

VHF FM TRANSCEIVER

# TK-760HG/762HG

## SERVICE MANUAL

**REVISED**

KENWOOD

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B51-8538-10 (N) 1724

This service manual is the same as the K and M market, TK-760HG/762HG (B51-8538-00) service manual with the exception of new K2 market.

### TK-760HG (K)



### TK-762HG (K)



# TK-760HG/762HG

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### Service Manual List

Title	Parts number	Remarks	Destination	TX-RX unit PCB number
TK-760G/762G	B51-8497-10	REVISED	TK-760G : K,K2,M TK-762G : K,K2	J72-0677-02
TK-760HG/762HG	B51-8538-00	SUPPLEMENT	TK-760HG : K,M TK-762HG : K	J72-0759-02
TK-760HG/762HG	B51-8538-10	REVISED (This service manual)	TK-760HG : K,K2,M TK-762HG : K,K2	J72-0759-12

Frequency range     K : 148~174MHz  
                      K2 : 136~162MHz  
                      M : 146~174MHz

# TK-760HG/762HG

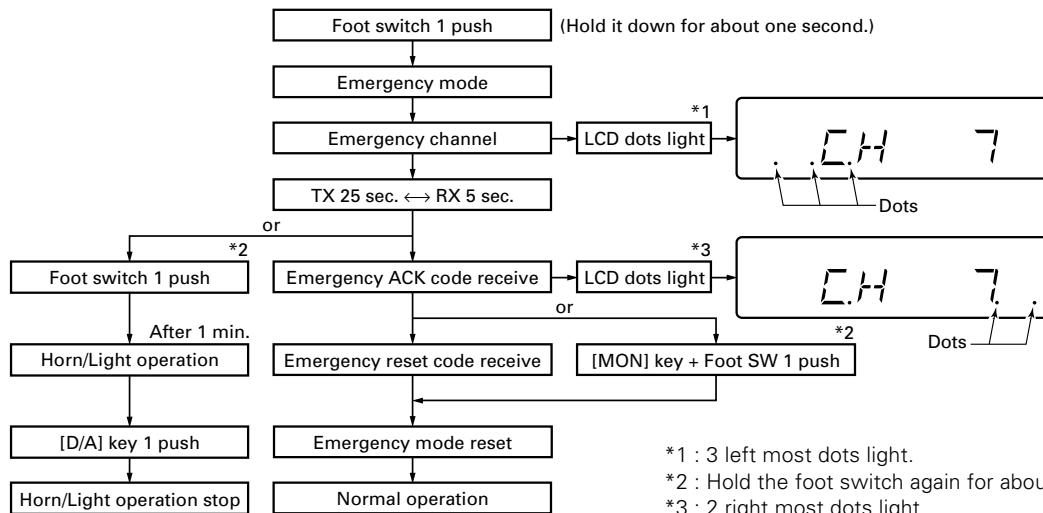
## OPERATING FEATURES

### Emergency

Pressing this key for longer than 1 second causes the transceiver to enter the emergency mode. The transceiver jumps to the programmed "Emergency the group and channel" and transmits for 25 seconds.

The transceiver disables mic mute while transmitting. After finishing transmission, the transceiver receives for 5 seconds. The transceiver mutes the speaker while receiving. Following the above sequence, the transceiver continues to transmit and receive.

### ■ Emergency mode system chart (TK-760HG)

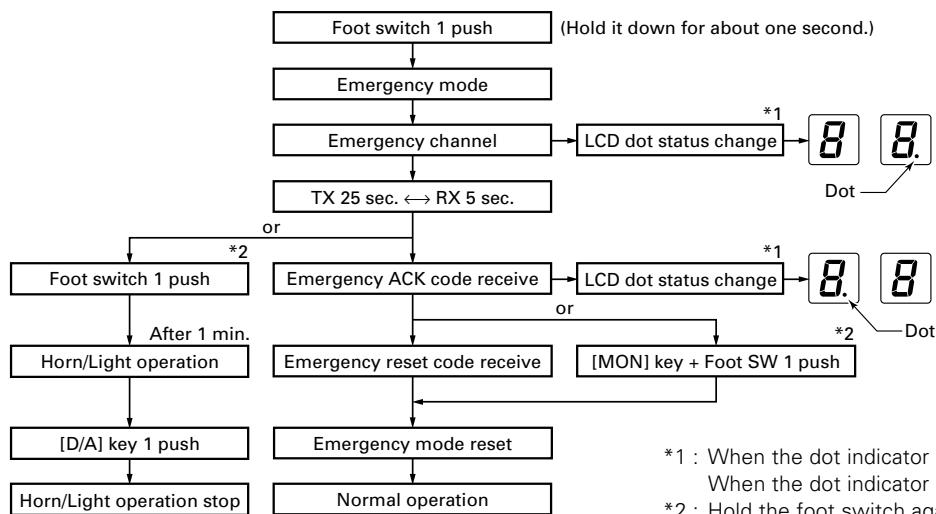


### Radio Password (TK-760HG only)

When the password is set in the transceiver, user can not use the transceiver unless enter the correct password.

This code can be up to 6 digits from 0 to 9 and input with the key, and "SCN" key.

### ■ Emergency mode system chart (TK-762HG)



\*1 : When the dot indicator is on, it turns off.  
When the dot indicator is off, it turns on.

\*2 : Hold the foot switch again for about one second.

# TK-760HG/762HG

## REALIGNMENT

### Clone Mode

Programming data can be transferred from one radio to another by connecting them via their modular microphone jacks. The operation is as follows (the transmit radio is the master and the receive radio is the slave).

1. Turn the master TK-760HG power ON with the [ $\blacktriangledown$ ] key held down. If the password is set to the TK-760HG, the TK-760HG displays "CLN LOCK". If the password is not set, the TK-760HG displays "CLONE".
2. When "CLN LOCK" is displayed, only the [CH $\blacktriangleleft$  /  $\blacktriangleright$ ] key and [SCN], and [0] to [9] keys can be accepted. When you enter the correct password, and "CLONE" is displayed, the TK-760HG can be used as the cloning master. The following describes how to enter the password.
3. How to enter the password with the microphone keypad; If you press a key while "CLN LOCK" is displayed, the number that was pressed is displayed on the TK-760HG. Each press of the key shifts the display in order to the left. When you enter the password and press the [SCN] key, "CLONE" is displayed if the entered password is correct. If the password is incorrect, "CLN LOCK" is redisplayed.  
How to enter the password with the [CH $\blacktriangleleft$  /  $\blacktriangleright$ ] key;  
If the [CH $\blacktriangleleft$  /  $\blacktriangleright$ ] key is pressed while "CLN LOCK" is displayed, numbers (0 to 9) are displayed flashing. When you press the [SCN] key, the correctly selected number is determined, and the display shifts to the left. If you press the [SCN] key after entering the password in this procedure, "CLONE" is displayed if the entered password is correct. If the password is incorrect, "CLN LOCK" is redisplayed.
4. Power on the slave TK-760HG/762HG.
5. Connect the cloning cable (No. E30-3382-05) to the modular microphone jacks on the master and slave.
6. Press the [SCN] key on the master while the master displays "CLONE". The data of the master is sent to the slave. While the slave is receiving the data, "-PC-" is displayed. When cloning of data is completed, the master displays "END", and the slave automatically operates in the User mode. The slave can then be operated by the same program as the master.
7. The other slave can be continuously cloned. When the [SCN] key on the master is pressed while the master displays "END", the master displays "CLONE". Carry out the operation in step 4 to 6.

### Note :

You can clone the programmed data between the transceiver frequency version must be same.

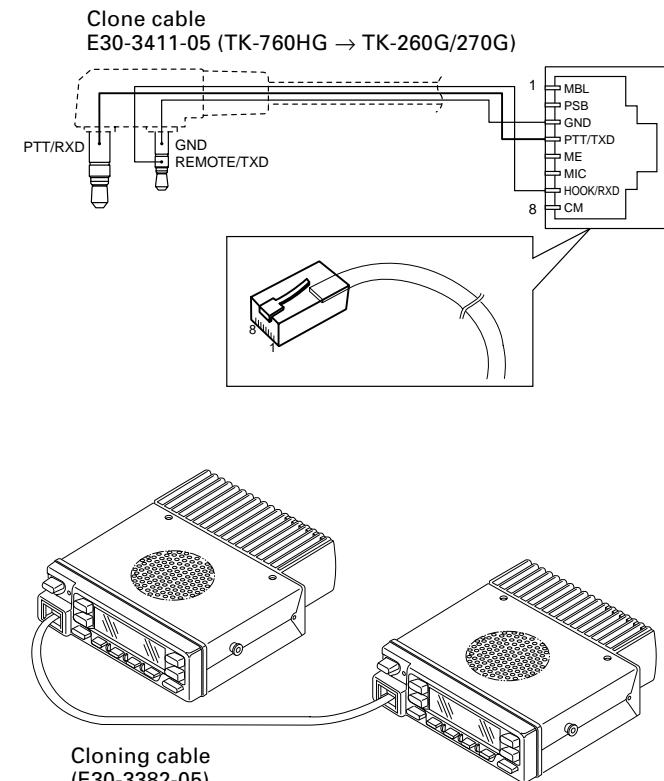


Fig. 1

# INSTALLATION

## Ignition Sense Cable (KCT-18 : Option)

The KCT-18 is an optional cable for enabling the ignition function. The ignition function lets you turn the power to the transceiver on and off with the car ignition key.

If you use the Horn Alert function or the Manual Relay function, you can turn the function off while driving with the ignition key.

### ■ Connecting the KCT-18 to the Transceiver

1. Install the KCT-19 in the transceiver.
2. Insert the KCT-18 lead terminal (②) into pin 3 of the square plug (①) supplied with the KCT-19, then insert the square plug into the KCT-19 connector (③).

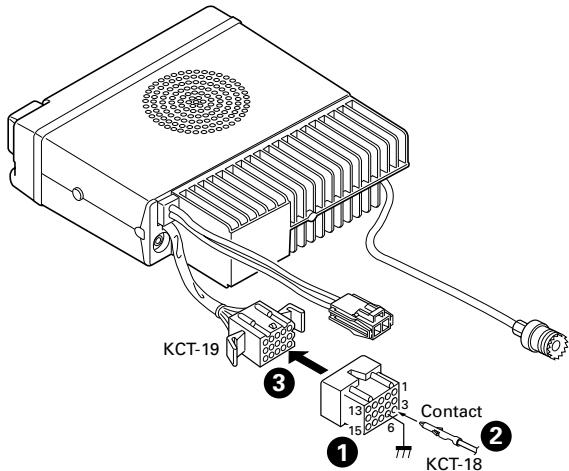


Fig. 1

### ■ Modifying the Transceiver

Modify the transceiver as follows to turn the power or the Horn Alert or Manual Relay function on and off with the ignition key.

1. Remove the lower half of the transceiver case.
2. Set jumper resistors ( $0\Omega$ ) R134 and R135 of the TX-RX unit (A/2) as shown in Table 1.

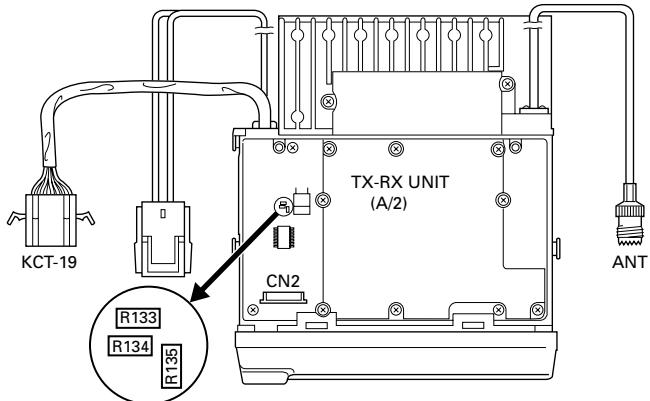


Fig. 2

Operation when KCT-18 is connected	R134	R135	
	Enable	Enable	← KCT-18 cannot be connected
<b>Power on/off and Horn Alert or AUX-A on/off</b>	Disable	Enable	
<b>Horn Alert or AUX-A on/off</b>	Enable	Disable	
	Disable	Disable	← Power cannot be turned on

Table 1 R134 and R135 setup chart

## PA/HA Unit (KAP-1 : Option)

### ■ Installing the KAP-1 in the Transceiver

The Horn Alert (max. 2A drive) and Public Address functions are enabled by inserting the KAP-1 W1 (3P; white/black/red) into CN3 on the TX-RX unit, inserting W2 (3P; green) into CN7 on the TX-RX unit, and connecting the KCT-19 (option) to CN2 and CN3 of the KAP-1.

#### • Installation procedure

1. Open the upper case of the transceiver.
2. Insert the two cables (①) with connectors from the KAP-1 switch unit into the connectors on the transceiver.
3. Secure the switch unit board to the chassis with a screw (③). The notch (②) in the board must be placed at the front left side.
4. Attach the cushion on the top of the KAP-1 switch unit.

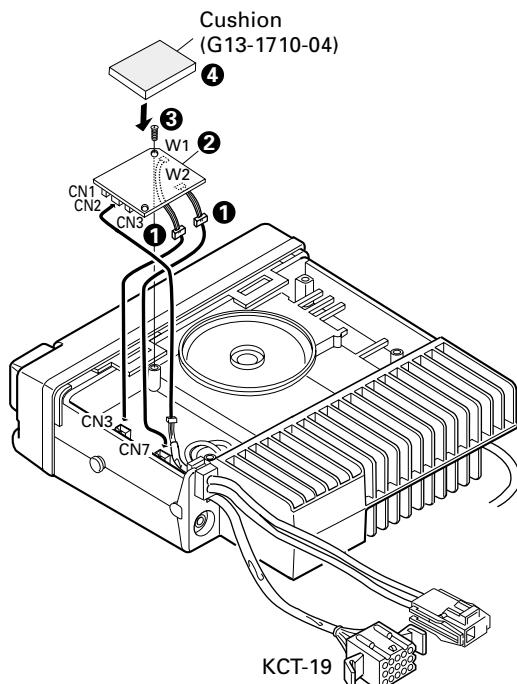


Fig. 3

# TK-760HG/762HG

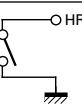
## INSTALLATION

### ■ Modifying the Transceiver

#### • Horn alert

The signal from pin 4 of IC9 on the TX-RX unit turns Q5 and Q1 on and off and drives KAP-1 HA relay K2 to drive the horn with a maximum of 2A.

The default output is HR1. The relay open output can be obtained between HR1 and HR2 by removing R1 in the KAP-1.

	R1	Output form
HR1 (Default)	Enable	
HR2	Disable	

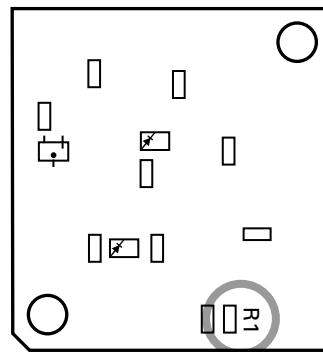


Fig. 4 KAP-1 foil side view

#### • Public address

The signal from pin 13 of IC9 on the TX-RX unit drives PA relay K1 in the KAP-1 and switches the audio power amplifier output between the external PA system (through KCT-19) and internal and external speakers.

To use the PA function, R153 on the TX-RX unit must be removed.

	R153
Use the PA function	Disable
Do not use the PA function	Enable

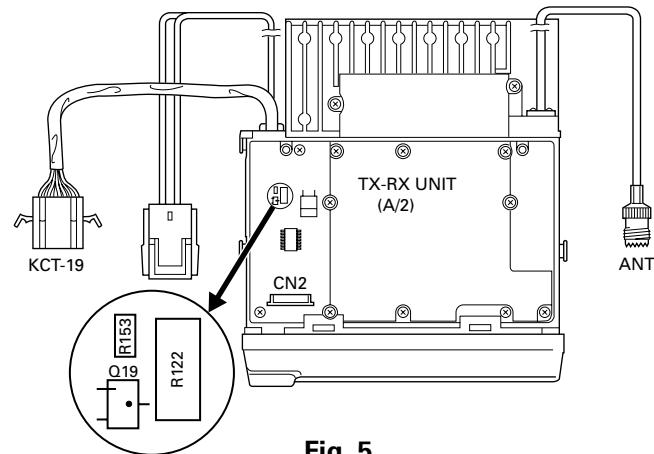


Fig. 5

#### ■ Others

If the PA and HR2 are not necessary and the speaker output is output to an external unit through the KCT-19, connect the KCT-19 C connector to CN8 on the TX-RX unit.

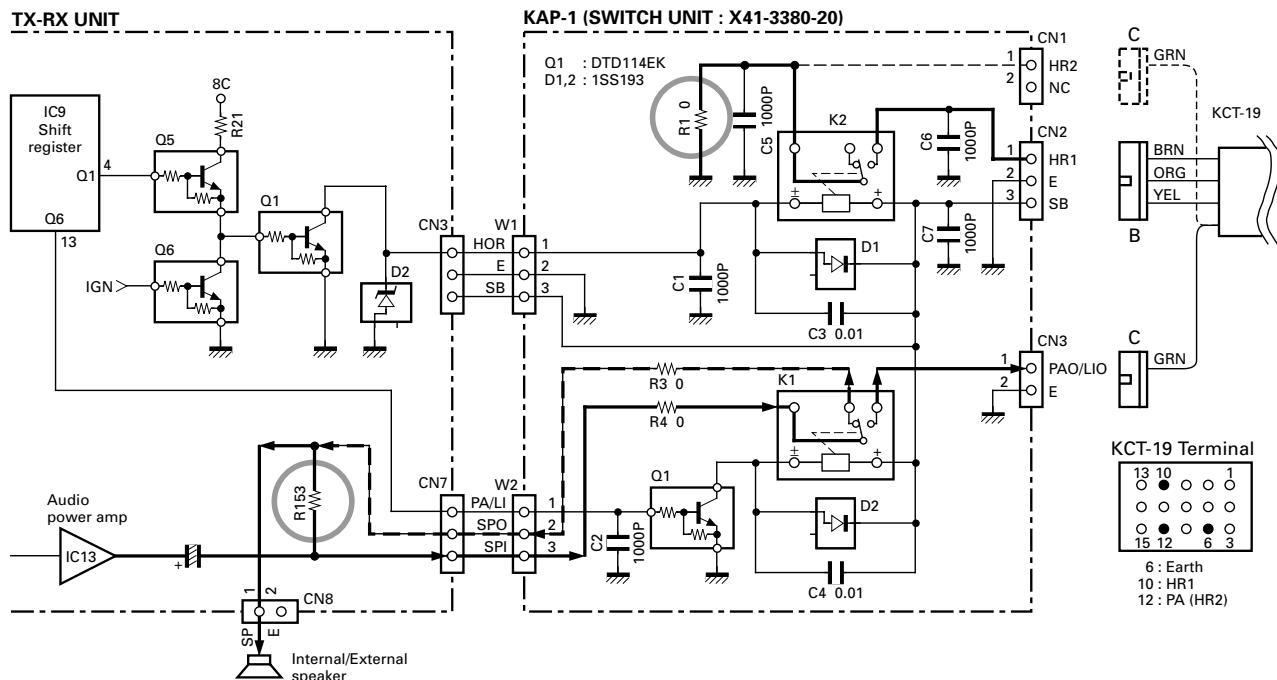


Fig. 6

## INSTALLATION

**Emergency Mode****■ Transceiver Modification Procedure****• Install the foot switch**

Install the foot switch through the KCT-19 and KCT-18. When the switch is treaded on, the radio enters the emergency mode.

**• Change the power switch circuit**

TX-RX unit (B/2) : Control section

\$R705 : Attach (R92-1252-05, 0Ω)

TX-RX unit (A/2) : RF section

R142 : Remove (RK73GB1J473J, 47kΩ)

Once the transceiver is modified, it cannot be turned on and off with the power switch. The power switch turns the LCD backlight and display on and off. (The power is switched on and off by IGNITION SENSE.)

