PORT 2 DTMF ACTIVE 4
101 - PORT 2 DTMF ACTIVE 5
102 - PORT 2 DTMF ACTIVE 6
103 - PORT 2 DTMF ACTIVE 7
104 - PORT 2 DTMF ACTIVE 8
105 - PORT 2 DTMF ACTIVE 9
106 - PORT 2 DTMF ACTIVE A
107 - PORT 2 DTMF ACTIVE B
108 - PORT 2 DTMF ACTIVE C
109 - PORT 2 DTMF ACTIVE D
110 - PORT 2 DTMF ACTIVE *
111 - PORT 2 DTMF ACTIVE #
112 - PORT 3 DTMF ACTIVE 0
113 - PORT 3 DTMF ACTIVE 1
114 - PORT 3 DTMF ACTIVE 2
115 - PORT 3 DTMF ACTIVE 3
116 - PORT 3 DTMF ACTIVE 4
117 - PORT 3 DTMF ACTIVE 5
118 - PORT 3 DTMF ACTIVE 6
119 - PORT 3 DTMF ACTIVE 7
120 - PORT 3 DTMF ACTIVE 8
121 - PORT 3 DTMF ACTIVE 9
122 - PORT 3 DTMF ACTIVE A
123 - PORT 3 DTMF ACTIVE B
124 - PORT 3 DTMF ACTIVE C
125 - PORT 3 DTMF ACTIVE D
126 - PORT 3 DTMF ACTIVE *
127 - PORT 3 DTMF ACTIVE #
128 - PORT 4 DTMF ACTIVE 0
129 - PORT 4 DTMF ACTIVE 1
130 - PORT 4 DTMF ACTIVE 2
131 - PORT 4 DTMF ACTIVE 3
132 - PORT 4 DTMF ACTIVE 4
133 - PORT 4 DTMF ACTIVE 5
134 - PORT 4 DTMF ACTIVE 6
135 - PORT 4 DTMF ACTIVE 7
136 - PORT 4 DTMF ACTIVE 8
137 - PORT 4 DTMF ACTIVE 9
138 - PORT 4 DTMF ACTIVE A
139 - PORT 4 DTMF ACTIVE B
140 - PORT 4 DTMF ACTIVE C
141 - PORT 4 DTMF ACTIVE D

