

FTDX5000 SERIES CAT OPERATION REFERENCE BOOK

YAESU MUSEN CO., LTD.

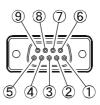
OVERVIEW

The CAT (Computer Aided Transceiver) System in the **FTDx5000** series provides control of frequency, VFO, memory, and other settings such as dual-channel memories and diversity reception using an external personal computer. This allows multiple control operations to be fully automated as single mouse clicks or keystroke operations on the computer keyboard.

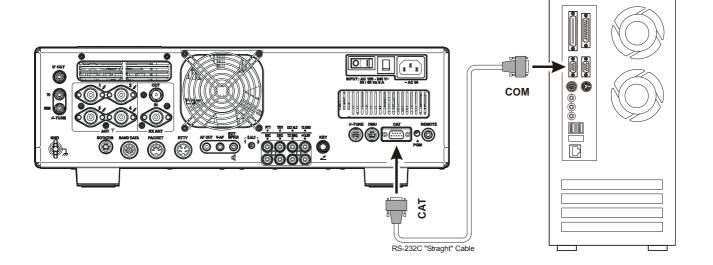
The FTDx5000 series has a built-in level converter, allowing direct connection from the rear-panel CAT jack to the serial port of your computer without the need of any external boxes. You will need a serial cable for connection to the RS-232C (serial or COM port) connector on your computer. Purchase a <u>standard serial cable</u> (not the so-called "null modem" type), ensuring it has the correct gender and number of pins (some serial COM port connectors use a 9-pin rather than 25-pin configuration). If your computer uses a custom connector, you may have to construct the cable. In this case, refer to the technical documentation supplied with your computer for correct data connection.

Vertex Standard does not produce CAT System operating software due to the wide variety of personal computers and operating systems in use today. However, the information provided in this chapter explains the serial data structure and opcodes used by the CAT system. This information, along with the short programming examples, is intended to help you start writing programs on your own. As you become more familiar with CAT operation, you can customize programs later on for your operating needs and discover the true operating potential of this system.

CAT JACK



			_
Pin No.	PIN NAME	1/0	Function
1	N/A	_	_
2	SERIAL OUT	Output	Outputs the Serial Data from the
			transceiver to the computer.
3	SERIAL IN	Input	Inputs the Serial Data from the
			computer to the transceiver.
4	N/A	_	
(5)	GND	_	Signal Ground
6	N/A	_	_
7	RTS	Input	When the computer is not ready
			to receive data, this port goes to
			"L" for inhibit the transmit data
			from the transceiver.
8	CTS	Output	When the transceiver is not ready
			to receive data, this port goes to
			"L" for inhibit the transmit data
			from the computer.
9	N/A	_	_



CONTROL COMMAND

A computer control command is composed of an alphabetical command, various parameters, and the terminator that signals the end of the control command.

Example: Set the main band (VFO-A) frequency to 14.250000 MHz.

FA 14250000 ; ↑ ↑ ↑ Command Parameter Terminator

There is three for the **FTDX5000** Command as shown below:

Set command: Set a particular condition

(to the **FTDX5000**)

Read command: Reads an answer

(from the **FTDx5000**)

Answer command: Transmits a condition

(from the **FTDx5000**)

For example, note the following in the case of the FA command (Set the main band (VFO-A) frequency):

☐ To set the main band (VFO-A) frequency to 14.250000 MHz, the following command is sent from the computer to the transceiver:

"FA14250000;" (Set command)

☐ To read the main band (VFO-A) frequency, the following command is sent from the computer to the transceiver:

"FA;" (Read command)

☐ When the Read command above has been sent, the following command is returned to the computer:

"FA14250000;" (Answer command)

Alphabetical Commands

A command consists of 2 alphabetical characters.

You may use either lower or upper case characters. The commands available for this transceiver are listed in the "PC Control Command Tables" on the following pages.

Parameters

Parameters are used to specify information necessary to implement the desired command.

The parameters to be used for each command are predetermined. The number of digits assigned to each parameter is also predetermined. Refer to the "Control Command List" and the "Control Command Tables" to configure the appropriate parameters.

When configuring parameters, be careful not to make the following mistakes.

For example, when correct parameter is "**ISO+1000**" (IF SHIFT):

IS01000:

Not enough parameters specified (No direction (+) given for the IF shift)

IS0+100;

Not enough digits (Only three frequency digits given)

IS0 + 1000;

Unnecessary characters between parameters

IS0+10000;

Too many digits (Five frequency digits given)

Note: If a particular parameter is not applicable to the **FTDX5000**, the parameter digits should be filled using any character except the ASCII control codes (00 to 1Fh) and the terminator (;).

Terminator

To signal the end of a command, it is necessary to use a semicolon (;). The digit where this special character must appear differs depending on the command used.

CONTROL COMMAND LIST

COMMAND	Function	SFT	READ	Ans.	AI	COMMAND	Function	SFT	READ	Ans.	Al
AB	VFO-A TO VFO-B	0	X	X	X	MR	MEMORY READ	X	0	0	X
AC	ANTENNA TUNER CONTROL	0	0	0	0	MS	METER SW	0	0	0	0
AG	AF GAIN	0	0	0	0	MW	MEMORY WRITE	0	X	Х	X
Al	AUTO INFORMATION	0	0	0	X	MX	MOX SET	0	0	0	0
AM	VFO-A TO MEMORY CHANNEL	0	Х	X	Х	NA	NARROW	0	0	0	0
AN	ANTENNA NUMBER	0	0	0	0	NB	NOISE BLANKER	0	0	0	0
ВА	VFO-B TO VFO-A	0	Х	X	Х	NL	NOISE BLANKER LEVEL	0	0	0	0
ВС	AUTO NOTCH	0	0	0	0	NR	NOISE REDUCTION	0	0	0	0
BD	BAND DOWN	0	Х	Х	Х	OI	OPPOSITE BAND INFORMATION	Х	0	0	Х
ВІ	BREAK-IN	0	0	0	0	os	OFFSET (REPEATER SHIFT)	0	0	0	0
ВР	MANUAL NOTCH	0	0	0	0	PA	PRE-AMP (IPO)	0	0	0	0
BS	BAND SELECT	0	Х	Х	Х	РВ	PLAY BACK	0	0	0	Х
BU	BAND UP	0	Х	Х	Х	PC	POWER CONTROL	0	0	0	0
BY	BUSY	Х	0	0	0	PL	SPEECH PROCESSOR LEVEL	0	0	0	0
CA	CLASS-A	0	0	0	0	PR	SPEECH PROCESSOR	0	0	0	0
СН	CHANNEL UP/DOWN	0	Х	Х	Х	PS	POWER SWITH	0	0	0	Х
CN	CTCSS NUMBER	0	0	0	0	QI	QMB STORE	0	Х	Х	Х
СО	CONTOUR	0	0	0	0	QR	QMB RECALL	0	Х	Х	Х
cs	CW SPOT	0	0	0	0	QS	QUICK SPLIT	0	Х	Х	Х
СТ	CTCSS	0	0	0	0	RA	RF ATTENUATOR	0	0	0	0
DA	DIMMER	0	0	0	Х	RC	CLAR CLEAR	0	Х	Х	Х
DN	DOWN	0	Х	Х	Х	RD	CLAR DOWN	0	Х	Х	Х
DP	DISPLAY	0	0	0	0	RF	ROOFING FILTER	0	0	0	0
DS	DIMMER SWITCH	0	0	0	0	RG	RF GAIN	0	0	0	0
ED	ENCORDER DOWN	0	Х	Х	Х	RI	RADIO INFORMATION	Х	0	0	0
EU	ENCORDER UP	0	Х	Х	Х	RL	NOISE REDUCTION LEVEL	0	0	0	0
EX	MENU	0	0	0	0	RM	READ METER	Х	0	0	0
FA	FREQUENCY VFO-A	0	0	0	0	RO	ROTATOR	0	0	0	Х
FB	FREQUENCY VFO-B	0	0	0	0	RS	RADIO STATUS	Х	0	0	0
FR	FUNCTION RX	0	0	0	0	RT	CLAR	0	0	0	0
FS	FAST STEP	0	0	0	0	RU	CLAR UP	0	Х	Х	Х
FT	FUNCTION TX	0	0	0	0	sc	SCAN	0	0	0	0
GT	AGC FUNCTION	0	0	0	0	SD	SEMI BREAK-IN DELAY TIME	0	0	0	0
ID	IDENTIFICATION	Х	0	0	Х	SF	SUB-DIAL FUNCTION	0	0	0	0
IF	INFORMATION	Х	0	0	0	SH	WIDTH	0	0	0	0
IS	IF-SHIFT	0	0	0	0	SM	S METER	Х	0	0	0
—	KEYER MEMORY	0	0	0	Χ	#	SQUELCH LEVEL	0	0	0	0
KP	KEY PITCH	0	0	0	0	SV	SWAP VFO	0	X	X	X
KR	KEYER	0	0	0	0	TS	TXW	0	0	0	0
KS	KEY SPEED	0	0	0	0	TX	TX SET	0	0	0	0
KY	CW KEYING	0	X	Х	X	UL	UNLOCK	X	0	0	0
LK	LOCK	0	0	0	0	UP	UP	0	X	X	X
LM	LOAD MESSAGE	0	0	0	X	VD	VOX DELAY TIME	0	0	0	0
MA	MEMORY CHANNEL TO VFO-A	0	X	X	X	VF	VRF FILTER	0	0	0	0
MC	MEMORY CHANNEL	0	0	0	X	VG	VOX GAIN	0	0	0	0
MD	MODE	0	0	0	0	VM	[V/M] KEY FUNCTION	0	X	X	X
MG	MIC GAIN	0	0	0	0	VS	VFO SELECT	0	0	0	0
MK	MODE KEY	0	X	X	X	VX	VOX	0	0	0	0
ML	MONITOR LEVEL	0	0	0	0	XT	TX CLAR	0	0	0	0

CAT (Computer Aided Transceiver) OPERATION

								<u> </u>	14 1 1	χ <u>Ο</u> Ι	Set 1 2 3 4 5 6 7 8 9 10													
AB	VFC)-Δ T	O VI	FO-B																				
Set						6	7	8	9	10														
	A	В	_	Ė	Ť	Ť	<u> </u>	۰	Ť															
Read	1	2	3	4	5	6	7	8	9	10														
						_	-																	
Answer	1	2	3	4	5	6	7	8	9	10														
AC					R CO																			
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Fixed P3 0: Tuner "OFF" P2 0: Fixed 1: Tuner "ON"													
<u> </u>	Α	С	P1	P2	P3	;					P2 0: Fixed 1: Tuner "ON" 2: Tuning Start													
Read	1	2	3	4	5	6	7	8	9	10	2. runing start													
A	Α	С	;		_			_	_															
Answer	1	2	3	4	5	6	7	8	9	10														
	Α	С	P1	P2	P3	;																		
AG	AF	GAIN	ı																					
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver													
	Α	G	P1	P2	P2	P2	;				1: Sub (VFO-B) Band Receiver													
Read	1	2	3	4	5	6	7	8	9	10	P2 000 - 255													
	Α	G	P1	;																				
Answer	1	2	3	4	5	6	7	8	9	10														
	Α	G	P1	P2	P2	P2	;																	
A /	A 1 1	TO IN	IFOE	N	ION																			
AI Set	1	2	3	4	5	6	7	8	9	10	P1 0: Auto Information "OFF"													
Joel	A	I	P1		3	0	<i>'</i>	0	9	10	1: Auto Information "ON"													
Read	1	2	3	4	5	6	7	8	9	10	This parameter is set to "0" (OFF) automatically when the transceiver is turned "OFF."													
Incad	À	ı	•	+-	Ť	۳		۳		10	,, ,													
Answer	1	2	3	4	5	6	7	8	9	10														
"	Ā	ī	P1		Ť	Ť	<u> </u>	_	_															
		_		٠,																				
AM	VFC	<u> </u>	O M	<u>EMO</u>	RY C	HAN	INEL																	
Set	1	2	3	4	5	6	7	8	9	10														
	Α	M	;																					
Read	1	2	3	4	5	6	7	8	9	10														
A	<u> </u>	_	_	-	-	_		_																
Answer	1	2	3	4	5	6	7	8	9	10														
AN	AN	TENN	IA N	UMB	ER																			
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band P2 1: ANT "1" P3 1: ANT "1"													
	Α	N	P1	P2	;						1: Sub (VFO-B) Band 2: ANT "2" 2: ANT "2"													
Read	1	2	3	4	5	6	7	8	9	10	3: ANT "3" 3: ANT "3" 4: ANT "4" 4: ANT "4"													
	Α	N	P1	;							5: ANT "RX" P4 0: ANT "RX" "OFF"													
Answer	1	2	3	4	5	6	7	8	9	10	1: ANT "RX" "ON"													
	Α	N	P1	P3	P4	;																		
BA	VEC)-B T	O VI	FO A																				
Set	1	2	3	4	5	6	7	8	9	10														
551	В	A		+-	1	۳	<u> </u>	-	9	10														
Read	1	2	3	4	5	6	7	8	9	10														
		_	Ť	Ė	Ť	۳	<u> </u>	<u> </u>	Ť															
Answer	1	2	3	4	5	6	7	8	9	10														
		† -			Ť																			
				·																				
BC	ΑU	ΤΟ Ν	отс	Н																				
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver													
	В	С	P1	P2	;						1: Sub (VFO-B) Band Receiver P2 0: Auto Notch "OFF"													
Read	1	2	3	4	5	6	7	8	9	10	1: Auto Notch "ON"													
ļ	В	С	P1	;																				
Answer	1	2	3	4	5	6	7	8	9	10														
	В	С	P1	P2	;																			
BD	BAI	ND D	1WO	1																				
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band													
	В	D	P1	;							1: Sub (VFO-B) Band													
Read	1	2	3	4	5	6	7	8	9	10														
	1	2	3	4	5	6	7	8	9	10														

BI	BRE	EAK-	IN									
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Break-in "OFF"
	В	ı	P1	;								1: Break-in "ON"
Read	1	2	3	4	5	6	7	8	9	10		
	В	ı	;									
Answer	1	2	3	4	5	6	7	8	9	10		
	В	ı	P1	;								

BP	MA	NUA	L NO	TCH								
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Main (VFO-A) Band Receiver P3 When P2=0
	В	Р	P1	P2	P3	P3	P3	;			l	1: Sub (VFO-B) Band Receiver 000: OFF
Read	1	2	3	4	5	6	7	8	9	10	P2	0: Manual NOTCH "ON/OFF" 001: ON 1: Manual NOTCH LEVEL When P2=1
	В	Р	P1	P2	;							001 - 400 (NOTCH Frequency : x 10 Hz)
Answer	1	2	3	4	5	6	7	8	9	10		,
	B	Р	P1	P2	P3	P3	P3				1	