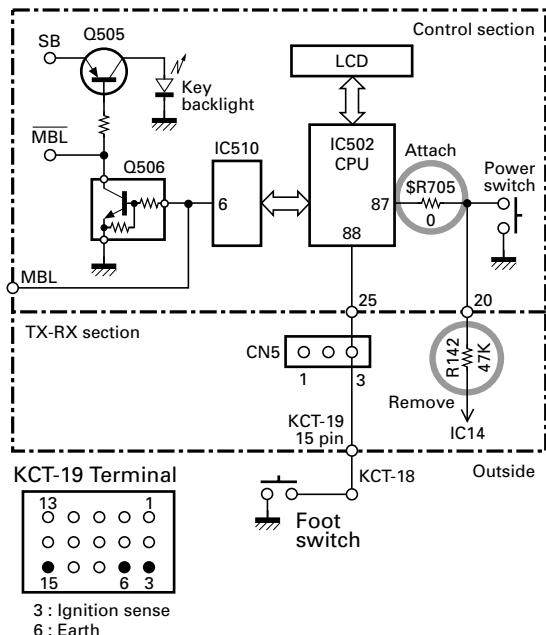


Fig. 7

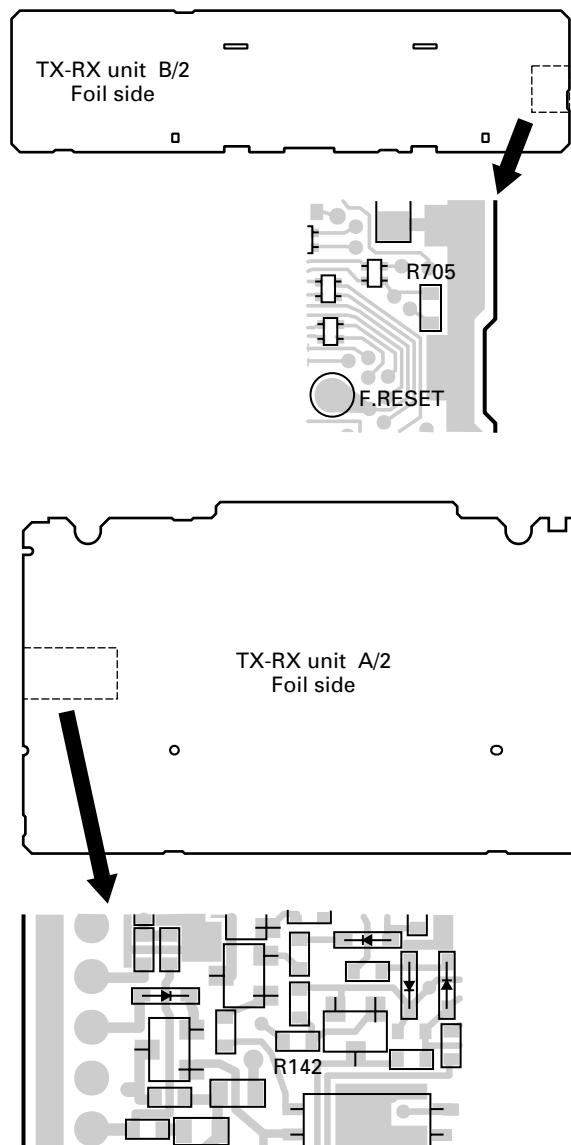


Fig. 8

# TK-760HG/762HG

## PARTS LIST

\* New Parts.  $\Delta$  indicates safety critical components.

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

L : Scandinavia

Y : PX (Far East, Hawaii)

Y : AAFES (Europe)

K : USA

T : England

X : Australia

P : Canada

E : Europe

M : Other Areas

**TK-760HG/762HG**

**DISPLAY UNIT (X54-3270-10) : TK-760HG, DISPLAY UNIT (X54-3280-10) : TK-762HG**

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
<b>TK-760HG/762HG</b>					
1	1B,1E	A01-2165-13	CABINET	UPPER	
2	2A,2D	A01-2166-13	CABINET	LOWER	
3	2A	A62-0642-03	PANEL ASSY		760
3	2D	A62-0731-03	PANEL ASSY		762
5	1G	B09-0235-05	CAP		
6	2B	B11-1226-03	ILLUMINATION GUIDE		760
6	2E	B11-1230-03	ILLUMINATION GUIDE		762
7	2A	B38-0824-05	LCD		760
7	2E	B38-0825-05	LCD		762
8	2G	*	B62-1257-20	INSTRUCTION MANUAL	M
8	2G	*	B62-1258-20	INSTRUCTION MANUAL	K,K2
9	1C	*	B72-1816-14	MODEL NAME PLATE	760K
9	1C	*	B72-1817-04	MODEL NAME PLATE	760M
9	1C	*	B72-1896-04	MODEL NAME PLATE	760K2
9	1F	*	B72-1818-14	MODEL NAME PLATE	762K
9	1F	*	B72-1897-04	MODEL NAME PLATE	762K2
11	2B	E29-1179-04	INTER CONNECTOR		760
11	2E	E29-1183-04	INTER CONNECTOR		762
12	1C	E30-2145-15	ANTENNA CABLE		
13	1G	E30-3339-05	DC CORD	ACC	
14	1C,1F	E30-3340-05	DC CORD	RADIO	
-	-	E30-3404-05	EXTENSION CABLE		
16	1C,1F	E37-0790-25	LEAD WIRE WITH CONNECTOR (SP)		
17	2B,2E	E37-0815-05	FLAT CABLE		
-	-	F10-2280-02	SHIELDING COVER		
19	1G	F51-0017-05	FUSE (6*30)		
21	1C,1F	G02-0791-04	FLAT SPRING	AF APC	
22	1B,1E	G10-1221-04	FIBROUS SHEET	SIDE	
23	1B,1E	G10-1222-14	FIBROUS SHEET	UP,DOWN	
24	1A,1D	G10-1223-14	FIBROUS SHEET	SHIELD	
25	1C,1F	G13-1468-04	CUSHION	DC CORD	
26	1B,1E	G13-1759-04	CUSHION	SP	
27	2C,2F	G53-0796-04	PACKING	PHONE JACK	
28	2E	G53-0889-04	PACKING	DISPLAY UNIT	762
30	3G	H10-6628-02	POLYSTYRENE FOAMED FIXTURE		
31	2H	H10-6629-02	POLYSTYRENE FOAMED FIXTURE		
32	1G	H12-1391-03	INNER PACKING CASE		
33	1H,2H	H25-0720-04	PROTECTION BAG (200X350)		
34	3H	H52-1653-02	ITEM CARTON CASE		
36	2G	J19-1584-05	HOLDER	ACC	
37	2A,2D	J21-8382-03	HARDWARE FIXTURE		
38	1G	J29-0627-23	BRACKET		
40	2A	K29-5343-02	KEY TOP		760
40	2D	K29-5344-02	KEY TOP		762
A	2A,2D	N33-2606-45	OVAL HEAD MACHINE SCREW		
B	2C,2F	N67-3008-46	PAN HEAD SEMS SCREW		
C	2B,2E	N87-2606-46	BRAZIER HEAD TAPTITE SCREW		
D	2B,2E	N87-2612-46	BRAZIER HEAD TAPTITE SCREW		
42	2G	N99-0395-05	SCREW SET		
44	1B,1E	T07-0368-05	SPEAKER		
45	1G	T91-0621-05	MICROPHONE		K,K2

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
<b>DISPLAY UNIT (X54-3270-10) : TK-760HG</b>					
D802-805			B30-2220-05	LED (2P/YELLOW)	
C801-803			CC73GCH1H101J	CHIP C	100PF J
C804			CK73GF1A105Z	CHIP C	1.0UF Z
C805			CK73GB1H102K	CHIP C	1000PF K
C806,807			CK73GB1H471K	CHIP C	470PF K
CN801			E40-6020-05	PIN ASSY	
L801			L92-0138-05	FERRITE CHIP	
R801-803			RK73GB1J103J	CHIP R	10K J 1/16W
R804			RK73GB1J473J	CHIP R	47K J 1/16W
R805			RK73GB1J474J	CHIP R	470K J 1/16W
R806			R92-1252-05	CHIP R	0 OHM
R808			RK73GB1J392J	CHIP R	3.9K J 1/16W
R809			RK73FB2A270J	CHIP R	27 J 1/10W
D801			MA2S111	DIODE	
D808			HSB123	DIODE	
IC801			LC75823W	IC (LCD DRIVER)	
Q801			2SB1132(Q,R)	TRANSISTOR	
<b>DISPLAY UNIT (X54-3280-10) : TK-762HG</b>					
D801			B30-2204-05	LED (RED/YEL)	
D803			B30-2220-05	LED (YELLOW)	
D804			B30-2204-05	LED (RED/YEL)	
C801			CK73GB1H471K	CHIP C	470PF K
C802-804			CC73GCH1H101J	CHIP C	100PF J
C805			CK73GF1A105Z	CHIP C	1.0UF Z
C806			CK73GB1H471K	CHIP C	470PF K
C807			CK73GB1H102K	CHIP C	1000PF K
C808			CK73GB1H471K	CHIP C	470PF K
C812			CK73GB1H471K	CHIP C	470PF K
CN801			E40-6020-05	PIN ASSY	
L801			L92-0138-05	FERRITE CHIP	
R801,802			RK73GB1J103J	CHIP R	10K J 1/16W
R803			RK73FB2A123J	CHIP R	12K J 1/10W
R804			RK73GB1J103J	CHIP R	10K J 1/16W
R805			RK73FB2A332J	CHIP R	3.3K J 1/10W
R806			RK73GB1J474J	CHIP R	470K J 1/16W
R807			R92-1252-05	CHIP R	0 OHM
R808			RK73GB1J393J	CHIP R	39K J 1/16W
R809			RK73FB2A123J	CHIP R	12K J 1/10W
R810			RK73FB2A332J	CHIP R	3.3K J 1/10W
R812			RK73FB2A561J	CHIP R	560 J 1/10W
R813-816			RK73GB1J473J	CHIP R	47K J 1/16W
D802			MA2S111	DIODE	
IC801			LC75833W	IC (LCD DRIVER)	
Q801-803			DTA114EKA	DIGITAL TRANSISTOR	
Q804			KRA225S	DIGITAL TRANSISTOR	
Q805			DTA114EKA	DIGITAL TRANSISTOR	
Q806-809			2SK1824	FET	

TK-760HG : K,K2,M

TK-762HG : K,K2

# PARTS LIST

# TK-760HG/762HG

# TK-760HG/762HG

## PARTS LIST

TX-RX UNIT (X57-5950-XX)

Ref. No.	Address	New parts	Parts No.	Description			Desti-nation	Ref. No.	Address	New parts	Parts No.	Description			Desti-nation
C168-170			CK73GB1H102K	CHIP C	1000PF	K		C270			CK73GB1C104K	CHIP C	0.10UF	K	
C171			CC73GCH1H020B	CHIP C	2.0PF	B		C271			CK73GB1H472K	CHIP C	4700PF	K	
C172			CE04EW1E471M	ELECTRO	470UF	25WV		C274			CK73GB1C104K	CHIP C	0.10UF	K	
C173			CK73GB1C104K	CHIP C	0.10UF	K		C276			CK73GB1H102K	CHIP C	1000PF	K	
C174			CK73GB1H102K	CHIP C	1000PF	K		C501			CK73GB1H102K	CHIP C	1000PF	K	
C175			CC73GCH1H080D	CHIP C	8.0PF	D	K,M	C502			CK73GB1C104K	CHIP C	0.10UF	K	
C175			CC73GCH1H100D	CHIP C	10PF	D	K2	C503			CK73GB1H471K	CHIP C	470PF	K	
C177			CK73GB1H102K	CHIP C	1000PF	K		C504			CK73GB1H103K	CHIP C	0.010UF	K	
C179			CK73GB1H102K	CHIP C	1000PF	K		C505			CK73GB1C104K	CHIP C	0.10UF	K	
C180			CK73GB1H103K	CHIP C	0.010UF	K		C506,507			CK73GB1H103K	CHIP C	0.010UF	K	
C181			CC73FCH1H270J	CHIP C	27PF	J	K,M	C508			CK73GB1H472K	CHIP C	4700PF	K	
C181			CC73FCH1H390J	CHIP C	39PF	J	K2	C509			C92-0507-05	CHIP-TAN	4.7UF	6.3WV	
C182,183			CK73GB1H102K	CHIP C	1000PF	K	K2	C514			CC73GCH1H680J	CHIP C	68PF	J	
C183			CK73GB1H102K	CHIP C	1000PF	K	K,M	C515			CK73GB1H103K	CHIP C	0.010UF	K	
C185			CK73GB1C104K	CHIP C	0.10UF	K		C516			CC73GCH1H270J	CHIP C	27PF	J	
C186,187			CK73GB1H102K	CHIP C	1000PF	K		C517			CK73GB1C683K	CHIP C	0.068UF	K	
C188			CC73GCH1H060D	CHIP C	6.0PF	D	K2	C518			CC73GCH1H270J	CHIP C	27PF	J	
C189,190			CK73GB1H102K	CHIP C	1000PF	K		C519			CK73GB1H102K	CHIP C	1000PF	K	
C192			CK73GB1H102K	CHIP C	1000PF	K		C520			CK73GB1C104K	CHIP C	0.10UF	K	
C194			CK73GB1C104K	CHIP C	0.10UF	K		C521			CK73GB1H102K	CHIP C	1000PF	K	
C195			C92-0719-05	ELECTRO	47UF	25WV		C522			C92-0507-05	CHIP-TAN	4.7UF	6.3WV	
C196			CK73GB1H102K	CHIP C	1000PF	K		C523			CC73GCH1H221J	CHIP C	220PF	J	
C198			CK73GB1H102K	CHIP C	1000PF	K		C524			CK73GB1H103K	CHIP C	0.010UF	K	
C200			CK73GB1H102K	CHIP C	1000PF	K	K,M	C525			CK73GB1E123K	CHIP C	0.012UF	K	
C201			CK73GB1C104K	CHIP C	0.10UF	K	K,M	C526			CK73GB1C683K	CHIP C	0.068UF	K	
C203			CK73GB1H102K	CHIP C	1000PF	K		C527			CK73GB1H222K	CHIP C	2200PF	K	
C204			C92-0004-05	CHIP-TAN	1.0UF	16WV		C528			CK73GB1H103K	CHIP C	0.010UF	K	
C205			C93-0560-05	CHIP C	10PF	D	K,M	C529			CK73GB1H272K	CHIP C	2700PF	K	
C205			C93-0563-05	CHIP C	18PF	J	K2	C530			CK73GB1H152K	CHIP C	1500PF	K	
C207			CK73GB1H103K	CHIP C	0.010UF	K		C531			CK73GB1H272K	CHIP C	2700PF	K	
C208			CC73FCH1H030C	CHIP C	3.0PF	C	K,M	C532,533			CK73GB1C104K	CHIP C	0.10UF	K	
C208			CC73FCH1H040C	CHIP C	4.0PF	C	K2	C534,535			CK73GB1H103K	CHIP C	0.010UF	K	
C209			C93-0561-05	CHIP C	12PF	J	K,M	C536,537			CK73GB1C104K	CHIP C	0.10UF	K	
C209			C93-0564-05	CHIP C	22PF	J	K2	C538			C92-0566-05	CHIP-TAN	10UF	6.3WV	
C210			CK73GB1H103K	CHIP C	0.010UF	K		C539			CK73GB1H103K	CHIP C	0.010UF	K	
C211			C93-0564-05	CHIP C	22PF	J		C540,541			CK73GB1C104K	CHIP C	0.10UF	K	
C212			CK73GB1H102K	CHIP C	1000PF	K		C542			CC73GCH1H331J	CHIP C	330PF	J	
C213			C93-0563-05	CHIP C	18PF	J		C543			CK73GB1H102K	CHIP C	1000PF	K	
C214			C93-0603-05	CHIP C	1000PF	K		C544-546			CK73GB1H562K	CHIP C	5600PF	K	
C215			C93-0560-05	CHIP C	10PF	D		C547			CC73GCH1H030C	CHIP C	3.0PF	C	
C216			CC73GCH1H0R5B	CHIP C	0.5PF	B		C548-550			CK73GB1H272K	CHIP C	2700PF	K	
C217			CC73GCH1H010B	CHIP C	1.0PF	B	K,M	C551			CC73GCH1H151J	CHIP C	150PF	J	
C217			CC73GCH1H020B	CHIP C	2.0PF	B	K2	C552			CC73GCH1H030C	CHIP C	3.0PF	C	
C218			CK73GB1C104K	CHIP C	0.10UF	K		C553			CK73GB1H102K	CHIP C	1000PF	K	
C219			C93-0563-05	CHIP C	18PF	J		C554			CK73GB1H122K	CHIP C	1200PF	K	
C220			CK73GB1H102K	CHIP C	1000PF	K		C555			C92-0566-05	CHIP-TAN	10UF	6.3WV	
C221			C93-0562-05	CHIP C	15PF	J		C556			CK73GB1C333K	CHIP C	0.033UF	K	
C222			CC73GCH1H0R5B	CHIP C	0.5PF	B		C557			CK73GB1C104K	CHIP C	0.10UF	K	
C223			CC73GCH1H010B	CHIP C	1.0PF	B	K2	C558			CC73GCH1H101J	CHIP C	100PF	J	
C223			CC73GCH1H020B	CHIP C	2.0PF	B	K,M	C559			CK73GB1H102K	CHIP C	1000PF	K	
C224			CK73GB1H102K	CHIP C	1000PF	K		C560-563			CK73GB1C104K	CHIP C	0.10UF	K	
C230,231			CK73GB1C104K	CHIP C	0.10UF	K		C564			C92-0507-05	CHIP-TAN	4.7UF	6.3WV	
C241			C93-0553-05	CHIP C	3.0PF	C	K2	C565,566			CK73GB1H472K	CHIP C	4700PF	K	
C241			C93-0554-05	CHIP C	4.0PF	C	K,M	C567			CK73GCH1H101J	CHIP C	100PF	J	
C245			CK73GB1C104K	CHIP C	0.10UF	K	K2	C568			C92-0507-05	CHIP-TAN	4.7UF	6.3WV	
C248			C92-0585-05	CHIP-TAN	4.7UF	16WV		C569			CK73GB1E223K	CHIP C	0.022UF	K	
C251			CK73GB1H102K	CHIP C	1000PF	K	K2	C570			CK73F1C105Z	CHIP C	1.0UF	Z	
C252			CK73GB1C104K	CHIP C	0.10UF	K	K2	C571,572			CK73GB1H102K	CHIP C	1000PF	K	
C259			CK73GB1C104K	CHIP C	0.10UF	K		C573			CK73FB1H563K	CHIP C	0.056UF	K	
C265			CK73GB1H102K	CHIP C	1000PF	K	K2	C574			CK73GCH1H470J	CHIP C	47PF	J	

TK-760HG : K,K2,M

TK-762HG : K,K2

## PARTS LIST

TX-RX UNIT (X57-5950-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C575			CK73GB1H102K	CHIP C	1000PF K	L8			L40-8285-85	SMALL FIXED INDUCTOR (0.82UH)	
C576			CK73GB1C104K	CHIP C	0.10UF K	L9			L40-1085-77	SMALL FIXED INDUCTOR (100NH)	
C577,578			CK73GB1H103K	CHIP C	0.010UF K	L10			L40-6875-77	SMALL FIXED INDUCTOR (68NH)	
C579			CC73GCH1H101J	CHIP C	100PF J	L11			L34-4472-05	COIL	
C580			CK73GB1C104K	CHIP C	0.10UF K	L12			L40-3375-34	SMALL FIXED INDUCTOR (33NH)	
C581			CK73GB1H102K	CHIP C	1000PF K	L13			L34-4473-05	COIL	
C582			CK73GB1C473K	CHIP C	0.047UF K	L14			L40-6875-34	SMALL FIXED INDUCTOR (68NH)	
C583			C92-0566-05	CHIP-TAN	10UF 6.3WV	L15			L34-4473-05	COIL	
C584			CK73GB1H103K	CHIP C	0.010UF K	L17			L92-0179-05	FERRITE CHIP	
C585			CC73GCH1H101J	CHIP C	100PF J	L18			L34-4472-05	COIL	
C587			CK73GB1H103K	CHIP C	0.010UF K	L20			L34-4481-05	AIR-CORE COIL	
C589			C92-0606-05	CHIP-TAN	4.7UF 10WV	L21			L34-4478-05	AIR-CORE COIL	
C590			CK73GB1H102K	CHIP C	1000PF K	L22			L34-4480-05	AIR-CORE COIL	
C594			CK73GB1H102K	CHIP C	1000PF K	L23	*		L34-4655-05	AIR-CORE COIL	
C596			CK73GB1H102K	CHIP C	1000PF K	L24			L34-4481-05	AIR-CORE COIL	
C597			CC73GCH1H101J	CHIP C	100PF J	L25			L34-4478-05	AIR-CORE COIL	
C598			CK73GB1H102K	CHIP C	1000PF K	L26			L40-4775-77	SMALL FIXED INDUCTOR (47NH)	
C599			CC73GCH1H101J	CHIP C	100PF J	L27			L40-1581-86	SMALL FIXED INDUCTOR (0.15UH)	
C600			CK73GB1H102K	CHIP C	1000PF K	L33,34			L92-0179-05	FERRITE CHIP	
C601,602			CC73GCH1H101J	CHIP C	100PF J	L501			L92-0138-05	FERRITE CHIP	
C603			CK73GB1H102K	CHIP C	1000PF K	L503,504			L92-0138-05	FERRITE CHIP	
C604-606			CC73GCH1H101J	CHIP C	100PF J	L510			L92-0138-05	FERRITE CHIP	
C608-610			CC73GCH1H101J	CHIP C	100PF J	X1			L77-1826-05	TCXO (16.8M)	
C611,612			CK73GB1H471K	CHIP C	470PF K	X501			L77-1708-05	CRYSTAL RESONATOR (3.579545MHZ)	
C613			CC73GCH1H101J	CHIP C	100PF J	X502			L78-0462-05	RESONATOR (9.8304MHZ)	
C615			CK73GB1H471K	CHIP C	470PF K	XF1			L71-0551-25	MCF (49.95MHZ/5.0K)	
C616			CC73GCH1H101J	CHIP C	100PF J	CP501-505			R90-0741-05	MULTIPLE RESISTOR	
C618			CK73GB1H102K	CHIP C	1000PF K	CP508-514			R90-0741-05	MULTIPLE RESISTOR	
C620			CK73GB1H471K	CHIP C	470PF K	CP516-524			R90-0741-05	MULTIPLE RESISTOR	
C621			CK73GB1H102K	CHIP C	1000PF K	CP526,527			R90-0741-05	MULTIPLE RESISTOR	
C623			CK73GB1H102K	CHIP C	1000PF K	CP529-536			R90-0741-05	MULTIPLE RESISTOR	
C626			CK73GB1C104K	CHIP C	0.10UF K	CP538			R90-0741-05	MULTIPLE RESISTOR	
C628			CK73GB1C104K	CHIP C	0.10UF K	CP539			R90-0724-05	MULTI-COMP 1K X4	
C629			CC73GCH1H470J	CHIP C	47PF J	R1			R92-1252-05	CHIP R 0 OHM	
C630			C92-0507-05	CHIP-TAN	4.7UF 6.3WV	R2			RK73GB1J102J	CHIP R 1.0K J 1/16W	
C631			CK73GB1H103K	CHIP C	0.010UF K	R3			R92-1252-05	CHIP R 0 OHM	
C632			CK73FF1C105Z	CHIP C	1.0UF Z	R4			RK73GB1J333J	CHIP R 33K J 1/16W	
C633			CK73GB1C104K	CHIP C	0.10UF K	R6			R92-1252-05	CHIP R 0 OHM	
C720			C92-0566-05	CHIP-TAN	10UF 6.3WV	R7,8			RK73GB1J102J	CHIP R 1.0K J 1/16W	
CN1			E40-6047-05	PIN ASSY		R9,10			R92-1252-05	CHIP R 0 OHM	
CN2			E40-6021-05	FLAT CABLE CONNECTOR		R11			RK73GB1J102J	CHIP R 1.0K J 1/16W	
CN3			E40-3247-05	PIN ASSY		R12			RK73GB1J104J	CHIP R 100K J 1/16W	
CN4			E40-5737-05	PIN ASSY		R13			RK73GB1J473J	CHIP R 47K J 1/16W	
CN5			E40-5738-05	PIN ASSY		R14			RK73GB1J474J	CHIP R 470K J 1/16W	
CN7			E40-3247-05	PIN ASSY		R15			RK73GB1J104J	CHIP R 100K J 1/16W	
CN8			E40-3246-05	PIN ASSY		R16			RK73GB1J220J	CHIP R 22 J 1/16W	
CN501			E40-6021-05	FLAT CABLE CONNECTOR		R17			RK73GB1J154J	CHIP R 150K J 1/16W	
J1			E11-0442-05	3.5D PHONE JACK (3P)		R18			RK73GB1J104J	CHIP R 100K J 1/16W	
J501			E08-0877-05	MODULAR JACK		R19			RK73GB1J392J	CHIP R 3.9K J 1/16W	
F1			F53-0108-05	FUSE		R20			RK73GB1J224J	CHIP R 220K J 1/16W	
-			J31-0543-05	COLLAR (LH-5-1.5)		R21			RK73GB1J102J	CHIP R 1.0K J 1/16W	
CF1			L72-0959-05	CERAMIC FILTER		R22			RK73GB1J474J	CHIP R 470K J 1/16W	
CF2			L72-0973-05	CERAMIC FILTER		R23			RK73GB1J223J	CHIP R 22K J 1/16W	
L1			L40-1005-34	SMALL FIXED INDUCTOR (10UH)		R24			RK73GB1J183J	CHIP R 18K J 1/16W	
L2-4			L40-3381-86	SMALL FIXED INDUCTOR (0.33UH)		R25,26			R92-1252-05	CHIP R 0 OHM	
L5			L34-4530-05	COIL		R29			R92-1252-05	CHIP R 0 OHM	
L6			L40-1581-86	SMALL FIXED INDUCTOR (0.15UH)		R30			RK73GB1J103J	CHIP R 10K J 1/16W	
L7			L40-4785-85	SMALL FIXED INDUCTOR (0.47UH)		R31			RK73GB1J152J	CHIP R 1.5K J 1/16W	
						R32			RK73GB1J103J	CHIP R 10K J 1/16W	