142 - PORT 4 DTMF ACTIVE *
143 - PORT 4 DTMF ACTIVE #
144 - PORT 5 DTMF ACTIVE 0
145 - PORT 5 DTMF ACTIVE 1
146 - PORT 5 DTMF ACTIVE 2
147 - PORT 5 DTMF ACTIVE 3
148 - PORT 5 DTMF ACTIVE 4
149 - PORT 5 DTMF ACTIVE 5
150 - PORT 5 DTMF ACTIVE 6
151 - PORT 5 DTMF ACTIVE 7
152 - PORT 5 DTMF ACTIVE 8
153 - PORT 5 DTMF ACTIVE 9
154 - PORT 5 DTMF ACTIVE A
155 - PORT 5 DTMF ACTIVE B
156 - PORT 5 DTMF ACTIVE C
157 - PORT 5 DTMF ACTIVE D
158 - PORT 5 DTMF ACTIVE *
159 - PORT 5 DTMF ACTIVE #
160 - PORT 6 DTMF ACTIVE 0
161 - PORT 6 DTMF ACTIVE 1
162 - PORT 6 DTMF ACTIVE 2
163 - PORT 6 DTMF ACTIVE 3
164 - PORT 6 DTMF ACTIVE 4
165 - PORT 6 DTMF ACTIVE 5
166 - PORT 6 DTMF ACTIVE 6
167 - PORT 6 DTMF ACTIVE 7
168 - PORT 6 DTMF ACTIVE 8
169 - PORT 6 DTMF ACTIVE 9
170 - PORT 6 DTMF ACTIVE A
171 - PORT 6 DTMF ACTIVE B
172 - PORT 6 DTMF ACTIVE C
173 - PORT 6 DTMF ACTIVE D
174 - PORT 6 DTMF ACTIVE *
175 - PORT 6 DTMF ACTIVE #
176 - PORT 7 DTMF ACTIVE 0
177 - PORT 7 DTMF ACTIVE 1
178 - PORT 7 DTMF ACTIVE 2
179 - PORT 7 DTMF ACTIVE 3
180 - PORT 7 DTMF ACTIVE 4
181 - PORT 7 DTMF ACTIVE 5
182 - PORT 7 DTMF ACTIVE 6
183 - PORT 7 DTMF ACTIVE 7
184 - PORT 7 DTMF ACTIVE 8
185 - PORT 7 DTMF ACTIVE 9
186 - PORT 7 DTMF ACTIVE A
187 - PORT 7 DTMF ACTIVE B
188 - PORT 7 DTMF ACTIVE C
189 - PORT 7 DTMF ACTIVE D
190 - PORT 7 DTMF ACTIVE *
191 - PORT 7 DTMF ACTIVE #
192 - PORT 8 DTMF ACTIVE 0
193 - PORT 8 DTMF ACTIVE 1
194 - PORT 8 DTMF ACTIVE 2
195 - PORT 8 DTMF ACTIVE 3
196 - PORT 8 DTMF ACTIVE 4
197 - PORT 8 DTMF ACTIVE 5
198 - PORT 8 DTMF ACTIVE 6
199 - PORT 8 DTMF ACTIVE 7
200 - PORT 8 DTMF ACTIVE 8
201 - PORT 8 DTMF ACTIVE 9
202 - PORT 8 DTMF ACTIVE A
203 - PORT 8 DTMF ACTIVE B
204 - PORT 8 DTMF ACTIVE C
205 - PORT 8 DTMF ACTIVE D
206 - PORT 8 DTMF ACTIVE *
207 - PORT 8 DTMF ACTIVE #
208 - TRIED TO HANG UP PATCH WHEN
WAS ALREADY HUNG UP,
209 - BEFORE TURN HF MODE ON
210 - AFTER TURN HF MODE OFF
211 - HF BAND 160M
212 - HF BAND 80M
213 - HF BAND 40M
214 - HF BAND 30M
215 - HF BAND 20M
216 - HF BAND 17M
217 - HF BAND 15M
218 - HF BAND 12M
219 - HF BAND 10M 28-29MHZ
220 - HF BAND 10M 29MHz+
221 - HF BAND 6M
222 - HF BAND 2M
223 - HF BAND 1.25cm
224 - HF BAND 70cm
225 - HF BAND 33cm
226 - HF BAND 23cm
227 - HF BAND OTHER BAND
228 - HANG UP COMMAND 115 BLOCKED
229 - TAIL MSG 1 TX 1
230 - TAIL MSG 2 TX 1
231 - TAIL MSG 3 TX 1
232 - TAIL MSG 1 TX 2
233 - TAIL MSG 2 TX 2
234 - TAIL MSG 3 TX 2
235 - TAIL MSG 1 TX 3
236 - TAIL MSG 2 TX 3
237 - TAIL MSG 3 TX 3
238 - TAIL MSG 1 TX 4
239 - TAIL MSG 2 TX 4
240 - TAIL MSG 3 TX 4
241 - TAIL MSG 1 TX 5
242 - TAIL MSG 2 TX 5
243 - TAIL MSG 3 TX 5
244 - TAIL MSG 1 TX 6
245 - TAIL MSG 2 TX 6
246 - TAIL MSG 3 TX 6
247 - TAIL MSG 1 TX 7