BS	BAI	ND S	ELEC	СТ								
Set	1	2	3 P1	4	5	6	7	8	9	10	P1 00: 1.8 MHz 06: 18 MHz 01: 3.5 MHz 07: 21 MHz	
	В	S	PΊ	P1	;						02· - 08· 24 5 MHz	
Read	1	2	3	4	5	6	7	8	9	10	- 03: 7 MHz 09: 28 MHz	
											04: 10 MHz 10: 50 MHz	
Answer	1	2	3	4	5	6	7	8	9	10	05: 14 MHz 11: GEN	

<i>BU</i> Set	BAN	ND U	Р								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band
	В	U	P1	;							1: Sub (VFO-B) Band
Read	1	2	3	4	5	6	7	8	9	10	
Answer	1	2	3	4	5	6	7	8	9	10	

BY	BUS	SY										
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band BUSY "OFF"	
											1: Main (VFO-A) Band BUSY "ON"	
Read	1	2	3	4	5	6	7	8	9	10	P2 0: Sub (VFO-B) Band BUSY "OFF" 1: Sub (VFO-B) Band BUSY "ON"	
	В	Υ	;								1. oub (VI O-b) band boot oil	
Answer	1	2	3	4	5	6	7	8	9	10		
	В	Υ	P1	P2	;							

CA	CLA	SS-	A								
Set	1	2	3	4	5	6	7	8	9	10	P1 0:CLASS-A ON/OFF
	С	Α	P1	P2	P2	P2	;				1: BIAS LEVEL
Read	1	2	3	4	5	6	7	8	9	10	P2 When P1=0 000: OFF
	С	Α	P1	;							001: ON
Answer	1	2	3	4	5	6	7	8	9	10	
	С	Α	P1	P2	P2	P2	;				001 - 100

CH Set	CHA	ANNE	EL UI	P/DO	WN							
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Memory Channel "UP"
	C	Н	P1	;								1: Memory Channel "DOWN"
Read	1	2	3	4	5	6	7	8	9	10		
Answer	1	2	3	4	5	6	7	8	9	10		

CN	СТС	css ⁻	TONI	E FR	EQU	ENC'	Υ					
Set	1	2	3	4	5	6	7	8	9	10		0: Main (VFO-A) Band Receiver
	С	N	P1	P2	P2	;						1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2	0 - 49: Tone Frequency Number
	С	N	P1	٠,								
Answer	1	2	3	4	5	6	7	8	9	10		
	С	N	P1	P2	P2	;						

					CTCSS To	ONE CH	IART				
00	67.0 Hz	09	91.5 Hz	18	123.0 Hz	27	162.2 Hz	36	189.9 Hz	45	229.1 Hz
01	69.3 Hz	10	94.8 Hz	19	127.3 Hz	28	165.5 Hz	37	192.8 Hz	46	233.6 Hz
02	71.9 Hz	11	97.4 Hz	20	131.8 Hz	29	167.9 Hz	38	196.6 Hz	47	241.8 Hz
03	74.4 Hz	12	100.0 Hz	21	136.5 Hz	30	171.3 Hz	39	199.5 Hz	48	250.3 Hz
04	77.0 Hz	13	103.5 Hz	22	141.3 Hz	31	173.8 Hz	40	203.5 Hz	49	254.1 Hz
05	79.7 Hz	14	107.2 Hz	23	146.2 Hz	32	177.3 Hz	41	206.5 Hz	-	_
06	82.5 Hz	15	110.9 Hz	24	151.4 Hz	33	179.9 Hz	42	210.7 Hz	_	_
07	85.4 Hz	16	114.8 Hz	25	156.7 Hz	34	183.5 Hz	43	218.1 Hz	_	_
80	88.5 Hz	17	118.8 Hz	26	159.8 Hz	35	186.2 Hz	44	225.7 Hz	-	_

СО	COL	NTOI	IR									
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Main (VEO A) Pand Bassiyar B2 When B2=0
Joel				_				0	9	10	「 '	0: Main (VFO-A) Band Receiver P3 When P2=0, 1: Sub (VFO-B) Band Receiver 000: CONTOUR/APF "OFF"
<u> </u>	С	0	P1	P2	P3	P3	,				P2	0: CONTOUR/APF "ON/OFF" 001: CONTOUR "ON"
Read	1	2	3	4	5	6	7	8	9	10	' -	1: CONTOUR FREQUENCY 002: APF "ON"
	С	0	P1	P2	;							When P2=1,
Answer	1	2	3	4	5	6	7	8	9	10	1	01 - 40 (CONTOUR FREQUENCY)
	С	0	P1	P2	P3	P3					1	100 ~ 4000 Hz
				1 2	1.5	1 0	,					
CS	CW	SPC	T									
Set	1	2	3	4	5	6	7	8	9	10	P1	0: OFF
1001	Ċ		P1	-	-	0	'	- 0	9	10	l''	1: ON
<u> </u>		S		,							ł	1.514
Read	1	2	3	4	5	6	7	8	9	10	l	
	С	S	;									
Answer	1	2	3	4	5	6	7	8	9	10	1	
	С	S	P1	:							1	
	_			,							_	
CT	СТС	SSS										
Set	1	2	3	4	5	6	7	8	9	10	D1	0: Main (VFO-A) Band Receiver
Joel						0	1	0	9	10	' '	1: Sub (VFO-B) Band Receiver
<u> </u>	С	Т	P1	P2	;						P2	0: CTCSS "OFF"
Read	1	2	3	4	5	6	7	8	9	10	۱. ۲	1: CTCSS ENC/DEC "ON"
	С	Т	P1	;	<u></u>					<u> </u>		2: CTCSS ENC "ON"
Answer	1	2	3	4	5	6	7	8	9	10	1	
	C	Т	P1	P2							1	
	U			1 2	,							
DA	DIM	MER										
Set	1	2	3	4	5	6	7	8	9	10	D1	00 - 15: VFD Backlight Brightness Level
Joel				-	-		_					00 - 15: Meter Brightness Level
<u> </u>	D	Α	P1	P1	P2	P2	P3	P3	P4	P4		00 - 15: OLE Brightness Level
Read	1	2	3	4	5	6	7	8	9	10		00 - 15: ELCD (SM-5000) Brightness Level
	D	Α	:								l' ⁻	10. LEOD (GW 0000) Brightness Ecver
Answer	1	2	3	4	5	6	7	8	9	10	1	
" " " " " " " " " " " " " " " " " " "	D	Ā	P1	P1	P2	P2	P3	P3	P4	P4	ł	
Cot		_	_	+	_	_		_	-	_	ł	
Set	11	12	13	14	15	16	17	18	19	20	ļ	
	;											
	11	12	13	14	15	16	17	18	19	20	ı	
Read	111	12	13	14	1 10	10	17	10	19	20	ı	
Read	- ''	12	13	14	13	16	17	10	19	20		
Answer	11	12	13	14	15	16	17	18	19	20		
Answer	11	12	13									
Answer DN	11 ;	12 DW	13 N	14	15	16	17	18	19	20	 	
Answer	11 ; MIC	12 DW 2	13 N									
Answer DN Set	11 ; MIC 1 D	12 DW 2 N	13 N 3 ;	14	15	16	7	18	19	20		
Answer DN	11 ; MIC	12 DW 2	13 N	14	15	16	17	18	19	20		
Answer DN Set	11 ; MIC 1 D	12 DW 2 N	13 N 3 ;	14	15	16	7	18	19	20		
Answer DN Set	11 ; MIC 1 D	12 DW 2 N 2	13 N 3 ;	14	5 5	6 6	7 7	8 8	19	10		
Answer DN Set Read	11 ; MIC 1 D	12 DW 2 N	13 N 3 ;	14	15	16	7	18	9 9	20		
Answer DN Set Read	11 ; MIC 1 D	12 DW 2 N 2	13 N 3 ;	14	5 5	6 6	7 7	8 8	9 9	10		
Answer DN Set Read Answer	11 ; MIC 1 D	12 DW 2 N 2	13 N 3 ; 3	14	5 5	6 6	7 7	8 8	9 9	10		
Answer DN Set Read Answer	11 ; MIC 1 D	12 DW 2 N 2	13 N 3 ; 3	14	5 5	6 6	7 7	8 8	9 9	10	P1	0: World Clock Display * This command does not acti-
Answer DN Set Read Answer	11 ; MIC 1 D 1	12 DW 2 N 2 2	13 N 3 ; 3	4 4 4	5 5	6 6	7 7	8 8	9 9	10	P1	0: World Clock Display 1: Band Scope Display 2: This command does not activates when the optional Data
Answer DN Set Read Answer DP Set	11 ; MIC 1 D 1	12 DW 2 N 2 2	3 ; 3 7 3 P1	4 4 ;	5 5 5	6 6	7 7 7	8 8 8	9 9	10 10 10	P1	1: Band Scope Display vates when the optional Data
Answer DN Set Read Answer	11 ; MIC 1 D 1	12 2 N 2 2 PLAY 2 P	13 3 ; 3 P1 3	4 4 4	5 5	6 6	7 7	8 8	9 9	10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display Managemnt Unit is not attached. 3: Log Book Display
Answer DN Set Read Answer DP Set Read	11 ; MIC 1 D 1	12 DW 2 N 2 2	3 ; 3 7 3 P1	4 4 ;	5 5 5	6 6	7 7 7	8 8 8	9 9	10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display Managemnt Unit is not attached. 3: Log Book Display 4: Temperature/SWR Display
Answer DN Set Read Answer DP Set	11 ; MIC 1 D 1	12 2 N 2 2 PLAY 2 P	3 3 7 3 P1 3 ;	4 4 ;	5 5 5	6 6	7 7 7	8 8 8	9 9	10 10 10	P1	Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display
Answer DN Set Read Answer DP Set Read	11 ; MIC 1 D 1 D 1 D 1 D 1 D 1 D 1 D 1 D D	12 2 N 2 2 PLAY 2 P	3 3 7 3 P1 3 ;	4 4 ;	5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display Managemnt Unit is not attached. 3: Log Book Display 4: Temperature/SWR Display
Answer DN Set Read Answer DP Set Read Answer	11 ; MICC 1 D 1	2 N 2 PLAN 2 P 2 P P 2 P P	3 ; 3 91 3 P1 3 P1	4 4 4 ;	5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	P1	Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display
Answer DN Set Read Answer DP Set Read	11 ; MICC 1 D 1	2 N 2 PLAN 2 P 2 P P 2 P P	3 ; 3 91 3 P1 3 P1	4 4 4 4 4 4 4 4	5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	P1	Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display
Answer DN Set Read Answer DP Set Read Answer	11 ; MICC 1 D 1	2 N 2 P 2 P 2 P	3 3 3 P1 3 7 3 P1 3 2 8	4 4 4 ;	5 5 5	6 6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display
Answer DN Set Read Answer DP Set Read Answer	11 ; MIC 1 D 1 D S T D T D T D D T D D	2 N 2 2 PLAY 2 P 2 P 2 P 2 P 2 P 2 P 2 P 2 P 2 P 2	3 7 3 P1 3 P1 3 2 8	4 4 4 ; 4 ;	5 5 5	6 6 6	7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9	10 10 10 10		Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display
Answer DN Set Read Answer DP Set Read Answer DS Set	11 ; MIC 1 D 1 D S T D T T	2 N 2 2 PLAY P 2 P P 2 P P S S	3; 3 P1 3 P1 3 P1	4 4 4 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	5 5 5 5	6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8 8	9 9 9 9	10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer	11 ;	2 N 2 PLAY 2 P P 2 P P 2 P S S 2	3 3 3 91 3 P1 3 P1 3 P1 3	4 4 4 ; 4 ; ; ; ; ; ; ;	5 5 5	6 6 6 6	7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9	10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer DS Set Read	11 ; MIC 1 D 1	2 N 2 2 PLAY P 2 P P 2 P P S S 2 S S	3 ; 3 P1 3 P1 3 P1 3 P1 3 ;	4 4 4 ; 4 ; 1TCH 4 ;	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer DS Set	11 ;	2 N 2 PLAY 2 P P 2 P P 2 P S S 2	3 3 3 7 3 91 3 P1 3 P1 3 7 3 P1 3 7	4 4 4 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	5 5 5 5	6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8 8	9 9 9 9	10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer DS Set Read	11 ;	2 N 2 2 PLAY P 2 P P 2 P P S S 2 S S	3 ; 3 P1 3 P1 3 P1 3 P1 3 ;	4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 4 4 ; ; 6 4 ; 6 6 6 6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer DS Set Read	11 ;	2 N 2 PLAY 2 P P 2 P P 2 S S 2 S 2	3 3 3 7 3 91 3 P1 3 P1 3 7 3 P1 3 7	4 4 4 ; 4 ; ; TTCH 4 ;	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer Read Answer Answer	11 ; MIC 1 D 1	2 N 2 2 PLAN 2 P 2 P 2 P 2 P 2 S 2 S S S	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; ; ; ; ; ;	5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10		1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF"
Answer DN Set Read Answer DP Set Read Answer Read Answer DS Set Read Answer	11 ; MIC 1	2 N 2 2 PLA 2 P 2 P 2 P 2 P 2 S 2 S S CORI	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 ; iTCH 4 ; j	5 5 5 5 5 5	6 6 6 6 6 6	7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON"
Answer DN Set Read Answer DP Set Read Answer Read Answer Answer	11 ;	2 N 2 2 PLAN 2 P 2 P 2 P 2 P 2 S 2 S S CORI 2	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 5 TTCH 4 ;	5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10		1: Band Scope Display 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER
Answer DN Set Read Answer DP Set Read Answer ED Set Read Answer	11 ;	2 N 2 2 PLAN 2 P 2 P 2 P 2 P 2 S 2 S S CORI 2 D	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 1TCH 4 ;	5 5 5 5 5 5 7 5 7	6 6 6 6 6 6 6 ;	7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER 1: SUB ENCORDER
Answer DN Set Read Answer DP Set Read Answer Read Answer DS Set Read Answer	11 ;	2 N 2 2 PLAN 2 P 2 P 2 P 2 P 2 S 2 S S CORI 2	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 5 TTCH 4 ;	5 5 5 5 5 5 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10 10	P1	1: Band Scope Display 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER
Answer DN Set Read Answer DP Set Read Answer ED Set Read Answer	11 ;	12	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 1TCH 4 ;	5 5 5 5 5 5 5 7 5	6 6 6 6 6 6 6 ;	7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10 10	P1	1: Band Scope Display vates when the optional Data 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER 1: SUB ENCORDER 2: MAIN Select
Answer DN Set Read Answer DP Set Read Answer ED Set Read Answer	11 ;	2 N 2 2 PLAN 2 P 2 P 2 P 2 P 2 S 2 S S CORI 2 D	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 1TCH 4 ;	5 5 5 5 5 5 7 5 7	6 6 6 6 6 6 6 ;	7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10 10	P1	1: Band Scope Display 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER 1: SUB ENCORDER 2: MAIN Select 3: SUB Select
Answer DN Set Read Answer DP Set Read Answer ED Set Read Answer	11 ;	12	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 4 4 ; 4 ; 5 TTCH 4 ; 4 P2	5 5 5 5 5 5 5 7 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10 10 10	P1	1: Band Scope Display 2: AF Oscilloscope/Spectrum Analyzer Display 3: Log Book Display 4: Temperature/SWR Display 5: Rotator Display 6: Memory Channel List Display 0: DIMMER "OFF" 1: DIMMER "ON" 0: MAIN ENCORDER 1: SUB ENCORDER 2: MAIN Select 3: SUB Select

