

KENWOOD

Document Copyrights

Copyright 2006 by Kenwood Corporation. All rights reserved.

No part of this manual may be reproduced, translated, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, for any purpose without the prior written permission of Kenwood.

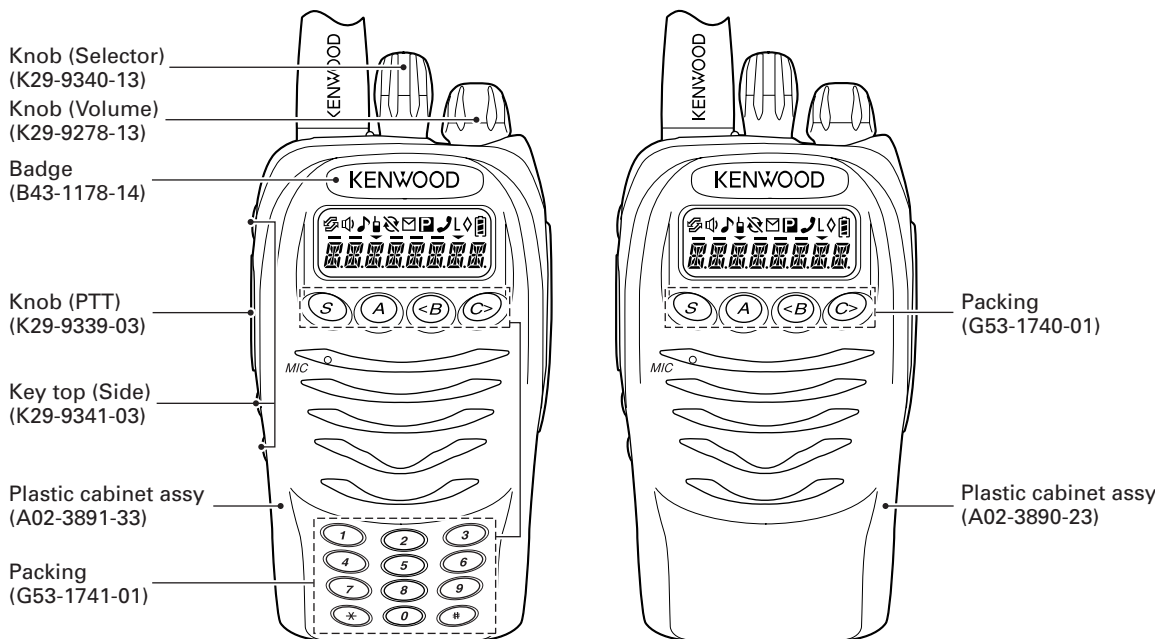
Disclaimer

While every precaution has been taken in the preparation of this manual, Kenwood assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. Kenwood reserves the right to make changes to any products herein at any time for improvement purposes.

This TK-3170/3173 service manual contains a number of sections which differ from the service manual (B51-8721-10) for the TK-3170/3173. For item other than those in this TK-3170/3173 service manual, please refer to the service manual (B51-8721-10) for the TK-3170/3173.

TK-3170 K4,K6,M,M3 / TK-3173 K4

TK-3170 K,K3 / TK-3173 K



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

CONTENTS

GENERAL	2	PC BOARD	
SYSTEM SET-UP	2	TX-RX UNIT (X57-7010-XX) (A/4)	22
PARTS LIST	3	TX-RX UNIT (X57-7010-XX) (B,C,D/4)	24
EXPLODED VIEW	12	SCHEMATIC DIAGRAM	28
PACKING	13	BLOCK DIAGRAM	36
ADJUSTMENT	14	LEVEL DIAGRAM	38
		KSC-30 (CHARGER)	39
		SPECIFICATIONS	BACK COVER

TK-3170/3173

GENERAL / SYSTEM SET-UP

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 personal 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.

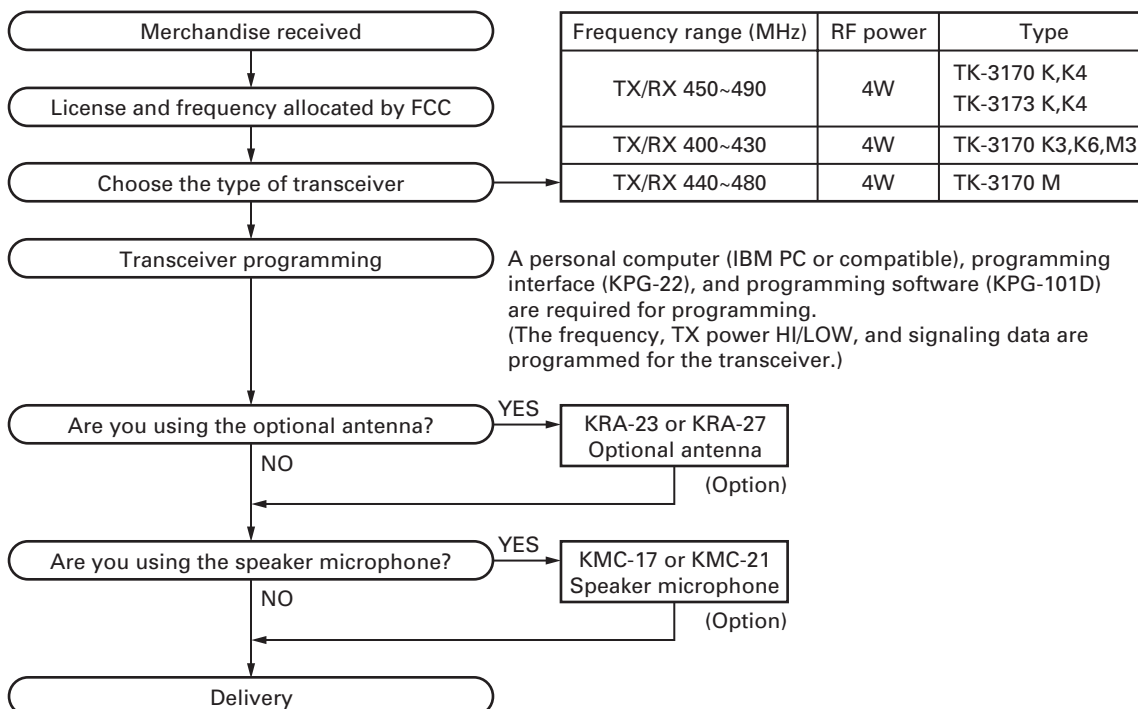
SERVICE

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	Parts number	Remarks	Market code	TX-RX unit number
TK-3170/ TK-3173	B51-8721-00		K,K4 K	X57-7010-XX J72-0964-09
TK-3170/ TK-3173	B51-8721-10		K,K3,K4,K6,M,M3 K	X57-7010-XX J72-0964-19
TK-3170/ TK-3173	B51-8781-00	This service manual	K,K3,K4,K6,M,M3 K,K4	X57-7010-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-3170/3173 (Y50-5860-XX)

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
TK-3170/3173					
1	1A		A02-3890-23	PLASTIC CABINET ASSY (4-KEY)	K,K3,A
2	1B		A02-3891-33	PLASTIC CABINET ASSY (16-KEY)	K4,K6,M
2	1B		A02-3891-33	PLASTIC CABINET ASSY (16-KEY)	M3,B
3	3A		A10-4088-01	CHASSIS	
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 (LCD)	
10	2B		B38-0901-05	LCD	
13	1A,1B		B43-1178-14	BADGE	
17	1C		B62-1809-10	INSTRUCTION MANUAL	K,K4,A
17	1C		B62-1809-10	INSTRUCTION MANUAL	K3,K6,B
17	1C	*	B62-1810-00	INSTRUCTION MANUAL	M,M3
20	2A		E04-0467-05	RF COAXIAL RECEPTACLE (SMA)	
21	2A		E23-1188-04	TERMINAL (ANT)	
22	3A		E23-1189-14	TERMINAL (GND)	
23	2B		E29-1204-04	INTER CONNECTOR (LCD)	
24	2B		E29-1211-04	INTER CONNECTOR (4-KEY)	
26	3A		E72-0421-03	TERMINAL BLOCK	
28	3A		F07-1890-04	COVER (OPTION BOARD)	
30	1A,1B		G10-1304-04	FIBROUS SHEET (CABNET)	
-			G10-1333-04	FIBROUS SHEET (CABINET-SP)	
29	2A		G10-1365-04	FIBROUS SHEET (ON CN901)	K,K4,A
29	2A		G10-1365-04	FIBROUS SHEET (ON CN901)	M,B
31	3A		G11-4315-04	SHEET (COOLING)	
32	2A		G11-4316-04	SHEET (PTT)	
33	2B		G11-4335-14	SHEET (LCD)	
34	1A,1B		G11-4351-04	SHEET (CABNET TOP)	
-		*	G11-4352-04	SHEET (LCD)	
35	2A		G13-1885-04	CUSHION (CHASSIS)	
36	3A		G13-2001-04	CUSHION (OPTION BOARD)	
38	2A		G53-1603-04	PACKING (ANT)	
39	2B		G53-1650-12	PACKING (TOP)	
42	2B		G53-1653-03	PACKING (JACK)	
43	3A		G53-1654-04	PACKING (TERMINAL)	
44	3A		G53-1655-04	PACKING (OPTION BOARD)	
40	1A	*	G53-1740-01	PACKING (4-KEY)	K,K3,A
41	1B	*	G53-1741-01	PACKING (16-KEY)	K4,K6,M
41	1B	*	G53-1741-01	PACKING (16-KEY)	M3,B
46	3C		H12-4210-02	PACKING FIXTURE	
47	2D		H25-0029-04	PROTECTION BAG (60/110/0.07)	
48	1D		H52-2067-02	ITEM CARTON CASE	K,K3,K4
48	1D		H52-2067-02	ITEM CARTON CASE	K6,M,M3
48	1D		H52-2068-02	ITEM CARTON CASE	A,B
50	2B		J19-5481-03	HOLDER (SPEAKER)	
51	2D		J19-5483-23	HOLDER ACCESSORY	
52	1B		J21-8488-03	MOUNTING HARDWARE (LCD)	
53	2C		J29-0701-15	HOOK ACCESSORY	
54	3A		J82-0106-05	FPC (VOLUME/SELECTOR)	
49	2A	*	J82-0111-05	FPC (PTT)	
55	2A		J99-0399-04	DOUBLE SIDED TAPE (4x7mm)	

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
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 (PTT)	
A	2A,3A		N09-2438-05	BINDING HEAD SCREW	
B	3B		N14-0805-04	CIRCULAR NUT (VOLUME)	
C	2A		N14-0833-04	CIRCULAR NUT (SELECTOR)	
D	3A		N30-2610-48	PAN HEAD MACHINE SCREW	
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 (X57-7010-XX)					
-10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6					
-14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3					
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	K4,K6,M
D8,9			B30-2050-05	LED	M3,B
D12,13			B30-2050-05	LED	K4,K6,M
D12,13			B30-2050-05	LED	M3,B
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			CS77AA0J220M	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

A : TK-3173 K

B : TK-3173 K4

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C42			CK73HB1H681K	CHIP C 680PF K		C121			CK73HB1A393K	CHIP C 0.039UF K	
C43,44			CK73HB1C103K	CHIP C 0.010UF K		C122			CK73HB1H471K	CHIP C 470PF K	
C45			CS77AA0J220M	CHIP TNTL 22UF 6.3WV		C123			CC73HCH1H680J	CHIP C 68PF J	
C46			CK73HB1H471K	CHIP C 470PF K		C125			CK73HB1A104K	CHIP C 0.10UF K	
C47			CK73GB1E105K	CHIP C 1.0UF K		C126			CC73HCH1H470J	CHIP C 47PF J	
C48-51			CK73HB1H471K	CHIP C 470PF K		C127			CC73HCH1H181J	CHIP C 180PF J	
C52			CK73HB1A104K	CHIP C 0.10UF K		C128			CK73HB1H471K	CHIP C 470PF K	
C53			CK73HB1H471K	CHIP C 470PF K		C129			CK73GB1E105K	CHIP C 1.0UF K	
C55			CK73GB1E105K	CHIP C 1.0UF K		C130			CK73HB1A104K	CHIP C 0.10UF K	
C56			CK73HB1A104K	CHIP C 0.10UF K		C131			CK73HB1H821K	CHIP C 820PF K	
C57		*	CS77AA0J150M	CHIP TNTL 15UF 6.3WV		C132			CK73HB1A104K	CHIP C 0.10UF K	
C58			CK73HB1H471K	CHIP C 470PF K		C133			CK73GB0J475K	CHIP C 4.7UF K	
C59			CC73HCH1H220J	CHIP C 22PF J		C134			CK73HB1A473K	CHIP C 0.047UF K	
C60			CC73HCH1H120J	CHIP C 12PF J		C135			CK73GB1E105K	CHIP C 1.0UF K	
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			CS77AA0J100M	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			CS77AA0J100M	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			CS77AA0J100M	CHIP TNTL 10UF 6.3WV	
C82			CC73HCH1H101J	CHIP C 100PF J		C172			CS77CC0J101M	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			CK73GB0J475K	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	K,K4,A
C113-115			CK73HB1A104K	CHIP C 0.10UF K		C199,200			CK73HB1A104K	CHIP C 0.10UF K	M,B
C116			CC73HCH1H220J	CHIP C 22PF J		C200			CK73HB1A104K	CHIP C 0.10UF K	K3,K6,M3
C117			CK73GB1E105K	CHIP C 1.0UF K		C201			CK73HB1A224K	CHIP C 0.22UF K	
C118			CK73HB1A104K	CHIP C 0.10UF K		C202			CK73GB1E105K	CHIP C 1.0UF K	
C119			CK73HB1C103K	CHIP C 0.010UF K		C423			CK73FB1A475K	CHIP C 4.7UF K	
C120			CK73GB1C225K	CHIP C 2.2UF K		C501			CK73HB1C103K	CHIP C 0.010UF K	