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## PARTS LIST

TX-RX UNIT (X57-5950-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
R33			R92-1252-05	CHIP R 0 OHM		R103			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R34			RK73GB1J104J	CHIP R 100K J 1/16W		R105			RK73GB1J470J	CHIP R 47 J 1/16W	
R35			RK73GB1J224J	CHIP R 220K J 1/16W		R106			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R36			RK73GB1J223J	CHIP R 22K J 1/16W		R107			RK73GB1J473J	CHIP R 47K J 1/16W	
R37			RK73GB1J220J	CHIP R 22 J 1/16W		R108			RK73GB1J181J	CHIP R 180 J 1/16W	K,M
R38-40			RK73GB1J103J	CHIP R 10K J 1/16W		R108			RK73GB1J271J	CHIP R 270 J 1/16W	K2
R41			RK73GB1J224J	CHIP R 220K J 1/16W		R109			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R42			RK73GB1J473J	CHIP R 47K J 1/16W		R110			RK73GB1J220J	CHIP R 22 J 1/16W	
R43			RK73GB1J683J	CHIP R 68K J 1/16W		R111			RK73GB1J180J	CHIP R 18 J 1/16W	K2
R44			RK73GB1J153J	CHIP R 15K J 1/16W		R111			RK73GB1J330J	CHIP R 33 J 1/16W	K,M
R46			RK73GB1J223J	CHIP R 22K J 1/16W		R112			RK73GB1J333J	CHIP R 33K J 1/16W	
R47			RK73GB1J101J	CHIP R 100 J 1/16W		R113			RK73GB1J181J	CHIP R 180 J 1/16W	K,M
R48			RK73GB1J184J	CHIP R 180K J 1/16W		R113			RK73GB1J271J	CHIP R 270 J 1/16W	K2
R49			RK73GB1J152J	CHIP R 1.5K J 1/16W		R114			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R50			RK73GB1J473J	CHIP R 47K J 1/16W		R115			RK73GB1J103J	CHIP R 10K J 1/16W	
R51-53			RK73GB1J102J	CHIP R 1.0K J 1/16W		R116			RK73GB1J473J	CHIP R 47K J 1/16W	
R54			R92-1252-05	CHIP R 0 OHM		R117			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R55			RK73GB1J104J	CHIP R 100K J 1/16W		R118			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R56			RK73GB1J101J	CHIP R 100 J 1/16W		R119			RK73GB1J103J	CHIP R 10K J 1/16W	
R57			RK73GB1J471J	CHIP R 470 J 1/16W		R120			R92-1252-05	CHIP R 0 OHM	
R58			RK73GB1J332J	CHIP R 3.3K J 1/16W		R121			RK73GB1J100J	CHIP R 10 J 1/16W	
R59			RK73GB1J472J	CHIP R 4.7K J 1/16W		R122			R92-1215-05	CHIP R 470 J 1/2W	
R60			RK73GB1J334J	CHIP R 330K J 1/16W		R123			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R61			RK73GB1J102J	CHIP R 1.0K J 1/16W		R124			RK73GB1J103J	CHIP R 10K J 1/16W	
R62			RK73GB1J224J	CHIP R 220K J 1/16W		R125			RK73GB1J333J	CHIP R 33K J 1/16W	
R63			RK73GB1J474J	CHIP R 470K J 1/16W		R126			RK73GB1J471J	CHIP R 470 J 1/16W	
R64			RK73GB1J223J	CHIP R 22K J 1/16W		R127			RK73GB1J222J	CHIP R 2.2K J 1/16W	
R65			RK73GB1J183J	CHIP R 18K J 1/16W		R128			RK73GB1J220J	CHIP R 22 J 1/16W	
R66			RK73GB1J101J	CHIP R 100 J 1/16W		R129			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R67			RK73GB1J472J	CHIP R 4.7K J 1/16W		R130			RK73GB1J103J	CHIP R 10K J 1/16W	
R68			RK73GB1J182J	CHIP R 1.8K J 1/16W		R131			RK73GB1J681J	CHIP R 680 J 1/16W	
R69			R92-1252-05	CHIP R 0 OHM		R132			RK73FB2A470J	CHIP R 47 J 1/10W	
R70			RK73GB1J562J	CHIP R 5.6K J 1/16W		R133-136			R92-1252-05	CHIP R 0 OHM	
R71			RK73GB1J103J	CHIP R 10K J 1/16W		R137			RK73FB2A100J	CHIP R 10 J 1/10W	
R72			R92-1252-05	CHIP R 0 OHM		R138			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R73			RK73GB1J223J	CHIP R 22K J 1/16W		R139			RK73GB1J103J	CHIP R 10K J 1/16W	
R75			RK73GB1J471J	CHIP R 470 J 1/16W		R140			RK73FB2A2R2J	CHIP R 2.2 J 1/10W	
R76			RK73GB1J223J	CHIP R 22K J 1/16W		R141			RK73GB1J103J	CHIP R 10K J 1/16W	
R77			RK73GB1J154J	CHIP R 150K J 1/16W	K,M	R142			RK73GB1J473J	CHIP R 47K J 1/16W	
R77			RK73GB1J184J	CHIP R 180K J 1/16W	K2	R144			R92-0685-05	CHIP R 22 J 1/2W	
R78			RK73GB1J104J	CHIP R 100K J 1/16W		R145,146			RK73GB1J473J	CHIP R 47K J 1/16W	
R79			RK73GB1J681J	CHIP R 680 J 1/16W		R147			RK73GB1J102J	CHIP R 1.0K J 1/16W	K,M
R80			RK73GB1J471J	CHIP R 470 J 1/16W		R147			RK73GB1J152J	CHIP R 1.5K J 1/16W	K2
R81			RK73GB1J101J	CHIP R 100 J 1/16W		R148			RK73GB1J104J	CHIP R 100K J 1/16W	
R82			RK73GB1J152J	CHIP R 1.5K J 1/16W		R149			RK73GB1J470J	CHIP R 47 J 1/16W	
R83			RK73GB1J684J	CHIP R 680K J 1/16W		R150			RK73GB1J104J	CHIP R 100K J 1/16W	
R85			RK73GB1J272J	CHIP R 2.7K J 1/16W		R151			RK73FB2A471J	CHIP R 470 J 1/10W	K2
R86			RK73GB1J122J	CHIP R 1.2K J 1/16W		R151			RK73FB2A821J	CHIP R 820 J 1/10W	K,M
R87			RK73GB1J102J	CHIP R 1.0K J 1/16W		R152			R92-1252-05	CHIP R 0 OHM	
R88			RK73GB1J271J	CHIP R 270 J 1/16W		R153			R92-0670-05	CHIP R 0 OHM	
R89			RK73GB1J102J	CHIP R 1.0K J 1/16W		R154			RK73GB1J152J	CHIP R 1.5K J 1/16W	
R90,91			RK73GB1J104J	CHIP R 100K J 1/16W		R155			RK73FB2A120J	CHIP R 12 J 1/10W	K2
R92			R92-1252-05	CHIP R 0 OHM		R155			RK73FB2A5R6J	CHIP R 5.6 J 1/10W	K,M
R93			RK73GB1J152J	CHIP R 1.5K J 1/16W		R157			RK73GB1J271J	CHIP R 270 J 1/16W	
R94			R92-1252-05	CHIP R 0 OHM		R159			RK73GB1J473J	CHIP R 47K J 1/16W	
R95			RK73GB1J103J	CHIP R 10K J 1/16W		R160			RK73FB2A471J	CHIP R 470 J 1/10W	K2
R97			RK73GB1J473J	CHIP R 47K J 1/16W		R160			RK73FB2A821J	CHIP R 820 J 1/10W	K,M
R98			RK73GB1J223J	CHIP R 22K J 1/16W		R161			RK73GB1J334J	CHIP R 330K J 1/16W	
R99			RK73GB1J271J	CHIP R 270 J 1/16W		R162			RK73GB1J333J	CHIP R 33K J 1/16W	
R100,101			RK73GB1J101J	CHIP R 100 J 1/16W		R163			R92-0670-05	CHIP R 0 OHM	

TK-760HG : K,K2,M

TK-762HG : K,K2

## PARTS LIST

TX-RX UNIT (X57-5950-XX)

Ref. No.	Address	New parts	Parts No.	Description			Desti-nation	Ref. No.	Address	New parts	Parts No.	Description			Desti-nation
R164			R92-1213-05	CHIP R	100	J	1/2W	R533			RK73GB1J104J	CHIP R	100K	J	1/16W
R166			RK73GB1J221J	CHIP R	220	J	1/16W	R534			RK73GB1J823J	CHIP R	82K	J	1/16W
R167			R92-1252-05	CHIP R	0 OHM			R535			RK73GB1J103J	CHIP R	10K	J	1/16W
R168,169			RK73GB1J103J	CHIP R	10K	J	1/16W	R536			RK73GB1J153J	CHIP R	15K	J	1/16W
R170			RK73FB2A222J	CHIP R	2.2K	J	1/10W	R537			RK73GB1J105J	CHIP R	1.0M	J	1/16W
R171			RK73GB1J153J	CHIP R	15K	J	1/16W	R538			RK73GB1J103J	CHIP R	10K	J	1/16W
R172			RK73GB1J334J	CHIP R	330K	J	1/16W	R539			R92-1252-05	CHIP R	0 OHM		
R173			RK73GB1J222J	CHIP R	2.2K	J	1/16W	R540			RK73GB1J223J	CHIP R	22K	J	1/16W
R173			RK73GB1J332J	CHIP R	3.3K	J	1/16W	R541			RK73GB1J184J	CHIP R	180K	J	1/16W
R174			RK73GB1J103J	CHIP R	10K	J	1/16W	R542			RK73GB1J102J	CHIP R	1.0K	J	1/16W
R175			RK73GB1J682J	CHIP R	6.8K	J	1/16W	R543			RK73GB1J184J	CHIP R	180K	J	1/16W
R176			RK73GB1J104J	CHIP R	100K	J	1/16W	R544			RK73GB1J103J	CHIP R	10K	J	1/16W
R177			R92-1214-05	CHIP R	120	J	1/2W	R545			RK73GB1J472J	CHIP R	4.7K	J	1/16W
R177			R92-1261-05	CHIP R	150	J	1/2W	R546			RN73GH1J913D	CHIP R	91K	D	1/16W
R178			RK73GB1J103J	CHIP R	10K	J	1/16W	R547			RK73GB1J103J	CHIP R	10K	J	1/16W
R178			RK73GB1J822J	CHIP R	8.2K	J	1/16W	R548			RN73GH1J333D	CHIP R	33K	D	1/16W
R179			RK73GB1J273J	CHIP R	27K	J	1/16W	R549			RN73GH1J913D	CHIP R	91K	D	1/16W
R179			RK73GB1J393J	CHIP R	39K	J	1/16W	R550			RN73GH1J683D	CHIP R	68K	D	1/16W
R180			RK73GB1J332J	CHIP R	3.3K	J	1/16W	R551,552			RK73GB1J223J	CHIP R	22K	J	1/16W
R180,181			RK73GB1J223J	CHIP R	22K	J	1/16W	R553			RK73GB1J105J	CHIP R	1.0M	J	1/16W
R181			RK73GB1J562J	CHIP R	5.6K	J	1/16W	R554			RN73GH1J913D	CHIP R	91K	D	1/16W
R182			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R555,556			RK73GB1J104J	CHIP R	100K	J	1/16W
R183			R92-0670-05	CHIP R	0 OHM			R557			RN73GH1J274D	CHIP R	270K	D	1/16W
R184			R92-1252-05	CHIP R	0 OHM			R558			R92-1252-05	CHIP R	0 OHM		
R185			RK73GB1J473J	CHIP R	47K	J	1/16W	R559			RK73GB1J333J	CHIP R	33K	J	1/16W
R186			RK73GB1J100J	CHIP R	10	J	1/16W	R560			RK73GB1J474J	CHIP R	470K	J	1/16W
R186			R92-1252-05	CHIP R	0 OHM		K,M	R561			RK73GB1J333J	CHIP R	33K	J	1/16W
R188			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R562			R92-1252-05	CHIP R	0 OHM		
R189			RK73GB1J101J	CHIP R	100	J	1/16W	R563			RK73GB1J473J	CHIP R	47K	J	1/16W
R190			RK73GB1J473J	CHIP R	47K	J	1/16W	R564			RK73GB1J223J	CHIP R	22K	J	1/16W
R192			RK73GB1J103J	CHIP R	10K	J	1/16W	R565			R92-1252-05	CHIP R	0 OHM		
R193			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R566			RK73GB1J563J	CHIP R	56K	J	1/16W
R196			RK73GB1J332J	CHIP R	3.3K	J	1/16W	R567			RK73GB1J334J	CHIP R	330K	J	1/16W
R197			R92-1252-05	CHIP R	0 OHM			R568			RK73GB1J473J	CHIP R	47K	J	1/16W
R201,202			R92-1252-05	CHIP R	0 OHM			R569			RK73GB1J102J	CHIP R	1.0K	J	1/16W
R208			R92-0670-05	CHIP R	0 OHM			R570			RK73GB1J155J	CHIP R	1.5M	J	1/16W
R210			R92-1252-05	CHIP R	0 OHM			R571			RN73GH1J682D	CHIP R	6.8K	D	1/16W
R219-221			R92-1252-05	CHIP R	0 OHM			R572			RK73GB1J473J	CHIP R	47K	J	1/16W
R501			RK73GB1J473J	CHIP R	47K	J	1/16W	R573			RK73GB1J474J	CHIP R	470K	J	1/16W
R502			RK73GB1J472J	CHIP R	4.7K	J	1/16W	R574			RN73GH1J683D	CHIP R	68K	D	1/16W
R503			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R575			RK73GB1J101J	CHIP R	100	J	1/16W
R504-507			RK73GB1J473J	CHIP R	47K	J	1/16W	R576			RK73GB1J224J	CHIP R	220K	J	1/16W
R508			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R577			RK73GB1J103J	CHIP R	10K	J	1/16W
R509,510			R92-1252-05	CHIP R	0 OHM			R578			RN73GH1J682D	CHIP R	6.8K	D	1/16W
R511			RK73GB1J473J	CHIP R	47K	J	1/16W	R579			RK73GB1J223J	CHIP R	22K	J	1/16W
R512			RK73GB1J104J	CHIP R	100K	J	1/16W	R580			R92-1252-05	CHIP R	0 OHM		
R513			RK73GB1J223J	CHIP R	22K	J	1/16W	R581			RK73GB1J394J	CHIP R	390K	J	1/16W
R514			RK73GB1J473J	CHIP R	47K	J	1/16W	R582			RK73GB1J273J	CHIP R	27K	J	1/16W
R515,516			RK73GB1J223J	CHIP R	22K	J	1/16W	R583			RK73GB1J470J	CHIP R	47	J	1/16W
R517			RK73GB1J473J	CHIP R	47K	J	1/16W	R584			RK73GB1J220J	CHIP R	22	J	1/16W
R518			RK73GB1J472J	CHIP R	4.7K	J	1/16W	R585			R92-1252-05	CHIP R	0 OHM		
R519			RK73GB1J103J	CHIP R	10K	J	1/16W	R586			RK73GB1J473J	CHIP R	47K	J	1/16W
R520-523			RK73GB1J102J	CHIP R	1.0K	J	1/16W	R587			R92-1252-05	CHIP R	0 OHM		
R526			RK73GB1J154J	CHIP R	150K	J	1/16W	R588			RK73GB1J103J	CHIP R	10K	J	1/16W
R527			R92-1252-05	CHIP R	0 OHM			R589			RK73GB1J333J	CHIP R	33K	J	1/16W
R528			RK73GB1J472J	CHIP R	4.7K	J	1/16W	R591			R92-1252-05	CHIP R	0 OHM		
R529			RK73GB1J154J	CHIP R	150K	J	1/16W	R592			RK73GB1J103J	CHIP R	10K	J	1/16W
R530			RK73GB1J473J	CHIP R	47K	J	1/16W	R593			RK73GB1J181J	CHIP R	180	J	1/16W
R531			RK73GB1J394J	CHIP R	390K	J	1/16W	R594			RK73GB1J392J	CHIP R	3.9K	J	1/16W
R532			RK73GB1J103J	CHIP R	10K	J	1/16W	R595			RK73GB1J181J	CHIP R	180	J	1/16W