CONTROL COMMAND TABLES

EU	ENC	CORI	DER	UP							
Set	1	2	3	4	5	6	7	8	9	10	P1 0: MAIN ENCORDER
	Е	U	P1	P2	P2	;					1: SUB ENCORDER
Read	1	2	3	4	5	6	7	8	9	10	2: MAIN Select 3: SUB Select
											P2 01-99: Steps
Answer	1	2	3	4	5	6	7	8	9	10	

EX	MEN	VU									
Set	1	2	3	4	5	6	7	8	nn	**	P1 : 001-176 (MENU Number)
	Е	Χ	P1	P1	P1	P2	P2	~	P2	;	P2 : Parameter
Read	1	2	3	4	5	6	7	8	9	10	See Table 1 - Table 3
	Е	Х	P1	P1	P1	;					
Answer	1	2	3	4	5	6	7	8	nn	**	
	Е	Х	P1	P1	P1	P2	P2	~	P2	;	

TABLE 1

P1	FUNCTION	P2	BYTE
001	MAIN-FAST-DELAY	0020~4000 (20msec/step)	4
002	MAIN-FAST-HOLD	0000~2000 (20msec/step)	4
003	MAIN-MID-DELAY	0020~4000 (20msec/step)	4
004	MAIN-MID-HOLD	0000~2000 (20msec/step)	4
005	MAIN-SLOW-DELAY	0020~4000 (20msec/step)	4
006	MAIN-SLOW-HOLD	0000~2000 (20msec/step)	4
007	TFT COLOR	0: COOL BLUE, 1: CONTRAST BLUE, 2: FLASH WHITE, 3: CONTRAST UMBER, 4: UMBER	1
008	DIMMER-METER	00~15	2
-			
009	DIMMER-VFD	00~15	2
010	DIMMER-OLE	00~15	2
011	DIMMER-E.LCD	00~15	2
012	BAR DISPLAY SELECT	0: CLAR, 1: CW TUNE	1
013	SUB MTR PEAK HOLD	0: OFF, 1: 0.5, 2: 1.0, 3: 2.0 (sec)	1
014	ROTATOR START UP	0. 0°, 1. 90°, 2: 180°, 3: 270°	1
015	ROTATOR OFFSET ADJ	-30~0 (P2 = 30~00) (2°step)	2
-			
016	QMB MARKER	0: DISABLE, 1: ENABLE	1
017	LEVEL INDICATOR	00000000000 ~ 111111111111 (see Page 9)	13
018	INDICATOR	0: VFD, 1: OEL	1
019	SELECT	0: PTN1, 1: PTN2	1
020	RX OUT LEVEL	000~100	3
021	TX OUT LEVEL	000-100	3
022	BEACON TIME	OFF/001~255sec (0: OFF)	3
-			
023	NUMBER STYLE	0: 1290, 1: AUNO, 2: AUNT, 3: A2NO, 4: A2NT, 5: 12NO, 6: 12NT	1
024	CONTEST NUMBER	0000~9999	4
025	CW MEMORY 1	0: TEXT, 1: MESSAGE	1
026	CW MEMORY 2	0: TEXT, 1: MESSAGE	1
027	CW MEMORY 3	0: TEXT, 1: MESSAGE	1
028	CW MEMORY 4	0: TEXT, 1: MESSAGE	1
029	CW MEMORY 5	0: TEXT, 1: MESSAGE	1
030		0: BAND, 1: STACK	1
-	ANT SELECT		
031	BEEP LEVEL	000~100	3
032	CAT RATE	0: 4800, 1: 9600, 2: 19200, 3: 38400 (bps)	1
033	CAT TIME OUT TIMER	0: 10, 1: 100, 2: 1000, 3: 3000 (msec)	1
034	CAT RTS	0: DISABLE, 1: ENABLE	1
035	CAT DATA INDICATOR	0: DISABLE, 1: ENABLE	1
036	MEM GROUP	0: DISABLE, 1: ENABLE	1
037	QUICK SPLIT FREQ	-20 ~ +20 kHz (P2 = -20 ~ +00 ~ +20)	3
-			
038	TRACKING	0: OFF, 1: BAND, 2: FREQ	1
039	TIME OUT TIMER	OFF/01~30min	2
040	TRV OFFSET (14MHz)	30: 30, 31: 31, 32: 32 ~ 44: 44, 45: 45, 46: 46 (MHz)	2
041	TRV OFFSET (28MHz)	30: 30, 31: 31, 32: 32 ~ 44: 44, 45: 45, 46: 46 (MHz)	2
042	TRV OFFSET (50MHz)	30: 30, 31: 31, 32: 32 ~ 44: 44, 45: 45, 46: 46 (MHz)	2
043	uTUNE DIAL STEP	0: DIAL STEP-2, 1: DIAL STEP-1, 2: OFF	1
044	MIC SCAN	0: DISABLE, 1: ENABLE	1
045		0: PAUSE, 1: TIME	1
	MIC SCAN RESUME		
046	FREQ ADJ	-25~0~+25 (P2 = -25 ~ +00 ~ +25)	3
047	AM LCUT FREQ	00: OFF, 01: 100Hz, ~, 19: 1000Hz (50Hz/step)	2
048	AM LCUT SLOPE	0: 6dB/oct, 1: 18dB/oct	1
049	AM HCUT FREQ	00: OFF, 01: 700Hz, ~, 67: 4000Hz (50Hz/step)	2
050	AM HCUT SLOPE	0: 6dB/oct, 1: 18dB/oct	1
051	AM MIC GAIN	MCVR/FIX(0~100) (P2 = 1000: MCVR, 0000~0100: FIX(0~100))	4
052	AM MIC SEL	0: FRONT, 1: DATA, 2: PC	1
-			
053	CW LCUT FREQ	00: OFF, 01: 100Hz, ~, 19: 1000Hz (50Hz/step)	2
054	CW LCUT SLOPE	0: 6dB/oct, 1: 18dB/oct	1
055	CW HCUT FREQ	00: OFF, 01: 700Hz, ~, 67: 4000Hz (50Hz/step)	2
056	CW HCUT SLOPE	0: 6dB/oct, 1: 18dB/oct	1
057	F-KEYER TYPE	0: OFF, 1: BUG, 2: ELEKEY, 3: ACS	1
	F-CW KEYER	0: NOR, 1: REV	1
	R-KEYER TYPE	0: OFF, 1: BUG, 2: ELEKEY, 3: ACS	1
-			
060	R-CW KEYER	0: NOR, 1: REV	1
061	CW AUTO MODE	0: OFF, 1: 50M, 2: ON	1
062	CW BFO	0: USB, 1: LSB, 2: AUTO	1
063	CW BK-IN	0: SEMI, 1: FULL	1
064	CW WAVE SHAPE	0: 1, 1: 2, 2: 4, 3: 6 (msec)	1
065	CW WEIGHT	2.5~3.0~4.5 (P2 = 25~45)	2
066	CW FREQ DISPLAY	0: DIRECT FREQ, 1: PITCH OFFSET	1
	OW LINE & DISPERSI	U. DINLOTTINES, I. FITOH OFFICE	1 1
	PC KEYING	0: DISABLE, 1: ENABLE	1 1

