

UHF FM TRANSCEIVER

TK-3140

SERVICE MANUAL

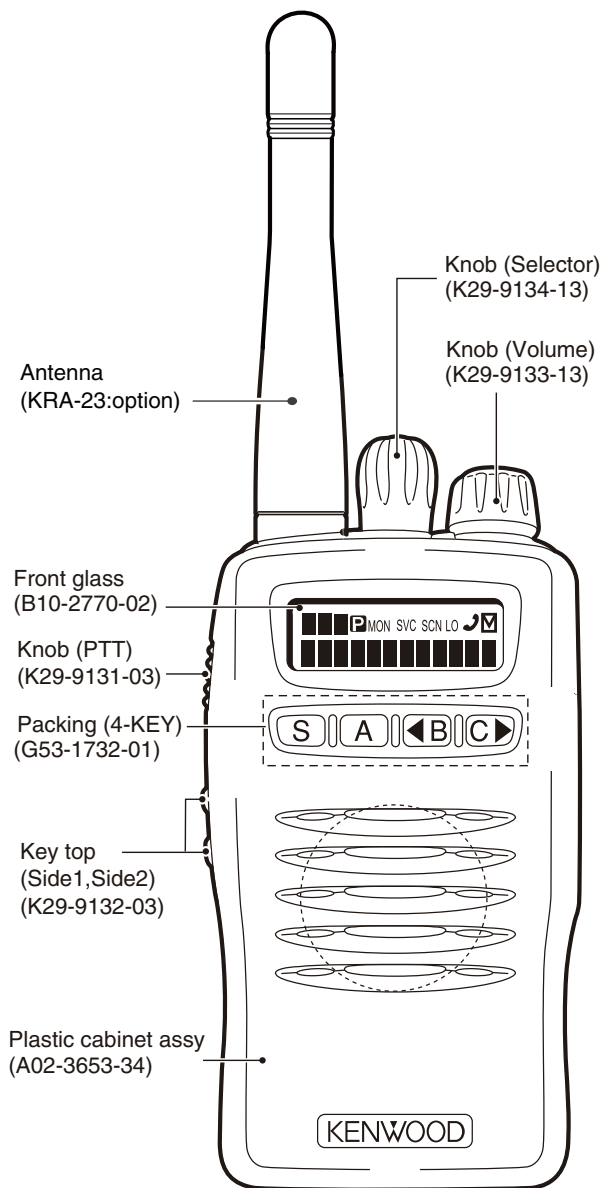
SUPPLEMENT II

KENWOOD

Kenwood Corporation

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This service manual applies to products with 00100987 or subsequent serial numbers.
In terms of the products with the serial numbers earlier than 00100987, refer to the TK-3140 service manual as per part No. B51-8621-00.



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DISASSEMBLY FOR REPAIR

Compatibility information

The PLL IC (IC1:CD8468) has been discontinued by the supplier, so New PLL IC(IC1:ADF4111BCP7) has been applied on to X57-6410-XX production.

Therefore, there is compatibility issue between TX-RX unit and its firmware because new PLL IC requires firmware modification. This service manual mentions compatibility information between TX-RX unit and firmware. As mentioned below, new firmware is compatible for both OLD and NEW TX-RX unit.

Compatibility Chart		Firmware	
		OLD	NEW
		Firmware Version 1.08 "F550" or earlier version S/No.912xxxxx and before	Firmware Version 1.09 "EF7C" or later version S/No.001xxxxx~
TX-RX Unit	OLD (PLL:IC1 CD8468 or SA7025DK) S/No.00100986 and before	Available	Available
	NEW (PLL:IC1 ADF4111BCP7) S/No.00100987~	NOT available Causes unlock condition	Available

PARTS LIST

*New Parts. Δ indicates safety critical components.

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

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

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

L : Scandinavia

Y : PX (Far East, Hawaii)

C : China

K : USA

T : England

X : Australia

P : Canada

E : Europe

M : Other Areas

TK-3140
TX-RX UNIT (X57-6410-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
TK-3140					
1	1B		A02-3653-34	PLASTIC CABINET ASSY	
2	3A	*	A10-4063-21	CHASSIS	
3	2B		A22-2519-02	SUB PANEL	
5	3B		B01-0694-13	ESCUTCHEON	
6	2C		B09-0625-03	CAP ACCESSORY	
7	3B		B10-2770-02	FRONT GLASS	
8	1A		B38-0890-15	LCD ASSY	
9	1C		B62-1476-30	INSTRUCTION MANUAL ACCESSORY	
9	1C		B62-1883-00	INSTRUCTION MANUAL ACCESSORY	
11	3B		E04-0467-15	RF COAXIAL RECEPTACLE(SMA)	
12	3A		E23-1189-14	TERMINAL	
13	3B		E23-1345-04	TERMINAL ASSY	
14	3A,2A		E37-0978-05	LEAD WIRE WITH CONNECTOR(SW2)	
15	3A		E37-1007-05	LEAD WIRE WITH CONNECTOR(PTT)	
16	3B		E58-0440-15	RECTANGULAR RECEPTACLE	
17	3A		E72-0413-03	TERMINAL BLOCK(BATT TERMINAL)	
19	1A		F10-2415-04	SHIELDING PLATE(MCU)	
20	1A		F10-2416-13	SHIELDING PLATE(LCD)	
21	2A		F10-2444-04	SHIELDING PLATE(SPEAKER)	
22	2A	*	F10-2463-04	SHIELDING COVER(AUDIO AMP)	
23	3A,3B		F15-1006-04	SHIELDING PLATE(CHASSIS)	
24	1A		F20-1192-04	INSULATING SHEET	
25	2A	*	F20-3307-14	INSULATING SHEET	
27	1B		G10-1304-04	FIBROUS SHEET	
28	2A		G10-1324-04	FIBROUS SHEET(LCD)	
29	3A		G10-1377-04	FIBROUS SHEET(PTT)	
30	3A		G11-4046-14	SHEET(PTT)	
31	3A		G11-4090-14	SHEET(FINAL)	
32	1A		G11-4174-04	SHEET(LCD)	
33	1B	*	G11-4189-04	SHEET(CABINET)	
34	1B	*	G11-4190-04	SHEET(CABINET)	
35	1A		G11-4297-14	SHEET(CABINET)	
36	1A		G11-4388-04	SHEET(LCD)	
37	2A		G11-4480-04	SHEET(PCB)	
38	3A		G13-1885-04	CUSHION(CHASSIS)	
39	2B		G13-2010-04	CUSHION(ECM)	
40	1D		H52-1816-02	ITEM CARTON CASE	
41	2B		G53-1547-04	PACKING(TERMINAL BLOCK)	
42	3A		G53-1620-04	PACKING(ANTENNA)	
43	2B		G53-1710-02	PACKING(TOP)	
44	2B		G53-1732-01	PACKING(4-KEY)	
45	2A		J19-5430-03	HOLDER(VOL/SEL)	
46	2A		J21-8424-04	MOUNTING HARDWARE	
48	2C		J29-0701-15	BELT CLIP ACCESSORY	
49	1B		J30-1269-04	SPACER(VOLUME)	
50	2B		J87-0022-05	FPC(VOL/SEL)	
51	3B		J87-0023-05	FPC(UNIVERSAL)	
52	1B		K29-9131-03	KNOB(PTT)	
53	1A		K29-9132-03	KEY TOP(PTT)	
54	1B		K29-9133-13	KNOB(VOLUME)	

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
55	1B		K29-9134-13	KNOB(SEL)	
A	2C		N08-0548-04	DRESSED SCREW ACCESSORY	
B	3A		N09-6565-05	PAN HEAD SCREW	
C	3B		N14-0834-04	CIRCULAR NUT(VOL/SEL)	
D	3B		N30-2604-48	PAN HEAD MACHINE SCREW(ANT)	
E	3B		N30-3006-43	PAN HEAD MACHINE SCREW	
F	3B		N79-2035-48	PAN HEAD TAPTITE SCREW	
G	1A,2A		N83-2005-48	PAN HEAD TAPTITE SCREW	
57	2B		R31-0617-05	VARIABLE RESISTOR	
58	2B		S60-0415-05	ROTARY SWITCH	
59	2B		T07-0732-25	SPEAKER	
60	2B		T91-0630-05	MIC ELEMENT	
TX-RX UNIT (X57-6410-XX) -10 : K -12 : K3					
D309			B30-2156-05	LED(RED)	
D310			B30-2157-05	LED(YELLOW)	
C1			CK73HB1H471K	CHIP C 470PF K	
C2			CK73HB1H102K	CHIP C 1000PF K	
C4			CC73HCH1H100D	CHIP C 10PF D	
C5			CK73HB1H471K	CHIP C 470PF K	
C8			CK73HB1C103K	CHIP C 0.010UF K	
C9			CC73HCH1H100D	CHIP C 10PF D	
C10			CK73HB1C103K	CHIP C 0.010UF K	
C11			CC73HCH1H101J	CHIP C 100PF J	
C13			CC73HCH1H101J	CHIP C 100PF J	
C15			CC73HCH1H050C	CHIP C 5.0PF C	
C16			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV	K3
C16			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV	K
C17			CC73HCH1H040C	CHIP C 4.0PF C	K
C17			CC73HCH1H080D	CHIP C 8.0PF D	K3
C18			CC73HCH1H020C	CHIP C 2.0PF C	K3
C18			CC73HCH1H030C	CHIP C 3.0PF C	K
C19			CC73HCH1H101J	CHIP C 100PF J	
C20			CC73HCH1H1R5C	CHIP C 1.5PF C	
C21			CC73HCH1H030C	CHIP C 3.0PF C	K
C21, 22			CC73HCH1H040C	CHIP C 4.0PF C	K3
C22			CC73HCH1H040C	CHIP C 4.0PF C	K
C24			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV	K
C24			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV	K3
C25			CC73HCH1H1R5C	CHIP C 1.5PF C	
C27, 28			CC73HCH1H101J	CHIP C 100PF J	
C29			CK73HB1H102K	CHIP C 1000PF K	
C30			CC73HCH1H101J	CHIP C 100PF J	
C31			CC73HCH1H110J	CHIP C 11PF J	K
C31			CC73HCH1H120J	CHIP C 12PF J	K3
C32			CC73HCH1H070B	CHIP C 7.0PF B	
C33			CC73HCH1H110J	CHIP C 11PF J	K
C33			CC73HCH1H180J	CHIP C 18PF J	K3
C34			CC73HCH1H060D	CHIP C 6.0PF D	K
C34			CC73HCH1H070D	CHIP C 7.0PF D	K3
C36			CC73GCH1H030B	CHIP C 3.0PF B	K3

PARTS LIST

TX-RX UNIT (X57-6410-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C36			CC73GCH1H040B	CHIP C 4.0PF B	K	C143			CC73GCH1H150G	CHIP C 15PF G	K3
C37			CC73GCH1H0R5B	CHIP C 0.5PF B		C144			CC73GCH1H070B	CHIP C 7.0PF B	K
C38			CC73GCH1H050B	CHIP C 5.0PF B		C144			CC73GCH1H080B	CHIP C 8.0PF B	K3
C39			CK73HB1H471K	CHIP C 470PF K		C146			CC73GCH1H270J	CHIP C 27PF J	
C40			CC73GCH1H020B	CHIP C 2.0PF B		C147			CK73HB1H471K	CHIP C 470PF K	
C41			CC73GCH1H060B	CHIP C 6.0PF B		C148			CC73HCH1H050C	CHIP C 5.0PF C	
C42			CC73GCH1H040B	CHIP C 4.0PF B		C149			CC73HCH1H101J	CHIP C 100PF J	K
C43			CC73GCH1H0R5B	CHIP C 0.5PF B		C149			CK73HB1H471K	CHIP C 470PF K	K3
C44			CC73GCH1H050B	CHIP C 5.0PF B	K	C150			CC73HCH1H020C	CHIP C 2.0PF C	K
C44			CC73GCH1H060B	CHIP C 6.0PF B	K3	C150			CC73HCH1H070D	CHIP C 7.0PF D	K3
C45			CK73HB1H471K	CHIP C 470PF K		C151			CC73HCH1H010C	CHIP C 1.0PF C	K3
C46			CC73HCH1H101J	CHIP C 100PF J		C151			CC73HCH1H1R5C	CHIP C 1.5PF C	K
C47			CC73GCH1H0R5B	CHIP C 0.5PF B		C152			CC73HCH1H040C	CHIP C 4.0PF C	K
C48 ,49			CK73HB1H102K	CHIP C 1000PF K		C152			CC73HCH1H060D	CHIP C 6.0PF D	K3
C50			CS77CA1A100M	CHIP TNTL 10UF 10WV		C153			CC73HCH1H020C	CHIP C 2.0PF C	
C51			CC73HCH1H070D	CHIP C 7.0PF D		C154			CC73HCH1H150J	CHIP C 15PF J	
C52			CK73HB1H102K	CHIP C 1000PF K		C155			CC73HCH1H050C	CHIP C 5.0PF C	K
C53			CC73HCH1H020B	CHIP C 2.0PF B		C155			CC73HCH1H080D	CHIP C 8.0PF D	K3
C54 -56			CK73HB1H471K	CHIP C 470PF K		C156			CC73HCH1H020C	CHIP C 2.0PF C	
C57			CC73HCH1H070D	CHIP C 7.0PF D		C157			CC73HCH1H010C	CHIP C 1.0PF C	K
C58			CC73GCH1H0R5B	CHIP C 0.5PF B		C157			CC73HCH1H040C	CHIP C 4.0PF C	K3
C60			CC73HCH1H100D	CHIP C 10PF D		C158			CC73HCH1H0R5C	CHIP C 0.5PF C	K3
C63 ,64			CC73HCH1H101J	CHIP C 100PF J		C158			CC73HCH1H030C	CHIP C 3.0PF C	K
C65 ,66			CC73HCH1H020C	CHIP C 2.0PF C		C160			CK73HB1H102K	CHIP C 1000PF K	
C67			CS77CA1A2R2M	CHIP TNTL 2.2UF 10WV		C164			CC73GCH1H101J	CHIP C 100PF J	K3
C68			CS77CP1A4R7M	CHIP TNTL 4.7UF 10WV		C164			CC73GCH1H330G	CHIP C 33PF G	K
C69			CK73HB1C103K	CHIP C 0.010UF K		C200			CK73GB1A224K	CHIP C 0.22UF K	
C70 -72			CC73HCH1H101J	CHIP C 100PF J		C201			CK73HB1A104K	CHIP C 0.10UF K	
C73			CK73HB1C223K	CHIP C 0.022UF K		C202			CK73HB1H221K	CHIP C 220PF K	
C74			CC73GCH1H020B	CHIP C 2.0PF B	K3	C203-205			CK73HB1A104K	CHIP C 0.10UF K	
C100-102			CK73HB1H471K	CHIP C 470PF K		C206			CK73HB1C103K	CHIP C 0.010UF K	
C103			CC73HCH1H070D	CHIP C 7.0PF D	K	C207			CK73HB1H471K	CHIP C 470PF K	
C103			CC73HCH1H090D	CHIP C 9.0PF D	K3	C208,209			CK73HB1H221K	CHIP C 220PF K	
C104,105			CK73HB1H471K	CHIP C 470PF K		C210			CK73HB1A104K	CHIP C 0.10UF K	
C106			CC73HCH1H060D	CHIP C 6.0PF D		C211			CK73HB1H102K	CHIP C 1000PF K	
C108			CK73HB1A104K	CHIP C 0.10UF K		C212			CC73HCH1H220J	CHIP C 22PF J	
C109			CC73HCH1H050C	CHIP C 5.0PF C	K	C213			CC73HCH1H100D	CHIP C 10PF D	
C109			CC73HCH1H080D	CHIP C 8.0PF D	K3	C214			CK73HB1A104K	CHIP C 0.10UF K	
C110			CC73HCH1H130J	CHIP C 13PF J		C215		*	CS77BP1A100M	CHIP TNTL 10UF 4.0WV	
C111			CK73HB1H471K	CHIP C 470PF K		C216			CK73HB1A104K	CHIP C 0.10UF K	
C115			CK73HB1H471K	CHIP C 470PF K		C217			CK73HB1H221K	CHIP C 220PF K	
C116			CC73HCH1H330J	CHIP C 33PF J		C218			CK73HB1A104K	CHIP C 0.10UF K	
C119			CC73GCH1H220G	CHIP C 22PF G	K	C219			CK73HB1A333K	CHIP C 0.033UF K	
C119			CC73GCH1H330G	CHIP C 33PF G	K3	C220			CK73HB1A104K	CHIP C 0.10UF K	
C122			CK73HB1H471K	CHIP C 470PF K		C221			CC73HCH1H680J	CHIP C 68PF J	
C123		*	CS77CA1A6R8M	CHIP TNTL 6.8UF 10WV		C222			CK73HB1A104K	CHIP C 0.10UF K	
C124			CK73GB0J105K	CHIP C 1.0UF K		C223			CK73HB1C103K	CHIP C 0.010UF K	
C125			CK73HB1H102K	CHIP C 1000PF K		C224		*	CS77CP1A100M	CHIP TNTL 10UF 10WV	
C126,127			CK73HB1H471K	CHIP C 470PF K		C225			CK73HB1C103K	CHIP C 0.010UF K	
C128			CC73HCH1H101J	CHIP C 100PF J		C227			CK73HB1A104K	CHIP C 0.10UF K	
C129,130			CK73HB1H471K	CHIP C 470PF K		C228,229			CK73HB1C103K	CHIP C 0.010UF K	
C131			CC73GCH1H270G	CHIP C 27PF G		C230			CC73HCH1H100D	CHIP C 10PF D	
C132			CK73HB1C103K	CHIP C 0.010UF K		C231			CK73HB1C103K	CHIP C 0.010UF K	
C133		*	CK73GB1A105K	CHIP C 1.0UF K		C232			CK73HB1H471K	CHIP C 470PF K	
C134			CK73HB1A104K	CHIP C 0.10UF K		C233			CK73HB1C103K	CHIP C 0.010UF K	
C135			CC73GCH1H200G	CHIP C 20PF G		C234			CK73HB1H471K	CHIP C 470PF K	
C136			CK73HB1H471K	CHIP C 470PF K		C235			CC73HCH1H060D	CHIP C 6.0PF D	
C137			CK73HB1C103K	CHIP C 0.010UF K		C236			CC73HCH1H020C	CHIP C 2.0PF C	
C139			CK73HB1H471K	CHIP C 470PF K		C237			CC73HCH1H180J	CHIP C 18PF J	
C143			CC73GCH1H100C	CHIP C 10PF C	K	C238			CC73HCH1H100D	CHIP C 10PF D	K

