

KENWOOD

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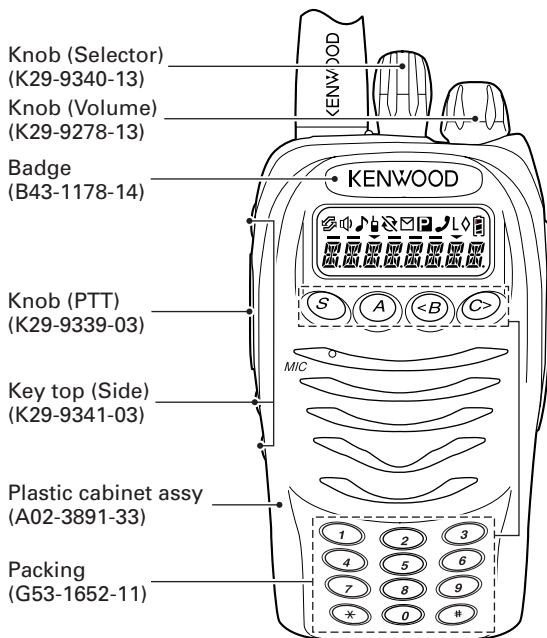
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TK-3170 E,E3

TK-3170 E4,E6



Does not come with antenna.
Antenna is available as an option.

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GENERAL

INTRODUCTION

SCOPE OF THIS MANUAL

This manual is intended for use by experienced technicians familiar with similar types of commercial grade communications equipment. It contains all required service information for the equipment and is current as of the publication date. Changes which may occur after publication are covered by either Service Bulletins or Manual Revisions. These are issued as required.

ORDERING REPLACEMENT PARTS

When ordering replacement parts or equipment information, the full part identification number should be included. This applies to all parts : components, kits, or chassis. If the part number is not known, include the chassis or kit number of which it is a part, and a sufficient description of the required component for proper identification.

PERSONAL SAFETY

The following precautions are recommended for personnel safety:

- DO NOT transmit until all RF connectors are verified secure and any open connectors are properly terminated.
- SHUT OFF and DO NOT operate this equipment near electrical blasting caps or in an explosive atmosphere.
- This equipment should be serviced by a qualified technician only.

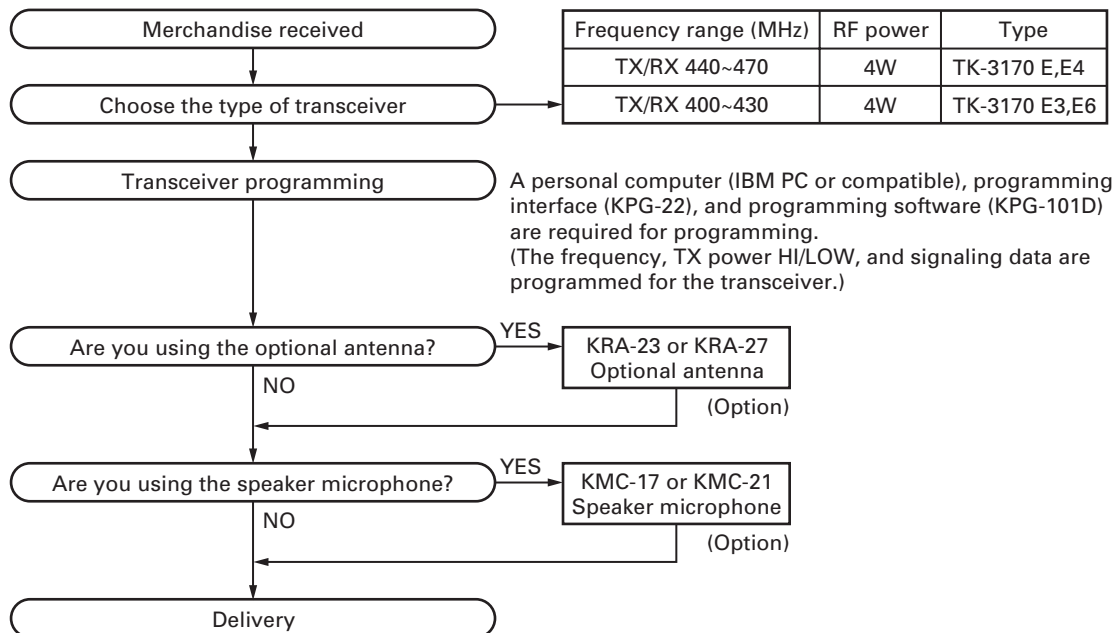
SERVICE

This radio is designed for easy servicing. Refer to the schematic diagrams, printed circuit board views, and alignment procedures contained within.

SERVICE MANUAL LIST

Title	Part number	Remarks	Market code	TX-RX unit number
TK-3170	B51-8738-00		E,X2	X57-701X-XX J72-0964-19
TK-3170 SUPPLEMENT	B51-8740-00		E3	X57-7012-72 J72-0964-19
TK-3170 SUPPLEMENT II	B51-8765-00	This service manual	E,E3,E4,E6	X57-7012-XX J79-0084-09

SYSTEM SET-UP



PARTS LIST

* New Parts. Δ 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-3170 (Y50-5862-XX)

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
TK-3170					
1	1A		A02-3890-23	PLASTIC CABINET ASSY (4KEYS)	E4,E6
2	1B	*	A02-3891-33	PLASTIC CABINET ASSY (16KEYS)	E,E3
5	3A		B01-0694-03	ESCUTCHEON	
6	2D		B09-0686-03	CAP ACCESSORY	
7	2B		B11-1826-03	ILLUMINATION GUIDE	
8	2A		B11-1827-04	ILLUMINATION GUIDE	
9	2B		B11-1828-04	FILTER	
10	2B		B38-0901-05	LCD	
13	1A,1B		B43-1178-14	BADGE	
17	3C		B62-1812-10	INSTRUCTION MANUAL	
20	2A		E04-0467-05	RF COAXIAL RECEPTACLE (SMA)	
21	2A		E23-1188-04	TERMINAL	
22	3A		E23-1189-14	TERMINAL	
23	2B		E29-1204-04	INTER CONNECTOR	
24	2B		E29-1211-04	INTER CONNECTOR	
26	3A		E72-0421-03	TERMINAL BLOCK	
28	3A		F07-1890-04	COVER	
30	1A,1B		G10-1304-04	FIBROUS SHEET (CABINET ASSY)	
-			G10-1333-04	FIBROUS SHEET (CABINET ASSY)	
29	2A		G10-1365-04	FIBROUS SHEET (FLAT CABLE)	E,E4
31	3A		G11-4315-04	SHEET	
32	2A		G11-4316-04	SHEET	
33	2B		G11-4335-14	SHEET	
34	1A,1B		G11-4351-04	SHEET	
35	2A		G13-1885-04	CUSHION	
36	3A		G13-2001-04	CUSHION	
38	2A		G53-1603-04	PACKING	
39	2B		G53-1650-12	PACKING	
40	1A		G53-1651-01	PACKING	E4,E6
41	1B		G53-1652-11	PACKING	E,E3
42	2B		G53-1653-03	PACKING	
43	3A		G53-1654-04	PACKING	
44	3A		G53-1655-04	PACKING	
46	2C		H12-4210-02	PACKING FIXTURE	
48	1D		H52-2067-02	ITEM CARTON CASE	
50	2B		J19-5481-03	HOLDER	
51	2D		J19-5483-23	HOLDER ACCESSORY	
52	1B		J21-8488-03	MOUNTING HARDWARE	
53	2C		J29-0701-15	HOOK ACCESSORY	
54	3A		J82-0106-05	FPC (VOL/SELECTOR)	
49	2A	*	J82-0111-05	FPC (PTT)	
55	2A		J99-0399-04	DOUBLE-SIDED TAPE (4x7mm)	
56	1B		K29-9278-13	KNOB (VOLUME)	
57	1B		K29-9339-03	KNOB (PTT)	
58	1B		K29-9340-13	KNOB (SELECTOR)	
59	1B		K29-9341-03	KEY TOP (SIDE)	
A	2A,3A		N09-2438-05	BINDING HEAD SCREW	
B	3B		N14-0805-04	CIRCULAR NUT	
C	2A		N14-0833-04	CIRCULAR NUT	
D	3A		N30-2610-48	PAN HEAD MACHINE SCREW	

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
E	3A	*	N30-3006-43	PAN HEAD MACHINE SCREW	
F	3A		N79-2030-48	PAN HEAD TAPTITE SCREW	
G	2A,2B		N83-2005-48	PAN HEAD TAPTITE SCREW	
61	3A	*	R31-0665-05	VARIABLE RESISTOR	
63	1B		T07-0369-15	SPEAKER	
64	2B		T91-0650-05	MIC ELEMENT	
66	2A	*	W02-3711-05	SELECTOR	
TX-RX UNIT (X57-7012-XX) -71 : E -72 : E3 -73 : E4 -74 : E6					
D2			B30-2278-05	LED (RED/YELLOW)	
D5			B30-2210-05	LED (TLY)	
D7			B30-2210-05	LED (TLY)	
D8,9			B30-2050-05	LED	E,E3
D12,13			B30-2050-05	LED	E,E3
C2			CK73HB1H471K	CHIP C 470PF	K
C3			CK73FB1A475K	CHIP C 4.7UF	K
C4			CK73GB1E105K	CHIP C 1.0UF	K
C5,6			CK73HB1H471K	CHIP C 470PF	K
C7			CK73HB1A104K	CHIP C 0.10UF	K
C9			CK73GB1E105K	CHIP C 1.0UF	K
C11			CK73FB1A225K	CHIP C 2.2UF	K
C13			CK73HB1H471K	CHIP C 470PF	K
C14,15			CK73HB1E472K	CHIP C 4700PF	K
C16,17			CK73HB1H471K	CHIP C 470PF	K
C18			CK73HB1A104K	CHIP C 0.10UF	K
C19			CK73HB1H471K	CHIP C 470PF	K
C20			CK73HB1E472K	CHIP C 4700PF	K
C21			CK73HB1H471K	CHIP C 470PF	K
C22			CK73HB1E472K	CHIP C 4700PF	K
C23,24			CK73GB1E105K	CHIP C 1.0UF	K
C25			CK73HB1E472K	CHIP C 4700PF	K
C26			CK73HB1H471K	CHIP C 470PF	K
C27			CS77AAQJ220M	CHIP TNTL 22UF	6.3WV
C28-31			CK73HB1H471K	CHIP C 470PF	K
C32,33			CK73HB1A104K	CHIP C 0.10UF	K
C34			CK73HB1H471K	CHIP C 470PF	K
C35			CK73HB1A104K	CHIP C 0.10UF	K
C38,39			CK73HB1A473K	CHIP C 0.047UF	K
C40			CK73HB1H471K	CHIP C 470PF	K
C42			CK73HB1H681K	CHIP C 680PF	K
C43,44			CK73HB1C103K	CHIP C 0.010UF	K
C45			CS77AAQJ220M	CHIP TNTL 22UF	6.3WV
C46			CK73HB1H471K	CHIP C 470PF	K
C47			CK73GB1E105K	CHIP C 1.0UF	K
C48-51			CK73HB1H471K	CHIP C 470PF	K
C52			CK73HB1A104K	CHIP C 0.10UF	K
C53			CK73HB1H471K	CHIP C 470PF	K
C55			CK73GB1E105K	CHIP C 1.0UF	K
C56			CK73HB1A104K	CHIP C 0.10UF	K
C57		*	CS77AAQJ150M	CHIP TNTL 15UF	6.3WV
C58			CK73HB1H471K	CHIP C 470PF	K
C59			CC73HCH1H220J	CHIP C 22PF	J
C60			CC73HCH1H120J	CHIP C 12PF	J

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C61			CK73HB1A104K	CHIP C 0.10UF K		C136			CK73HB1H561K	CHIP C 560PF K	
C62			CC73HCH1H010C	CHIP C 1.0PF C		C137			CK73HB1H471K	CHIP C 470PF K	
C63			CC73HCH1H120J	CHIP C 12PF J		C138			CK73HB1A104K	CHIP C 0.10UF K	
C65			CK73HB1A104K	CHIP C 0.10UF K		C140			CK73HB1A104K	CHIP C 0.10UF K	
C66			CK73HB1C103K	CHIP C 0.010UF K		C142,143			CK73GB1E105K	CHIP C 1.0UF K	
C67			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV		C145-148			CK73HB1H471K	CHIP C 470PF K	
C68			CK73HB1H471K	CHIP C 470PF K		C149			CK73HB1H221K	CHIP C 220PF K	
C69			CS77AAQJ100M	CHIP TNTL 10UF 6.3WV		C150,151			CK73FB1A225K	CHIP C 2.2UF K	
C70			CK73HB1E682K	CHIP C 6800PF K		C153			CK73GB1E105K	CHIP C 1.0UF K	
C71			CK73HB1H392K	CHIP C 3900PF K		C154,155			CK73HB1H471K	CHIP C 470PF K	
C72			CK73HB1H122K	CHIP C 1200PF K		C157			CK73GB1A224K	CHIP C 0.22UF K	
C73			CC73HCH1H470J	CHIP C 47PF J		C158			CK73HB1A104K	CHIP C 0.10UF K	
C74			CK73HB1H122K	CHIP C 1200PF K		C159			CC73HCH1H101J	CHIP C 100PF J	
C75			CK73HB1C153K	CHIP C 0.015UF K		C161			CC73HCH1H101J	CHIP C 100PF J	
C76			CK73HB1H332K	CHIP C 3300PF K		C162			CS77AAQJ100M	CHIP TNTL 10UF 6.3WV	
C77			CK73HB1C153K	CHIP C 0.015UF K		C166			CK73HB1H471K	CHIP C 470PF K	
C78			CK73HB1H221K	CHIP C 220PF K		C168,169			CK73HB1A393K	CHIP C 0.039UF K	
C79			CK73HB1H222K	CHIP C 2200PF K		C170			CK73HB1H471K	CHIP C 470PF K	
C81			CK73HB1A104K	CHIP C 0.10UF K		C171			CS77AAQJ100M	CHIP TNTL 10UF 6.3WV	
C82			CC73HCH1H101J	CHIP C 100PF J		C172			CS77CCQJ101M	CHIP TNTL 100UF 6.3WV	
C84			CK73HB1H471K	CHIP C 470PF K		C173			CK73HB1H221K	CHIP C 220PF K	
C85			CK73HB1C123K	CHIP C 0.012UF K		C174			CK73HB1H471K	CHIP C 470PF K	
C87			CK73HB1A104K	CHIP C 0.10UF K		C175			CK73HB1C103K	CHIP C 0.010UF K	
C88,89			CC73HCH1H010B	CHIP C 1.0PF B		C176			CK73HB1A224K	CHIP C 0.22UF K	
C90,91			CK73GB1E104K	CHIP C 0.10UF K		C177			CK73HB1A104K	CHIP C 0.10UF K	
C93			CK73GB1E105K	CHIP C 1.0UF K		C178			CK73GB1E105K	CHIP C 1.0UF K	
C95			CK73HB1A224K	CHIP C 0.22UF K		C181			CK73GBQJ475K	CHIP C 4.7UF K	
C96			CK73GB1E105K	CHIP C 1.0UF K		C182			CK73HB1H681K	CHIP C 680PF K	
C97			CC73HCH1H151J	CHIP C 150PF J		C183			CK73HB1H471K	CHIP C 470PF K	
C98			CK73HB1A683K	CHIP C 0.068UF K		C184			CK73HB1H222K	CHIP C 2200PF K	
C99,100			CK73FB1A475K	CHIP C 4.7UF K		C185			CK73HB1C103K	CHIP C 0.010UF K	
C102			CK73HB1C103K	CHIP C 0.010UF K		C186			CC73HCH1H270J	CHIP C 27PF J	
C104			CK73GB1E104K	CHIP C 0.10UF K		C187			CK73HB1C103K	CHIP C 0.010UF K	
C106			CK73HB1H471K	CHIP C 470PF K		C188			CC73HCH1H270J	CHIP C 27PF J	
C107			CK73HB1A104K	CHIP C 0.10UF K		C189			CK73GB1E104K	CHIP C 0.10UF K	
C108			CK73GB1E105K	CHIP C 1.0UF K		C190,191			CK73HB1H471K	CHIP C 470PF K	
C109			CC73HCH1H100D	CHIP C 10PF D		C192			CK73HB1H102K	CHIP C 1000PF K	
C110			CK73HB1H471K	CHIP C 470PF K		C196			CK73HB1C473K	CHIP C 0.047UF K	
C111			CK73HB1C103K	CHIP C 0.010UF K		C197,198			CK73HB1H471K	CHIP C 470PF K	
C112			CC73HCH1H680J	CHIP C 68PF J		C199,200			CK73HB1A104K	CHIP C 0.10UF K	E,E4
C113-115			CK73HB1A104K	CHIP C 0.10UF K		C200			CK73HB1A104K	CHIP C 0.10UF K	E3,E6
C116			CC73HCH1H220J	CHIP C 22PF J		C201			CK73HB1A224K	CHIP C 0.22UF K	
C117			CK73GB1E105K	CHIP C 1.0UF K		C202			CK73GB1E105K	CHIP C 1.0UF K	
C118			CK73HB1A104K	CHIP C 0.10UF K		C423			CK73FB1A475K	CHIP C 4.7UF K	
C119			CK73HB1C103K	CHIP C 0.010UF K		C501			CK73HB1C103K	CHIP C 0.010UF K	
C120			CK73GB1C225K	CHIP C 2.2UF K		C502			CC73HCH1H470J	CHIP C 47PF J	
C121			CK73HB1A393K	CHIP C 0.039UF K		C503			CC73HCH1H101J	CHIP C 100PF J	
C122			CK73HB1H471K	CHIP C 470PF K		C505			CC73HCH1H101J	CHIP C 100PF J	
C123			CC73HCH1H680J	CHIP C 68PF J		C506			CK73HB1C103K	CHIP C 0.010UF K	
C125			CK73HB1A104K	CHIP C 0.10UF K		C507,508			CC73HCH1H101J	CHIP C 100PF J	
C126			CC73HCH1H470J	CHIP C 47PF J		C509			CC73HCH1H150J	CHIP C 15PF J	
C127			CC73HCH1H181J	CHIP C 180PF J		C512			CK73HB1C103K	CHIP C 0.010UF K	
C128			CK73HB1H471K	CHIP C 470PF K		C513			CK73HB1H471K	CHIP C 470PF K	
C129			CK73GB1E105K	CHIP C 1.0UF K		C514			CC73HCH1H101J	CHIP C 100PF J	
C130			CK73HB1A104K	CHIP C 0.10UF K		C515			CK73HB1H471K	CHIP C 470PF K	
C131			CK73HB1H821K	CHIP C 820PF K		C517			CK73HB1H471K	CHIP C 470PF K	
C132			CK73HB1A104K	CHIP C 0.10UF K		C520			CK73GB1E105K	CHIP C 1.0UF K	
C133			CK73GB0J475K	CHIP C 4.7UF K		C522			CC73HCH1H050C	CHIP C 5.0PF C	
C134			CK73HB1A473K	CHIP C 0.047UF K		C523			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV	
C135			CK73GB1E105K	CHIP C 1.0UF K		C524			CC73HCH1H101J	CHIP C 100PF J	

