

TK-380
Tuning procedure

FCC/MELLON

JAN 19 1999

Before attempting to tune the transceiver, connect the unit to a suitable power supply. Whenever the transmitter tuned, unit must be connected to a suitable dummy load, unless the instruction specify otherwise. The speaker output connector must be terminated with a 16 Ohm dummy load at any time during the tuning and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement at all the time during the tuning.

Power sw on during "A" push to test mode [1-1] then push "S" to tuning mode. This *** mean using 3 numbers from CHANNEL NOB.

1 Transmitter section

1.1 Frequency adjustment

Set test mode CH1, Push "S" to enter tuning mode, Select [FREQ***], then PTT on. 418.100MHz $\pm$ 50Hz.

1.2 TX High power adjustment

Set test mode CH1, Push "S" to enter tuning mode, Select Hpow, Push "A" to 5 points.

- Select [L Hpow***] then PTT on 4.8W $\pm$ 0.1W.
 - Push "C" to select [L2 Hpow***] then PTT on, push "B" after tuned.
 - Push "C" to select [C Hpow ***] then PTT on, push "B" after tuned.
 - Push "C" to select [H2Hpow***] then PTT on, push "B" after tuned.
 - Push "C" to select [H Hpow***] then PTT on, push "S" to return test mode.
- The TX current is 2.2A or less.

1.3 TX Low power adjustment

Set test mode CH1, Push "S" to enter tuning mode, Select L pow, Push "A" to 5 points.

- Select [L Lpow***] then PTT on 1.0W $\pm$ 0.1W.
 - Push "C" to select [L2 Lpow***] then PTT on, push "B" after tuned.
 - Push "C" to select [C Lpow***] then PTT on, push "B" after tuned.
 - Push "C" to select [H2 Lpow***] then PTT on, push "B" after tuned.
 - Push "C" to select [H Lpow***] then PTT on, push "S" to return test mode.
- The TX current is 1.0A or less.

1.4 DQT BAL adjustment

Set test mode CH1, Push "S" to enter tuning mode, Select [BAL***], Push "A" to enter 3 Points,

- Select [LBAL***] adjustments mode then PTT on Push "B" after tuned .
- Push "C" to select [C BAL***] then PTT on push "B" after tuned.
- Push "C" to select [H BAL***] then PTT on push "B" after tuned.
Push "A" to return to tuning mode.
- Push "Lamp" to narrow adjustment mode [n BAL***], then PTT on push "B" after tuned.
Push "Lamp" to return tuning mode.
Make the de-modulation waves into square waves.

1.5 Max deviation adjustment

Set test mode CH1, push "S" to enter tuning mode, Push "A" to 3 points adjustment mode.

- Select [L MAX***] then PTT on push "B" after tuned.
- push "C" to select [C MAX***] then PTT on push "B" after tuned.
- push "C" to select [H MAX***] then PTT on push "B" after tuned
Push "A" to return tuning mode.

Deviation $\pm$ 3.80KHz(Wide), $\pm$ 1.75KHz(Narrow)

Push " Lamp" to narrow adjustment mode [n MAX***] then PTT on push "Lamp" to return

tuning mode.

1.6 QT Deviation adjustment

- a) Push "S" to enter tuning mode select [FQT***] push "A" to adjustment mode.
Select [L FQT***] then PTT on push "B" after tuned.

Deviation $\pm 0.75\text{KHz}(\pm 0.05\text{KHz})$

- b) same [C FQT***]
- c) same [H FQT***]
- d) same [n FQT***]

1.7 DQT Deviation adjustment

- a) Same as QT. Select [FDQT***]
- b) same as [L FDQT***]
- c) same as [C FDQT***]
- d) same as [H FDQT***]
- e) same as [n FDQT***]

Deviation $\pm 0.75\text{KHz}(\pm 0.05\text{KHz})$

1.8 LTR Deviation adjustment

- a) Select [FLTR***]
- b) Select [L FLTR***]
- c) Select [C FLTR***]
- d) Select [H FLTR***]
- e) Select [n FLTR***]

Deviation $\pm 1.0\text{KHz}(\pm 0.05\text{KHz})$ (Wide) $\pm 0.75\text{KHz}(\pm 0.05\text{KHz})$ (Narrow)

1.9 DTMF Deviation adjustment

- a) Select [DTMF***] Deviation $\pm 2.5\text{KHz}(\pm 0.05\text{KHz})$ (Wide)
- b) Select [n DTMF***] Deviation $\pm 1.25\text{KHz}(\pm 0.05\text{KHz})$ (Narrow)

1.10 MSK Deviation adjustment

- a) Select [FMSK***] Deviation $\pm 2.5\text{KHz}(\pm 0.05\text{KHz})$ (Wide)
- b) Select [n MSK***] Deviation $\pm 1.25\text{KHz}(\pm 0.05\text{KHz})$ (Narrow)

2 Receiver section

2.1 Sensitivity

- a) Select [SENS***] 12dB SINAD or more.