# TK-760HG/762HG

## PARTS LIST

TX-RX UNIT (X57-5950-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
R598			RK73GB1J473J	CHIP R 47K J 1/16W		D526			1812L075PR	VARISTOR	
R599			RK73GB1J02J	CHIP R 1.0K J 1/16W		D527,528			HSB123	DIODE	
R600			R92-1252-05	CHIP R 0 OHM		D529			MA742	DIODE	
R602			RK73GB1J473J	CHIP R 47K J 1/16W		IC1,2			TA75S01F	IC (OP AMP)	
R603			RK73GB1J101J	CHIP R 100 J 1/16W		IC3			MB15A02	IC (PLL)	
R604			RK73GB1J472J	CHIP R 4.7K J 1/16W		IC4			NJM4558M	IC (OP AMP X2)	
R605			RK73GB1J332J	CHIP R 3.3K J 1/16W		IC5			TA31136FN	IC (FM IF DETECTOR)	
R606			RK73GB1J102J	CHIP R 1.0K J 1/16W		IC6			M62363FP	IC (8bit D/A CONVERTOR)	
R607			RK73GB1J101J	CHIP R 100 J 1/16W		IC7			NJM2904M	IC (OP AMP X2)	
R608			RK73GB1J122J	CHIP R 1.2K J 1/16W		IC8			UPB1509GV	BI-POLAR IC	
R610,611			RK73GB1J473J	CHIP R 47K J 1/16W		IC9			BU4094BCF	IC (8-STAGE SHIFT/STORE REGISTER)	
R612			R92-1201-05	CHIP R 220 1/2W		IC10			NJM78L05UA	IC (REGULATOR/+5V)	
R613			RK73GB1J103J	CHIP R 10K J 1/16W		IC11			AN8009M	IC (REGULATOR)	
R614,615			R92-1252-05	CHIP R 0 OHM		IC12			TA7808S	IC (REGULATOR)	
R616			RK73GB1J474J	CHIP R 470K J 1/16W		IC13			LA4422	IC (AF POWER AMP/5.8W)	
R617			RK73GB1J472J	CHIP R 4.7K J 1/16W		IC14			TC4013BF(N)	MOS IC	
R618			RK73GB1J683J	CHIP R 68K J 1/16W		IC15			TA75S01F	MOS IC	
R619			RK73GB1J104J	CHIP R 100K J 1/16W		IC400	2C,2F		M68702H	POWER MODULE	K,M
R620,621			RK73GB1J103J	CHIP R 10K J 1/16W		IC400	2C,2F		M68702L	POWER MODULE	K2
R622			RK73GB1J473J	CHIP R 47K J 1/16W		IC501			AT29C020-90T1	IC (FLASH ROM)	
R630			R92-1252-05	CHIP R 0 OHM		IC502			30622M4102GP	CPU	
R701			RK73GB1J473J	CHIP R 47K J 1/16W		IC503			RH5VL42C	IC (REGULATOR)	
R704			RK73GB1J223J	CHIP R 22K J 1/16W		IC505			AT2408N10SI2.5	IC (EEPROM)	
R720			R92-1252-05	CHIP R 0 OHM		IC507			NJM2904V	IC (APC)	
R722			R92-1252-05	CHIP R 0 OHM		IC508			TC35453F	IC (AUDIO PROCESSOR)	
D1			HSB123	DIODE		IC509			BU4066BCFV	IC (ANALOG SWITCH X4)	
D2			02DZ20(Y,Z)	ZENER DIODE		IC510			BU4094BCFV	IC (8-STAGE SHIFT/STORE REGISTER)	
D3-5			HSB123	DIODE		IC511			LC73872M	IC (DTMF RECEIVER)	
D8			DAN235K	DIODE		IC512			NJM78L05UA	IC (REGULATOR)	
D9			1SS355	DIODE		IC513			TA75W558FU	IC (OP AMO X2)	
D10			DAN235K	DIODE		IC514			TC75W51FU	IC (OP AMP X2)	
D11			MA742	DIODE		Q1			DTD114EK	DIGITAL TRANSISTOR	
D14			1SS355	DIODE		Q2			KRA225S	DIGITAL TRANSISTOR	
D15			DAN202K	DIODE		Q3			DTA114EKA	DIGITAL TRANSISTOR	
D16			DAN235K	DIODE		Q4-6			DTC114EKA	DIGITAL TRANSISTOR	
D17			1SS355	DIODE		Q7			2SC4649(N,P)	TRANSISTOR	
D18			HVC350B	VARIABLE CAPACITANCE DIODE		Q8			2SC2412K	TRANSISTOR	
D19,20			1SS355	DIODE		Q9			2SC4215(Y)	TRANSISTOR	
D21			02DZ18(X,Y)	ZENER DIODE		Q10			2SC2412K	TRANSISTOR	
D22			HSB123	DIODE		Q11			2SA1832(GR)	TRANSISTOR	
D23			HVC350B	VARIABLE CAPACITANCE DIODE		Q12			2SC4738(GR)	TRANSISTOR	
D24			02DZ15(X,Y)	ZENER DIODE		Q13,14			2SC4649(N,P)	TRANSISTOR	
D25			22ZR-10D	SURGE ABSORBER		Q15			3SK228	FET	
D26			DSA3A1-FK	DIODE		Q16			DTC114EKA	DIGITAL TRANSISTOR	
D27			1SS355	DIODE		Q17			DTC363EU	DIGITAL TRANSISTOR	
D28			HVC350B	VARIABLE CAPACITANCE DIODE		Q18			2SA1745(6,7)	TRANSISTOR	
D30,31			HVC350B	VARIABLE CAPACITANCE DIODE		Q19			DTC114EKA	DIGITAL TRANSISTOR	
D34			MA4PH633	DIODE		Q20			DTA114EKA	DIGITAL TRANSISTOR	
D35,36			MA742	DIODE		Q21			DTA114EKA	DIGITAL TRANSISTOR	
D37		*	MA4PH633	DIODE	K2	Q22			2SC3357	TRANSISTOR	
D39		*	XB15A709	DIODE	K,M	Q23			2SA1641(S,T)	TRANSISTOR	
D40			UDZ4.7(B)	ZENER DIODE		Q24			DTA114EKA	DIGITAL TRANSISTOR	
D41			MA742	DIODE		Q25			2SC2954	TRANSISTOR	
D501-504			HZU5ALL	DIODE		Q26			DTA114EKA	DIGITAL TRANSISTOR	
D505			MA2S111	DIODE		Q27			3SK241(R)	FET	
D506,507			MA2S111	DIODE	762	Q28			2SB1132(Q,R)	TRANSISTOR	
D508			MA742	DIODE		Q29			DTC114EKA	DIGITAL TRANSISTOR	
D523			DAN202U	DIODE		Q31			2SC2412K	TRANSISTOR	
D524,525			HSB123	DIODE		Q32			2SB1565(E,F)	TRANSISTOR	
						Q33			DTC114EKA	DIGITAL TRANSISTOR	

## PARTS LIST

PLL/VCO (X58-4670-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
Q35			DTC144EKA	DIGITAL TRANSISTOR	
Q36			2SC2412K	TRANSISTOR	
Q37,38			2SK1824	FET	
Q501			2SC4619	TRANSISTOR	
Q502,503			DTC114EE	DIGITAL TRANSISTOR	
Q504			2SC4617(S)	TRANSISTOR	
Q505			2SB1132(Q,R)	TRANSISTOR	
Q506			DTC114EE	DIGITAL TRANSISTOR	
Q508			2SC4617(S)	TRANSISTOR	
Q509			DTC363EU	DIGITAL TRANSISTOR	
TH1			157-153-65001	THERMISTOR	

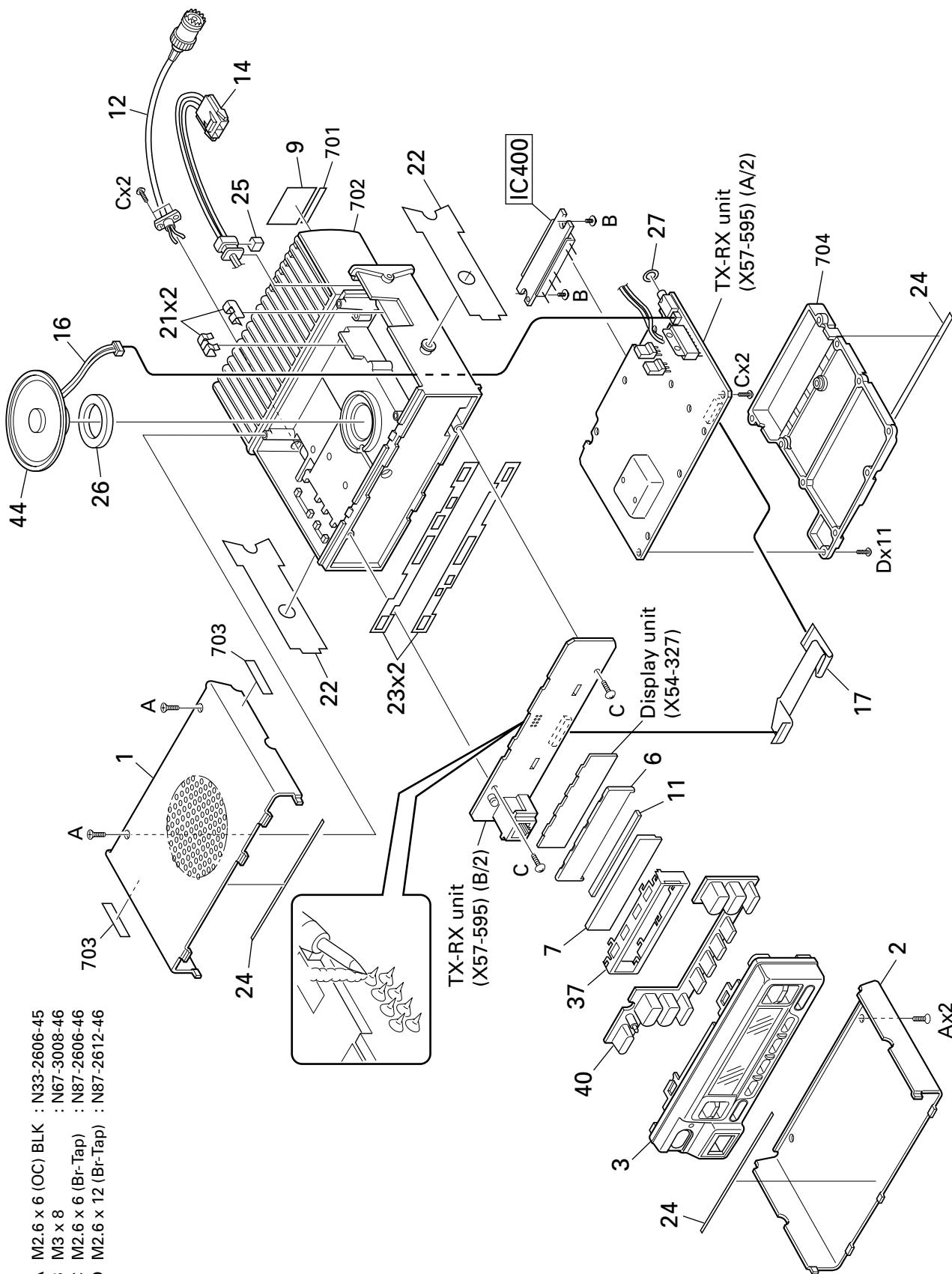
PLL/VCO (X58-4670-XX) -10 : K,M -11 : K2

C102			CK73GB1H471K	CHIP C	470PF	K		
C104			CC73GCH1H150J	CHIP C	15PF	J	K2	
C104,105			CC73GCH1H150J	CHIP C	15PF	J	K,M	
C105			CC73GCH1H270J	CHIP C	27PF	J	K2	
C107			CC73GCH1H060D	CHIP C	6.0PF	D	K2	
C107			CC73GCH1H080D	CHIP C	8.0PF	D	K,M	
C110			CC73GCH1H040B	CHIP C	4.0PF	B	K,M	
C110			CC73GCH1H120J	CHIP C	12PF	J	K2	
C111			CC73GCH1H040B	CHIP C	4.0PF	B	K2	
C111			CC73GCH1H050B	CHIP C	5.0PF	B	K,M	
C112,113			CC73GCH1H020B	CHIP C	2.0PF	B		
C114			CC73GCH1H070D	CHIP C	7.0PF	D	K2	
C114,115			CC73GCH1H060D	CHIP C	6.0PF	D	K,M	
C115			CC73GCH1H050B	CHIP C	5.0PF	B	K2	
C116			CC73GCH1H120J	CHIP C	12PF	J		
C117			CK73GB1H471K	CHIP C	470PF	K		
C118			CC73GCH1H050B	CHIP C	5.0PF	B		
C119,120			CK73GB1H471K	CHIP C	470PF	K		
C121			CC73GCH1H090D	CHIP C	9.0PF	D		
C122			CC73GCH1H0R5B	CHIP C	0.5PF	B		
C123			CK73GB1H471K	CHIP C	470PF	K		
C124			CC73GCH1H0R5B	CHIP C	0.5PF	B		
C125			CK73GB1H102K	CHIP C	1000PF	K		
C126			CK73GB1H471K	CHIP C	470PF	K		
C127			CC73GCH1H100D	CHIP C	10PF	D		
TC106			C05-0384-05	CERAMIC TRIMMER CAP (10PF)				
TC109			C05-0384-05	CERAMIC TRIMMER CAP (10PF)				
CN101			E40-6019-05	PIN ASSY				
-			F10-2279-04	SHIELDING CASE				
L101-104			L40-1595-34	SMALL FIXED INDUCTOR (1.5UH)				
L105			L40-3975-34	SMALL FIXED INDUCTOR (39NH)				
L106			L40-2775-34	SMALL FIXED INDUCTOR (27NH)				
L107,108			L40-1098-76	SMALL FIXED INDUCTOR (1UH)				
L109,110			L40-1595-34	SMALL FIXED INDUCTOR (1.5UH)				
L111			L34-4547-05	AIR-CORE COIL				
L112			L34-4548-05	AIR-CORE COIL				
L116			L34-4549-05	AIR-CORE COIL				
R101,102			RK73GB1J101J	CHIP R	100	J	1/16W	
R103			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R104			RK73GB1J470J	CHIP R	47	J	1/16W	
R105			RK73GB1J154J	CHIP R	150K	J	1/16W	
R106			RK73GB1J470J	CHIP R	47	J	1/16W	

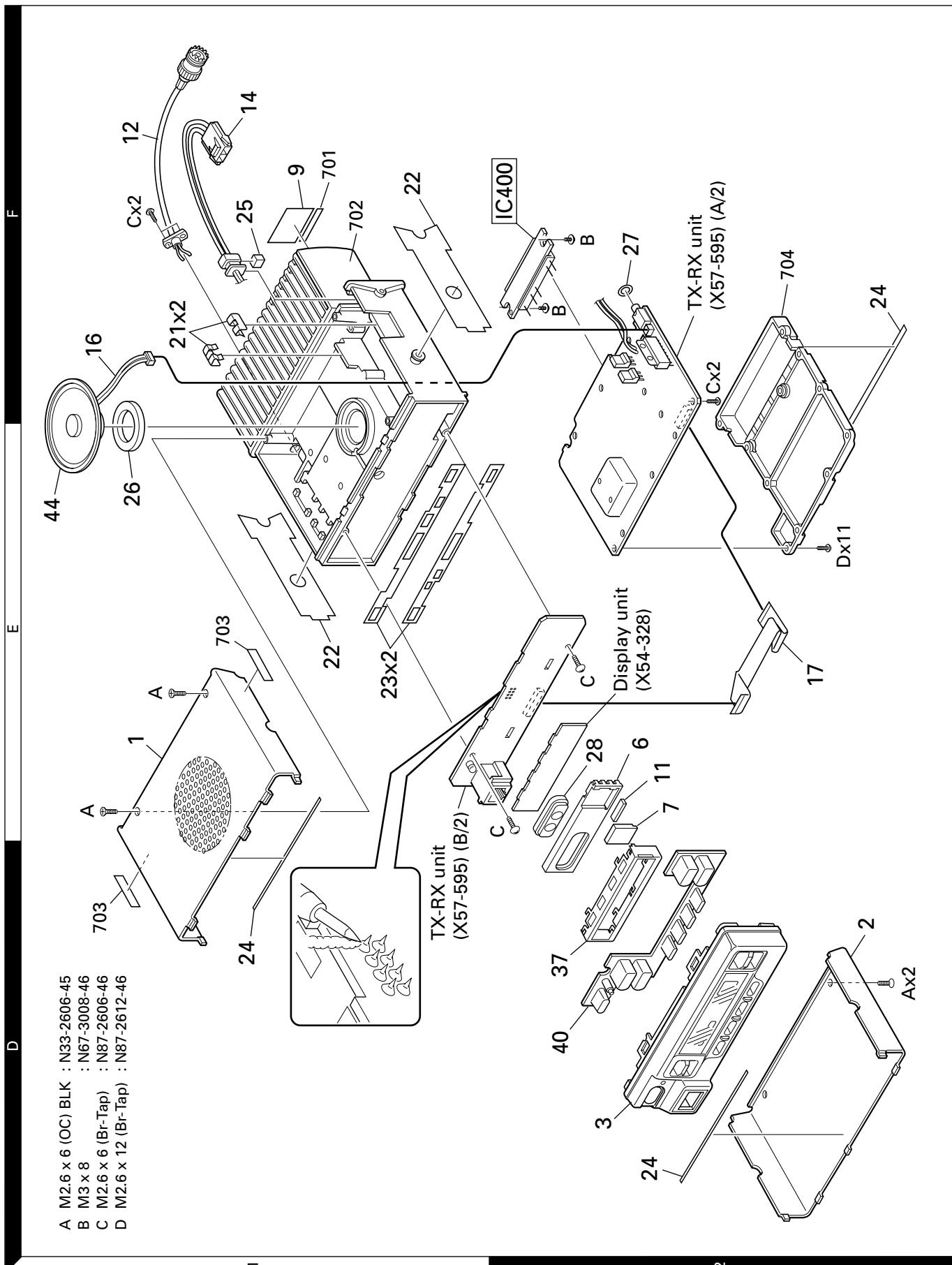
Ref. No.	Address	New parts	Parts No.	Description				Desti-nation
R107-110			RK73GB1J103J	CHIP R	10K	J	1/16W	
R111			RK73GB1J331J	CHIP R	330	J	1/16W	
R112,113			RK73GB1J181J	CHIP R	180	J	1/16W	
R114			RK73GB1J470J	CHIP R	47	J	1/16W	
R115			RK73GB1J103J	CHIP R	10K	J	1/16W	
R116			RK73GB1J392J	CHIP R	3.9K	J	1/16W	
R117			RK73GB1J101J	CHIP R	100	J	1/16W	
D101-104			1SV283	VARIABLE CAPACITANCE DIODE				
D105			HVU363A	DIODE				
Q101			2SK508NV(K52)	FET				
Q102			DTC114EUA	DIGITAL TRANSISTOR				
Q103			2SK508NV(K52)	FET				
Q104,105			2SC4081	TRANSISTOR				
Q106			2SC4226(R24)	TRANSISTOR				

# TK-760HG/762HG

## EXPLODED VIEW (TK-760HG)



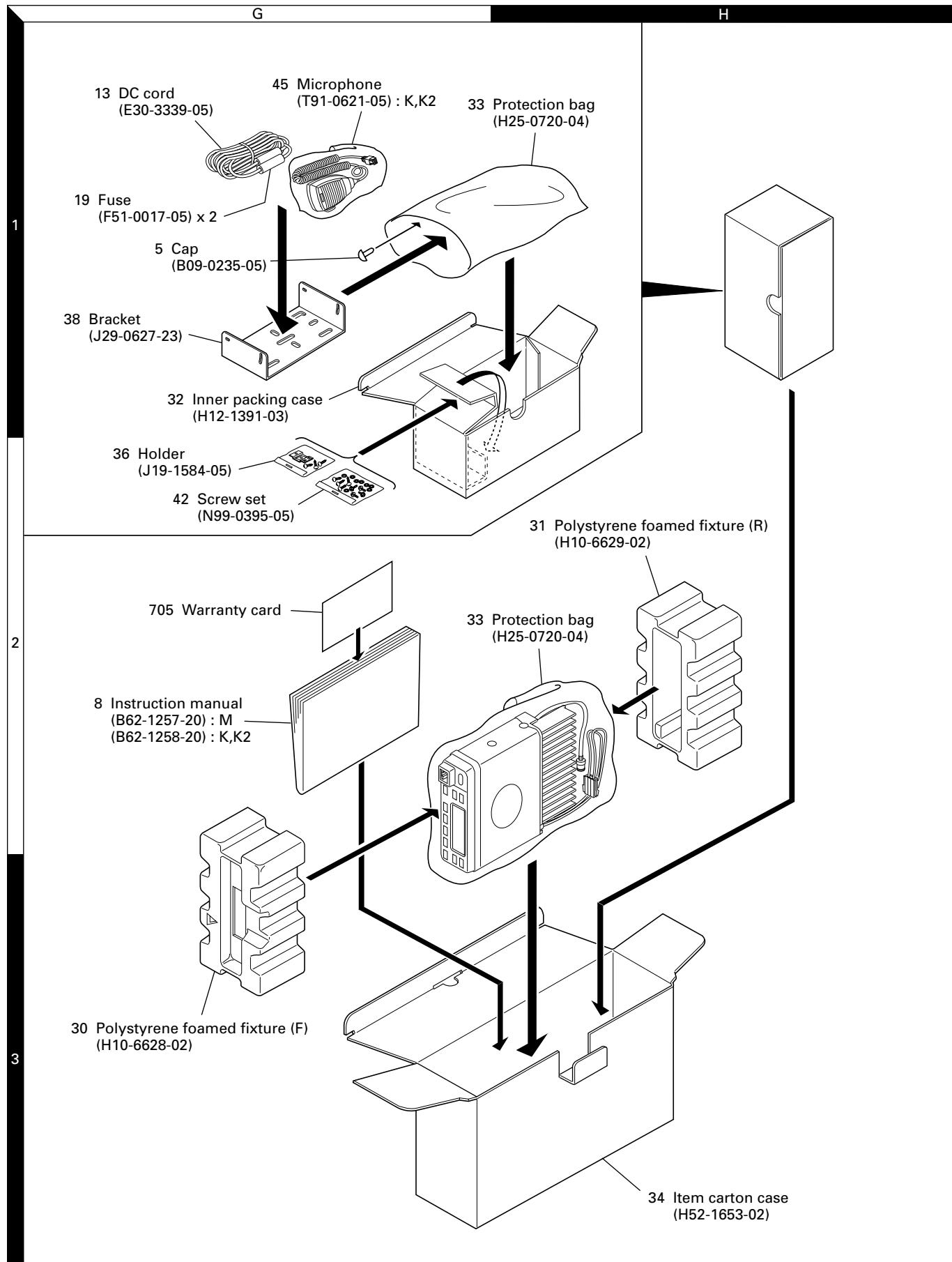
## EXPLODED VIEW (TK-762HG)



Parts with the exploded numbers larger than 700 are not supplied.