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C525			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	E,E4	C610-613			CK73HB1H471K	CHIP C 470PF K	E3,E6
C525			CS77AA1E010M	CHIP TNTL 1.0UF 25WV	E3,E6	C611-613			CK73HB1H471K	CHIP C 470PF K	E,E4
C526			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV		C615			CK73HB1H471K	CHIP C 470PF K	
C527			CC73HCH1H050C	CHIP C 5.0PF C	E,E4	C617			CC73HCH1H150J	CHIP C 15PF J	
C527			CC73HCH1H080D	CHIP C 8.0PF D	E3,E6	C619			CC73HCH1H150J	CHIP C 15PF J	E,E4
C528			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV	E,E4	C622			CC73HCH1H101J	CHIP C 100PF J	
C528			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV	E3,E6	C623			CK73HB1H102K	CHIP C 1000PF K	
C529			CC73HCH1H020C	CHIP C 2.0PF C	E3,E6	C625			CC73HCH1H070D	CHIP C 7.0PF D	E,E4
C529			CC73HCH1H030C	CHIP C 3.0PF C	E,E4	C625			CC73HCH1H120J	CHIP C 12PF J	E3,E6
C530			CC73HCH1H101J	CHIP C 100PF J		C626			CC73HCH1H101J	CHIP C 100PF J	
C533			CC73HCH1H1R5C	CHIP C 1.5PF C		C627			CC73HCH1H270J	CHIP C 27PF J	E3,E6
C536			CC73HCH1H030C	CHIP C 3.0PF C		C627			CC73HCH1H390J	CHIP C 39PF J	E,E4
C537			CC73HCH1H050C	CHIP C 5.0PF C		C629			CC73HCH1H150J	CHIP C 15PF J	E,E4
C538			CC73HCH1H101J	CHIP C 100PF J		C629			CC73HCH1H270J	CHIP C 27PF J	E3,E6
C539			CC73HCH1H1R5B	CHIP C 1.5PF B		C631			CC73HCH1H180J	CHIP C 18PF J	
C540			CC73HCH1H020B	CHIP C 2.0PF B		C632			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	
C541			CC73HCH1H220J	CHIP C 22PF J		C633			CK73HB1H471K	CHIP C 470PF K	
C542			CC73HCH1H1R5C	CHIP C 1.5PF C	E,E4	C635			CC73HCH1H101J	CHIP C 100PF J	
C544			CC73HCH1H1R5C	CHIP C 1.5PF C		C636			CC73HCH1H180J	CHIP C 18PF J	E3,E6
C545			CC73HCH1H090D	CHIP C 9.0PF D	E,E4	C636			CC73HCH1H220J	CHIP C 22PF J	E,E4
C545			CC73HCH1H150J	CHIP C 15PF J	E3,E6	C637			CK73HB1H102K	CHIP C 1000PF K	
C546			CC73HCH1H1R5C	CHIP C 1.5PF C	E,E4	C638,639			CK73HB1H471K	CHIP C 470PF K	
C548			CC73HCH1H330J	CHIP C 33PF J	E3,E6	C641			CC73HCH1H101J	CHIP C 100PF J	
C548			CC73HCH1H470J	CHIP C 47PF J	E,E4	C643			CK73HB1C103K	CHIP C 0.010UF K	
C549			CC73HCH1H080B	CHIP C 8.0PF B	E,E4	C645			CC73GCH1H120J	CHIP C 12PF J	E,E4
C549			CC73HCH1H270J	CHIP C 27PF J	E3,E6	C645			CC73GCH1H150J	CHIP C 15PF J	E3,E6
C551			CC73HCH1H0R5B	CHIP C 0.5PF B		C646			CK73HB1H471K	CHIP C 470PF K	
C552			CC73HCH1H101J	CHIP C 100PF J		C648			CK73HB1H471K	CHIP C 470PF K	
C553			CC73HCH1H050B	CHIP C 5.0PF B	E,E4	C651			CK73HB1A104K	CHIP C 0.10UF K	
C553-555			CC73HCH1H050B	CHIP C 5.0PF B	E3,E6	C652			CC73GCH1H220J	CHIP C 22PF J	E,E4
C554-556			CC73HCH1H040B	CHIP C 4.0PF B	E,E4	C655			CC73GCH1H270J	CHIP C 27PF J	E3,E6
C556			CC73HCH1H060B	CHIP C 6.0PF B	E3,E6	C658			CK73HB1H471K	CHIP C 470PF K	
C558			CC73HCH1H050B	CHIP C 5.0PF B	E3,E6	C660			CC73GCH1H150J	CHIP C 15PF J	E3,E6
C558			CC73HCH1H060B	CHIP C 6.0PF B	E,E4	C660			CC73GCH1H220J	CHIP C 22PF J	E,E4
C559			CC73HCH1H080B	CHIP C 8.0PF B	E3,E6	C665			CK73HB1A104K	CHIP C 0.10UF K	
C559			CC73HCH1H090B	CHIP C 9.0PF B	E,E4	C669			CC73GCH1H060B	CHIP C 6.0PF B	E,E4
C560			CC73HCH1H101J	CHIP C 100PF J		C669			CC73GCH1H080B	CHIP C 8.0PF B	E3,E6
C562,563			CK73HB1H471K	CHIP C 470PF K		C670			CC73GCH1H101J	CHIP C 100PF J	E3,E6
C564,565			CK73HB1A104K	CHIP C 0.10UF K		C670			CC73GCH1H330J	CHIP C 33PF J	E,E4
C566,567			CC73HCH1H0R5B	CHIP C 0.5PF B		C671			CC73GCH1H050B	CHIP C 5.0PF B	E3,E6
C568			CK73HB1C103K	CHIP C 0.010UF K		C671			CC73GCH1H4R5B	CHIP C 4.5PF B	E,E4
C569			CK73HB1H471K	CHIP C 470PF K		C673			CK73HB1H471K	CHIP C 470PF K	
C570			CK73HB1C103K	CHIP C 0.010UF K		C675			CC73GCH1H020B	CHIP C 2.0PF B	E,E4
C571			CK73HB1A104K	CHIP C 0.10UF K	E,E4	C675			CC73GCH1H040B	CHIP C 4.0PF B	E3,E6
C571			CK73HB1H471K	CHIP C 470PF K	E3,E6	C676			CC73GCH1H101J	CHIP C 100PF J	
C572			CS77AA1A100M	CHIP TNTL 10UF 10WV		C677			CC73GCH1H050B	CHIP C 5.0PF B	
C573			CK73HB1H471K	CHIP C 470PF K		C678			CC73GCH1H030B	CHIP C 3.0PF B	E,E4
C574,575			CC73HCH1H100D	CHIP C 10PF D		C678			CC73GCH1H040B	CHIP C 4.0PF B	E3,E6
C577,578			CK73HB1H471K	CHIP C 470PF K		C679			CC73GCH1H1R5B	CHIP C 1.5PF B	
C579			CC73HCH1H030B	CHIP C 3.0PF B	E3,E6	C680			CC73GCH1H040B	CHIP C 4.0PF B	E,E4
C579			CC73HCH1H040B	CHIP C 4.0PF B	E,E4	C680			CC73GCH1H070B	CHIP C 7.0PF B	E3,E6
C580,581			CK73HB1H471K	CHIP C 470PF K		C681			CC73GCH1H020B	CHIP C 2.0PF B	E,E4
C582			CC73HCH1H020B	CHIP C 2.0PF B		C681			CC73GCH1H030B	CHIP C 3.0PF B	E3,E6
C583			CK73HB1A104K	CHIP C 0.10UF K		C682			CC73GCH1H050B	CHIP C 5.0PF B	E,E4
C584			CC73HCH1H100D	CHIP C 10PF D		C682			CC73GCH1H070B	CHIP C 7.0PF B	E3,E6
C601			CK73HB1H471K	CHIP C 470PF K		C683			CC73GCH1H020B	CHIP C 2.0PF B	E,E4
C604			CK73HB1A224K	CHIP C 0.22UF K		C683			CC73GCH1H2R5B	CHIP C 2.5PF B	E3,E6
C606			CK73HB1H471K	CHIP C 470PF K		C684			CC73GCH1H1R5B	CHIP C 1.5PF B	
C608			CK73HB1H471K	CHIP C 470PF K		C701,702			CK73HB1A104K	CHIP C 0.10UF K	
C609			CC73HCH1H050C	CHIP C 5.0PF C		C703			CC73HCH1H330J	CHIP C 33PF J	

PARTS LIST

TX-RX UNIT (X57-7012-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C704			CK73HB1C103K	CHIP C 0.010UF K		C769			CK73HB1H471K	CHIP C 470PF K	
C705			CC73HCH1H220J	CHIP C 22PF J		C771			CK73HB1A104K	CHIP C 0.10UF K	
C706			CC73HCH1H820J	CHIP C 82PF J		C772			CK73HB1H471K	CHIP C 470PF K	
C707			CK73HB1H331K	CHIP C 330PF K		C773			CC73HCH1H030B	CHIP C 3.0PF B	
C708,709			CK73HB1A104K	CHIP C 0.10UF K		C774			CC73HCH1H180J	CHIP C 18PF J	E3,E6
C710			CC73HCH1H390J	CHIP C 39PF J		C774			CC73HCH1H330J	CHIP C 33PF J	E,E4
C711			CC73HCH1H820J	CHIP C 82PF J		C776			CC73HCH1H030B	CHIP C 3.0PF B	
C712			CK73HB1H331K	CHIP C 330PF K		C777			CK73HB1H471K	CHIP C 470PF K	
C713			CK73HB1A104K	CHIP C 0.10UF K		C778			CC73HCH1H030B	CHIP C 3.0PF B	
C714			CC73HCH1H390J	CHIP C 39PF J		C779			CC73HCH1H180J	CHIP C 18PF J	E3,E6
C715			CK73HB1H471K	CHIP C 470PF K		C779			CC73HCH1H330J	CHIP C 33PF J	E,E4
C716			CK73HB1H182K	CHIP C 1800PF K		C781			CK73HB1H471K	CHIP C 470PF K	
C717			CK73GB1E105K	CHIP C 1.0UF K		C782			CC73HCH1H080D	CHIP C 8.0PF D	E3,E6
C718			CS77AAQJ220M	CHIP TNL 22UF 6.3WV		C782			CC73HCH1H330J	CHIP C 33PF J	E,E4
C719			CC73HCH1H820J	CHIP C 82PF J		C783			CC73HCH1H060B	CHIP C 6.0PF B	E,E4
C720			CK73HB1C103K	CHIP C 0.010UF K		C783			CC73HCH1H080B	CHIP C 8.0PF B	E3,E6
C721			CK73HB1H471K	CHIP C 470PF K		C784			CC73HCH1H100D	CHIP C 10PF D	
C722			CK73HB1A104K	CHIP C 0.10UF K		C788			CC73HCH1H060B	CHIP C 6.0PF B	E,E4
C723			CK73HB1A333K	CHIP C 0.033UF K		C788			CC73HCH1H100B	CHIP C 10PF B	E3,E6
C724			CC73HCH1H330J	CHIP C 33PF J		C901			CK73HB1H471K	CHIP C 470PF K	
C725			CK73HB1A104K	CHIP C 0.10UF K		C904			CK73HB1H471K	CHIP C 470PF K	
C726			CK73HB1C103K	CHIP C 0.010UF K		C906			CK73HB1C103K	CHIP C 0.010UF K	
C727			CK73HB1H471K	CHIP C 470PF K		C917			CK73HB1A104K	CHIP C 0.10UF K	
C728			CK73HB1C103K	CHIP C 0.010UF K		C921			CK73HB1C223K	CHIP C 0.022UF K	
C729			CC73HCH1H010B	CHIP C 1.0PF B	E,E4	C923-926			CK73HB1H471K	CHIP C 470PF K	
C730			CC73HCH1H080B	CHIP C 8.0PF B		TC501,502			C05-0384-05	CERAMIC TRIMMER (10PF)	
C732,733			CK73HB1C103K	CHIP C 0.010UF K		101	2A		E37-1141-15	FLAT CABLE	
C734,735			CK73HB1H471K	CHIP C 470PF K		CN1		*	E40-6519-05	PIN ASSY	
C736			CK73HB1C103K	CHIP C 0.010UF K		CN8		*	E40-6568-05	FLAT CABLE CONNECTOR	
C737			CC73HCH1H060B	CHIP C 6.0PF B		CN18		*	E40-6456-05	FLAT CABLE CONNECTOR	
C738			CC73HCH1H120J	CHIP C 12PF J		CN60			E40-5932-05	SOCKET FOR PIN ASSY	
C739			CC73HCH1H020B	CHIP C 2.0PF B		CN71		*	E40-6568-05	FLAT CABLE CONNECTOR	
C740			CC73HCH1H100D	CHIP C 10PF D		CN901		*	E40-6456-05	FLAT CABLE CONNECTOR	
C741			CK73HB1C103K	CHIP C 0.010UF K		J1			E11-0707-05	PHONE JACK (2.5/3.5)	
C743			CC73HCH1H010B	CHIP C 1.0PF B		102	2A		F12-0476-04	SHIELDING SHEET (FLAT CABLE)	E,E4
C744,745			CK73HB1H471K	CHIP C 470PF K		F901			F53-0324-05	FUSE	
C746			CC73HCH1H030B	CHIP C 3.0PF B	E3,E6	CD701			L79-1474-05	TUNING COIL	
C746			CC73HCH1H050B	CHIP C 5.0PF B	E,E4	CF701			L72-1010-05	CERAMIC FILTER	
C747,748			CK73HB1H471K	CHIP C 470PF K		CF702			L72-1012-05	CERAMIC FILTER	
C749			CC73HCH1H040B	CHIP C 4.0PF B	E3,E6	L1			L92-0140-05	CHIP FERRITE	
C749			CC73HCH1H3R5B	CHIP C 3.5PF B	E,E4	L2-5			L92-0138-05	CHIP FERRITE	
C750			CC73HCH1H180J	CHIP C 18PF J	E3,E6	L8			L92-0138-05	CHIP FERRITE	
C750			CC73HCH1H330J	CHIP C 33PF J	E,E4	L10			L92-0140-05	CHIP FERRITE	
C752			CC73HCH1H020B	CHIP C 2.0PF B		L11			L92-0149-05	CHIP FERRITE	
C754			CC73HCH1H020B	CHIP C 2.0PF B		L12,13			L92-0419-15	CHIP FERRITE	
C755			CC73HCH1H180J	CHIP C 18PF J	E3,E6	L14-16			L92-0138-05	CHIP FERRITE	
C755			CC73HCH1H330J	CHIP C 33PF J	E,E4	L501			L41-4795-39	SMALL FIXED INDUCTOR (4.7UH)	
C756			CC73HCH1H050B	CHIP C 5.0PF B		L502			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	E,E4
C757			CC73HCH1H020B	CHIP C 2.0PF B	E3,E6	L502			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	E3,E6
C757			CC73HCH1H1R5B	CHIP C 1.5PF B	E,E4	L503			L92-0138-05	CHIP FERRITE	
C758			CK73HB1H471K	CHIP C 470PF K		L505			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E3,E6
C759			CC73HCH1H020B	CHIP C 2.0PF B		L505,506			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E,E4
C760			CK73HB1H471K	CHIP C 470PF K		L506			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	E3,E6
C761			CC73HCH1H180J	CHIP C 18PF J	E3,E6	L507			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	E,E4
C761			CC73HCH1H330J	CHIP C 33PF J	E,E4	L507			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	E3,E6
C762			CC73HCH1H050B	CHIP C 5.0PF B		L508			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	E3,E6
C763			CK73HB1H471K	CHIP C 470PF K		L508,509			L40-8275-92	SMALL FIXED INDUCTOR (82NH)	E,E4
C765			CK73HB1H471K	CHIP C 470PF K		L509			L40-1285-92	SMALL FIXED INDUCTOR (120NH)	E3,E6
C766			CC73HCH1H0R5B	CHIP C 0.5PF B							
C767			CK73HB1H471K	CHIP C 470PF K							

PARTS LIST

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Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
L511			L40-1275-57	SMALL FIXED INDUCTOR (12.0NH)	E,E4	CP22-24			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L511			L40-1575-57	SMALL FIXED INDUCTOR (15.0NH)	E3,E6	CP28			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L512			L41-1875-43	SMALL FIXED INDUCTOR (18NH)	E,E4	CP30			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L512		*	L41-2275-43	SMALL FIXED INDUCTOR (22NH)	E3,E6	CP32			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L513			L41-2278-14	SMALL FIXED INDUCTOR (22NH)	E,E4	CP34			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L513			L41-2778-14	SMALL FIXED INDUCTOR (27NH)	E3,E6	CP36			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L514			L41-1585-45	SMALL FIXED INDUCTOR (150NH)	E,E4	CP38			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L514,515		*	L41-2285-45	SMALL FIXED INDUCTOR (220NH)	E3,E6	CP40			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L515		*	L41-1885-45	SMALL FIXED INDUCTOR (180NH)	E,E4	CP42,43			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L517		*	L41-2785-45	SMALL FIXED INDUCTOR (270NH)		CP44			RK75HA1J474J	CHIP-COM 470K J 1/16W	
L518			L40-1585-92	SMALL FIXED INDUCTOR (150NH)	E,E4	CP45-47			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L518			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	E3,E6	CP48,49			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L519			L92-0138-05	CHIP FERRITE		CP50			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L521			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)		CP54			RK75HA1J473J	CHIP-COM 47K J 1/16W	
L524			L40-2275-57	SMALL FIXED INDUCTOR (22.0NH)		R1			RK73GB2A000J	CHIP R 0.0 J 1/10W	
L601			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)		R2			RK73HB1J153J	CHIP R 15K J 1/16W	
L602			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)		R7			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L603			L92-0138-05	CHIP FERRITE		R8			RK73HB1J272J	CHIP R 2.7K J 1/16W	
L605			L40-6885-57	SMALL FIXED INDUCTOR (6.8NH)		R9			RK73HB1J332J	CHIP R 3.3K J 1/16W	
L606		*	L41-1575-45	SMALL FIXED INDUCTOR (15NH)		R11			RK73HB1J473J	CHIP R 47K J 1/16W	
L607			L92-0149-05	CHIP FERRITE		R12			RK73HB1J334J	CHIP R 330K J 1/16W	
L608			L40-1263-92	SMALL FIXED INDUCTOR (1.2NH)	E3,E6	R13			RK73HB1J332J	CHIP R 3.3K J 1/16W	
L611			L34-4576-05	AIR-CORE COIL		R14			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L612			L92-0149-05	CHIP FERRITE		R15			RK73HB1J272J	CHIP R 2.7K J 1/16W	
L613			L41-5668-14	SMALL FIXED INDUCTOR (5.6NH)		R16			RK73HB1J331J	CHIP R 330 J 1/16W	
L614		*	L41-2285-45	SMALL FIXED INDUCTOR (220NH)		R17			RK73HB1J821J	CHIP R 820 J 1/16W	
L615-618			L34-4564-05	AIR-CORE COIL		R18			RK73GB2A100J	CHIP R 10 J 1/10W	
L619			L41-1092-44	SMALL FIXED INDUCTOR (1UH)		R20			RK73HB1J103J	CHIP R 10K J 1/16W	
L701			L40-1885-92	SMALL FIXED INDUCTOR (180NH)		R21			RK73HB1J821J	CHIP R 820 J 1/16W	
L702			L40-1085-57	SMALL FIXED INDUCTOR (100NH)		R22,23			RK73HB1J000J	CHIP R 0.0 J 1/16W	
L703			L40-1591-86	SMALL FIXED INDUCTOR (1.5UH)		R24			RK73HB1J224J	CHIP R 220K J 1/16W	
L704			L92-0138-05	CHIP FERRITE		R25			RK73HB1J153J	CHIP R 15K J 1/16W	
L705			L41-5685-39	SMALL FIXED INDUCTOR (0.56UH)		R26			RK73HB1J000J	CHIP R 0.0 J 1/16W	
L706			L40-2785-92	SMALL FIXED INDUCTOR (270NH)		R27,28			RK73HB1J474D	CHIP R 470K D 1/16W	
L707			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)		R31			RK73HB1J103J	CHIP R 10K J 1/16W	
L709			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	E,E4	R36		*	RK73GB2A433J	CHIP R 43K J 1/10W	
L709			L40-3375-57	SMALL FIXED INDUCTOR (33.0NH)	E3,E6	R37			RK73HB1J103J	CHIP R 10K J 1/16W	
L711-713			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)		R39,40			RK73HB1J473J	CHIP R 47K J 1/16W	
L714			L92-0138-05	CHIP FERRITE		R42-44			RK73HB1J103J	CHIP R 10K J 1/16W	
L715		*	L41-1575-45	SMALL FIXED INDUCTOR (15NH)		R45,46			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L717,718			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)		R48-52			RK73HB1J473J	CHIP R 47K J 1/16W	
L719		*	L41-4775-45	SMALL FIXED INDUCTOR (47NH)		R53			RK73HB1J474J	CHIP R 470K J 1/16W	
L720			L40-1575-57	SMALL FIXED INDUCTOR (15.0NH)	E,E4	R54			RK73HB1J102J	CHIP R 1.0K J 1/16W	
L720			L40-6885-57	SMALL FIXED INDUCTOR (6.8NH)	E3,E6	R55,56			RK73HB1J474J	CHIP R 470K J 1/16W	
L901			L92-0149-05	CHIP FERRITE		R57			RK73HB1J103J	CHIP R 10K J 1/16W	
X1			L77-1950-05	CRYSTAL RESONATOR (11.0592MHZ)		R58,59			RK73HB1J473J	CHIP R 47K J 1/16W	
X2			L77-1976-05	CRYSTAL RESONATOR (3.6864MHZ)		R61			RK73HB1J331J	CHIP R 330 J 1/16W	
X501			L77-1971-05	TCXO (16.8MHZ)		R62			RK73HB1J103J	CHIP R 10K J 1/16W	
XF701			L71-0617-25	MCF (49.95MHZ)		R63			RK73HB1J332J	CHIP R 3.3K J 1/16W	
						R64			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP1			RK74HB1J473J	CHIP-COM 47K J 1/16W		R65,66			RK73HB1J473J	CHIP R 47K J 1/16W	
CP3,4			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R67			RK73HB1J472J	CHIP R 4.7K J 1/16W	
CP5			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R68			RK73GB2A181J	CHIP R 180 J 1/10W	
CP7,8			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R69			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP10			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R71			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP11			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R72			RK73GB2A181J	CHIP R 180 J 1/10W	
CP12,13			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R73,74			RK73HB1J474J	CHIP R 470K J 1/16W	
CP16			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R75			RK73GB2A391J	CHIP R 390 J 1/10W	E,E3
CP18			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R76-80			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP19			RK75HA1J473J	CHIP-COM 47K J 1/16W		R82			RK73GB2A391J	CHIP R 390 J 1/10W	E,E3