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C502			CC73HCH1H470J	CHIP C 47PF J		C559			CC73HCH1H090B	CHIP C 9.0PF B	M,B
C503			CC73HCH1H101J	CHIP C 100PF J		C560			CC73HCH1H101J	CHIP C 100PF J	
C505			CC73HCH1H101J	CHIP C 100PF J		C562,563			CK73HB1H471K	CHIP C 470PF K	
C506			CK73HB1C103K	CHIP C 0.010UF K		C564,565			CK73HB1A104K	CHIP C 0.10UF K	
C507,508			CC73HCH1H101J	CHIP C 100PF J		C566,567			CC73HCH1H0R5B	CHIP C 0.5PF B	
C509			CC73HCH1H150J	CHIP C 15PF J		C568			CK73HB1C103K	CHIP C 0.010UF K	
C512			CK73HB1C103K	CHIP C 0.010UF K		C569			CK73HB1H471K	CHIP C 470PF K	
C513			CK73HB1H471K	CHIP C 470PF K		C570			CK73HB1C103K	CHIP C 0.010UF K	
C514			CC73HCH1H101J	CHIP C 100PF J		C571			CK73HB1A104K	CHIP C 0.10UF K	K,K4,A
C515			CK73HB1H471K	CHIP C 470PF K		C571			CK73HB1A104K	CHIP C 0.10UF K	M,B
C517			CK73HB1H471K	CHIP C 470PF K		C571			CK73HB1H471K	CHIP C 470PF K	K3,K6,M3
C520			CK73GB1E105K	CHIP C 1.0UF K		C572			CS77AA1A100M	CHIP TNTL 10UF 10WV	
C522			CC73HCH1H050C	CHIP C 5.0PF C		C573			CK73HB1H471K	CHIP C 470PF K	
C523			CS77CA1V0R1M	CHIP TNTL 0.1UF 35WV		C574,575			CC73HCH1H100D	CHIP C 10PF D	
C524			CC73HCH1H101J	CHIP C 100PF J		C577,578			CK73HB1H471K	CHIP C 470PF K	
C525			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	K,K4,A	C579			CC73HCH1H030B	CHIP C 3.0PF B	K3,K6,M3
C525			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	M,B	C579			CC73HCH1H040B	CHIP C 4.0PF B	K,K4,A
C525			CS77AA1E010M	CHIP TNTL 1.0UF 25WV	K3,K6,M3	C579			CC73HCH1H040B	CHIP C 4.0PF B	M,B
C526			CS77CA1VR22M	CHIP TNTL 0.22UF 35WV		C580,581			CK73HB1H471K	CHIP C 470PF K	
C527			CC73HCH1H050C	CHIP C 5.0PF C	K,K4,A	C582			CC73HCH1H020B	CHIP C 2.0PF B	
C527			CC73HCH1H050C	CHIP C 5.0PF C	M,B	C583			CK73HB1A104K	CHIP C 0.10UF K	
C527			CC73HCH1H080D	CHIP C 8.0PF D	K3,K6,M3	C584			CC73HCH1H100D	CHIP C 10PF D	
C529			CC73HCH1H020C	CHIP C 2.0PF C	K3,K6,M3	C601			CK73HB1H471K	CHIP C 470PF K	
C529			CC73HCH1H030C	CHIP C 3.0PF C	K,K4,A	C604			CK73HB1A224K	CHIP C 0.22UF K	
C529			CC73HCH1H030C	CHIP C 3.0PF C	M,B	C606			CK73HB1H471K	CHIP C 470PF K	
C530			CC73HCH1H101J	CHIP C 100PF J		C608			CK73HB1H471K	CHIP C 470PF K	
C533			CC73HCH1H1R5C	CHIP C 1.5PF C		C609			CC73HCH1H050C	CHIP C 5.0PF C	
C536			CC73HCH1H030C	CHIP C 3.0PF C		C610-613			CK73HB1H471K	CHIP C 470PF K	K3,K6,M3
C537			CC73HCH1H050C	CHIP C 5.0PF C		C611-613			CK73HB1H471K	CHIP C 470PF K	K,K4,A
C538			CC73HCH1H101J	CHIP C 100PF J		C611-613			CK73HB1H471K	CHIP C 470PF K	M,B
C539			CC73HCH1H1R5B	CHIP C 1.5PF B		C615			CK73HB1H471K	CHIP C 470PF K	
C540			CC73HCH1H020B	CHIP C 2.0PF B		C617			CC73HCH1H150J	CHIP C 15PF J	
C541			CC73HCH1H220J	CHIP C 22PF J		C619			CC73HCH1H150J	CHIP C 15PF J	K,K4,A
C542			CC73HCH1H1R5C	CHIP C 1.5PF C	K,K4,A	C619			CC73HCH1H150J	CHIP C 15PF J	M,B
C542			CC73HCH1H1R5C	CHIP C 1.5PF C	M,B	C622			CC73HCH1H101J	CHIP C 100PF J	
C544			CC73HCH1H1R5C	CHIP C 1.5PF C		C623			CK73HB1H102K	CHIP C 1000PF K	
C545			CC73HCH1H090D	CHIP C 9.0PF D	K,K4,A	C625			CC73HCH1H070D	CHIP C 7.0PF D	K,K4,A
C545			CC73HCH1H090D	CHIP C 9.0PF D	M,B	C625			CC73HCH1H070D	CHIP C 7.0PF D	M,B
C545			CC73HCH1H150J	CHIP C 15PF J	K3,K6,M3	C625			CC73HCH1H120J	CHIP C 12PF J	K3,K6,M3
C546			CC73HCH1H1R5C	CHIP C 1.5PF C	K,K4,A	C626			CC73HCH1H101J	CHIP C 100PF J	
C546			CC73HCH1H1R5C	CHIP C 1.5PF C	M,B	C627			CC73HCH1H270J	CHIP C 27PF J	K3,K6,M3
C548			CC73HCH1H330J	CHIP C 33PF J	K3,K6,M3	C627			CC73HCH1H390J	CHIP C 39PF J	K,K4,A
C548			CC73HCH1H470J	CHIP C 47PF J	K,K4,A	C627			CC73HCH1H390J	CHIP C 39PF J	M,B
C548			CC73HCH1H470J	CHIP C 47PF J	M,B	C629			CC73HCH1H150J	CHIP C 15PF J	K,K4,A
C549			CC73HCH1H080B	CHIP C 8.0PF B	K,K4,A	C629			CC73HCH1H150J	CHIP C 15PF J	M,B
C549			CC73HCH1H080B	CHIP C 8.0PF B	M,B	C629			CC73HCH1H270J	CHIP C 27PF J	K3,K6,M3
C549			CC73HCH1H270J	CHIP C 27PF J	K3,K6,M3	C631			CC73HCH1H180J	CHIP C 18PF J	
C551			CC73HCH1H0R5B	CHIP C 0.5PF B		C632			CS77AA1A2R2M	CHIP TNTL 2.2UF 10WV	
C552			CC73HCH1H101J	CHIP C 100PF J		C633			CK73HB1H471K	CHIP C 470PF K	
C553			CC73HCH1H050B	CHIP C 5.0PF B	K,K4,A	C635			CC73HCH1H101J	CHIP C 100PF J	
C553			CC73HCH1H050B	CHIP C 5.0PF B	M,B	C636			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C553-555			CC73HCH1H050B	CHIP C 5.0PF B	K3,K6,M3	C636			CC73HCH1H220J	CHIP C 22PF J	K,K4,A
C554-556			CC73HCH1H040B	CHIP C 4.0PF B	K,K4,A	C636			CC73HCH1H220J	CHIP C 22PF J	M,B
C554-556			CC73HCH1H040B	CHIP C 4.0PF B	M,B	C637			CK73HB1H102K	CHIP C 1000PF K	
C556			CC73HCH1H060B	CHIP C 6.0PF B	K3,K6,M3	C638,639			CK73HB1H471K	CHIP C 470PF K	
C558			CC73HCH1H050B	CHIP C 5.0PF B	K3,K6,M3	C641			CC73HCH1H101J	CHIP C 100PF J	
C558			CC73HCH1H060B	CHIP C 6.0PF B	K,K4,A	C643			CK73HB1C103K	CHIP C 0.010UF K	
C558			CC73HCH1H060B	CHIP C 6.0PF B	M,B	C645			CC73GCH1H120J	CHIP C 12PF J	K,K4,A
C559			CC73HCH1H080B	CHIP C 8.0PF B	K3,K6,M3	C645			CC73GCH1H120J	CHIP C 12PF J	M,B
C559			CC73HCH1H090B	CHIP C 9.0PF B	K,K4,A	C645			CC73GCH1H150J	CHIP C 15PF J	K3,K6,M3

A : TK-3173 K

B : TK-3173 K4

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
C646			CK73HB1H471K	CHIP C 470PF K		C720			CK73HB1C103K	CHIP C 0.010UF K	
C648			CK73HB1H471K	CHIP C 470PF K		C721			CK73HB1H471K	CHIP C 470PF K	
C651			CK73HB1A104K	CHIP C 0.10UF K		C722			CK73HB1A104K	CHIP C 0.10UF K	
C652			CC73GCH1H220J	CHIP C 22PF J	K,K4,A	C723			CK73HB1A333K	CHIP C 0.033UF K	
C652			CC73GCH1H220J	CHIP C 22PF J	M,B	C724			CC73HCH1H330J	CHIP C 33PF J	
C655			CC73GCH1H270J	CHIP C 27PF J	K3,K6,M3	C725			CK73HB1A104K	CHIP C 0.10UF K	
C658			CK73HB1H471K	CHIP C 470PF K		C726			CK73HB1C103K	CHIP C 0.010UF K	
C660			CC73GCH1H150J	CHIP C 15PF J	K3,K6,M3	C727			CK73HB1H471K	CHIP C 470PF K	
C660			CC73GCH1H220J	CHIP C 22PF J	K,K4,A	C728			CK73HB1C103K	CHIP C 0.010UF K	
C660			CC73GCH1H220J	CHIP C 22PF J	M,B	C730			CC73HCH1H080B	CHIP C 8.0PF B	
C665			CK73HB1A104K	CHIP C 0.10UF K		C732,733			CK73HB1C103K	CHIP C 0.010UF K	
C669			CC73GCH1H060B	CHIP C 6.0PF B	K,K4,A	C734,735			CK73HB1H471K	CHIP C 470PF K	
C669			CC73GCH1H060B	CHIP C 6.0PF B	M,B	C736			CK73HB1C103K	CHIP C 0.010UF K	
C669			CC73GCH1H080B	CHIP C 8.0PF B	K3,K6,M3	C737			CC73HCH1H060B	CHIP C 6.0PF B	
C670			CC73GCH1H101J	CHIP C 100PF J	K3,K6,M3	C738			CC73HCH1H120J	CHIP C 12PF J	
C670			CC73GCH1H330J	CHIP C 33PF J	K,K4,A	C739			CC73HCH1H020B	CHIP C 2.0PF B	
C670			CC73GCH1H330J	CHIP C 33PF J	M,B	C740			CC73HCH1H100D	CHIP C 10PF D	
C671			CC73GCH1H050B	CHIP C 5.0PF B	K3,K6,M3	C741			CK73HB1C103K	CHIP C 0.010UF K	
C671			CC73GCH1H4R5B	CHIP C 4.5PF B	K,K4,A	C743			CC73HCH1H010B	CHIP C 1.0PF B	
C671			CC73GCH1H4R5B	CHIP C 4.5PF B	M,B	C744,745			CK73HB1H471K	CHIP C 470PF K	
C673			CK73HB1H471K	CHIP C 470PF K		C746			CC73HCH1H040B	CHIP C 4.0PF B	
C675			CC73GCH1H020B	CHIP C 2.0PF B	K,K4,A	C747,748			CK73HB1H471K	CHIP C 470PF K	
C675			CC73GCH1H020B	CHIP C 2.0PF B	M,B	C749			CC73HCH1H040B	CHIP C 4.0PF B	K3,K6,M3
C675			CC73GCH1H040B	CHIP C 4.0PF B	K3,K6,M3	C749			CC73HCH1H3R5B	CHIP C 3.5PF B	K,K4,A
C676			CC73GCH1H101J	CHIP C 100PF J		C749			CC73HCH1H3R5B	CHIP C 3.5PF B	M,B
C677			CC73GCH1H050B	CHIP C 5.0PF B		C750			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C678			CC73GCH1H030B	CHIP C 3.0PF B	K,K4,A	C750			CC73HCH1H330J	CHIP C 33PF J	K,K4,A
C678			CC73GCH1H030B	CHIP C 3.0PF B	M,B	C750			CC73HCH1H330J	CHIP C 33PF J	M,B
C678			CC73GCH1H040B	CHIP C 4.0PF B	K3,K6,M3	C752			CC73HCH1H020B	CHIP C 2.0PF B	
C679			CC73GCH1H1R5B	CHIP C 1.5PF B		C754			CC73HCH1H020B	CHIP C 2.0PF B	
C680			CC73GCH1H040B	CHIP C 4.0PF B	K,K4,A	C755			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C680			CC73GCH1H040B	CHIP C 4.0PF B	M,B	C755			CC73HCH1H330J	CHIP C 33PF J	K,K4,A
C680			CC73GCH1H070B	CHIP C 7.0PF B	K3,K6,M3	C755			CC73HCH1H330J	CHIP C 33PF J	M,B
C681			CC73GCH1H020B	CHIP C 2.0PF B	K,K4,A	C756			CC73HCH1H050B	CHIP C 5.0PF B	
C681			CC73GCH1H020B	CHIP C 2.0PF B	M,B	C757			CC73HCH1H020B	CHIP C 2.0PF B	K3,K6,M3
C681			CC73GCH1H030B	CHIP C 3.0PF B	K3,K6,M3	C757			CC73HCH1H1R5B	CHIP C 1.5PF B	K,K4,A
C682			CC73GCH1H050B	CHIP C 5.0PF B	K,K4,A	C757			CC73HCH1H1R5B	CHIP C 1.5PF B	M,B
C682			CC73GCH1H050B	CHIP C 5.0PF B	M,B	C758			CK73HB1H471K	CHIP C 470PF K	
C682			CC73GCH1H070B	CHIP C 7.0PF B	K3,K6,M3	C759			CC73HCH1H020B	CHIP C 2.0PF B	
C683			CC73GCH1H020B	CHIP C 2.0PF B	K,K4,A	C760			CK73HB1H471K	CHIP C 470PF K	
C683			CC73GCH1H020B	CHIP C 2.0PF B	M,B	C761			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C683			CC73GCH1H2R5B	CHIP C 2.5PF B	K3,K6,M3	C761			CC73HCH1H330J	CHIP C 33PF J	K,K4,A
C684			CC73GCH1H1R5B	CHIP C 1.5PF B		C761			CC73HCH1H330J	CHIP C 33PF J	M,B
C701,702			CK73HB1A104K	CHIP C 0.10UF K		C762			CC73HCH1H050B	CHIP C 5.0PF B	
C703			CC73HCH1H330J	CHIP C 33PF J		C763			CK73HB1H471K	CHIP C 470PF K	
C704			CK73HB1C103K	CHIP C 0.010UF K		C765			CK73HB1H471K	CHIP C 470PF K	
C705			CC73HCH1H220J	CHIP C 22PF J		C767			CK73HB1H471K	CHIP C 470PF K	
C706			CC73HCH1H820J	CHIP C 82PF J		C769			CK73HB1H471K	CHIP C 470PF K	
C707			CK73HB1H331K	CHIP C 330PF K		C771			CK73HB1A104K	CHIP C 0.10UF K	
C708,709			CK73HB1A104K	CHIP C 0.10UF K		C772			CK73HB1H471K	CHIP C 470PF K	
C710			CC73HCH1H390J	CHIP C 39PF J		C773			CC73HCH1H030B	CHIP C 3.0PF B	
C711			CC73HCH1H820J	CHIP C 82PF J		C774			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C712			CK73HB1H331K	CHIP C 330PF K		C774			CC73HCH1H330J	CHIP C 33PF J	K,K4,A
C713			CK73HB1A104K	CHIP C 0.10UF K		C774			CC73HCH1H330J	CHIP C 33PF J	M,B
C714			CC73HCH1H390J	CHIP C 39PF J		C776			CC73HCH1H030B	CHIP C 3.0PF B	
C715			CK73HB1H471K	CHIP C 470PF K		C777			CK73HB1H471K	CHIP C 470PF K	
C716			CK73HB1H182K	CHIP C 1800PF K		C778			CC73HCH1H030B	CHIP C 3.0PF B	
C717			CK73GB1E105K	CHIP C 1.0UF K		C779			CC73HCH1H180J	CHIP C 18PF J	K3,K6,M3
C718			CS77AAQJ220M	CHIP TNL 22UF 6.3WV		C779			CC73HCH1H330J	CHIP C 33PF J	K,K4,A
C719			CC73HCH1H820J	CHIP C 82PF J		C779			CC73HCH1H330J	CHIP C 33PF J	M,B