# TK-760HG/762HG

## PACKING



## ADJUSTMENT

**Test Mode (TK-760HG Only)****■ Test Mode Operating Features**

This transceiver has a test mode. **To enter test mode, press [SCN] key and turn power on. Hold [SCN] key until test channel No. and test signalling No. appears on LCD.** Test mode can be inhibited by programming. To exit test mode, switch the power on again. The following functions are available in test mode.

**• Controls**

[PTT]	Used when making a transmission.
[MON]	Monitor on and off.
[SCN]	Sets to the tuning mode.
[A]	Function on.
[D/A]	RF power high and low.
[▼]	Changes signalling.
[▲]	Changes wide and narrow
[CH▲/▼]	Changes channel.
[Volume▲/▼]	Volume up/down.

**• LCD indicator**

"SCN"	Unused.
"AUX"	Lights at RF power low.
"MON"	Lights at monitor on.
"Right side dot"	Lights at narrow.

**• LED indicator**

Red LED	Lights during transmission.
Green LED	Lights when there is a carrier.

**■ Frequency and Signalling**

The set has been adjusted for the frequencies shown in the following table. When required, re-adjust them following the adjustment procedure to obtain the frequencies you want in actual operation.

**• Frequency (MHz)**

Channel No.	TK-760HG/762HG (K)		TK-760HG (M)	
	RX	TX	RX	TX
1 (Center)	161.050	161.100	160.050	160.100
2 (Low)	148.050	148.100	146.050	146.100
3 (High)	173.950	173.900	173.950	173.900
4	161.000	161.000	160.000	160.000
5	161.200	161.200	160.200	160.200
6	161.400	161.400	160.400	160.400
7~16	-	-	-	-
Channel No.	TK-760HG/762HG (K2)			
	RX	TX		
1 (Center)	149.050	149.100		
2 (Low)	136.050	136.100		
3 (High)	161.950	161.900		
4	149.000	149.000		
5	149.200	149.200		
6	149.400	149.400		
7~16	-	-		

**• Signalling**

Signalling No.	RX	TX
1	None	None
2	None	100Hz square
3	QT 67.0Hz	QT 67.0Hz
4	QT 151.4Hz	QT 151.4Hz
5	QT 210.7Hz	QT 210.7Hz
6	QT 250.3Hz	QT 250.3Hz
7	DQT D023N	DQT D023N
8	DQT D754I	DQT D754I
9	DTMF DEC, (159D)	DTMF ENC, (159D)
10	None	DTMF tone (9)
11	2-tone 321.7/928.1Hz	None
12	Single tone 1200Hz	Single tone 1200Hz

**• Preparations for tuning the transceiver**

Before attempting to tune the transceiver, connect the unit to a suitable power supply.

Whenever the transmitter is turned, the unit must be connected to a suitable dummy load (i.e. power meter).

The speaker output connector must be terminated with a  $4\Omega$  dummy load and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement meter at all times during tuning.

**• Transceiver tuning****(To place transceiver in tuning mode)**

Channel appears on LCD. Set channel according to tuning requirements.

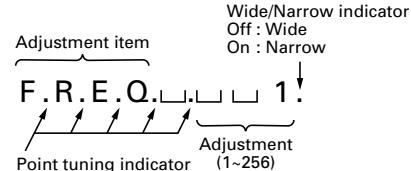
## LCD display (Test mode)



Press [SCN], now in tuning mode. Use [D/A] button to write tuning data through tuning modes, and [CH▲/▼] to adjust tuning requirements (1 to 256 appears on LCD).

Use [▼] button to select the adjustment item through tuning modes. Use [A] button to adjust 3-point or 5-point tuning, and use [▲] button to switch between wide/narrow.

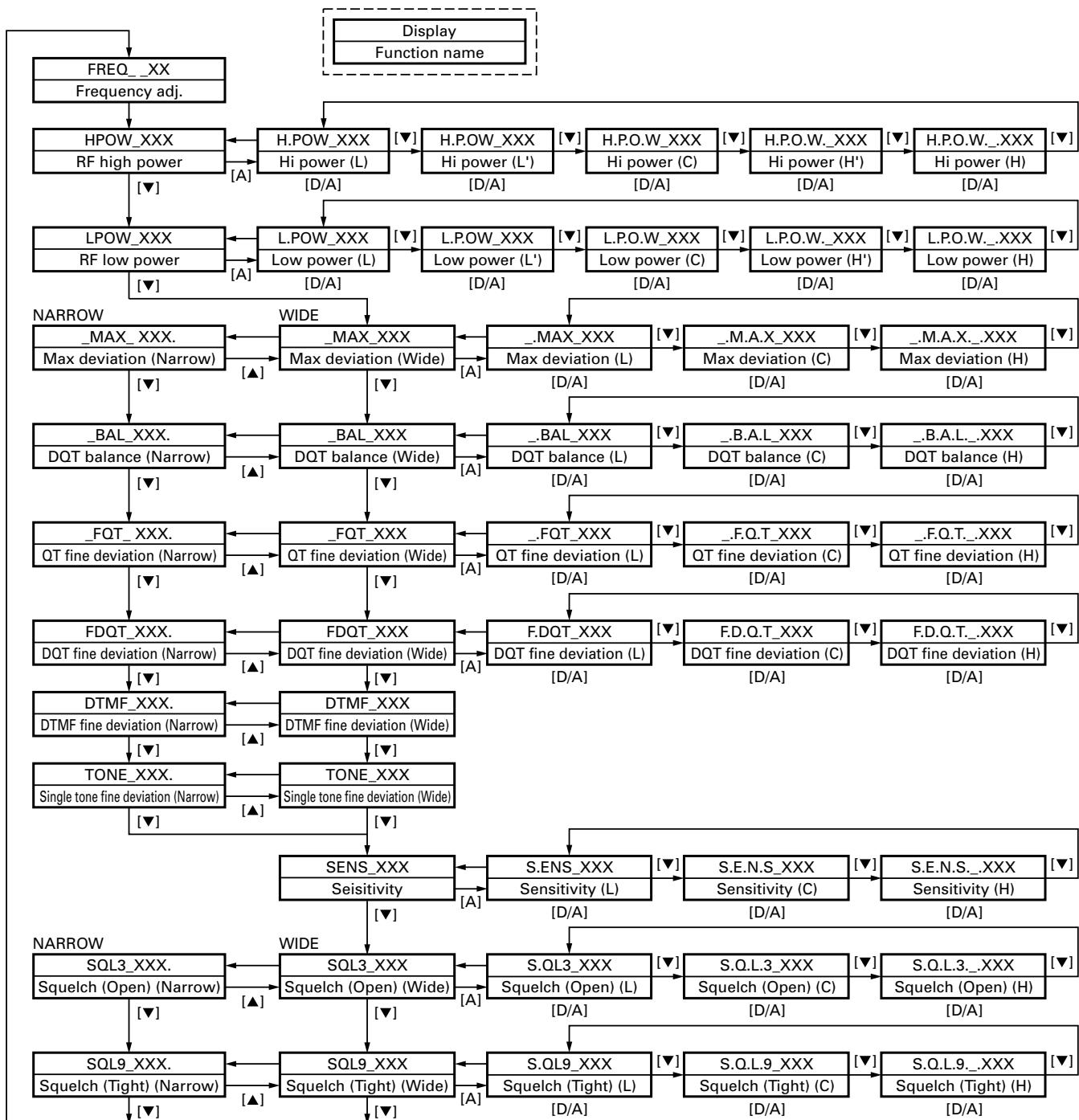
## LCD display (Tuning mode)



# TK-760HG/762HG

## ADJUSTMENT

### ■ Tuning Mode

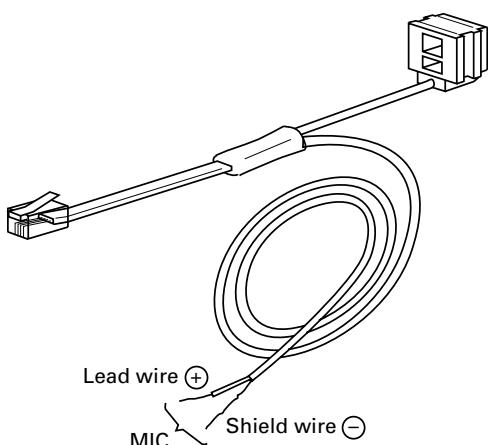
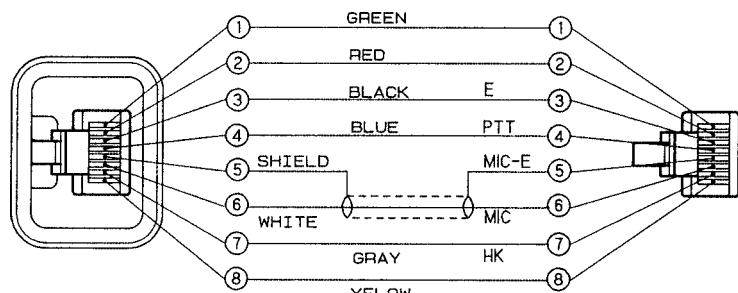


**ADJUSTMENT****Test Equipment Required for Alignment**

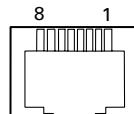
<b>Test Equipment</b>	<b>Major Specifications</b>	
1. Standard Signal Generator (SSG)	Frequency Range Modulation Output	136 to 174MHz Frequency modulation and external modulation -127dBm/0.1μV to greater than -7dBm/100mV
2. Power Meter	Input Impedance Operation Frequency Measurement Capability	50Ω 136 to 174MHz or more Vicinity of 100W
3. Deviation Meter	Frequency Range	136 to 174MHz
4. Digital Volt Meter (DVM)	Measuring Range Accuracy	1 to 20V DC High input impedance for minimum circuit loading
5. Oscilloscope		DC through 30MHz
6. High Sensitivity Frequency Counter	Frequency Range Frequency Stability	10Hz to 1000MHz 0.2ppm or less
7. Ammeter		20A
8. AF Volt Meter (AF VTVM)	Frequency Range Voltage Range	50Hz to 10kHz 1mV to 10V
9. Audio Generator (AG)	Frequency Range Output	20Hz to 20kHz or more 0 to 1V
10. Distortion Meter	Capability Input Level	3% or less at 1kHz 50mV to 10Vrms
11. 4Ω Dummy Load		Approx. 4Ω, 10W or more
12. Regulated Power Supply		13.6V, approx. 20A (adjustable from 9 to 20V) Useful if ammeter equipped

**Tuning cable (E30-3383-05)**

Adapter cable (E30-3383-05) is required for injecting an audio if PC tuning is used.  
See "PC Mode" section for the connection.

**Test cable for microphone input (E30-3360-08)**

**MIC connector  
(Front view)**

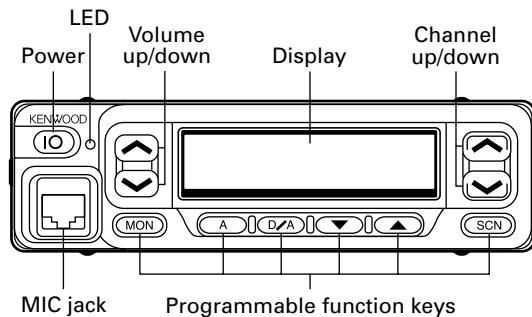


- 1 : BLC
- 2 : PSB
- 3 : E
- 4 : PTT
- 5 : ME
- 6 : MIC
- 7 : HOOK
- 8 : CM

# TK-760HG/762HG

## ADJUSTMENT

### Adjustment Location ■ Switch (TK-760HG)



### ■ Note

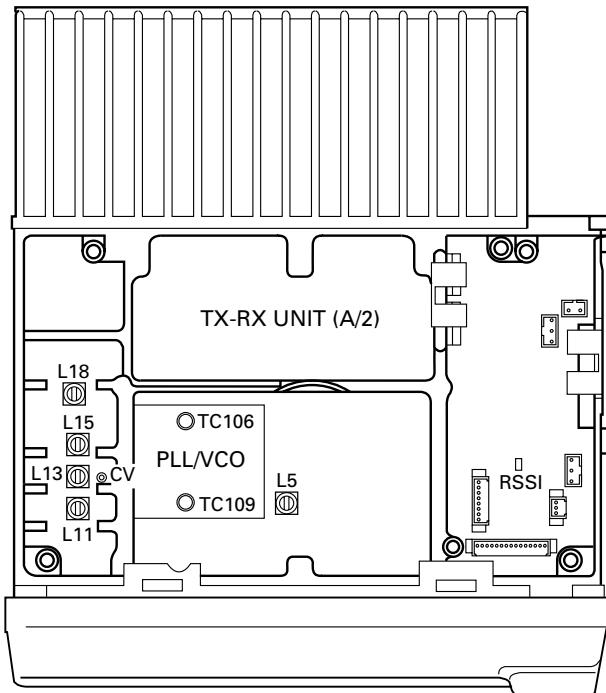
#### • Flash memory

The firmware program (User mode, Test mode, Tuning mode, etc.) and the data programmed by the FPU (KPG-56D) for the flash memory, is stored in memory. When parts are changed, program the data again.

#### • EEPROM

The tuning data (Deviation, Squelch, etc.) for the EEPROM, is stored in memory. When parts are changed, readjust the transceiver.

### ■ Adjustment Point



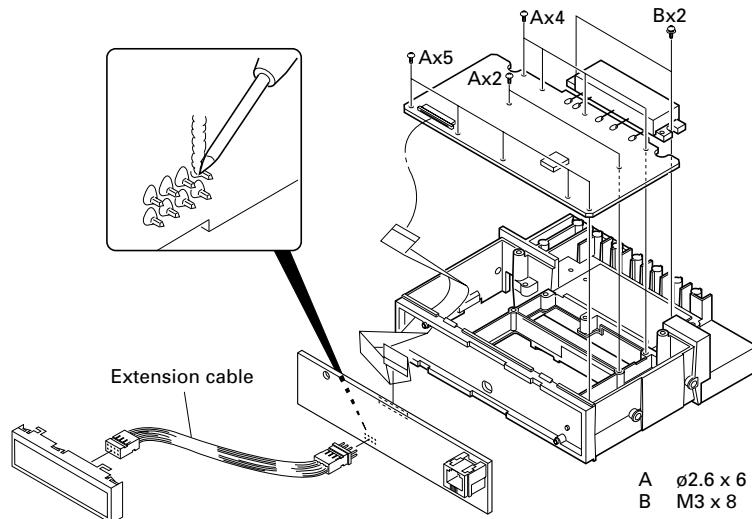
### ■ Repair Jig

#### • Chassis

Use jig (Part No. : A10-4010-02) for repairing the TK-760HG/762HG. The jig facilitates the voltage check when the voltage on the component side TX-RX unit is checked during repairs.

#### • Extension cable

Part No. : E30-3404-05



## ADJUSTMENT

**Common Section** Since the TK-762HG cannot be tuned from the panel, the FPU (KPG-56D) should be used for adjustment.

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. PLL lock voltage	1) Set test mode CH : CH3 - Sig1 RX	DVM Power meter F. counter	TX-RX (A/2)	CV	PLL	TC106	7.5V	±0.1V
	2) PTT : ON (Transmit) TX				TC109	7.5V		
	3) CH : CH2 - Sig1 AUX : ON (talk-around mode) RX						Check	1.0V or more
	4) PTT : ON (Transmit) TX							0.5V or more

## Receiver Section

Item	Condition	Measurement			Adjustment			Specifications/Remarks	
		Test-equipment	Unit	Terminal	Unit	Parts	Method		
1. Discriminator • Wide	1) Set test mode CH : CH1 - Sig1 SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b> SSG output : -53dBm/501μV SSG MOD : 3kHz AF : 1.4V/4Ω	SSG AF VTVM Oscilloscope	Rear panel	ANT ACC (EXT.SP)	TX-RX (A/2)	L5	AF output maximum.		
2. Sensitivity • Wide	1) Set test mode Select "SENS" in tuning mode. "S.E.N.S" Adjust [120] SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b> SSG output : -118dBm/0.28μV SSG MOD : 3kHz AF output : 1V/4Ω	SSG AF VTVM Distortion meter Oscilloscope AG  DVM	Rear panel	ANT ACC (EXT.SP)	TX-RX (A/2)	L11 L13 L15 L18	RSSI voltage maximum.		
	2) "S.ENS" Adjust [***] SSG freq' : 148.050MHz <b>K</b> : 136.050MHz <b>K2</b> : 146.050MHz <b>M</b>					Front panel	CH $\wedge/\sim$		
	3) "S.E.N.S._." Adjust [***] SSG freq' : 173.950MHz <b>K,M</b> : 161.950MHz <b>K2</b>								
3. Squelch 3 • Wide	1) Set test mode Select "SQL3" in tuning mode. "S.QL3" Adjust [***] SSG freq' : 148.050MHz <b>K</b> : 136.050MHz <b>K2</b> : 146.050MHz <b>M</b> SSG output : -127dBm/0.1μV SSG MOD : 3kHz (Wide) 1.5kHz (Narrow)						Adjust to the squelch threshold point.		
	2) "S.Q.L.3" Adjust [***] SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b>								

# TK-760HG/762HG

## ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
	3) "S.Q.L.3._." Adjust [***] SSG freq' : 173.950MHz <b>K,M</b> : 161.950MHz <b>K2</b>	SSG AF VTVM Distortion meter	Rear panel	ANT ACC (EXT.SP)	Front panel	CH $\wedge/\vee$	Adjust to the squelch threshold point.	
• Narrow	4) "SQL3***." Adjust [***] SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b>	Oscilloscope AG						
4. Squelch 9 • Wide	1) Set test mode Select "SQL9" in tuning mode. "S.QL9" Adjust [***] SSG freq' : 148.050MHz <b>K</b> : 136.050MHz <b>K2</b> : 146.050MHz <b>M</b> SSG output : -114dBm/0.44μV SSG MOD : 3kHz (Wide) 1.5kHz (Narrow)							
	2) "S.Q.L.9" Adjust [***] SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b>							
	3) "S.Q.L.9._." Adjust [***] SSG freq' : 173.950MHz <b>K,M</b> : 161.950MHz <b>K2</b>							
• Narrow	4) "SQL9***." Adjust [***] SSG freq' : 161.050MHz <b>K</b> : 149.050MHz <b>K2</b> : 160.050MHz <b>M</b>							
5. Squelch check	1) Set test mode CH : CH1 - Sig1~CH3 - Sig1 SSG output : -118dBm/0.28μV					Check		Squelch must be opened. (Wide/Narrow)
	2) SSG output : OFF							Squelch must be closed. (Wide/Narrow)
6. QT check	1) Set test mode CH : CH1 - Sig4 SSG MOD INT : 3kHz (Wide) 1.5kHz (Narrow) EXT : 151.4Hz SSG system MOD DEV : ±3.75kHz (Wide) : ±1.85kHz (Narrow) SSG output : 10dB SINAD level							
	2) CH : CH1 - Sig3 CH1 - Sig5 CH1 - Sig6					Check		Squelch must be opened.