CONTROL COMMAND TABLES

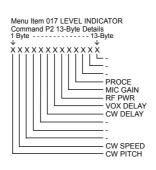
TABLE 2

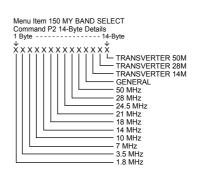
OSC OSC	D 4	FUNCTION		DVTE
Top DATA SCANDAR DOI: 100 DATA SCANDAR DATA SCANDAR DOI: 100 DATA SCANDAR DOI: 100 DATA SCANDAR D	P1	FUNCTION	P2	BYTE
DOT DATA YOUR	068	QSK	0: 15, 1: 20, 2: 25, 3: 30 (msec)	1
DOT DATA YOUR	069	DATA IN SELECT		1
2017 DATA OUT DA				3
DOTS DATA COUNT EVEL				
1973 DATA VOX. DEL. AVY				1
DAY DAY NOW CANN DOD-100			000~100	3
Control Cont	073	DATA VOX DELAY	0030~0300~3000msec (10msec/step)	4
Control Cont	074	DATA VOX GAIN	000~100	3
Continue Continue				2
OFF PH HOUT PREC				
CFS				1
Description	077	FM HCUT FREQ	00: OFF, 01: 700, ~ , 67: 4000 Hz (50Hz/step)	2
Description	078	FM HCUT SLOPE	0: 6 . 1: 18 (dB/oct)	1
0.00 PM C SET 0.00 PM				4
Section Content Cont				
DOI: 1000 - 1000 - 1000 - 1000 - 1000 - 1000 1000				1
DOCUMENT DOCUMENT	081	RPT SHIFT(28MHz)	0000 ~0100 ~ 1000 kHz (10Hz/step)	4
083 PRT LOUT FRED	082	RPT SHIFT(50MHz)	0000 ~0100 ~ 1000 ~ 4000 kHz (10Hz/step)	4
0.68 PRT LOUT SLOPE				2
DOC PRT HOUT PREC DOC OFF 0.1 700 0.7 4000 Ptz (50014496)				
06.00	084			1
06.00	085	PKT HCUT FREQ	00: OFF, 01: 700, ~ , 67: 4000 Hz (50Hz/step)	2
1007 PT TISP ESS)				1
0.000				
TITLY LOUT FIRED				5
OFF DITTY CUT FRED DO OFF DI 1100 19 1000 12 1000 1000 12	088	PKT SHIFT (SSB)	-3000 ~ 0 ~ +3000 Hz (10Hz/step) (P2 = -3000 ~ +0000 ~ +3000)	5
Dec HTTYLCUT SLOPE Dec 1.18 (deliced) Dec TTYL PECK Dec Dec TTYL PECK Dec Dec Dec TTYL PECK Dec	089			2
DOT STYN FOUT SLOPE D. C. 1: 18 (dishce)				
Dec Dec				1
ORD FOLARITY ORD				2
0.004 POLARITYCE	092	RTTY HCUT SLOPE	0: 6, 1: 18 (dB/oct)	1
Got For Company Co				1
1985 RTYY OUT EVEL				
1999 NTTY OUT LEVEL				1
1997 NTTY SHIFT				1
1997 NTTY SHIFT	096	RTTY OUT LEVEL	000 ~100	3
G99 SSB LOUT FRED 0.1275, 1:2125 (Hz)				1
1999 SSB LCUT FREQ				
100 SSB LCUT SLOPE				1
101 SSB HCUT FORD	_			2
101 SSB HCUT FORD	100	SSB LCUT SLOPE	0: 6, 1: 18 (dB/oct)	1
102 SSB HOUT SLOPE 0 - 6 1: 18 (Blocd) 0 - 5				2
1935 SSB MIC SELECT	_			
104 SSB-TX-BPF				1
105 LSB RX-CARRIER	103		0: FRONT, 1: DATA, 2: PC	1
105 LSB RX-CARRIER	104	SSB-TX-BPF	0: 50-3000, 1: 100-2900, 2: 200-2800, 3: 300-2700, 4: 400-2600(Hz), 5: 3000WB	1
109 USB RX-CARRIER				4
AGC-SLOPE				
TOB				4
TIOS THEADPHONE MIX	107	AGC-SLOPE	0: NORMAL, 1: SLOPE	1
190 IF OUT	108			1
MAIN NO HEVEL				1
THI MAIN NB WIDTH				
MINI-CONTOUR-LEVEL	_			3
113	111	MAIN NB WIDTH		3
113	112	MAIN-CONTOUR-LEVEL	-40~0~20 (P2 = -40 ~ +00 ~ +20)	3
114 IF-NOTCH-WIDTH				2
115 MAIN-CW SLOPE 0. STEEP, 1. HEDIUM, 2. GENTLE				1
116 MAIN-CW SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 117 MAIN-PSK SHAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 118 MAIN-PSK SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 119 MAIN-RTY SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 120 MAIN-RTY SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 121 MAIN-SSB SHAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 122 MAIN-SSB SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 123 SUB-CW SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 124 SUB-CW SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 125 SUB-CW SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 126 SUB-PSK SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 127 SUB-CW SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 128 SUB-PSK SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 129 SUB-SSK SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 120 SUB-SSK SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 121 SUB-RTY SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 122 SUB-RTY SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 123 SUB-SSB SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 124 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 125 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 126 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 127 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 128 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 129 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 130 SUB-SSB SLAPE 0. STEEP, 1: MEDIUM, 2: GENTLE 131 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 132 FIX 3: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 133 FIX 5: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 134 FIX 7: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 135 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 136 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 137 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 138 FIX 5: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 139 FIX 2: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 130 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 131 FIX 1: MINH2 1. SUBMH2 1: MEDIUM, 2: GENTLE 1				
1117 MAIN-PSK SLOPE 0. SOFT, 1. SHARP 1. STEEP; 1. MEDIUM, 2. GENTLE 1. MEDIUM, 2. MENTER 1. STEEP; 1. MEDIUM, 2. GENTLE 1. 1. STEEP; 1	115	MAIN-CW SHAPE	0: SOFT, 1: SHARP	1
MAIN-PSK SLOPE	116	MAIN-CW SLOPE	0: STEEP, 1: MEDIUM, 2: GENTLE	1
MAIN-PSK SLOPE	117	MAIN-PSK SHAPE		1
119 MAIN-RTY SLOPE 0: SOFT, 1: SHARP 120 MAIN-SSB SHAPE 0: SOFT, 1: SHARP 121 MAIN-SSB SHAPE 0: SOFT, 1: SHARP 122 MAIN-SSB SHAPE 0: SOFT, 1: SHARP 123 SUB-CW SHAPE 0: SOFT, 1: SHARP 124 SUB-CW SHAPE 0: SOFT, 1: SHARP 125 SUB-PSK SHAPE 0: SOFT, 1: SHARP 126 SUB-PSK SHAPE 0: SOFT, 1: SHARP 127 SUB-CW SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 128 SUB-PSK SHAPE 0: SOFT, 1: SHARP 128 SUB-PSK SHAPE 0: SOFT, 1: SHARP 128 SUB-RSK SHAPE 0: SOFT, 1: SHARP 128 SUB-RSK SHAPE 0: SOFT, 1: SHARP 129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 130 SUB-SSB SHAPE 0: SOFT, 1: SHARP 131 FIX 1. SMHz 1. SUB-MTZ - 1. SMHZ - 1.				
1210 MAIN-RTY SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1211 MAIN-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1221 MAIN-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1232 SUB-CW SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1243 SUB-CW SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1253 SUB-PSK SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1264 SUB-PSK SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1275 SUB-PSK SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1287 SUB-RTY SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1298 SUB-SSK SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1299 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1299 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1290 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1301 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 1312 FIX 1: SMHz 1: 1000MHz ~ 1: 999MHz 1: KHz /step (P2 = 01800 ~ 01999) 132 FIX 3: SMHz 3: 500MHz ~ 3: 999MHz 1: KHz /step (P2 = 01800 ~ 01999) 133 FIX 5: SMHz 3: 500MHz ~ 3: 5				1
MAIN-SSB SHAPE				1
MAIN-SSB SHAPE	120	MAIN-RTY SLOPE	0: STEEP, 1: MEDIUM, 2: GENTLE	1
122 MAIN-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE				1
123 SUB-CW SLAPE 0: SOFT, 1: SHARP 0:			•	_
124 SUB-CW SLOPE				1
125 SUB-PSK SHAPE				1
125 SUB-PSK SHAPE	124	SUB-CW SLOPE	0: STEEP, 1: MEDIUM, 2: GENTLE	1
126 SUB-PSK SLOPE D: STEEP, 1: MEDIUM, 2: GENTLE		0110 0011 0111 00		1
127 SUB-RTY SLOPE 0: SOFT, 1: SHARP 0: SOFT, 1: SHARP 0: SUB-SSB SHAPE 0: STEEP, 1: MEDIUM, 2: GENTLE 129 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 131 FX			•	1
128 SUB-RTY SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 0: SOFT, 1: SOFT, 1: SHARP 0: SOFT, 1: SOFT,				
129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 0: STEEP, 1: MEDIUM, 2: GENTLE 118 IFIX 1.8MHz 1.800MHz ~ 1.999MHz 1kHz /step (P2 = 01800 ~ 01999) 132 FIX 3.5MHz 3.500MHz ~ 3.999MHz 1kHz /step (P2 = 05500 ~ 05999) 133 FIX 5.0MHz 5.250MHz ~ 5.499MHz 1kHz /step (P2 = 05500 ~ 05499) 134 FIX 7.0MHz 7.000MHz ~ 7.299MHz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 101000 ~ 10149) 136 FIX 14MHz 14.000MHz ~ 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz ~ 14.349MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 24MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 21449) 139 FIX 24MHz 21.000MHz ~ 24.499MHz 1kHz /step (P2 = 24000 ~ 24498) 140 FIX 28MHz 22.000MHz ~ 29.899MHz 1kHz /step (P2 = 24000 ~ 24989) 141 FIX 500MHz 20.000MHz ~ 29.899MHz 1kHz /step (P2 = 28000 ~ 29699) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UPDOWN STEP 0: 1 1.5 Hz, 2: 10Hz 0: DISABLE, 1: ENABLE 146 FM CH STEP 0: 25, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 149 FM DIAL STEP 0: 0.000 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0:				1
129 SUB-SSB SHAPE 0: SOFT, 1: SHARP 130 SUB-SSB SLOPE 0: STEEP, 1: MEDIUM, 2: GENTLE 131 FIX 1.8MHz 1.800MHz ~ 1.999MHz 1kHz /step (P2 = 03500 ~ 03999) 132 FIX 3.5MHz 3.500MHz ~ 3.999MHz 1kHz /step (P2 = 05500 ~ 05499) 133 FIX 5.0MHz 5.250MHz ~ 5.499MHz 1kHz /step (P2 = 07000 ~ 07299) 134 FIX 7.0MHz 7.000MHz ~ 7.299MHz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 10000 ~ 10149) 136 FIX 14MHz 14.000MHz ~ 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz ~ 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 138 FIX 21MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 24MHz 21.000MHz ~ 24.498MHz 1kHz /step (P2 = 12000 ~ 24449) 139 FIX 24MHz 22.000MHz ~ 24.989MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 22.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 28699) 141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 250000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 144 UPPOWN STEP 0: 1 MHz, 1: 100MHz 100MHz 11.00MHz 14.40MHz	128	SUB-RTY SLOPE	0: STEEP, 1: MEDIUM, 2: GENTLE	1
130 SUB-SSB SLOPE 0. STEEP, 1: MEDIUM, 2: GENTLE 131 FIX 1.8MHz 1.800Mtz - 1.999Mtz 1kHz /step (P2 = 01800 ~ 01999) 132 FIX 3.5MHz 3.500Mtz ~ 3.999Mtz 1kHz /step (P2 = 03500 ~ 03999) 133 FIX 5.0Mtz 5.250Mtz ~ 5.499Mtz 1kHz /step (P2 = 05250 ~ 05499) 134 FIX 7.0MHz 7.000Mtz ~ 7.299Mtz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10Mtz 10.100Mtz ~ 10.149Mtz 1kHz /step (P2 = 10100 ~ 10149) 136 FIX 14Mtz 14.000Mtz ~ 14.349Mtz 1kHz /step (P2 = 10100 ~ 14349) 137 FIX 18Mtz 18.000Mtz ~ 18.199Mtz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 21Mtz 21.000Mtz ~ 21.449Mtz 1kHz /step (P2 = 12000 ~ 21449) 139 FIX 24Mttz 24.800Mtz ~ 24.898Mtz 1kHz /step (P2 = 24800 ~ 24988) 140 FIX 28Mttz 28.000Mtz ~ 29.699Mtz 1kHz /step (P2 = 24800 ~ 24988) 141 FIX 50Mttz 28.000Mtz ~ 29.699Mtz 1kHz /step (P2 = 26000 ~ 26999) 142 DIAL STEP 0.1.1.1.5 Hz, 2: 10Hz 143 DIAL CW FINE 0.1.5 Hz, 2: 10Hz 0.1.5 Hz, 2: 10Hz 144 UP/DOWN STEP 0.1.1.1.5 Hz, 2: 10Hz 0.1.4 12.5 kHz 145 AM CH STEP 0.2.5, 1: 5, 2: 9, 3: 10.4: 12.5 kHz 146 FM CH STEP 0.1.5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0.108ABE, 1: ENABLE 148 FM DIAL STEP 0.1.1.1 100Hz 150 MY BAND 0.0000000000000000000000000000000000	129	SUB-SSB SHAPE		1
131 FIX 1.8MHz				1
132 FIX 3.5MHz 3.500MHz 3.999MHz 1kHz /step (P2 = 03500 ~ 03999) 133 FIX 5.0MHz 5.250MHz ~ 5.499MHz 1kHz /step (P2 = 07500 ~ 05290 ~ 05499) 134 FIX 7.0MHz 7.00MHz 7.000MHz ~ 7.299MHz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 11000 ~ 10149) 136 FIX 14MHz 14.000MHz ~ 18.199MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 22MHz 24.800MHz ~ 24.499MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 2699) 141 FIX 50MHz 50.000MHz ~ 50.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0.11, 1.51, 2.10Hz 0.10KHz 0				5
133 FIX 5.0MHz 5.250MHz 5.250MHz 7.000MHz 1412 /step (P2 = 05250 ~ 05499) 134 FIX 7.0MHz 7.000MHz 7.000MHz 7.1299MHz 1412 /step (P2 = 10100 ~ 10149) 135 FIX 10MHz 10.100MHz 70.1499MHz 1412 /step (P2 = 10100 ~ 10149) 136 FIX 14MHz 14.000MHz 71.4349MHz 1412 /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz 71.4349MHz 1412 /step (P2 = 14000 ~ 14349) 138 FIX 21MHz 21.000MHz 71.4494MHz 1412 /step (P2 = 14000 ~ 21449) 139 FIX 24MHz 24.800MHz 72.4498MHz 1412 /step (P2 = 14000 ~ 21449) 139 FIX 24MHz 24.800MHz 72.4989MHz 1412 /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz 72.9699MHz 1412 /step (P2 = 28000 ~ 25699) 141 FIX 50MHz 50.000MHz 73.999MHz 1412 /step (P2 = 28000 ~ 25999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1, 1112, 1: 1004Hz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000000000000000000000000				
133 FIX 5.0MHz 5.250MHz 5.250MHz 7.000MHz 1412 /step (P2 = 05250 ~ 05499) 134 FIX 7.0MHz 7.000MHz 7.000MHz 7.1299MHz 1412 /step (P2 = 10100 ~ 10149) 135 FIX 10MHz 10.100MHz 70.1499MHz 1412 /step (P2 = 10100 ~ 10149) 136 FIX 14MHz 14.000MHz 71.4349MHz 1412 /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz 71.4349MHz 1412 /step (P2 = 14000 ~ 14349) 138 FIX 21MHz 21.000MHz 71.4494MHz 1412 /step (P2 = 14000 ~ 21449) 139 FIX 24MHz 24.800MHz 72.4498MHz 1412 /step (P2 = 14000 ~ 21449) 139 FIX 24MHz 24.800MHz 72.4989MHz 1412 /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz 72.9699MHz 1412 /step (P2 = 28000 ~ 25699) 141 FIX 50MHz 50.000MHz 73.999MHz 1412 /step (P2 = 28000 ~ 25999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1, 1112, 1: 1004Hz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000000000000000000000000	132			5
134 FIX 7.0MHz 7.09MHz 7.299MHz 1kHz /step (P2 = 07000 ~ 07299) 135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 110100 ~ 10149) 136 FIX 14MHz 14.000MHz ~ 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 22MHz 24.800MHz ~ 24.498MHz 1kHz /step (P2 = 22800 ~ 24989) 140 FIX 22MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 33.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz / 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ2 BWTH 01~10 155 PRMTRC EQ2 EVEL -10~++10 (P2 = -10 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	133	FIX 5.0MHz	5.250MHz ~ 5.499MHz 1kHz /step (P2 = 05250 ~ 05499)	5
135 FIX 10MHz 10.100MHz ~ 10.149MHz 1kHz /step (P2 = 10100 ~ 10149) 136 FIX 14MHz 14.000MHz - 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz - 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 138 FIX 21MHz 21.000MHz - 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 24MHz 24.800MHz - 24.989MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz - 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz - 53.999MHz 1kHz /step (P2 = 28000 ~ 29699) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 0: 1, 1:				5
136 FIX 14MHz 14.000MHz ~ 14.349MHz 1kHz /step (P2 = 14000 ~ 14349) 137 FIX 18MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 24MHz 24.800MHz ~ 21.499MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 29.699MHz 1kHz /step (P2 = 50000 ~ 53999) 141 FIX 50MHz 50.000MHz ~ 29.699MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 5, 1: 6.25, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND				5
137 FIX 18MHz 18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199) 138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 24MHz 24.800MHz ~ 24.899MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 24.800MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 1P/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000000 ~ 1:111111111111111111				
138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 24MHz 24.800MHz ~ 24.989MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 11111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				5
138 FIX 21MHz 21.000MHz ~ 21.449MHz 1kHz /step (P2 = 21000 ~ 21449) 139 FIX 24MHz 24.800MHz ~ 24.989MHz 1kHz /step (P2 = 24800 ~ 24989) 140 FIX 28MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1, 11: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000 ~ 111111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 EREQ 00: OFF, 01: 100, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 2000, 07: 2100, 08: 2200, 09: 2300 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	137	FIX 18MHz	18.000MHz ~ 18.199MHz 1kHz /step (P2 = 18000 ~ 18199)	5
139	138			5
140 FIX 28MHz 28.000MHz ~ 29.699MHz 1kHz /step (P2 = 28000 ~ 29699) 141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000 ~ 111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 EVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900				5
141 FIX 50MHz 50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999) 142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 000000000000000 ~ 111111111111111111111	_			
142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 1:111111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 154 PRMTRC EQ2 BWTH 01~10 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				5
142 DIAL STEP 0: 1, 1: 5Hz, 2: 10Hz 143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 1:111111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 154 PRMTRC EQ2 BWTH 01~10 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	141		50.000MHz ~ 53.999MHz 1kHz /step (P2 = 50000 ~ 53999)	5
143 DIAL CW FINE 0: DISABLE, 1: ENABLE 144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL STEP 0: 10, 1: 100Hz 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 000000000000000 ~ 1111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 BWTH 01~0 154 PRMTRC EQ1 BWTH 01~10 155 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	142			1
144 UP/DOWN STEP 0: 1MHz, 1: 100kHz 145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ2 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				1
145 AM CH STEP 0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz 146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000000 ~ 11111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	_			
146 FM CH STEP 0: 5, 1: 6.25, 2: 10, 3: 12.5, 4: 20kHz, 5: 25kHz 147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 00000000000000 ~ 11111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				1
147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 EVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	145	AM CH STEP	0: 2.5, 1: 5, 2: 9, 3: 10, 4: 12.5kHz	1
147 AM DIAL LOCK 0: DISABLE, 1: ENABLE 148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 EVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	146			1
148 FM DIAL LOCK 0: DISABLE, 1: ENABLE 149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 1111111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 EVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	_			1
149 FM DIAL STEP 0: 10, 1: 100Hz 150 MY BAND 0000000000000 ~ 11111111111111 (see Page 9) 151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10-0~10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 157 PRMTRC EQ3 FREQ 00: OFF, 01: 1500, 02: 1600, 03: 1700, 04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				
150 MY BAND				1
150 MY BAND	149	FM DIAL STEP		1
151 PRMTRC EQ1 FREQ 00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz) 152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	150			14
152 PRMTRC EQ1 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				2
153 PRMTRC EQ1 BWTH 01~10 154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				
154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10-0+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				3
154 PRMTRC EQ2 FREQ 00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz) 155 PRMTRC EQ2 LEVEL -10-0+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	153	PRMTRC EQ1 BWTH	01~10	2
155 PRMTRC EQ2 LEVEL -10~0~+10 (P2 = -10 ~ +00 ~ +10) 156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300			00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000. 05: 1100. 06: 1200. 07: 1300. 08: 1400. 09: 1500 (Hz)	2
156 PRMTRC EQ2 BWTH 01~10 157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	_			3
157 PRMTRC EQ3 FREQ 00: OFF,01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300				
				2
	157	PRMTRC EQ3 FREQ		2
10: 2400, 11: 2500, 12: 2600, 13: 2700, 14: 2800, 15: 2900, 16: 3000, 17: 3100, 18: 3200 (Hz)			10: 2400, 11: 2500, 12: 2600, 13: 2700, 14: 2800, 15: 2900, 16: 3000, 17: 3100, 18: 3200 (Hz)	