PARTS LIST

TX-RX UNIT (X57-6410-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C238			CC73HCH1H110J	CHIP C 11PF J	K3	C302			CK73HB1A104K	CHIP C 0.10UF K	
C239			CK73HB1H471K	CHIP C 470PF K		C303			CK73HB1A473K	CHIP C 0.047UF K	
C240			CC73HCH1HR75C	CHIP C 0.75PF C	K	C304			CC73HCH1H330J	CHIP C 33PF J	
C240			CC73HCH1H010C	CHIP C 1.0PF C	K3	C305			CK73HB1C103K	CHIP C 0.010UF K	
C241			CC73HCH1H070D	CHIP C 7.0PF D		C306-308			CK73HB1A104K	CHIP C 0.10UF K	
C242			CK73HB1A104K	CHIP C 0.10UF K		C309			CC73HCH1H101J	CHIP C 100PF J	
C243			CK73HB1H102K	CHIP C 1000PF K		C310			CK73HB1C103K	CHIP C 0.010UF K	
C244			CC73GCH1H050B	CHIP C 5.0PF B	K	C311			CC73HCH1H101J	CHIP C 100PF J	
C244			CC73GCH1H090B	CHIP C 9.0PF B	K3	C313			CC73HCH1H101J	CHIP C 100PF J	
C245			CK73HB1H471K	CHIP C 470PF K		C314			CK73HB1H471K	CHIP C 470PF K	
C246			CK73HB1A104K	CHIP C 0.10UF K		C315	*		CS77CP1A100M	CHIP TNTL 10UF 10WV	
C248			CC73HCH1H330J	CHIP C 33PF J		C316			CK73HB1A333K	CHIP C 0.033UF K	
C249			CC73HCH1H020C	CHIP C 2.0PF C	K3	C318			CK73HB1H221K	CHIP C 220PF K	
C249			CC73HCH1H030C	CHIP C 3.0PF C	K	C319			CC73HCH1H121J	CHIP C 120PF J	
C250			CK73HB1H471K	CHIP C 470PF K		C320			CK73HB1A104K	CHIP C 0.10UF K	
C251			CC73GCH1H020B	CHIP C 2.0PF B		C321			CK73HB1H271K	CHIP C 270PF K	
C252			CC73HCH1H330J	CHIP C 33PF J		C322			CK73HB1C103K	CHIP C 0.010UF K	
C253-255			CK73HB1A104K	CHIP C 0.10UF K		C323			CK73HB1H222K	CHIP C 2200PF K	
C256			CC73HCH1H330J	CHIP C 33PF J		C324			CK73HB1A104K	CHIP C 0.10UF K	
C257-260			CK73HB1H471K	CHIP C 470PF K		C325			CK73HB1C123K	CHIP C 0.012UF K	
C261			CC73GCH1H120G	CHIP C 12PF G	K3	C327			CK73GB1H103K	CHIP C 0.010UF K	
C261			CK73GB1H471K	CHIP C 470PF K	K	C328			CK73GB1C683K	CHIP C 0.068UF K	
C262			CK73HB1A104K	CHIP C 0.10UF K		C329			CK73GB0J105K	CHIP C 1.0UF K	
C263			CC73HCH1H180J	CHIP C 18PF J	K3	C330			CK73HB1A104K	CHIP C 0.10UF K	
C263			CC73HCH1H330J	CHIP C 33PF J	K	C331			CK73HB1C223K	CHIP C 0.022UF K	
C264			CK73HB1H471K	CHIP C 470PF K		C332-335			CK73HB1C103K	CHIP C 0.010UF K	
C265			CK73HB1A104K	CHIP C 0.10UF K		C336,337			CC73HCH1H270J	CHIP C 27PF J	
C266			CK73HB1H471K	CHIP C 470PF K		C338			CC73HCH1H160J	CHIP C 16PF J	
C267			CC73GCH1H030B	CHIP C 3.0PF B		C339-342			CK73HB1C103K	CHIP C 0.010UF K	
C268			CC73HCH1H330J	CHIP C 33PF J		C344	*		CS77CP1A100M	CHIP TNTL 10UF 10WV	
C269			CC73GCH1H030B	CHIP C 3.0PF B	K	C345			CK73GB1A474K	CHIP C 0.47UF K	
C269			CC73GCH1H050B	CHIP C 5.0PF B	K3	C346			CC73HCH1H470J	CHIP C 47PF J	
C270			CC73HCH1H020C	CHIP C 2.0PF C	K3	C347			CK73HB1C103K	CHIP C 0.010UF K	
C270			CC73HCH1H030C	CHIP C 3.0PF C	K	C348			CK73GB1A474K	CHIP C 0.47UF K	
C274			CC73GCH1H030B	CHIP C 3.0PF B	K	C349			CK73HB1C153K	CHIP C 0.015UF K	
C275			CC73HCH1H101J	CHIP C 100PF J		C350	*		CS77CP0G3R3M	CHIP TNTL 3.3UF 4.0WV	
C276			CK73HB1H471K	CHIP C 470PF K		C351			CK73HB1C103K	CHIP C 0.010UF K	
C277			CC73GCH1H2R5B	CHIP C 2.5PF B	K3	C352-354			CK73HB1A104K	CHIP C 0.10UF K	
C277			CC73GCH1H3R5B	CHIP C 3.5PF B	K	C355			CS77CA1A100M	CHIP TNTL 10UF 10WV	
C278-280			CK73HB1A104K	CHIP C 0.10UF K		C356			CC73HCH1H470J	CHIP C 47PF J	
C281			CK73HB1H471K	CHIP C 470PF K		C357,358			CS77CA1A100M	CHIP TNTL 10UF 10WV	
C282			CK73HB1H102K	CHIP C 1000PF K		C359			CC73HCH1H470J	CHIP C 47PF J	
C283,284			CK73HB1A104K	CHIP C 0.10UF K		C362			CC73HCH1H470J	CHIP C 47PF J	
C285			CC73GCH1H0R5B	CHIP C 0.5PF B	K	C364			CC73HCH1H470J	CHIP C 47PF J	
C286			CC73GCH1H050B	CHIP C 5.0PF B	K	C369			CC73HCH1H101J	CHIP C 100PF J	
C286			CC73GCH1H060B	CHIP C 6.0PF B	K3	C371			CC73HCH1H470J	CHIP C 47PF J	
C288			CK73HB1H471K	CHIP C 470PF K		C375			CC73HCH1H470J	CHIP C 47PF J	
C289			CC73GCH1H010B	CHIP C 1.0PF B	K3	C382			CK73HB1A104K	CHIP C 0.10UF K	
C289			CC73GCH1H020B	CHIP C 2.0PF B	K	C383,384			CK73HB1H102K	CHIP C 1000PF K	
C290			CC73GCH1H050B	CHIP C 5.0PF B	K3	C386			CC73HCH1H470J	CHIP C 47PF J	
C290			CC73GCH1H3R5B	CHIP C 3.5PF B	K	C388			CK73HB1H102K	CHIP C 1000PF K	
C292			CC73HCH1H030C	CHIP C 3.0PF C	K	C389			CC73HCH1H470J	CHIP C 47PF J	
C292			CC73HCH1H1R5B	CHIP C 1.5PF B	K3	C390			CK73HB1A104K	CHIP C 0.10UF K	
C293			CC73GCH1H020B	CHIP C 2.0PF B	K	C391,392			CK73HB1C103K	CHIP C 0.010UF K	
C293			CC73GCH1H2R5B	CHIP C 2.5PF B	K3	C394-398			CK73HB1A104K	CHIP C 0.10UF K	
C294			CK73GB1H471K	CHIP C 470PF K		C399			CK73HB1C103K	CHIP C 0.010UF K	
C295			CK73HB1H471K	CHIP C 470PF K		C400			CK73HB1H471K	CHIP C 470PF K	
C298			CK73HB1H471K	CHIP C 470PF K		C402-405			CK73HB1H102K	CHIP C 1000PF K	
C300		*	CS77CP1A100M	CHIP TNTL 10UF 10WV		C408			CK73HB1H102K	CHIP C 1000PF K	
C301			CK73HB1H471K	CHIP C 470PF K		C410			CK73FB1A475K	CHIP C 4.7UF K	

PARTS LIST

TX-RX UNIT (X57-6410-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C411		*	CK73GB1A105K	CHIP C 1.0UF K		CN500			E40-6179-25	PIN ASSY(30P)	
C413			CK73FB1A106K	CHIP C 10UF K		F400			F53-0324-15	FUSE(2.5A)	
C415			CC73HCH1H101J	CHIP C 100PF J					G11-4050-04	SHEET	
C416			CK73FB1A106K	CHIP C 10UF K		CD200			L79-1834-05	TUNING COIL	
C417			CK73GB0J105K	CHIP C 1.0UF K		CF200	*		L72-1031-05	CERAMIC FILTER(455KHZ/WID)	
C419			CK73HB1H102K	CHIP C 1000PF K		CF201			L72-0934-05	CERAMIC FILTER(455KHZ/NAR)	
C420			CC73HCH1H101J	CHIP C 100PF J		L1			L41-4795-39	SMALL FIXED INDUCTOR(4.7UH)	
C421		*	CK73GB1A105K	CHIP C 1.0UF K		L2 ,3			L40-3363-57	SMALL FIXED INDUCTOR(3.3NH)	K
C422			CK73FB1A475K	CHIP C 4.7UF K		L2 ,3			L40-3963-57	SMALL FIXED INDUCTOR(3.9NH)	K3
C423			CK73FB0J106K	CHIP C 10UF K		L6			L40-1275-57	SMALL FIXED INDUCTOR(12.0NH)	K
C424			CC73HCH1H101J	CHIP C 100PF J		L6			L40-1575-57	SMALL FIXED INDUCTOR(15.0NH)	K3
C425			CK73HB1A104K	CHIP C 0.10UF K		L7			L92-0163-05	BEADS CORE	
C426			CC73HCH1H101J	CHIP C 100PF J		L8			L40-1085-92	SMALL FIXED INDUCTOR(100NH)	
C500			CK73GB1H122K	CHIP C 1200PF K		L9			L92-0163-05	BEADS CORE	
C501,502			CK73HB1A104K	CHIP C 0.10UF K		L10 -12			L40-1085-92	SMALL FIXED INDUCTOR(100NH)	
C503,504			CK73HB1C103K	CHIP C 0.010UF K		L15			L41-2275-43	SMALL FIXED INDUCTOR(22NH)	K
C506			CK73HB1A104K	CHIP C 0.10UF K		L15			L41-2275-43	SMALL FIXED INDUCTOR(22NH)	K
C507			CK73HB1C103K	CHIP C 0.010UF K		L15			L41-2275-43	SMALL FIXED INDUCTOR(22NH)	K
C508			CK73HB1A104K	CHIP C 0.10UF K		L15			L41-2275-43	SMALL FIXED INDUCTOR(22NH)	K
C509-511			CK73GB1H562J	CHIP C 5600PF J		L15			L41-2775-43	SMALL FIXED INDUCTOR(27NH)	K3
C512-514			CK73GB1H272J	CHIP C 2700PF J		L16			L40-2778-67	SMALL FIXED INDUCTOR(27NH)	K
C515			CC73HCH1H030C	CHIP C 3.0PF C		L16			L40-3378-67	SMALL FIXED INDUCTOR(33NH)	K3
C516			CC73HCH1H151J	CHIP C 150PF J		L17 ,18			L41-2285-03	SMALL FIXED INDUCTOR(220NH)	
C517			CK73HB1A104K	CHIP C 0.10UF K		L19 ,20			L40-3391-86	SMALL FIXED INDUCTOR(3.3UH)	
C518			CK73HB1A333K	CHIP C 0.033UF K		L21			L40-2275-92	SMALL FIXED INDUCTOR(22NH)	K
C519			CC73HCH1H030C	CHIP C 3.0PF C		L21			L40-2275-92	SMALL FIXED INDUCTOR(22NH)	K3
C520			CK73GB1H152J	CHIP C 1500PF J		L22			L92-0163-05	BEADS CORE	
C521		*	CS77CP1A100M	CHIP TNL 10UF 10WV		L23			L40-2275-92	SMALL FIXED INDUCTOR(22NH)	
C522			CK73HB1A104K	CHIP C 0.10UF K		L100			L40-1875-92	SMALL FIXED INDUCTOR(18NH)	
C523,524			CK73HB1H102K	CHIP C 1000PF K		L101			L40-2275-92	SMALL FIXED INDUCTOR(22NH)	
C525			CK73HB1A104K	CHIP C 0.10UF K		L102			L92-0162-05	BEADS CORE	
C526			CK73GB1H562J	CHIP C 5600PF J		L103			L41-1575-43	SMALL FIXED INDUCTOR(15NH)	
C527,528			CK73HB1A104K	CHIP C 0.10UF K		L104			L92-0149-05	CHIP FERRITE	
C529			CK73GB1H562J	CHIP C 5600PF J		L106			L34-4602-15	AIR-CORE COIL	
C530			CK73FB0J475K	CHIP C 4.7UF K		L107			L92-0149-05	CHIP FERRITE	
C531			CK73HB1C153K	CHIP C 0.015UF K		L108			L41-2285-43	SMALL FIXED INDUCTOR(220NH)	
C532			CK73HB1H561K	CHIP C 560PF K		L109			L34-4572-05	AIR-CORE COIL	
C533			CK73HB1H102K	CHIP C 1000PF K		L110-112			L34-4564-05	AIR-CORE COIL	
C534			CC73HCH1H560J	CHIP C 56PF J		L113			L41-1092-44	SMALL FIXED INDUCTOR(1UH)	
C535			CK73HB1A104K	CHIP C 0.10UF K		L114,115			L40-8265-57	SMALL FIXED INDUCTOR(8.2NH)	
C536,537			CK73FB0J475K	CHIP C 4.7UF K		L116			L40-1563-92	SMALL FIXED INDUCTOR(1.5NH)	
C538			CK73HB1H471K	CHIP C 470PF K		L201			L40-1091-86	SMALL FIXED INDUCTOR(1.0UH)	
C539,540			CK73GB1C563K	CHIP C 0.056UF K		L202	*		L40-1591-86	SMALL FIXED INDUCTOR(1.5UH)	
C542,543			CK73HB1H102K	CHIP C 1000PF K		L203			L92-0163-05	BEADS CORE	
C554-557			CK73HB1H102K	CHIP C 1000PF K		L204			L41-5685-39	SMALL FIXED INDUCTOR(0.56UH)	
C700			CC73GCH1H040B	CHIP C 4.0PF B	K3	L205			L40-1875-57	SMALL FIXED INDUCTOR(18.0NH)	K
C700			CC73GCH1H1R5B	CHIP C 1.5PF B	K	L205,206			L40-1875-57	SMALL FIXED INDUCTOR(18.0NH)	K3
C702			CK73HB1H471K	CHIP C 470PF K		L206			L40-2275-57	SMALL FIXED INDUCTOR(22.0NH)	K
C710			CC73GCH1H2R5B	CHIP C 2.5PF B	K	L207			L40-2775-92	SMALL FIXED INDUCTOR(27NH)	
C720			CS77CP1A4R7M	CHIP TNL 4.7UF 10WV		L209-211			L41-1078-14	SMALL FIXED INDUCTOR(10NH)	K3
C730		*	CS77CP1C2R2M	CHIP TNL 2.2UF 16WV		L209-211			L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)	K
C731			CC73HCH1H101J	CHIP C 100PF J		L212			L92-0163-05	BEADS CORE	
C740			CK73HB1A104K	CHIP C 0.10UF K		L213			L41-2285-03	SMALL FIXED INDUCTOR(220NH)	
C910,911			CK73HB1H102K	CHIP C 1000PF K		L215			L41-1278-14	SMALL FIXED INDUCTOR(12NH)	K3
TC1 ,2			C05-0384-05	CERAMIC TRIMMER CAP(10P)		L215			L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)	K
CN300		*	E40-6178-25	SOCKET FOR PIN ASSY(30P)		L217			L41-1078-14	SMALL FIXED INDUCTOR(10NH)	K3
CN301,302			E40-6453-05	FLAT CABLE CONNECTOR(14P)		L217			L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)	K
CN303-306			E40-6092-05	PIN ASSY(2P)		L219			L41-4778-03	SMALL FIXED INDUCTOR(47NH)	K
CN400			E40-6453-05	FLAT CABLE CONNECTOR(14P)		L300-313			L92-0163-05	BEADS CORE	