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Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R83			RK73GB2A000J	CHIP R 0.0 J 1/10W		R164			RK73HB1J184J	CHIP R 180K J 1/16W	
R84			RK73HB1J184J	CHIP R 180K J 1/16W		R165			RK73HB1J154J	CHIP R 150K J 1/16W	
R89			RK73HB1J102J	CHIP R 1.0K J 1/16W		R166			RK73HB1J103J	CHIP R 10K J 1/16W	
R90			RK73HB1J394J	CHIP R 390K J 1/16W		R167			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R91			RK73HB1J332J	CHIP R 3.3K J 1/16W		R168			RK73HB1J474J	CHIP R 470K J 1/16W	
R92			RK73HB1J473J	CHIP R 47K J 1/16W		R169			RK73HB1J223J	CHIP R 22K J 1/16W	
R93			RK73HB1J393J	CHIP R 39K J 1/16W		R170			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R94			RK73HB1J684J	CHIP R 680K J 1/16W		R171			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R95,96			RK73HB1J102J	CHIP R 1.0K J 1/16W		R172			RK73HB1J684J	CHIP R 680K J 1/16W	
R97			RK73HB1J474J	CHIP R 470K J 1/16W		R173			RK73HB1J184J	CHIP R 180K J 1/16W	
R98,99			RK73HB1J473J	CHIP R 47K J 1/16W		R174			RK73HB1J123J	CHIP R 12K J 1/16W	
R100			RK73HB1J223J	CHIP R 22K J 1/16W		R175			RK73HB1J103J	CHIP R 10K J 1/16W	
R101			RK73HB1J103J	CHIP R 10K J 1/16W		R176			RK73HB1J683J	CHIP R 68K J 1/16W	
R102			RK73HB1J473J	CHIP R 47K J 1/16W		R177			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R103			RK73HB1J105J	CHIP R 1.0M J 1/16W		R178			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R104			RK73HB1J103J	CHIP R 10K J 1/16W		R180			RK73HB1J103J	CHIP R 10K J 1/16W	
R105			RK73HB1J472J	CHIP R 4.7K J 1/16W		R181			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R106			RK73HB1J473J	CHIP R 47K J 1/16W		R183			RK73HB1J103J	CHIP R 10K J 1/16W	
R107			RK73HB1J564J	CHIP R 560K J 1/16W		R184			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R108			RK73HB1J334J	CHIP R 330K J 1/16W		R187			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R109			RK73HB1J684J	CHIP R 680K J 1/16W		R191			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R111			RK73HB1J564J	CHIP R 560K J 1/16W		R192,193			RK73HB1J104J	CHIP R 100K J 1/16W	
R112			RK73HB1J334J	CHIP R 330K J 1/16W		R194,195			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R113			RK73HB1J000J	CHIP R 0.0 J 1/16W		R196			RK73HB1J151J	CHIP R 150 J 1/16W	
R114			RK73HB1J184J	CHIP R 180K J 1/16W		R198			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R115			RK73GB2A103J	CHIP R 10K J 1/10W		R199			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R116			RK73HB1J393J	CHIP R 39K J 1/16W		R200			RK73HB1J473J	CHIP R 47K J 1/16W	
R117			RK73HB1J683J	CHIP R 68K J 1/16W		R202			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R119			RK73HB1J101J	CHIP R 100 J 1/16W		R203			RK73HB1J222J	CHIP R 2.2K J 1/16W	
R121			RK73HB1J184J	CHIP R 180K J 1/16W		R204			RK73HB1J104J	CHIP R 100K J 1/16W	
R122			RK73HB1J154J	CHIP R 150K J 1/16W		R205			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R125			RK73GB2A152J	CHIP R 1.5K J 1/10W		R206			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R129			RK73HB1J105J	CHIP R 1.0M J 1/16W		R207			RK73HB1J154J	CHIP R 150K J 1/16W	
R130			RK73HB1J474J	CHIP R 470K J 1/16W		R210			RK73HB1J471J	CHIP R 470 J 1/16W	
R131,132			RK73HB1J000J	CHIP R 0.0 J 1/16W		R211			RK73HB1J474J	CHIP R 470K J 1/16W	
R134			RK73HB1J104J	CHIP R 100K J 1/16W		R212			RK73GB2A101J	CHIP R 100 J 1/10W	
R135			RK73HB1J000J	CHIP R 0.0 J 1/16W		R213			RK73HB1J101J	CHIP R 100 J 1/16W	
R137			RK73HB1J223J	CHIP R 22K J 1/16W		R214			RK73HB1J182J	CHIP R 1.8K J 1/16W	
R139			RK73HB1J103J	CHIP R 10K J 1/16W		R215			RK73HB1J334J	CHIP R 330K J 1/16W	
R140			RK73HB1J102J	CHIP R 1.0K J 1/16W		R216			RK73HB1J274J	CHIP R 270K J 1/16W	
R141			RK73HB1J105J	CHIP R 1.0M J 1/16W		R218			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R142			RK73HB1J223J	CHIP R 22K J 1/16W		R220			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R143			RK73HB1J473J	CHIP R 47K J 1/16W		R221			RK73HB1J473J	CHIP R 47K J 1/16W	
R144			RK73HB1J472J	CHIP R 4.7K J 1/16W		R222,223			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R145			RK73HB1J154J	CHIP R 150K J 1/16W		R224			RK73HB1J104J	CHIP R 100K J 1/16W	
R146			RK73HB1J105J	CHIP R 1.0M J 1/16W		R225			RK73HB1J154J	CHIP R 150K J 1/16W	
R147			RK73HB1J103J	CHIP R 10K J 1/16W		R226			RK73HB1J184J	CHIP R 180K J 1/16W	
R149			RK73HB1J105J	CHIP R 1.0M J 1/16W		R229			RK73HB1J473J	CHIP R 47K J 1/16W	
R150			RK73HB1J153J	CHIP R 15K J 1/16W		R230			RK73HB1J123J	CHIP R 12K J 1/16W	
R151			RK73HB1J183J	CHIP R 18K J 1/16W		R232			RK73HB1J823J	CHIP R 82K J 1/16W	
R152			RK73HB1J105J	CHIP R 1.0M J 1/16W		R236			RK73HB1J124J	CHIP R 120K J 1/16W	
R153			RK73HB1J332J	CHIP R 3.3K J 1/16W		R238			RK73HB1J474J	CHIP R 470K J 1/16W	
R154			RK73HB1J333J	CHIP R 33K J 1/16W		R239			RK73HB1J104J	CHIP R 100K J 1/16W	
R155			RK73HB1J223J	CHIP R 22K J 1/16W		R240			RK73HB1J474J	CHIP R 470K J 1/16W	
R156,157		*	RK73HB1J304J	CHIP R 300K J 1/16W		R241			RK73HB1J473J	CHIP R 47K J 1/16W	
R158			RK73HB1J334J	CHIP R 330K J 1/16W		R242			RK73HB1J104J	CHIP R 100K J 1/16W	
R159			RK73HB1J474J	CHIP R 470K J 1/16W		R243			RK73HB1J474J	CHIP R 470K J 1/16W	
R160			RK73HB1J224J	CHIP R 220K J 1/16W		R244			RK73HB1J473J	CHIP R 47K J 1/16W	
R161,162			RK73HB1J124J	CHIP R 120K J 1/16W		R245			RK73HB1J103J	CHIP R 10K J 1/16W	
R163			RK73HB1J393J	CHIP R 39K J 1/16W		R246			RK73HB1J223J	CHIP R 22K J 1/16W	

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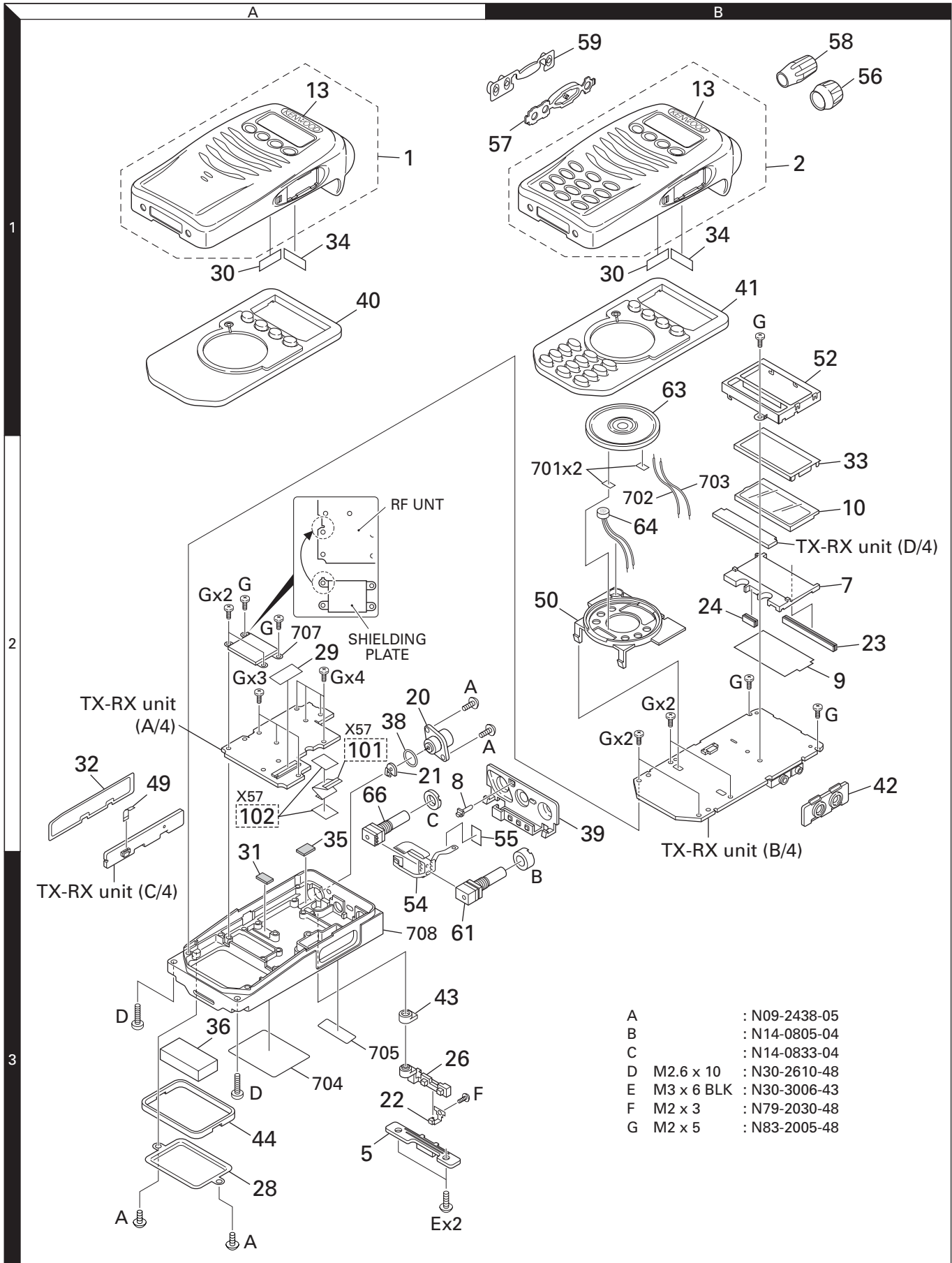
Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
R247			RK73HB1J184J	CHIP R 180K J 1/16W		R607			RK73HB1J220J	CHIP R 22 J 1/16W	
R248			RK73GB2A000J	CHIP R 0.0 J 1/10W		R608			RK73HB1J331J	CHIP R 330 J 1/16W	
R250			RK73GB2A000J	CHIP R 0.0 J 1/10W		R609			RK73HB1J330J	CHIP R 33 J 1/16W	
R251			RK73HB1J474J	CHIP R 470K J 1/16W		R610			RK73HB1J331J	CHIP R 330 J 1/16W	
R254,255			RK73HB1J474J	CHIP R 470K J 1/16W		R611			RK73HB1J823J	CHIP R 82K J 1/16W	
R256-258			RK73GB2A000J	CHIP R 0.0 J 1/10W		R612			RK73HB1J221J	CHIP R 220 J 1/16W	
R259			RK73HB1J103J	CHIP R 10K J 1/16W		R613			RK73HB1J563J	CHIP R 56K J 1/16W	
R261			RK73HB1J103J	CHIP R 10K J 1/16W		R614			RK73HB1J471J	CHIP R 470 J 1/16W	
R262			RK73HB1J473J	CHIP R 47K J 1/16W		R618			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R263			RK73HB1J000J	CHIP R 0.0 J 1/16W		R619			RK73HB1J103J	CHIP R 10K J 1/16W	
R501,502			RK73HB1J102J	CHIP R 1.0K J 1/16W		R620			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R503			RK73HB1J470J	CHIP R 47 J 1/16W		R621			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R504			RK73HB1J103J	CHIP R 10K J 1/16W		R622			RK73HB1J220J	CHIP R 22 J 1/16W	
R505			RK73HB1J102J	CHIP R 1.0K J 1/16W		R623			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R506			RK73HB1J154J	CHIP R 150K J 1/16W		R624			RK73HB1J104J	CHIP R 100K J 1/16W	
R507			RK73HB1J101J	CHIP R 100 J 1/16W		R625			RK73HB1J680J	CHIP R 68 J 1/16W	
R508			RK73HB1J330J	CHIP R 33 J 1/16W		R626			RK73GB2A000J	CHIP R 0.0 J 1/10W	E,E4
R509			RK73HB1J272J	CHIP R 2.7K J 1/16W		R627			RK73HB1J223J	CHIP R 22K J 1/16W	
R510-512			RK73HB1J000J	CHIP R 0.0 J 1/16W		R628			RK73HB1J183J	CHIP R 18K J 1/16W	
R513			RK73HB1J470J	CHIP R 47 J 1/16W		R629			RK73EB2ER39K	CHIP R 0.39 K 1/4W	
R514			RK73HB1J102J	CHIP R 1.0K J 1/16W	E,E4	R630,631			RK73HH1J154D	CHIP R 150K D 1/16W	
R514			RK73HB1J152J	CHIP R 1.5K J 1/16W	E3,E6	R632,633			RK73HH1J334D	CHIP R 330K D 1/16W	
R515			RK73HB1J561J	CHIP R 560 J 1/16W	E,E4	R634			RK73HB1J103J	CHIP R 10K J 1/16W	
R515,516			RK73HB1J331J	CHIP R 330 J 1/16W	E3,E6	R635			RK73HB1J473J	CHIP R 47K J 1/16W	
R516			RK73HB1J331J	CHIP R 330 J 1/16W	E,E4	R636			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R517			RK73HB1J103J	CHIP R 10K J 1/16W		R637			RK73HB1J223J	CHIP R 22K J 1/16W	
R518			RK73HB1J101J	CHIP R 100 J 1/16W		R638			RK73HB1J474J	CHIP R 470K J 1/16W	
R519,520			RK73HB1J103J	CHIP R 10K J 1/16W		R639			RK73HB1J184J	CHIP R 180K J 1/16W	
R521			RK73HB1J101J	CHIP R 100 J 1/16W	E,E4	R640			RK73HB1J474J	CHIP R 470K J 1/16W	
R521,522			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6	R641			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R522			RK73HB1J220J	CHIP R 22 J 1/16W	E,E4	R642			RK73HB1J220J	CHIP R 22 J 1/16W	
R523			RK73HB1J473J	CHIP R 47K J 1/16W		R643			RK73HB1J683J	CHIP R 68K J 1/16W	
R525			RK73HB1J101J	CHIP R 100 J 1/16W		R645,646			RK73GB2A271J	CHIP R 270 J 1/10W	
R527			RK73HB1J104J	CHIP R 100K J 1/16W	E3,E6	R647			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R527			RK73HB1J224J	CHIP R 220K J 1/16W	E,E4	R648			RK73HB1J000J	CHIP R 0.0 J 1/16W	E,E4
R529			RK73HB1J151J	CHIP R 150 J 1/16W	E,E4	R648			RK73HB1J5R6J	CHIP R 5.6 J 1/16W	E3,E6
R529,530			RK73HB1J181J	CHIP R 180 J 1/16W	E3,E6	R649			RK73HB1J473J	CHIP R 47K J 1/16W	
R530			RK73HB1J181J	CHIP R 180 J 1/16W	E,E4	R701			RK73HB1J103J	CHIP R 10K J 1/16W	
R531,532			RK73HB1J220J	CHIP R 22 J 1/16W		R702,703			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R533			RK73HB1J472J	CHIP R 4.7K J 1/16W		R704			RK73HB1J224J	CHIP R 220K J 1/16W	
R534			RK73HB1J154J	CHIP R 150K J 1/16W		R705,706			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R535			RK73HB1J101J	CHIP R 100 J 1/16W		R707			RK73HB1J101J	CHIP R 100 J 1/16W	
R541			RK73HB1J154J	CHIP R 150K J 1/16W		R708			RK73HB1J103J	CHIP R 10K J 1/16W	
R542			RK73HB1J331J	CHIP R 330 J 1/16W	E3,E6	R710			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R542			RK73HB1J680J	CHIP R 68 J 1/16W	E,E4	R711			RK73HB1J474J	CHIP R 470K J 1/16W	
R544			RK73HB1J470J	CHIP R 47 J 1/16W		R713			RK73HB1J334J	CHIP R 330K J 1/16W	
R545			RK73HH1J333D	CHIP R 33K D 1/16W		R715,716			RK73HB1J332J	CHIP R 3.3K J 1/16W	
R546			RK73HH1J104D	CHIP R 100K D 1/16W		R717			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R547			RK73HB1J472J	CHIP R 4.7K J 1/16W		R718			RK73HB1J100J	CHIP R 10 J 1/16W	
R548			RK73HB1J000J	CHIP R 0.0 J 1/16W		R719			RK73HB1J332J	CHIP R 3.3K J 1/16W	
R550			RK73GB2A000J	CHIP R 0.0 J 1/10W		R721			RK73HB1J224J	CHIP R 220K J 1/16W	
R551,552			RK73HB1J000J	CHIP R 0.0 J 1/16W		R722			RK73HB1J101J	CHIP R 100 J 1/16W	
R558			RK73HB1J000J	CHIP R 0.0 J 1/16W		R726			RK73HB1J474J	CHIP R 470K J 1/16W	
R601			RK73HB1J472J	CHIP R 4.7K J 1/16W		R727			RK73HB1J681J	CHIP R 680 J 1/16W	
R602			RK73HB1J000J	CHIP R 0.0 J 1/16W		R728			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6
R603			RK73HB1J102J	CHIP R 1.0K J 1/16W		R728			RK73HB1J331J	CHIP R 330 J 1/16W	E,E4
R604			RK73HB1J333J	CHIP R 33K J 1/16W		R729			RK73HB1J470J	CHIP R 47 J 1/16W	
R605			RK73HB1J101J	CHIP R 100 J 1/16W	E3,E6	R730			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R605			RK73HB1J470J	CHIP R 47 J 1/16W	E,E4	R732			RK73HB1J391J	CHIP R 390 J 1/16W	
R606			RK73HB1J471J	CHIP R 470 J 1/16W	E3,E6	R733			RK73HB1J000J	CHIP R 0.0 J 1/16W	