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
C781			CK73HB1H471K	CHIP C 470PF K		L512		*	L41-2275-43	SMALL FIXED INDUCTOR (22NH)	K3,K6,M3
C782			CC73HCH1H220J	CHIP C 22PF J	K3,K6,M3	L513			L41-2278-14	SMALL FIXED INDUCTOR (22NH)	K,K4,A
C782			CC73HCH1H330J	CHIP C 33PF J	K,K4,A	L513			L41-2278-14	SMALL FIXED INDUCTOR (22NH)	M,B
C782			CC73HCH1H330J	CHIP C 33PF J	M,B	L513			L41-2778-14	SMALL FIXED INDUCTOR (27NH)	K3,K6,M3
C783			CC73HCH1H060B	CHIP C 6.0PF B	K,K4,A	L514			L41-1585-45	SMALL FIXED INDUCTOR (150NH)	K,K4,A
C783			CC73HCH1H060B	CHIP C 6.0PF B	M,B	L514			L41-1585-45	SMALL FIXED INDUCTOR (150NH)	M,B
C783			CC73HCH1H080B	CHIP C 8.0PF B	K3,K6,M3	L514,515		*	L41-2285-45	SMALL FIXED INDUCTOR (220NH)	K3,K6,M3
C784			CC73HCH1H100D	CHIP C 10PF D		L515		*	L41-1885-45	SMALL FIXED INDUCTOR (180NH)	K,K4,A
C901			CK73HB1H471K	CHIP C 470PF K		L515		*	L41-1885-45	SMALL FIXED INDUCTOR (180NH)	M,B
C904			CK73HB1H471K	CHIP C 470PF K		L517		*	L41-2785-45	SMALL FIXED INDUCTOR (270NH)	
C906			CK73HB1C103K	CHIP C 0.010UF K		L518			L40-1585-92	SMALL FIXED INDUCTOR (150NH)	K,K4,A
C917			CK73HB1A104K	CHIP C 0.10UF K		L518			L40-1585-92	SMALL FIXED INDUCTOR (150NH)	M,B
C921			CK73HB1C223K	CHIP C 0.022UF K		L518			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	K3,K6,M3
C923-926			CK73HB1H471K	CHIP C 470PF K		L519			L92-0138-05	CHIP FERRITE	
TC501,502			C05-0384-05	TRIMMER CAPACITOR (10PF)		L521			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	
101	2A		E37-1141-15	FLAT CABLE		L524			L40-2275-57	SMALL FIXED INDUCTOR (22.0NH)	
CN1			E40-6519-05	PIN ASSY		L601			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	
CN8		*	E40-6568-05	FLAT CABLE CONNECTOR		L602			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	
CN18		*	E40-6456-05	FLAT CABLE CONNECTOR		L603			L92-0138-05	CHIP FERRITE	
CN60		*	E40-5932-05	SOCKET FOR PIN ASSY		L604			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	K,K4,A
CN71		*	E40-6568-05	FLAT CABLE CONNECTOR		L604			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	M,B
CN901		*	E40-6456-05	FLAT CABLE CONNECTOR		L605			L40-6865-57	SMALL FIXED INDUCTOR (6.8NH)	
J1			E11-0707-05	PHONE JACK (2.5/3.5)		L606		*	L41-1575-45	SMALL FIXED INDUCTOR (15NH)	
102	2A		F12-0476-04	SHIELDING SHEET	K,K4,A	L607			L92-0149-05	CHIP FERRITE	
102	2A		F12-0476-04	SHIELDING SHEET	M,B	L608			L40-1263-92	SMALL FIXED INDUCTOR (1.2NH)	K3,K6,M3
F901			F53-0324-05	FUSE		L611			L34-4576-05	AIR-CORE COIL	
-			G11-4427-04	SHEET		L612			L92-0149-05	CHIP FERRITE	
CD701			L79-1474-05	TUNING COIL		L613			L41-5668-14	SMALL FIXED INDUCTOR (5.6NH)	
CF701			L72-1010-05	CERAMIC FILTER		L614		*	L41-2285-45	SMALL FIXED INDUCTOR (220NH)	
CF702			L72-1012-05	CERAMIC FILTER		L615-618			L34-4564-05	AIR-CORE COIL	
L1			L92-0140-05	CHIP FERRITE		L619			L41-1092-44	SMALL FIXED INDUCTOR (1UH)	
L2-5			L92-0138-05	CHIP FERRITE		L701			L40-1885-92	SMALL FIXED INDUCTOR (180NH)	
L8			L92-0138-05	CHIP FERRITE		L702			L40-1085-57	SMALL FIXED INDUCTOR (100NH)	
L10			L92-0140-05	CHIP FERRITE		L703			L40-1591-86	SMALL FIXED INDUCTOR (1.5UH)	
L11			L92-0149-05	CHIP FERRITE		L704			L92-0138-05	CHIP FERRITE	
L12,13			L92-0419-15	CHIP FERRITE		L705			L41-5685-39	SMALL FIXED INDUCTOR (0.56UH)	
L14-16			L92-0138-05	CHIP FERRITE		L706			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	
L501			L41-4795-39	SMALL FIXED INDUCTOR (4.7UH)		L707			L40-1875-57	SMALL FIXED INDUCTOR (18.0NH)	
L502			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	K,K4,A	L709			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	K,K4,A
L502			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	M,B	L709			L40-2775-57	SMALL FIXED INDUCTOR (27.0NH)	M,B
L502			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	K3,K6,M3	L710			L40-3375-57	SMALL FIXED INDUCTOR (33.0NH)	K3,K6,M3
L503			L92-0138-05	CHIP FERRITE		L711-713			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	
L505			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	K3,K6,M3	L714			L92-0138-05	CHIP FERRITE	
L505,506			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	K,K4,A	L715		*	L41-2785-45	SMALL FIXED INDUCTOR (270NH)	
L505,506			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	M,B	L717,718			L41-8268-14	SMALL FIXED INDUCTOR (8.2NH)	
L506			L40-2785-92	SMALL FIXED INDUCTOR (270NH)	K3,K6,M3	L719		*	L41-4775-45	SMALL FIXED INDUCTOR (47NH)	
L507			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	K,K4,A	L720			L40-6865-57	SMALL FIXED INDUCTOR (6.8NH)	
L507			L40-3363-57	SMALL FIXED INDUCTOR (3.3NH)	M,B	L901			L92-0149-05	CHIP FERRITE	
L507			L40-3963-57	SMALL FIXED INDUCTOR (3.9NH)	K3,K6,M3	X1			L77-1950-05	CRYSTAL RESONATOR (11.0592MHZ)	
L508			L40-2285-92	SMALL FIXED INDUCTOR (220NH)	K3,K6,M3	X2			L77-1976-05	CRYSTAL RESONATOR (3.6864MHZ)	
L508,509			L40-8275-92	SMALL FIXED INDUCTOR (82NH)	K,K4,A	X501			L77-1971-05	TCXO (16.8MHZ)	
L508,509			L40-8275-92	SMALL FIXED INDUCTOR (82NH)	M,B	XF701			L71-0617-25	MCF (49.95MHZ)	
L509			L40-1285-92	SMALL FIXED INDUCTOR (120NH)	K3,K6,M3	CP1			RK74HB1J473J	CHIP-COM 47K J 1/16W	
L511			L40-1275-57	SMALL FIXED INDUCTOR (12.0NH)	K,K4,A	CP3,4			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L511			L40-1275-57	SMALL FIXED INDUCTOR (12.0NH)	M,B	CP5			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L511			L40-1575-57	SMALL FIXED INDUCTOR (15.0NH)	K3,K6,M3	CP7,8			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
L512			L41-1875-43	SMALL FIXED INDUCTOR (18NH)	K,K4,A	CP10			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
L512			L41-1875-43	SMALL FIXED INDUCTOR (18NH)	M,B	CP11			RK75HA1J102J	CHIP-COM 1.0K J 1/16W	
						CP12,13			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
CP16			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R75			RK73GB2A391J	CHIP R 390 J 1/10W	K4,K6,M
CP18			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R75			RK73GB2A391J	CHIP R 390 J 1/10W	M3,B
CP19			RK75HA1J473J	CHIP-COM 47K J 1/16W		R76-80			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP22-24			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R82			RK73GB2A391J	CHIP R 390 J 1/10W	K4,K6,M
CP28			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R82			RK73GB2A391J	CHIP R 390 J 1/10W	M3,B
CP30			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R83			RK73GB2A000J	CHIP R 0.0 J 1/10W	
CP32			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R84			RK73HB1J184J	CHIP R 180K J 1/16W	
CP34			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R89			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP36			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R90			RK73HB1J394J	CHIP R 390K J 1/16W	
CP38			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R91			RK73HB1J332J	CHIP R 3.3K J 1/16W	
CP40			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R92			RK73HB1J473J	CHIP R 47K J 1/16W	
CP42,43			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R93			RK73HB1J393J	CHIP R 39K J 1/16W	
CP44			RK75HA1J474J	CHIP-COM 470K J 1/16W		R94			RK73HB1J684J	CHIP R 680K J 1/16W	
CP45-47			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R95,96			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CP48,49			RK74HB1J102J	CHIP-COM 1.0K J 1/16W		R97			RK73HB1J474J	CHIP R 470K J 1/16W	
CP50			RK75HA1J102J	CHIP-COM 1.0K J 1/16W		R98,99			RK73HB1J473J	CHIP R 47K J 1/16W	
CP54			RK75HA1J473J	CHIP-COM 47K J 1/16W		R100			RK73HB1J223J	CHIP R 22K J 1/16W	
R1			RK73GB2A000J	CHIP R 0.0 J 1/10W		R101			RK73HB1J103J	CHIP R 10K J 1/16W	
R2			RK73HB1J153J	CHIP R 15K J 1/16W		R102			RK73HB1J473J	CHIP R 47K J 1/16W	
R7			RK73HB1J102J	CHIP R 1.0K J 1/16W		R103			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R8			RK73HB1J272J	CHIP R 2.7K J 1/16W		R104			RK73HB1J103J	CHIP R 10K J 1/16W	
R9			RK73HB1J332J	CHIP R 3.3K J 1/16W		R105			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R11			RK73HB1J473J	CHIP R 47K J 1/16W		R106			RK73HB1J473J	CHIP R 47K J 1/16W	
R12			RK73HB1J334J	CHIP R 330K J 1/16W		R107			RK73HB1J564J	CHIP R 560K J 1/16W	
R13			RK73HB1J332J	CHIP R 3.3K J 1/16W		R108			RK73HB1J334J	CHIP R 330K J 1/16W	
R14			RK73HB1J102J	CHIP R 1.0K J 1/16W		R109			RK73HB1J684J	CHIP R 680K J 1/16W	
R15			RK73HB1J272J	CHIP R 2.7K J 1/16W		R111			RK73HB1J564J	CHIP R 560K J 1/16W	
R16			RK73HB1J331J	CHIP R 330 J 1/16W		R112			RK73HB1J334J	CHIP R 330K J 1/16W	
R17			RK73HB1J821J	CHIP R 820 J 1/16W		R113			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R18			RK73GB2A100J	CHIP R 10 J 1/10W		R114			RK73HB1J184J	CHIP R 180K J 1/16W	
R20			RK73HB1J103J	CHIP R 10K J 1/16W		R115			RK73GB2A103J	CHIP R 10K J 1/10W	
R21			RK73HB1J821J	CHIP R 820 J 1/16W		R116			RK73HB1J393J	CHIP R 39K J 1/16W	
R22,23			RK73HB1J000J	CHIP R 0.0 J 1/16W		R117			RK73HB1J683J	CHIP R 68K J 1/16W	
R24			RK73HB1J224J	CHIP R 220K J 1/16W		R119			RK73HB1J101J	CHIP R 100 J 1/16W	
R25			RK73HB1J153J	CHIP R 15K J 1/16W		R121			RK73HB1J184J	CHIP R 180K J 1/16W	
R26			RK73HB1J000J	CHIP R 0.0 J 1/16W		R122			RK73HB1J154J	CHIP R 150K J 1/16W	
R27,28			RK73HB1J474D	CHIP R 470K D 1/16W		R125			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R31			RK73HB1J103J	CHIP R 10K J 1/16W		R129			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R36		*	RK73GB2A433J	CHIP R 43K J 1/10W		R130			RK73HB1J474J	CHIP R 470K J 1/16W	
R37			RK73HB1J103J	CHIP R 10K J 1/16W		R131,132			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R39,40			RK73HB1J473J	CHIP R 47K J 1/16W		R134			RK73HB1J104J	CHIP R 100K J 1/16W	
R42-44			RK73HB1J103J	CHIP R 10K J 1/16W		R135			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R45,46			RK73HB1J102J	CHIP R 1.0K J 1/16W		R137			RK73HB1J223J	CHIP R 22K J 1/16W	
R48-52			RK73HB1J473J	CHIP R 47K J 1/16W		R139			RK73HB1J103J	CHIP R 10K J 1/16W	
R53			RK73HB1J474J	CHIP R 470K J 1/16W		R140			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R54			RK73HB1J102J	CHIP R 1.0K J 1/16W		R141			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R55,56			RK73HB1J474J	CHIP R 470K J 1/16W		R142			RK73HB1J223J	CHIP R 22K J 1/16W	
R57			RK73HB1J103J	CHIP R 10K J 1/16W		R143			RK73HB1J473J	CHIP R 47K J 1/16W	
R58,59			RK73HB1J473J	CHIP R 47K J 1/16W		R144			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R61			RK73HB1J331J	CHIP R 330 J 1/16W		R145			RK73HB1J154J	CHIP R 150K J 1/16W	
R62			RK73HB1J103J	CHIP R 10K J 1/16W		R146			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R63			RK73HB1J332J	CHIP R 3.3K J 1/16W		R147			RK73HB1J103J	CHIP R 10K J 1/16W	
R64			RK73HB1J102J	CHIP R 1.0K J 1/16W		R149			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R65,66			RK73HB1J473J	CHIP R 47K J 1/16W		R150			RK73HB1J153J	CHIP R 15K J 1/16W	
R67			RK73HB1J472J	CHIP R 4.7K J 1/16W		R151			RK73HB1J183J	CHIP R 18K J 1/16W	
R68			RK73GB2A181J	CHIP R 180 J 1/10W		R152			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R69			RK73HB1J102J	CHIP R 1.0K J 1/16W		R153			RK73HB1J332J	CHIP R 3.3K J 1/16W	
R71			RK73HB1J102J	CHIP R 1.0K J 1/16W		R154			RK73HB1J333J	CHIP R 33K J 1/16W	
R72			RK73GB2A181J	CHIP R 180 J 1/10W		R155			RK73HB1J223J	CHIP R 22K J 1/16W	
R73,74			RK73HB1J474J	CHIP R 470K J 1/16W		R156,157		*	RK73HB1J304J	CHIP R 300K J 1/16W	