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Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
L314-317			L92-0408-05	CHIP FERRITE		R39			RK73HB1J103J	CHIP R 10K J 1/16W	
L320			L92-0163-05	BEADS CORE		R40			RK73HB1J154J	CHIP R 150K J 1/16W	
L400			L92-0149-05	CHIP FERRITE		R41			RK73HB1J000J	CHIP R 0.0 J 1/16W	
L500			L92-0163-05	BEADS CORE		R42, 43			RK73HB1J103J	CHIP R 10K J 1/16W	
L701			L40-2785-92	SMALL FIXED INDUCTOR(270NH)		R44, 45			RK73HB1J101J	CHIP R 100 J 1/16W	
L710			L41-3369-16	SMALL FIXED INDUCTOR(3.3NH)	K3	R46			RK73HB1J103J	CHIP R 10K J 1/16W	
L730			L92-0163-05	BEADS CORE		R47			RK73HB1J101J	CHIP R 100 J 1/16W	K3
L904			L92-0419-15	CHIP FERRITE		R47			RK73HB1J220J	CHIP R 22 J 1/16W	K
X1		*	L77-3028-05	TCXO(16.8MHZ).		R48			RK73HB1J000J	CHIP R 0.0 J 1/16W	
X200			L77-1760-15	CRYSTAL RESONATOR(44.395MHZ)		R100,101			RK73HB1J472J	CHIP R 4.7K J 1/16W	
X300			L77-1810-05	CRYSTAL RESONATOR(9.8304MHZ)		R102			RK73HB1J473J	CHIP R 47K J 1/16W	
X500			L77-1708-15	CRYSTAL RESONATOR(3.579545MHZ)		R103			RK73HB1J331J	CHIP R 330 J 1/16W	
XF200			L71-0530-05	MCF (44.85MHZ)		R104			RK73HB1J220J	CHIP R 22 J 1/16W	
CP300-313			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R105			RK73HB1J681J	CHIP R 680 J 1/16W	
CP314			RK75HA1J473J	CHIP-COM 47K J 1/16W		R106			RK73HB1J152J	CHIP R 1.5K J 1/16W	
CP315			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R107			RK73HB1J100J	CHIP R 10 J 1/16W	
CP316			RK75HA1J473J	CHIP-COM 47K J 1/16W		R108,109			RK73HB1J331J	CHIP R 330 J 1/16W	
CP317-320			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R111			RK73HB1J180J	CHIP R 18 J 1/16W	
CP322			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R112			RK73HB1J331J	CHIP R 330 J 1/16W	
CP323,324			RK75HA1J473J	CHIP-COM 47K J 1/16W		R114			RK73HB1J104J	CHIP R 100K J 1/16W	K3
CP326,327			RK75HA1J473J	CHIP-COM 47K J 1/16W		R114			RK73HB1J124J	CHIP R 120K J 1/16W	K
CP400,401			RK75HA1J473J	CHIP-COM 47K J 1/16W		R115			RK73HB1J473J	CHIP R 47K J 1/16W	
CP500,501			RK75HA1J472J	CHIP-COM 4.7K J 1/16W		R116			RK73HB1J220J	CHIP R 22 J 1/16W	
R1			RK73HB1J101J	CHIP R 100 J 1/16W		R118			RK73HB1J101J	CHIP R 100 J 1/16W	K
R3			RK73HB1J000J	CHIP R 0.0 J 1/16W		R119,120			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R4			RK73HB1J102J	CHIP R 1.0K J 1/16W		R121			RK73HB1J273J	CHIP R 27K J 1/16W	K3
R5			RK73HB1J330J	CHIP R 33 J 1/16W		R121			RK73HB1J473J	CHIP R 47K J 1/16W	K
R6			RK73HB1J470J	CHIP R 47 J 1/16W		R122			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R7			RK73HB1J000J	CHIP R 0.0 J 1/16W		R123			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R8			RK73HB1J222J	CHIP R 2.2K J 1/16W	K3	R124			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R8			RK73HB1J561J	CHIP R 560 J 1/16W	K	R125			RK73GB2A101J	CHIP R 100 J 1/10W	K3
R9			RK73HB1J000J	CHIP R 0.0 J 1/16W		R125			RK73GB2A220J	CHIP R 22 J 1/10W	K
R11			RK73HB1J104J	CHIP R 100K J 1/16W		R126			RK73HB1J473J	CHIP R 47K J 1/16W	
R12			RK73HB1J681J	CHIP R 680 J 1/16W	K3	R127-129			RK73HH1J154D	CHIP R 150K D 1/16W	
R12, 13			RK73HB1J102J	CHIP R 1.0K J 1/16W	K	R131-133			RK73HH1J154D	CHIP R 150K D 1/16W	
R13			RK73HB1J102J	CHIP R 1.0K J 1/16W	K3	R134			RK73HB1J103J	CHIP R 10K J 1/16W	
R14, 15			RK73HB1J473J	CHIP R 47K J 1/16W		R136			RK73HB1J473J	CHIP R 47K J 1/16W	
R16			RK73HB1J181J	CHIP R 180 J 1/16W		R138			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R17			RK73HB1J101J	CHIP R 100 J 1/16W		R139			RK73HH1J105D	CHIP R 1.0M D 1/16W	
R18			RK73HB1J151J	CHIP R 150 J 1/16W		R140			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R19			RK73HB1J101J	CHIP R 100 J 1/16W		R142,143			RK73HB1J104J	CHIP R 100K J 1/16W	
R20			RK73HB1J104J	CHIP R 100K J 1/16W		R144			RK73FB2B000J	CHIP R 0.0 J 1/8W	K
R21			RK73HB1J154J	CHIP R 150K J 1/16W		R145,146			RK73HB1J271J	CHIP R 270 J 1/16W	
R22			RK73HB1J472J	CHIP R 4.7K J 1/16W		R147			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R23			RK73HB1J101J	CHIP R 100 J 1/16W		R149			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R24			RK73HB1J102J	CHIP R 1.0K J 1/16W		R151,152			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R25			RK73HB1J682J	CHIP R 6.8K J 1/16W		R200			RK73HB1J224J	CHIP R 220K J 1/16W	
R26			RK73HB1J103J	CHIP R 10K J 1/16W		R201			RK73HB1J104J	CHIP R 100K J 1/16W	
R27			RK73HB1J331J	CHIP R 330 J 1/16W		R202			RK73HB1J153J	CHIP R 15K J 1/16W	
R28			RK73HH1J333D	CHIP R 33K D 1/16W		R203			RK73HH1J224D	CHIP R 220K D 1/16W	
R29			RK73HH1J104D	CHIP R 100K D 1/16W		R204			RK73HH1J824D	CHIP R 820K D 1/16W	
R31			RK73HB1J470J	CHIP R 47 J 1/16W		R205			RK73HB1J334J	CHIP R 330K J 1/16W	
R32			RK73HB1J101J	CHIP R 100 J 1/16W		R206			RK73HB1J333J	CHIP R 33K J 1/16W	
R33			RK73HB1J000J	CHIP R 0.0 J 1/16W		R207			RK73HB1J154J	CHIP R 150K J 1/16W	
R34			RK73HB1J272J	CHIP R 2.7K J 1/16W		R208			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R35			RK73HB1J000J	CHIP R 0.0 J 1/16W		R209			RK73HB1J103J	CHIP R 10K J 1/16W	
R36			RK73HB1J102J	CHIP R 1.0K J 1/16W		R210			RK73HB1J123J	CHIP R 12K J 1/16W	
R38			RK73HB1J470J	CHIP R 47 J 1/16W		R211			RK73HB1J223J	CHIP R 22K J 1/16W	
						R212			RK73HB1J472J	CHIP R 4.7K J 1/16W	
						R213			RK73HB1J123J	CHIP R 12K J 1/16W	

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Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R214			RK73HB1J334J	CHIP R 330K J 1/16W		R319			RK73HB1J473J	CHIP R 47K J 1/16W	
R215			RK73HB1J332J	CHIP R 3.3K J 1/16W		R320			RK73HB1J563J	CHIP R 56K J 1/16W	
R216			RK73HB1J472J	CHIP R 4.7K J 1/16W		R321			RK73HB1J823J	CHIP R 82K J 1/16W	
R217			RK73HB1J334J	CHIP R 330K J 1/16W		R322			RK73HB1J154J	CHIP R 150K J 1/16W	
R218			RK73HB1J123J	CHIP R 12K J 1/16W		R323			RK73HB1J823J	CHIP R 82K J 1/16W	
R219			RK73HB1J224J	CHIP R 220K J 1/16W		R324,325			RK73HB1J334J	CHIP R 330K J 1/16W	
R220			RK73HB1J332J	CHIP R 3.3K J 1/16W		R326			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R221		*	RK73HH1J332D	CHIP R 3.3K D 1/16W		R327			RK73HB1J473J	CHIP R 47K J 1/16W	
R222			RK73HB1J220J	CHIP R 22 J 1/16W		R328			RK73HB1J104J	CHIP R 100K J 1/16W	
R223			RK73HB1J184J	CHIP R 180K J 1/16W		R329			RK73HB1J274J	CHIP R 270K J 1/16W	
R226			RK73HB1J221J	CHIP R 220 J 1/16W		R330			RK73HB1J184J	CHIP R 180K J 1/16W	
R227,228			RK73HB1J331J	CHIP R 330 J 1/16W		R331			RK73HB1J124J	CHIP R 120K J 1/16W	
R229			RK73HB1J472J	CHIP R 4.7K J 1/16W		R332			RK73HB1J474J	CHIP R 470K J 1/16W	
R230			RK73HB1J000J	CHIP R 0.0 J 1/16W		R333			RK73HB1J473J	CHIP R 47K J 1/16W	
R232			RK73HB1J102J	CHIP R 1.0K J 1/16W		R334			RK73HB1J184J	CHIP R 180K J 1/16W	
R233			RK73HB1J151J	CHIP R 150 J 1/16W		R336-338			RK73HB1J223J	CHIP R 22K J 1/16W	
R234			RK73HB1J104J	CHIP R 100K J 1/16W		R339-341			RK73HB1J103J	CHIP R 10K J 1/16W	
R235			RK73HB1J563J	CHIP R 56K J 1/16W		R342			RK73HB1J223J	CHIP R 22K J 1/16W	
R236			RK73HB1J104J	CHIP R 100K J 1/16W		R343			RK73HB1J103J	CHIP R 10K J 1/16W	
R237			RK73HB1J563J	CHIP R 56K J 1/16W		R344,345			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R238			RK73HB1J000J	CHIP R 0.0 J 1/16W		R346			RK73HB1J473J	CHIP R 47K J 1/16W	
R239-241			RK73HB1J105J	CHIP R 1.0M J 1/16W		R347			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R243			RK73HB1J221J	CHIP R 220 J 1/16W		R348			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R244			RK73HB1J104J	CHIP R 100K J 1/16W		R349,350			RK73HB1J473J	CHIP R 47K J 1/16W	
R246			RK73HB1J104J	CHIP R 100K J 1/16W		R351			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R247			RK73HB1J683J	CHIP R 68K J 1/16W		R352,353			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R248,249			RK73HB1J105J	CHIP R 1.0M J 1/16W		R354			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R250			RK73HB1J102J	CHIP R 1.0K J 1/16W		R356			RK73HB1J473J	CHIP R 47K J 1/16W	
R252			RK73HB1J470J	CHIP R 47 J 1/16W		R357			RK73HB1J471J	CHIP R 470 J 1/16W	
R253			RK73GB2A000J	CHIP R 0.0 J 1/10W		R359			RK73HB1J153J	CHIP R 15K J 1/16W	
R254			RK73HB1J470J	CHIP R 47 J 1/16W		R360			RK73HB1J182J	CHIP R 1.8K J 1/16W	
R255			RK73HH1J272D	CHIP R 2.7K D 1/16W		R361			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R256			RK73HB1J473J	CHIP R 47K J 1/16W		R362			RK73HB1J473J	CHIP R 47K J 1/16W	
R259			RK73HB1J473J	CHIP R 47K J 1/16W		R363			RK73HB1J124J	CHIP R 120K J 1/16W	
R260			RK73HB1J223J	CHIP R 22K J 1/16W		R364			RK73HB1J104J	CHIP R 100K J 1/16W	
R264			RK73HB1J181J	CHIP R 180 J 1/16W		R365			RK73HB1J473J	CHIP R 47K J 1/16W	
R265			RK73HB1J334J	CHIP R 330K J 1/16W		R366			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R266			RK73HB1J272J	CHIP R 2.7K J 1/16W		R367			RK73HB1J103J	CHIP R 10K J 1/16W	
R267			RK73HB1J334J	CHIP R 330K J 1/16W		R368			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R268			RK73HB1J221J	CHIP R 220 J 1/16W		R369			RK73HB1J563J	CHIP R 56K J 1/16W	
R270			RK73FB2B000J	CHIP R 0.0 J 1/8W		R370			RK73HB1J104J	CHIP R 100K J 1/16W	
R273			RK73HB1J000J	CHIP R 0.0 J 1/16W		R371			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R276			RK73HB1J000J	CHIP R 0.0 J 1/16W		R372			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R300			RK73HB1J154J	CHIP R 150K J 1/16W		R373			RK73HB1J124J	CHIP R 120K J 1/16W	
R301			RK73HB1J104J	CHIP R 100K J 1/16W		R374			RK73HB1J104J	CHIP R 100K J 1/16W	
R303			RK73HB1J474J	CHIP R 470K J 1/16W		R376			RK73HB1J103J	CHIP R 10K J 1/16W	
R304			RK73HB1J394J	CHIP R 390K J 1/16W		R377			RK73HB1J104J	CHIP R 100K J 1/16W	
R305			RK73HB1J153J	CHIP R 15K J 1/16W		R378			RK73HB1J101J	CHIP R 100 J 1/16W	
R307			RK73HB1J103J	CHIP R 10K J 1/16W		R379			RK73HB1J821J	CHIP R 820 J 1/16W	
R308			RK73HB1J472J	CHIP R 4.7K J 1/16W		R380,381			RK73HB1J101J	CHIP R 100 J 1/16W	
R309			RK73HB1J000J	CHIP R 0.0 J 1/16W		R382			RK73HB1J103J	CHIP R 10K J 1/16W	
R310			RK73HB1J473J	CHIP R 47K J 1/16W		R383			RK73HB1J101J	CHIP R 100 J 1/16W	
R311			RK73HB1J154J	CHIP R 150K J 1/16W		R384			RK73HB1J331J	CHIP R 330 J 1/16W	
R312			RK73HB1J104J	CHIP R 100K J 1/16W		R385			RK73HB1J470J	CHIP R 47 J 1/16W	
R313			RK73HB1J103J	CHIP R 10K J 1/16W		R386			RK73HB1J331J	CHIP R 330 J 1/16W	
R314			RK73HB1J474J	CHIP R 470K J 1/16W		R387			RK73FB2B104J	CHIP R 100K J 1/8W	
R315			RK73HB1J472J	CHIP R 4.7K J 1/16W		R388			RK73HB1J474J	CHIP R 470K J 1/16W	
R316			RK73HB1J104J	CHIP R 100K J 1/16W		R389			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R317			RK73HB1J184J	CHIP R 180K J 1/16W		R390			RK73HB1J821J	CHIP R 820 J 1/16W	
R318			RK73HB1J223J	CHIP R 22K J 1/16W		R391,392			RK73HB1J331J	CHIP R 330 J 1/16W	

PARTS LIST

TX-RX UNIT (X57-6410-XX)