PARTS LIST

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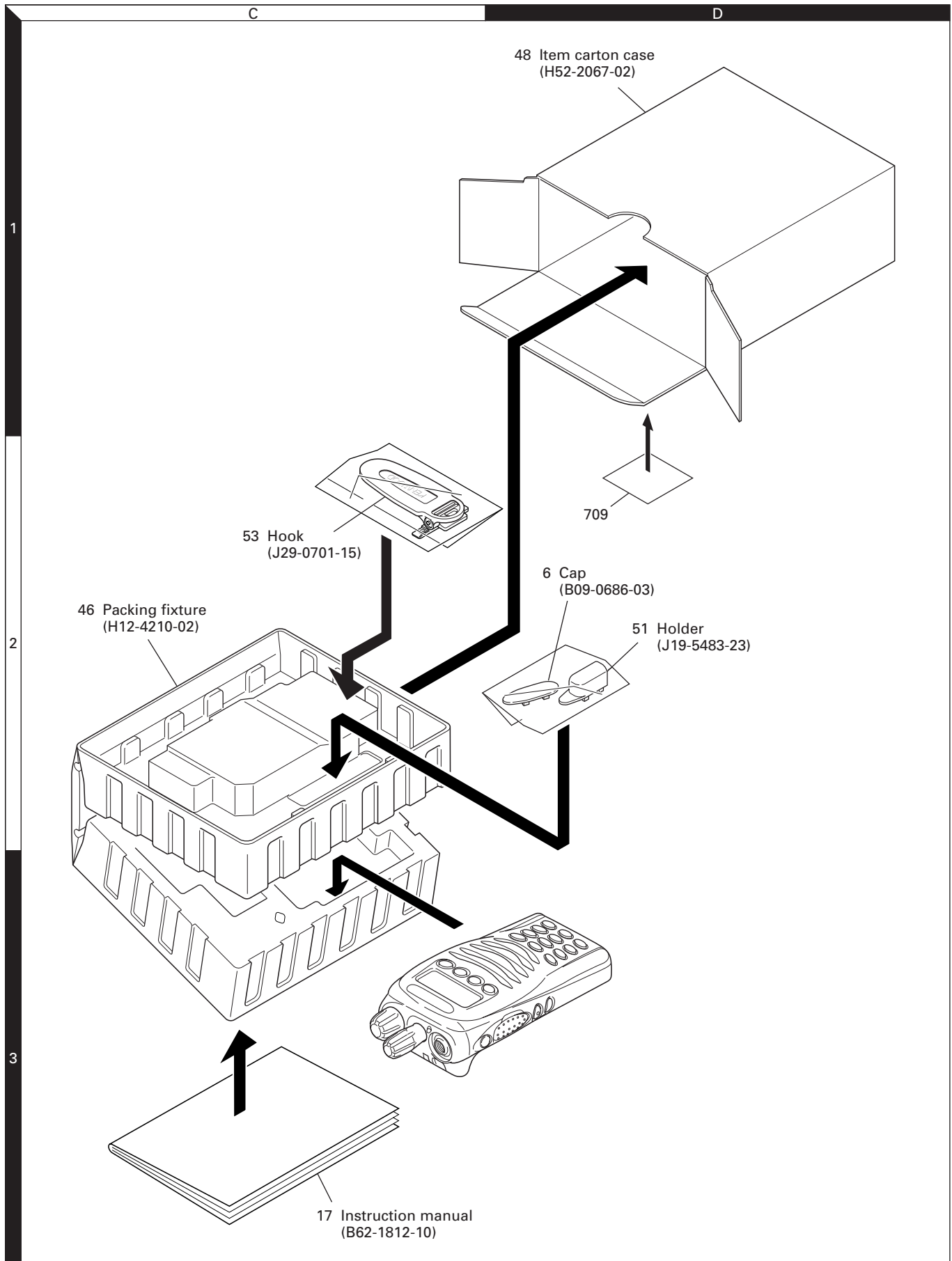
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R734			RK73HB1J563J	CHIP R 56K J 1/16W		IC13			AQUA-L	MOS-IC	
R735			RK73HB1J104J	CHIP R 100K J 1/16W		IC14			TC7W53FK(F)	MOS-IC	
R736			RK73HB1J563J	CHIP R 56K J 1/16W		IC15			TK62012F	MOS-IC	
R737			RK73HB1J104J	CHIP R 100K J 1/16W		IC16			M62364FP-F	MOS-IC	
R738			RK73HB1J120J	CHIP R 12 J 1/16W	E,E4	IC17			TK62012F	MOS-IC	
R738			RK73HB1J180J	CHIP R 18 J 1/16W	E3,E6	IC18			TA7368FG	MOS-IC	
R739-741			RK73HB1J105J	CHIP R 1.0M J 1/16W		IC19			TC75S51FE(F)	MOS-IC	
R743			RK73HB1J220J	CHIP R 22 J 1/16W		IC501			ADF4111BCP7	MOS-IC	
R744			RK73HB1J221J	CHIP R 220 J 1/16W		IC601			TA75W01FUF	MOS-IC	
R747			RK73HB1J104J	CHIP R 100K J 1/16W		IC701			TA31136FNG	MOS-IC	
R748			RK73HB1J824J	CHIP R 820K J 1/16W	E3,E6	Q1			UMG3N	TRANSISTOR	
R750			RK73HB1J104J	CHIP R 100K J 1/16W	E,E4	Q4			FP210	TRANSISTOR	
R750,751			RK73HB1J104J	CHIP R 100K J 1/16W	E3,E6	Q5		*	UPA672T-A	FET	
R751			RK73HB1J683J	CHIP R 68K J 1/16W	E,E4	Q6			UMG3N	TRANSISTOR	
R753			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q7		*	UPA672T-A	FET	
R754,755			RK73HB1J105J	CHIP R 1.0M J 1/16W		Q8			DTA114EE	DIGITAL TRANSISTOR	
R756			RK73FB2B000J	CHIP R 0.0 J 1/8W		Q9			SSM6J08FU(F)	FET	
R757			RK73HB1J105J	CHIP R 1.0M J 1/16W		Q12			2SC4617(S)	TRANSISTOR	
R758			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q13			2SB1132(Q,R)	TRANSISTOR	
R759			RK73GB2A000J	CHIP R 0.0 J 1/10W		Q14,15			SSM3K15TE(F)	FET	
R760			RK73HB1J000J	CHIP R 0.0 J 1/16W		Q16			2SA1774(S)	TRANSISTOR	
R903			RK73HB1J102J	CHIP R 1.0K J 1/16W		Q17			2SC4649(N,P)	TRANSISTOR	
R913-916			RK73HB1J102J	CHIP R 1.0K J 1/16W		Q19			SSM3K15TE(F)	FET	
R923			RK73GB2A000J	CHIP R 0.0 J 1/10W		Q21			RN4910(F)	TRANSISTOR	
S1			S70-0424-05	TACT SWITCH		Q22			SSM3K15TE(F)	FET	
S2			S70-0457-05	TACT SWITCH		Q23			DTC144EE	DIGITAL TRANSISTOR	
S3,4			S70-0424-05	TACT SWITCH		Q24			SSM6J08FU(F)	FET	
D1			RB521S-30	DIODE		Q25			2SK1830F	FET	
D4			MA2S111-F	DIODE		Q26			2SJ347F	FET	
D16,17			MA2S111-F	DIODE		Q27			DTC144EE	DIGITAL TRANSISTOR	
D24-27			MA2S111-F	DIODE		Q28			SSM3K01T(F)	FET	
D28-31			RB706F-40	DIODE		Q29			SSM3K15TE(F)	FET	
D32			DA221	DIODE		Q30			2SJ243-A	FET	
D33			AVRM1608270MAB	VARIATOR		Q31,32			2SC4649(N,P)	TRANSISTOR	
D501		*	MA2S077-F	DIODE		Q33			2SJ347F	FET	
D502,503			HSC277	DIODE		Q34			SSM3K15TE(F)	FET	
D505			1SV325F	VARIABLE CAPACITANCE DIODE		Q35			SSM3K01T(F)	FET	
D507			1SV325F	VARIABLE CAPACITANCE DIODE		Q501			2SC5488	TRANSISTOR	
D509			1SV325F	VARIABLE CAPACITANCE DIODE		Q502,503			2SK508NV(K52)	FET	
D511			1SV325F	VARIABLE CAPACITANCE DIODE		Q504			SSM6P05FU(F)	FET	
D513			1SV278F	VARIABLE CAPACITANCE DIODE		Q505			2SC4617(S)	TRANSISTOR	
D514-516			HSC277	DIODE		Q506,507			2SC5488	TRANSISTOR	
D517		*	MA2S077-F	DIODE		Q601			2SC5488	TRANSISTOR	
D601			UDZS4.7B	ZENER DIODE		Q602			2SK3077F	FET	
D604-608			HVC131	DIODE		Q603		*	RD01MUS1-T113	FET	
D701,702			DAN235E	DIODE		Q604			2SK3476-F	FET	
D703-707			HVC355B	VARIABLE CAPACITANCE DIODE	E,E4	Q605			DTC114EE	DIGITAL TRANSISTOR	
D703-708			HVC350B	VARIABLE CAPACITANCE DIODE	E3,E6	Q606			2SK879(GR)F	FET	
D708			HVC350B	VARIABLE CAPACITANCE DIODE	E,E4	Q607			DTC114EE	DIGITAL TRANSISTOR	
D901			1SR154-400	DIODE		Q608			DTA144EE	DIGITAL TRANSISTOR	
IC1			XC61CC5002NR	MOS-IC		Q609			SSM3K15TE(F)	FET	
IC2			XC6204B502PR	MOS-IC		Q701			2SC4649(N,P)	TRANSISTOR	
IC3			XC61CN3402NR	MOS-IC		Q702			DTA144EE	DIGITAL TRANSISTOR	
IC4,5			BU4094BCFV	MOS-IC		Q703			2SC4649(N,P)	TRANSISTOR	
IC6		*	LC75834W-E	MOS-IC		Q704,705			3SK318	FET	
IC7			30625MGP234HU	MICROPROCESSOR IC		TH501			B57331V2104J	THERMISTOR	
IC8			AT29C040A-90TU	ROM IC		TH701,702			B57331V2104J	THERMISTOR	
IC9			CAT24WC64WI	ROM IC							
IC10-12			TK62012F	MOS-IC							

EXPLODED VIEW



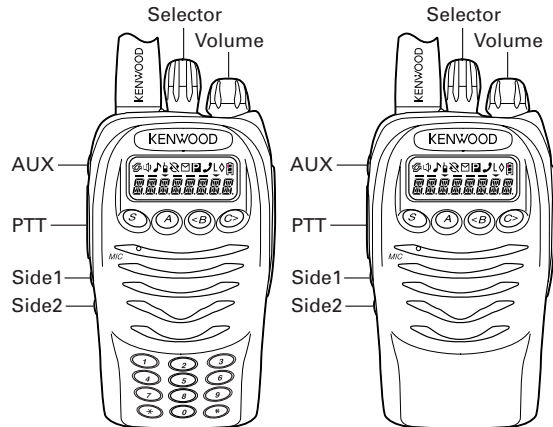
Parts with the exploded numbers larger than 700 are not supplied.

PACKING



ADJUSTMENT

Controls



Panel Test Mode

■ Test mode operation features

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

■ Key operation

Key	Function	Display
[S]	Shifts to Panel tuning mode	-
[A]	Low transmit power	"L" appears
[B]	MSK 1200bps and 2400bps	2400bps : ☑ icon appears
[C]	Test signaling CH up	Signaling No.
[Selector]	Test frequency CH up/down	Channel No.
[Side1]	Squelch on/off	🔊
[Side2]	Narrow/Wide 5k/Wide 4k	Narrow : "N" Wide 5k : "W" Wide 4k : "S"
[PTT]	Transmit	-
[0] to [9] and [#], [*]	Use as the DTMF keypad. If a key is pressed during transmission, the DTMF corresponding to the key that was presses is sent.	-
[AUX]	Segment check	All segment appears

Note :

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

• LED indicator

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

• LCD display in panel test mode

N _ _ _ _ 1 _ _ 1
 ↑ ↑ ↑
 N : Narrow Channel No. Signaling No.
 W : Wide 5k
 S : Wide 4k (E type only)

■ Frequency and Signaling

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

• Test frequency

CH	E, E4		E3, E6	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
1	455.05000	455.10000	415.05000	415.10000
2	440.05000	440.10000	400.05000	400.10000
3	469.95000	469.90000	429.95000	429.90000
4	455.00000	455.00000	415.00000	415.00000
5	455.20000	455.20000	415.20000	415.20000
6	455.40000	455.40000	415.40000	415.40000
7~16	-	-	-	-

• Test signaling

No.	RX	TX
1	None	None
2	None	100Hz Square Wave
3	Skip	Skip
4	QT : 67.0Hz	QT : 67.0Hz
5	QT : 151.4Hz	QT : 151.4Hz
6	QT : 210.7Hz	QT : 210.7Hz
7	QT : 254.1Hz	QT : 254.1Hz
8	DQT : 023N	DQT : 023N
9	DQT : 754I	DQT : 754I
10	DTMF : 159D	DTMF : 159D
11	None	DTMF Code 9
12	Skip	Skip
13	Single Tone : 979.9Hz	Single Tone : 979.9Hz
14	None	Single Tone : 1000Hz
15	5-tone : 12345 (CCIR)	5-tone : 12345 (CCIR)
16	None	MSK
17	MSK : Preamble : 0xAAAA Sync : 0x23EB Data : 0x230960C6AAAA CRC : 0xC4D7	MSK : Preamble : 0xAAAA Sync : 0x23EB Data : 0x230960C6AAAA CRC : 0xC4D7

ADJUSTMENT

Panel Tuning Mode

■ 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 8Ω 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

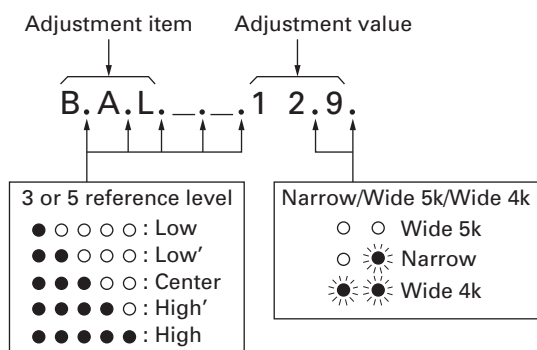
(To place transceiver in tuning mode)

Press [S] key, now in tuning mode. Use [B] key to write tuning data through tuning modes, and [Selector] to adjust tuning requirements (1 to 256 appears on LCD).

Use [C] key to select the adjustment item through tuning modes. Use [A] key to adjust 3 or 5 reference level adjustments, and use [Side2] key to switch between Wide/Narrow.

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

• LCD display in panel tuning mode



■ 3 or 5 reference level adjustments frequency

Tuning point	E, E4		E3, E6	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
Low	440.05000	440.10000	400.05000	400.10000
Low'	447.55000	447.60000	407.55000	407.60000
Center	455.05000	455.10000	415.05000	415.10000
High'	462.55000	462.60000	422.55000	422.60000
High	469.95000	469.90000	429.95000	429.90000

■ Adjustment item and Display

(*** : 1~256, MSK only : 1~64)

Order	Adjustment item	Display
1	Frequency	F R E Q _ * * *
2	High power	H P W R _ * * *
3	Low power	L P W R _ * * *
4	DQT balance	B A L _ _ * * *
5	Max deviation	D E V _ _ * * *
6	VOX 1	V X 1 _ _ * * *
7	VOX 10	V X 1 0 _ * * *
8	QT deviation	Q T _ _ _ * * *
9	DQT deviation	D Q T _ _ * * *
10	DTMF deviation	D T M F _ * * *
11	MSK deviation	M S K _ _ _ * *
12	Tone deviation	T O N E _ * * *
13	Sensitivity	S E N S _ * * *
14	Squelch	S Q L _ _ * * *
15	Low RSSI	L R S S I * * *
16	Squelch tight	S Q L T _ * * *
17	High RSSI	H R S S I * * *
18	Battery detection	B A T T _ * * *

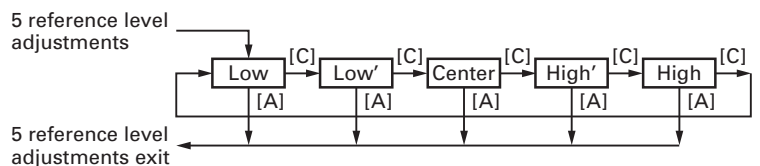
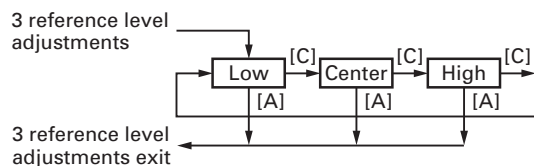
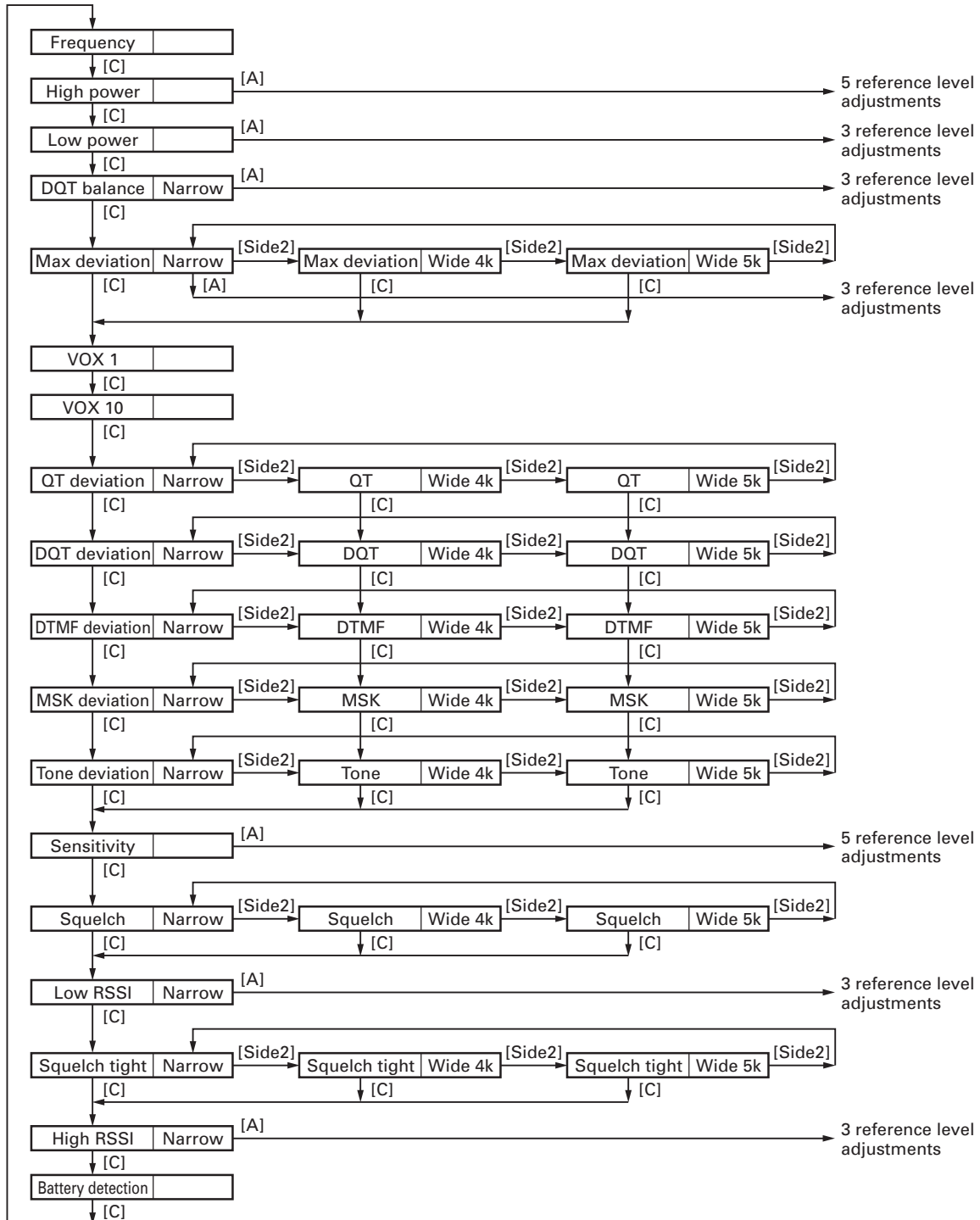
■ Key operation

Key	Function	
	Push	Hold (1 second)
[S]	End of panel tuning mode	-
[A]	To enter 3 or 5 reference level adjustments	-
[B]	Writes the adjustment value	-
[C]	Go to next adjustment item	Back to last adjustment item
[Selector]	Adjustment value up/down	
[Volume]	Volume level up/down	
[Side1]	Squelch on/off	-
[Side2]	Selects Narrow, Wide	-
[AUX]	All segment appears	-

ADJUSTMENT

Flow chart

Note : Wide 4k is E and E4 type only



ADJUSTMENT

Test Equipment Required for Alignment

Test Equipment	Major Specifications	
1. Standard Signal Generator (SSG)	Frequency Range	400 to 520MHz
	Modulation	Frequency modulation and external modulation
	Output	-127dBm/0.1μV to greater than -47dBm/1mV
2. Power Meter	Input Impedance	50Ω
	Operation Frequency	400 to 520MHz or more
	Measurement Capability	Vicinity of 10W
3. Deviation Meter	Frequency Range	400 to 520MHz
4. Digital Volt Meter (DVM)	Measuring Range	10mV to 10V DC
	Input Impedance	High input impedance for minimum circuit loading
5. Oscilloscope		DC through 30MHz
6. High Sensitivity Frequency Counter	Frequency Range	10Hz to 1000MHz
	Frequency Stability	0.2ppm or less
7. Ammeter		5A
8. AF Volt Meter (AF VTVM)	Frequency Range	50Hz to 10kHz
	Voltage Range	1mV to 10V
9. Audio Generator (AG)	Frequency Range	50Hz to 5kHz or more
	Output	0 to 1V
10. Distortion Meter	Capability	3% or less at 1kHz
	Input Level	50mV to 10Vrms
11. 8Ω Dummy Load		Approx. 8Ω, 3W
12. Regulated Power Supply		5V to 10V, approx. 5A Useful if ammeter equipped

■ Antenna Connector Adapter

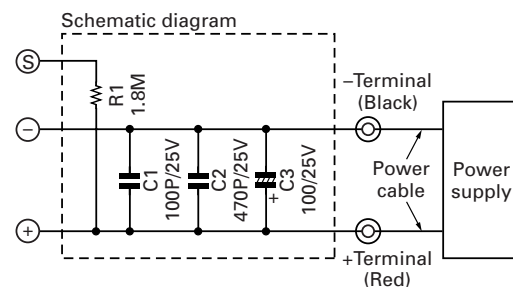
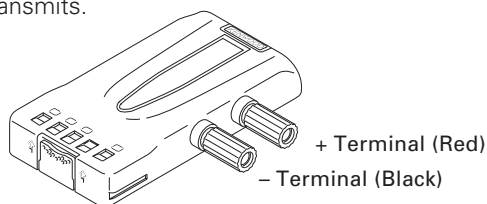
The antenna connector of this radio uses an SMA terminal. Use an antenna connector adapter [SMA(f) – BNC(f) or SMA(f) – N(f)] for adjustment. (The adapter is not provided as an option, so buy a commercially-available one.)

■ Battery Jig (W05-0909-00)

Connect the power cable properly between the battery jig installed in the transceiver and the power supply, and be sure output voltage and the power supply polarity prior to switching the power supply ON, otherwise over voltage and reverse connection may damage the transceiver, or the power supply or both.

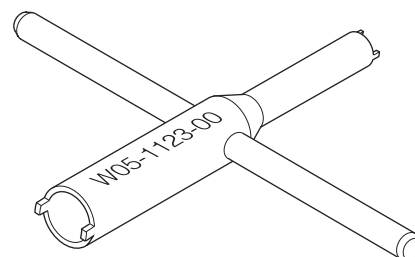
When using the battery jig in user mode, the transceiver assumes that a lithium-ion battery pack is attached to the transceiver. In adjustment mode, battery type detection is not performed. Refer to page 22 for details.

Note : When using the battery jig, you must measure the voltage at the terminals of the battery jig. Otherwise, a slight voltage drop may occur within the power cable, between the power supply and the battery jig, especially while the transceiver transmits.



■ Nut wrench

In order to turn the volume nut and the channel selector nut, use a recommendation tool.
KENWOOD part No. : W05-1123-00



ADJUSTMENT

Common Section


Item	Condition	Measurement			Adjustment			Specifications/Remarks
		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 • RX	[Panel test mode] 1) CH-Sig : 3-1	Power meter	Panel	ANT	TX-RX (A/4)	TC502	3.6V E,E4 3.4V E3,E6	±0.1V
	2) CH-Sig : 2-1	DVM	TX-RX (A/4)	CV			Check	0.6V or more
	[Panel tuning mode] LPWR* 3) CH-Sig : 3-1 PTT : ON				TX-RX (A/4)	TC501	3.6V E,E4 3.4V E3,E6	±0.1V
	4) CH-Sig : 2-1 PTT : ON						Check	0.6V or more

* TX can be continued on unlock condition in panel tuning mode.