CONTROL COMMAND TABLES

TABLE 3

P1	FUNCTION	P2	BYTE
158	PRMTRC EQ3 LEVEL	-10~0~+10 (P2 = -10 ~ +00 ~ +10)	3
159	PRMTRC EQ3 BWTH	01~10	2
160	P-PRMTRC EQ1-FREQ	00: OFF, 01: 100, 02: 200, 03: 300, 04: 400, 05: 500, 06: 600, 07: 700 (Hz)	2
161	P-PRMTRC EQ1-LEVEL	-10~0~+10 (P2 = -10 ~ +00 ~ +10)	3
162	P-PRMTRC EQ1-BWTH	01~10	2
163	P-PRMTRC EQ2-FREQ	00: OFF, 01: 700, 02: 800, 03: 900, 04: 1000, 05: 1100, 06: 1200, 07: 1300, 08: 1400, 09: 1500 (Hz)	2
164	P-PRMTRC EQ2-LEVEL	-10~0~+10 (P2 = -10 ~ +00 ~ +10)	3
165	P-PRMTRC EQ2-BWTH	01~10	2
166	P-PRMTRC EQ3-FREQ	00: OFF, 01: 1500, 02: 1600, 03: 1700,04: 1800, 05: 1900, 06: 2000, 07: 2100, 08: 2200, 09: 2300	2
		10: 2400, 11: 2500, 12: 2600, 13: 2700, 14: 2800, 15: 2900, 16: 3000, 17: 3100, 18: 3200 (Hz)	
167	P-PRMTRC EQ3-LEVEL	-10~0~+10 (P2 = -10 ~ +00 ~ +10)	3
168	P-PRMTRC EQ3-BWTH	01~10	2
169	FINAL BIAS	A(1~100%) (P2 = 0001~0100: A(1~100%))	4
170	TX MAX POWER	0: 10(20), 1: 20(50), 2: 50(100), 3: 100(200) (200W type)	1
171	TX PWR CONTROL	0: ALL MODE, 1: CARRIER	1
172	EXT AMP TX-GND	0: DISABLE, 1: ENABLE	1
173	EXT AMP TUNING PWR	0: 10(20), 1: 20(50), 2: 50(100), 3: 100(200) (200W type)	1
174	VOX SELECT	0: MIC, 1: DATA	1
175	ANTI VOX GAIN	000~100	3
176	EMERGENCY FREQ TX	0: DISABLE, 1: ENABLE	1





FA	FRF	QUE	ENC	/ VF	O-A						
Set	1	2	3	4	5	6	7	8	9	10	P1 00030000 - 60000000 (Hz)
1001	F	A	P1	P1	P1	P1	P1	P1	P1	P1	1 1 00030000 - 00000000 (112)
			_	 	+	_	 	_		-	-
	11	12	13	14	15	16	17	18	19	20	-
Danie I	;	_	_	<u> </u>	-	_	-	_	_		-
Read	1	2	3	4	5	6	7	8	9	10	
	F	Α	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	F	Α	P1	P1	P1	P1	P1	P1	P1	P1	
	11	12	13	14	15	16	17	18	19	20	
	;										
50		-0115	-1101	/ \ / E							
FB				Y VF	$\overline{}$		-				T
Set	1	2	3	4	5	6	7	8	9	10	P1 00030000 - 60000000 (Hz)
	F	В	P1	P1	P1	P1	P1	P1	P1	P1	
	11	12	13	14	15	16	17	18	19	20	
	;										
Read	1	2	3	4	5	6	7	8	9	10	
	F	В	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	F	В	P1	P1	P1	P1	P1	P1	P1	P1	
	11	12	13	14	15	16	17	18	19	20	
	;										
FR		ICTI		XX		_		_			
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver: RX, Sub (VFO-B) Band Receiver: "OFF" 1: Main (VFO-A) Band Receiver: Mute, Sub (VFO-B) Band Receiver: "OFF"
	F	R	P1	;							2: Main (VFO-A) Band Receiver: RX, Sub (VFO-B) Band Receiver: RX
Read	1	2	3	4	5	6	7	8	9	10	3: Main (VFO-A) Band Receiver: Mute, Sub (VFO-B) Band Receiver: RX
	F	R	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	F	R	P1	;							
50		T 01									
FS		ST S1									I
Set	1	2	3	4	5	6	7	8	9	10	P1 0: VFO A "OFF" (SET Only) 4: VFO A "OFF", VFO B "OFF"
	F	S	P1	;							1: VFO A "ON" (SET Only) 5: VFO A "ON", VFO B "OFF" 2: VFO B "OFF" (SET Only) 6: VFO A "OFF", VFO B "ON"
Read	1	2	3	4	5	6	7	8	9	10	3: VFO B "ON" (SET Only) 7: VFO A "ON", VFO B "ON"
	F	S	;								1
Answer	1	2	3	4	5	6	7	8	9	10	
	F	S	P1	;							
	FILE	ICTI	0N T	·v							
FT Cot		ICTIO	_		T -		-				Int. o. TV Pool Anti-A/FO A) Pool in C. L. A/FO P) Pool (T. L.)
Set	1	2	3	4	5	6	7	8	9	10	P1 0: TX Band = Main (VFO-A) Band ↔ Sub (VFO-B) Band (Toggle) 1: TX Band = Sub (VFO-B) Band ↔ Main (VFO-A) Band (Toggle)
L	F	Т	P1	;						<u> </u>	2: TX Band = Sub (VFO-A) Band Wall (VFO-A) Band (Toggle)
Read	1	2	3	4	5	6	7	8	9	10	3: TX Band = Sub (VFO-B) Band
<u> </u>	F	Т	;								P2 0: TX Band = Main`(VFO-Á) Band
Answer	1	2	3	4	5	6	7	8	9	10	1: TX Band = Sub (VFO-B) Band
	F	Т	P2	;							
CT	100	C E	NOT	1011							
GT Set		C FU			-		-			4.5	DA O Maia (MEO A) David DO O ACO "OFF"
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band P3 0: AGC "OFF"
<u> </u>	G	Т	P1	P2	;						1: Sub (VFO-B) Band 1: AGC "FAST" P2 0: AGC "OFF" 2: AGC "MID"
Read	1	2	3	4	5	6	7	8	9	10	1: AGC "FAST" 2: AGC "MID"
	G	T	P1	;							2: AGC "MID" 4: AGC "AUTO-FAST"
Answer	1	2	3	4	5	6	7	8	9	10	3: AGC "SLOW" 5: AGC "AUTO-MID"
	G	Т	P1	P3	;						4: AGC "AUTO" 6: AGC "AUTO-SLOW"
10	15-										
ID Out		NTIF									T
Set	1	2	3	4	5	6	7	8	9	10	P1 0362: FTDX5000
	<u> </u>										1
Read	1	2	3	4	5	6	7	8	9	10	
	1	D	;								
Answer	1	2	3	4	5	6	7	8	9	10	I .

IF	INF	ORM	ATIC	N								
Set	1	2	3	4	5	6	7	8	9	10	P3	001-117 (Memory Channel) P2 VFO-A Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift
Read	1	2 F	3	4	5	6	7	8	9	10	P4	Clarifier Offset: 0000 - 9999 (Hz) 0: RX CLAR "OFF"
Answer	1	<u>г</u> 2	3	4	5	6	7	8	9	10		0: TX CLAR "OFF" 1: TX CLAR "ON" MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB)
	ī	F	P1	P1	P1	P2		P2	P2	P2		7: CW-R 8: PKT-L 9: FSK-R (RTTY-USB) A: PKT-FM
	11	12	13	14	15	16	17	18	19	20	P7	B: FM-N C: PKT-U 0: VFO 1: Memory 2: Memory Tune 3: Quick Memory Bank (QMB) 4: QMB-MT
	P2	P2	P2 23	P3	P3 25	P3	P3	P3	P4 29	P5 30	P8	0: CTCSS "OFF" 1: CTCSS ENC/DEC 2: CTCSS ENC Fone Number (See Page 5: "CTCSS Tone Chart") 00 ~ 49
	P6	P7	P8	P9		P10	;	20	29	30	P10	0: Simplex 1: Plus Shift 2: Minus Shift
10	15.0											
IS Set	1F-5	HIF1 2	3	4	5	6	7	8	9	10	D1	0:Main (VFO-A) Band Receiver
	i	S	P1	-/+	P2	P2		P2	• ;	10		1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2	-1000 ~ +1000 Hz
A := = : : : = : =	1	S	P1	;	_		_					
Answer	1 	2 S	3 P1	-/+	5 P2	6 P2	7 P2	8 P2	9	10		
KM				IORY					,			
Set	1	2	3	4	5	6	7	~	53	**	P1	1 - 5 : Keyer Memory Channel Number
	K	М	P1	P2	P2	P2	P2	~	P2	;	P2	Message Characters (up to 50 characters)
Read	1	2	3	4	5	6	7	8	9	10		n the message is complete, add the "}" character at the end to signify the termina-
Answer	K	M	P1 3	;	5	6	7	~	53	**		of the message.
7 11.011 01	K	M	P1	P2	P2	P2		~	P2	;	ex. N	(M CQ} ~ _; (_: space)
KP	KEY	' PIT	СН									
Set	1	2	3	4	5	6	7	8	9	10	P1	00 ~75: 300 Hz ~ 1050 Hz (10 Hz Step)
	K	Р	P1	P1	;							
Read	1	2	3	4	5	6	7	8	9	10		
Answer	K	P 2	3	4	5	6	7	8	9	10		
	K	P	P1	P1	;							
KR	KEY	/FD										
Set	1	2	3	4	5	6	7	8	9	10	P1	0: KEYER "OFF"
	K	R	P1	;								1: KEYER "ON"
Read	1	2	3	4	5	6	7	8	9	10		
Answer	K	R	3	4	5	6	7	8	9	10		
	K	R	P1	;	_							
KS	KEY	′ SPI	EED									
Set	1				5	6	7	8	9	10	P1	004 - 060 (WPM)
Dood	K	S	P1	P1	P1	;		•	•	10		
Read	1 K	2 S	3	4	5	6	7	8	9	10		
Answer	1	2	3	4	5	6	7	8	9	10		
	K	S	P1	P1	P1	;						
KY	CW	KEY	ING									
Set	1	2	3	4	5	6	7	8	9	10		1: Keyer Memory "1" Playback 6: Message Keyer "1" Playback
D	K	Υ	P1	;								2: Keyer Memory "2" Playback 7: Message Keyer "2" Playback 3: Keyer Memory "3" Playback 8: Message Keyer "3" Playback
Read	1	2	3	4	5	6	7	8	9	10		4: Keyer Memory "4" Playback 9: Message Keyer "4" Playback
Answer	1	2	3	4	5	6	7	8	9	10		5: Keyer Memory "5" Playback A: Message Keyer "5" Playback
LK	LOC	K										
Set	1	2	3	4	5	6	7	8	9	10		0: VFO A "OFF" (SET Only) 4: VFO A "OFF", VFO B "OFF"
Read	<u>L</u>	K	P1 3	;	5	6	7	8	9	10		1: VFO A "ON" (SET Only) 5: VFO A "ON", VFO B "OFF" 2: VFO B "OFF" (SET Only) 6: VFO A "OFF", VFO B "ON"
Neau		K	:	4	٦	υ	/	0	y	10		3: VFO B "ON" (SET Only) 7: VFO A "ON", VFO B "ON"
Answer	1	2	3	4	5	6	7	8	9	10		
	L	K	P1	;								