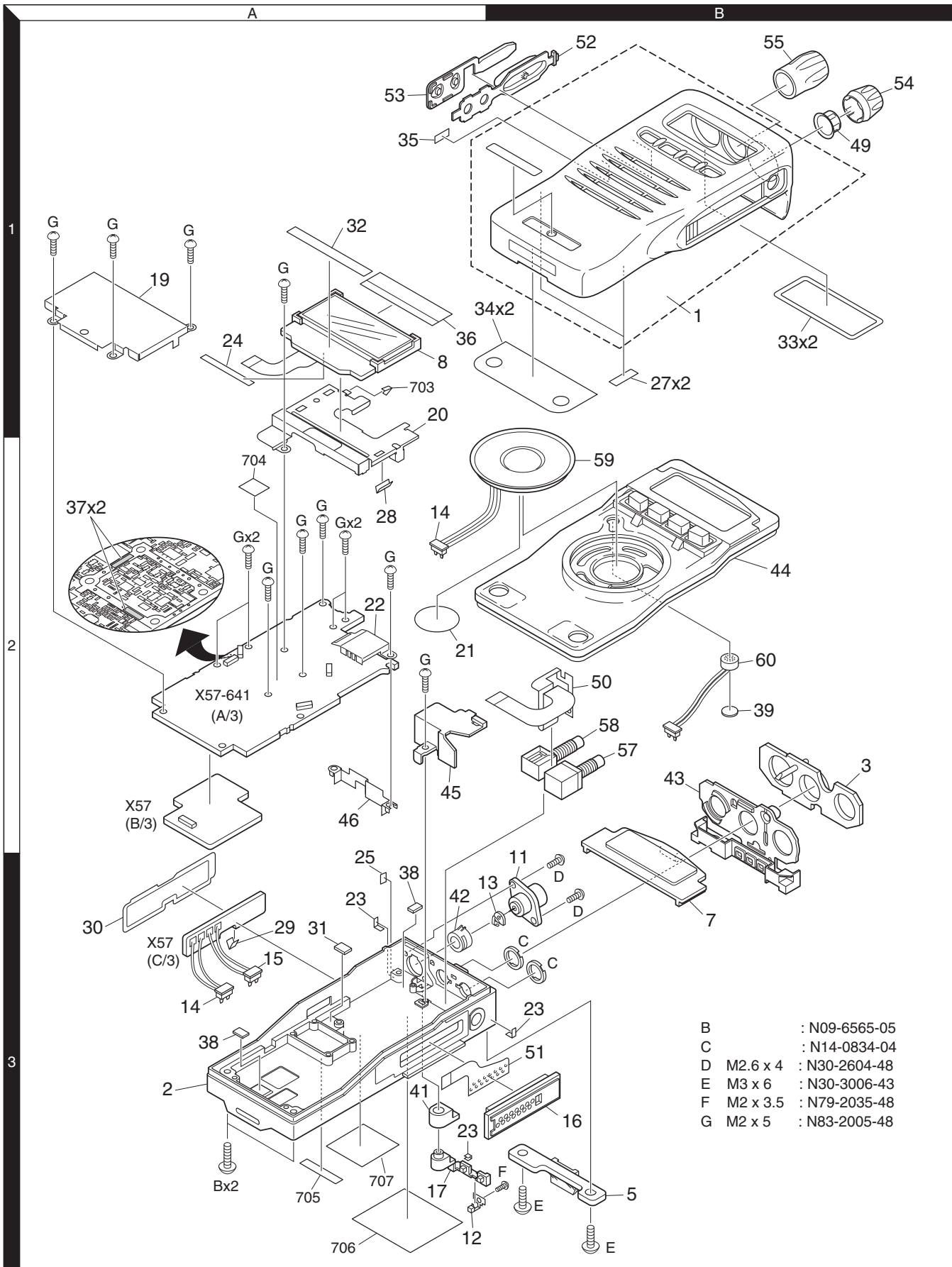
Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
R393			RK73HB1J000J	CHIP R 0.0 J 1/16W	K3 K	S600-602			S70-0457-05	TACT SWITCH	
R393			RK73HB1J273J	CHIP R 27K J 1/16W			D1 -4			1SV325F	VARIABLE CAPACITANCE DIODE
R397,398			RK73HB1J000J	CHIP R 0.0 J 1/16W		D5			1SV278F	VARIABLE CAPACITANCE DIODE	
R400			RK73HB1J103J	CHIP R 10K J 1/16W		D6			MA2S111-F	DIODE	
R401,402			RK73HH1J474D	CHIP R 470K D 1/16W		D11			MA2S077G	DIODE	K3 K
						D11 ,12			MA2S077G	DIODE	
R403			RK73HB1J334J	CHIP R 330K J 1/16W		D13 ,14			HSC277	DIODE	
R404			RK73HB1J105J	CHIP R 1.0M J 1/16W		D100,101			HSC277	DIODE	
R405			RK73GB2A000J	CHIP R 0.0 J 1/10W		D102-105			HVC131	DIODE	
R406			RK73HB1J103J	CHIP R 10K J 1/16W		D106			HZU5CLL	ZENER DIODE	
R407			RK73HB1J224J	CHIP R 220K J 1/16W		D200			HVC131	DIODE	
R408			RK73HB1J472J	CHIP R 4.7K J 1/16W		D201			RB706F-40	DIODE	
R409			RK73HB1J473J	CHIP R 47K J 1/16W		D202,203			DAN235E	DIODE	
R410			RK73HB1J102J	CHIP R 1.0K J 1/16W		D204-208			HVC369B	VARIABLE CAPACITANCE DIODE	
R411			RK73HB1J471J	CHIP R 470 J 1/16W		D209			MA2S111-F	DIODE	
R413			RK73HB1J105J	CHIP R 1.0M J 1/16W		D301	*		KDR367E-P	DIODE	
R414			RK73HB1J103J	CHIP R 10K J 1/16W		D302			DA221	DIODE	
R500			RK73HB1J000J	CHIP R 0.0 J 1/16W		D302,304			015AZ6.8F	ZENER DIODE	
R501			RK73HH1J913D	CHIP R 91K D 1/16W		D305			015AZ2.4(X)F	ZENER DIODE	
R502			RK73HH1J683D	CHIP R 68K D 1/16W		D306			DA221	DIODE	
R503			RK73HH1J333D	CHIP R 33K D 1/16W		D307			015AZ6.8F	ZENER DIODE	
R504			RK73HH1J913D	CHIP R 91K D 1/16W		D308			NNCD6.8G-A	ZENER DIODE	
R505			RK73HB1J564J	CHIP R 560K J 1/16W		D402			GN1G	DIODE	
R506			RK73HB1J000J	CHIP R 0.0 J 1/16W		D403			MA2S111-F	DIODE	
R507			RK73HH1J274D	CHIP R 270K D 1/16W		D405			RB521S-30	DIODE	
R508			RK73HH1J913D	CHIP R 91K D 1/16W		D501			RB706F-40	DIODE	
R509			RK73HB1J000J	CHIP R 0.0 J 1/16W		IC1			ADF4111BCP7	MOS-IC	
R510			RK73HH1J682D	CHIP R 6.8K D 1/16W		IC100			TA75W01FUF	MOS-IC	
R511			RK73GB2A155J	CHIP R 1.5M J 1/10W		IC200			TA31136FNG	MOS-IC	
R512			RK73HH1J683D	CHIP R 68K D 1/16W		IC201			TC75W51FK(F)	MOS-IC	
R513			RK73HB1J474J	CHIP R 470K J 1/16W		IC300			TK62012F	MOS-IC	
R514			RK73HH1J682D	CHIP R 6.8K D 1/16W		IC301			LC73872M	MOS-IC	
R515			RK73HB1J101J	CHIP R 100 J 1/16W		IC302,303			TK62012F	MOS-IC	
R516			RK73HB1J184J	CHIP R 180K J 1/16W		IC304			TC75S51FE(F)	MOS-IC	
R517			RK73HB1J103J	CHIP R 10K J 1/16W		IC305,306			TK62012F	MOS-IC	
R518			RK73HB1J223J	CHIP R 22K J 1/16W		IC307			M62364FP-F	MOS-IC	
R519			RK73HB1J102J	CHIP R 1.0K J 1/16W		IC308			AT29C02090TU	ROM IC	
R520			RK73HB1J472J	CHIP R 4.7K J 1/16W		IC309			30622MEP526GU	MCU	
R521			RK73HB1J394J	CHIP R 390K J 1/16W		IC310			EX24016ASAS0A	ROM IC	
R522			RK73HB1J333J	CHIP R 33K J 1/16W		IC311,312			BU4094BCFV	MOS-IC	
R523			RK73HB1J470J	CHIP R 47 J 1/16W		IC313			TDA7053AT	BI-POLAR IC	
R524			RK73HB1J224J	CHIP R 220K J 1/16W		IC400	*		XC61CN4202N-G	MOS-IC	
R525			RK73HB1J184J	CHIP R 180K J 1/16W		IC401			XC6209B502M-G	MOS-IC	
R526			RK73HB1J394J	CHIP R 390K J 1/16W		IC402			XC62GR5012P-G	MOS-IC	
R527			RK73HB1J224J	CHIP R 220K J 1/16W		IC403			XC6209B502M-G	MOS-IC	
R528			RK73HB1J220J	CHIP R 22 J 1/16W		IC404			XC61CN5002NR	MOS-IC	
R529			RK73HB1J473J	CHIP R 47K J 1/16W		IC500			TC35453FG6	MOS-IC	
R530			RK73HB1J474J	CHIP R 470K J 1/16W		IC501			TK62012F	MOS-IC	
R531			RK73HB1J184J	CHIP R 180K J 1/16W		Q1			2SC5488A-H	TRANSISTOR	
R532,533			RK73HB1J104J	CHIP R 100K J 1/16W		Q2 ,3			2SK508NV(K52)	FET	
R537			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q4			2SJ347F	FET	
R603-611			RK73HB1J471J	CHIP R 470 J 1/16W		Q5			2SC5108(Y)F	TRANSISTOR	
R612,613			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q6			RN47A4-F	TRANSISTOR	
R614,615			RK73HB1J473J	CHIP R 47K J 1/16W		Q7			2SC4617(S)	TRANSISTOR	
R617,618			RK73HB1J473J	CHIP R 47K J 1/16W		Q8			2SC5108(Y)F	TRANSISTOR	
R619			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q100			2SC5108(Y)F	TRANSISTOR	
R620			RK73HB1J473J	CHIP R 47K J 1/16W		Q101	*		2SC5191-A	TRANSISTOR	
R621			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q103			2SK2596-E	FET	
R623			RK73HB1J000J	CHIP R 0.0 J 1/16W							
R740			RK73HB1J473J	CHIP R 47K J 1/16W							

PARTS LIST

TX-RX UNIT (X57-6410-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
Q104,105			RT1N141U-T111	TRANSISTOR							
Q106			2SK3476-F	FET							
Q107			2SK1824-A	FET							
Q108			RT1P441U-T111	TRANSISTOR							
Q201			RT1N441U-T111	TRANSISTOR							
Q202			RN47A4-F	TRANSISTOR							
Q203			2SK1824-A	FET							
Q204			2SK1830F	FET							
Q205			2SC4649(N,P)	TRANSISTOR							
Q206,207			3SK318	FET							
Q208			2SC4617(S)	TRANSISTOR							
Q300			2SC4649(N,P)	TRANSISTOR							
Q301			2SJ347F	FET							
Q302			2SC4617(S)	TRANSISTOR							
Q303			2SB1132(Q,R)	TRANSISTOR							
Q304			2SC4617(S)	TRANSISTOR							
Q305			UPA672T-A	FET							
Q306			2SC4617(S)	TRANSISTOR							
Q307			UPA672T-A	FET							
Q308			2SK1824-A	FET							
Q309,310			2SC4617(S)	TRANSISTOR							
Q311		*	2SA1362-F(Y)	TRANSISTOR							
Q312			RT1N441U-T111	TRANSISTOR							
Q400			2SJ347F	FET							
Q401			2SK1830F	FET							
Q403			RT1N441U-T111	TRANSISTOR							
Q404			2SJ347F	FET							
Q405			KTA2015(Y)	TRANSISTOR							
Q406			2SJ347F	FET							
Q500			RT1N441U-T111	TRANSISTOR							
Q501			UPA672T-A	FET							
Q502			2SK1830F	FET							
TH1			ERTJ0EV104H	THERMISTOR							
TH200			ERTJ0EV104H	THERMISTOR							
TH300			TN10-3S154JT	THERMISTOR							

EXPLODED VIEW



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

ADJUSTMENT

Test Mode

■ Test mode operating features



This transceiver has a test mode. **To enter test mode, press [A] key and turn power on. Hold [A] 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

Controls	"FCN" appears	"FCN" not appears
[PTT]	Used when making a transmission.	Used when making a transmission.
[AUX]	Unused	Unused
[MON] (SW1)	Monitor ON and OFF.	Monitor ON and OFF.
[LAMP] (SW2)	Lights the lamp for five seconds. Lighting is extended for a further five seconds by pressing any key while the lamp is lit.	Changes wide and narrow.
[S]	Sets to the Tuning mode.	Sets to the Tuning mode.
[A]	Function OFF	Function ON.
[B]	Compander function ON and OFF.	RF power HIGH and LOW.
[C]	Beat shift ON and OFF	Changes signalling.
[O] to [9], and [#],[*]	Used as the DTMF keypad. If a key is pressed during transmission, the DTMF corresponding to the key that was pressed is sent. (keypad model)	Used as the DTMF keypad. If a key is pressed during transmission, the DTMF corresponding to the key that was pressed is sent. (keypad model)
[ENCODER]	Changes channel.	Changes channel.

Note: If a [S],[A],[B],[C] key is pressed during transmission, the DTMF corresponding to the key that was pressed is sent.

• LCD indicator

"SCN"	Unused
" 	Lights at Compander ON.
"LO"	Lights at RF Power Low.
"P"	Unused
"MON"	Lights at moniter ON.
"SVC"	Unused
" 	Unused

• LED indicator

Red LED	Lights during transmission. Blinks at the low battery voltage warning.
Green LED	Lights when there is a carrier.

• Sub LCD indicator

"FCN"	appears at Function ON.
"n"	appears at Narrow ON.

■ 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.	K	
	RX (MHz)	TX (MHz)
1	470. 05	470. 10
2	450. 05	450. 10
3	489. 95	489. 90
4	470. 00	470. 00
5	470. 20	470. 20
6	470. 40	470. 40
7~16	—	—

Channel No.	K3	
	RX (MHz)	TX (MHz)
1	415. 05	415. 10
2	400. 05	400. 10
3	429. 95	429. 90
4	415. 00	415. 00
5	415. 20	415. 20
6	415. 40	415. 40
7~16	—	—

ADJUSTMENT

Signalling

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

- **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).

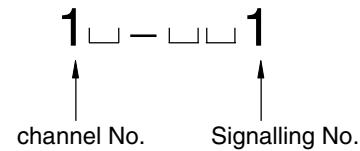
The speaker output connector must be terminated with a 16Ω dummy load and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement meter at all times during tuning.

- **Transceiver tuning**

(To place transceiver in tuning mode)

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

LCD display (Test mode)



Press [S], now in tuning mode. Use [◀B] button to write tuning data through tuning modes, and channel selector knob to adjust tuning requirements (1 to 256 appears on LCD).

Use [C▶] button to select the adjustment item through tuning modes. Use [A] button to adjust 3 or 5 point tuning, and use [LAMP] button to switch between Wide/Narrow.

LCD display (Tuning mode)



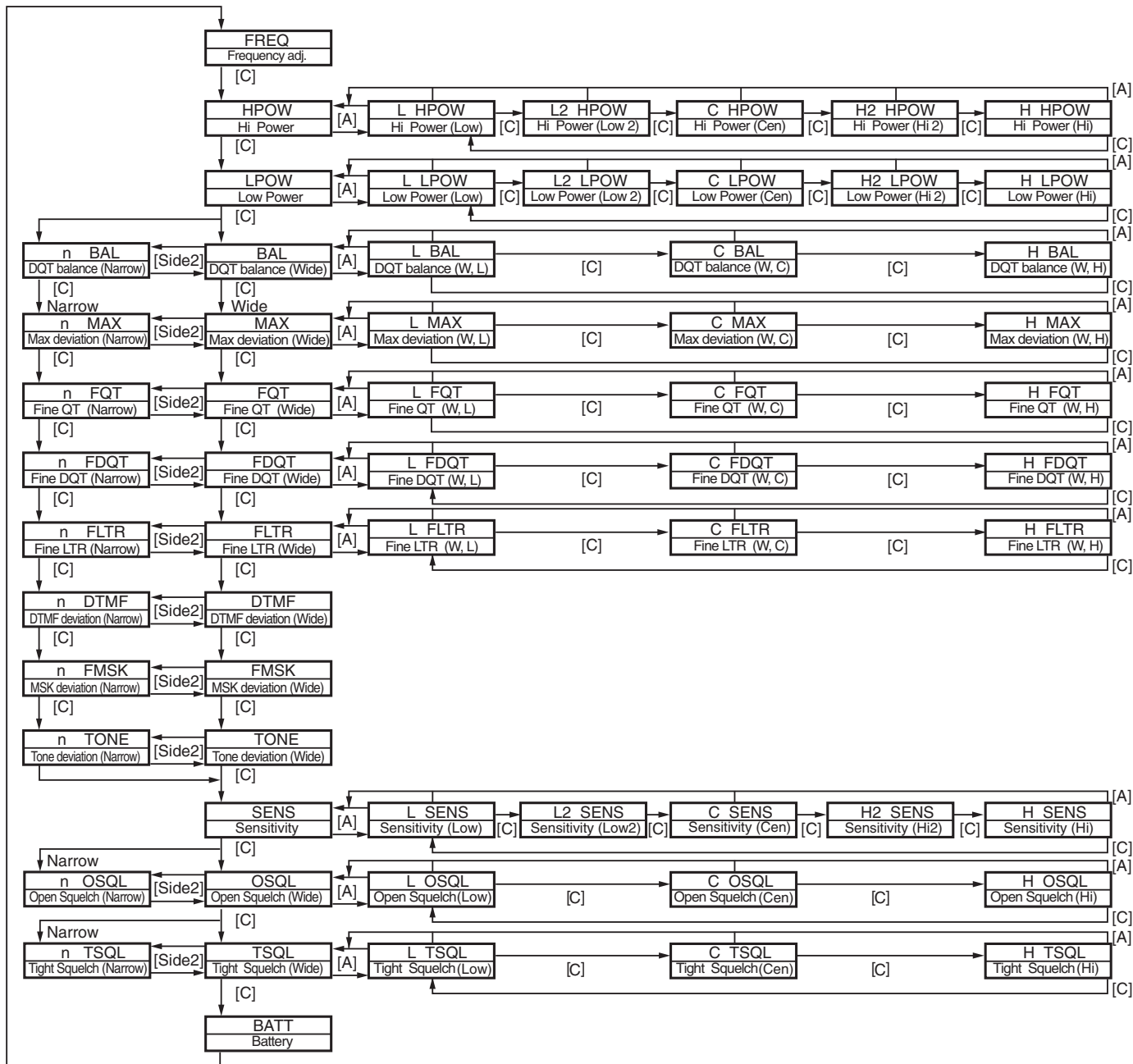
Panel Tuning Mode frequency table

TEST Ch	K	
	RX frequency (MHz)	TX frequency (MHz)
L	440.05	440.10
L2	450.05	450.10
C	470.05	470.10
H2	480.05	480.10
H	489.95	489.90

TEST Ch	K3	
	RX frequency (MHz)	TX frequency (MHz)
L	400.05	400.10
L2	415.05	415.10
C	430.05	430.10
H2	440.05	440.10
H	449.95	449.90

ADJUSTMENT

■ Panel Tuning Mode flow chart



ADJUSTMENT


Common Section

Item	Condition	Measurement			Adjustment			Specifications/ Remark
		Test equipment	Unit	Terminal	Unit	Parts	Method	
1. Setting	1) BATT terminal voltage:7.5V 2) SSG Standard modulation [Wide] MOD:1kHz, DEV:3kHz [Narrow] MOD:1kHz, DEV:1.5kHz							
2. VCO lock voltage	[Panel Test Mode]							
RX	1) CH-Sig:3-1	Power meter	Panel	ANT	TX-RX	TC2	4.1V:K 4.2V: K3	±0.1V
	2) CH-Sig:2-1	DVM	TX-RX	CV			Check	0.6V or more
TX	3) CH-Sig:3-1 PTT:ON					TC1	4.1V:K 4.2V: K3	±0.1V
	4) CH-Sig:2-1 PTT:ON						Check	0.6V or more