Transmitter Section (Note: The market code of the E3 and E6 do not perform "Wide 4k" adjustment)

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Frequency adjust	1) Adj item : [FREQ_] Adjust : [***] CH-Sig : 3-1 PTT : ON	f. counter	Panel	ANT	Panel	Selector knob	High frequency ±50Hz	Note : After replacing the TCXO (X501) align frequency.
2. High power adjust	1) Adj item : [HPWR_] Adjust : [***] 2) Adj item : [H.PWR_] → [H.P.WR_] → [H.P.W.R_] → [H.P.W.R._] → [H.P.W.R._] → [H.P.W.R._] Adjust : [***] PTT : ON	Power meter Ammeter					4.0W	±0.1W 1.8A or less
3. High power check	[Panel test mode] 1) CH-Sig : 1-1 PTT : ON						Check	3.0~5.0W 1.9A or less
	2) CH-Sig : 2-1 PTT : ON							
	3) CH-Sig : 3-1 PTT : ON							
4. Low power adjust	1) Adj item : [LPWR_] Adjust : [***] 2) Adj item : [L.PWR_] → [L.P.W.R_] → [L.P.W.R._] → [L.P.W.R._] Adjust : [***] PTT : ON				Panel	Selector knob	1.0W	±0.1W 0.9A or less
5. Low power check	[Panel test mode] 1) CH-Sig : 1-1 Set low power (Push [S]) PTT : ON	Power meter Ammeter	Panel	ANT			Check	0.7~1.4W 1.0A or less
	2) CH-Sig : 2-1 PTT : ON							
	3) CH-Sig : 3-1 PTT : ON							

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/Remarks				
		Test-equipment	Unit	Terminal	Unit	Parts	Method					
6. DQT balance adjust • Narrow	1) Adj item : [BAL_ _] Adjust : [***.] Deviation meter filter LPF : 3kHz HPF : OFF 2) Adj item : [B.AL_ _] → [B.A.L._ _] → [B.A.L._ _] Adjust : [***.] PTT : ON	Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	Make the demodulation waves into square waves.	<p>These 2 peaks to the same level</p> 				
7. Max DEV adjust • Narrow	1) Adj item : [DEV_ _] Adjust : [***.] AG : 1kHz/75mV at MIC terminal Deviation meter filter LPF : 15kHz HPF : OFF 2) Adj item : [D.EV_ _] → [D.E.V._ _] → [D.E.V._ _] Adjust : [***.] PTT : ON								3.50kHz (According to the larger +, -)	±50Hz		
• Wide 4k	3) Adj item : [DEV_ _] Adjust : [**.*.] PTT : ON										4.40kHz (According to the larger +, -)	±50Hz
• Wide 5k	4) Adj item : [DEV_ _] Adjust : [***] PTT : ON											
8. MIC sensitivity check	[Panel test mode] 1) CH-Sig : 1-1 AG : 1kHz/15.0mV at MIC terminal PTT : ON					Check	1.3~1.8kHz (Narrow) 1.9~2.9kHz (Wide 4k) 2.5~3.5kHz (Wide 5k)					
9. VOX1 adjust	1) Adj item : [VOX1_] Adjust : [***] AG : 1kHz/150mV at MIC terminal	AG	Panel	SP/MIC	Panel		After apply signal from AG, press [B] key that numeric will be stored in memory.					
10. VOX10 adjust	1) Adj item : [VOX10] Adjust : [***] AG : 1kHz/2mV at MIC terminal											
11. QT deviation adjust • Narrow	1) Remove the panel tuning cable assembly from the universal connector. Adj item : [QT_ _ _] Adjust : [***.] Deviation meter filter LPF : 3kHz HPF : OFF PTT : ON	Power meter Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	0.35kHz	±40Hz				
• Wide 4k	2) Adj item : [QT_ _ _] Adjust : [**.*.] PTT : ON						0.60kHz	±40Hz				
• Wide 5k	3) Adj item : [QT_ _ _] Adjust : [***] PTT : ON						0.75kHz	±40Hz				

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/Remarks	
		Test-equipment	Unit	Terminal	Unit	Parts	Method		
12. DQT deviation adjust • Narrow	1) Adj item : [DQT_] Adjust : [***.] Deviation meter filter LPF : 3kHz HPF : OFF PTT : ON	Power meter Deviation meter Oscilloscope AG AF VTVM	Panel	ANT SP/MIC	Panel	Selector knob	0.35kHz	±40Hz	
	• Wide 4k						2) Adj item : [DQT_] Adjust : [**.*.] PTT : ON	0.60kHz	±40Hz
	• Wide 5k						3) Adj item : [DQT_] Adjust : [***] PTT : ON	0.75kHz	±40Hz
13. DTMF deviation adjust • Narrow	1) Adj item : [DTMF_] Adjust : [***.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.25kHz	±0.1kHz	
	• Wide 4k						2) Adj item : [DTMF_] Adjust : [**.*.] PTT : ON	2.0kHz	±0.1kHz
	• Wide 5k						3) Adj item : [DTMF_] Adjust : [***] PTT : ON	2.5kHz	±0.1kHz
14. MSK deviation adjust • Narrow	1) Adj item : [MSK_] Adjust : [***.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.5kHz	±0.1kHz	
	• Wide 4k						2) Adj item : [MSK_] Adjust : [**.*.] PTT : ON	2.4kHz	±0.1kHz
	• Wide 5k						3) Adj item : [MSK_] Adjust : [***] PTT : ON	3.0kHz	±0.1kHz
15. TONE deviation adjust • Narrow	1) Adj item : [TONE_] Adjust : [***.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.5kHz	±0.1kHz	
	• Wide 4k						2) Adj item : [TONE_] Adjust : [**.*.] PTT : ON	2.4kHz	±0.1kHz
	• Wide 5k						3) Adj item : [TONE_] Adjust : [***] PTT : ON	3.0kHz	±0.1kHz

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
16. BATT detection writing	1) Adj item : [BATT_] Adjust : [***] PTT : ON	Power meter DVM	Panel	ANT BATT terminal	Panel		After pressing the PTT switch, confirm that one predetermined numeric in the range 1 to 256 appears and then press [B] key. That numeric will be stored in memory.	BATT terminal voltage : 5.9V
17. BATT detection check	[Panel test mode] 1) CH-Sig : 1-1 BATT terminal voltage : 7.5V PTT : ON						Check	The transceiver can transmit without causing the LED to blink.
	2) BATT terminal voltage : 5.7V PTT : ON							The transceiver should not transmit and LED blinking.

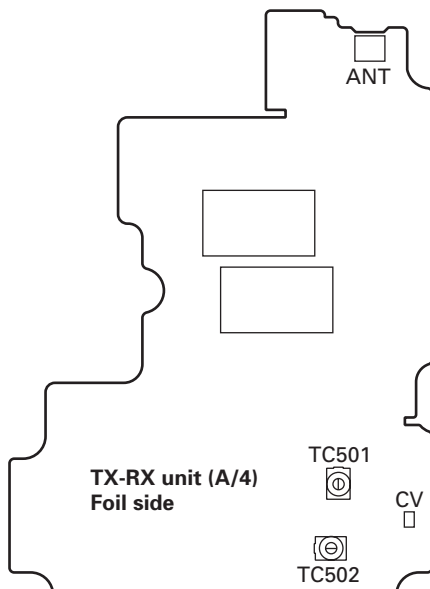
Receiver Section (Note: The market code of the E3 and E6 do not perform "Wide 4k" adjustment)

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Sensitivity adjust	1) Adj item : [SENS_] Adjust : [***] 2) Adj item : [S.ENS_] → [S.E.N.S_] → [S.E.N.S.] → [S.E.N.S.] → [S.E.N.S.] Adjust : [***] SSG output : -103dBm (1.58μV) (MOD : 1kHz±1.5kHz)	S G AF VTVM Oscilloscope	Panel	ANT SP/MIC	Panel	Selector knob	Adjust for RSSI MAX	Rotate the selector knob and increase the adjustment value starting from "1" to obtain RSSI MAX.
2. Sensitivity check	[Panel test mode] 1) CH-Sig : 1-1 SSG output Wide 5k : -117dBm (0.32μV) (MOD : 1kHz±3.0kHz) Wide 4k : -117dBm (0.32μV) (MOD : 1kHz±2.4kHz) Narrow : -115dBm (0.4μV) (MOD : 1kHz±1.5kHz)						Check	13dB SINAD or more
3. Squelch (Preset) adjust • Narrow	1) Adj item : [SQL_] Adjust : [***] SSG output : -118dBm (0.28μV) (MOD : 1kHz±1.5kHz)				Panel	Selector knob	After input signal from SSG, press [B] key. That numeric will be stored in memory.	After adjusting SQL, check SQL open/close. SSG -116dBm : Open SSG OFF : Close
• Wide 4k	2) Adj item : [SQL_] Adjust : [***] SSG output : -118dBm (0.28μV) (MOD : 1kHz±2.4kHz)							
• Wide 5k	3) Adj item : [SQL_] Adjust : [***] SSG output : -118dBm (0.28μV) (MOD : 1kHz±3.0kHz)							

ADJUSTMENT

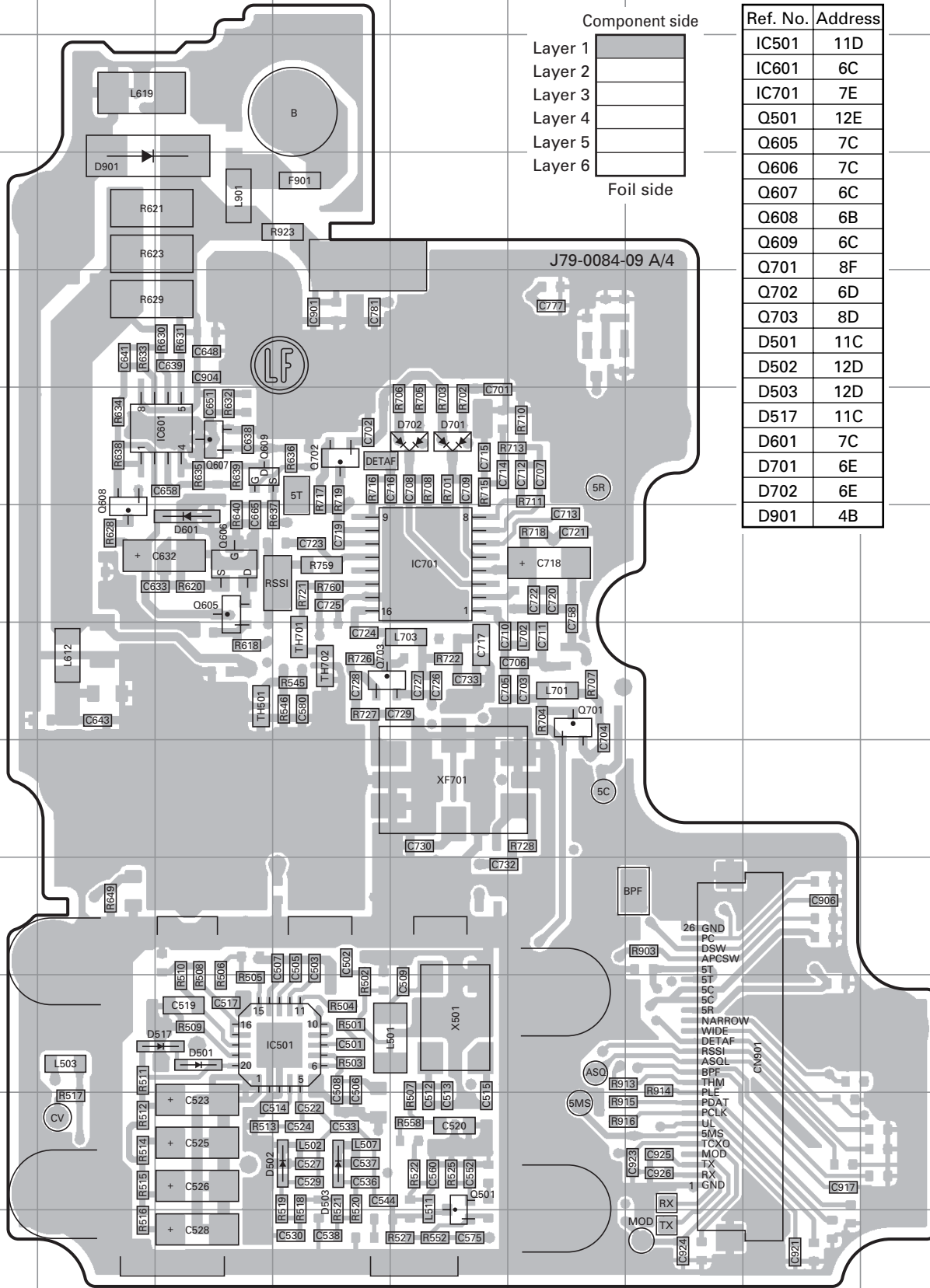
Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
4. Low RSSI adjust • Narrow	1) Adj item : [LRSSI] Adjust : [***.] SSG output : -118dBm (0.28μV) (MOD : 1kHz±1.5kHz)	SSG AF VTVM Oscilloscope	Panel	ANT	Panel	Selector knob	After input signal from SSG, press [B] key. That numeric will be stored in memory.	
	SP/MIC							
	2) Adj item : [L.RSSI] → [L.R.S.S.I] → [L.R.S.S.I.] Adjust : [***.]							
5. Squelch (Tight) adjust • Narrow • Wide 4k • Wide 5k	1) Adj item : [SQLT_] Adjust : [***.] SSG output : -113dBm (0.5μV) (MOD : 1kHz±1.5kHz)						After input signal from SSG, press [B] key. That numeric will be stored in memory.	After adjusting SQL, check SQL open/close. SSG -111dBm : Open SSG OFF : Close
	2) Adj item : [SQLT_] Adjust : [*.*.]. SSG output : -114dBm (0.45μV) (MOD : 1kHz±2.4kHz)							
	3) Adj item : [SQLT_] Adjust : [***.] SSG output : -114dBm (0.45μV) (MOD : 1kHz±3.0kHz)							
6. High RSSI adjust • Narrow	1) Adj item : [HRSSI] Adjust : [***.] SSG output : -70dBm (70.8μV) (MOD : 1kHz±1.5kHz)						After input signal from SSG, press [B] key. That numeric will be stored in memory.	
	2) Adj item : [H.RSSI] → [H.R.S.S.I] → [H.R.S.S.I.] Adjust : [***.]							

Adjustment Points



TK-3170 PC BOARD

TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6
 Component side view (J79-0084-09 A/4)

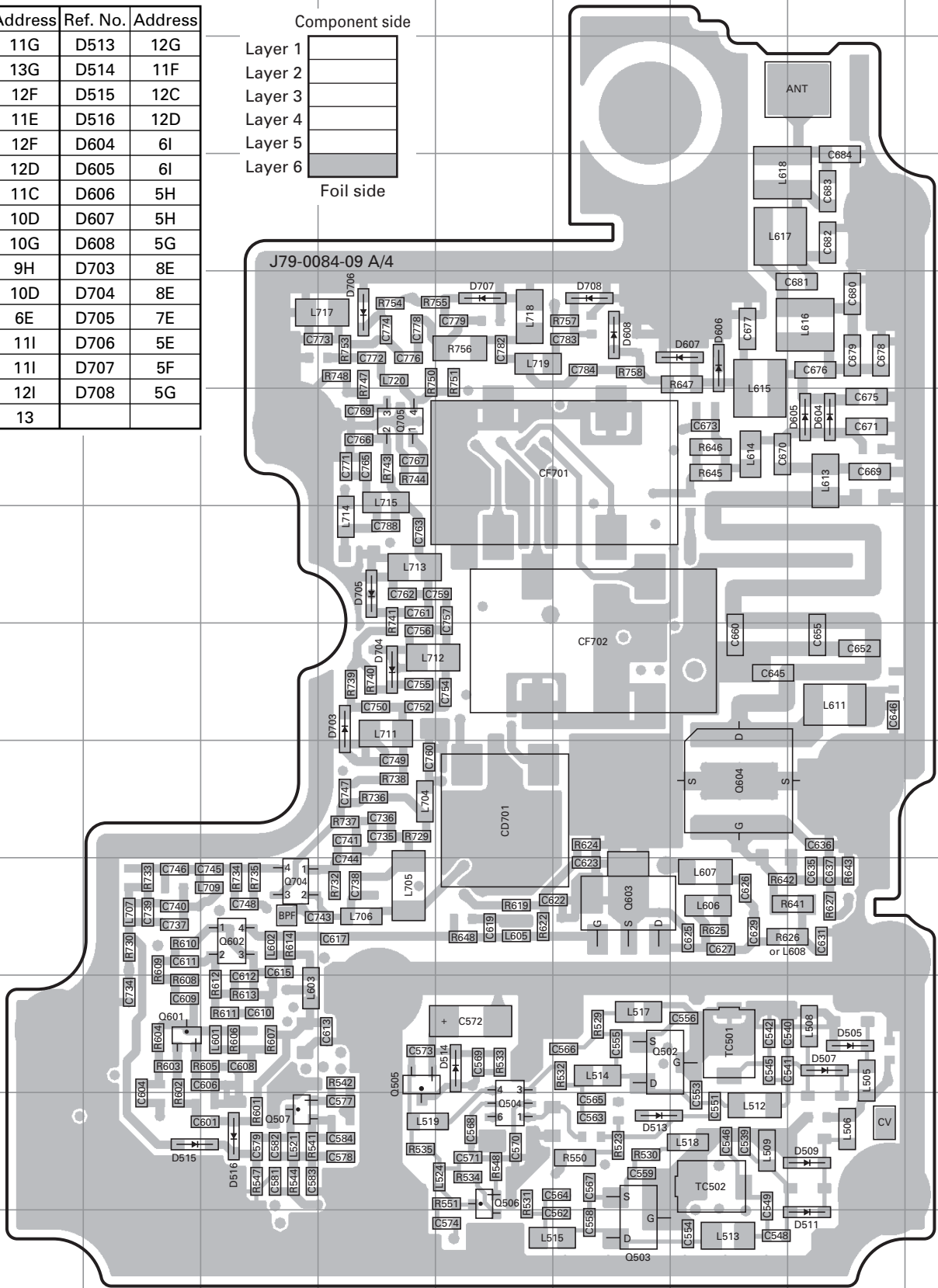
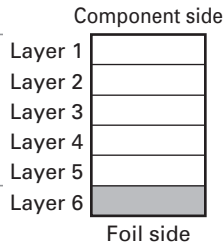


Ref. No.	Address
IC501	11D
IC601	6C
IC701	7E
Q501	12E
Q605	7C
Q606	7C
Q607	6C
Q608	6B
Q609	6C
Q701	8F
Q702	6D
Q703	8D
D501	11C
D502	12D
D503	12D
D517	11C
D601	7C
D701	6E
D702	6E
D901	4B

PC BOARD TK-3170

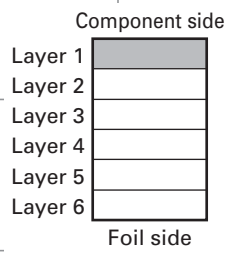
TX-RX UNIT (X57-7012-XX) (A/4) -71 : E -72 : E3 -73 : E4 -74 : E6 Foil side view (J79-0084-09 A/4)

Ref. No.	Address	Ref. No.	Address
Q502	11G	D513	12G
Q503	13G	D514	11F
Q504	12F	D515	12C
Q505	11E	D516	12D
Q506	12F	D604	6I
Q507	12D	D605	6I
Q601	11C	D606	5H
Q602	10D	D607	5H
Q603	10G	D608	5G
Q604	9H	D703	8E
Q704	10D	D704	8E
Q705	6E	D705	7E
D505	11I	D706	5E
D507	11I	D707	5F
D509	12I	D708	5G
D511	13		

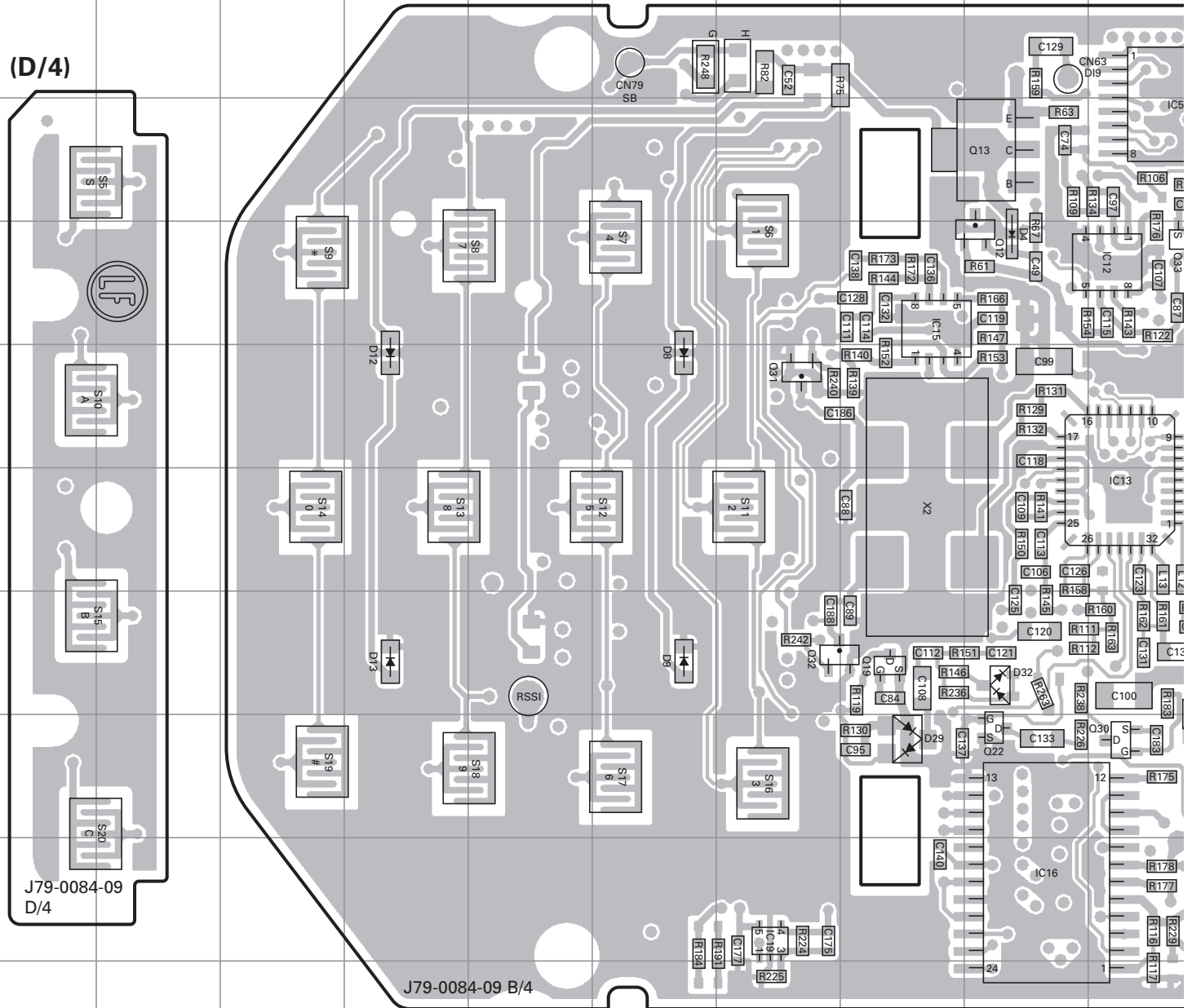


TK-3170 PC BOARD

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC4	6M	IC17	12K	Q23	8N	Q32	10G	D12	8D
IC5	6J	IC18	8M	Q24	7M	Q33	7J	D13	10D
IC11	8K	IC19	12G	Q25	12K	Q35	9M	D29	11H
IC12	7J	Q12	7I	Q26	12K	D4	7I	D30	10K
IC13	9J	Q13	6I	Q27	9M	D5	8N	D31	10J
IC14	9K	Q19	10H	Q28	9N	D7	10N	D32	10I
IC15	7H	Q21	10K	Q30	11J	D8	8F	D33	12N
IC16	12I	Q22	11I	Q31	8G	D9	10F		