PARTS LIST

TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Desti-nation	Ref. No.	Address	New parts	Parts No.	Description	Desti-nation
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	
R164			RK73HB1J184J	CHIP R 180K J 1/16W		R247			RK73HB1J184J	CHIP R 180K J 1/16W	
R165			RK73HB1J154J	CHIP R 150K J 1/16W		R248			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R166			RK73HB1J103J	CHIP R 10K J 1/16W		R250			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R167			RK73GB2A000J	CHIP R 0.0 J 1/10W		R251			RK73HB1J474J	CHIP R 470K J 1/16W	
R168			RK73HB1J474J	CHIP R 470K J 1/16W		R254,255			RK73HB1J474J	CHIP R 470K J 1/16W	
R169			RK73HB1J223J	CHIP R 22K J 1/16W		R256-258			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R170			RK73GB2A000J	CHIP R 0.0 J 1/10W		R259			RK73HB1J103J	CHIP R 10K J 1/16W	
R171			RK73HB1J000J	CHIP R 0.0 J 1/16W		R261			RK73HB1J103J	CHIP R 10K J 1/16W	
R172			RK73HB1J684J	CHIP R 680K J 1/16W		R262			RK73HB1J473J	CHIP R 47K J 1/16W	
R173			RK73HB1J184J	CHIP R 180K J 1/16W		R263			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R174			RK73HB1J123J	CHIP R 12K J 1/16W		R501,502			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R175			RK73HB1J103J	CHIP R 10K J 1/16W		R503			RK73HB1J470J	CHIP R 47 J 1/16W	
R176			RK73HB1J683J	CHIP R 68K J 1/16W		R504			RK73HB1J103J	CHIP R 10K J 1/16W	
R177			RK73HB1J000J	CHIP R 0.0 J 1/16W		R505			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R178			RK73HB1J102J	CHIP R 1.0K J 1/16W		R506			RK73HB1J154J	CHIP R 150K J 1/16W	
R180			RK73HB1J103J	CHIP R 10K J 1/16W		R507			RK73HB1J101J	CHIP R 100 J 1/16W	
R181			RK73HB1J000J	CHIP R 0.0 J 1/16W		R508			RK73HB1J330J	CHIP R 33 J 1/16W	
R183			RK73HB1J103J	CHIP R 10K J 1/16W		R509			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R184			RK73HB1J000J	CHIP R 0.0 J 1/16W		R510-512			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R187			RK73HB1J000J	CHIP R 0.0 J 1/16W		R513			RK73HB1J470J	CHIP R 47 J 1/16W	
R191			RK73HB1J000J	CHIP R 0.0 J 1/16W		R514			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R192,193			RK73HB1J104J	CHIP R 100K J 1/16W		R515			RK73HB1J331J	CHIP R 330 J 1/16W	K3,K6,M3
R194,195			RK73HB1J102J	CHIP R 1.0K J 1/16W		R515			RK73HB1J561J	CHIP R 560 J 1/16W	K,K4,A
R196			RK73HB1J151J	CHIP R 150 J 1/16W		R515			RK73HB1J561J	CHIP R 560 J 1/16W	M,B
R198			RK73GB2A000J	CHIP R 0.0 J 1/10W		R516			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R199			RK73HB1J472J	CHIP R 4.7K J 1/16W		R517			RK73HB1J103J	CHIP R 10K J 1/16W	
R200			RK73HB1J473J	CHIP R 47K J 1/16W		R518			RK73HB1J101J	CHIP R 100 J 1/16W	
R202			RK73HB1J102J	CHIP R 1.0K J 1/16W		R519,520			RK73HB1J103J	CHIP R 10K J 1/16W	
R203			RK73HB1J222J	CHIP R 2.2K J 1/16W		R521			RK73HB1J101J	CHIP R 100 J 1/16W	K,K4,A
R204			RK73HB1J104J	CHIP R 100K J 1/16W		R521			RK73HB1J101J	CHIP R 100 J 1/16W	M,B
R205			RK73HB1J105J	CHIP R 1.0M J 1/16W		R521,522			RK73HB1J101J	CHIP R 100 J 1/16W	K3,K6,M3
R206			RK73HB1J000J	CHIP R 0.0 J 1/16W		R522			RK73HB1J220J	CHIP R 22 J 1/16W	K,K4,A
R207			RK73HB1J154J	CHIP R 150K J 1/16W		R522			RK73HB1J220J	CHIP R 22 J 1/16W	M,B
R210			RK73HB1J471J	CHIP R 470 J 1/16W		R523			RK73HB1J473J	CHIP R 47K J 1/16W	
R211			RK73HB1J474J	CHIP R 470K J 1/16W		R525			RK73HB1J101J	CHIP R 100 J 1/16W	
R212			RK73GB2A101J	CHIP R 100 J 1/10W		R527			RK73HB1J104J	CHIP R 100K J 1/16W	K3,K6,M3
R213			RK73HB1J101J	CHIP R 100 J 1/16W		R527			RK73HB1J224J	CHIP R 220K J 1/16W	K,K4,A
R214			RK73HB1J182J	CHIP R 1.8K J 1/16W		R527			RK73HB1J224J	CHIP R 220K J 1/16W	M,B
R215			RK73HB1J334J	CHIP R 330K J 1/16W		R529			RK73HB1J151J	CHIP R 150 J 1/16W	K,K4,A
R216			RK73HB1J274J	CHIP R 270K J 1/16W		R529			RK73HB1J151J	CHIP R 150 J 1/16W	M,B
R218			RK73GB2A000J	CHIP R 0.0 J 1/10W		R529,530			RK73HB1J181J	CHIP R 180 J 1/16W	K3,K6,M3
R220			RK73GB2A102J	CHIP R 1.0K J 1/10W		R530			RK73HB1J181J	CHIP R 180 J 1/16W	K,K4,A
R221			RK73HB1J473J	CHIP R 47K J 1/16W		R530			RK73HB1J181J	CHIP R 180 J 1/16W	M,B
R222,223			RK73HB1J102J	CHIP R 1.0K J 1/16W		R531,532			RK73HB1J220J	CHIP R 22 J 1/16W	
R224			RK73HB1J104J	CHIP R 100K J 1/16W		R533			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R225			RK73HB1J154J	CHIP R 150K J 1/16W		R534			RK73HB1J154J	CHIP R 150K J 1/16W	
R226			RK73HB1J184J	CHIP R 180K J 1/16W		R535			RK73HB1J101J	CHIP R 100 J 1/16W	
R229			RK73HB1J473J	CHIP R 47K J 1/16W		R541			RK73HB1J154J	CHIP R 150K J 1/16W	
R230			RK73HB1J123J	CHIP R 12K J 1/16W		R542			RK73HB1J331J	CHIP R 330 J 1/16W	K3,K6,M3
R232			RK73HB1J823J	CHIP R 82K J 1/16W		R542			RK73HB1J680J	CHIP R 68 J 1/16W	K,K4,A
R236			RK73HB1J124J	CHIP R 120K J 1/16W		R542			RK73HB1J680J	CHIP R 68 J 1/16W	M,B
R238			RK73HB1J474J	CHIP R 470K J 1/16W		R544			RK73HB1J470J	CHIP R 47 J 1/16W	
R239			RK73HB1J104J	CHIP R 100K J 1/16W		R545			RK73HB1J333D	CHIP R 33K D 1/16W	
R240			RK73HB1J474J	CHIP R 470K J 1/16W		R546			RK73HB1J104D	CHIP R 100K D 1/16W	
R241			RK73HB1J473J	CHIP R 47K J 1/16W		R547			RK73HB1J472J	CHIP R 4.7K J 1/16W	

PARTS LIST

TX-RX UNIT (X57-7010-XX)

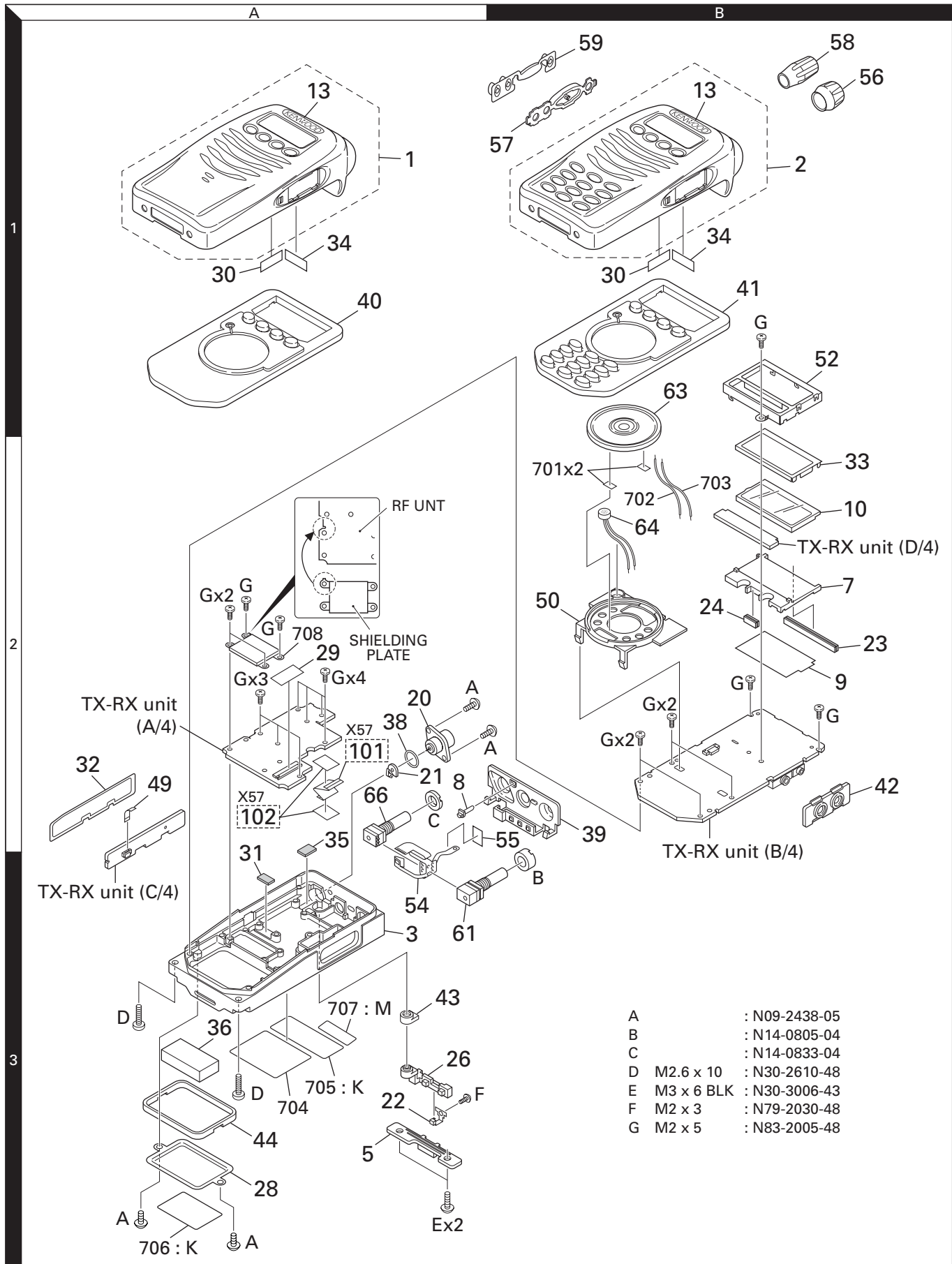
Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
R548			RK73HB1J000J	CHIP R 0.0 J 1/16W		R717			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R550			RK73GB2A000J	CHIP R 0.0 J 1/10W		R718			RK73HB1J100J	CHIP R 10 J 1/16W	
R551,552			RK73HB1J000J	CHIP R 0.0 J 1/16W		R719			RK73HB1J332J	CHIP R 3.3K J 1/16W	
R558			RK73HB1J000J	CHIP R 0.0 J 1/16W		R721			RK73HB1J224J	CHIP R 220K J 1/16W	
R601			RK73HB1J472J	CHIP R 4.7K J 1/16W		R722			RK73HB1J101J	CHIP R 100 J 1/16W	
R602			RK73HB1J000J	CHIP R 0.0 J 1/16W	K3,K6,M3	R726			RK73HB1J474J	CHIP R 470K J 1/16W	
R603			RK73HB1J102J	CHIP R 1.0K J 1/16W		R727			RK73HB1J681J	CHIP R 680 J 1/16W	
R604			RK73HB1J333J	CHIP R 33K J 1/16W		R728			RK73HB1J101J	CHIP R 100 J 1/16W	
R605			RK73HB1J101J	CHIP R 100 J 1/16W	K3,K6,M3	R729			RK73HB1J470J	CHIP R 47 J 1/16W	
R605			RK73HB1J470J	CHIP R 47 J 1/16W	K,K4,A	R730			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R605			RK73HB1J470J	CHIP R 47 J 1/16W	M,B	R731			RK73HB1J222J	CHIP R 2.2K J 1/16W	
R606			RK73HB1J471J	CHIP R 470 J 1/16W	K3,K6,M3	R732			RK73HB1J151J	CHIP R 150 J 1/16W	
R607			RK73HB1J220J	CHIP R 22 J 1/16W		R733			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R608			RK73HB1J331J	CHIP R 330 J 1/16W		R734			RK73HB1J104J	CHIP R 100K J 1/16W	
R609			RK73HB1J330J	CHIP R 33 J 1/16W		R735			RK73HB1J563J	CHIP R 56K J 1/16W	
R610			RK73HB1J331J	CHIP R 330 J 1/16W		R736			RK73HB1J104J	CHIP R 100K J 1/16W	
R611			RK73HB1J823J	CHIP R 82K J 1/16W		R737			RK73HB1J563J	CHIP R 56K J 1/16W	
R612			RK73HB1J221J	CHIP R 220 J 1/16W		R738			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R613			RK73HB1J563J	CHIP R 56K J 1/16W		R739-741			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R614			RK73HB1J471J	CHIP R 470 J 1/16W		R743			RK73HB1J101J	CHIP R 100 J 1/16W	K,K4,A
R618			RK73HB1J000J	CHIP R 0.0 J 1/16W		R743			RK73HB1J101J	CHIP R 100 J 1/16W	M,B
R619			RK73HB1J103J	CHIP R 10K J 1/16W		R743			RK73HB1J470J	CHIP R 47 J 1/16W	K3,K6,M3
R620			RK73HB1J000J	CHIP R 0.0 J 1/16W		R744			RK73HB1J221J	CHIP R 220 J 1/16W	
R621			RK73EB2ER39K	CHIP R 0.39 K 1/4W		R747			RK73HB1J104J	CHIP R 100K J 1/16W	
R622			RK73HB1J220J	CHIP R 22 J 1/16W		R750			RK73HB1J104J	CHIP R 100K J 1/16W	
R623			RK73EB2ER39K	CHIP R 0.39 K 1/4W		R751			RK73HB1J683J	CHIP R 68K J 1/16W	
R624			RK73HB1J104J	CHIP R 100K J 1/16W		R753			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R625			RK73HB1J680J	CHIP R 68 J 1/16W		R754,755			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R626			RK73GB2A000J	CHIP R 0.0 J 1/10W	K,K4,A	R756			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R626			RK73GB2A000J	CHIP R 0.0 J 1/10W	M,B	R757			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R627			RK73HB1J223J	CHIP R 22K J 1/16W		R758			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R628			RK73HB1J183J	CHIP R 18K J 1/16W		R759			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R629			RK73EB2ER39K	CHIP R 0.39 K 1/4W		R760			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R630,631			RK73HH1J154D	CHIP R 150K D 1/1		R903			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R632,633			RK73HH1J334D	CHIP R 330K D 1/16W		R913-916			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R634			RK73HB1J103J	CHIP R 10K J 1/16W		R923			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R635			RK73HB1J473J	CHIP R 47K J 1/16W		S1			S70-0424-05	TACT SWITCH	
R636			RK73HB1J000J	CHIP R 0.0 J 1/16W		S2			S70-0457-05	TACT SWITCH	
R637			RK73HB1J223J	CHIP R 22K J 1/16W		S3,4			S70-0424-05	TACT SWITCH	
R638			RK73HB1J474J	CHIP R 470K J 1/16W		D1			RB521S-30	DIODE	
R639			RK73HB1J184J	CHIP R 180K J 1/16W		D4			MA2S111-F	DIODE	
R640			RK73HB1J474J	CHIP R 470K J 1/16W		D14			MA2S111-F	DIODE	K,K3,K4
R641			RK73GB2A000J	CHIP R 0.0 J 1/10W		D14			MA2S111-F	DIODE	K6
R642			RK73HB1J220J	CHIP R 22 J 1/16W		D14-17			MA2S111-F	DIODE	A,B
R643			RK73HB1J683J	CHIP R 68K J 1/16W		D15-17			MA2S111-F	DIODE	M,M3
R645,646			RK73GB2A271J	CHIP R 270 J 1/10W		D16,17			MA2S111-F	DIODE	K,K3,K4
R647			RK73GB2A000J	CHIP R 0.0 J 1/10W		D16,17			MA2S111-F	DIODE	K6
R648			RK73HB1J000J	CHIP R 0.0 J 1/16W	K,K4,A	D24-27			MA2S111-F	DIODE	
R648			RK73HB1J000J	CHIP R 0.0 J 1/16W	M,B	D28-31			MA2S111-F	DIODE	
R648			RK73HB1J5R6J	CHIP R 5.6 J 1/16W	K3,K6,M3	D32			DA221	DIODE	
R701			RK73HB1J103J	CHIP R 10K J 1/16W		D33			AVRM1608270MAB	VARIATOR	
R702,703			RK73HB1J472J	CHIP R 4.7K J 1/16W		D501			MA2S077-F	DIODE	
R704			RK73HB1J224J	CHIP R 220K J 1/16W		D502,503			HSC277	DIODE	
R705,706			RK73HB1J472J	CHIP R 4.7K J 1/16W		D505			1SV325F	VARIABLE CAPACITANCE DIODE	
R707			RK73HB1J101J	CHIP R 100 J 1/16W		D507			1SV325F	VARIABLE CAPACITANCE DIODE	
R708			RK73HB1J103J	CHIP R 10K J 1/16W		D509			1SV325F	VARIABLE CAPACITANCE DIODE	
R710			RK73HB1J102J	CHIP R 1.0K J 1/16W		D511			1SV325F	VARIABLE CAPACITANCE DIODE	
R711			RK73HB1J474J	CHIP R 470K J 1/16W		D513			1SV278F	VARIABLE CAPACITANCE DIODE	
R713			RK73HB1J334J	CHIP R 330K J 1/16W		D514-516			HSC277	DIODE	
R715,716			RK73HB1J332J	CHIP R 3.3K J 1/16W							