Transmitter Section

Item	Condition	Measurement			Adjustment			Specifications/ Remark
		Test equipment	Unit	Terminal	Unit	Parts	Method	
1. Frequency Adjust	1) Adj item [FREQ] Adjust [***] PTT:ON	Power meter Ammeter	Panel	ANT	Panel	Encoder knob	Center frequency ± 100Hz	Note: After replacing the TCXO (X1), align using KPG-74D CPS.
2. Hight Power Adjust	1) Adj item [HPOW] Adjust [***] 2) Adj item [L HPOW]→[L2 HPOW]→[C HPOW]→[H2 HPOW]→[H HPOW] Adjust [***] PTT:ON					Encoder knob	4.0W	±0.1W 1.9A or less
								Note: For K3 type; The output power 4.0W ±0.1W cannot be obtained by adjusting [H HPOW] value, set the same value as [H2 HPOW].
3. Hight Power Check	[Panel Test Mode] 1) CH-Sig:1-1 PTT:ON 2) CH-Sig:2-1 PTT:ON 3) CH-Sig:3-1 PTT:ON						Check	3.7~4.3W 1.9A or less
4. Low Power Adjust	1) Adj item [LPOW] Adjust [***] 2) Adj item [L LPOW] →[L2 LPOW]→[C LPOW]→[H2 LPOW]→[H LPOW] Adjust [***] PTT:ON				Panel	Encoder knob	1.0W	±0.05W 1.0A or less
5. Low Power Check	[Panel Test Mode] 1) CH-Sig:1-1 Set low power (Push [B]) PTT:ON 2) CH-Sig:2-1 PTT:ON 3) CH-Sig:3-1 PTT:ON						Check	0.5~1.5W 1.0A or less

ADJUSTMENT

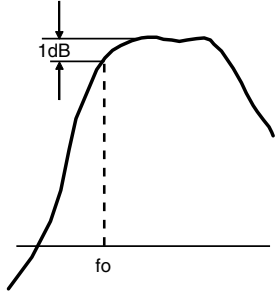
Item	Condition	Measurement			Adjustment			Specifications/ Remark	
		Test equipment	Unit	Terminal	Unit	Parts	Method		
6. DQT Balance Adjust [Wide]	1) Adj item [BAL] Adjust [***] LPF:3kHz HPF:OFF 2) Adj item [L BAL]→[C BAL]→[H BAL] Adjust [***] PTT:ON	Power meter Dev meter Oscilloscope AG AF VTVM	Panel	ANT Universal connector	Panel	Encoder knob	Make the demodulation waves into square waves.		
[Narrow]	3) Adj item [n BAL] Adjust [***] PTT:ON								
7. Max DEV Adjust [Wide]	1) Adj item [MAX] Adjust [***] AG:1kHz / 150mV Dev meter filter LPF:15kHz HPF:OFF 2) Adj item [L MAX]→[C MAX]→[H MAX] Adjust [***] PTT:ON								3.8kHz (According to the larger +,-)
[Narrow]	1) Adj item [n MAX] Adjust [***] PTT:ON	1.75kHz (According to the larger+,-)							
8. MIC Sensitivity Check	[Panel Test Mode] 1) CH-Sig:1-1 AG:1kHz / Wide:15mV Narrow:15mV LPF:15kHz PTT:ON		Check	Wide:2.4~3.6kHz Narrow:1.0~2.2kHz					
9. QT Deviation Adjust [Wide]	1) Adj item [FQT] Adjust [***] LPF:3kHz HPF:OFF 2) Adj item [L FQT]→[C FQT]→[H FQT] Adjust [***] PTT:ON	Power meter Dev meter Oscilloscope AG AF VTVM	Panel	ANT Universal connector	Panel	Encoder knob	0.75kHz	±50Hz	
[Narrow]	3) Adj item [n FQT] Adjust [***] PTT:ON								0.35kHz
10. DQT Devition Adjust [Wide]	1) Adj item [FDQT] Adjust [***] LPF:3kHz HPF:OFF 2) Adj item [L FDQT]→[C FDQT]→[H FDQT] Adjust [***] PTT:ON								0.75kHz
[Narrow]	3) Adj item [n FDQT] Adjust [***] PTT:ON	0.35kHz							

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/ Remark
		Test equipment	Unit	Terminal	Unit	Parts	Method	
11.LTR Deviation Adjust [Wide]	1) Adj item [FLTR] Adjust [LPF:3kHz HPF:OFF	Power meter Dev meter Oscilloscope AG AF VTVM	Panel	ANT Universal connector	Panel	Encoder knov	1.0kHz	±0.1kHz
	2) Adj item [L FLTR]→[C FLTR]→[H FLTR] Adjust [***] PTT:ON							
[Narrow]	3) Adj item [n FLTR] Adjust [***] PTT:ON						0.75kHz	±0.1kHz
12.DTMF Deviation Adjust [Wide]	1) Adj item [DTMF] Adjust [***] LPF:15kHz HPF:OFF PTT:ON						2.5kHz	±0.1kHz
	[Narrow]	2) Adj item [n DTMF] Adjust [***] PTT:ON					1.25kHz	±0.1kHz
13.MSK Deviation Adjust [Wide]	1) Adj item [FMSK] Adjust [***] LPF:15kHz HPF:OFF PTT:ON						3.0kHz	±0.1kHz
	[Narrow]	2) Adj item [n FMSK] Adjust [***] PTT:ON					1.5kHz	±0.1kHz
14.TONE Deviation Adjust [Wide]	1) Adj item [TONE] Adjust [***] LPF:15kHz HPF:OFF PTT:ON						3.0kHz	±0.1kHz
	[Narrow]	2) Adj item [n TONE] Adjust [***] PTT:ON					1.5kHz	±0.1kHz
15.BATT Detection Writing	1) Adj item [BATT] Adjust [***] PTT:ON	Power meter DVM	Panel	ANT BATT terminal	Panel	Encoder knob	After pressing the PTT switch, confirm that one predeter- mined numeric in the range 1 to 256 appears and then press [B] key. That numeric will be stored in memory.	BATT terminal voltage:6.2V
	16.BATT Detection Check							[Panel Test Mode] 1) CH-Sig:1-1 BATT terminal voltage: 6.8V, Use the battery jig W05-0909-00 PTT:ON
	2) BATT terminal voltage: 6.0V, Use the battery jig W05-0909-00 PTT:ON							Blinking of LED

ADJUSTMENT

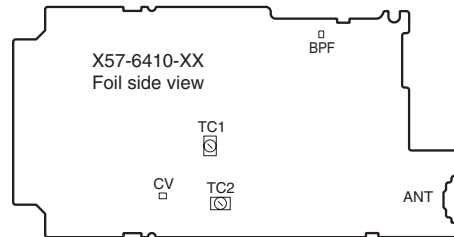
Receiver Section

Item	Condition	Measurement			Adjustment			Specifications/ Remark
		Test equipment	Unit	Terminal	Unit	Parts	Method	
1. Sensitivity Adjust (BPF characteristic)	1) Adj item [SENS] Adjust [***] 2) Low-edge frequency Adj item [L SENS]→[L2 SENS]→ [C SENS]→[H2 SENS]→ [H SENS] Spectrum analyzer setting Center-f : 450MHz(K) : 410MHz(K3) Span : 100MHz RBW : 100kHz VBW : 1kHz REF level : -50dBm ATT : 0dB Tracking generator setting Output level : -30dBm	Tracking generator Spectrum analyzer	Panel TX-RX	ANT BPF Need couple capacitor (1000PF)	Panel	Encoder knob	Adjustment Turn a knob and make "fo" level 1dB above from peak level. Caution Adjustment "SENS" value 60  fo=f L, f L2, f C, f H2, f H Adjust point frequency Refer to the Panel Tuning Mode frequency table on page 19.	
2. Sensitivity Check	[Panel Test Mode] 1) CH-Sig:1-1 SSG OUT Wide:-117dBm(0.32uV) (MOD:1kHz / ±3kHz) Narrow:-116dBm(0.35uV) (MOD:1kHz / ±1.5kHz)	SSG AF VTVM Oscilloscope	Panel	ANT Universal connector			Check	12dB SINAD or more
3. Squelch Adjust (Open)	1) Adj item [O SQL] Adjust [***] 2) Adj item [L OSQL]→[C OSQL]→[H OSQL] Adjust [***] SSG OUT: 12dB SINAD level 3) Adj item [n OSQL] Adjust [***] SSG OUT: 12dB SINAD level					Encoder knob squelch.	Adjust to point of opening	
4. Squelch Check (Open)	[Panel Test Mode] 1) CH-Sig:1-1 SSG OUT: 12dB SINAD level 2) SSG OUT: 12dB SINAD level-3dB						Check	Squelch must be opened. Squelch must be closed.

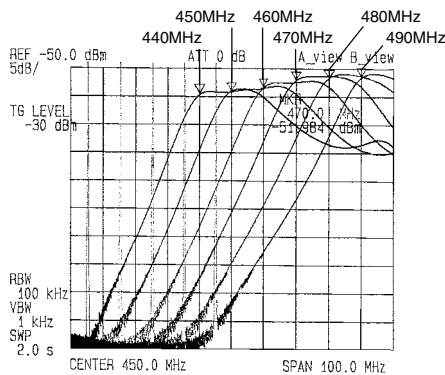
ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/ Remark
		Test equipment	Unit	Terminal	Unit	Parts	Method	
5. Squelch Adjust (Tight)	1) Adj item [T SQL] Adjust [***] 2) Adj item [L TSQL]→[C TSQL]→[H TSQL] Adjust [***] SSG OUT: 12dB SINAD level+5dB	SSG AF VTVM Oscilloscope	Panel	ANT Universal connector		Encoder knob	Adjust to point of opening squelch.	
	3) Adj item [n TSQL] Adjust [***] SSG OUT: 12dB SINAD level+5dB							
6. Squelch Check (Tight)	[Panel Test Mode] 1) CH-Sig:1-1 SSG OUT : 12dB SINAD level+5dB					Check	Squelch must be opened.	
	2) 12dB SINAD level-5dB						Squelch must be closed.	

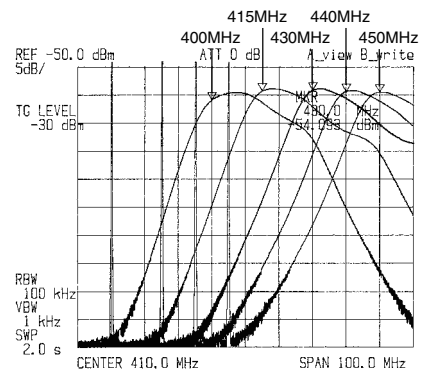
**Adjustment points
TX-RX unit (X57-6410-XX)
component side view**



Band Pass Filter Characteristic (K)

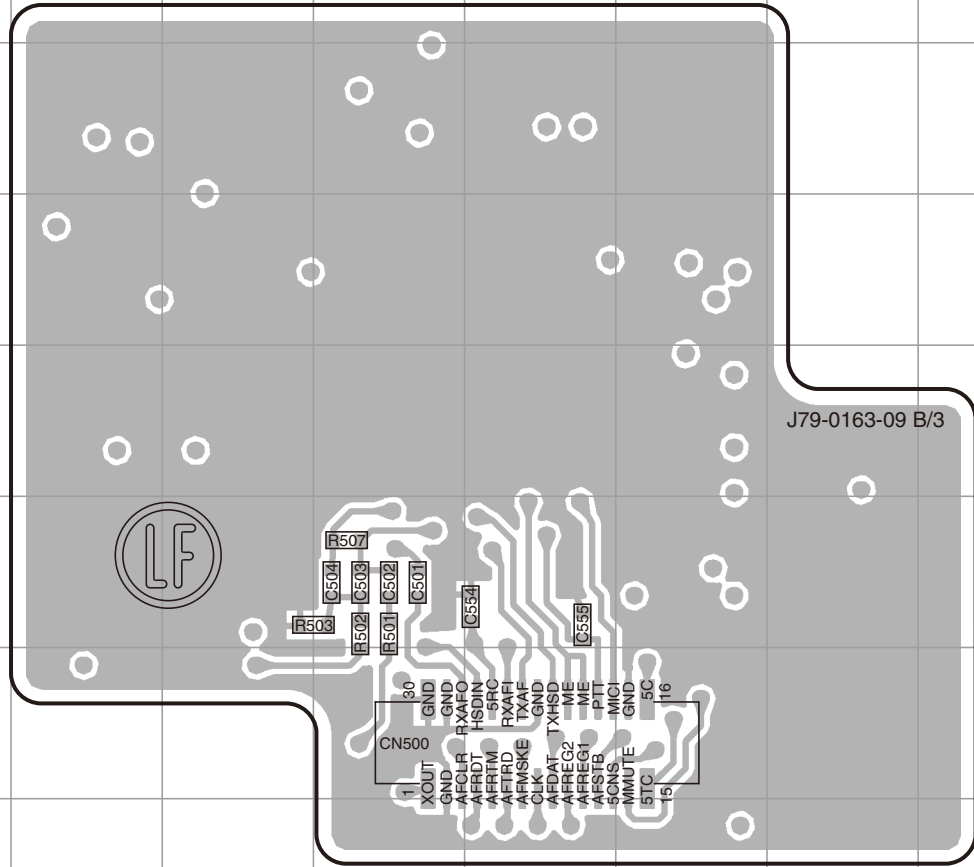


Band Pass Filter Characteristic (K3)

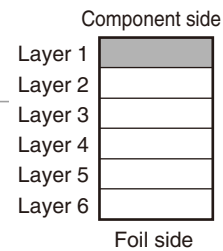
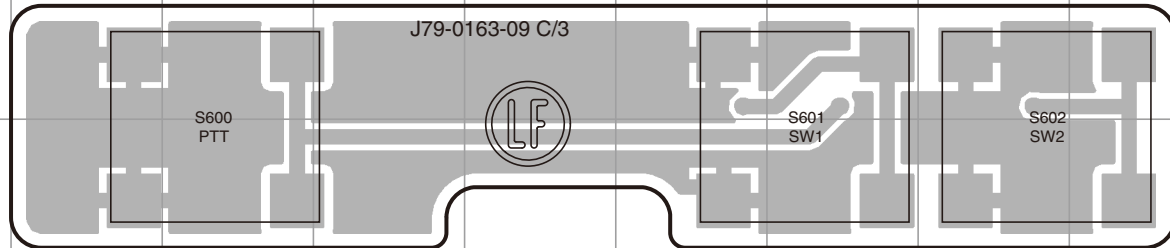


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TX-RX UNIT (X57-6410-XX) (B/3) Component side view (J79-0163-09 B/3)

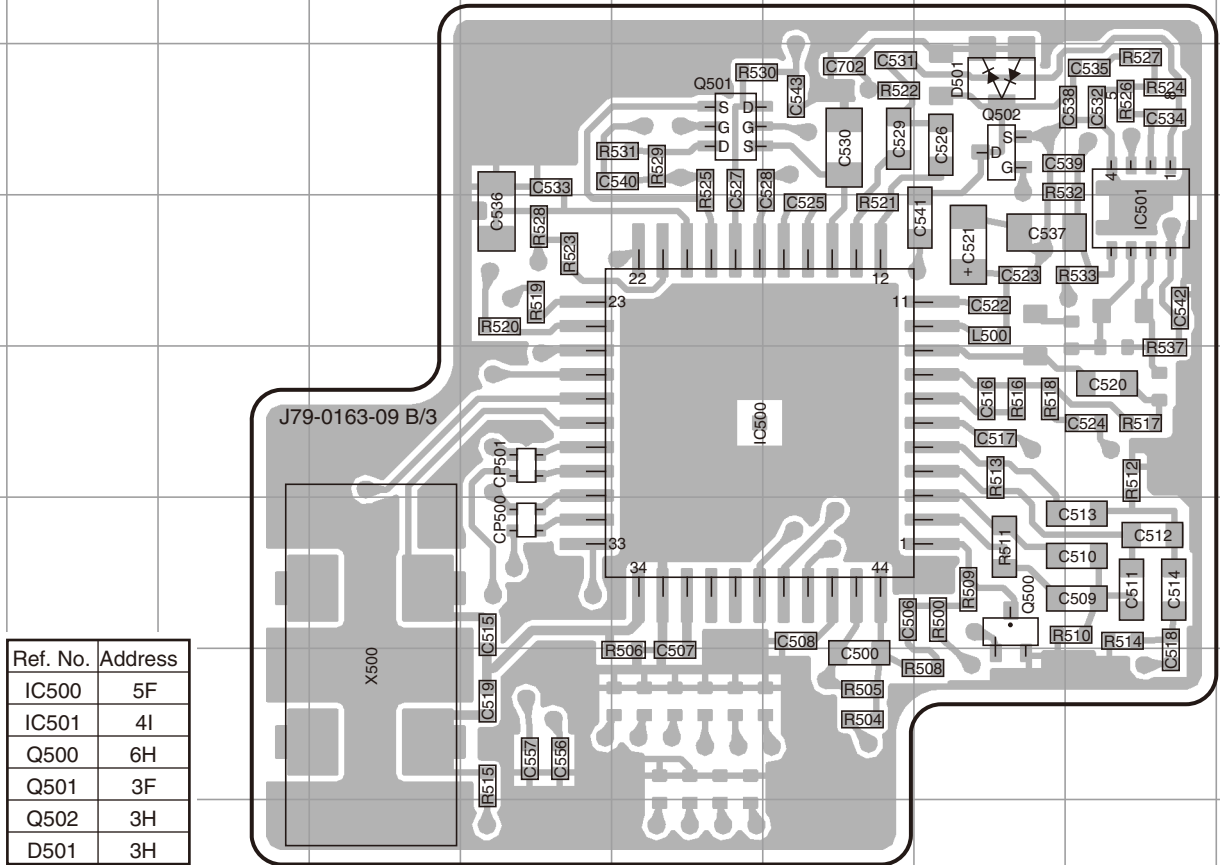


TX-RX UNIT (X57-6410-XX) (C/3) Component side view (J79-0163-09 C/3)