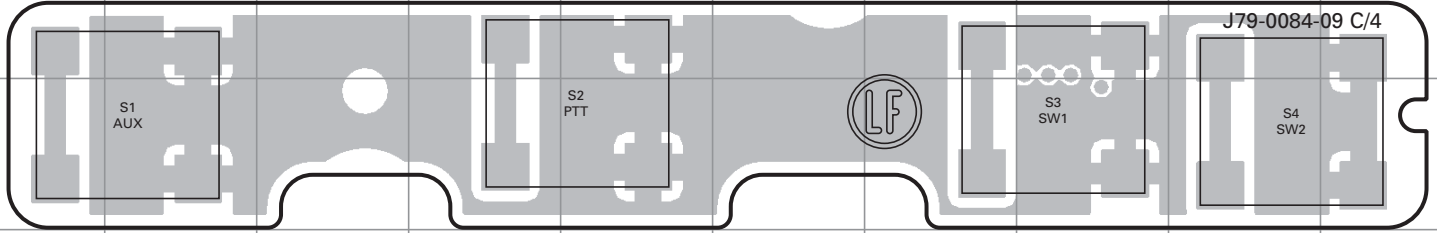


TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 B/4)

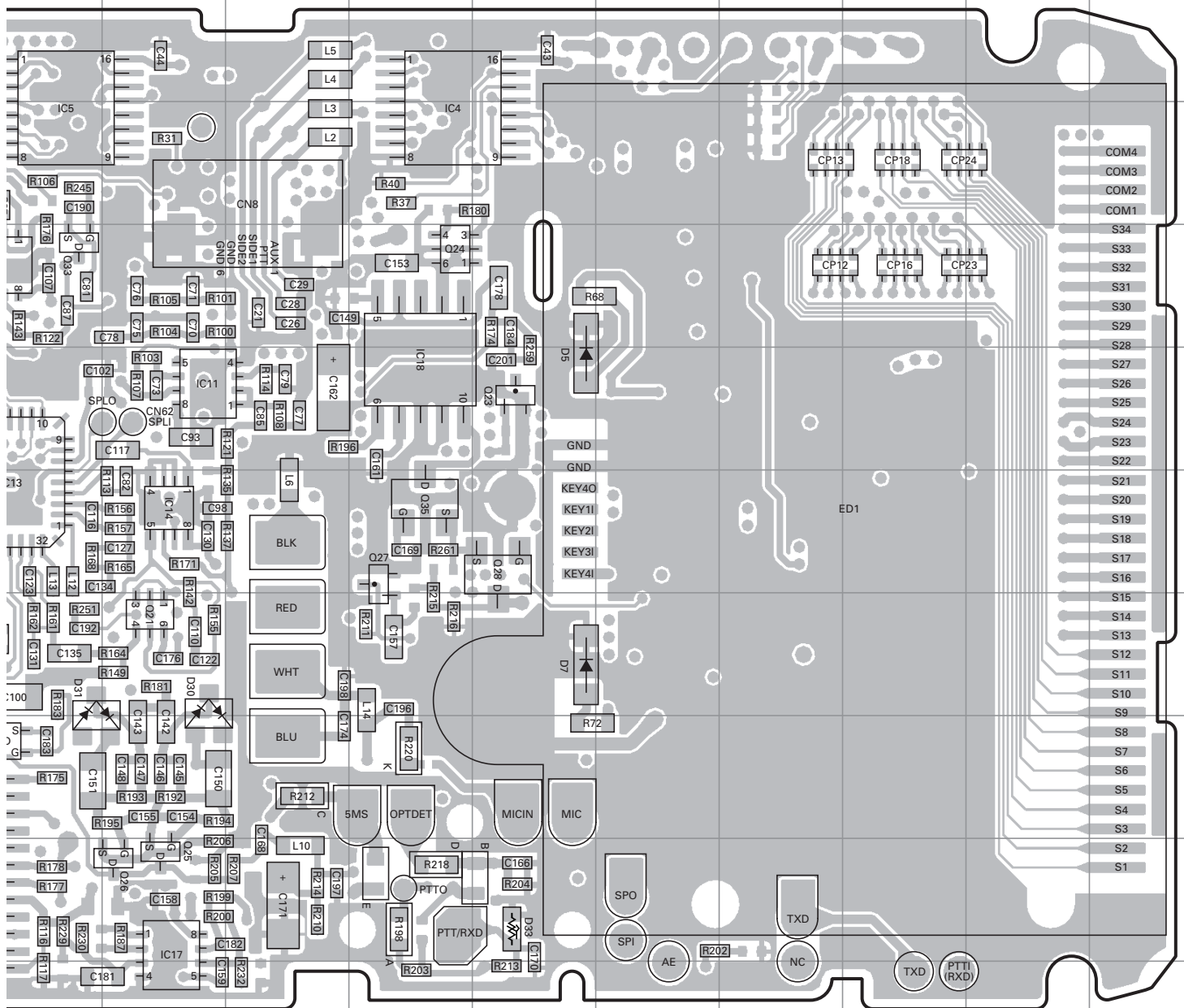


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TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 C/4)



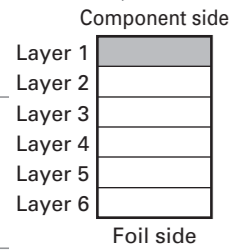
TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 B/4)



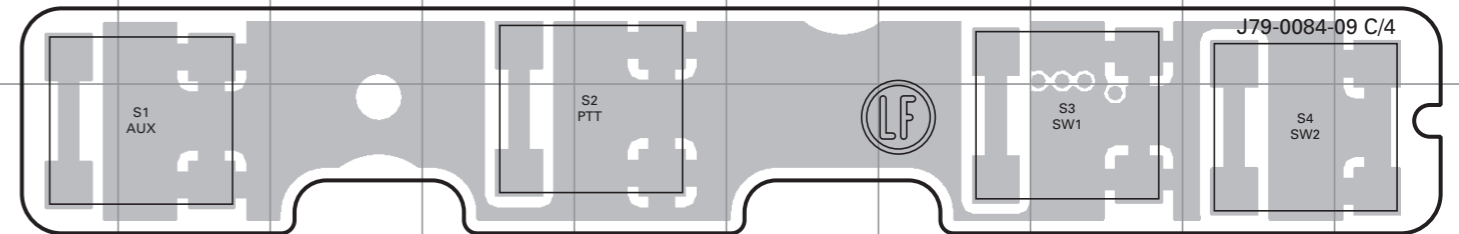
TK-3170 PC BOARD

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Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC4	6M	IC17	12K	Q23	8N	Q32	10G	D12	8D
IC5	6J	IC18	8M	Q24	7M	Q33	7J	D13	10D
IC11	8K	IC19	12G	Q25	12K	Q35	9M	D29	11H
IC12	7J	Q12	7I	Q26	12K	D4	7I	D30	10K
IC13	9J	Q13	6I	Q27	9M	D5	8N	D31	10J
IC14	9K	Q19	10H	Q28	9N	D7	10N	D32	10I
IC15	7H	Q21	10K	Q30	11J	D8	8F	D33	12N
IC16	12I	Q22	11I	Q31	8G	D9	10F		

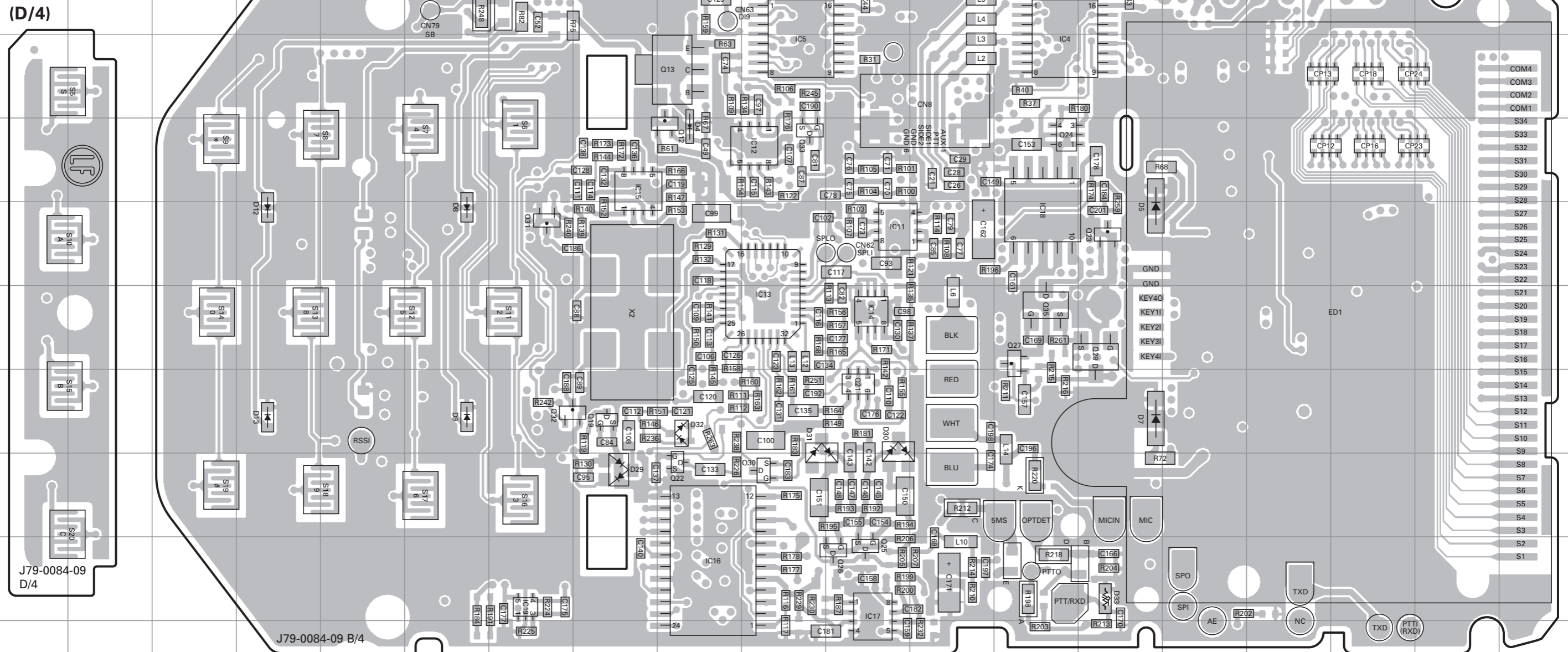


TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 C/4)



TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 B/4)

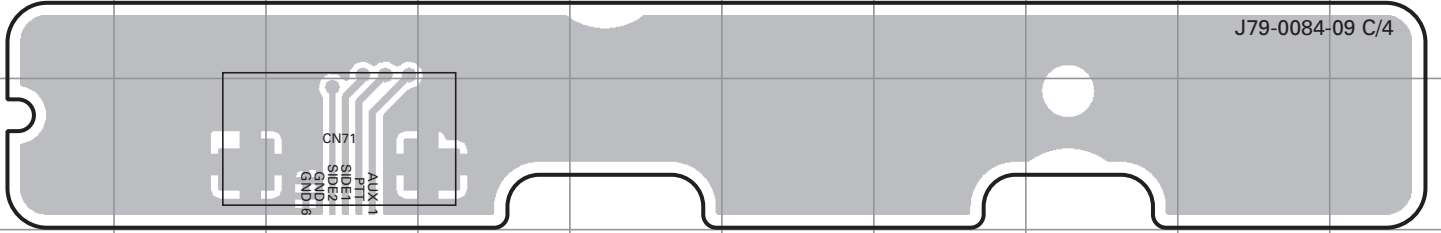
TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6
Component side view (J79-0084-09 B/4)



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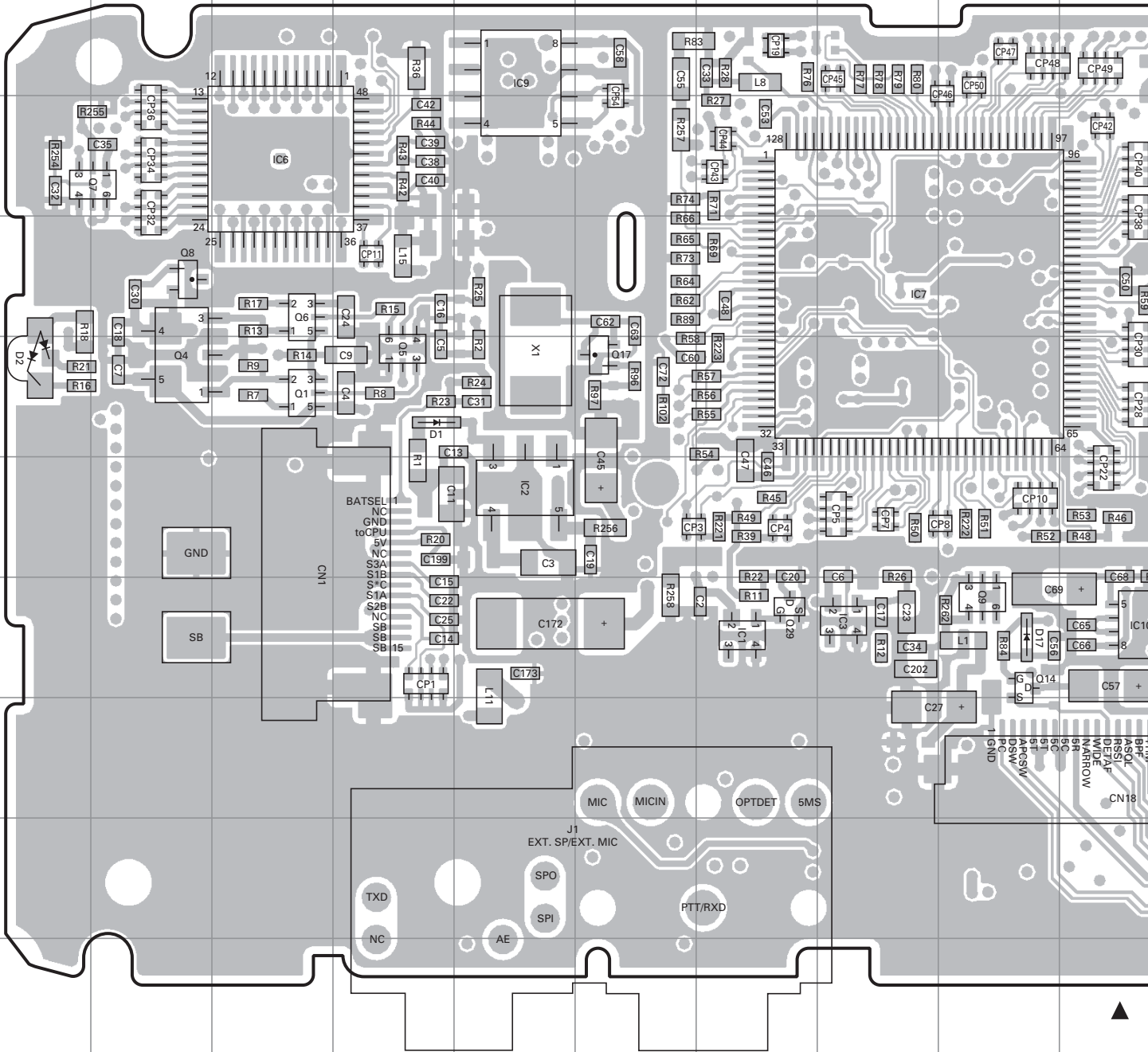
TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6

Foil side view (J79-0084-09 C/4)



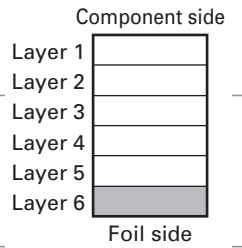
TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6

Foil side view (J79-0084-09 B/4)

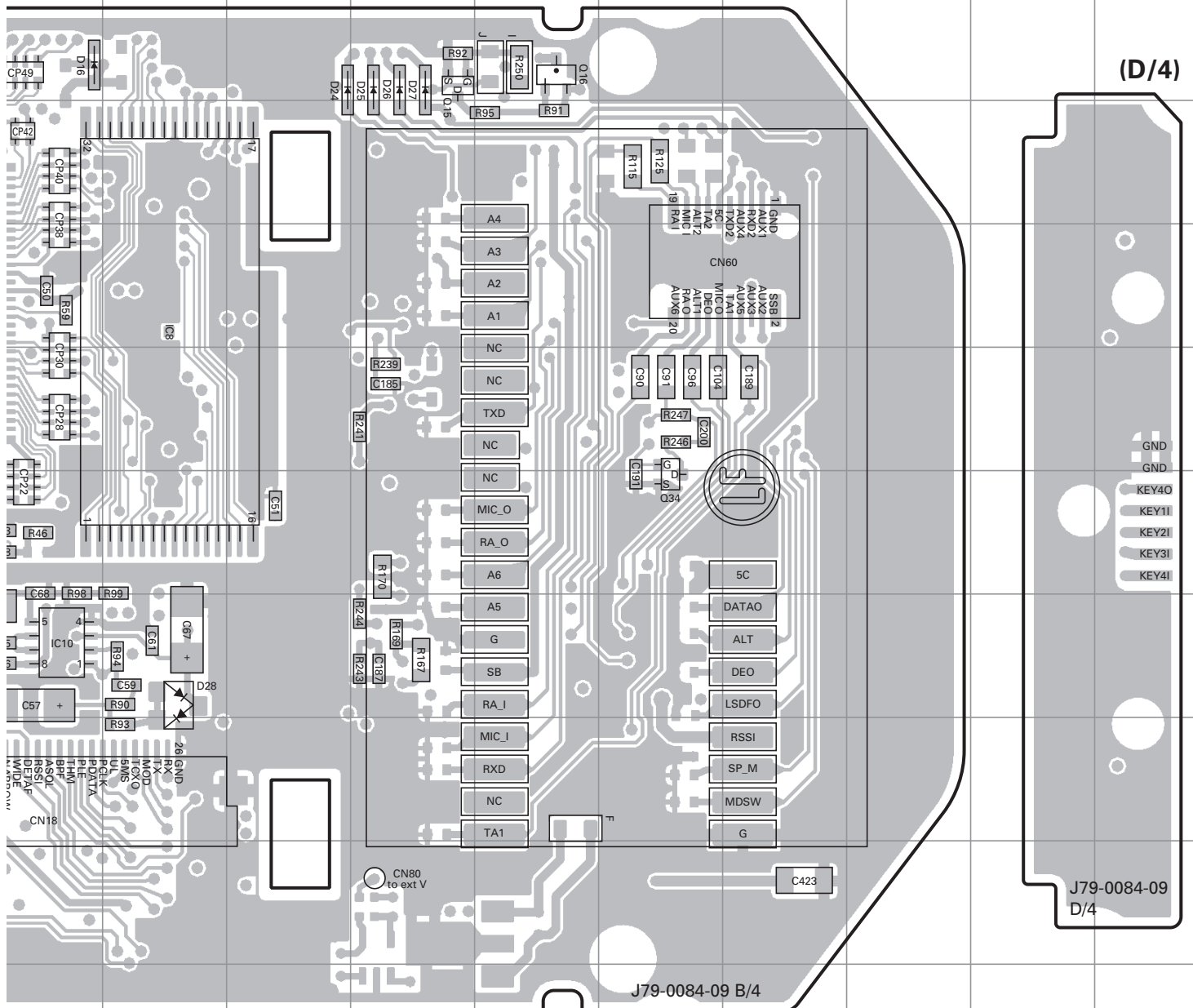


PC BOARD TK-3170

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	10G	Q1	8C	Q15	5M	D17	10I
IC2	9E	Q4	8B	Q16	5N	D24	5L
IC3	10H	Q5	8D	Q17	8F	D25	5M
IC6	6C	Q6	7C	Q29	10G	D26	5M
IC7	7H	Q7	6B	Q34	9O	D27	5M
IC8	7K	Q8	7B	D1	8D	D28	10K
IC9	5E	Q9	10I	D2	8A		
IC10	10J	Q14	10I	D16	5J		



TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6 Foil side view (J79-0084-09 B/4)

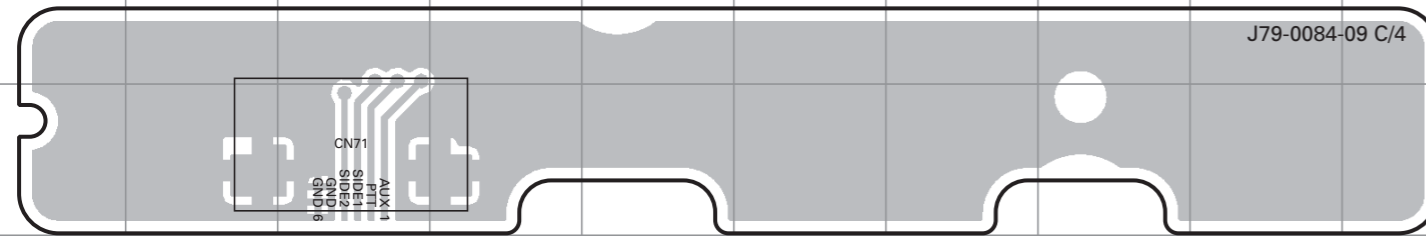


TK-3170 PC BOARD

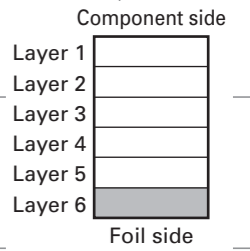
PC BOARD TK-3170

TX-RX UNIT (X57-7012-XX) (C/4) -71 : E -72 : E3 -73 : E4 -74 : E6

Foil side view (J79-0084-09 C/4)