## ADJUSTMENT

## Transmitter Section

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Frequency	1) Set test mode Select "FREQ" in tuning mode. PTT : ON Adjust [ <u>_*</u> ]	Power meter F. counter	Rear panel	ANT	Front panel	CH $\wedge/\checkmark$	Check	161.100MHz±50Hz <b>K</b> 149.100MHz±50Hz <b>K2</b> 160.100MHz±50Hz <b>M</b>
2. Power output	1) Maximum power Set test mode Select "HPOW" in tuning mode. "H.POW" Adjust [256] PTT : ON						Check	More than 52W
3. High power	1) Set test mode Select "HPOW" in tuning mode. "H.POW" PTT : ON Adjust [ <u>***</u> ]  2) "H.P.O.W." PTT : ON Adjust [ <u>***</u> ]  3) "H.P.O.W." PTT : ON Adjust [ <u>***</u> ]  4) "H.P.O.W." PTT : ON Adjust [ <u>***</u> ]  5) "H.P.O.W._." PTT : ON Adjust [ <u>***</u> ]						50.0W	±2.0W
							45.0W <b>K,M</b> 50.0W <b>K2</b>	±2.0W
							45.0W	
4. Low power	1) Set test mode Select "LPOW" in tuning mode. "L.POW" PTT : ON Adjust [ <u>***</u> ]  2) "L.P.O.W." PTT : ON Adjust [ <u>***</u> ]  3) "L.P.O.W." PTT : ON Adjust [ <u>***</u> ]  4) "L.P.O.W." PTT : ON Adjust [ <u>***</u> ]  5) "L.P.O.W._." PTT : ON Adjust [ <u>***</u> ]	Power meter					10.0W	±1.0W
5. Power check	1) Set test mode CH : CH1 - Sig1 CH2 - Sig1 CH3 - Sig1 PTT : ON	Power meter Ammeter	Rear panel	ANT	DC IN		Check	CH1, CH2 : 50W±2W, 12A or less CH3 : 45W±2W, 12A or less

# TK-760HG/762HG

## ADJUSTMENT

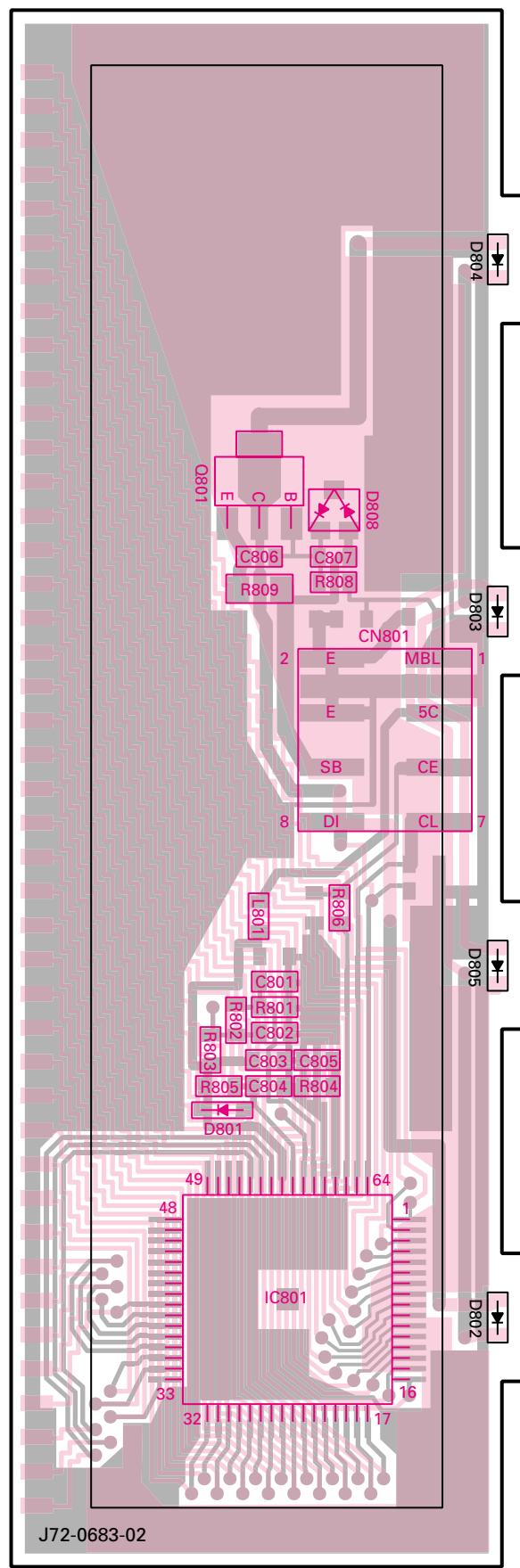
Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
6. Modulation balanced • Wide	1) Set test mode MIC input : OFF Select "BAL" in tuning mode. "._BAL" Deviation meter filter LPF : 3kHz HPF : OFF De-emphasis : OFF PTT : ON Adjust [***]	Power meter Deviation meter Oscilloscope AF VTVM AG	Rear panel Front panel Front panel	ANT MIC	Front panel	CH $\wedge/\vee$	Make the de-modulation waveform neat.	(Wide/Narrow) 
	2) "._B.A.L" PTT : ON Adjust [***]							
	3) "._B.A.L._." PTT : ON Adjust [***]							
	4) "._BAL***." PTT : ON Adjust [***]							
7. Maximum deviation • Wide	1) Set test mode Connect AG to the MIC terminal. Select "MAX" in tuning mode. "._MAX" AG : 1kHz/50mV Deviation meter filter LPF : 15kHz HPF : OFF De-emphasis : OFF PTT : ON Adjust [***]					3.95kHz (Wide) 1.95kHz (Narrow) (According to the larger +, -)	$\pm 50\text{Hz}$ (Wide/Narrow)	
	2) "._M.A.X" PTT : ON Adjust [***]							
	3) "._M.A.X._." PTT : ON Adjust [***]							
	4) "._MAX***." PTT : ON Adjust [***]							
8. MIC sensitivity check	1) Set test mode CH : CH1 - Sig1 AG : 1kHz/5mV PTT : ON Adjust [***]					Check	$\pm 1.2\text{kHz} \sim 1.7\text{kHz}$ (Narrow) $\pm 2.4\text{kHz} \sim 3.4\text{kHz}$ (Wide)	
9. QT deviation • Wide	1) Set test mode Select "FQT" in tuning mode. "._FQT" Deviation meter filter LPF : 3kHz HPF : OFF PTT : ON Adjust [***]							

## ADJUSTMENT

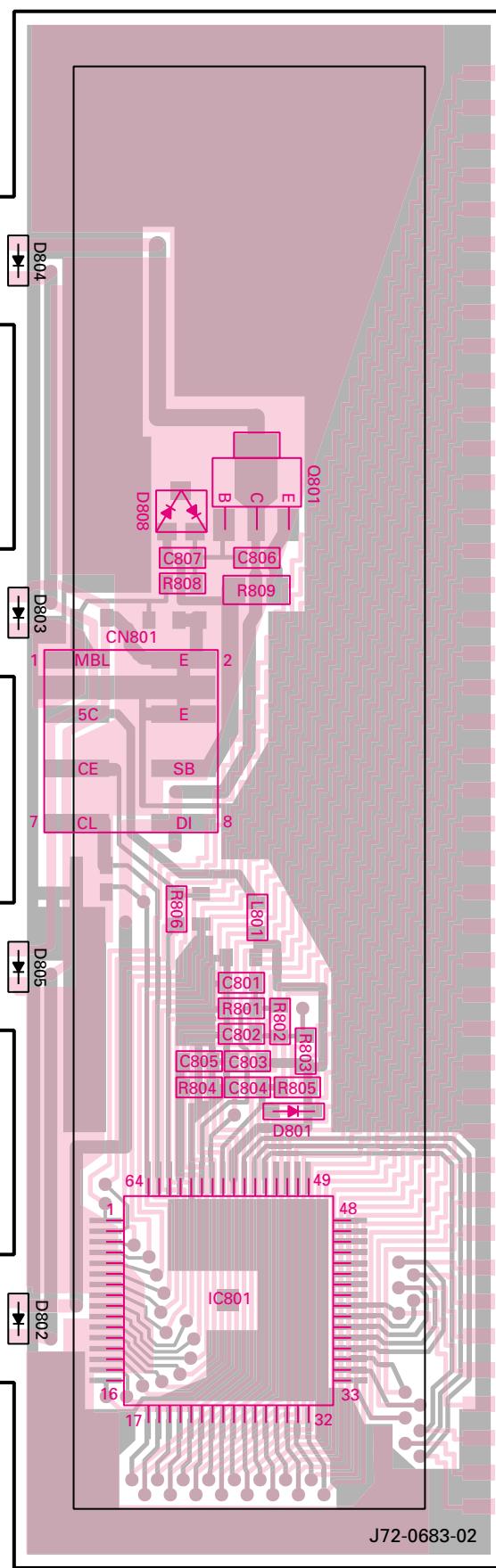
Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
10. DQT deviation • Wide	2) “_F.Q.T” PTT : ON Adjust [***]	Power meter Deviation meter Oscilloscope AF VTVM AG	Rear panel Front panel	ANT MIC	Front panel	CH $\wedge/\vee$	0.75kHz	$\pm 50\text{Hz}$ (Wide/Narrow)
	3) “_F.Q.T._.” PTT : ON Adjust [***]						0.35kHz	
	4) “_F.Q.T.*.*.” PTT : ON Adjust [***]						0.35kHz	
	1) Set test mode Select “FDQT” in tuning mode. “F.DQT” Deviation meter filter LPF : 3kHz HPF : OFF PTT : ON Adjust [***]				Front panel	CH $\wedge/\vee$	0.75kHz	$\pm 50\text{Hz}$
	2) “F.D.Q.T” PTT : ON Adjust [***]						0.36kHz	
	3) “F.D.Q.T._.” PTT : ON Adjust [***]						0.36kHz	
	4) “FDQT*.*.” PTT : ON Adjust [***]						0.36kHz	
	1) Set test mode Select “DTMF” in tuning mode. Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON Adjust [***]				Front panel	CH $\wedge/\vee$	3.0kHz	$\pm 0.2\text{kHz}$
	2) “DTMF*.*.” PTT : ON Adjust [***]						1.5kHz	
12. TONE deviation • Wide	1) Set test mode Select “TONE” in tuning mode. Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON Adjust [***]		Front panel	CH $\wedge/\vee$	3.0kHz		$\pm 0.1\text{kHz}$ (Wide/Narrow)	
	2) “TONE*.*.” PTT : ON Adjust [***]				1.5kHz			
• Narrow			Front panel	CH $\wedge/\vee$	3.0kHz		$\pm 0.1\text{kHz}$ (Wide/Narrow)	
					1.5kHz			

# TK-760HG/762HG PC BOARD VIEWS

DISPLAY UNIT (X54-3270-10) : TK-760HG  
Component side view



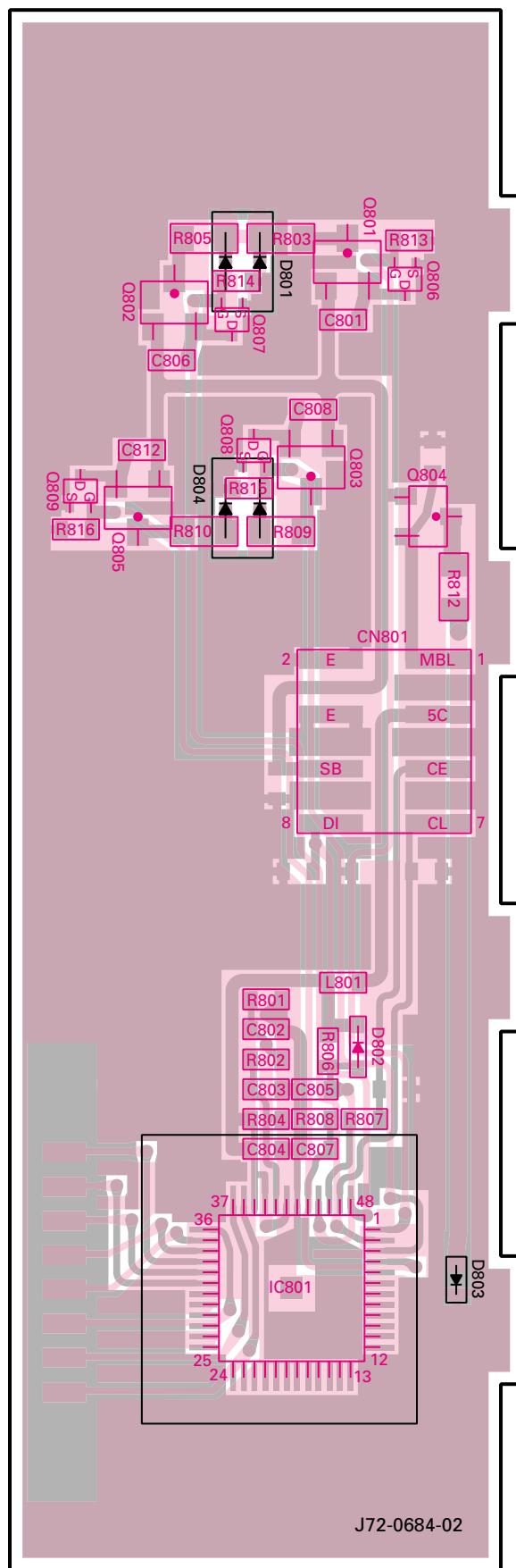
DISPLAY UNIT (X54-3270-10) : TK-760HG  
Foil side view



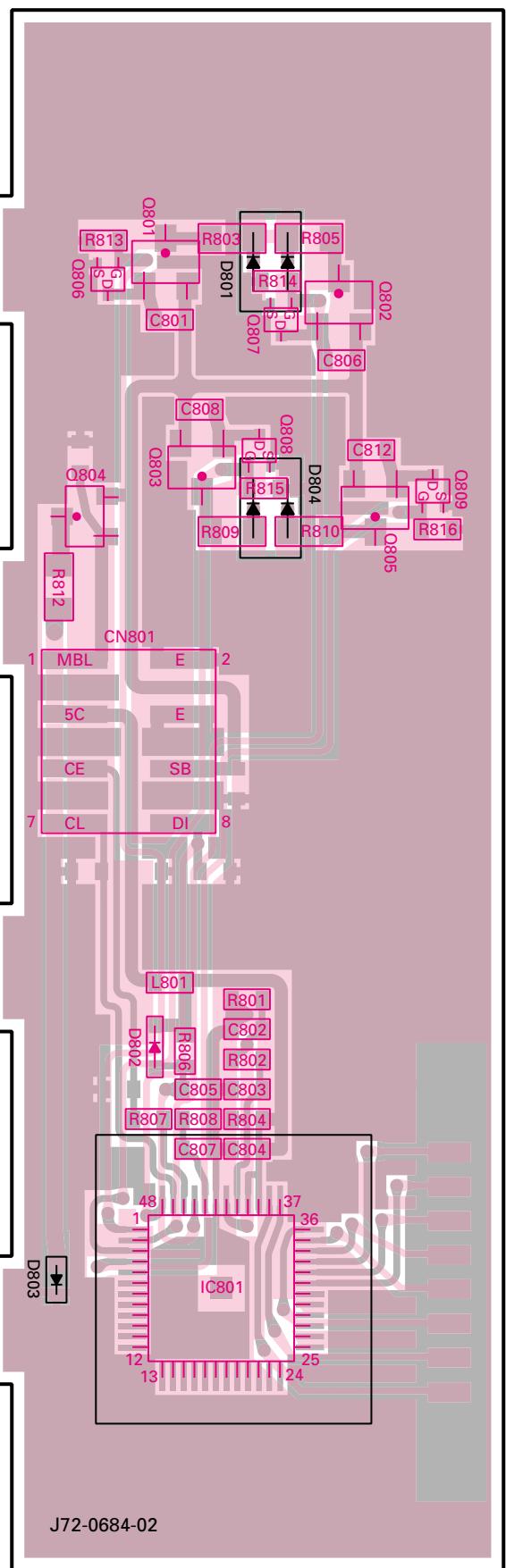
Component side      Foil side

# PC BOARD VIEWS TK-760HG/762HG

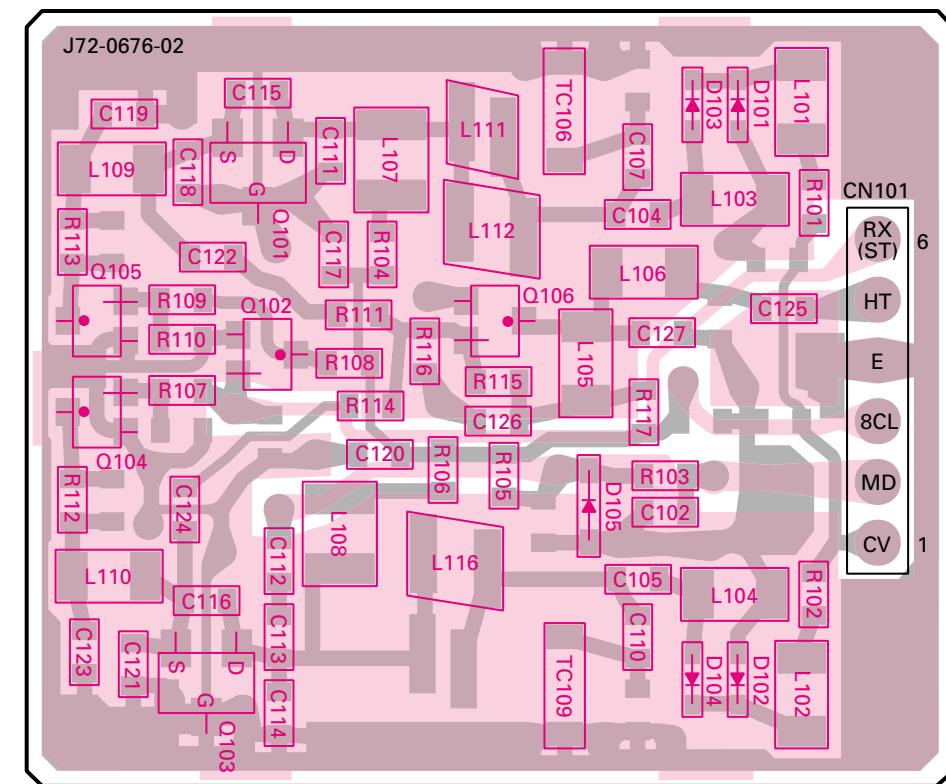
**DISPLAY UNIT (X54-3280-10) : TK-762HG**  
Component side view



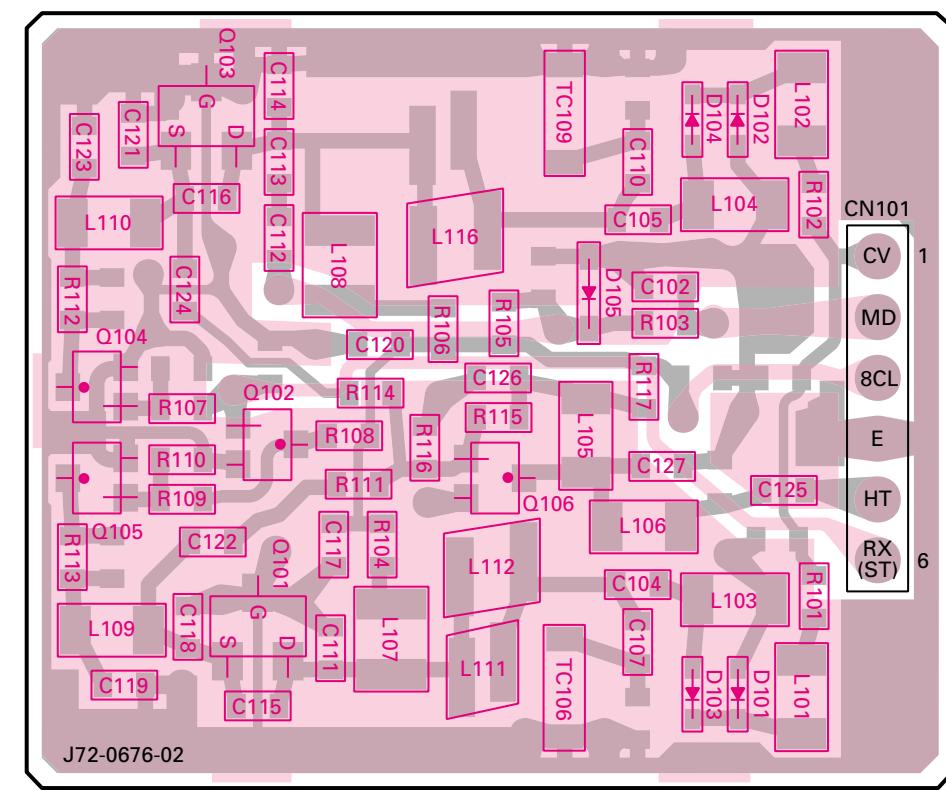
**DISPLAY UNIT (X54-3280-10) : TK-762HG**  
Foil side view