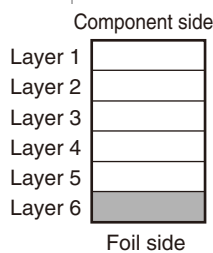
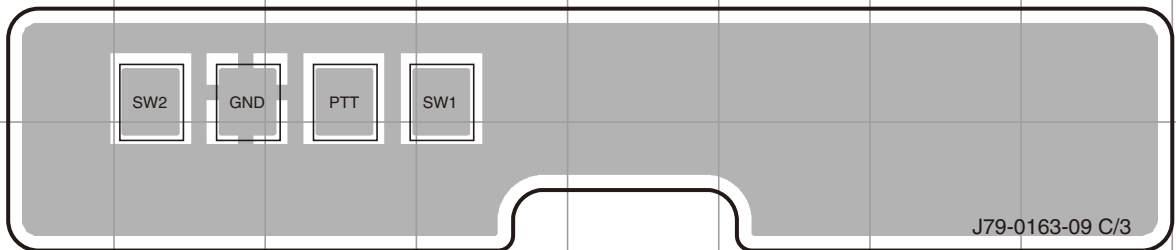
PC BOARD TK-3140

TX-RX UNIT (X57-6410-XX) (B/3) Foil side view (J79-0163-09 B/3)



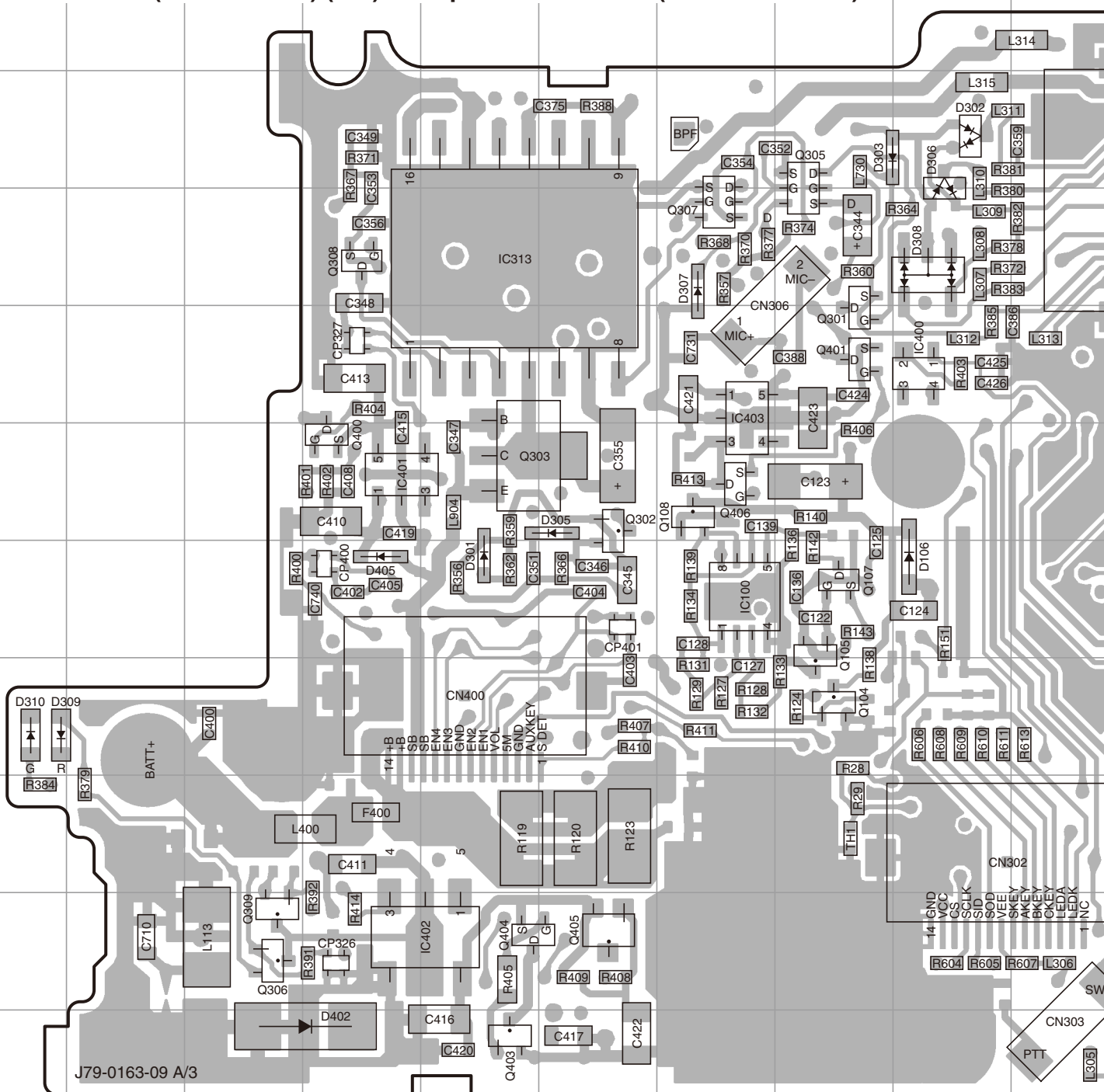
Ref. No.	Address
IC500	5F
IC501	4I
Q500	6H
Q501	3F
Q502	3H
D501	3H

TX-RX UNIT (X57-6410-XX) (C/3) Foil side view (J79-0163-09 C/3)



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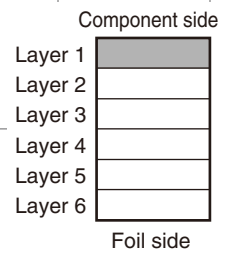
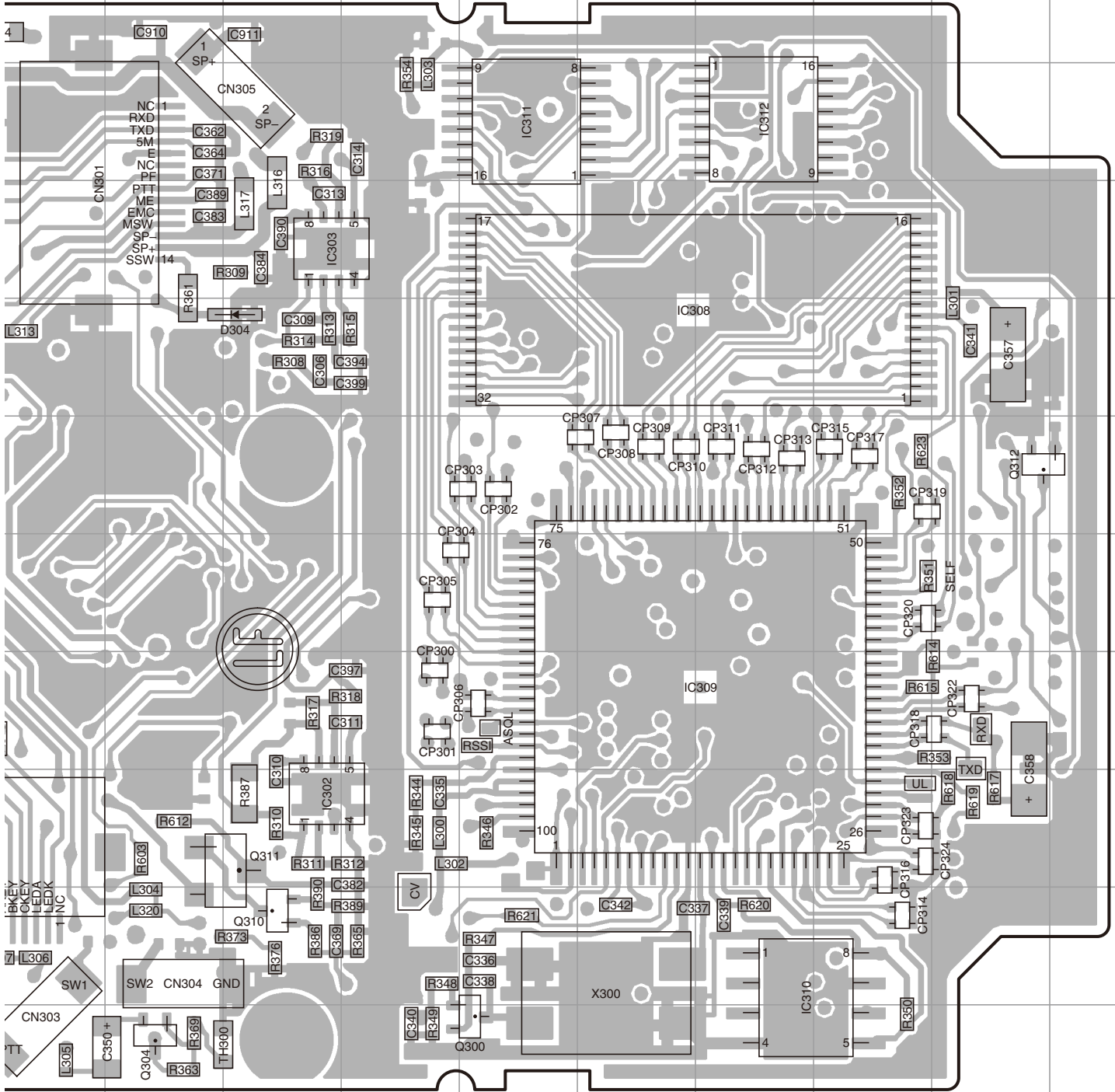
TX-RX UNIT (X57-6410-XX) (A/3) Component side view (J79-0163-09 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC100	7G	IC312	3P	Q105	7H	Q304	11K	Q311	9L	Q406	6G	D306	3I
IC302	9L	IC313	4E	Q107	7H	Q305	3H	Q312	6R	D106	7I	D307	4G
IC303	4L	IC400	5I	Q108	6G	Q306	10C	Q400	6D	D301	7E	D308	4I
IC308	5O	IC401	6D	Q300	11N	Q307	4G	Q401	5H	D302	3I	D309	8A
IC309	8P	IC402	10E	Q301	5H	Q308	4D	Q403	11E	D303	3H	D310	8A
IC310	10P	IC403	5G	Q302	6F	Q309	10C	Q404	10E	D304	5L	D402	11D
IC311	3N	Q104	8H	Q303	6E	Q310	10L	Q405	10F	D305	6F	D405	7D

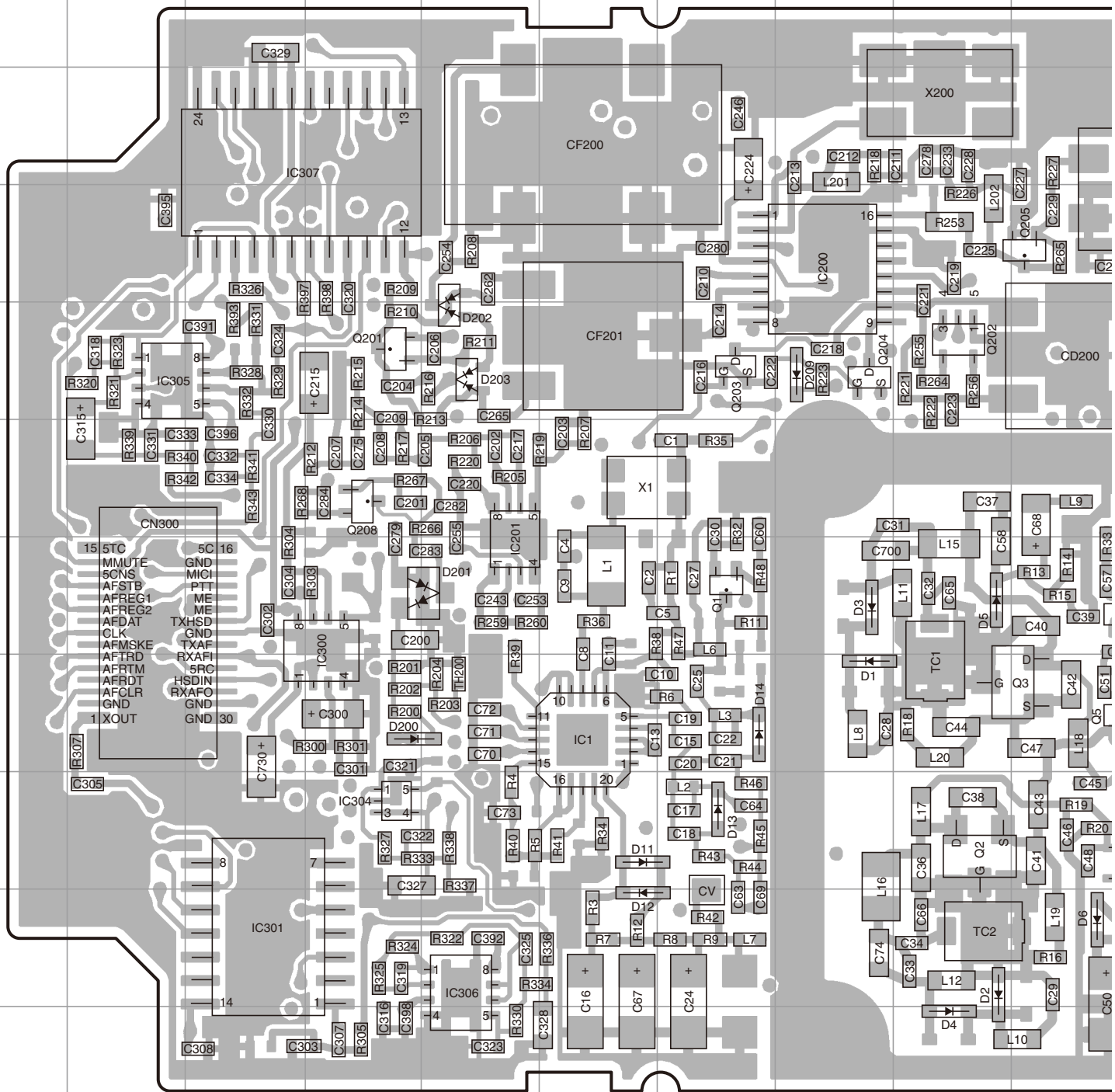
PC BOARD TK-3140

TX-RX UNIT (X57-6410-XX) (A/3) Component side view (J79-0163-09 A/3)



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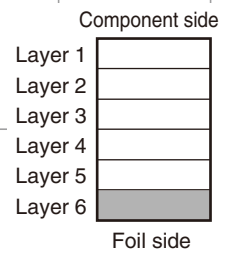
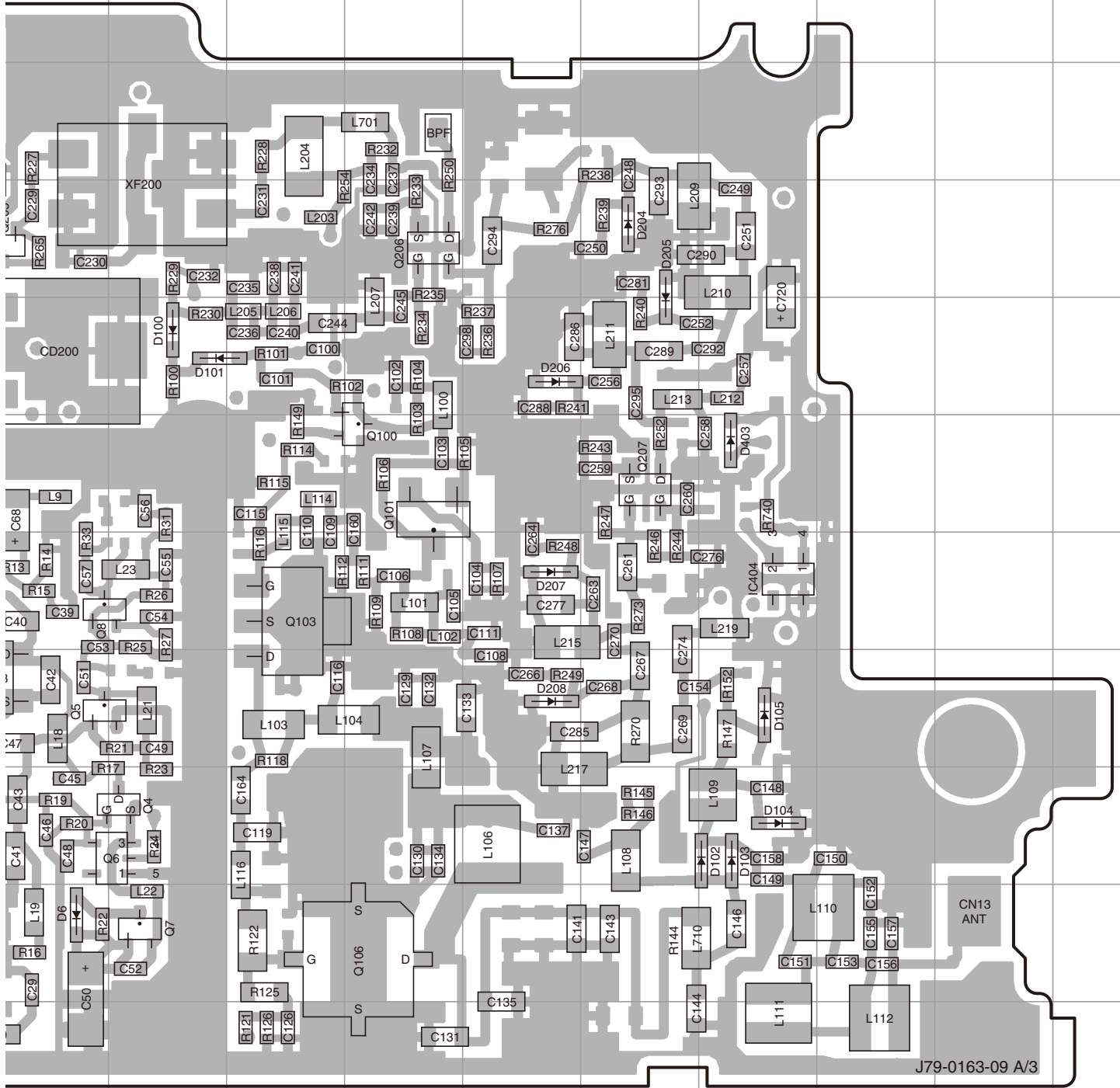
TX-RX UNIT (X57-6410-XX) (A/3) Foil side view (J79-0163-09 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	8F	IC307	3C	Q7	10K	Q203	5G	D3	7H	D100	5K	D202	5E
IC200	4H	IC404	7P	Q8	7J	Q204	5H	D4	11I	D101	5K	D203	5E
IC201	7E	Q1	7G	Q100	6M	Q205	4J	D5	7I	D102	9P	D204	4O
IC300	7D	Q2	9I	Q101	6M	Q206	4M	D6	10J	D103	9P	D205	4O
IC301	10C	Q3	8J	Q103	7L	Q207	6O	D11	9F	D104	9P	D206	5N
IC304	9D	Q4	9K	Q106	10M	Q208	6D	D12	10F	D105	8P	D207	7N
IC305	5B	Q5	8J	Q201	5D	D1	8H	D13	9G	D200	8D	D208	8N
IC306	10E	Q6	9K	Q202	5I	D2	10I	D14	8G	D201	7E	D209	5H