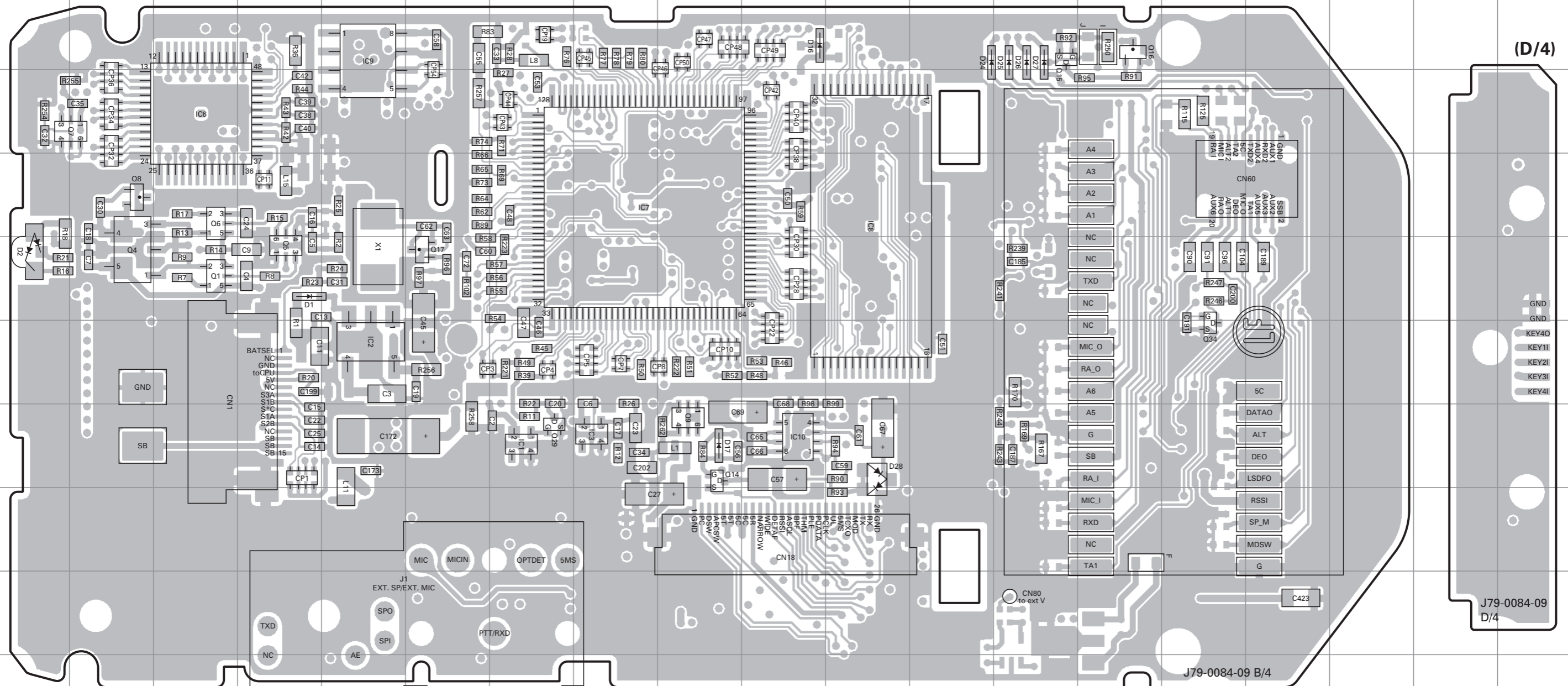


Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	10G	Q1	8C	Q15	5M	D17	10I
IC2	9E	Q4	8B	Q16	5N	D24	5L
IC3	10H	Q5	8D	Q17	8F	D25	5M
IC6	6C	Q6	7C	Q29	10G	D26	5M
IC7	7H	Q7	6B	Q34	9O	D27	5M
IC8	7K	Q8	7B	D1	8D	D28	10K
IC9	5E	Q9	10I	D2	8A		
IC10	10J	Q14	10I	D16	5J		



TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6

Foil side view (J79-0084-09 B/4)



TX-RX UNIT (X57-7012-XX) (B/4) -71 : E -72 : E3 -73 : E4 -74 : E6

Foil side view (J79-0084-09 B/4)

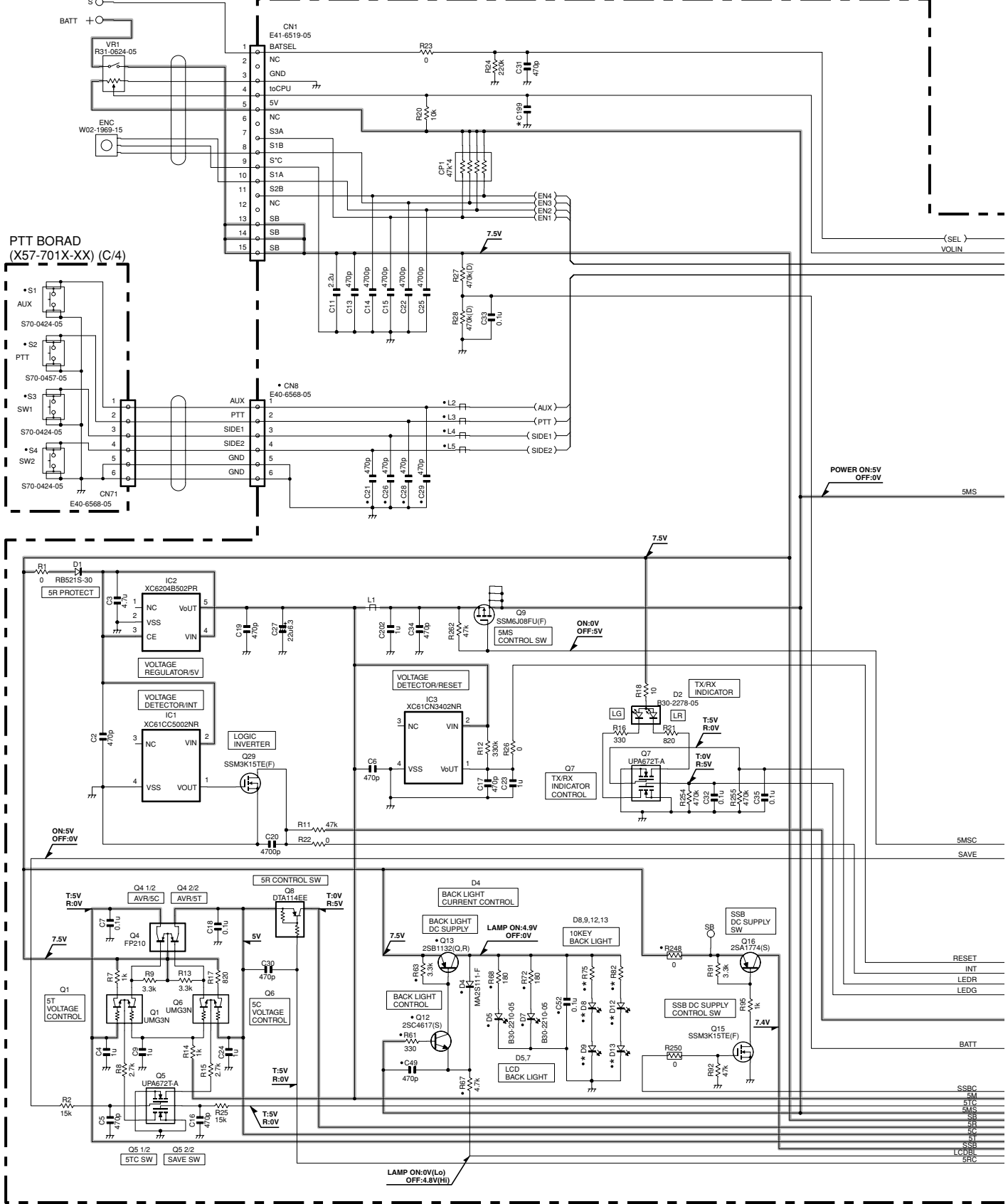
(D/4)

- GND
- GND
- KEY40
- KEY11
- KEY21
- KEY31
- KEY41

J79-0084-09
D/4

TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT : CONTROL SECTION (X57-701X-XX) (B/4)



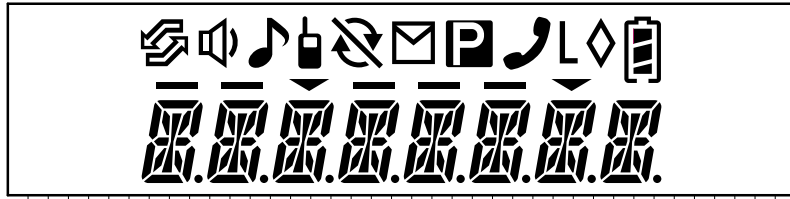
Note : The components marked with a dot (•) are parts of layer 1.

X57-701X-XX(B/4)		D8	D9	D12	D13	R75	R82	C199
2-71	E 16key	B30-2050-05	B30-2050-05	B30-2050-05	B30-2050-05	390	390	0.1u
2-72	E3 16key	B30-2050-05	B30-2050-05	B30-2050-05	B30-2050-05	390	390	NO
2-73	E4 4key	NO	NO	NO	NO	NO	NO	0.1u
2-74	E6 4key	NO	NO	NO	NO	NO	NO	NO

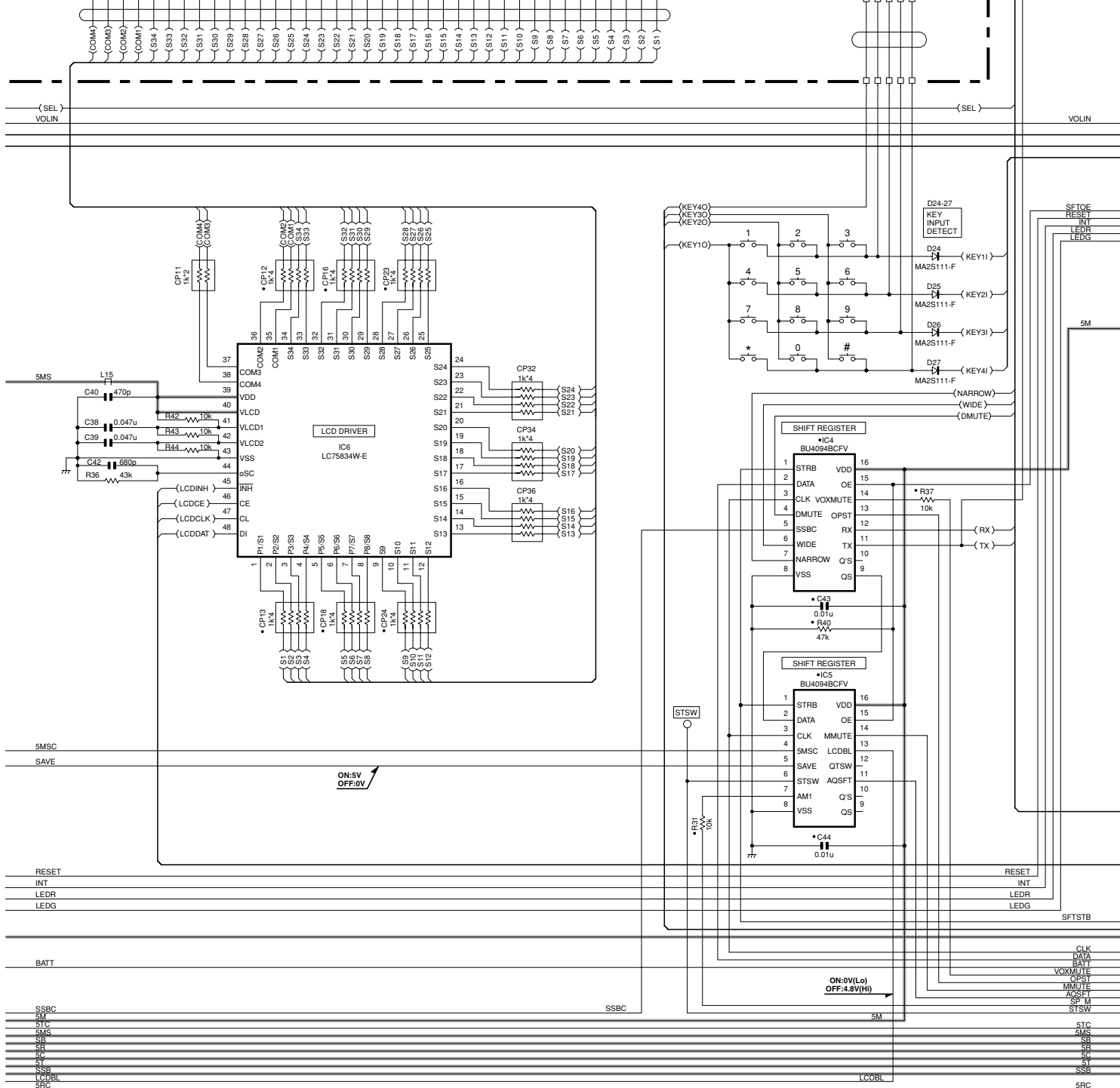
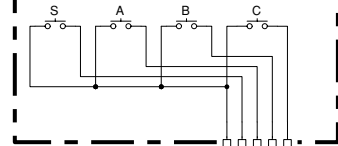
SCHEMATIC DIAGRAM TK-3170

TX-RX UNIT (X57-701X-XX) (B/4)

B38-0901-05

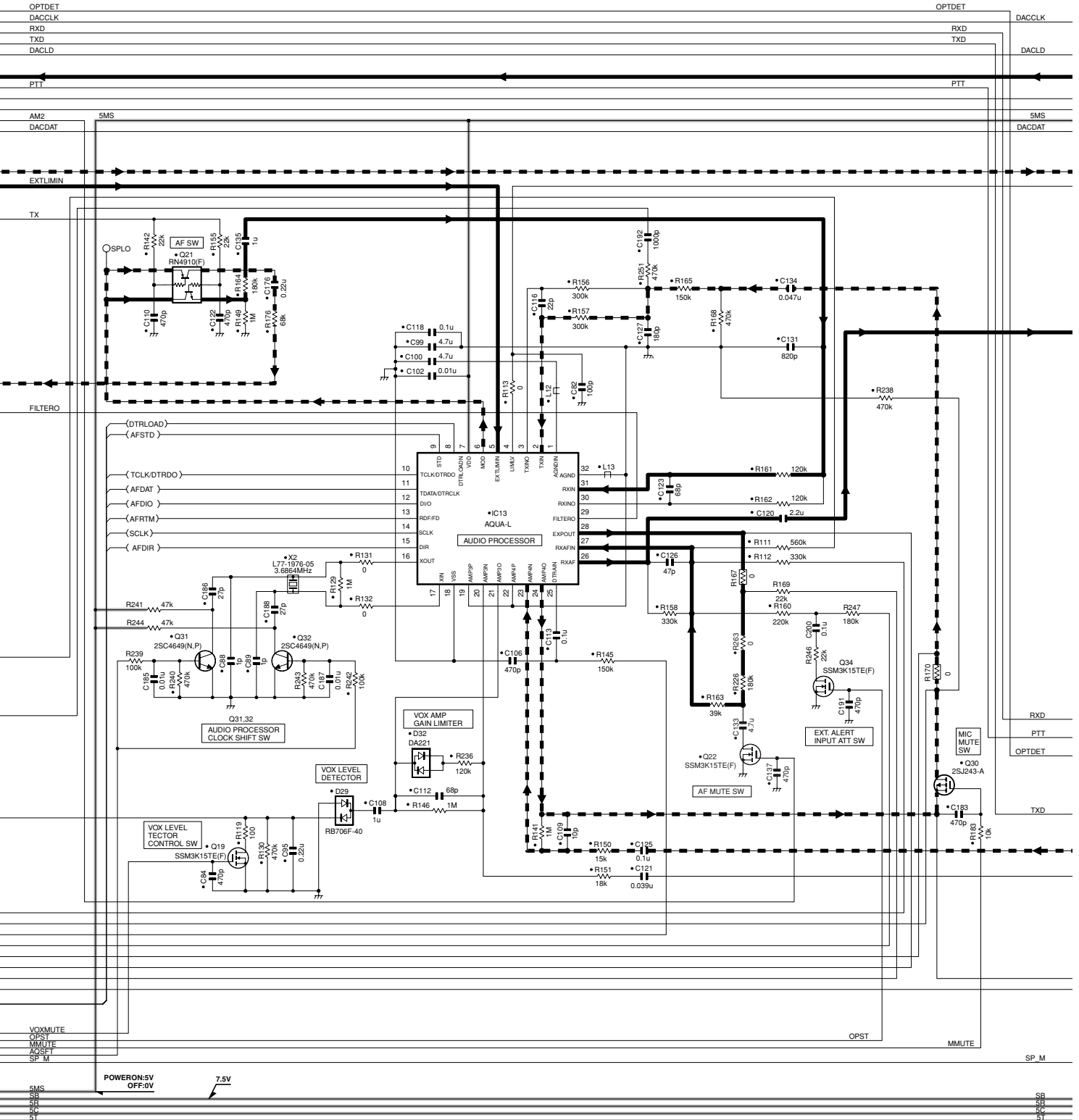


4KEY BOARD
(X57-701X-XX) (D/4)



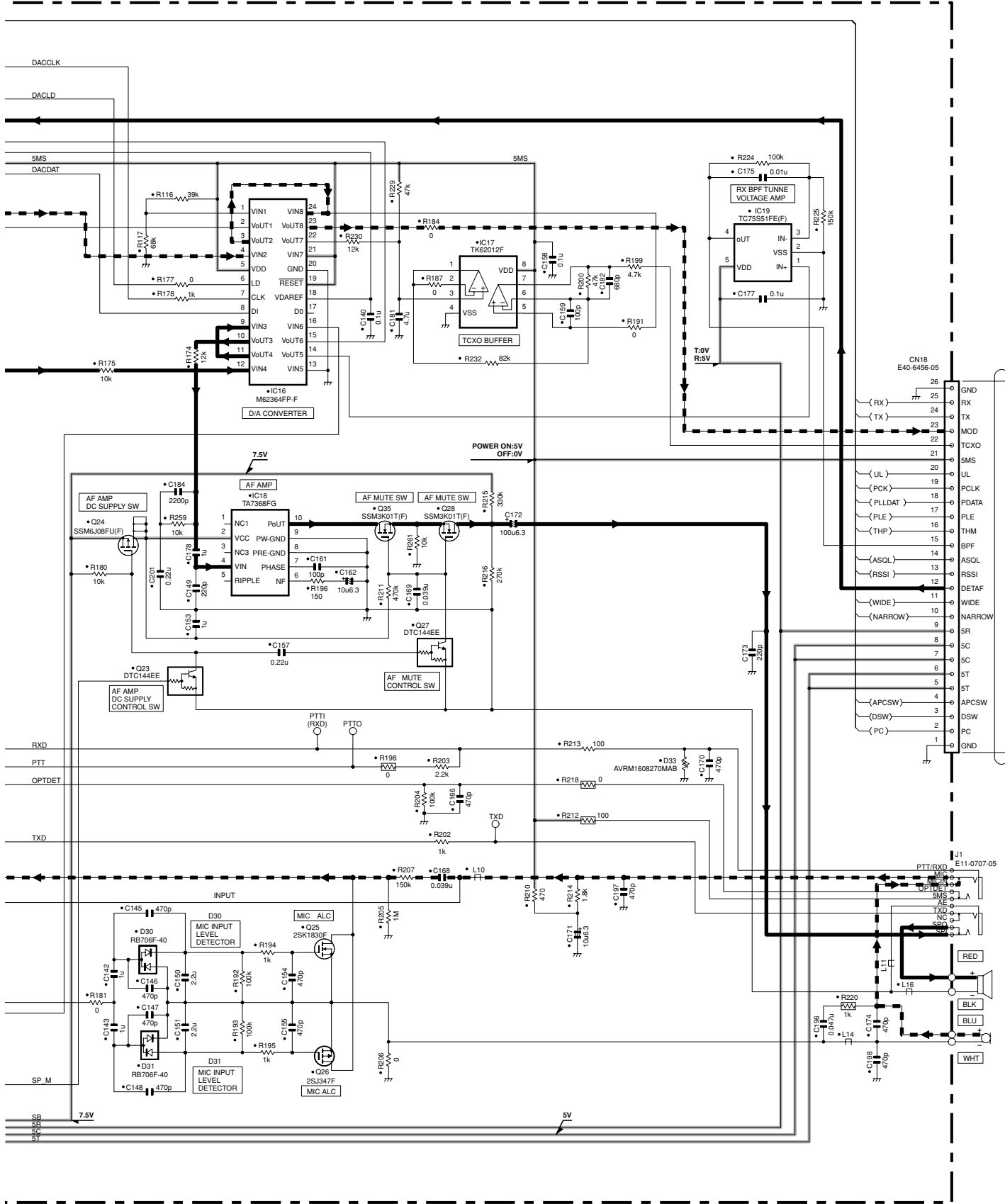
TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-701X-XX) (B/4)