**PLL/VCO (X58-4670-XX) -10 : K,M -11 : K2 Component side view**



**PLL/VCO (X58-4670-XX) -10 : K,M -11 : K2 Foil side view**

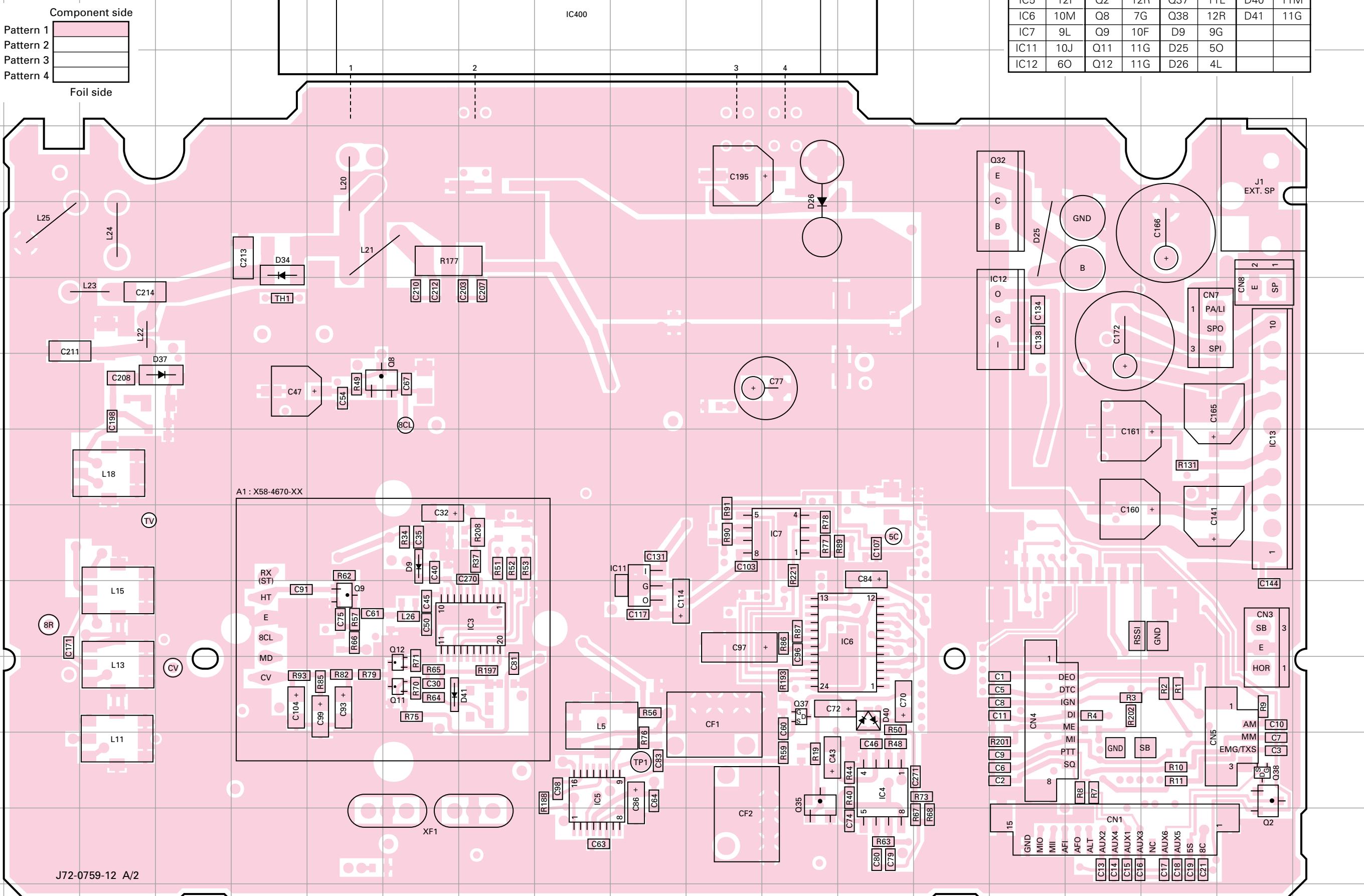


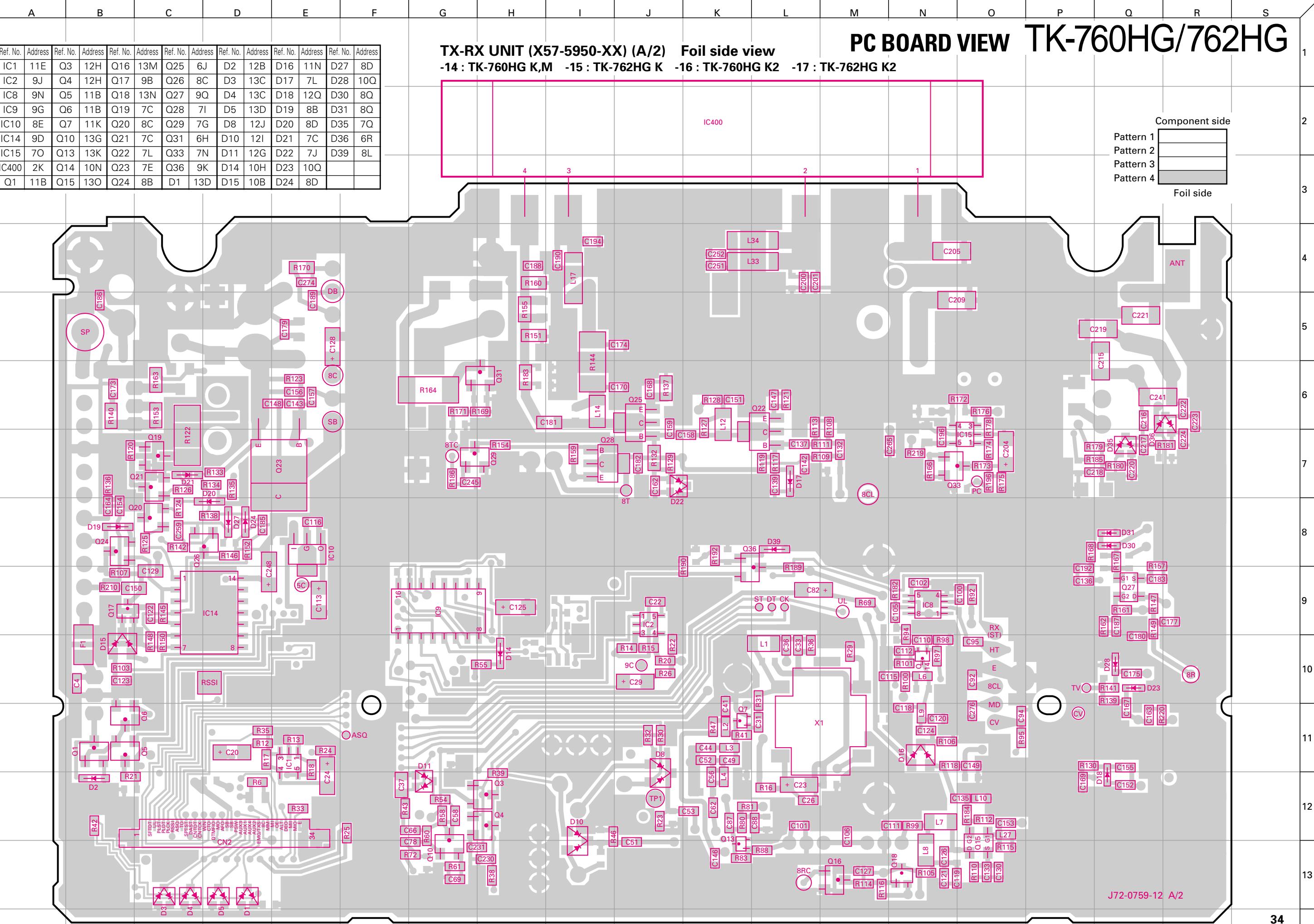
■ Component side ■ Foil side

# TK-760HG/762HG PC BOARD VIEW

## TX-RX UNIT (X57-5950-XX) (A/2) Component side view

-14 : TK-760HG K,M -15 : TK-762HG K -16 : TK-760HG K2 -17 : TK-762HG



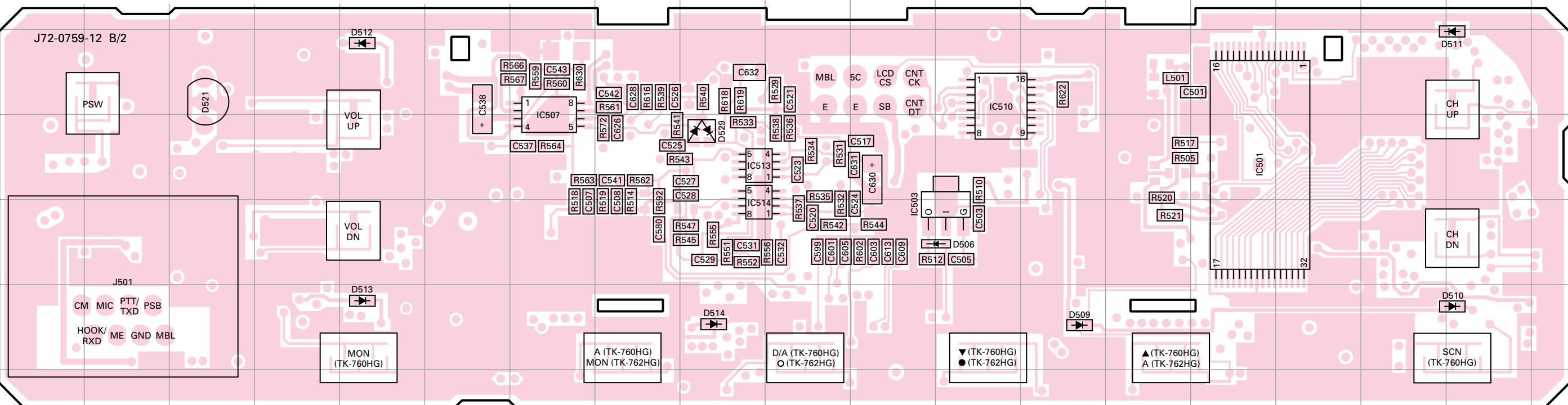




# **PC BOARD VIEWS** TK-760HG/762HG

**TX-RX UNIT (X57-5950-XX) (B/2) Component side view**

-14 : TK-760HG K,M -15 : TK-762HG K -16 : TK-760HG K2 -17 : TK-762HG K2



Ref. No.	Address								
IC501	3O	IC510	2L	D506	4L	D511	2R	D514	5I
IC503	4L	IC513	3I	D509	5M	D512	2E	D521	2C
IC507	3G	IC514	4I	D510	5R	D513	5E	D529	3I

## Component side

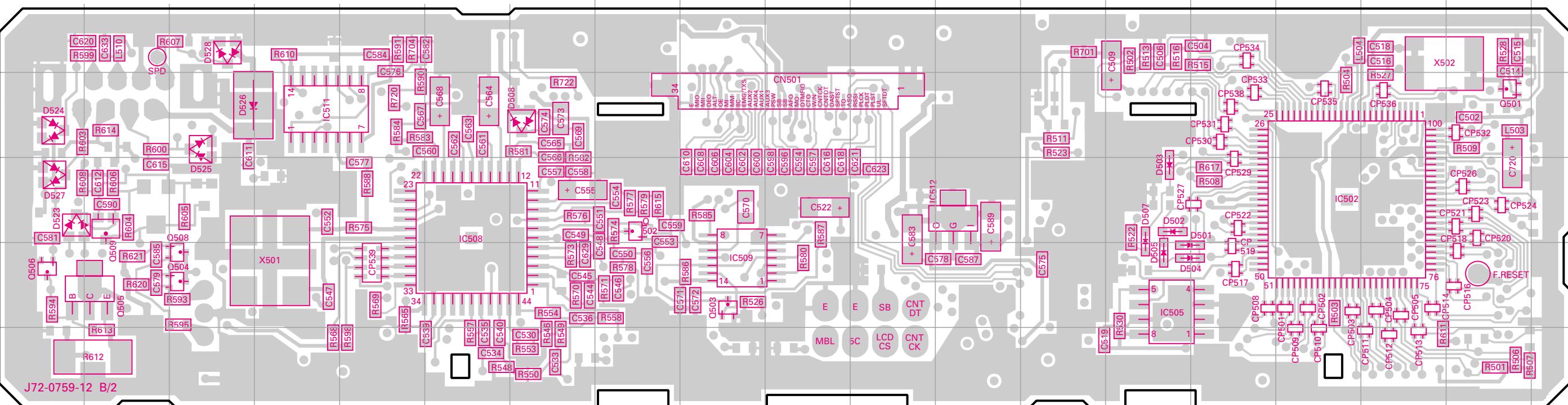
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ANSWER

Page 1

## **TX-RX UNIT (X57-5950-XX) (B/2)      Foil side view**

-14 : TK-760HG K,M -15 : TK-762HG K -16 : TK-760HG K2 -17 : TK-762HG K2



Ref. No.	Address																
IC502	10P	IC509	11I	Q501	9R	Q504	11C	Q508	11C	D502	10N	D505	11N	D523	10A	D526	9C
IC505	11N	IC511	9D	Q502	10H	Q505	11B	Q509	10B	D503	10N	D507	10N	D524	9A	D527	10A
IC508	10F	IC512	10L	Q503	11I	Q506	11A	D501	11N	D504	11N	D508	9G	D525	9C	D528	8C

## Component side

Page 1

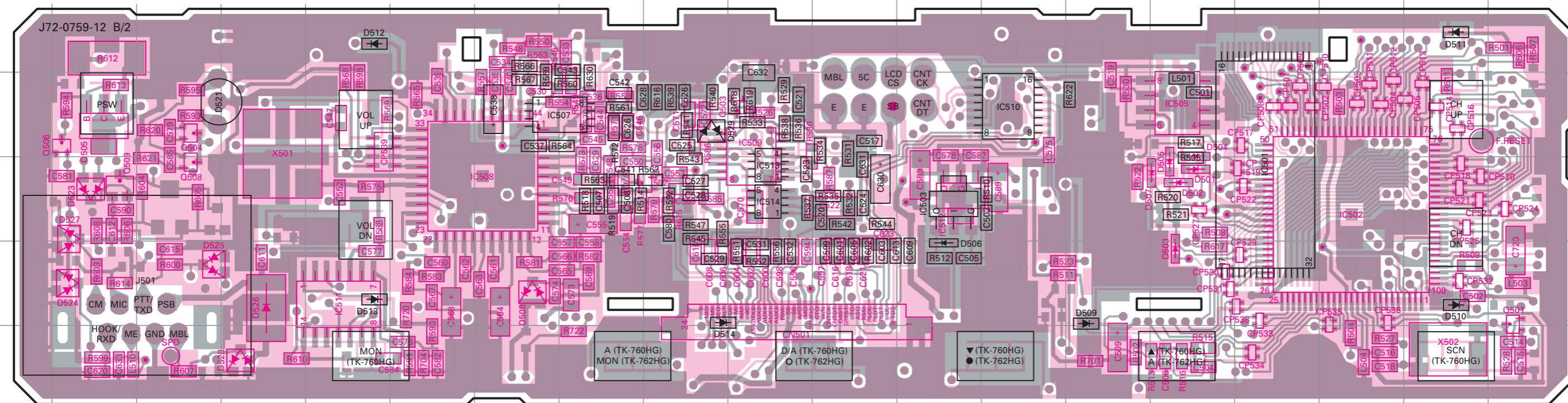
10 of 10

1

# TK-760HG/762HG PC BOARD VIEW

TX-RX UNIT (X57-5950-XX) (B/2) Component side view + Foil side

-14 : TK-760HG K,M -15 : TK-762HG K -16 : TK-760HG K2 -17 : TK-762HG K2



Ref. No.	Address										
IC501	4P	IC510	3M	Q503	3J	D502	4O	D509	5N	D523	4B
IC502	4Q	IC511	5E	Q504	3C	D503	5O	D510	5R	D524	5B
IC503	4L	IC512	4L	Q505	3B	D504	4O	D511	2R	D525	5C
IC505	3O	IC513	4J	Q506	3B	D505	4O	D512	2E	D526	5D
IC507	3H	IC514	4J	Q508	4C	D506	5L	D513	5E	D527	4B
IC508	4G	Q501	5S	Q509	4B	D507	4O	D514	5I	D528	6D
IC509	3J	Q502	4I	D501	4O	D508	5G	D521	3C	D529	3I

Component side  
Pattern 1  
Pattern 2  
Pattern 3  
Pattern 4

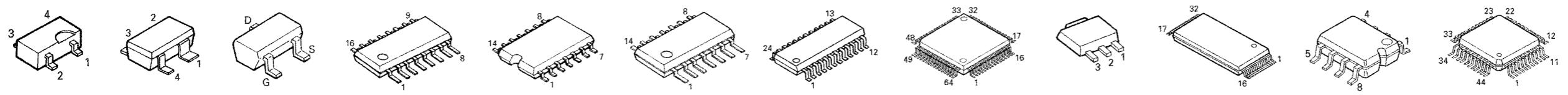
Foil side

● Connect 1 and 4

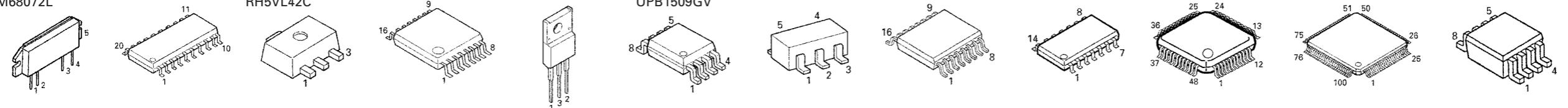
2SB1565 DTC114EE 2SC4617 2SB1132 2SA1641 2SC4081 DTC363EU DTA114EKA 2SC4649 LA4422 NJM2904M DAN202K MA742 2SK508NV



3SK241 3SK228 2SK1824 BU4094BCF TC4013BF BU4066BCFV M62363FP LC75823W AN8009M AT29C020-90TI AT2408N10SI2.5 TC35453F

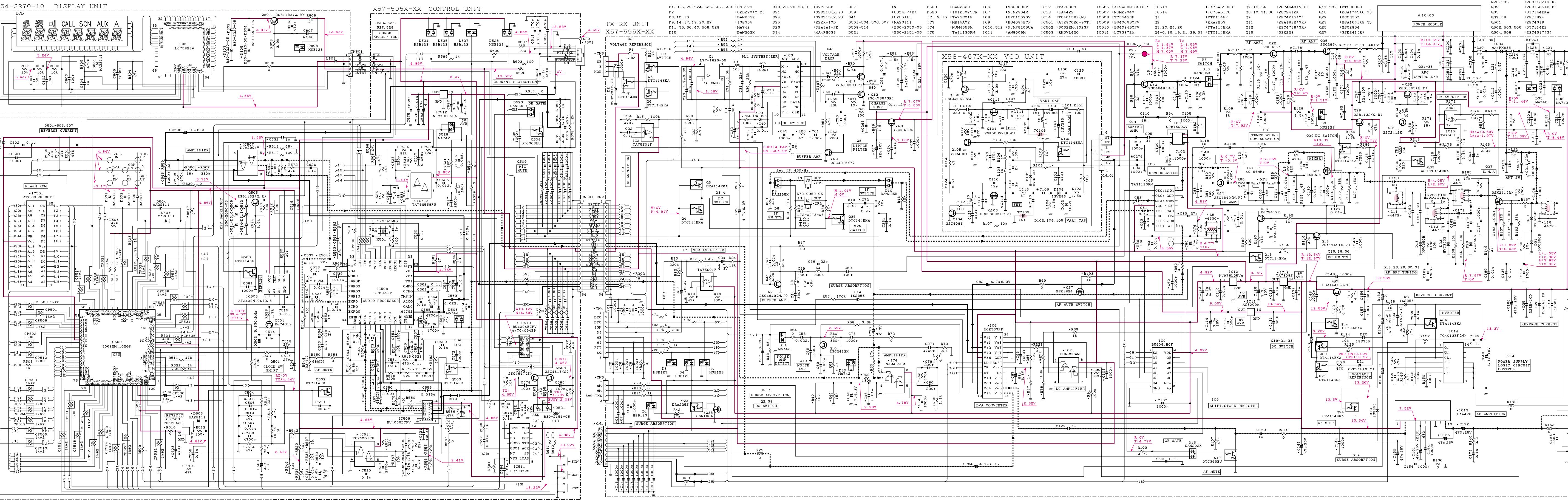


M68702H MB15A02 NJM78L05UA RH5VL42C BU4094BCFV TA7808S NJM2094V UPB1509GV TA75S01F TA31136FN LC73872M LC75833W 30622M4102GP TC75W51FU



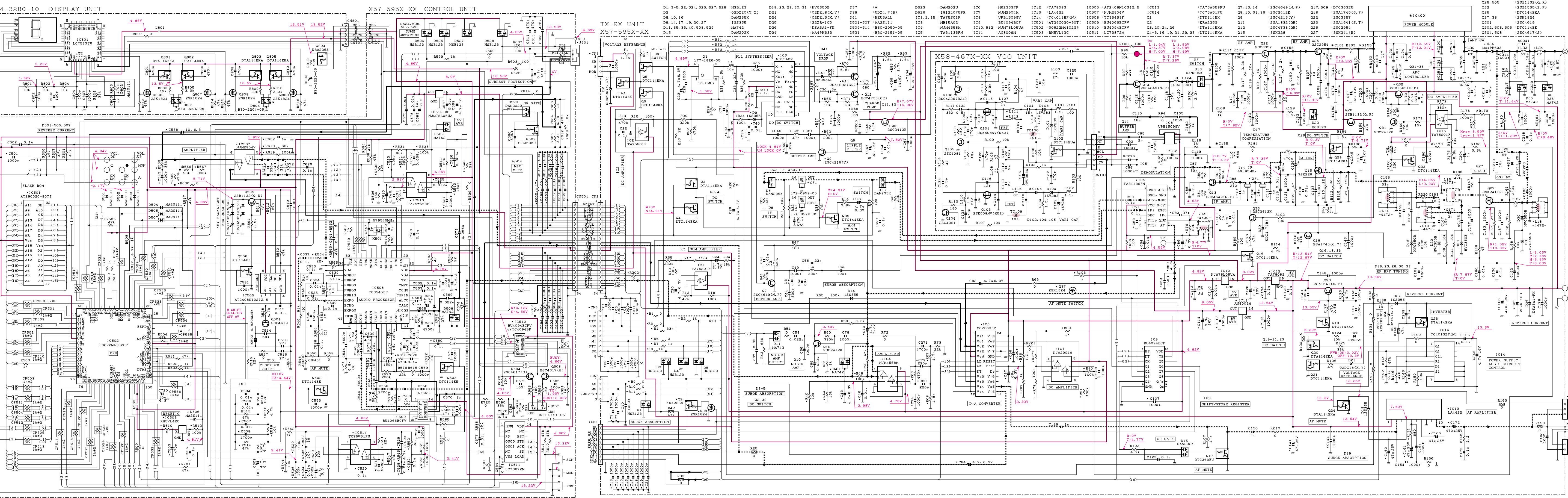
**SCHEMATIC DIAGRAM** TK-760HG

Note : Components marked with a dot (.) are parts of pattern 1.