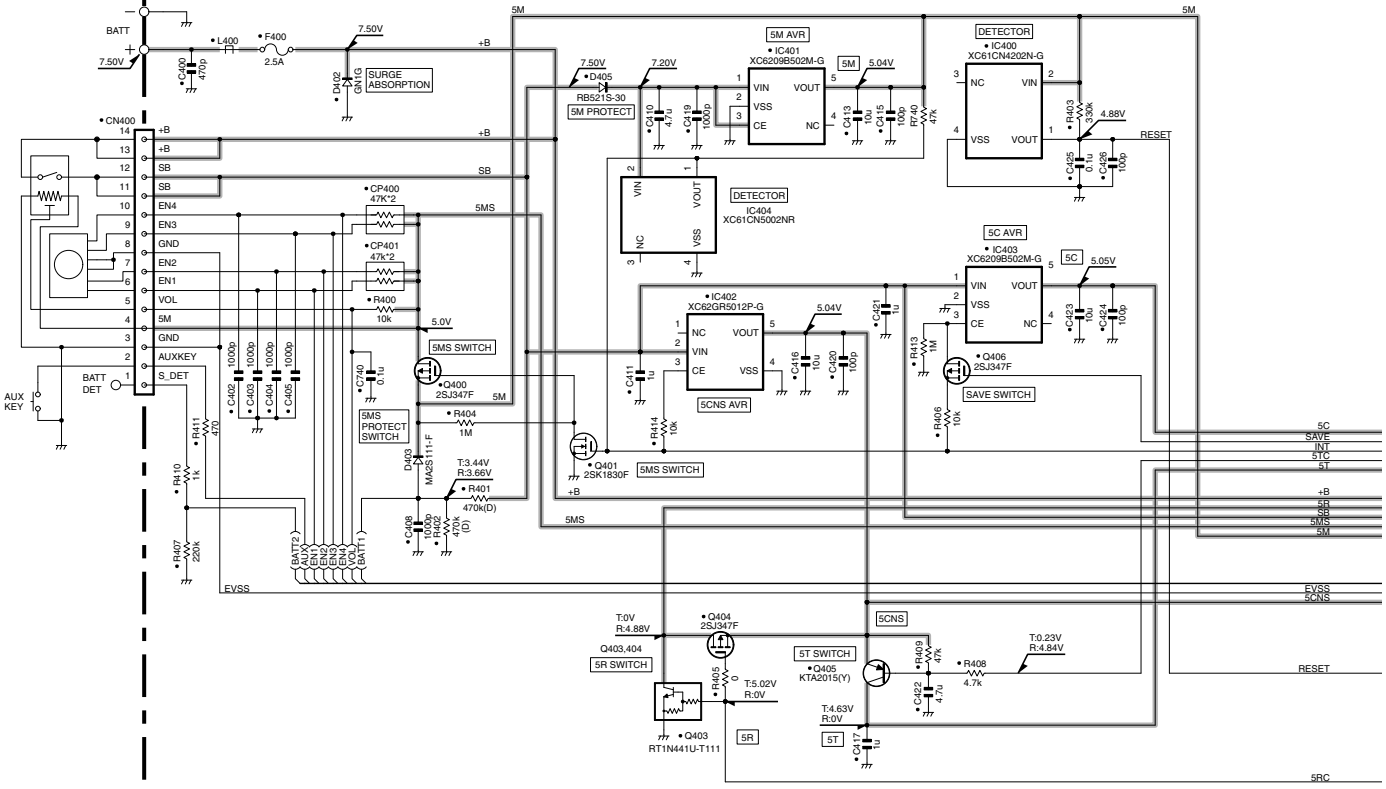
PC BOARD TK-3140

TX-RX UNIT (X57-6410-XX) (A/3) Foil side view (J79-0163-09 A/3)

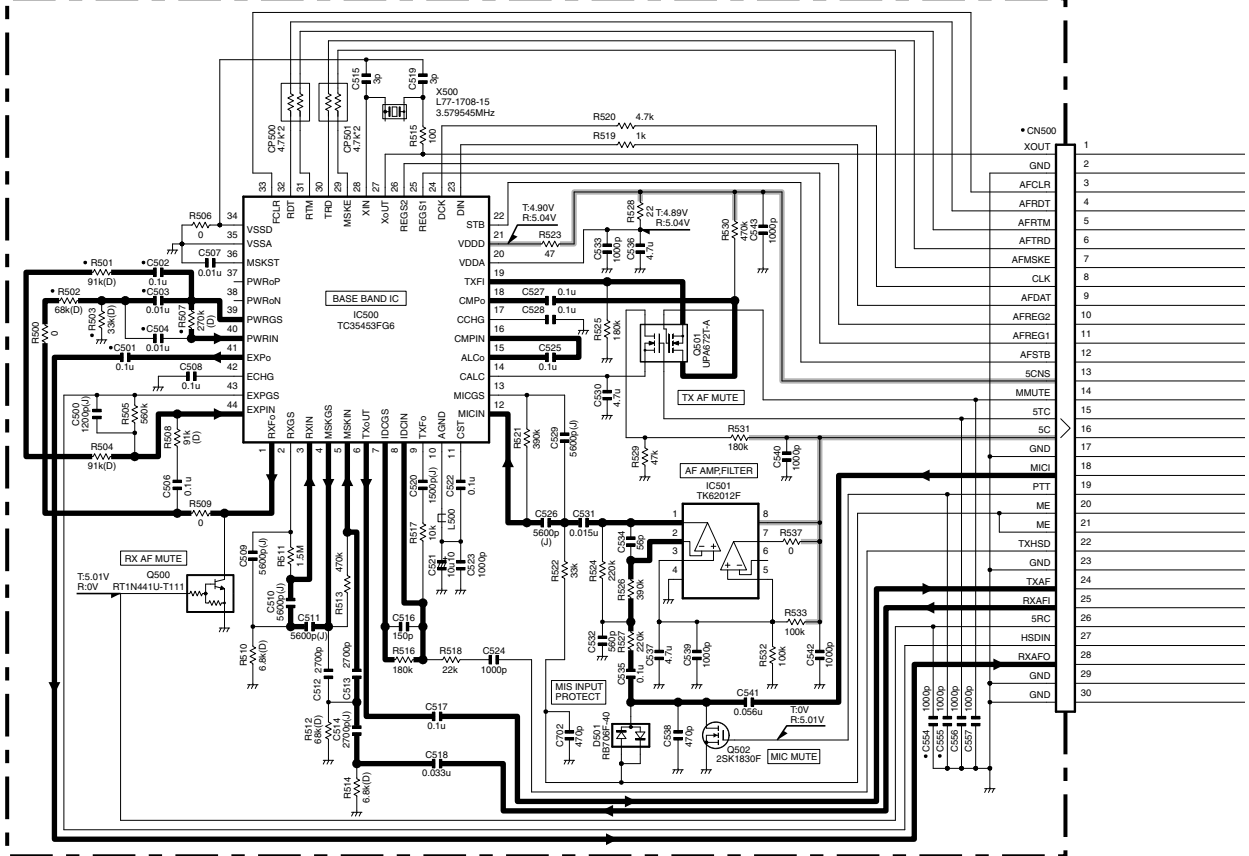


TK-3140 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-6410-XX) (A/3)

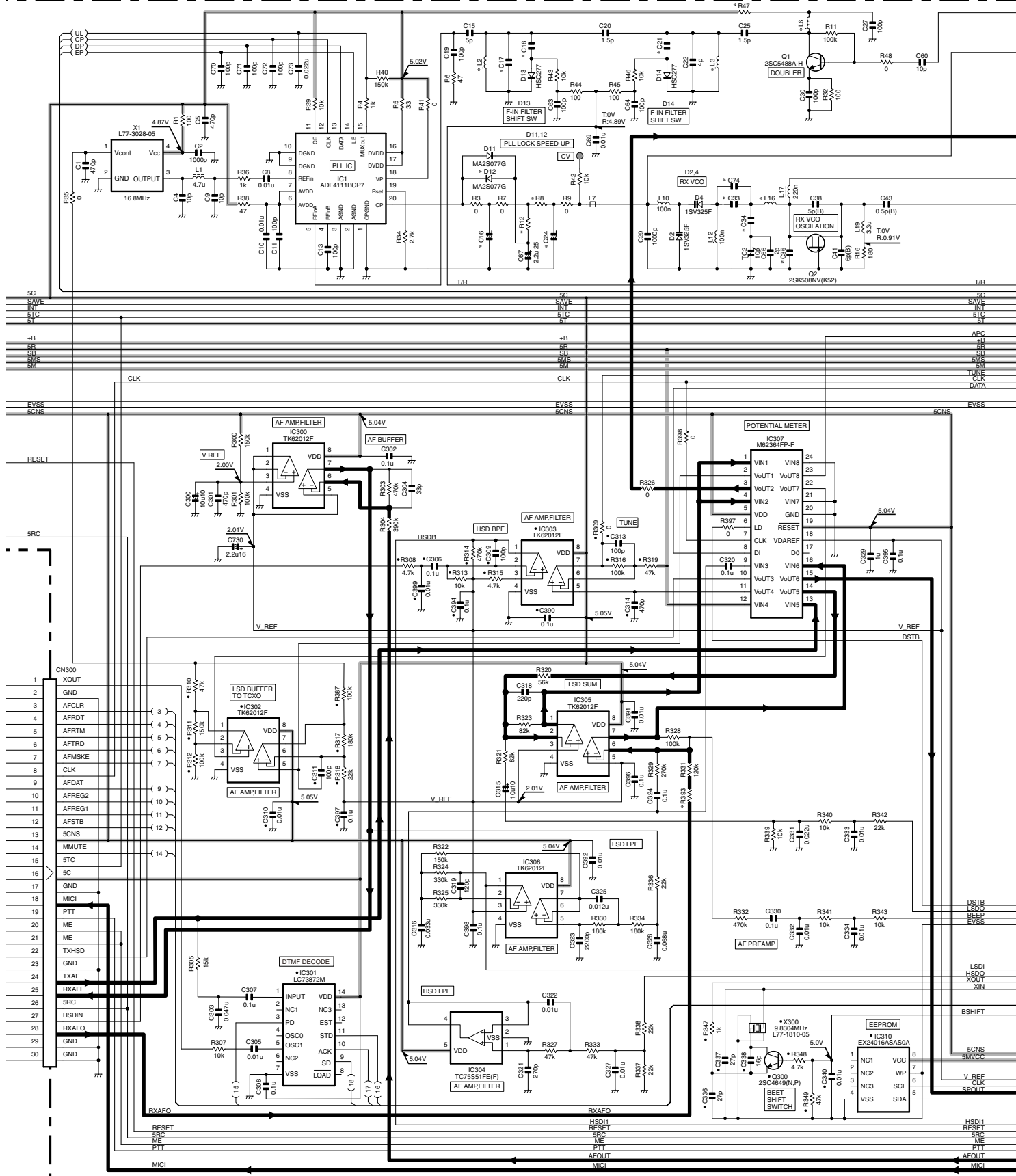


TX-RX UNIT (X57-6410-XX) (B/3)



SCHEMATIC DIAGRAM TK-3140

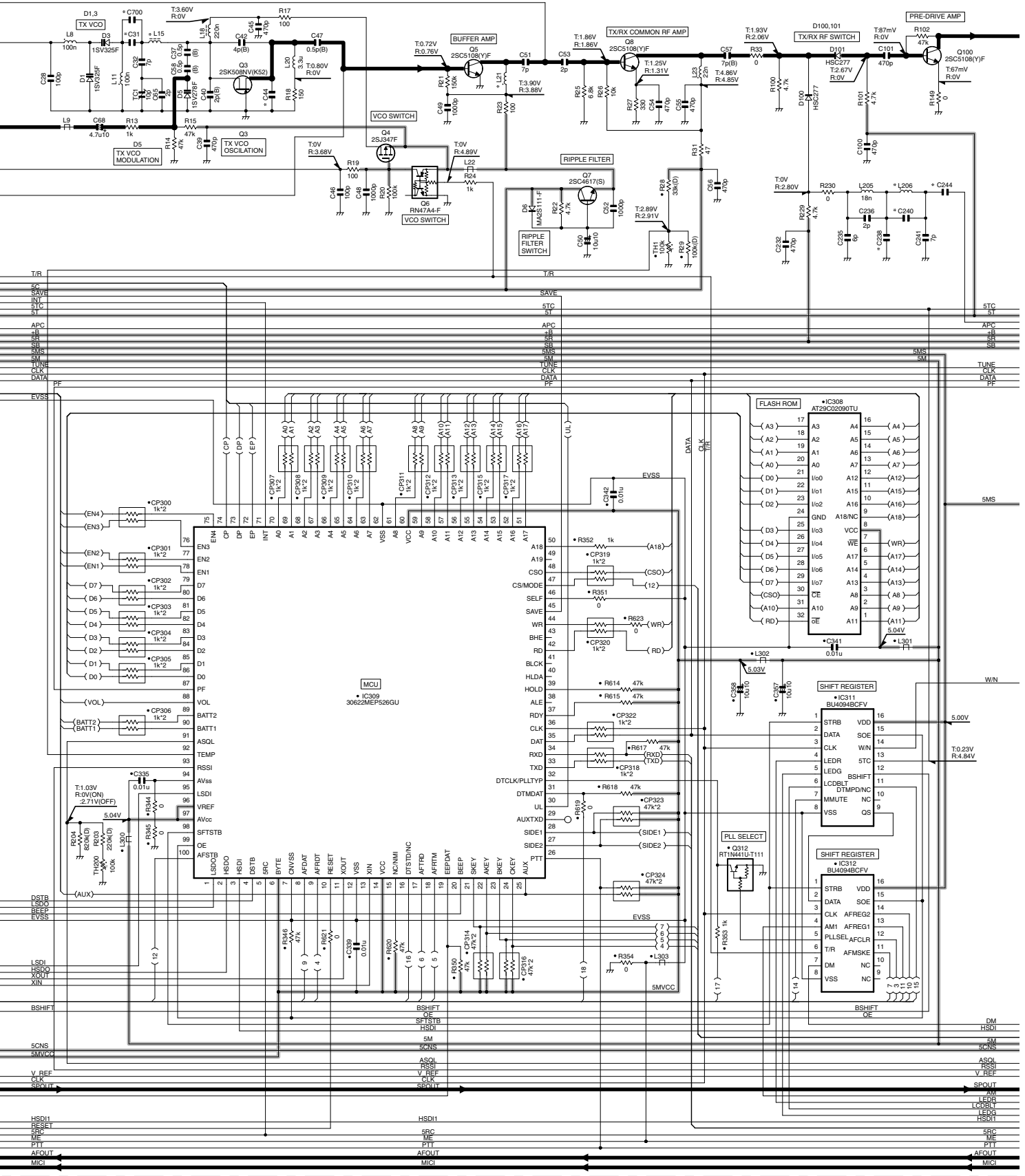
TX-RX UNIT (X57-6410-XX) (A/3)



X57-6410-XX	C16	C17	C18	C21	C24	C33	C34	C36	C74	R8	R12	R47	R393	L2	L3	L6	L16	D12	
-10	K	0.1u	4p	3p	0.22u	11p	6p	4p	NO	560	1k	22	27k	3.3n	3.3n	12n	27n	MA2S077G	
-12	K3	0.22u	8p	2p	4p	0.1u	18p	7p	3p	2p	2.2K	680	100	0	3.9n	3.9n	15n	33n	NO