LM	LOA	AD M	ESS	AGE								
Set	1	2	3	4	5	6	7	8	9	10		2: DVS P2 When P1=0 When P1=1
	L	М	P1	P2	;						1	1: P. B 0: DVS (Recording Stop) 0: P.B (Recording Stop) 1: DVS (CH "1" Recording Start/Stop) 1: P.B (Recording Start)
Read	1	2	3	4	5	6	7	8	9	10		2: DVS (CH "2" Recording Start/Stop)
Answer	L	M	P1 3	; 4	5	6	7	8	9	10		3: DVS (CH "3" Recording Start/Stop) 4: DVS (CH "4" Recording Start/Stop)
Allowei	H	M	P1	P2		-	,	- 0	9	10		5: DVS (CH "5" Recording Start/Stop)
					,							· · · · · · · · · · · · · · · · · · ·
<i>MA</i> Set				IANN						40		
Set	1 M	2 A	3	4	5	6	7	8	9	10		
Read	1	2	3	4	5	6	7	8	9	10		
Answer	1	2	3	4	5	6	7	8	9	10		
МС	MEI	MOR	Y CH	IANN	IEL							
Set	1	2	3	4	5	6	7	8	9	10	P1 0	001 - 117: Memory Channel Number
	М	ပ	P1	P1	P1	;						001 - 099: Regular Memory Channel 100: P1L
Read	1	2	3	4	5	6	7	8	9	10		100. PTL 101: P1U
Answer	M	<u>C</u>	;	4	5	6	7	8	9	10		≀ 116: P9L
Allowei	м	C	P1	P1	P1		,	0	9	10		117: P9U
						,						
MD Set				MOE		_	-	_	_	4.0	D4 ^	Main (//FO A) Pand
Set	1 M	2 D	3 P1	4 P2	5	6	7	8	9	10): Main (VFO-A) Band I: Sub (VFO-B) Band
Read	1	2	3	4	5	6	7	8	9	10		MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB)
	М	D	P1	;	_							7: CW-R 8: PKT-L 9: FSK-R (RTTY-USB) A: PKT-FM B: FM-N C: PKT-U
Answer	1	2	3	4	5	6	7	8	9	10		B. 1 III 10 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	M	D	P1	P2	;							
MG	МІС	GAI	N									
Set	1	2	3	4	5	6	7	8	9	10	P1 0	000 - 255
	М	G	P1	P1	P1	;						
Read	1 M	2 G	3	4	5	6	7	8	9	10		
Answer		2	3	4	5	6	7	8	9	10		
	1 1											
	1 M	G	P1	P1	P1	;		-	3	10		
	М	G	P1		P1	;			9	10		
MK	MOI	G DE K	P1	P1		,	7				P1 k	(FY 0·LSB
	MO I	G DE K 2	P1 (EY 3		P1 5	;	7	8	9	10	P1 k	1: USB
MK	MOI	G DE K	P1	P1 4		,	7				P1 k	1: USB 2: CW
MK Set	MOI 1 M	G 2 K 2	P1 3 P1	P1 4 ;	5	6		8	9	10	P1 k	1: USB 2: CW 3: AM / FM 4: FM / FM
MK Set	MOI 1 M	G DE K 2 K	P1 3 P1	P1 4 ;	5	6		8	9	10	P1 k	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY
MK Set	MOI 1 M 1	G 2 K 2	P1 3 P1 3	P1 4 ; 4	5	6	7	8	9	10	P1 k	1: USB 2: CW 3: AM / FM 4: FM / FM
MK Set Read Answer	MOI 1 M 1 1	G DE K 2 K 2 2	P1 3 P1 3	4 ; 4 4	5 5	6 6	7	8 8	9 9	10		1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT
MK Set Read Answer	MOI 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 K 2 2 NITC 2	P1 3 P1 3 3	4 ; 4 4	5 5 5	6 6	7 7	8	9	10	P1 0	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT
MK Set Read Answer ML Set	MOI 1 1 1 1 MOI 1 M M M M M M M M M M M M M M M M M M	G 2 K 2 2 NITC 2 L	91 3 91 3 3 9R LE 3 P1	4 ; 4 4 •••••••••••••••••••••••••••••••	5 5 5 P2	6 6 6 P2	7 7 ;	8 8	9 9	10 10 10	P1 0	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" I: MONI Level When P1=0
MK Set Read Answer	MOI 1 MOI 1 1 1 MOI 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 K 2 2 P 2 P 1 C 2 L 2	P1 3 P1 3 3 P1 3 P1 3	4 ; 4 4	5 5 5	6 6	7 7	8 8	9 9	10	P1 0	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" 1: MONI Level When P1=0 000: MONI "OFF"
MK Set Read Answer ML Set	MOI 1 1 1 1 MOI 1 M M M M M M M M M M M M M M M M M M	G 2 K 2 2 NITC 2 L	91 3 91 3 3 9R LE 3 P1	P1 4 ; 4 4 4 P2 4	5 5 5 P2	6 6 6 P2	7 7 ;	8 8	9 9	10 10 10	P1 0 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" : MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1
MK Set Read Answer ML Set Read	MOI 1 MOI 1 1 1 MOI 1 MOI 1 MOI 1 M 1 M 1 M 1	G DE K 2 K 2 2 NITC 2 L	P1 3 P1 3 3 P1 3 P1 3 P1	4 ; 4 4 P2 4 ;	5 5 5 P2 5	6 6 6 P2 6	7 7 ; 7	8 8 8	9 9 9	10 10 10 10 10	P1 0 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" :: MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF"
MK Set Read Answer ML Set Read Answer	MOI 1	2 K 2 2 L 2 L L	P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 4 ; 4 4 P2 4 P2	5 5 5 P2 5 P2	6 6 6 P2 6 P2	7 7 ; 7 7 ;	8 8 8	9 9 9	10 10 10 10 10	P1 0 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" : MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1
MK Set Read Answer ML Set Read	MOI 1	2 K 2 2 L 2 L L	P1 3 P1 3 P1 3 P1 3 P1 3 P1	4 ; 4 4 P2 4 ; 4	5 5 5 P2 5 P2	6 6 6 P2 6 P2	7 7 ; 7 7 ;	8 8 8	9 9 9	10 10 10 10 10	P1 C 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" : MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1
MK Set Read Answer ML Set Read Answer	MOI 1 1 1 1 1 1 MOI 1 M 1 M 1 M M 1 M M M M M M M M M M M	G E K C C C C C C C C C C C C	P1 3 P1 3 P1 3 P1 3 P1 7 P1 7 P1	P1 4 ; 4 4 P2 4 ; 4 P2 A P2 A P1	5 5 5 P2 5 P2	6 6 6 P2 6 P2	7 7 ; 7 7 ;	8 8 8 8 8	9 9 9 9	10 10 10 10 10	P1 0 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" 1: MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift
MK Set Read Answer ML Set Read Answer	MOI 1 MOI 1 MOI 1 M M M M M M M M M M M M M M M M M M	G DE K 2 K 2 2 L 2 L 2 L 2 2 2 2 2 2	P1 3	P1 4 ; 4 4 P2 4 ; 4 P2 4 P2 JANN 4	5 5 5 P2 5 P2 5 P2 5	6 6 6 P2 6 P2 6 P2	7 7 ; 7 7 ;	8 8 8 8 8	9 9 9 9	10 10 10 10 10	P1 0 1 P2 V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" 1: MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255
MK Set Read Answer ML Set Read Answer MR Read Answer	MOI 1	G DE K 2 K 2 2 L 2 L 2 L 2 R	P1 3 3 P1 3 P1 3 P1 3 P1 9 CH	P1 4 ; 4 4 P2 4 ; 4 P2 4 P2 A P1	5 5 5 P2 5 P2 5 P2 5 P2	6 6 6 P2 6 P2 6 P2	7 7 7 ; 7 7 ; 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10	P1 0 1 P2 V V V V V V V V V V V V V V V V V V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" 1: MONI Level When P1=0 000: MONI "OFF" 001: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Offset: 0000 - 9999 (Hz) D: RX CLAR "OFF" 1: RX CLAR "ON" D: TX CLAR "OFF" 1: TX CLAR "ON"
MK Set Read Answer ML Set Read Answer MR Set	MOI 1 MOI 1 MOI 1 M M M M M M M M M M M M M M M M M M	G E C C C C C C C C C C C C	P1 3 3 P1	P1 4 ; 4 4 P2 4 P2 IANN 4 P1 4	5 5 5 P2 5 P2 5 P2 5 P2 5 P2 5	6 6 6 P2 6 P2 6 6 6 9 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9 9	10 10 10 10 10 10 10	P1 0 1 P2 V V V V V V V V V V V V V V V V V V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" 1: MONI Level When P1=0 000: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift Clarifier Offset: 0000 - 9999 (Hz) D: RX CLAR "OFF" 1: RX CLAR "ON" D: TX CLAR "OFF" 1: TX CLAR "ON" D: TX CLAR "OFF" 1: TX CLAR "ON" MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB)
MK Set Read Answer ML Set Read Answer MR Read Answer	MOI 1	G DE K 2 K 2 NITC L 2 L 2 L R 2 R 2 R	P1 3 P1 7 CH 3 P1 3 P1 7 P1	P1 4 ; 4 4 P2 4 ; 4 P2 4 P2 A P1 4 P1	5 5 5 5 P2 5 P2 5 P2 5 P2 5 P2 F2 F2 F2 F2 F2 F2 F2 F2 F2 F2 F3 F4 F4 F4 F4 F4 F4 F4 F4 F4 F4 F4 F4 F4	6 6 6 P2 6 P2 6 6 7 6 6 7	7 7 7 7 7 7 7 7 P2	8 8 8 8 8 8 8 P2	9 9 9 9 9 9 P2	10 10 10 10 10 10 10 10 P2	P1 C 1 1 P2 V V V V P3 C C P6 M	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" :: MONI Level When P1=0 000: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift Clarifier Offset: 0000 - 9999 (Hz) 0: RX CLAR "OFF" 1: RX CLAR "ON" 0: TX CLAR "OFF" 1: TX CLAR "ON" MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB) 7: CW-R 8: PKT-L B: FM-N C: PKT-U
MK Set Read Answer ML Set Read Answer MR Read Answer	MOI 1 MOI 1 MOI 1 M M M M M M M M M M M M M M M M M M	G E C C C C C C C C C C C C	P1 3 3 P1	P1 4 ; 4 4 P2 4 P2 IANN 4 P1 4	5 5 5 P2 5 P2 5 P2 5 P2 5 P2 5	6 6 6 P2 6 P2 6 6 6 9 6 6 7 6	7 7 7 7 7 7 7 P2 17	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9 9	10 10 10 10 10 10 10	P1 N V V V V V V V V V V V V V V V V V V	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT D: MONI "ON/OFF" :: MONI Level When P1=0 000: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift Clarifier Offset: 0000 - 9999 (Hz) D: RX CLAR "OFF" 1: RX CLAR "ON" D: TX CLAR "OFF" 1: TX CLAR "ON" D: TX CLAR "OFF" 1: TX CLAR "ON" MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB) 7: CW-R 8: PKT-L 9: FSK-R (RTTY-USB) A: PKT-FM B: FM-N C: PKT-U D: VFO 1: Memory
MK Set Read Answer ML Set Read Answer MR Read Answer	MOI 1 MOI 1 MOI 1 MOI 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1	C C C C C C C C C C C C C C C C C C C	P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 13	P1 4 ; 4 P2 4 P2 4 P2 4 P1 4 P1 4	5 5 5 7 5 P2 5 P2 5 P1 5 P1 5 P1 5 P1 7 P1 7 P2 P2	6 6 6 P2 6 P2 6 6 9 6 9 7	7 7 7 7 7 7 7 7 7 7 7 7 7 P2 17 P3 27	8 8 8 8 8 8 8 P2	9 9 9 9 9 9 P2 19	10 10 10 10 10 10 10 10 10 P2 20	P1 0 1 P2 V V V V P6 M P7 0 P8 0 P9: Ti	1: USB 2: CW 3: AM / FM 4: FM / FM 5: RTTY 6: PKT 0: MONI "ON/OFF" :: MONI Level When P1=0 000: MONI "OFF" 001: MONI "ON" When P1=1 001 - 255 Memory Channel Number P2 Memory Channel Frequency (Hz) Clarifier Direction +: Plus Shift, -: Minus Shift Clarifier Offset: 0000 - 9999 (Hz) 0: RX CLAR "OFF" 1: RX CLAR "ON" 0: TX CLAR "OFF" 1: TX CLAR "ON" MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB) 7: CW-R 8: PKT-L B: FM-N C: PKT-U

MS	MET	TER :	SW								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: COMP
	М	S	P1	;							1: ALC
Read	1	2	3	4	5	6	7	8	9	10	2: PO 3: SWR
	М	S	;								4: ID
Answer	1	2	3	4	5	6	7	8	9	10	5: VDD
	М	S	P1	;							

MW	MEI	MOR	Y CH	ANN	IEL V	VRIT	E				
Set	1	2	3	4	5	6	7	8	9	10	P1 Memory Channel Number P2 Memory Channel Frequency (Hz)
	М	W	P1	P1	P1	P2	P2	P2	P2	P2	P3 Clarifier Direction +: Plus Shift, -: Minus Shift
	11	12	13	14	15	16	17	18	19	20	Clarifier Offset: 0000 - 9999 (Hz) P4 0: RX CLAR "OFF" 1: RX CLAR "ON"
	P2	P2	P2	P3	P3	P3	P3	P3	P4	P5	P5 0:TX CLAR "OFF" 1: TX CLAR "ON"
	21	22	23	24	25	26	27	28	29	30	P6 MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB)
	P6	P7	P8	P9	P9	P10	;				7: CW-R 8: PKT-L 9: FSK-R (RTTY-USB) A: PKT-FM
Read	1	2	3	4	5	6	7	8	0	10	B: FM-N C: PKT-U P7 0: (Fixed)
											P8 0: CTCSS "OFF" 1: CTCSS ENC/DEC 2: CTCSS ENC
Answer	1	2	3	4	5	6	7	8	9	10	P9: Tone Number (See Page 5: "CTCSS Tone Chart") 00 ~ 49
											P10 0: Simplex 1: Plus Shift 2: Minus Shift

MX Set	MO	X SE	T								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: MOX "OFF"
	М	Х	P1	;							1: MOX "ON"
Read	1	2	3	4	5	6	7	8	9	10	
	Ν	Χ	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	N	Х	P1	;							

NA	NAF	RRO	W								
Set	1	2	3	4	5	6	7	8	9	10	
	Z	Α	P1	P2	;						1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2 0: OFF 1: ON
	N	Α	P1	;] 1. 010
Answer	1	2	3	4	5	6	7	8	9	10	
	Z	Α	P1	P2	;						

NB	NOI	SE E	BLAN	KER	STA	TUS						
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Main (VFO-A) Band Receiver
	N	В	P1	P2	;						1	1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10] P2	0: Noise Blanker "OFF" 1: Noise Blanker "ON"
	N	В	P1	;]	2: Noise Blanker (Wide) "ON"
Answer	1	2	3	4	5	6	7	8	9	10]	(),
	N	В	P1	P2	;						1	

NL	NOI	SE E	BLAN	IKER	LEV	/EL						
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Main (VFO-A) Band Receiver
	N	L	P1	P2	P2	P2	, .]	1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2	000 - 255
	N	L	P1	;								
Answer	1	2	3	4	5	6	7	8	9	10	1	
	N	L	P1	P2	P2	P2	;				1	

NR	NOI	SE F	REDU	ICTIO	ON							
Set	1	2	3	4	5	6	7	8	9	10	P1	0: Main (VFO-A) Band Receiver
	N	R	P1	P2	;]	1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10] P2	0: Noise Reduction "OFF" 1: Noise Reduction "ON"
	N	R	P1	٠,								1. Noise Neduction ON
Answer	1	2	3	4	5	6	7	8	9	10		
	N	R	P1	P2	;						1	

OI	OPF	<u> </u>	IF R	AND	INF	<u>ORM</u>	AHC	N			
Set	1	2	3	4	5	6	7	8	9	10	P1 Current Memory Channel P2 VFO-B Frequency (Hz)
											P3 Clarifier Direction +: Plus Shift, -: Minus Shift
Read	1	2	3	4	5	6	7	8	9	10	Crarifier Offset: 0000 - 9999 (Hz) P4 0: RX CLAR "OFF" 1: RX CLAR "ON"
	0	ı	;								P5 0:TX CLAR "OFF" 1: TX CLAR "ON"
Answer	1	2	3	4	5	6	7	8	9	10	P6 MODE 1: LSB 2: USB 3: CW 4: FM 5: AM 6: FSK (RTTY-LSB)
	0	ı	P1	P1	P1	P2	P2	P2	P2	P2	
	11	12	13	14	15	16	17	18	19	20	B: FM-N C: PKT-U P7 0: VFO 1: Memory
	P2	P2	P2	P3	P3	P3	P3	P3	P4	P5	P8 0: CTCSS "OFF" 1: CTCSS ENC/DEC 2: CTCSS ENC
	21	22	23	24	25	26	27	28	29	30	(· 3
	P6	P7	P8	P9	P9	P10	;				P10 0: Simplex 1: Plus Shift 2: Minus Shift