PARTS LIST

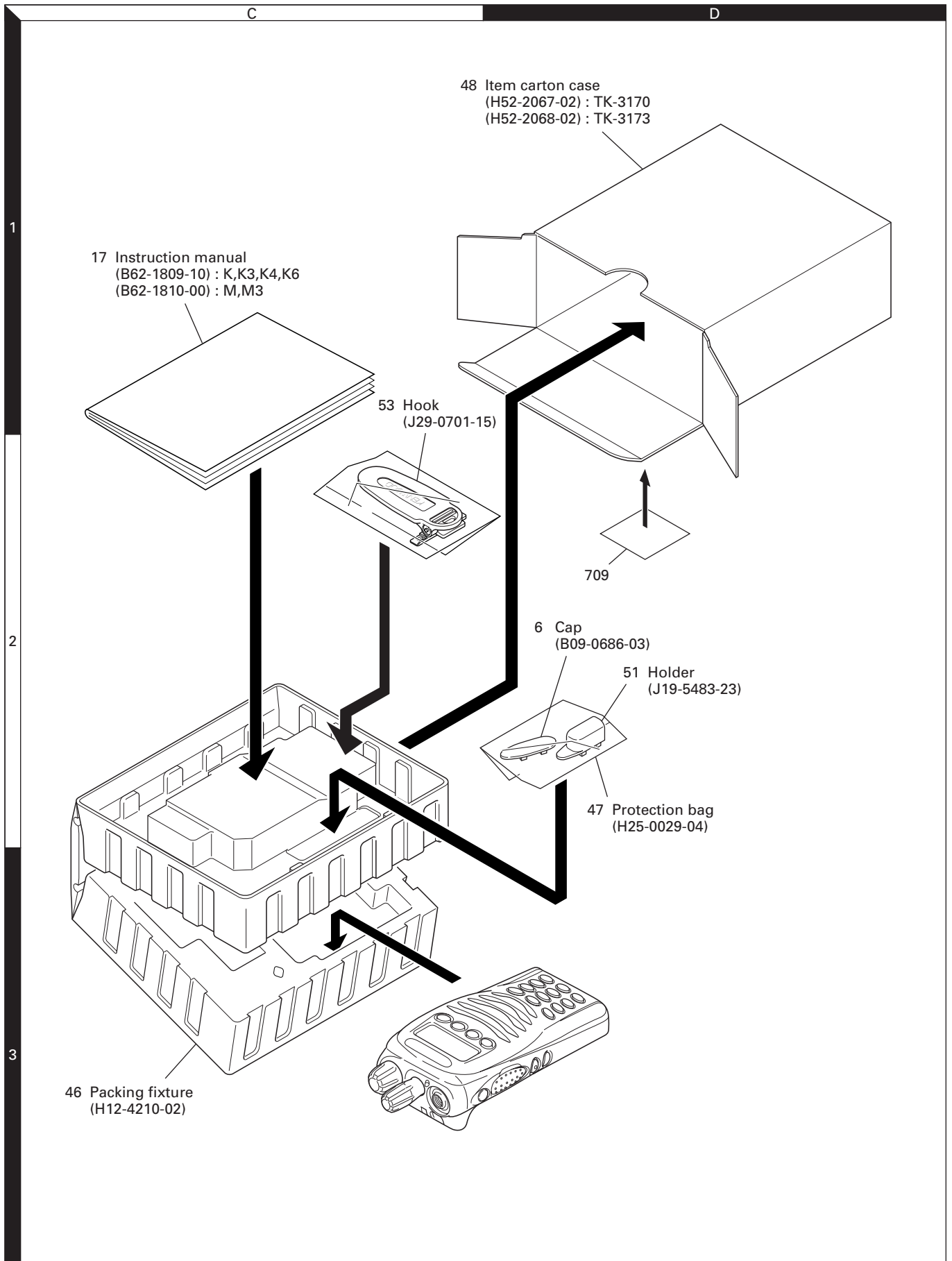
TX-RX UNIT (X57-7010-XX)

Ref. No.	Address	New parts	Parts No.	Description	Destination	Ref. No.	Address	New parts	Parts No.	Description	Destination
D517			MA2S077-F	DIODE		Q506,507			2SC5488	TRANSISTOR	
D601			UDZS4.7B	ZENER DIODE		Q601			2SC5488	TRANSISTOR	
D604-608			HVC131	DIODE		Q602			2SK3077F	FET	
D701,702			DAN235E	DIODE		Q603		*	RD01MUS1-T113	FET	
D703-707			HVC355B	VARIABLE CAPACITANCE DIODE	K,K4,A	Q604			2SK3476-F	FET	
D703-707			HVC355B	VARIABLE CAPACITANCE DIODE	M,B	Q605			DTC114EE	DIGITAL TRANSISTOR	
D703-708			HVC350B	VARIABLE CAPACITANCE DIODE	K3,K6,M3	Q606			2SK879(GR)F	FET	
D708			HVC350B	VARIABLE CAPACITANCE DIODE	K,K4,A	Q607			DTC114EE	DIGITAL TRANSISTOR	
D708			HVC350B	VARIABLE CAPACITANCE DIODE	M,B	Q608			DTA144EE	DIGITAL TRANSISTOR	
D901			1SR154-400	DIODE		Q609			SSM3K15TE(F)	FET	
IC1			XC61CC5002NR	MOS-IC		Q701			2SC4649(N,P)	TRANSISTOR	
IC2			XC6204B502PR	MOS-IC		Q702			DTA144EE	DIGITAL TRANSISTOR	
IC3			XC61CN3402NR	MOS-IC		Q703			2SC4649(N,P)	TRANSISTOR	
IC4,5			BU4094BCFV	MOS-IC		Q704,705			3SK318	FET	
IC6		*	LC75834W-E	MOS-IC		TH501			B57331V2104J	THERMISTOR	
IC7			30625MGP234HU	MCU		TH701,702			B57331V2104J	THERMISTOR	
IC8			AT29C040A-90TU	ROM IC							
IC9			CAT24WC64WI	ROM IC							
IC10-12			TK62012F	MOS-IC							
IC13			AQUA-L	MOS-IC							
IC14			TC7W53FK(F)	MOS-IC							
IC15			TK62012F	MOS-IC							
IC16			M62364FP-F	MOS-IC							
IC17			TK62012F	MOS-IC							
IC18			TA7368FG	MOS-IC							
IC19			TC75S51FE(F)	MOS-IC							
IC501			ADF4111BCP7	MOS-IC							
IC601			TA75W01FUF	MOS-IC							
IC701			TA31136FNG	MOS-IC							
Q1			UMG3N	TRANSISTOR							
Q4			FP210	TRANSISTOR							
Q5			UPA672T-A	FET							
Q6			UMG3N	TRANSISTOR							
Q7			UPA672T-A	FET							
Q8			DTA114EE	DIGITAL TRANSISTOR							
Q9			SSM6J08FU(F)	FET							
Q12			2SC4617(S)	TRANSISTOR							
Q13			2SB1132(Q,R)	TRANSISTOR							
Q14,15			SSM3K15TE(F)	FET							
Q16			2SA1774(S)	TRANSISTOR							
Q17			2SC4649(N,P)	TRANSISTOR							
Q19			SSM3K15TE(F)	FET							
Q21			RN4910(F)	TRANSISTOR							
Q22			SSM3K15TE(F)	FET							
Q23			DTC144EE	DIGITAL TRANSISTOR							
Q24			SSM6J08FU(F)	FET							
Q25			2SK1830F	FET							
Q26			2SJ347F	FET							
Q27			DTC144EE	DIGITAL TRANSISTOR							
Q28			SSM3K01T(F)	FET							
Q29			SSM3K15TE(F)	FET							
Q30			2SJ243-A	FET							
Q31,32			2SC4649(N,P)	TRANSISTOR							
Q33			2SJ347F	FET							
Q34			SSM3K15TE(F)	FET							
Q35			SSM3K01T(F)	FET							
Q501			2SC5488	TRANSISTOR							
Q502,503			2SK508NV(K52)	FET							
Q504			SSM6P05FU(F)	FET							
Q505			2SC4617(S)	TRANSISTOR							

EXPLODED VIEW



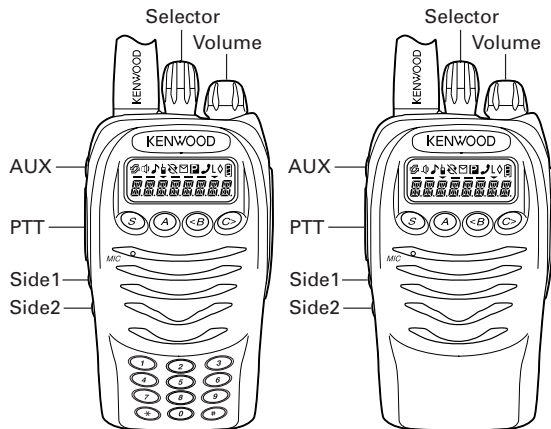
PACKING



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

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 : <input checked="" type="checkbox"/> icon appears
[C]	Test signaling CH up	Signaling No.
[Selector]	Test frequency CH up/down	Channel No.
[Side1]	Squelch on/off	🔊
[Side2]	Narrow/Wide	Narrow : "N", Wide : "W"
[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

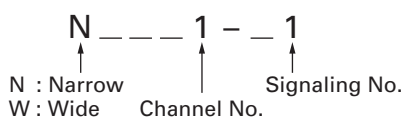
Note :

- 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



■ 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	TK-3170/3173 K,K4		TK-3170 K3,K6,M3		TK-3170 M	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
1	465.05000	465.10000	415.05000	415.10000	465.05000	465.10000
2	440.05000	440.10000	400.05000	400.10000	440.05000	440.10000
3	489.95000	489.90000	429.95000	429.90000	489.95000	489.90000
4	465.00000	465.00000	415.00000	415.00000	465.00000	465.00000
5	465.20000	465.20000	415.20000	415.20000	465.20000	465.20000
6	465.40000	465.40000	415.40000	415.40000	465.40000	465.40000
7~16	-	-	-	-	-	-

• Test signaling

No.	RX	TX
1	None	None
2	None	100Hz Square Wave
3*	LTR Data : AREA=0, GOTO=12 HOME=12 ID=47, FREE=25	LTR Data : AREA=0, GOTO=12 HOME=12 ID=47, FREE=25
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	2-tone : A : 304.7Hz B : 3106.0Hz	2-tone : A : 304.7Hz B : 3106.0Hz
13	Single Tone : 979.9Hz	Single Tone : 979.9Hz
14	None	Single Tone : 1000Hz
15	Skip	Skip
16	None	MSK
17	MSK : Preamble : 0xAAAA Sync : 0x23EB Data : 0x230960C6AAAA CRC : 0xC4D7	MSK : Preamble : 0xAAAA Sync : 0x23EB Data : 0x230960C6AAAA CRC : 0xC4D7

* : LTR signaling apply TK-3173 (K,K4) and TK-3170 (M,M3) only.

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

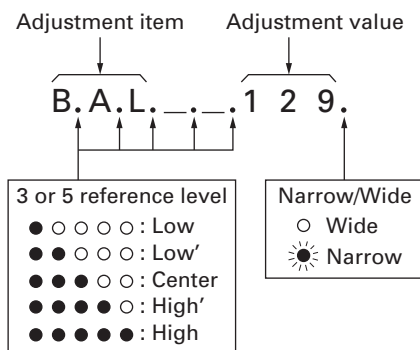
(To place transceiver in tuning mode)

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



■ 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	-

■ 3 or 5 reference level adjustments frequency

Tuning point	TK-3170/3173 K,K4		TK-3170 K3,K6,M3		Tk-3170 M	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
Low	440.05000	440.10000	400.05000	400.10000	440.05000	440.10000
Low'	452.55000	452.60000	407.55000	407.60000	452.55000	452.60000
Center	465.05000	465.10000	415.05000	415.10000	465.05000	465.10000
High'	477.55000	477.60000	422.55000	422.60000	477.55000	477.60000
High	489.95000	489.90000	429.95000	429.90000	489.95000	489.90000

■ Adjustment item and Display

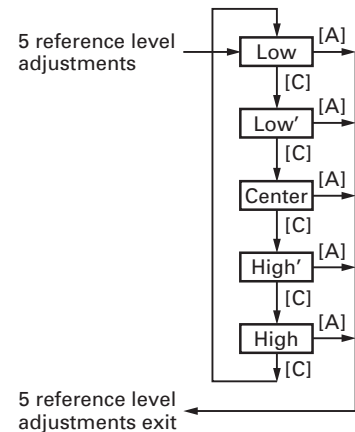
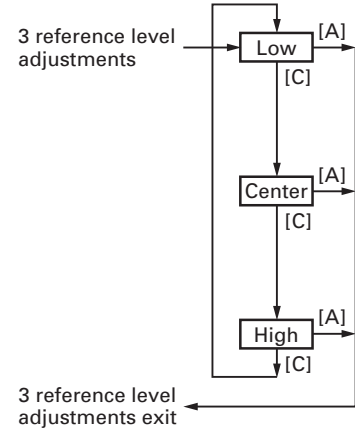
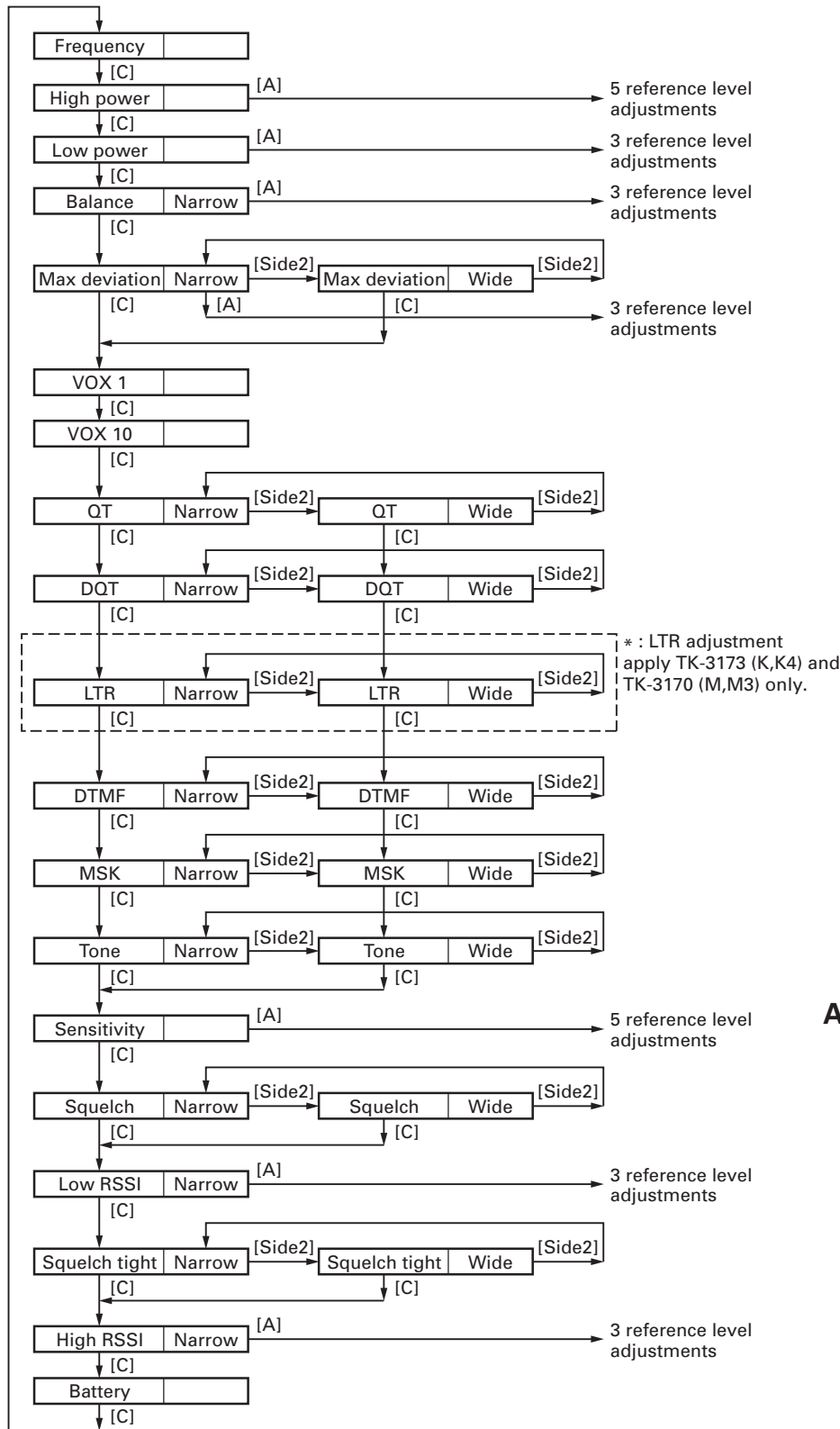
(*** : 1~256, MSK only : 1~64)