EVENT TABLE

VOICE WORD TABLE

000 ZERO	098 BATTERY	196 FAST	294 LITTON
001 ONE	099 BE	197 FEBRUARY	295 LOCK
002 TWO	100 BELOW	198 FEET	296 LONG
003 THREE	101 BETWEEN	199 FILED	297 LOOK
004 FOUR	102 BLOWING	200 FINAL	298 LOW
005 FIVE	103 BLUE KNOB	201 FINDLAY	299 LOWER
006 SIX	104 BOARD	202 FIRE	300 LUNCH
007 SEVEN	105 BOOST	203 FIRST	301 MACHINE
008 EIGHT	106 BOZO	204 FLAPS	302 MAINTAIN
009 NINE	107 BRAKE	205 FLIGHT	303 MANUAL
010 TEN	108 BRAVO	206 FLOW	304 MARCH
011 ELEVEN	109 BREAK	207 FOG	305 MARKER
012 TWELVE	110 BROKEN	208 FOR	306 MAY
013 THIRTEEN	111 BUSY	209 FOURTH	307 MAYDAY
014 FOURTEEN	112 BUTTON	210 FOXTROT	308 ME
015 FIFTEEN	113 BY	211 FREEDOM	309 MEAN
016 SIXTEEN	114 CABIN	212 FREEZING	310 MEASURE
017 SEVENTEEN	115 CALIBRATE	213 FREQUENCY	311 MEETING
018 EIGHTEEN	116 CALL	214 FRIDAY	312 MEGA
019 NINETEEN	117 CALLING	215 FROM	313 MESSAGES
020 TWENTY	118 CALM	216 FRONT	314 METER
021 THIRTY	119 CANCEL	217 FULL	315 MICRO
022 FORTY	120 CAUTION	218 GALLONS	316 MIKE
023 FIFTY	121 CEILING	219 GATE	317 MILES
024 SIXTY	122 CELSIUS	220 GAUGE	318 MILL
025 SEVENTY	123 CENTER	221 GEAR	319 MILLI
026 EIGHTY	124 CHANGE	222 GET	320 MINUS
027 NINETY	125 CHARLIE	223 GLIDE	321 MINUTES
028 HUNDRED	126 CHECK	224 GO	322 MIST
029 THOUSAND	127 CIRCUIT	225 GOLF	323 MOBILE
030 MILLION	128 CLEAR	226 GOODBYE	324 MODERATE
031 A	129 CLIMB	227 GREEN	325 MONDAY
032 B	130 CLOCK	228 GREENWICH	326 MONTH
033 C	131 CLOSED	229 GROUND	327 MORETHAN
034 D	132 CLUB	230 GURNEE	328 MOTOR
035 E	133 CODE	231 GUSTING_TO	329 MOUNT HAMILTON
036 F	134 COLUMBUS	232 HAIL	330 MOUNT TAMALPAIS
037 G	135 COME	233 HALF	331 MOVE
038 H	136 COMPLETE	234 HAM	332 MOVING
039 I	137 COMPUTER	235 HAMFEST	333 MUCH
040 J	138 CONDITION	236 HAMVENTION	334 NEAR
041 K	139 CONGRATULATIONS	237 HAVE	335 NEGATIVE
042 L	140 CONNECT	238 HAZARDOUS	336 NET
043 M	141 CONNECTICUT	239 HAZE	337 NEW
044 N	142 CONTACT	240 HEAVY	338 NEWINGTON
045 O	143 CONTROL	241 HELLO	339 NEW HAVEN
046 P	144 CONVERGING	242 HELP	340 NEXT
047 Q	145 COSHOCTON	243 HENRY	341 NIGHT
048 R	146 COUNT	244 HERTZ	342 NO
049 S	147 COURSE	245 HIGH	343 NORTH
050 T	148 CRANE	246 HOLD	344 NORTHEAST
051 U	149 CROSSWIND	247 HOME	345 NORTHWEST
052 V	150 CURRENT	248 HOTEL	346 NOT
053 W	151 CUYAHOGA FALLS	249 HOUR	347 NOVEMBER
054 X	152 CYCLE	250 HOURS	348 NUMBER
055 Y	153 DALLAS	039 I	349 OAKS
056 Z	154 DANGER	251 ICE	350 OBSCURED
057 ABORT	155 DATE	252 ICING	351 O'CLOCK
058 ABOUT	156 DAY	253 IDENTIFY	352 OCTOBER
059 ABOVE	157 DAYS	254 IGNITE	353 OF
060 ACKNOWLEDGE	158 DAYTON	255 IGNITION	354 OFF
061 ACTION	159 DECEMBER	256 IMMEDIATELY	045 OH
062 ADJUST	160 DECREASE	257 IN	355 OHIO
063 ADVANCED	161 DECREASING	258 INBOUND	356 OHMS
064 ADVISE	162 DEGREES	259 INCH	357 OIL
065 AERIAL	163 DELTA	260 INCREASE	358 ON
066 AFFIRMATIVE	164 DEPARTURE	261 INCREASING	359 OPEN
067 AIR	165 DEVICE	262 INCREASING_TO	360 OPERATION
068 AIRPORT	166 DIAL	263 INDIA	361 OPERATOR
069 AKRON	167 DINNER	264 INDICATED	362 OSCAR
070 ALERT	168 DIRECTION	265 INFLIGHT	363 OTHER
071 ALL	169 DISPLAY	266 INFORMATION	364 OUT
072 ALOFT	170 DIVIDED	267 INNER	365 OUTER
073 ALPHA	171 DOOR	268 INSPECTOR	366 OVER
074 ALTERNATE	172 DOWN	269 INTRUDER	367 OVERCAST
075 ALTITUDE	173 DOWNWIND	270 IS	368 PAPA
076 AMATEUR	174 DRIVE	271 IT	369 PARTIALLY
077 AMPS	175 DRIZZLE	272 JANUARY	370 PASS
078 AND	176 DUST	273 JULIET	371 PASSED
079 ANSWER	177 EAST	274 JULY	372 PATCH
080 APPROACH	178 ECHO	275 JUNE	373 PATH
081 APRIL	179 ELECTRICIAN	276 KENTUCKY	374 PELLETS
082 ARE	180 ELEVATION	277 KEY	375 PER
083 AREA	181 EMERGENCY	278 KILO	376 PERCENT
084 ARRIVAL	182 ENGINE	279 KNOTS	377 PHONE
085 AS	183 ENTER	280 LAND	378 PICO
086 ASSOCIATION	184 EQUAL	281 LANDING	379 PLEASE
087 AT	185 EQUALS	282 LATE	380 PLUS
088 AUGUST	186 ERROR	283 LAUNCH	381 POINT
089 AUTO	187 ESTIMATED	284 LEAN	382 POLICE
090 AUTOMATIC	188 EVACUATE	285 LEFT	383 POSITION
091 AUTOPILOT	189 EVACUATION	286 LEG	384 POWER
092 AUXILIARY	190 EXIT	287 LESS_THAN	385 PRACTICE
093 AVON	191 EXPECT	288 LEVEL	386 PRESS
094 AVON MOUNTAIN	192 FAIL	289 LIGHT	387 PRESSURE
095 A.M	193 FAILURE	290 LIMA	388 PRIVATE
096 BAND	194 FARAD	291 LINE	389 PROBE
097 BANK	195 FAHRENHEIT	292 LINK	390 PROGRAMMING
		293 LIST	391 PULL