2.2 Tight squelch adjustment

- a) Select [SQL***] Adjust to point of opening squelch.(Wide)
- b) Select [n SQL***] Adjust to point of opening squelch.(Narrow)

3 Reference shift low(Use KPG-36,KPG-49D)

- a) connect to PC and FPU cable with Radio.
- b) Push to "Alt" to test mode from program.[CH:No1, Signaling No:1]
- c) Push to PF10 to tuning mode.
- d) Select Reference shift Low.
- e) Push SPARE BAR(PTT ON)

4 Reference shift low(Use KPG-36,KPG-49D)

- a) Push to "Alt" to test mode from program.[CH:No1, Signaling No:1]
- b) Push to PF10 to tuning mode.
- c) Select Reference shift High.
- e) Push SPARE BAR(PTT ON)

FCC ID: ALH24623130
ACTIVE DEVICES

FCCID: ALH24623130

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Y50-4880-12

FCC/MELLOM

JAN 19 1999

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使用半導体一覧表

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X57-5750-12

部品番号 PART NUMBER	部品名 PART NAME	REF	REF NO.
2SA1745(6,7)	トランジスタ TRANSISTER	Q	3
2SC4617(S)	トランジスタ TRANSISTER	Q	4,8
2SC4619	トランジスタ TRANSISTER	Q	19
2SC4988	トランジスタ TRANSISTER	Q	20
2SC5108(Y)	トランジスタ TRANSISTER	Q	12,16,17,18
DTA144EE	トランジスタ TRANSISTER	Q	6,25
DTC114EE	トランジスタ TRANSISTER	Q	22
DTC144EE	トランジスタ TRANSISTER	Q	1,7,9,10
2SJ243	トランジスタ TRANSISTER	Q	2,5
2SK1824	トランジスタ TRANSISTER	Q	11,13,14,15,21,23,26
3SK239A	トランジスタ TRANSISTER	Q	24
DAN222	ダイオード DIODE	D	5,7
DA221	ダイオード DIODE	D	17,18
HSM88AS	ダイオード DIODE	D	16
HVU131	ダイオード DIODE	D	12
HZU5ALL	ダイオード DIODE	D	10
MA2S077	ダイオード DIODE	D	9,14,15,24,25
MA2S111	ダイオード DIODE	D	2,3,6
RB706F-40	ダイオード DIODE	D	4,8
ISR-154-400	ダイオード DIODE	D	1
ISS373	ダイオード DIODE	D	23
HVC372B	ダイオード DIODE	D	20,22

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X57-5750-12

部品番号 PART NUMBER	部品名 PART NAME	REF	REF NO.
AT2408N10SI2.5	IC	IC	20
AT29C020-90TI	IC	IC	17
BU4094BCFV	IC	IC	21,22
GN2011(Q)	IC	IC	18
LC3872M	IC	IC	16
M62364FP	IC	IC	8
NJM2904V	IC	IC	23
NJU7201U50	IC	IC	6
RN5VL42C	IC	IC	3
S-81350HG-KD	IC	IC	5
SA7025DK	IC	IC	14
TA31136FN	IC	IC	12
TA75S01F	IC	IC	10
TA75W01FU	IC	IC	1,11
TC35453F	IC	IC	13
TC7S66FU	IC	IC	24
TC75W51FU	IC	IC	2,4,7
TK11250BM	IC	IC	9
30612M4A-407GP	IC	IC	19

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X54-3210-10

部品番号 PART NUMBER	部品名 PART NAME	REF	REF NO.
2SB1132(Q,R)	トランジスタ TRANSISTER	Q	307
2SB798(DL,DK)	トランジスタ TRANSISTER	Q	305
2SC4617(S)	トランジスタ TRANSISTER	Q	302,303,304,306,309
UPA672T	トランジスタ TRANSISTER	Q	301,308
2SJ243	トランジスタ TRANSISTER	Q	300
2SK1824	トランジスタ TRANSISTER	Q	310
IMN10	ダイオード DIODE	D	318
MA2S111	ダイオード DIODE	D	304,317
1SS373	ダイオード DIODE	D	302
B30-2019-05	ダイオード DIODE	D	301
B30-2171-05	ダイオード DIODE	D	305,306
015AZ6.8	ダイオード DIODE	D	319,320,321
NNCD6.8C	ダイオード DIODE	D	300
015AZ2.4-X	ダイオード DIODE	D	303
MC74HC4017F	IC	IC	301
TDA7053AT	IC	IC	300