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*	LTR deviation	L T R _ _ * * *
11	DTMF deviation	D T M F _ * * *
12	MSK deviation	M S K _ _ _ * *
13	Tone deviation	T O N E _ * * *
14	Sensitivity	S E N S _ * * *
15	Squelch	S Q L _ _ * * *
16	Low RSSI	L R S S I _ * * *
17	Squelch tight	S Q L T _ * * *
18	High RSSI	H R S S I _ * * *
19	Battery detection	B A T T _ * * *

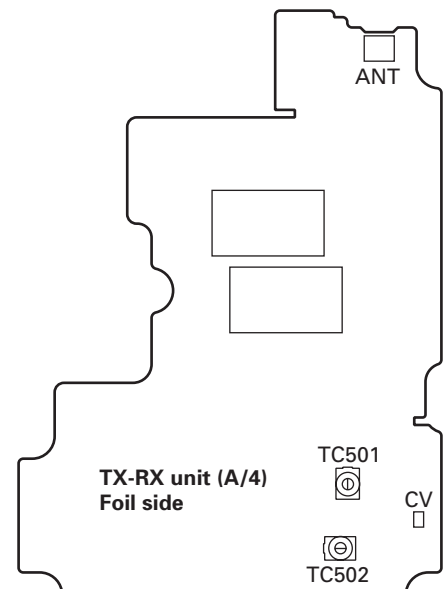
* : LTR adjustment apply TK-3173 (K,K4) and TK-3170 (M,M3) only.

ADJUSTMENT

Flow chart



Adjustment Points



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

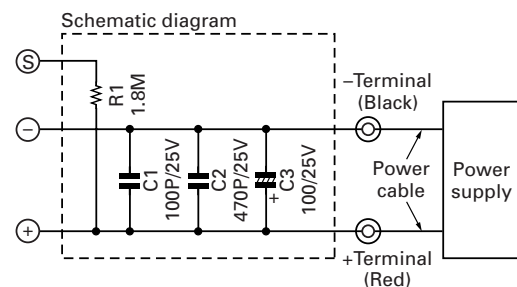
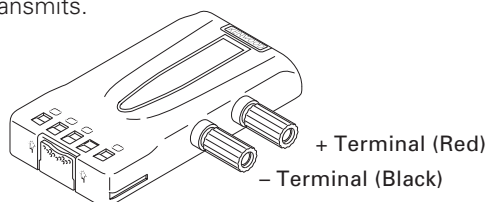
The antenna connector of this radio uses an SMA terminal. Use an antenna connector adapter [SMA(f) – BNC(f) or SMA(f) – N(f)] for adjustment. (The adapter is not provided as an option, so buy a commercially-available one.)

■ 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.

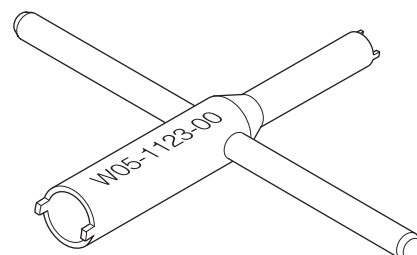
Note : When using the battery jig, you must measure the voltage at the terminals of the battery jig. Otherwise, a slight voltage drop may occur within the power cable, between the power supply and the battery jig, especially while the transceiver transmits.



■ 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 Type 1 3.4V Type 3	±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 Type 1 3.4V Type 3	±0.1V
	4) CH-Sig : 2-1 PTT : ON						Check	0.6V or more

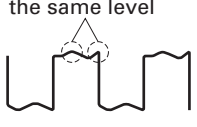
* TX can be continued on unlock condition in panel tuning mode.

Type 1: TK-3170 K,K4,M, TK-3173 K,K4**Type 3: TK-3170 K3,K6,M3**

Transmitter Section

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._] 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	4.5~5.5W 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._] 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								2.20kHz (According to the larger +, -)	±50Hz		
• Wide	3) Adj item : [DEV_ _] Adjust : [***] PTT : ON										4.40kHz (According to the larger +, -)	±50Hz
8. MIC sensitivity check	[Panel test mode] 1) CH-Sig : 1-1 AG : 1kHz/15.0mV at MIC terminal PTT : ON											
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	2) Adj item : [QT_ _ _] Adjust : [***] PTT : ON								0.75kHz	±40Hz		
12. DQT deviation adjust • Narrow	1) Adj item : [DQT_ _] Adjust : [***.] Deviation meter filter LPF : 3kHz HPF : OFF PTT : ON										0.35kHz	±40Hz
• Wide	2) Adj item : [DQT_ _] Adjust : [***] PTT : ON	0.75kHz	±40Hz									

ADJUSTMENT

Item	Condition	Measurement			Adjustment			Specifications/Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
13. LTR deviation adjust • Narrow	1) Adj item : [LTR_]] 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	0.75kHz	±0.04kHz
	• Wide						2) Adj item : [LTR_]] Adjust : [***.] PTT : ON	1.00kHz
LTR adjustment apply TK-3173 (K,K4) and TK-3170 (M,M3) only.								
14. DTMF deviation adjust • Narrow	1) Adj item : [DTMF_]] Adjust : [***.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.25kHz	±0.1kHz
	• Wide						2) Adj item : [DTMF_]] Adjust : [***.] PTT : ON	2.5kHz
15. MSK deviation adjust • Narrow	1) Adj item : [MSK_ _ _]] Adjust : [**.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.5kHz	±0.1kHz
	• Wide						2) Adj item : [MSK_ _ _]] Adjust : [**.] PTT : ON	3.0kHz
16. TONE deviation adjust • Narrow	1) Adj item : [TONE_]] Adjust : [***.] Deviation meter filter LPF : 15kHz HPF : OFF PTT : ON						1.5kHz	±0.1kHz
	• Wide						2) Adj item : [TONE_]] Adjust : [***.] PTT : ON	3.0kHz
17. 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
18. 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.

ADJUSTMENT

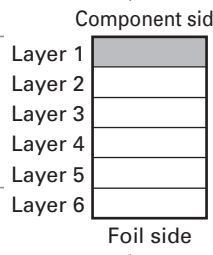
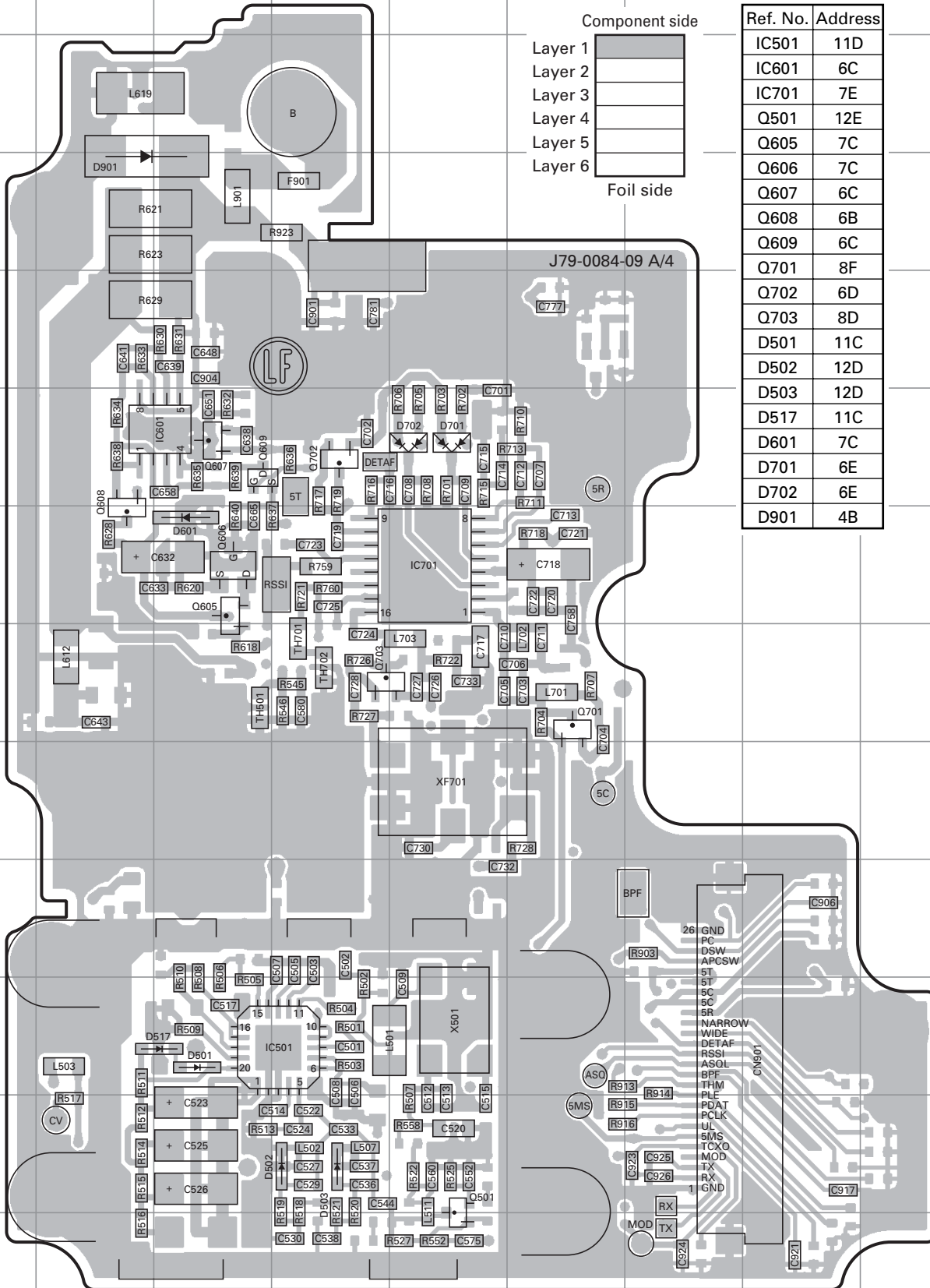
Receiver Section

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)	SSG 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 : -117dBm (0.32μV) (MOD : 1kHz±3kHz) Narrow : -116dBm (0.35μV) (MOD : 1kHz±1.5kHz)						Check	13dB SINAD or more
3. Squelch (Preset) adjust • Narrow	1) Adj item : [SQL_] Adjust : [***.] SSG output : -120dBm (0.22μV) (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 -118dBm : Open SSG OFF : Close
• Wide	2) Adj item : [SQL_] Adjust : [***.] SSG output : -120dBm (0.22μV) (MOD : 1kHz±3.0kHz)							
4. Low RSSI adjust • Narrow	1) Adj item : [LRSSI] Adjust : [***.] SSG output : -118dBm (0.28μV) (MOD : 1kHz±1.5kHz)						After input signal from SSG, press [B] key. That numeric will be stored in memory.	
	2) Adj item : [L.RSSI] → [L.R.S.S.I] → [L.R.S.S.I.] Adjust : [***.]							
5. Squelch (Tight) adjust • Narrow	1) Adj item : [SQLT_] Adjust : [***.] SSG output : -115dBm (0.4μV) (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 -113dBm : Open SSG OFF : Close
• Wide	2) Adj item : [SQLT_] Adjust : [***.] SSG output : -116dBm (0.35μV) (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 : [***.]							

TK-3170/3173 PC BOARD

TX-RX UNIT (X57-7010-XX) (A/4) Component side view (J79-0084-09 A/4)

-10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

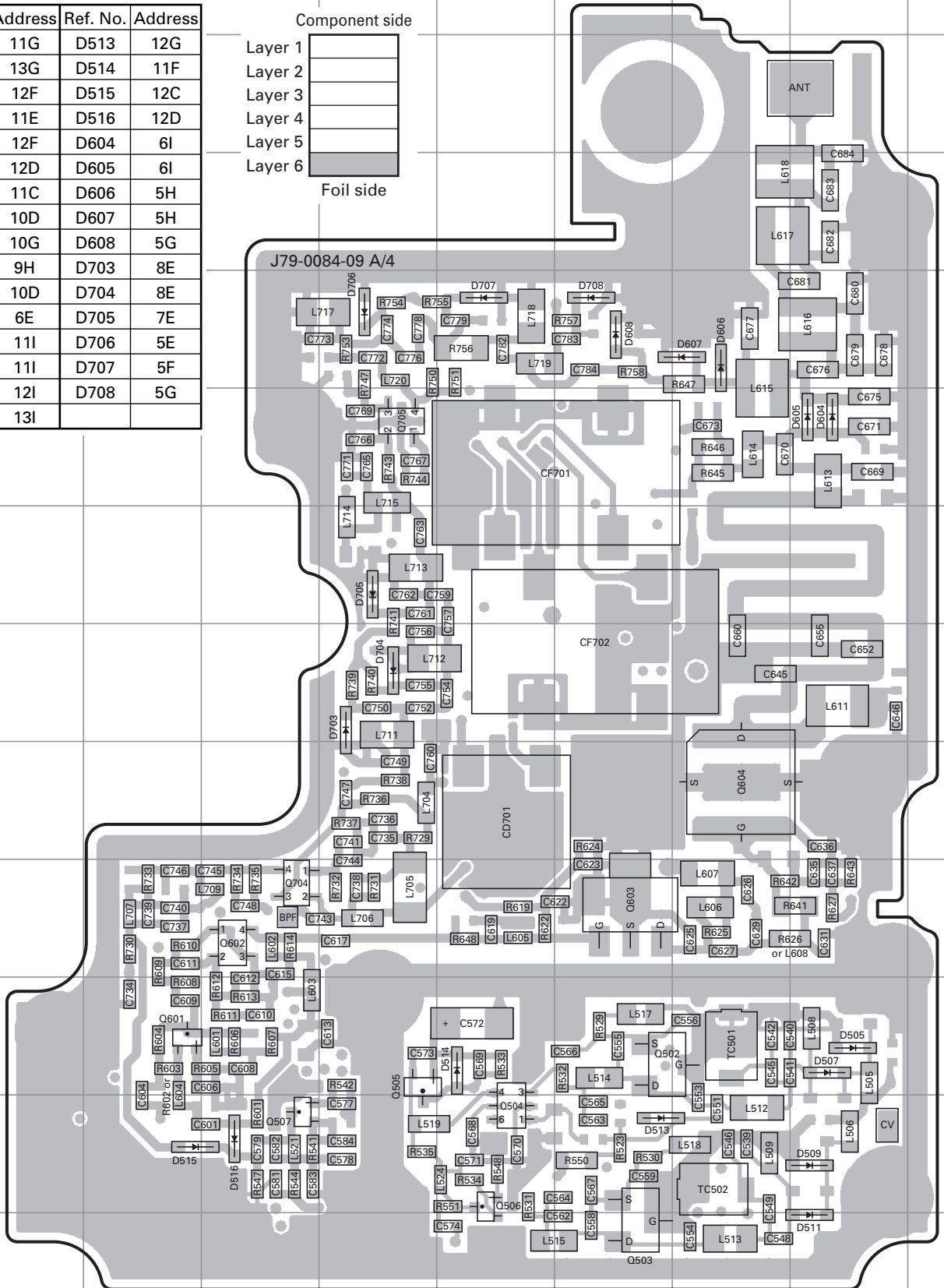
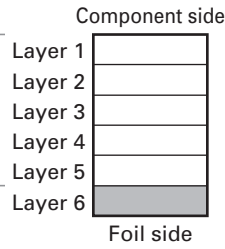