392 PUSH
393 P.M.
394 QUEBEC
395 RADAR
396 RADIO
397 RAIN
398 RAISE
399 RANGE
400 RATE
401 RATTLESNAKE MOUNTAIN
402 READY
403 REAR
404 RECEIVE
405 RED
406 RELEASE
407 REMARK
408 REMOTE
409 REPAIR
410 REPEAT
411 REPEATER
412 RICH
413 RICHMOND
414 RIG
415 RIGHT
416 ROAD
417 ROGER
418 ROMEO
419 ROUTE
420 RUNWAY
421 SAFE
422 SAINT PETERSBURG
423 SAND
424 SANTA CLARA
425 SAN LEANDRO
426 SATURDAY
427 SCATTERED
033 SEA
428 SECOND
429 SECONDS
430 SECURITY
033 SEE
431 SELECT
432 SEPTEMBER
433 SEQUENCE
434 SERVICE
435 SET
436 SEVERE
437 SEXY
438 SHORT
439 SHOWERS
440 SHUT
441 SIDE
442 SIERRA
443 SIGHT
444 SLEET
445 SLOPE
446 SLOW
447 SMOKE
448 SNOW
449 SOUTH
450 SOUTHEAST
451 SOUTHWEST
452 SPEED
453 SPRAY
454 SQUAWK
455 STALL
456 START
457 STOP
458 STORM
459 SUNDAY
460 SWITCH
461 SYSTEM
462 TANGO
463 TANK
464 TARGET
465 TARPON SPRINGS
466 TAXI
050 TEA
050 TEE
467 TEEN
468 TELEPHONE
469 TEMPERATURE
470 TERMINAL
471 TEST
472 THANK YOU
473 THAT
474 THE_LONG_E
475 THE_SHORT_E
476 THE_NORMAL_E
477 THIN
478 THINLY
479 THIRD
480 THIS_IS
481 THIS
482 THUNDERSTORM
483 THURSDAY
484 TIME
485 TIMER
486 TIMES
487 TO
488 TODAY
489 TOMORROW
490 TONIGHT
491 TOOL
492 TORNADO
493 TORONTO
494 TOUCHDOWN

495 TOWER
496 TRAFFIC
497 TRANSMIT
498 TRIM
499 TUESDAY
500 TURBULENCE
501 TURN
502 UNDER
503 UNIFORM
504 UNIT
505 UNLIMITED
506 UNTIL
507 UP
508 USE (NOUN)
509 USE (VERB)
510 VALLEY
511 VALVE
512 VARIABLE
513 VERIFY
514 VICTOR
515 VISIBILITY
516 VOLTS
517 WAIT
518 WAKE
519 WAKEUP
520 WARNING
521 WATCH
522 WATTS
523 WAY
524 WEATHER
525 WEDNESDAY
526 WELCOME
527 WEST
528 WEST HARTFORD
529 WHISKEY
530 WILL
531 WIND
532 WISKEY
533 WITH
534 WRONG
535 X_RAY
536 YANKEE
537 YELLOW
538 YESTERDAY
539 YOU
540 YOUR
541 ZED
542 ZONE
543 ZULU