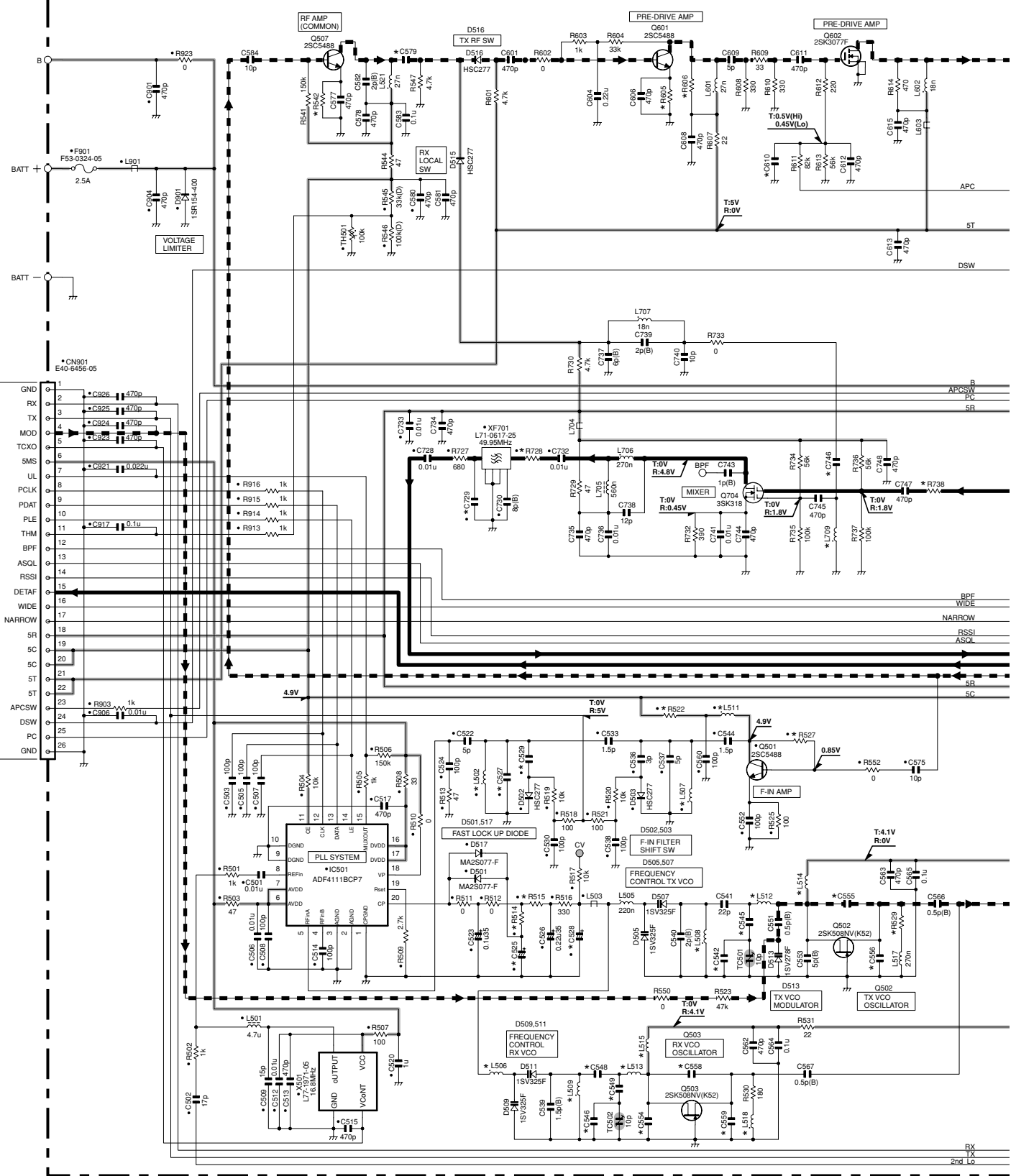
SCHEMATIC DIAGRAM TK-3170

TX-RX UNIT (X57-701X-XX) (B/4)



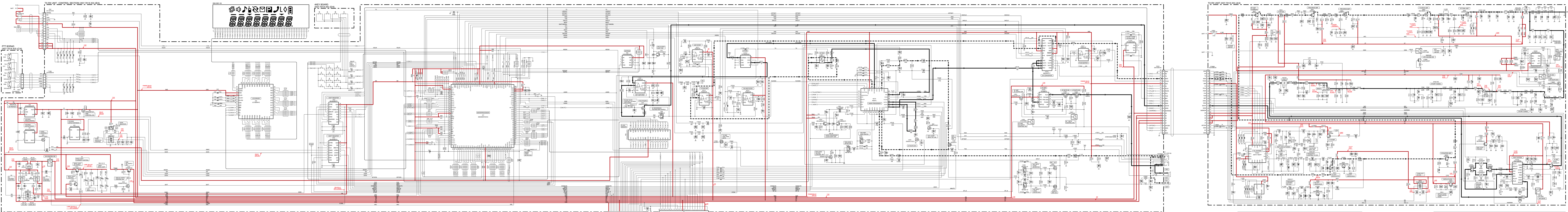
TK-3170 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-701X-XX) (A/4)



X57-701X-XX(A/4)	L502	L506	L507	L508	L509	L511	L512	L513	L514	L515	L518	L709	R514	R515	R522	R527	R529	R542	R605	R606	R728	R738		
2.71	E	16key	3.3n	220n	3.3n	82n	82n	12n	18n	22n	150n	180n	150n	27n	1k	560	22	220k	150	68	47	NO	330	12
2.73	E4	4key																						
2.72	E3	16key	3.9n	270n	3.9n	220n	120n	15n	22n	27n	220n	220n	270n	33n	1.5k	330	100	100k	180	330	100	470	100	18
2.74	E6	4key																						

X57-701X-XX(A/4)	C525	C527	C528	C529	C542	C545	C546	C548	C549	C554	C555	C556	C558	C559	C579	C610	C729	C746			
2.71	E	16key	2.2u10	5p	0.22u35	3p	1.5p	9p	1.5p	47p	8p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO	1p(B)	5p(B)		
2.73	E4	4key																			
2.72	E3	16key	1u25	8p	0.1u35	2p	NO	15p	NO	33p	27p	5p(B)	5p(B)	6p(B)	5p(B)	8p(B)	3p(B)	470p	NO	3p(B)	
2.74	E6	4key																			

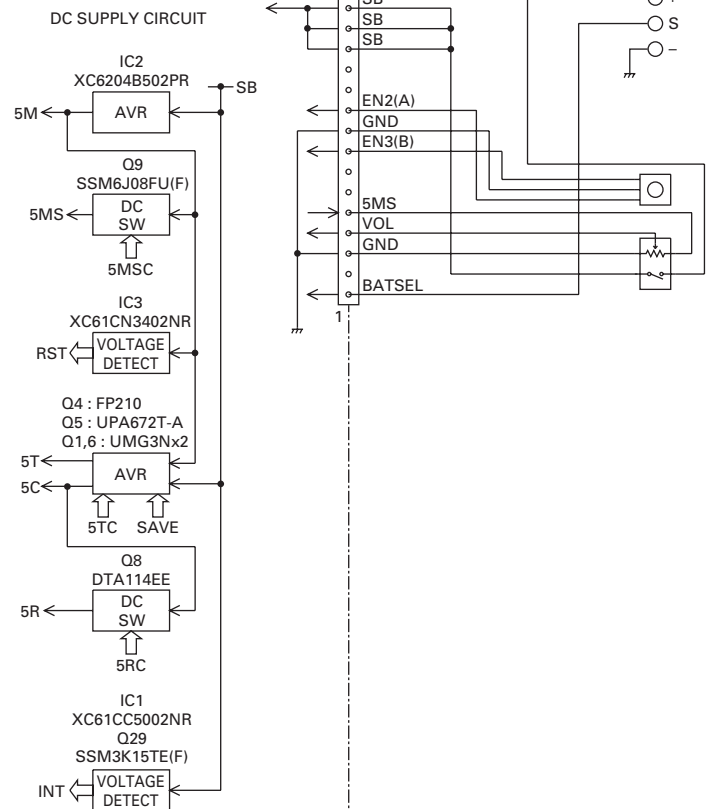
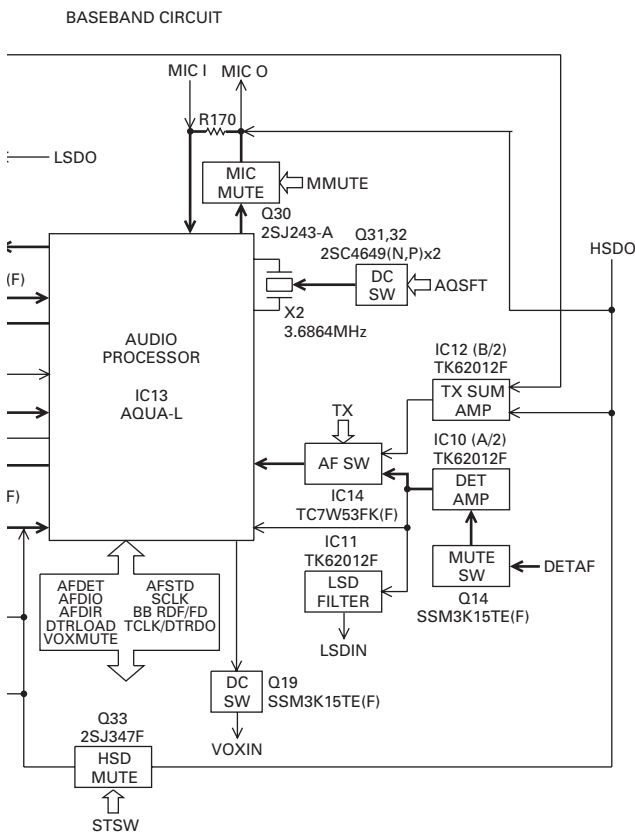
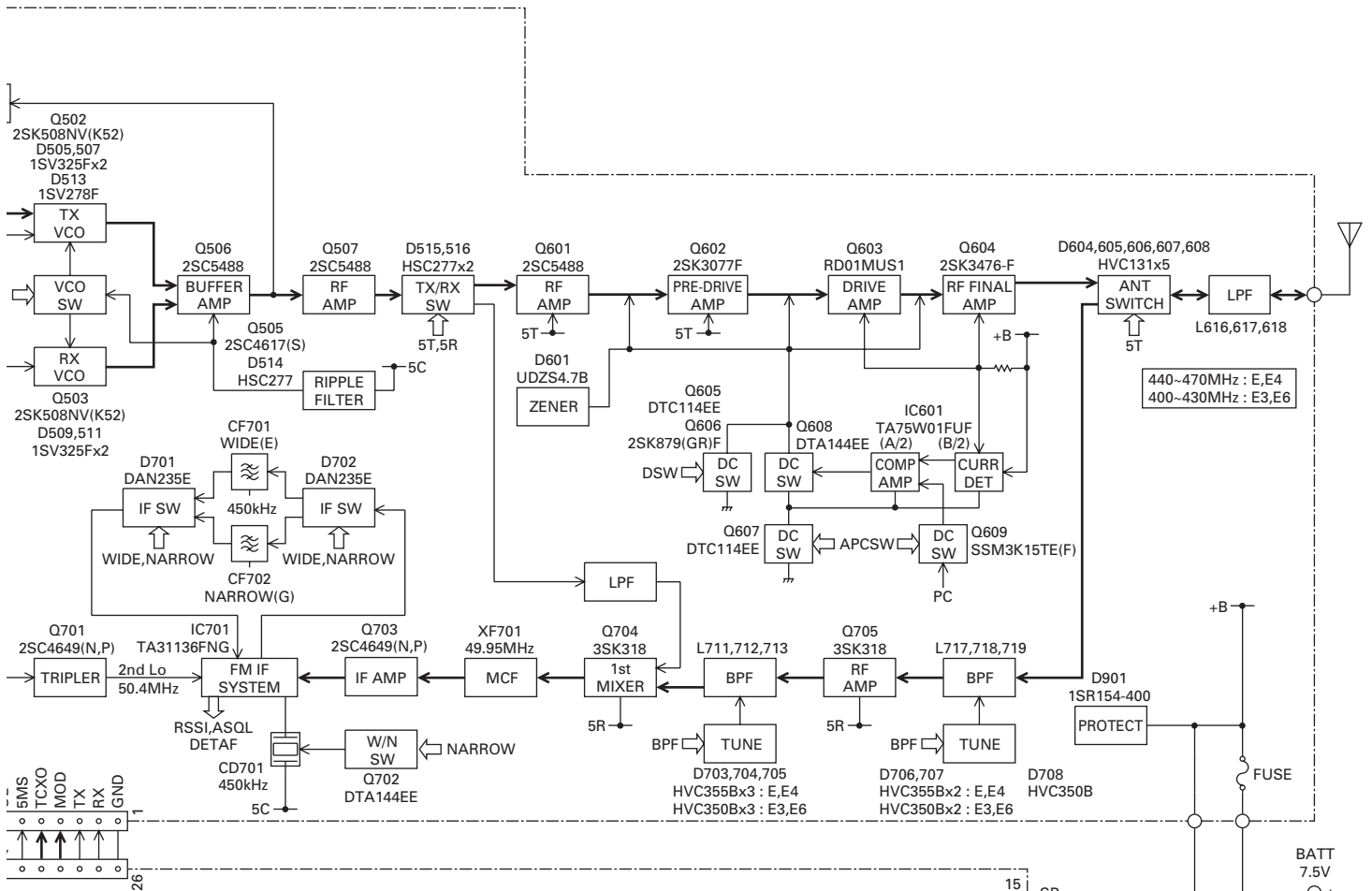


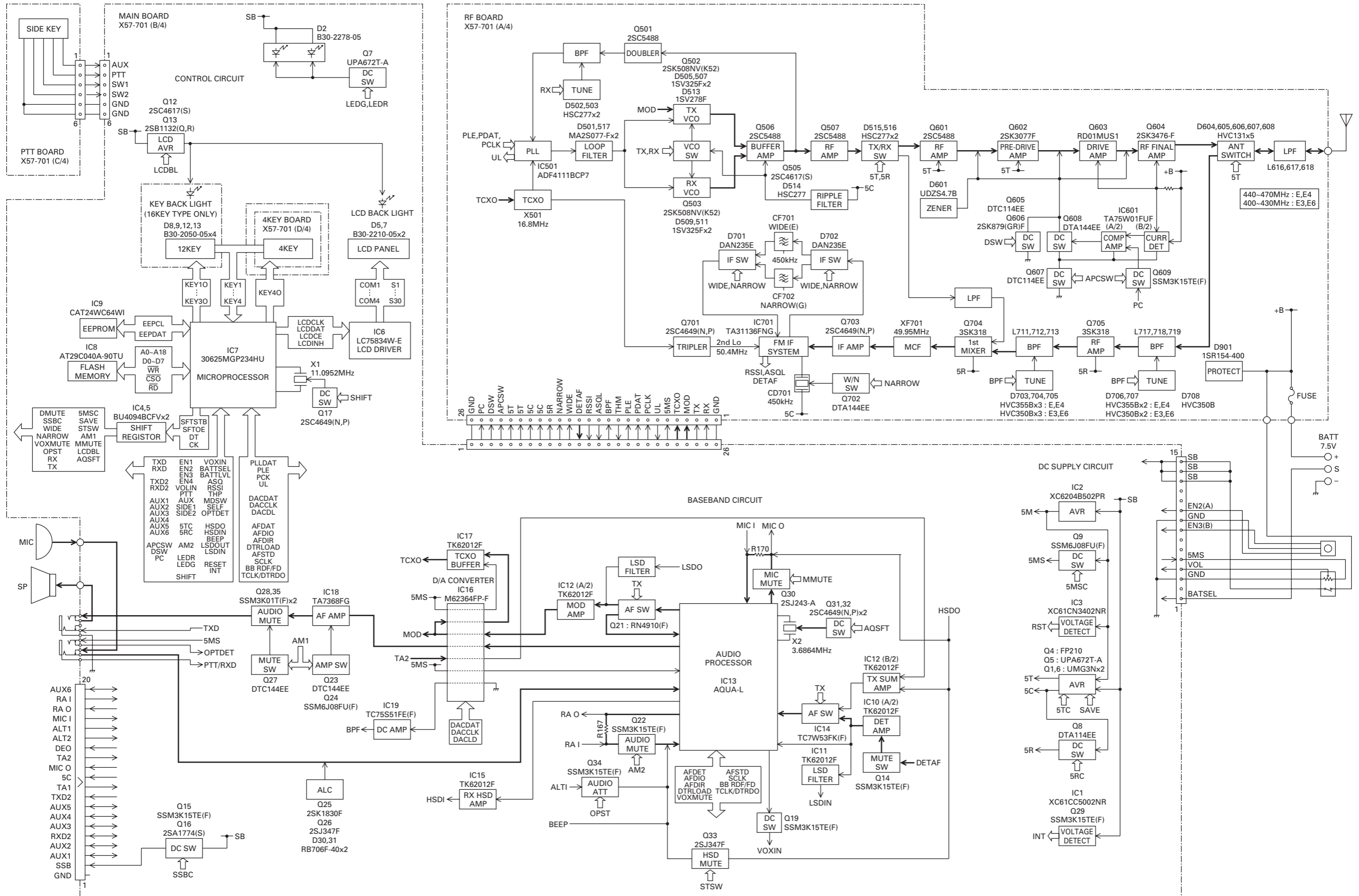
REF ID	VALUE	QTY	UNIT	DESCRIPTION
2.17	R	1	10K	RESISTOR
2.18	R	1	100K	RESISTOR
2.19	R	1	100K	RESISTOR
2.20	R	1	100K	RESISTOR
2.21	R	1	100K	RESISTOR
2.22	R	1	100K	RESISTOR
2.23	R	1	100K	RESISTOR
2.24	R	1	100K	RESISTOR
2.25	R	1	100K	RESISTOR
2.26	R	1	100K	RESISTOR
2.27	R	1	100K	RESISTOR
2.28	R	1	100K	RESISTOR
2.29	R	1	100K	RESISTOR
2.30	R	1	100K	RESISTOR
2.31	R	1	100K	RESISTOR
2.32	R	1	100K	RESISTOR
2.33	R	1	100K	RESISTOR
2.34	R	1	100K	RESISTOR
2.35	R	1	100K	RESISTOR
2.36	R	1	100K	RESISTOR
2.37	R	1	100K	RESISTOR
2.38	R	1	100K	RESISTOR
2.39	R	1	100K	RESISTOR
2.40	R	1	100K	RESISTOR
2.41	R	1	100K	RESISTOR
2.42	R	1	100K	RESISTOR
2.43	R	1	100K	RESISTOR
2.44	R	1	100K	RESISTOR
2.45	R	1	100K	RESISTOR
2.46	R	1	100K	RESISTOR
2.47	R	1	100K	RESISTOR
2.48	R	1	100K	RESISTOR
2.49	R	1	100K	RESISTOR
2.50	R	1	100K	RESISTOR

REF ID	VALUE	QTY	UNIT	DESCRIPTION
2.51	R	1	100K	RESISTOR
2.52	R	1	100K	RESISTOR
2.53	R	1	100K	RESISTOR
2.54	R	1	100K	RESISTOR
2.55	R	1	100K	RESISTOR
2.56	R	1	100K	RESISTOR
2.57	R	1	100K	RESISTOR
2.58	R	1	100K	RESISTOR
2.59	R	1	100K	RESISTOR
2.60	R	1	100K	RESISTOR
2.61	R	1	100K	RESISTOR
2.62	R	1	100K	RESISTOR
2.63	R	1	100K	RESISTOR
2.64	R	1	100K	RESISTOR
2.65	R	1	100K	RESISTOR
2.66	R	1	100K	RESISTOR
2.67	R	1	100K	RESISTOR
2.68	R	1	100K	RESISTOR
2.69	R	1	100K	RESISTOR
2.70	R	1	100K	RESISTOR

REF ID	VALUE	QTY	UNIT	DESCRIPTION
2.71	R	1	100K	RESISTOR
2.72	R	1	100K	RESISTOR
2.73	R	1	100K	RESISTOR
2.74	R	1	100K	RESISTOR
2.75	R	1	100K	RESISTOR
2.76	R	1	100K	RESISTOR
2.77	R	1	100K	RESISTOR
2.78	R	1	100K	RESISTOR
2.79	R	1	100K	RESISTOR
2.80	R	1	100K	RESISTOR
2.81	R	1	100K	RESISTOR
2.82	R	1	100K	RESISTOR
2.83	R	1	100K	RESISTOR
2.84	R	1	100K	RESISTOR
2.85	R	1	100K	RESISTOR
2.86	R	1	100K	RESISTOR
2.87	R	1	100K	RESISTOR
2.88	R	1	100K	RESISTOR
2.89	R	1	100K	RESISTOR
2.90	R	1	100K	RESISTOR

BLOCK DIAGRAM TK-3170





SPECIFICATIONS

GENERAL (Applicable standards : EN standards)

Frequency range	440~470MHz (E,E4)	400~430MHz (E3,E6)
Number of channels	Zone : Max. 128 per radio	Channel : Max. 128 per zone
Channel spacing		
E,E4	Wide 5k : 25kHz	Wide 4k : 20kHz Narrow : 12.5kHz
E3,E6	Wide 5k : 25kHz	Narrow : 12.5kHz
Battery voltage	7.5V DC \pm 20%	
Battery life (5-5-90 duty cycle)/Approx. hours		
KNB-24L (1400mAh)	9	
KNB-25A (1200mAh)	8	
KNB-26N (2000mAh)	12	
KNB-35L (1950mAh)	11	
Operating temperature range	-30°C~+60°C	
Frequency stability	\pm 0.00025% (-30°C~+60°C)	
Antenna impedance	50 Ω	
Channel frequency spread	30MHz	
Dimensions (W x H x D)	56 x 109 x 31.7 mm with KNB-24L or 35L battery	
(Projections not included)	56 x 109 x 37.9 mm with KNB-25A or 26N battery	
Weight (net)	340 g with battery (KNB-35L), antenna (KRA-23) and beltclip (KBH-12)	

RECEIVER (Measurements made per EN standards)

Sensitivity			
EIA 12dB SINAD	Wide 5k : 0.25 μ V	*Wide 4k : 0.25 μ V	Narrow : 0.32 μ V
EN 20dB SINAD	Wide 5k : 0.63 μ V	*Wide 4k : 0.63 μ V	Narrow : 0.70 μ V
Adjacent channel selectivity	Wide 5k : 70dB	*Wide 4k : 70dB	Narrow : 62dB
Intermodulation	65dB		
Spurious response rejection	70dB		
Audio output (4 Ω impedance)	500mW with less than 5% distortion		

TRANSMITTER (Measurements made per EN standards)

RF power output	HI : 4W	LO : 1W
Spurious emission (E)	\leq -36dBm < 1GHz	\leq -30dBm > 1GHz
Spurious response (X2)	70dBm	
Modulation	Wide 5k : 16K0F3E	*Wide 4k : 14K0F3E Narrow : 11K0F3E
FM noise (EIA)	Wide 5k : 45dB	*Wide 4k : 43dB Narrow : 40dB
Audio distortion	Less than 5%	

* : E,E4 type only

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