OS	OFF	SET	(RE	PEA	TER	SHIF	T)				
Set	1	2	3	4	5	6	7	8	9	10	
	0	S	P1	P2	;						1: Sub (VFO-B) Band
Read	1	2	3	4	5	6	7	8	9	10	P2 0: Simplex 1: Plus Shift
	0	s	P1	;							2: Minus Shift
Answer	1	2	3	4	5	6	7	8	9	10	
	0	s	P1	P2	;						
PA		-AM	_								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver
L	Р	Α	P1	P2	;						→ B2 0:1B0 i '
Read	1	2	3	4	5	6	7	8	9	10	1: AMP 1
	Р	Α	P1	;							2: AMP 2
Answer	1	2	3	4	5	6	7	8	9	10	3: IPO 2
	Р	Α	P1	P2	;						
PB	ВΙΛ	Y B	VCK								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: DVS P2 When P1=0 When P1=1
Joet	P	В	P1	P2		0		0	9	10	1: P.B 0: DVS (Recording Stop) 0: P.B (Playback Stop)
Read	1	2	3	4	5	6	7	8	9	10	1: DVS (CH "1" Playback Start) 1: P.B (Playback Start)
INCau	P	В	P1		3	-		0	9	10	→ 2: DVS (CH "2" Playback Start)
Answer	1	2	3	4	5	6	7	8	9	10	3: DVS (CH "3" Playback Start) 4: DVS (CH "4" Playback Start)
Allowei	P	В	P1	P2		-	-	0	9	10	5: DVS (CH 4' Playback Start)
		ם	[[]	172	,				<u> </u>		1
PC	PO	NER	COI	NTRO	DL						
Set	1	2	3	4	5	6	7	8	9	10	P1 000 - 255
	Р	С	P1	P1	P1	:					
Read	1	2	3	4	5	6	7	8	9	10	
	Р	С	:								
Answer	1	2	3	4	5	6	7	8	9	10	
	Р	С	P1	P1	P1						7
										-	
PL	SPE	ECH	I PR	OCE	SSO	R LE	VEL				
Set	1	2	3	4	5	6	7	8	9	10	P1 000 - 255
	Р	L	P1	P1	P1	;					<u>_</u>
Read	1	2	3	4	5	6	7	8	9	10	
					1				l	1	
	Р	L	;								
Answer	1	L	3	4	5	6	7	8	9	10	
Answer	_			4 P1	5 P1	6	7	8	9	10	
	1 P	2 L	3 P1	P1	P1	;	7	8	9	10	
PR	1 P	2 L	3 P1	P1 OCE	P1	; R					1
	1 P SPE	2 L ECH 2	3 P1 PR	P1 OCE 4	P1	;	7	8	9	10	P1 0: Speech Processor "OFF"
PR Set	1 P	2 L ECH 2 R	3 P1 I PR 3 P1	P1 OCE 4 ;	P1 SSO	; R	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR	1 P SPE 1 P 1	2 L 2 R 2	3 P1 I PR 3 P1 3	P1 OCE 4	P1	; R					P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read	1 P	2 L 2 R 2 R	3 P1 I PR 3 P1 3	P1 OCE 4 ; 4	5 5	; R 6	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set	1 P 1 P 1	2 L 2 R 2 R 2	3 P1 PR 3 P1 3 ;	P1 OCE 4 ;	P1 SSO	; R	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read	1 P	2 L 2 R 2 R	3 P1 I PR 3 P1 3	P1 OCE 4 ; 4	5 5	; R 6	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read	1 P 1 P 1 P	2 L 2 R 2 R 2 R	3 P1 3 P1 3 P1 3 ;	P1 OCE 4 ; 4 ; ;	5 5 5	; R 6	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read	1 P 1 P 1 P	2 L 2 R 2 R 2 R	3 P1 3 P1 3 P1 3 ;	P1 OCE 4 ; 4	5 5 5	; R 6	7	8	9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read Answer	1 P 1 P PON	2 L 2 R 2 R 2 R	3 P1 PR 3 P1 3 ; 3 P1	P1 OCE 4 ; 4 ; TCH	SSO 5 5 5	; R 6 6	7 7 7	8 8	9 9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON"
PR Set Read Answer	1 P 1 P 1 P 1 P 1 P 1 1 P 1	2 L 2 R 2 R 2 R	3 P1 PR 3 P1 3 ; 3 P1	P1 OCE 4 ; 4 ; TCH 4	SSO 5 5 5	; R 6 6	7 7 7	8 8	9 9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set	1 P 1 P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L 2 R 2 R 2 R 2 R	3 P1 PR 3 P1 3 ; 3 P1	P1 OCE 4 ; 4 ; TCH 4 ;	5 5 5 5	; R 6 6	7 7 7	8 8 8	9 9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set	1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P	2 L 2 R 2 R 2 R 2 R 2 R	3 P1 3 P1 3 P1 3 P1 SWI 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ;	5 5 5 5	; R 6 6	7 7 7	8 8 8	9 9	10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read	1 P P P P P P P P P P P P P P P P P P P	2 L 2 R 2 R 2 R 2 R 2 S	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ;	5 5 5 5	; R 6 6	7 7 7 7	8 8 8	9 9 9	10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	P	2 L EECH 2 R 2 R 2 R 2 R 2 S 2 S 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 2 S 5 5 5 5	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 OCE 4 ; 4 ; TCH 4 ; 4 ;	5 5 5 5	; R 6 6	7 7 7 7	8 8 8	9 9 9	10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	1 P P 1 P P 1 P P P P P P P P P P P P P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 ;	P1 SSO 5 5 5 5 5 5	; R 6 6 6 6 6 6 6	7 7 7 7 7 7 7	8 8 8 8	9 9 9 9	10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 ;	5 5 5 5	; R 6 6	7 7 7 7	8 8 8	9 9 9	10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L 2 R 2 R 2 R 2 R 2 S 2 S 2 S 2 S	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 ;	P1	; R 6 6 6 6	7 7 7 7 7 7 7	8 8 8 8 8	9 9 9	10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 ;	P1 SSO 5 5 5 5 5 5	; R 6 6 6 6 6 6 6	7 7 7 7 7 7 7	8 8 8 8	9 9 9 9	10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S 2 S 1 2 1 2 1 2 1 2 1 2	3 P1 3 P1 3 P1 3 P1 SWI 3 P1 3 P1 0 ORE 3 ; 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 ;	F1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	; ; ; 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L 2 R 2 R 2 R 2 R 2 S 2 S 2 S 2 S	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 ;	P1	; R 6 6 6 6	7 7 7 7 7 7 7	8 8 8 8 8	9 9 9	10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S 2 S 1 2 1 2 1 2 1 2 1 2	3 P1 3 P1 3 P1 3 P1 SWI 3 P1 3 P1 0 ORE 3 ; 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 ;	F1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	; ; ; 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P QMI 1 Q 1 1	2 L 2 R 2 R 2 R 2 S 2 S 2 S 2 S 2 S 2 I 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 4 4 4 4 4	F1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	; ; ; 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 5 S 2 S 2 S 1 2 2	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 L	\$\frac{5}{5}\$ \$\	; R 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S 2 S 2 S 2 S	3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 4 4 4 4 4 4	F1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	; ; ; 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer QI Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 5 S 5 S 8 ST 2 I 2 C 2 R	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 L	\$\frac{5}{5}\$ \$\	; R 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 2 S 2 S 2 S 2 S 2 S 2 S	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 4 L	\$\frac{5}{5}\$ \$\	; R 6 6 6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer QI Set Read Answer Read Answer	1 PP 1 P	2 L 2 R 2 R 2 R 2 S 2 S 5 S 8 ST 2 I 2 C 2 R 2 R 2 R 2 R 2 R 2 R 2 R 2 R 2 R 2 R	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; L 4	\$\frac{5}{5}\$ \$\	; R 6 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8 8	9 9 9 9 9 9 9	10 10 10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)
PR Set Read Answer PS Set Read Answer Read Answer QI Set Read Answer	1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P	2 L EECH 2 R 2 R 2 R 2 S 5 S 5 S 8 ST 2 I 2 C 2 R	3 P1 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3 P1 3	P1 OCE 4 ; 4 ; TCH 4 ; 4 L	\$\frac{5}{5}\$ \$\	; R 6 6 6 6 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10	P1 0: Speech Processor "OFF" 1: Speech Processor "ON" 2: Microphone Equalizer "ON" P1 0: POWER "OFF" 1: POWER "ON" (Send the PS1; command twice every one second.)

C	C	T
CONTROL	COMMAND	IABLES

QS	QUI	CK S	PLI	Ţ							
Set	1	2	3	4	5	6	7	8	9	10	
	Q	S	;								
Read	1	2	3	4	5	6	7	8	9	10	0_
A						_	_				
Answer	1	2	3	4	5	6	7	8	9	10	
RA	RF /	ATTE	NUA	TOR	ł						
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver
	R	Α	P1	P2	;						1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2 0: OFF 1: 6 dB
	R	Α	P1	;							2: 12 dB
Answer	1	2	3	4	5	6	7	8	9	10	3: 18 dB
	R	Α	P1	P2	;						
RC	CLA	R C	LEAI	R							
Set	1	2	3	4	5	6	7	8	9	10	, T
	R	C	•	-	<u> </u>		,	-		10	
Read	1	2	3	4	5	6	7	8	9	10	
Answer	1	2	3	4	5	6	7	8	9	10	
00	0	D 11	1811.14		F0						
RD Set		2	3	4	FSE1		-	8	9	10	P1 0000 - 9999 (Hz)
Set	R R	D	P1	P1	5 P1	6 P1	7	0	9	10	7 F1 0000 - 9999 (HZ)
Read	1	2	3	4	5	6	7	8	9	10	
I TOUG	Ė			-	Ť		,	-		10	
Answer	1	2	3	4	5	6	7	8	9	10	
			_						_		
RF				LTEF		_					
Set	1	2	3	4	5	6	7	8	9	10	D P1 P2 0: AUTO P3 1: 15 kHz 8: 300 Hz (Main) 0: Main (VFO-A) 1: 15 kHz 2: 6 kHz 9: AUTO - 600 Hz (Main
Dand	R	F	P1	P2	;		_				☐ Band Receiver 2: 6 kHz 3: 3 kHz Δ: ΔΙΤΟ - 300 Hz (Main
Read	1 R	2 F	3 P1	4	5	6	7	8	9	10	1: Sub (VFO-B) 3: 3 kHz 4: AUTO - 15 kHz
Answer	1	<u>г</u> 2	3	4	5	6	7	8	9	10	Band Receiver 4: 600 Hz (Main) 5: AUTO - 6kHz 5: 300 Hz (Main) 6: AUTO - 3 kHz
Allswei	R	F	ە P1	P3		0	/	0	9	10	5. 300 Hz (Maiii) 6. A010 - 3 kHz 7: 600 Hz (Main)
		•		1 3	,						
RG	RF (GAIN									
Set	1	2	3	4	5	6	7	8	9	10	
L	R	G	P1	P2	P2	P2	;				1: Sub (VFO-B) Band Receiver P2 000 - 255
Read	1	2	3	4	5	6	7	8	9	10	
A	R	G	P1	;	-	_					_
Answer	1	2	3	4	5	6	7	8	9	10	
	R	G	P1	P2	P2	P2	,				
RI	RAI	DIO II	NFO	RMA	TION						
Set	1	2	3	4	5	6	7	8	9	10	
											T 1: MIC-EQ 8: SUB RX 1: ON 2: CLASS-A
Read	1	2	3	4	5	6	7	8	9	10	2: CLASS-A 3: REC
<u> </u>	R		P1	;							4: PLAY
Answer	1	2	3	4	5	6	7	8	9	10	5: MAIN TX 6: SUB TX
	R	ı	P1	P2	;						0.0001/
RL	NOI	SE F	REDL	JCTI	ON L	EVE	L				
Set	1	2	3	4	5	6	7	8	9	10	
<u></u>	R	L	P1	P2	P2	;					1: Sub (VFO-B) Band Receiver
Read	1	2	3	4	5	6	7	8	9	10	P2 01 - 15
	R	L	P1	;							
Answer	1	2	3	4	5	6	7	8	9	10	
	R	L	P1	P2	P2	;					
RM	RF4	D M	ETE	R							
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Depends of the front panel's METER knob
1	H	_	_		Ť	_					1: S Meter (Main) 5: PO Meter
Read	1	2	3	4	5	6	7	8	9	10	2: S Meter (Sub) 6: SWR Meter
<u></u>	R	М	P1	;							3: COMP Meter 7: ID Meter 4: ALC Meter 8: VDD Meter
Answer	1	2	3	4	5	6	7	8	9	10	
1	R	M	P1	P2	P2	P2	;				
			_	_						_	

RO	RO	ГАТС	R									
Set	1	2	3	4	5	6	7	8	9	10	P1 0:	OEE
OCI	R	0	P1	-	-	-	- '	-	-	10		Counter Clockwise
Deed	_	_	_	,	-	-	_	_				Clockwise
Read	1	2	3	4	5	6	7	8	9	10		SPEED 1 % DOWN
	R	0	;									SPEED 1 % UP
Answer	1	2	3	4	5	6	7	8	9	10		IRECTION (0 - 450)
	R	0	P1	P2	P2	P2	P3	P3	P3	;	P3 SI	PEED (0 - 100 %)
RS	RΔI	NO S	TAT	us								
Set	1	2	3	4	5	6	7	8	9	10	D1 0:	NORMAL MODE
OCI	-		-	-	"	"	'	0	9	10		MENU MODE
Read	1	2	3	4	5	6	7	8	9	10		
Neau				4	5	0		<u> </u>	9	10		
A	R	S	,	<u> </u>	<u> </u>	-	_	_	_			
Answer	1	2	3	4	5	6	7	8	9	10		
	R	S	P1	;								
RT	CLA	\R										
Set	1	2	3	4	5	6	7	8	9	10	P1 0:	RX Clarifier "OFF"
00.	R	T	P1	Ė	Ť	Ť	Ė	<u> </u>	_			RX Clarifier "ON"
Read	1	2	3	4	5	6	7	8	9	10		
iteau		T		-	5	-	-	l °	9	10		
A	R		,	H .	l _		_					
Answer	1	2	3	4	5	6	7	8	9	10		
	R	T	P1	;								
RU	RX	CLA	RIFIE	ER P	LUS	OFF	SET					
Set	1	2	3	4	5	6	7	8	9	10	P1 00	000 - 9999 (Hz)
	R	Ū	P1	P1	P1	P1						
Read	1	2	3	4	5	6	7	8	9	10		
rtcaa	<u> </u>		-	+	۳	۳	<u> </u>	-		10		
Answer	1	2	3	4	5	6	7	8	9	10		
7 11101101	<u> </u>	_	۳	-	Ť	Ť	'	۳		10		
							1					
SC	SCA											
Set	1	2	3	4	5	6	7	8	9	10		Scan "OFF"
	S	С	P1	;							1:	Scan "ON" (Upward) Scan "ON" (Downward)
Read	1	2	3	4	5	6	7	8	9	10	۷.	Scall ON (Downward)
	S	С	;									
Answer	1	2	3	4	5	6	7	8	9	10		
	S	С	P1	;								
SD	CW	DDE	. N K	IN D		TIM	_					
Set	1	2	3	4	5	6	7	8	9	10	D1 00	020 - 5000 (mS)
Jei	S	D	P1	P1	P1	P1		l °	a	10	1-1 00	020 - 0000 (IIIO)
Dood		_	_	_	_	_	,	_	_	40		
Read	1	2	3	4	5	6	7	8	9	10		
	S	D	;	<u> </u>	<u> </u>			<u> </u>				
Answer	1	2	3	4	5	6	7	8	9	10		
	S	D	P1	P1	P1	P1	;					
SF	SHE	R VE	O.R	KNO	R EI	INCT	ION					
Set	1	2	3	4	5	6	7	8	9	10	D1 00	D: BAND 07: S-DIAL
001	s	F	P1			۳	<u> </u>	-	9	10		1: - 08: CLAR

SF	SUE	3 VF	<u>0-B I</u>	KNO	<u>B FU</u>	NCT	ION				
Set	1	2	3	4	5	6	7	8	9	10	P1 00: BAND 07: S-DIAL
	S	F	P1	P1	;						01: - 08: CLAR
Read	1	2	3	4	5	6	7	8	9	10	02: GRP 03: MCH
	S	F	;								03: WOTT 04: -
Answer	1	2	3	4	5	6	7	8	9	10	05: -
	S	F	P1	P1	;						06: -