PREFIXES AND SUFFIXES

544 FIF
545 THIR-
546 -ED
547 -ER
548 -ING
549 -S
550 -TEEN
551 -TH
552 -TY

JULIET'S WORDS

553 OH
554 ONE (F)
555 TWO (F)
556 THREE (F)
557 FOUR (F)
558 FIVE (F)
559 SIX (F)
560 SEVEN (F)
561 EIGHT (F)
562 NINE (F)
563 TEN (F)
564 ELEVEN (F)
565 TWELVE (F)
566 THIRTEEN (F)
567 FOURTEEN (F)
568 FIFTEEN (F)
569 SIXTEEN (F)
570 SEVENTEEN (F)
571 EIGHTEEN (F)
572 NINETEEN (F)
573 TWENTY (F)
574 THIRTY (F)
575 FORTY (F)
576 FIFTY (F)
577 GOOD (F)
578 MORNING (F)
579 AFTERNOON (F)
580 EVENING (F)
581 THE (F)
582 TIME (F)
583 IS (F)
584 AM (F)
585 PM (F)
586 O'CLOCK (F)

PAUSE

587 PAUSE

SOUND EFFECTS

588 LASER
589 WHISTLE
590 PHASER
591 TRAIN
592 EXP
593 CROWD
594 TIC
595 TOC
596 HIGH-LOW TONE
597 LOW-HIGH TONE
598 HIGH TONE

JUNIOR'S WORDS

599 ALARM
600 AMATEUR
601 ANALOG
602 ARIZONA
603 AUTOPATCH
604 BACHELOR
605 BAD
606 BASE
607 BATTERY
608 BAY
609 BILLINGS
610 BOZEMAN
611 CANOE
612 CAPROCK
613 CENTRAL
614 CHARGING
615 CLOUDS
616 CLUB
617 COMMUNICATIONS
618 CONTROLLER
619 DIGITAL
620 EMPIRE
621 EVENT
622 FIELD
623 FLASH
624 FLOOD
625 FRIENDLY
626 GOLDEN
627 GREYCLIFF
628 HAM
629 HAMFEST
630 HARRISON
631 HOLLEY
632 HOME
633 INFORMATION
634 INLAND
635 INPUT
636 INSIDE
637 KOOTENAI
638 LINK
639 LITTLE ROCK
640 MEDIUM
641 MEETING
642 MICA
643 MONITOR
644 MOUNTAIN
645 NET
646 OBED
647 OREGON
648 OUTSIDE
649 PEAK
650 POUND
651 PUMP
652 PYRAMID
653 RACES
654 RADIO
655 RATTLESNAKE
656 REMOTE
657 REPEATER
658 RIDGE
659 SANDRA
660 SCAN
661 SIDNEY
662 SKYWARN
663 SOCIETY
664 SPOKANE
665 STAR
666 STATE
667 SUNDANCE
668 SYSTEM
669 TACOMA
670 THIS
671 TIGER
672 TODAY
673 TOMORROW
674 TONIGHT
675 VALUE
676 VOLTAGE
677 WASHINGTON
678 WATCH
679 WATER
680 WELCOME
681 WITH
682 YAKIMA
683 YELLOWHEAD
684 YELLOWKNIFE
685 ZED

INTERNAL VARIABLE WORDS (DON'T USE)