Ref. No.	Address
IC501	11D
IC601	6C
IC701	7E
Q501	12E
Q605	7C
Q606	7C
Q607	6C
Q608	6B
Q609	6C
Q701	8F
Q702	6D
Q703	8D
D501	11C
D502	12D
D503	12D
D517	11C
D601	7C
D701	6E
D702	6E
D901	4B

PC BOARD TK-3170/3173

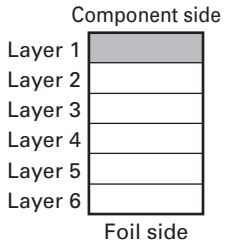
TX-RX UNIT (X57-7010-XX) (A/4) Foil side view (J79-0084-09 A/4)
-10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
-14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

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	13I		

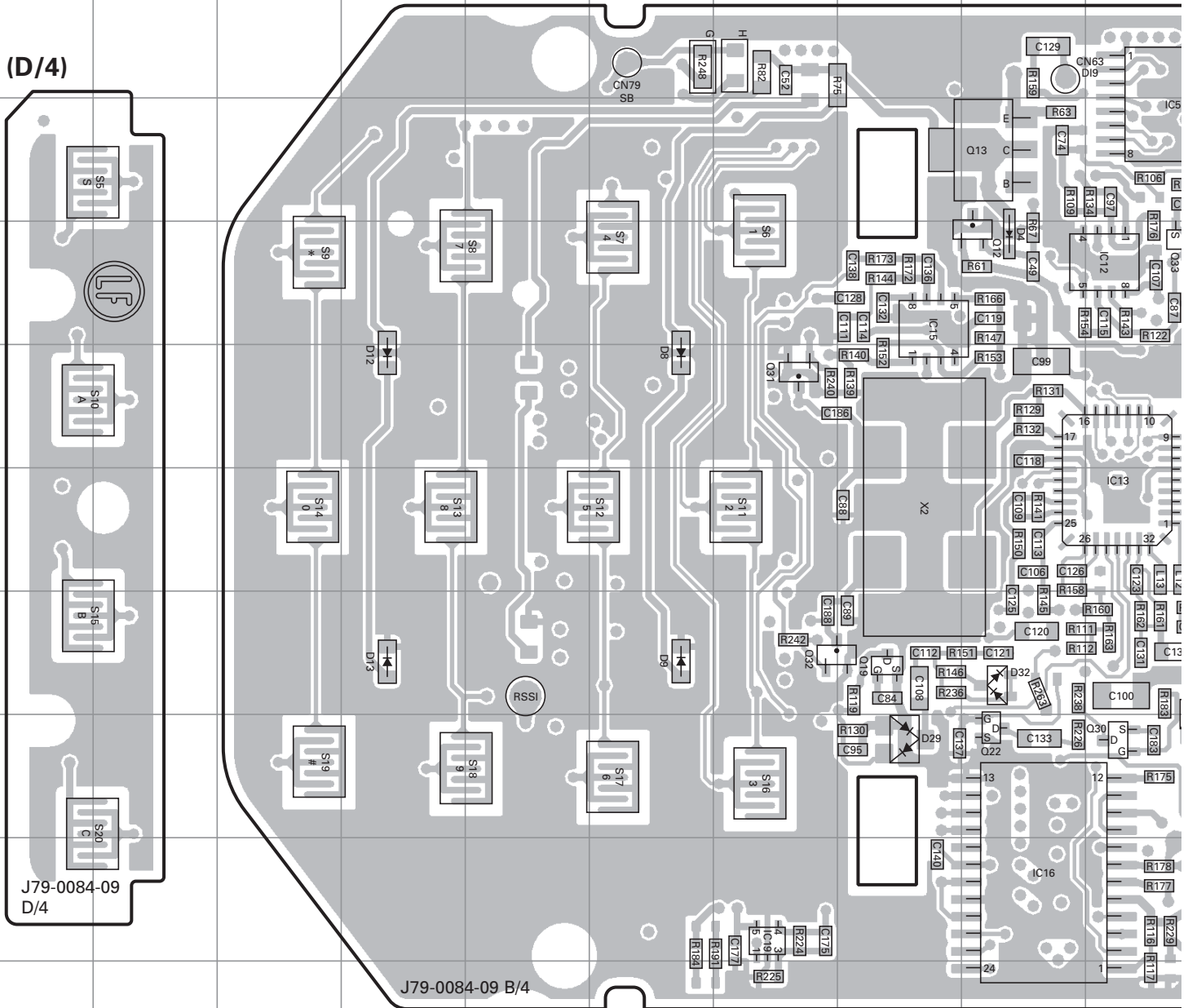


TK-3170/3173 PC BOARD

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		

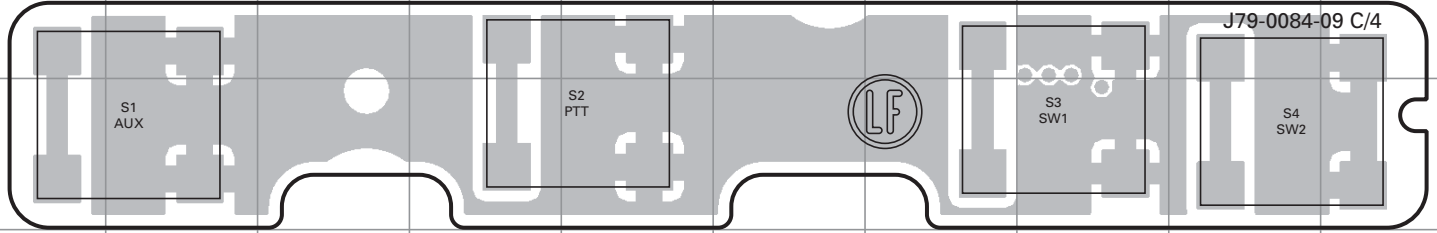


TX-RX UNIT (X57-7010-XX) (B/4) Component side view (J79-0084-09 B/4)
-10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
-14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

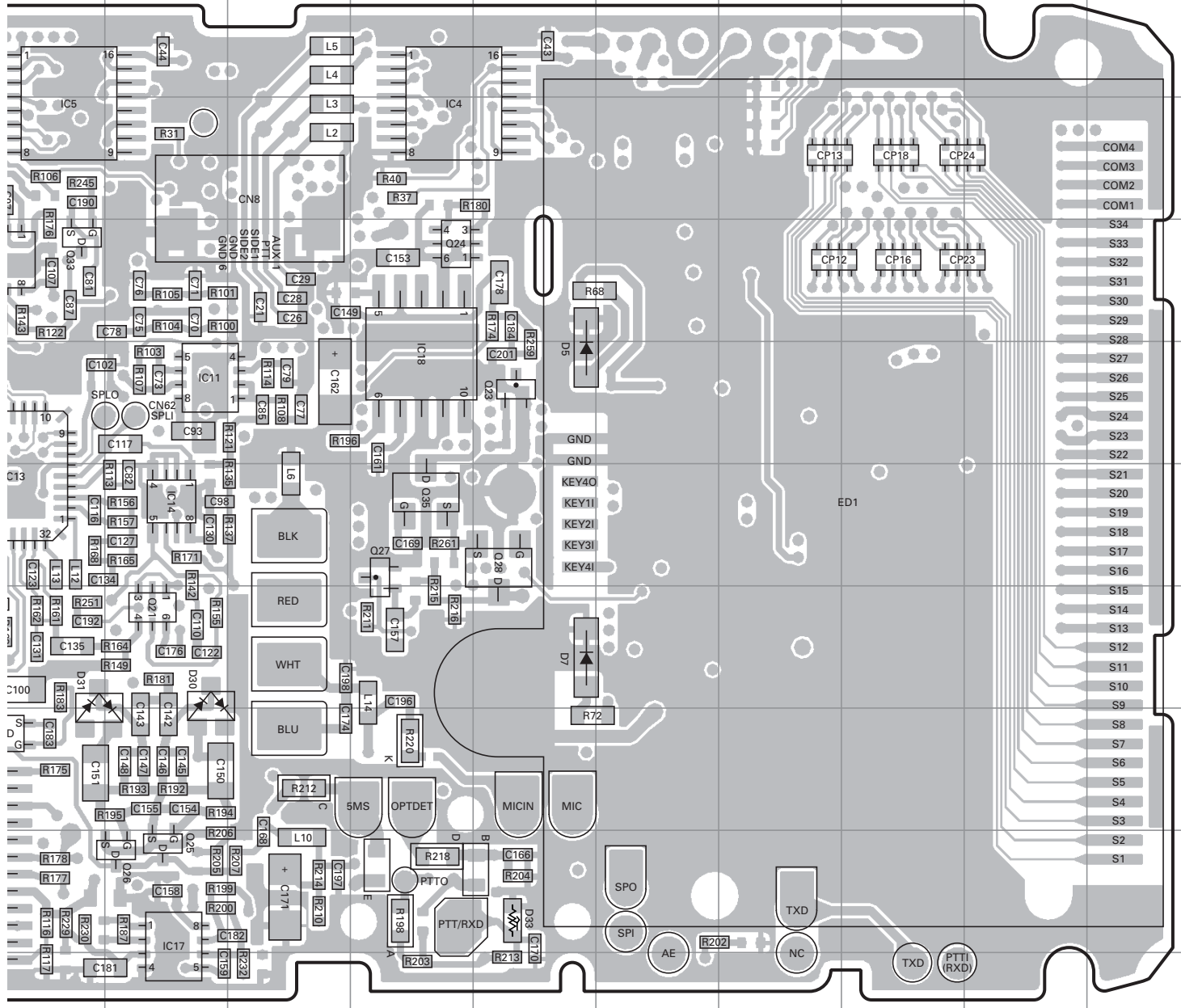


PC BOARD TK-3170/3173

TX-RX UNIT (X57-7010-XX) (C/4) Component side view (J79-0084-09 C/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3



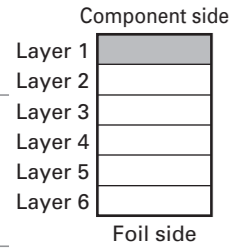
TX-RX UNIT (X57-7010-XX) (B/4) Component side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3



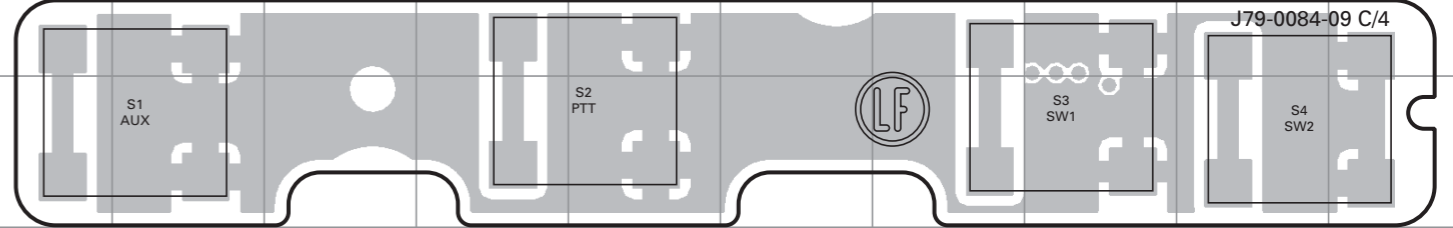
TK-3170/3173 PC BOARD

PC BOARD TK-3170/3173

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		



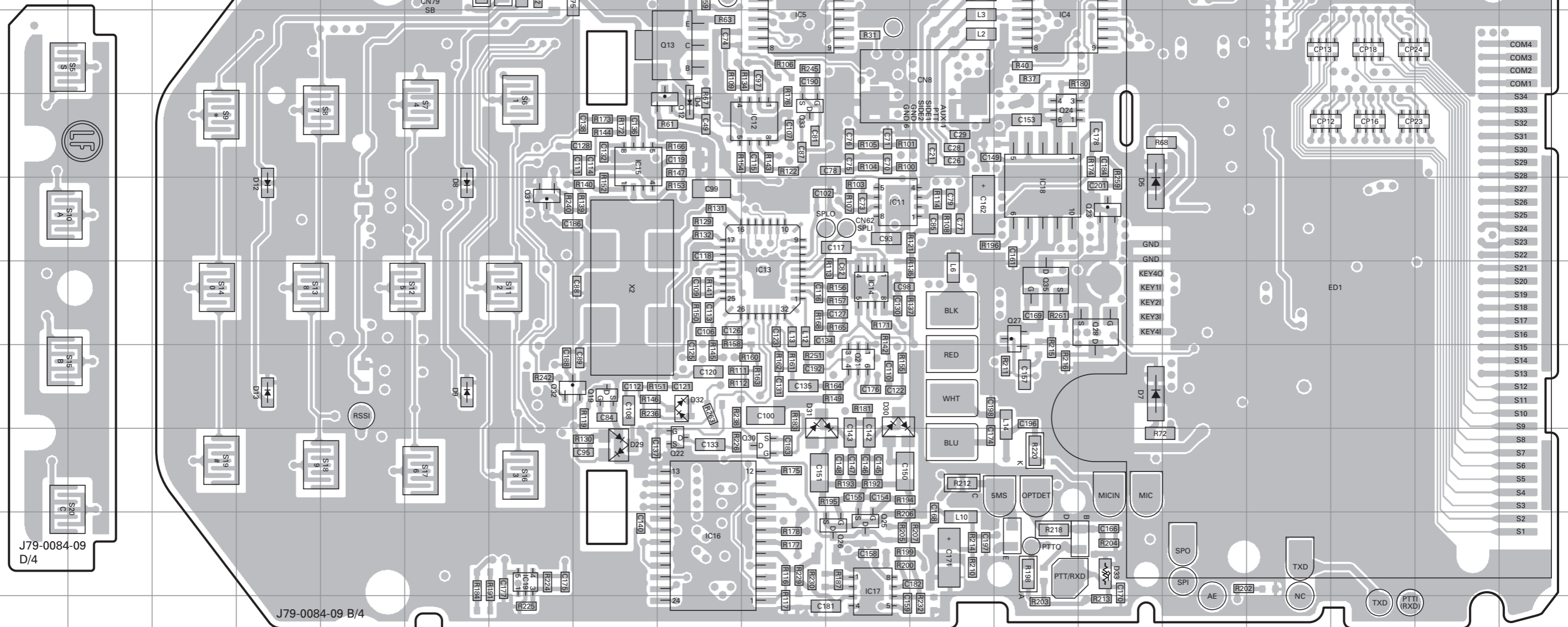
TX-RX UNIT (X57-7010-XX) (C/4) Component side view (J79-0084-09 C/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3