WID	TH															
1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFC	O-A) Band	Receiver				
S	Н	P1	P2	P2	;					,	-B) Band F	Receiver				
1	2	3	4	5	6	7	8	9	10		01: 200	02: 400	na: enn	04: 950	05: 1100	
S	Н	P1	,										03. 000	04. 650	05. 1100	
1	2	3	4	5	6	7	8	9	10			08: 1650	09: 1800	10: 1950	11: 2100	
S	Н	P1	P2	P2	:					1	12: 2250	13: [2400]	14:	15: 2500	16: 2600	
_					,					1	17: 2700	18: 2800	19: 2900	20: 3000	21: 3200	
											22: 3400	23: 3600	24: 3800	25: 4000		
										CW NARROW	01: 50	02: 100	03: 150	04: 200	05: 250	
												06: 300	07: 350	08: 400	09: 450	10: [500]
										CW WIDE	10: 500	11: 800	12: 1200	13: 1400	14: 1700	
												15: 2000	16: [2400]]		
										RTTY NARROW	01: 50	02: 100	03: 150	04: 200	05: 250	
												06: [300]	07: 350	08: 400	09: 450	10: 500
										RTTY WIDE	10: [500]	11: 800	12: 1200	13: 1400	14: 1700	
												15: 2000	16: 2400			
										PSK NARROW	01: 50	02: 100	03: 150	04: 200	05: 250	
										1	06: [300]	07: 350	08: 400	09: 450	10: 500	
										PSK WIDE	10: [500]	11: 800	12: 1200	13: 1400	14: 1700	
											15: 2000	16: 2400				
	1 S	S H 1 2 S H 1 2	1 2 3 S H P1 1 2 3 S H P1 1 2 3	1 2 3 4 S H P1 P2 1 2 3 4 S H P1 ; 1 2 3 4	1 2 3 4 5 S H P1 P2 P2 1 2 3 4 5 S H P1 ; 1 2 3 4 5	1 2 3 4 5 6 S H P1 P2 P2 ; 1 2 3 4 5 6 S H P1 ; . 1 2 3 4 5 6	1 2 3 4 5 6 7 S H P1 P2 P2 ; 1 2 3 4 5 6 7 S H P1 ; . . 1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 S H P1 P2 P2 ; 1 2 3 4 5 6 7 8 S H P1 ; - <td>1 2 3 4 5 6 7 8 9 S H P1 P2 P2 ; 1 2 3 4 5 6 7 8 9 S H P1 ; 1 2 3 4 5 6 7 8 9</td> <td>1 2 3 4 5 6 7 8 9 10 S H P1 P2 P2 ; 9 10 S H P1 ; <td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFC 1: Sub (VFC) 1: Su</td><td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band F1: Sub (VFO-B) Band F1: Su</td><td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 1: Sub (VFO-B</td><td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 2: Sub (VFO-B) Ba</td><td>1 2 3 4 5 6 7 8 9 10 P1 0:Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 1: Sub (VFO-B)</td><td> 1</td></td>	1 2 3 4 5 6 7 8 9 S H P1 P2 P2 ; 1 2 3 4 5 6 7 8 9 S H P1 ; 1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9 10 S H P1 P2 P2 ; 9 10 S H P1 ; <td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFC 1: Sub (VFC) 1: Su</td> <td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band F1: Sub (VFO-B) Band F1: Su</td> <td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 1: Sub (VFO-B</td> <td>1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 2: Sub (VFO-B) Ba</td> <td>1 2 3 4 5 6 7 8 9 10 P1 0:Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 1: Sub (VFO-B)</td> <td> 1</td>	1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFC 1: Sub (VFC) 1: Su	1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band F1: Sub (VFO-B) Band F1: Su	1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 1: Sub (VFO-B	1 2 3 4 5 6 7 8 9 10 P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver 2: Sub (VFO-B) Ba	1 2 3 4 5 6 7 8 9 10 P1 0:Main (VFO-A) Band Receiver 1: Sub (VFO-B)	1

								<u> </u>			
SM	S-M	ETE	R RE	ADII	NG					_	
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band S-meter
											1: Sub (VFO-B) Band S-meter
Read	1	2	3	4	5	6	7	8	9	10	P2 000 - 255
- touu	s	M	P1		Ť	-			_		
_			_	,							
Answer	1	2	3	4	5	6	7	8	9	10	
	S	M	P1	P2	P2	P2	;				
SQ	SOL	IFI (CLH I	FVF	=1						
Set							-	_		40	D4 O.Mair (VEO A) Band Bassins
Set	1	2	3	4	5	6	7	8	9	10	P1 0: Main (VFO-A) Band Receiver 1: Sub (VFO-B) Band Receiver
	S	Q	P1	P2	P2	P2	;				P2 000 - 255
Read	1	2	3	4	5	6	7	8	9	10	F2 000 - 255
	S	Q	P1	:							
Answer	1	2	3	4	5	6	7	8	9	10	
7 11 10 11 01	S	Q	P1	P2		P2		-	_	- 10	
	<u> </u>	Q	РΙ	PZ	PZ	PZ	,				
SV	CM	AP V	ΈΩ								
Set	1	2	3	4	5	6	7	8	9	10	
	S	٧	;								
Read	1	2	3	4	5	6	7	8	9	10	
Answer	1	2	3	4	5	6	7	8	9	10	
Allowel	⊢'-		3	4	°	0	/	ď	Э	10	
T 0											
TS	TXV	<u>v</u>									
Set	1	2	3	4	5	6	7	8	9	10	P1 0: TXW "OFF"
	Т	S	P1	:							1: TXW "ON"
Read	1	2	3	4	5	6	7	8	9	10	
rtead				_	۰	-		-		10	
_	Т	S	,		_					_	
Answer	1	2	3	4	5	6	7	8	9	10	
	Т	S	P1	;							
TX	TX S	SET									
Set	1	2	3	4	5	6	7	8	9	10	P1 0: RADIO TX "OFF" CAT TX "OFF"
											1: RADIO TX "OFF" CAT TX "ON"
	1 T I	l X	P1								1.10 DIO 1X OIT ON 1X OIV
Read	<u>T</u>	X	P1	,	5	6	7	Ω	0	10	2: RADIO TX "ON" CAT TX "OFF" (Answer)
Read	1	2	3	4	5	6	7	8	9	10	
	1 T	2 X	3	4							
Read Answer	1 T	2 X 2	3 ;	,	5	6	7	8	9	10	
	1 T	2 X	3	4							
Answer	1 T 1 T	2 X 2 X	3 ; 3 P1	4 ;	5	6					
Answer	1 T 1 T	2 X 2 X	3 ;	4 ;	5	6					
Answer	1 T 1 T	2 X 2 X	3 ; 3 P1	4 ;	5	6					
Answer	1 T 1 T	2 X 2 X	3 ; 3 P1	4 ;	5 ATUS	6	7	8	9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer)
Answer UL Set	1 T 1 T	2 X 2 X . UNI	3 ; 3 P1 LOCH	4 ; K ST	5 ATUS	6	7	8	9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer	1 T 1 T	2 X 2 X . UNI 2 2	3 ; 3 P1 LOCH 3	4 ;	5 ATUS	6	7	8	9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read	1 T 1 T PLL 1	2 X 2 X . UNI 2 L	3 ; 3 P1 LOCH 3	4 ; (ST /4	5 ATUS 5	6 6	7 7	8 8	9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set	1 T 1 T 1 U	2 X 2 X . UNI 2 2	3 ; 3 P1 	4 ; K ST	5 ATUS	6	7	8	9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read	1 T 1 T PLL 1	2 X 2 X . UNI 2 L	3 ; 3 P1 LOCH 3	4 ; (ST /4	5 ATUS 5	6 6	7 7	8 8	9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer	1 T 1 T 1 U 1 U	2 X 2 X 2 UNI 2 L 2 L	3 ; 3 P1 	4 ; (ST ₄ 4	5 ATUS 5	6 6	7 7	8 8	9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read	1 T 1 T 1 U	2 X 2 X 2 UNI 2 L 2 L	3 ; 3 P1 	4 ; (ST ₄ 4	5 ATUS 5	6 6	7 7	8 8	9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer	T T T T T T T T T T T T T T T T T T T	2 X 2 X 2 UN 2 2 L 2 L	3 ; 3 P1 	4 ; (ST /4 4 ;	5 5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer	1 T 1 T 1 U 1 U	2 X 2 X . UNI 2 L 2 L 2 L	3 ; 3 P1 3 3 ; 3 P1	4 ; (ST ₄ 4	5 ATUS 5	6 6	7 7	8 8	9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set	1 T 1 T PLL 1 U 1 U	2 X 2 X .UNI 2 L 2 L 2 L 2 P	3 ; 3 P1 3 3 ; 3 P1	4 ; (ST, 4 4	5 5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer	1 T 1 T 1 U 1 U	2 X 2 X . UNI 2 L 2 L 2 L	3 ; 3 P1 3 3 ; 3 P1	4 ; (ST /4 4 ;	5 5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set	1 T 1 T PLL 1 U 1 U	2 X 2 X .UNI 2 L 2 L 2 L 2 P	3 ; 3 P1 3 3 ; 3 P1	4 ; (ST, 4 4	5 5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set	1 T 1 T PLL 1 U 1 U	2 X 2 X .UNI 2 L 2 L 2 L 2 P	3 ; 3 P1 3 3 ; 3 P1	4 ; (ST, 4 4	5 5 5 5	6 6 6	7 7 7	8 8 8	9 9 9	10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer VL Set Read Answer VP Set Read	1 T 1 T 1 T 1 U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U	2 X 2 X . UNI 2 L 2 L 2 L 2 P 2	3 ; 3 P1 LOCH 3 3 P1	4 ; (ST/ 4 4 ;	5 5 5 5	6 6 6	7 7 7 7	8 8 8 8	9 9 9	10 10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer VL Set Read Answer VP Set Read	1 T 1 T 1 T 1 U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U U 1 U	2 X 2 X . UNI 2 L 2 L 2 L 2 P 2	3 ; 3 P1 LOCH 3 3 P1	4 ; (ST/ 4 4 ;	5 5 5 5	6 6 6	7 7 7 7	8 8 8 8	9 9 9	10 10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set Read Answer	1 T 1 T 1 T U 1 U U I 1 U I 1 U I 1 U I 1 U I I I I	2 X 2 X . UNI 2	3 ; 3 P1 COCH 3 ; 3 P1	4 4 ;; (ST, 4 4 4 4 4 4	5 5 5 5 5	6 6 6	7 7 7 7	8 8 8 8	9 9 9	10 10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set Read Answer	1 T 1 T 1 U 1 U 1 U 1 U 1 U 1 U 1 U V V V V V V	2 X 2 X 2 L 2 L 2 L 2 P 2	3 ; 3 P1 3 3 ; 3 P1 3 ; 3 P1	4 	5 5 5 5 5	6 6 6	7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9	10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"
Answer UL Set Read Answer UP Set Read Answer	1 T 1 T 1 U 1 U 1 U 1 U 1 U 1 U 1	2 X 2 X 2 L 2 L 2 L 2 P 2 P 2	3 ; 3 P1 3 3 ; 3 P1 3 ; 3 P1	4 ; 4 4 4 ; 4 4	5 5 5 5 5 5	6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8	9 9 9	10 10 10 10 10	2: RADIO TX "ON" CAT TX "OFF" (Answer) P1 0: PLL "Lock"
Answer UL Set Read Answer UP Set Read Answer VD Set	1 T 1 T T T U 1 U 1 U 1 U 1 U 1 V V V V V V V V V V	2 X 2 X 2 L 2 L 2 L 2 P 2 P 2 D	3; 3 P1 LOCI 3 3 3; 3 P1 3; 3 3 P1 LAY	4 4 ; 4 4 4 4 4 P1	5 5 5 5 5 5 5 P1	6 6 6 6 P1	7 7 7 7 7 7 7 7 7 7 ;	8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"
Answer UL Set Read Answer UP Set Read Answer	1 T 1 T T T T T T T T T T T T T T T T T	2 X 2 X 2 L 2 L 2 L 2 P 2 P 2 D 2	3 ; 3 P1 3 3 ; 3 P1 3 ; 3 3 P1	4 ; 4 4 4 ; 4 4	5 5 5 5 5 5	6 6 6	7 7 7 7 7 7 7 7 7	8 8 8 8 8	9 9 9 9 9	10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"
Answer UL Set Read Answer UP Set Read Answer VD Set	1 T 1 T 1 U 1 U 1 U 1 U 1 U 1 U 1 V V	2 X 2 X 2 L 2 L 2 L 2 P 2 P 2 D	3; 3 P1 LOCI 3 3 3; 3 P1 3; 3 3 P1 LAY	4 4 ; 4 4 4 4 4 P1	5 5 5 5 5 5 5 P1	6 6 6 6 P1	7 7 7 7 7 7 7 7 7 7 ;	8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"
Answer UL Set Read Answer UP Set Read Answer VD Set Read Read	1 T 1 T T T T T T T T T T T T T T T T T	2 X 2 X 2 L 2 L 2 L 2 L 2 D 2 D	3 ; 3 P1 3 3 ; 3 P1 3 ; 3 P1 3 ; 3 P1	4 4 ; 4 4 4 4 4 P1	5 5 5 5 5 5 5 P1	6 6 6 6 P1	7 7 7 7 7 7 7 7 7 7 ;	8 8 8 8 8 8	9 9 9 9 9	10 10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"
Answer UL Set Read Answer UP Set Read Answer VD Set	1 T 1 T T T T T T T T T T T T T T T T T	2 X 2 X 2 L 2 L 2 L 2 P 2 P 2 D 2	3 ; 3 P1 3 3 ; 3 P1 3 ; 3 3 P1	4 ; 4 4 ; 4 4 4 P1 4	5 5 5 5 5 5 5 7 5 7 7	6 6 6 6 P1 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 8 8 8 8 8 8	9 9 9 9 9 9	10 10 10 10 10 10 10	P1 0: PLL "Lock" 1: PLL "Unlock"

VF	VRF	FIL	TER										
Set	1	2	3	4	5	6	7	8	9	10	P1		+: Plus Shift
	٧	F	P1	P2	P3	P4	.,]	1: Sub (VFO-B) Band Receiver	-: Minus Shift
Read	1	2	3	4	5	6	7	8	9	10] P2		0 - 9 (Step) 000 - 255
	٧	F	P1;]		0: VRF
Answer	1	2	3	4	5	6	7	8	9	10	1		1: µTUNE
	٧	F	P1	P2	P5	P5	P5	P6	;				

CAT (Computer Aided Transceiver) OPERATION

VG	VO	(GA	IN								
Set	1	2	3	4	5	6	7	8	9	10	P1 000 - 255
	٧	G	P1	P1	P1	;					
Read	1	2	3	4	5	6	7	8	9	10	
	٧	G	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	٧	G	P1	P1	P1	;					

VM	VFC)-A T	О МІ	ЕМО	RY C	HAN	INEL			
Set	1	2	3	4	5	6	7	8	9	10
	٧	М	;							
Read	1	2	3	4	5	6	7	8	9	10
Answer	1	2	3	4	5	6	7	8	9	10

VS	VFC	SE	LECT								
Set	1	2	3	4	5	6	7	8	9	10	P1 0: VFO-A
	٧	S	P1	;							1: VFO-B
Read	1	2	3	4	5	6	7	8	9	10	
	٧	S	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	٧	S	P1	;							

VX	VOX	(ST/	ATUS	;							
Set	1	2	3	4	5	6	7	8	9	10	P1 0: VOX "OFF"
	٧	Х	P1	;							1: VOX "ON"
Read	1	2	3	4	5	6	7	8	9	10	
	٧	Х	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	٧	Х	P1	;							

XT	TX	CLAF	₹								
Set	1	21	3	4	5	6	7	8	9	10	P1 0:TX CLAR "OFF"
	Х	Т	P1	;							1:TX CLAR "ON"
Read	1	2	3	4	5	6	7	8	9	10	
	Х	Т	;								
Answer	1	2	3	4	5	6	7	8	9	10	
	Х	Т	P1	;							



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