800 UNUSED
801 START POLITE
802 END POLITE
803 END POLITE DO CMD
804 DO DELAYED DIAL
805 START DVR TIMER

VARIABLE WORDS

810 MALE TIME
811 HOUR OF DAY (12 HR)
812 HOUR OF DAY (24 HR)
813 MINUTE OF HOUR
814 AM / PM
815 DATE
816 MONTH OF YEAR
817 DAY OF MONTH
818 YEAR
819 DAY OF WEEK
830 TIME (F)
831 HOUR OF DAY (12 HR) (F)
832 HOUR OF DAY (24 HR) (F)
833 MINUTE OF DAY (F)
834 AM / PM (F)
835 MORN/AFT/EVEN (F)
840 I/O 1 ANALOG 1
841 I/O 1 ANALOG 2
842 I/O 1 ANALOG 3
843 I/O 1 ANALOG 4
844 I/O 1 ANALOG 5
845 I/O 1 ANALOG 6
846 I/O 1 ANALOG 7
847 I/O 1 ANALOG 8
848 I/O 2 ANALOG 1
849 I/O 2 ANALOG 2
850 I/O 2 ANALOG 3
851 I/O 2 ANALOG 4
852 I/O 2 ANALOG 5
853 I/O 2 ANALOG 6
854 I/O 2 ANALOG 7
855 I/O 2 ANALOG 8
856 I/O 1 HIGH 1
857 I/O 1 HIGH 2
858 I/O 1 HIGH 3
859 I/O 1 HIGH 4
860 I/O 1 HIGH 5
861 I/O 1 HIGH 6
862 I/O 1 HIGH 7
863 I/O 1 HIGH 8
864 I/O 2 HIGH 1
865 I/O 2 HIGH 2
866 I/O 2 HIGH 3
867 I/O 2 HIGH 4
868 I/O 2 HIGH 5
869 I/O 2 HIGH 6
870 I/O 2 HIGH 7
871 I/O 2 HIGH 8
872 I/O 1 HIGH TIME 1
873 I/O 1 HIGH TIME 2
874 I/O 1 HIGH TIME 3
875 I/O 1 HIGH TIME 4
876 I/O 1 HIGH TIME 5
877 I/O 1 HIGH TIME 6
878 I/O 1 HIGH TIME 7
879 I/O 1 HIGH TIME 8
880 I/O 2 HIGH TIME 1
881 I/O 2 HIGH TIME 2
882 I/O 2 HIGH TIME 3
883 I/O 2 HIGH TIME 4
884 I/O 2 HIGH TIME 5
885 I/O 2 HIGH TIME 6
886 I/O 2 HIGH TIME 7
887 I/O 2 HIGH TIME 8
888 I/O 1 LOW 1
889 I/O 1 LOW 2
890 I/O 1 LOW 3
891 I/O 1 LOW 4
892 I/O 1 LOW 5
893 I/O 1 LOW 6
894 I/O 1 LOW 7
895 I/O 1 LOW 8
896 I/O 2 LOW 1
897 I/O 2 LOW 2
898 I/O 2 LOW 3
899 I/O 2 LOW 4
900 I/O 2 LOW 5
901 I/O 2 LOW 6
902 I/O 2 LOW 7
903 I/O 2 LOW 8
904 I/O 1 LOW TIME 1
905 I/O 1 LOW TIME 2
906 I/O 1 LOW TIME 3
907 I/O 1 LOW TIME 4
908 I/O 1 LOW TIME 5
909 I/O 1 LOW TIME 6
910 I/O 1 LOW TIME 7
911 I/O 1 LOW TIME 8
912 I/O 2 LOW TIME 1
913 I/O 2 LOW TIME 2
914 I/O 2 LOW TIME 3
915 I/O 2 LOW TIME 4
916 I/O 2 LOW TIME 5
917 I/O 2 LOW TIME 6
918 I/O 2 LOW TIME 7

919 I/O 2 Low Time 8
 920XXX - READ ANALOG 1-16
 AS S-METER
 921XXX - READ ANALOG 1-16
 AS A DIRECTION N, NE
 E, SE, S ETC.
 922XXX - EXECUTE COMMAND XXX
 (UP TO 900 OR SO, MAY
 NOT GO ALL THE WAY TO
 999) WILL NOT HAPPEN
 UNTIL THIS WORD IS -
 ACTUALLY SPOKEN.
 923XXX - SPEAK 24 HOUR TIME
 IN MALE VOICE ADDING XXX
 HOURS. CAN USE TO SPEAK
 THE TIME FOR ANY TIME
 ZONE.
 924XXX - SAME AS ABOVE IN
 FEMALE VOICE

CW CODE TABLE

00	0
01	1
02	2
03	3
04	4
05	5
06	6
07	7
08	8
09	9
10	A
11	B
12	C
13	D
14	E
15	F
16	G
17	H
18	I
19	J
20	K
21	L
22	M
23	N
24	O
25	P
26	Q
27	R
28	S
29	T
30	U
31	V
32	W
33	X
34	Y
35	Z
36	/
37	.
38	?
39	AR
40	SPACE
41	PAUSE