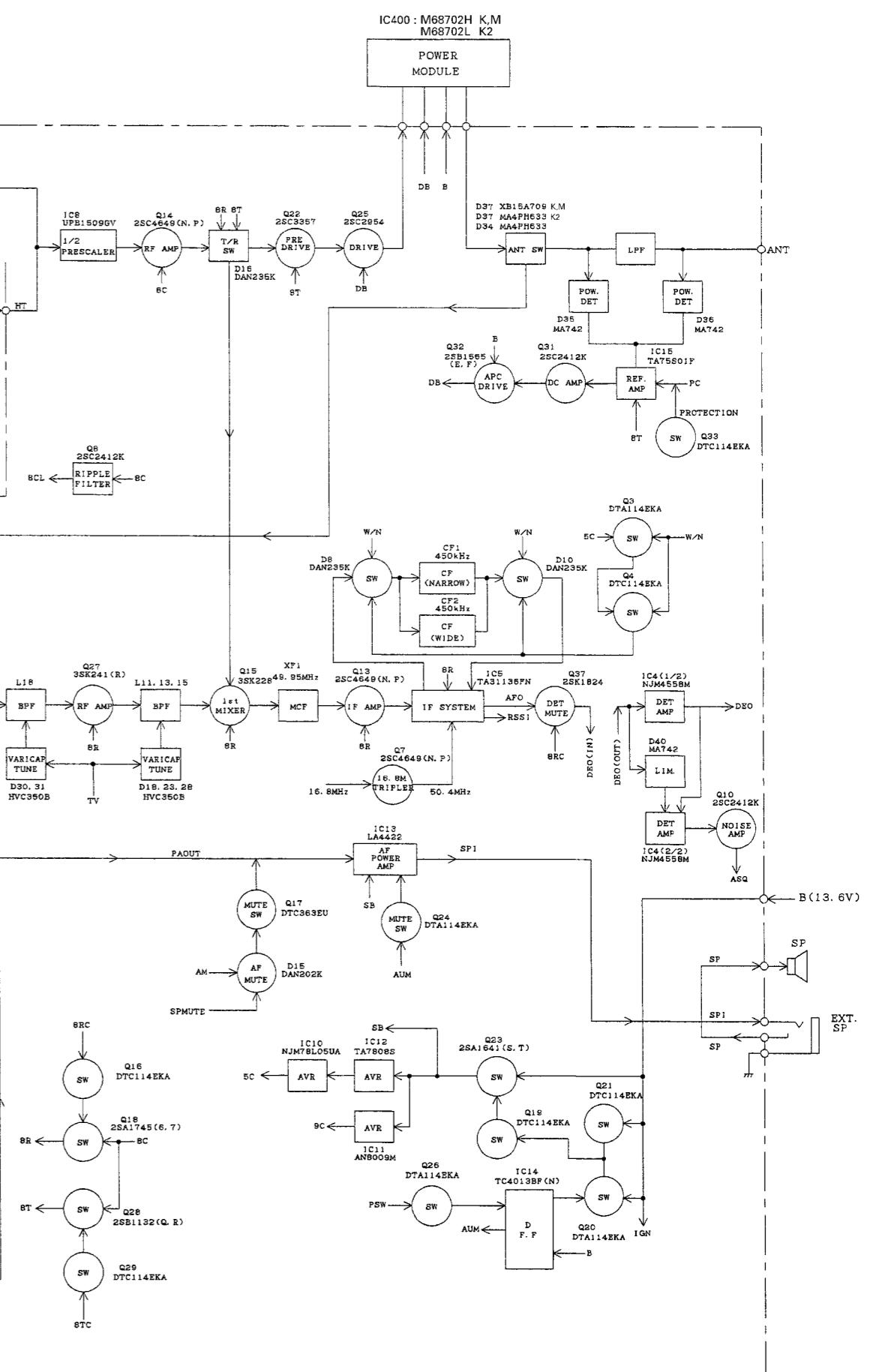
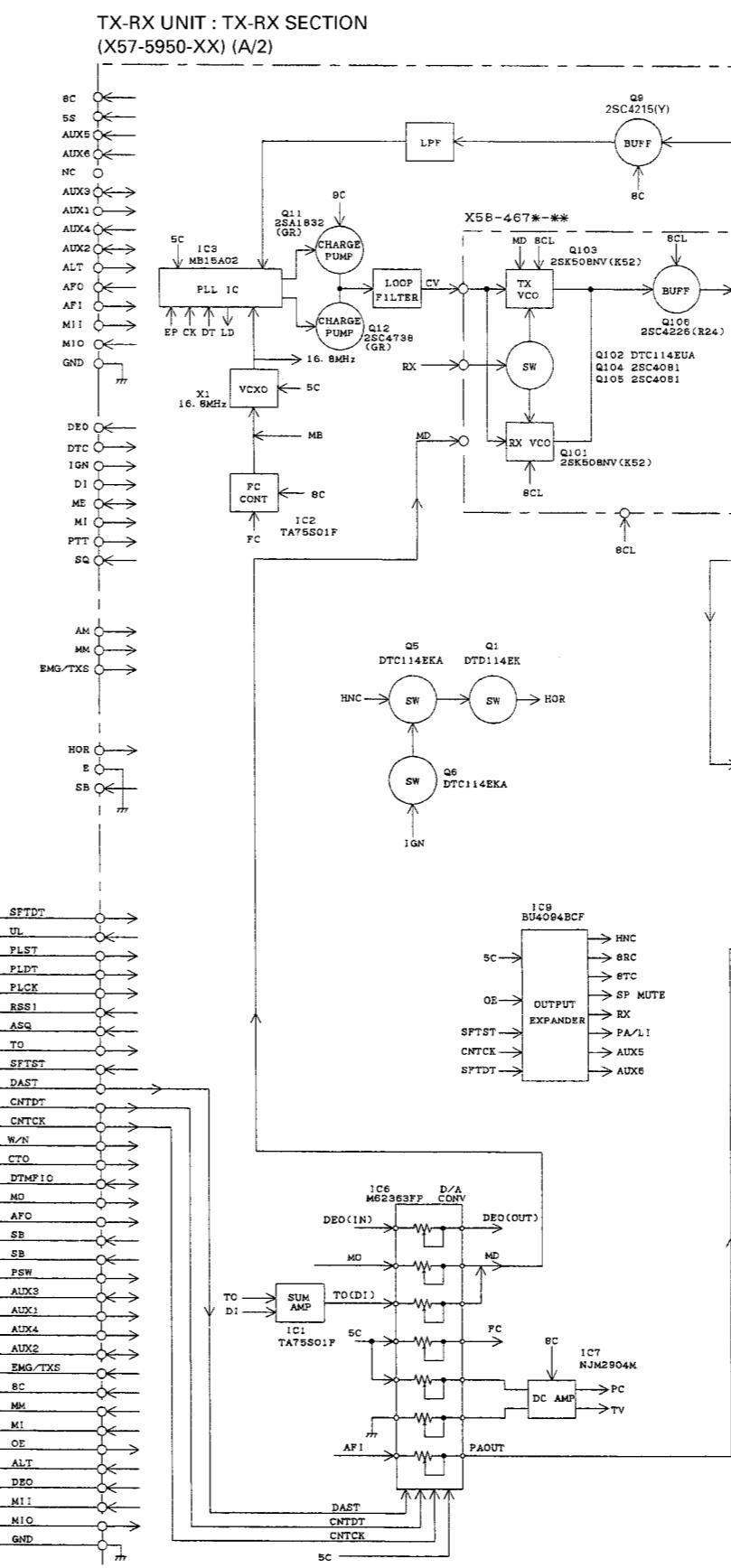
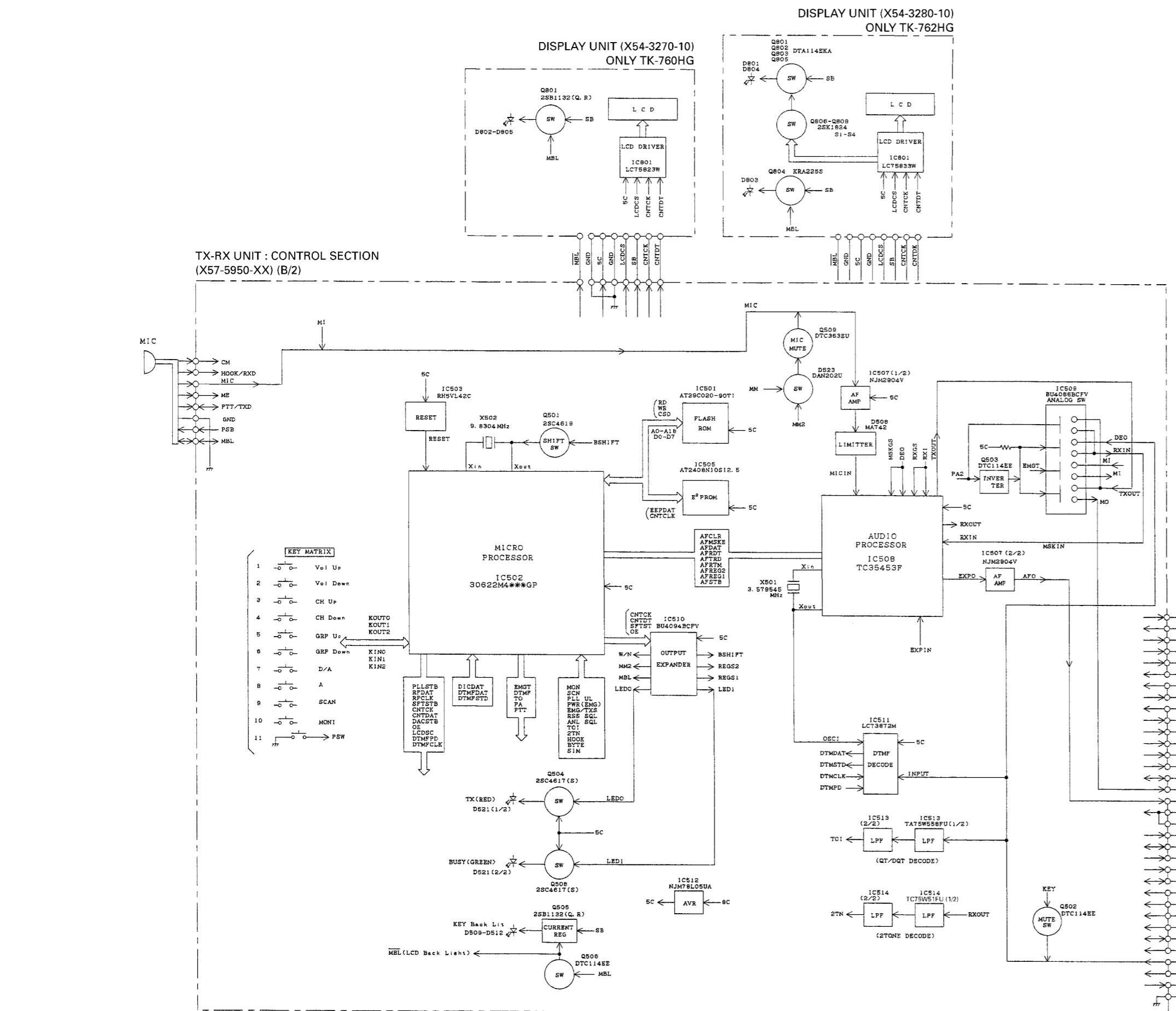


# K-762HG SCHEMATIC DIAGRAM

**Note : Components marked with a dot (.) are parts of pattern 1.**



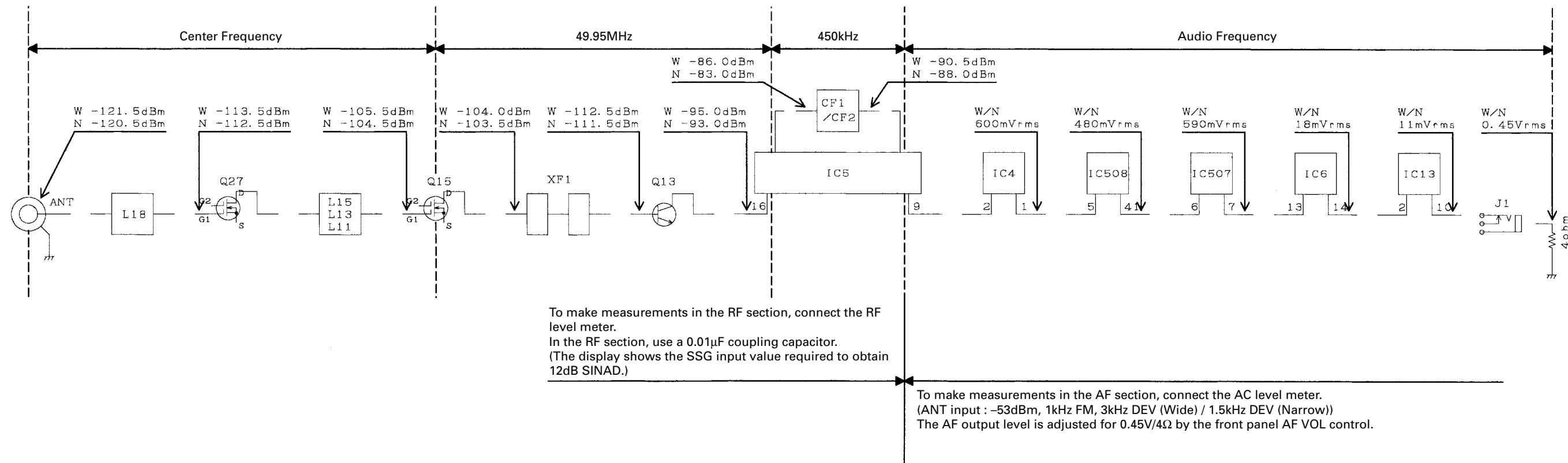
## BLOCK DIAGRAM



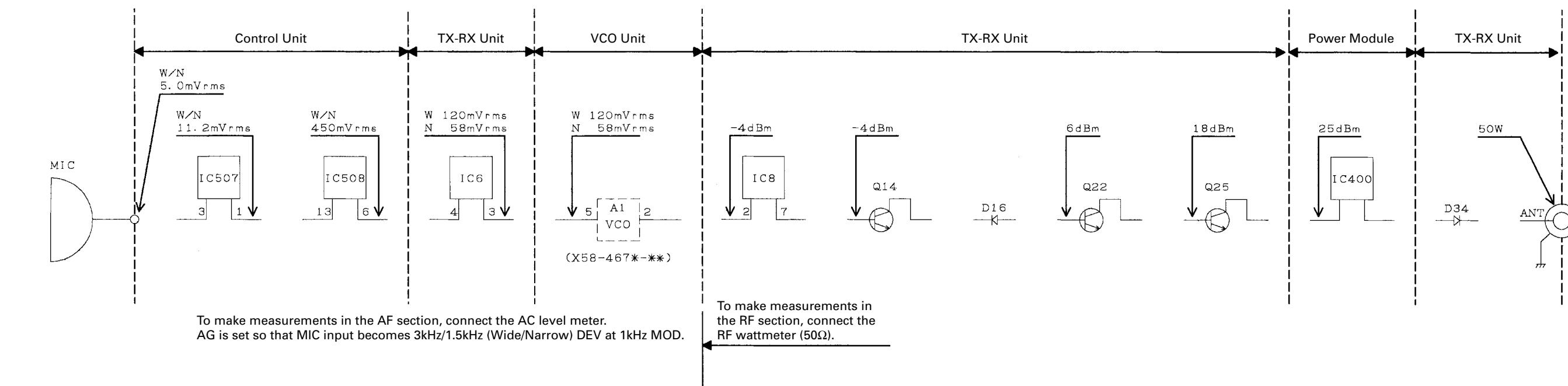
# TK-760HG/762HG    TK-760HG/762HG

## LEVEL DIAGRAM

### Receiver Section



### Transmitter Section



# TK-760HG/762HG

## TERMINAL FUNCTION

### CN1 (TX-RX Unit)

Pin No.	Name	Function
1	8C	DC 8V output.
2	5S	DC 5V output.
3	AUX5	SMRD : Reset output. *1
4	AUX6	5SC : 5S control (Cannot use). *1
5	NC	Non-connection
6	AUX3	SMCK : Clock pulse output. *1 SQ : Squelch detect output. *2
7	AUX1	SMRQ : Ack Req input. *1 PTT : External PTT input. *2
8	AUX4	TXD : Serial control data output. *1
9	AUX2	RXD : Serial control data input. *1 DTC : Data channel control/External hook input. CHDATA : Channel control serial data input.
10	ALT	Alert tone input.
11	AFO	Receiver audio signal output.
12	AFI	Reseiver audio signal input.
13	MII	Transmit audio signal input.
14	MIO	Transmit audio signal output.
15	GND	Ground

### CN2 (TX-RX Unit) ↔ CN501 (Control Unit)

Pin No.	Name	Function
1	SFTDT	Serial data for IC9 (Shift register).
2	UL	Lock detect.
3	PLST	Strobe signal for IC3 (PLL IC).
4	PLDT	Serial data for IC3 (PLL IC).
5	PLCK	Clock pulse for IC3 (PLL IC).
6	RSSI	Receive signal strength indicator.
7	ASQ	Analog squelch.
8	TO	Transmit sub-tone signal output.
9	SFTST	Strobe signal for IC9 (Shift register).
10	DAST	Strobe signal for IC6 (Shift register).
11	CNTDT	Control serial data for IC6.
12	CNTCK	Control clock pulse for IC6.
13	W/N	Change signal of wide or narrow.
14	CTO	Received sub-tone signal.
15	DTMFIO	DTMF signal.
16	MO	Modulation signal.
17	AFO	Receiver audio signal.
18	SB	Switched B.
19	SB	Switched B.
20	PSW	Power swtich.
21	AUX3	Optional unit control signal.
22	AUX1	Optional unit control signal.
23	AUX4	Optional unit control singal.
24	AUX2	Optional unit control signal.
25	EMG/TXS	Foot switch input signal.
26	8C	DC 8V.
27	MM	MIC mute.
28	MI	External MIC input signal.
29	OE	Output enable.
30	ALT	Alert tone signal.
31	DEO	Receiver detector output.
32	MII	Transmit audio signal input.
33	MIO	Transmit audio signal output.
34	GND	Grond.

\*1 : SmarTrunk OMNI mode

### CN3 (TX-RX Unit)

Pin No.	Name	Function
1	HOR	Horn alert/call output.
2	E	Ground.
3	SB	Switched B+, DC 13.6V output, Maximum 1A.

### CN4 (TX-RX Unit)

Pin No.	Name	Function
1	DEO	Receiver detector output. Level : 0.5Vrms (At standard modulation)
2	DTC	Data channel control/External hook input.
3	IGN	Ignition sense input.
4	DI	Data modulation input.
5	ME	External microphone ground.
6	MI	EXternal microphone input.
7	PTT	External PTT input, active low.
8	SQ	Squelch detect output.

### CN5 (TX-RX Unit)

Pin No.	Name	Function
1	AM	Speaker mute input, active high.
2	MM	MIC mute input, active high
3	EMG/TXS	EMG : Foot switch input, active low. *3

### CN7 (TX-RX Unit)

Pin No.	Name	Function
1	PA/LI	Relay for PA function KAP-1 control. "H" : PA/LI on, "L" : PA/LI off
2	SPO	Audio signal output to KAP-1
3	SPI	Audio signal inpt from KAP-1

### CN8 (TX-RX Unit)

Pin No.	Name	Function
1	SP	Audio signal output to internal/external speaker.
2	E	Ground

### J501 (Control Unit)

Pin No.	Name	Function
1	MBL	MIC backlight control.
2	PSB	13.6V.
3	GND	Ground.
4	PTT/TXD	PTT.
5	ME	MIC ground.
6	MIC	MIC signal input.
7	HOOK/RXD	Hook detection
8	CM	MIC data detection.

### CN101 (PLL/VCO) ↔ TX-RX Unit

Pin No.	Name	Function
1	CV	Control voltage input.
2	MD	Modulation input.
3	8CL	8V input.
4	E	Ground.
5	HT	Signal output.
6	RX (ST)	Switched transmit input. H : Transmit

\*1 : SmarTrunk OMNI mode

54 \*2 : MDT mode

\*3 : Emergency mode

# TK-760HG/762HG

## SPECIFICATIONS

### GENERAL

Frequency Range .....	K : 148 to 174MHz	K2 : 136 to 162MHz	M : 146 to 174MHz
Number of Channels .....	TK-762HG : Maximum 8 channels	TK-760HG : Maximum 128 channels	
Number of Groups .....	TK-760HG : Maximum 128 groups		
Channel Spacing .....	Wide : 25, 30kHz	Narrow : 12.5, 15kHz	
PLL Channel Stepping .....	2.5, 3.75, 5, 6.25, 7.5kHz		
Operating Voltage .....	13.6V DC ±15%		
Current Drain .....	Less than 0.4A on standby		
	Less than 1.0A on receive		
	Less than 12.0A on transmit		
Operating Temperature Range .....	-30°C to +60°C (-22°F to +140°F)		
Dimensions & Weight .....	140 (5-33/64) W x 40 (1-37/64) H x 173 (6-13/16) D mm (inch), 1050g (2.31 lbs)		
Channel Frequency Spread .....	K, K2 : 26MHz	M : 28MHz	

### RECEIVER (Measurements made per EIA standard EIA/TIA-204-D)

Sensitivity (12dB SINAD) .....	Wide : 0.25µV	Narrow : 0.33µV
Selectivity .....	Wide : 85dB	Narrow : 75dB
Intermodulation .....	Wide : 75dB	Narrow : 65dB
Spurious Responce .....	90dB	
Audio Power Output .....	4.0W	
Frequency Stability .....	±2.5ppm	

### TRANSMITTER (Measurements made per EIA standard EIA-152-C)

RF Power Output .....	50W
Spurious and Harmonics .....	70dB
Modulation .....	Wide : 16K0F3E
	Narrow : 11K0F3E
FM Noise .....	Wide : 50dB
	Narrow : 45dB
Audio Distortion .....	Less than 3%
Frequency Stability .....	±2.5ppm

# TK-760HG/762HG

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