TK-3140 SCHEMATIC DIAGRAM

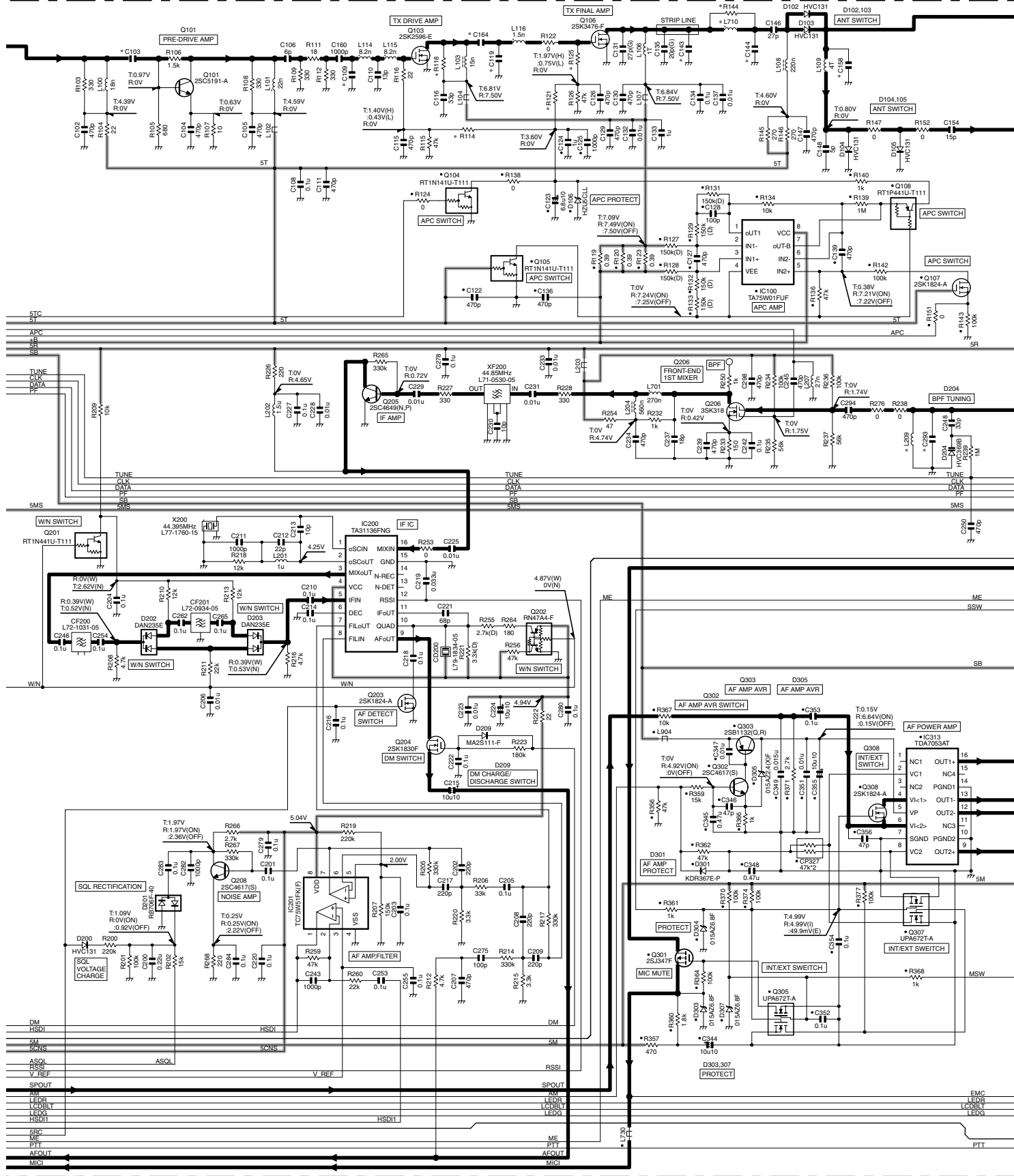
TX-RX UNIT (X57-6410-XX) (A/3)



X57-6410-XX	C31	C44	C238	C240	C244	C700	L15	L21	L206
-10	K	11p	5p	10p	0.75p	5p	1.5p	22n	22n
-12	K3	12p	6p	11p	1p	9p	4p	27n	18n

SCHEMATIC DIAGRAM TK-3140

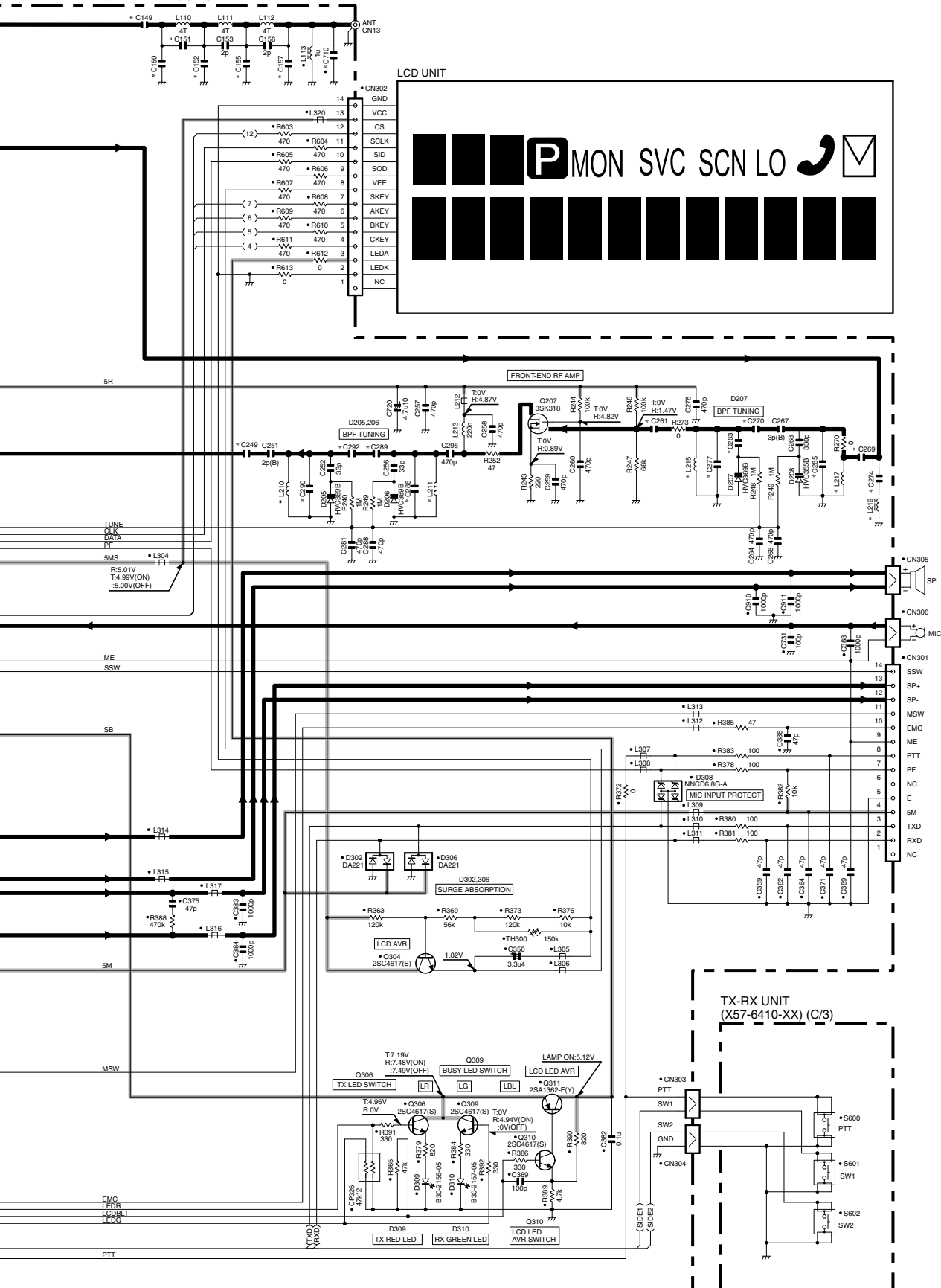
TX-RX UNIT (X57-6410-XX) (A/3)



	X57-6410-XX	C103	C109	C119	C143	C144	C158	C164	C293	R114	R118	R121	R125	R144	L209	L710
-10	K	7p	5p	22p	10p	7p	3p	33p	2p	120k	100	47k	22	0	8.2n	NO
-12	K3	9p	8p	33p	15p	8p	0.5p	100p	2.5p	100k	NO	27k	100	NO	10n	3.3n

TK-3140 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-6410-XX) (A/3)



X57-6410-XX	C149	C150	C151	C152	C155	C157	C249	C261	C263	C269	C270	C274	C277	C285	C286	C289	C290	C292	C710	L210	L211	L215	L217	L219	
-10	K	100p	2p	1.5p	4p	5p	1p	3p	470p	33p	3p	3p	3.5p	0.5p	5p	2p	3.5p	3p	2.5p	8.2n	8.2n	8.2n	8.2n	47n	
-12	K3	470p	7p	1p	6p	8p	4p	2p	12p	18p	5p	2p	NO	2.5p	NO	6p	1p	5p	1.5p	NO	10n	10n	12n	10n	NO

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TK-3140

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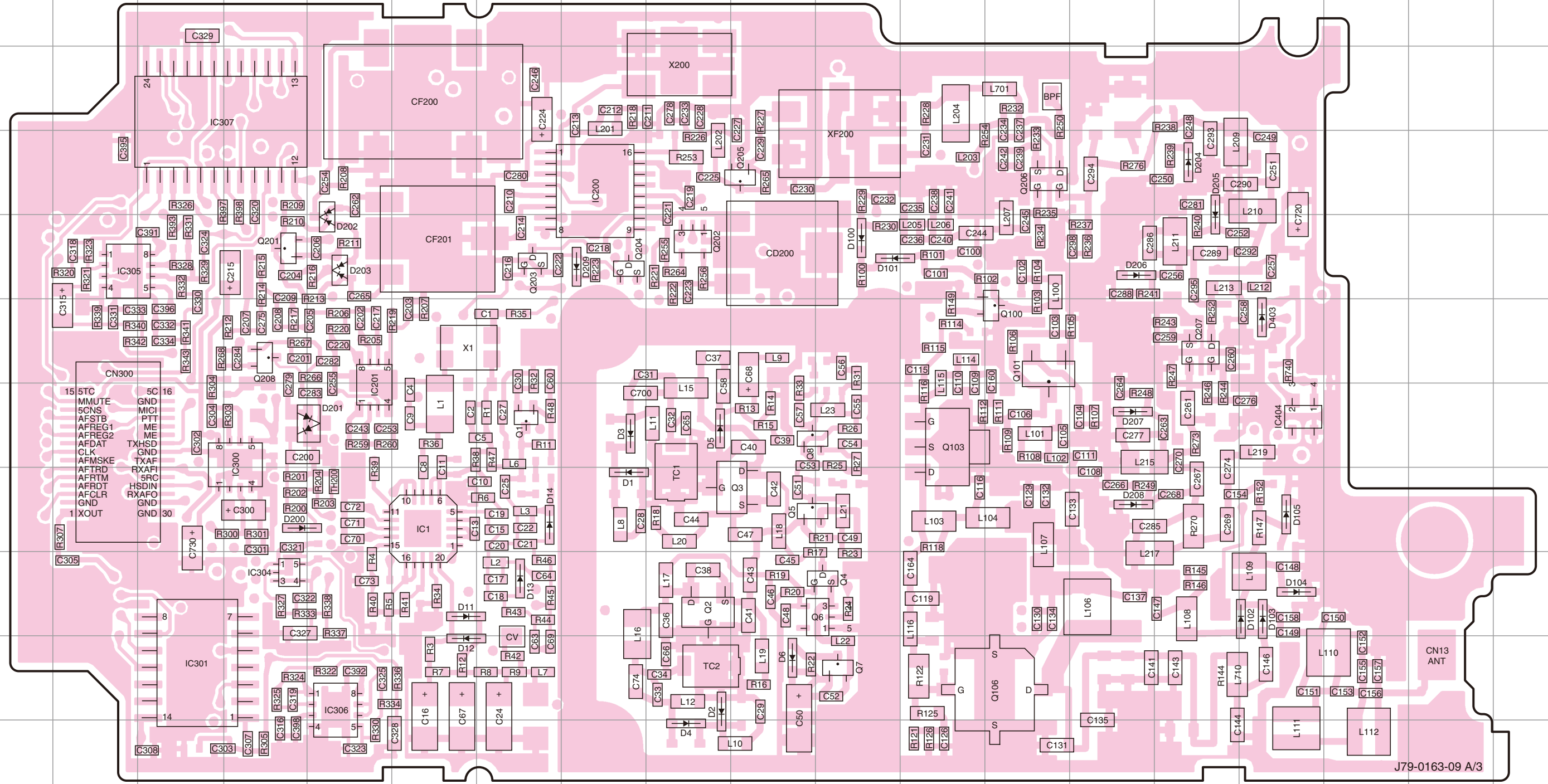
Suite 2504, 25/F, Tower 2, Nina Tower, No. 8 Yeung Uk Road,
Tsuen Wan, New Territories, Hong Kong

Kenwood Electronics Singapore Pte Ltd

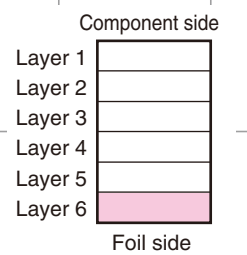
1 Ang Mo Kio Street 63, Singapore 569110

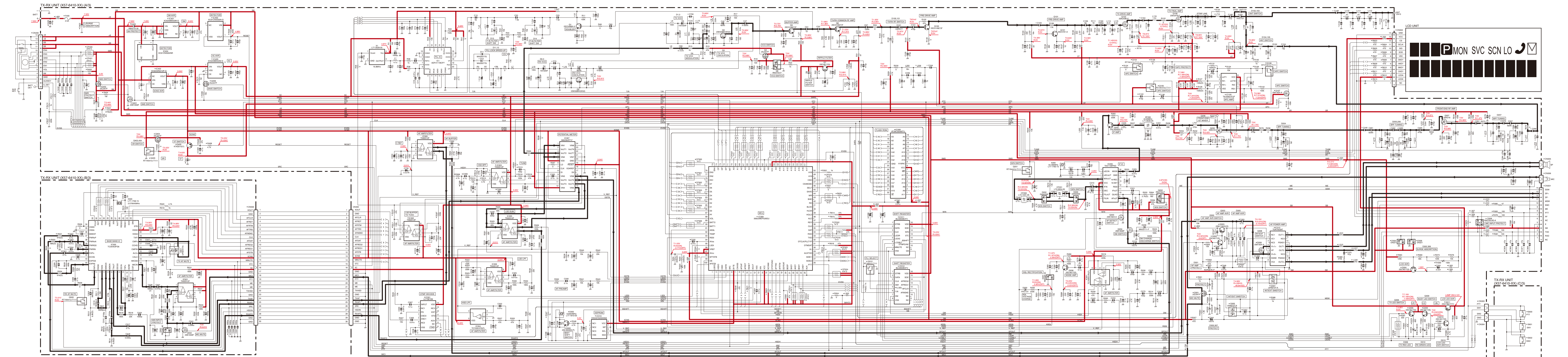
TX-RX UNIT (X57-6410-XX) (A/3) Foil side view (J79-0163-09 A/3)

TX-RX UNIT (X57-6410-XX) (A/3) Foil side view (J79-0163-09 A/3)



Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	8F	IC307	3C	Q7	10K	Q203	5G	D3	7H	D100	5K	D202	5E
IC200	4H	IC404	7P	Q8	7J	Q204	5H	D4	11I	D101	5K	D203	5E
IC201	7E	Q1	7G	Q100	6M	Q205	4J	D5	7I	D102	9P	D204	4O
IC300	7D	Q2	9I	Q101	6M	Q206	4M	D6	10J	D103	9P	D205	4O
IC301	10C	Q3	8J	Q103	7L	Q207	6O	D11	9F	D104	9P	D206	5N
IC304	9D	Q4	9K	Q106	10M	Q208	6D	D12	10F	D105	8P	D207	7N
IC305	5B	Q5	8J	Q201	5D	D1	8H	D13	9G	D200	8D	D208	8N
IC306	10E	Q6	9K	Q202	5I	D2	10I	D14	8G	D201	7E	D209	5H





X57-6410-XX C16 C17 C18 C21 C24 C23 C34 C36 C74 R8 R12 R47 R93 L2 L3 L6 L16 D12

-10	K	0.1u	4p	3p	0.22u	11p	6p	4p	NO	560	1k	22	27k	3.3k	3.3k	12k	27k	MA25075
-12	K3	0.22u	8p	2p	0.1u	18p	7p	3p	2p	2.0k	680	100	0	3.9k	3.9k	15k	33k	NO

X57-6410-XX C31 C44 C28 C24 C70 L15 L1 L16 D12

-10	K	11p	5p	10p	0.75p	5p	1.5p	22n	22n	22n								
-12	K3	17p	6p	11p	1p	5p	4p	27k	27k	18k								

X57-6410-XX C100 C109 C119 C143 C144 C158 C164 C293 R114 R118 R121 R125 R144 L209 L710

-10	K	7p	5p	22p	10p	7p	3p	33p	2p	12k	100	47k	22	0	8.2k	NO	
-12	K3	8p	3p	33p	15p	8p	0.5p	100p	2.5p	100k	NO	27k	100	NO	10k	NO	

X57-6410-XX C149 C150 C151 C152 C155 C157 C248 C261 C263 C269 C270 C274 C277 C285 C286 C289 C290 C292 C710 L210 L211 L215 L217 L219

-10	K	100p	2p	1.5p	4p	5p	1p	3p	470k	33p	3p	3p	3.5p	0.5p	5p	3p	3.5p	2.5p	8.2k	8.2k	8.2k	47k
-12	K3	470p	7p	1p	6p	4p	2p	17k	18p	5p	2p	NO	2.5p	NO	6p	1p	5p	1.5p	10k	10k	10k	NO