DTMF CODE TABLE

00	DIGIT 0
01	DIGIT 1
02	DIGIT 2
03	DIGIT 3
04	DIGIT 4
05	DIGIT 5
06	DIGIT 6
07	DIGIT 7
08	DIGIT 8
09	DIGIT 9
10	DIGIT *
11	DIGIT #
12	DIGIT A
13	DIGIT B
14	DIGIT C
15	DIGIT D
16	<PAUSE>

RADIO PORT PIN-OUT

1,6,8,9	GROUND
2	PL INPUT (ACTIVE H/L)
3	PTT (ACTIVE LOW 150MA)
4	AUDIO OUT (600 OHM)
5	AUDIO IN (10K OHM)
7	COR INPUT (ACTIVE H/L) (COR 10K 4MA ^ TO GND)

RADIO PORT DIP SW

1	OFF (SPEAKER AUDIO)
UP	ON (DISCRIMINATER)
2	OFF COR HIGH
UP	ON COR LOW
3	OFF PL HIGH
UP	ON PL LOW
4	SPARE
5	SPARE

J1 TX &

J3	RX
1,2	AUDIO PATH COMPLETE
3	GROUND
4	+10 VOLT

J5 RS232*

*=WHEN JUMPERS ARE REMOVED,
 REQUIRES DALLAS DS1275 -DO NOT
 JUMP 1,2 AND 3,4 W/DS1275.
 -12 TO +12 VOLTS

J5 TTL**

**=WHEN JUMPERS ARE PRESENT =
 TTL SIGNALS FROM 68HC11 - THIS
 MODE IS USED FOR DOUG HALL AND
 RLC-1CM CONTROL.
 0-5 VOLTS

AUDIO ADJUSTMENT

RECEIVER:
 ADJUST THE "RX" POT ON EACH PORT,
 CHECKING THE SIGNAL ON P4 SO THAT
 ALL RECEIVER INPUTS ARE SET TO THE
 SAME LEVEL OF 1 VOLT PEAK-TO-PEAK.
 (P4 IS A 10 PIN CONNECTOR NEAR
 THE POWER CONNECTOR ABOVE THE
 MOTHER-BOARD SERIAL PORT)

TRANSMITTER:
 AFTER RX ADJUSTMENT, ADJUST THE
 "TX" POTS ON ALL CONNECTED
 TRANSMITTERS TO OBTAIN THE
 DESIRED DEVIATION. (TRANSMITTERS
 SHOULD NOT NEED ANY ADDITIONAL
 ADJUSTMENTS AFTER AT LEAST 1
 RECEIVER IS SET UP)

VOICE LEVEL:
 THIS ADJUSTMENT R12 SHOULD BE
 SET FOR 2 KHZ DEVIATION. (R12 IS
 LOCATED ON THE MOTHER-BOARD
 BETWEEN PORT CARDS 2 AND 3)

TONE GENERATOR:
 ADJUST THE "TN" POT ON EACH PORT
 CARD FOR 1.5 KHZ DEVIATION.

RS232 COMMUNICATION PARAMETERS

9600	N81
BAUD (DEFAULT)	9600
START BITS	1
STOP BITS	1
PARITY	NONE
WORD LENGTH	8
DUPLEX	FULL

RS232 SIGNALS AND INTERFACING MODEM

USE A STRAIGHT-THROUGH CABLE (NOT
 A NULL MODEM CABLE OR ADAPTER)
 WITH AT LEAST * PINS CONNETED

DB25 TO DB9		
8	1	CARRIER DETECT
3	*	2 RECEIVE DATA
2	*	3 TRANSMIT DATA
20	4	DATA TERM. READY
7	*	5 GROUND
6	6	DATA SET READY
4	7	REQUEST TO SEND
5	8	CLEAR TO SEND
22	9	RING INDICATOR

CONTROLLER- COMPUTER - OR MODEM				
DB9 -DB9 DB25 -DB9 DB25				
PIN 2	2	3	2	
PIN 3	3	2	3	
PIN 5	5	7	5	7

MODEM DEFAULTS

AT&F = FACTORY DEFAULTS
 AT53 = AUTO ANSWER 3RD RING
 OR (AT50 NO ANSWER)
 AT50 = AUTO ANSWER OFF
 AT&K0 = DISABLE FLOW CONTROL
 AT&E = DISABLE LOCAL ECHO
 ATQ1 = STOP MODEM RESULT
 CODES
 AT&W = STORE MODEM SETTINGS

IF UNABLE TO DISABLE THE
 MODEMS FLOW CONTROL, SHORT
 PINS 4 AND 5 TOGETHER AND
 PINS 6, 8 AND 20 TOGETHER
 THIS SHOULD FOOL THE FLOW
 CONTROL

SERIAL DOWNLOADS

IF MORE THAN A DOZEN COMMANDS OR
 SO ARE DOWNLOADED, THE RLC-3 MAY
 GET WAY BEHIND, OR EVEN GET LOST.
 THIS DOES NOT AFFECT THE
 COMMANDS THAT ARE BEING SENT TO
 THE RLC-3 IN ANY WAY - JUST THE
 RESPONSES. IF YOU NEED TO KNOW
 WHAT THE RESPONSES ARE CHANGE
 THE ASCII TRANSFER SETTINGS ON
 YOUR COMMUNICATIONS SOFTWARE TO
 INSERT A 1.5 SECOND DELAY AFTER
 EACH LINE (LONGER FOR SLOW BAUD
 RATES, SHORTER FOR FAST BAUD
 RATES) THIS WILL GIVE THE RLC-3
 TIME TO SEND THE RESPONSES BACK
 WITHOUT OVERFLOWING THE QUEUE.
 SETTING 050 090 BEFORE THE
 DOWNLOAD WILL TURN OFF VOICE
 RESPONSES.
 TO TURN LOWER CASE AND
 LINEFEEDS ON ENTER 06011 BEFORE
 THE DOWNLOAD.

DTMF VOICE FALSING

CHECK TO SEE IF R12 ON THE RADIO
 PORT CARD IS 470K OHMS.
 (NOT THE MOTHER BOARD)
 THE RLC3 EARLY RELEASES WERE
 SHIPPED WITH R12 AS 300K. THIS
 CHANGE INCREASES THE DECODE
 TIME FROM 40MS TO 50MS. IF
 MORE THAN 50MS IS NEEDED,
 VALUES OVER 700K SHOULD BE
 AVOIDED AS THEY MAY CAUSE THE
 RLC3 NOT TO DECODE AT ALL.
 ANY ADDITIONAL AUDIO FALSING
 CAN BE LESS ANNOYING BY
 SETTING DTMF MUTE TIMER
 RELATIVELY SHORT 1..2 SEC.
 (OR LESS WITH AUDIO DELAY MODULE)

I/O CARD DB-25

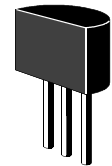
DB-PIN	LINE-#	I/O TYPE
1	N/A	GROUND
14	8	ANALOG
2	7	ANALOG
15	6	ANALOG
3	5	ANALOG
16	4	ANALOG
4	3	ANALOG
17	2	ANALOG
5	1	ANALOG
18	8	INPUT
6	7	INPUT
19	6	INPUT
7	5	INPUT
20	4	INPUT
8	3	INPUT
21	2	INPUT
9	1	INPUT
22	8	OUTPUT
10	7	OUTPUT
23	6	OUTPUT
11	5	OUTPUT
24	4	OUTPUT
12	3	OUTPUT
25	2	OUTPUT
13	1	OUTPUT

I/O CARD

S1 UP ON FOR LM335 TEMP SEN
 S2 UP ON FOR V-DIVIDER 25V

LM335 TEMPERATURE SENSOR

THE SENSOR CONVERTS TEMPERATURE
 INTO VOLTAGE WHICH IS READ BY THE
 CONTROLLERS ADC
 (ANALOG-DIGITAL CONVERTER).
 POWERING THE SENSOR IS
 ACCOMPLISHED BY TURNING THE
 APPROPRIATE DIP SWITCH 'ON' ON THE
 I/O BOARD. THE POWER SWITCH MUST
 BE ON AND THE VOLTAGE DIVIDER
 SWITCH OFF FOR THE TEMPERATURE
 SENSOR TO WORK.



1=N/C 2=Analog 3=Ground

Pins on the LM-335

SYSTEM RE-INITIALIZATION

METHOD #1
 WITH THE POWER OFF.

PRESS AND HOLD THE
 INIT BUTTON ON THE MOTHER-
 BOARD. TURN ON THE POWER.
 WAIT FOR ABOUT 3 SECONDS (OR
 LONGER. RELEASE THE INIT
 BUTTON.

METHOD #2
 WITH THE POWER ON.

PRESS AND HOLD BOTH THE INI AND
 THE RESET BUTTONS. RELEASE THE
 RESET BUTTON WAIT AT LEAST 3
 SECONDS. RELEASE THE INITIAL
 BUTTON.

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