TX-RX UNIT (X57-7010-XX) (B/4) Component side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

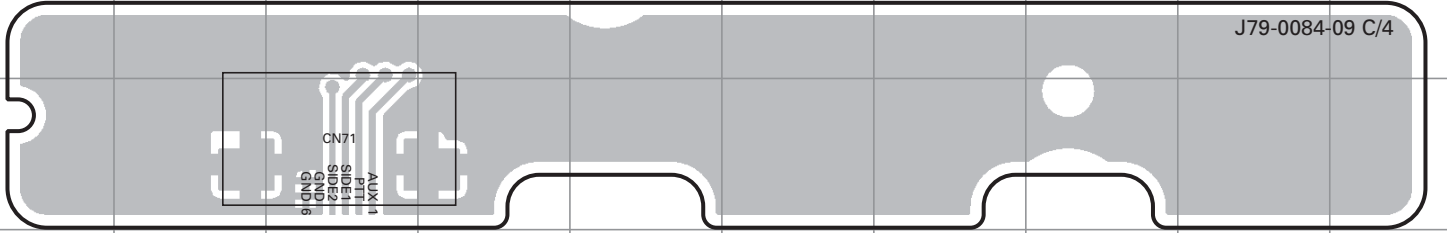
TX-RX UNIT (X57-7010-XX) (B/4) Component side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

(D/4)

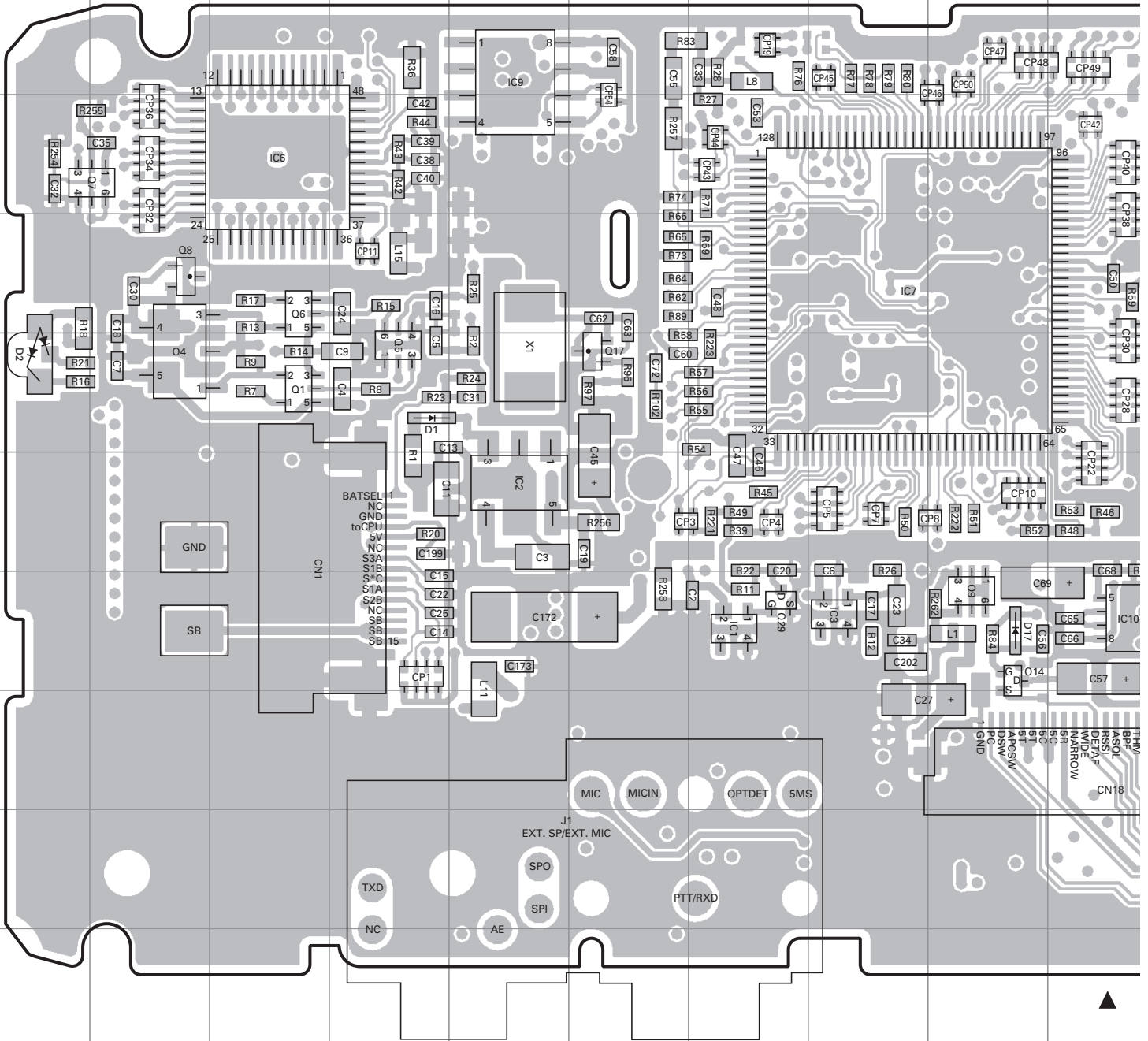


TK-3170/3173 PC BOARD

TX-RX UNIT (X57-7010-XX) (C/4) Foil side view (J79-0084-09 C/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

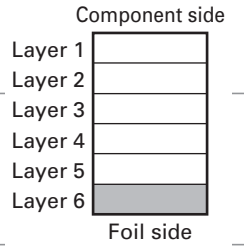


TX-RX UNIT (X57-7010-XX) (B/4) Foil side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

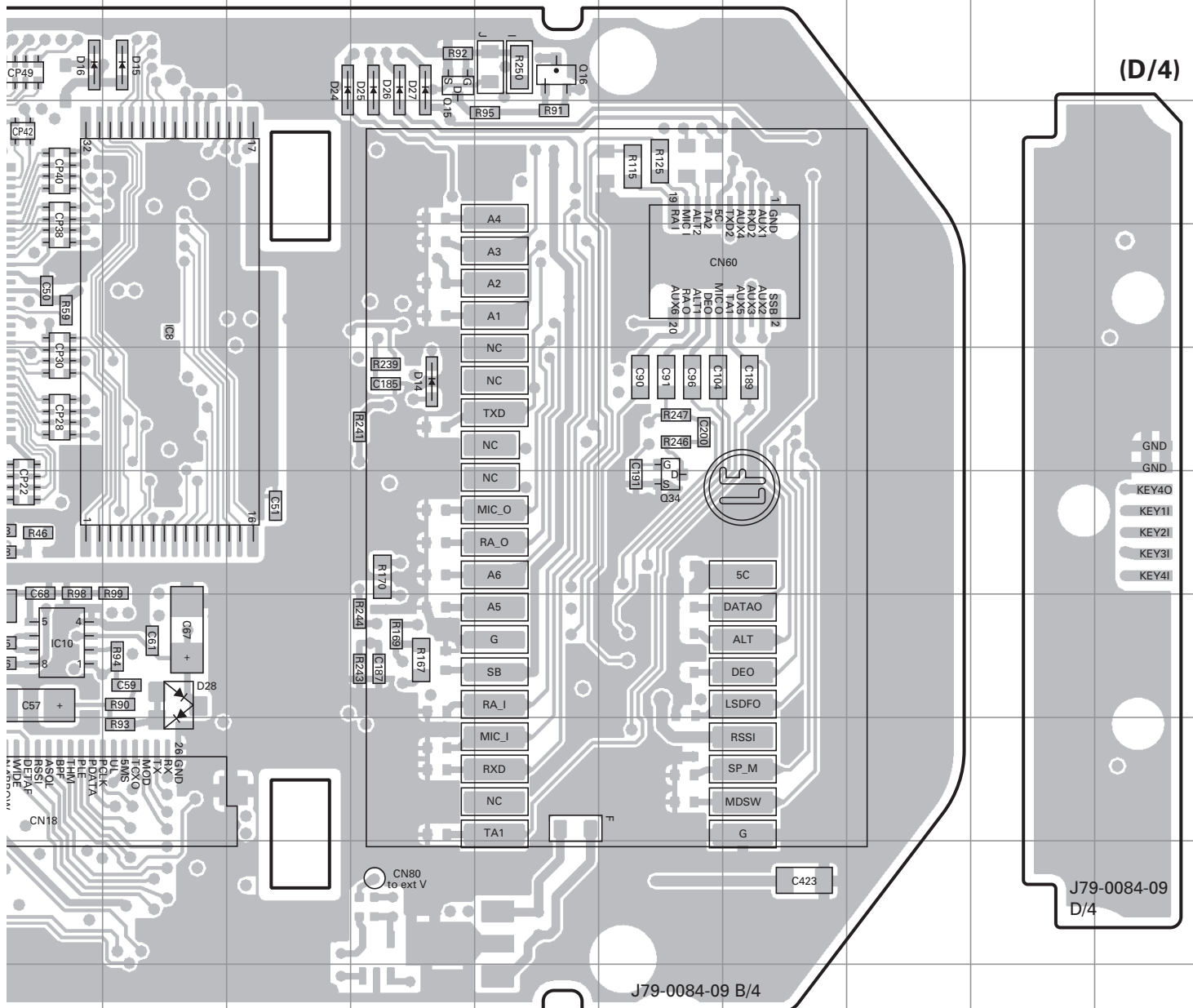


PC BOARD TK-3170/3173

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	10G	Q1	8C	Q15	5M	D15	5K
IC2	9E	Q4	8B	Q16	5N	D16	5J
IC3	10H	Q5	8D	Q17	8F	D17	10I
IC6	6C	Q6	7C	Q29	10G	D24	5L
IC7	7H	Q7	6B	Q34	9O	D25	5M
IC8	7K	Q8	7B	D1	8D	D26	5M
IC9	5E	Q9	10I	D2	8A	D27	5M
IC10	10J	Q14	10I	D14	8M	D28	10K



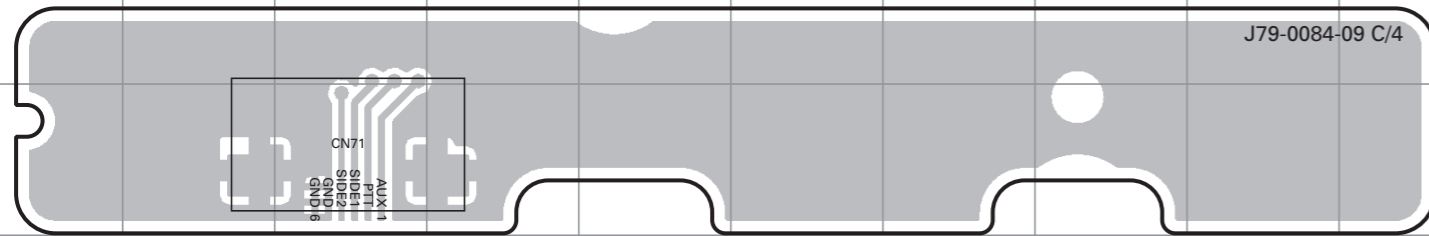
TX-RX UNIT (X57-7010-XX) (B/4) Foil side view (J79-0084-09 B/4)
-10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
-14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3



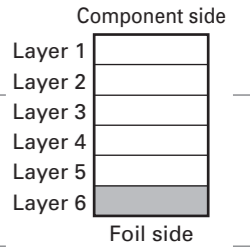
TK-3170/3173 PC BOARD

PC BOARD TK-3170/3173

TX-RX UNIT (X57-7010-XX) (C/4) Foil side view (J79-0084-09 C/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

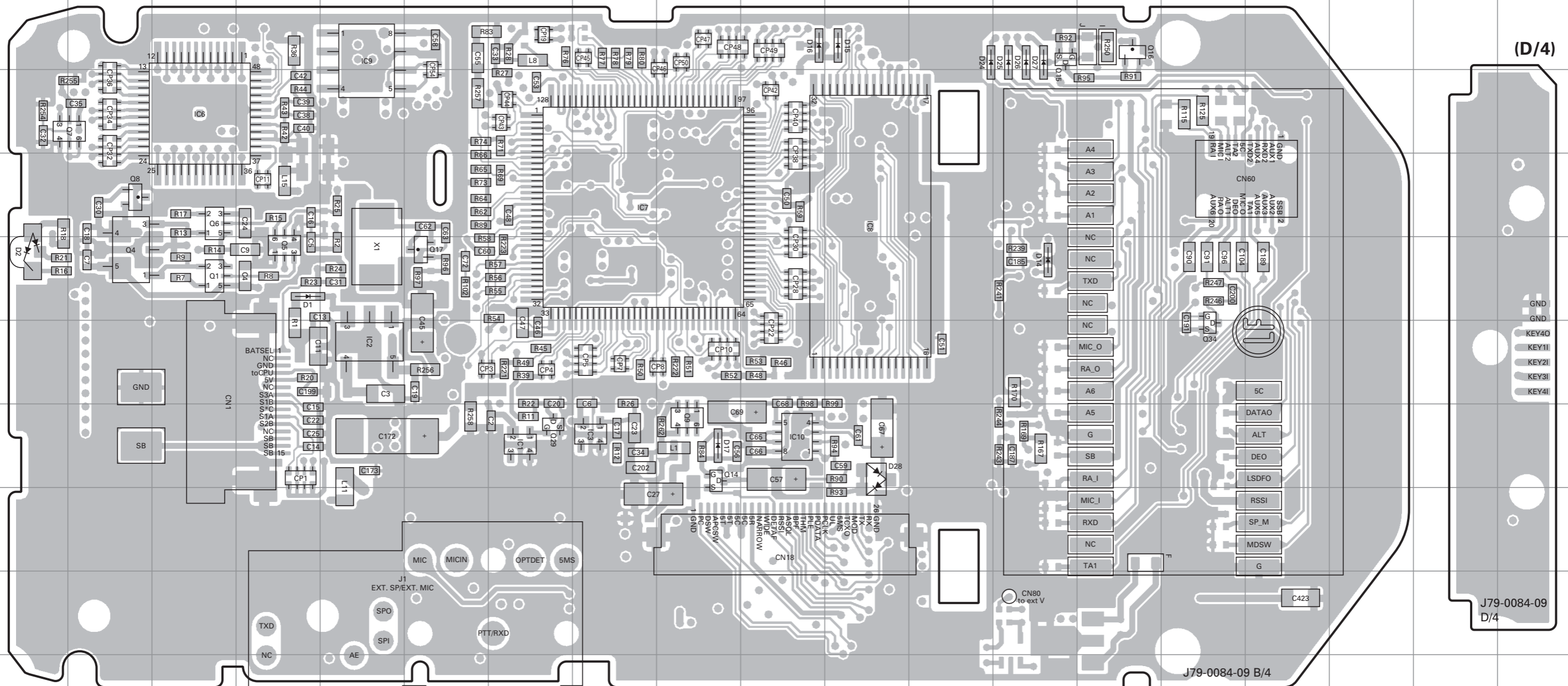


Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	10G	Q1	8C	Q15	5M	D15	5K
IC2	9E	Q4	8B	Q16	5N	D16	5J
IC3	10H	Q5	8D	Q17	8F	D17	10I
IC6	6C	Q6	7C	Q29	10G	D24	5L
IC7	7H	Q7	6B	Q34	9O	D25	5M
IC8	7K	Q8	7B	D1	8D	D26	5M
IC9	5E	Q9	10I	D2	8A	D27	5M
IC10	10J	Q14	10I	D14	8M	D28	10K



TX-RX UNIT (X57-7010-XX) (B/4) Foil side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3

TX-RX UNIT (X57-7010-XX) (B/4) Foil side view (J79-0084-09 B/4)
 -10 : TK-3170 K -11 : TK-3170 K4 -12 : TK-3170 K3 -13 : TK-3170 K6
 -14 : TK-3173 K -15 : TK-3173 K4 -21 : TK-3170 M -22 : TK-3170 M3



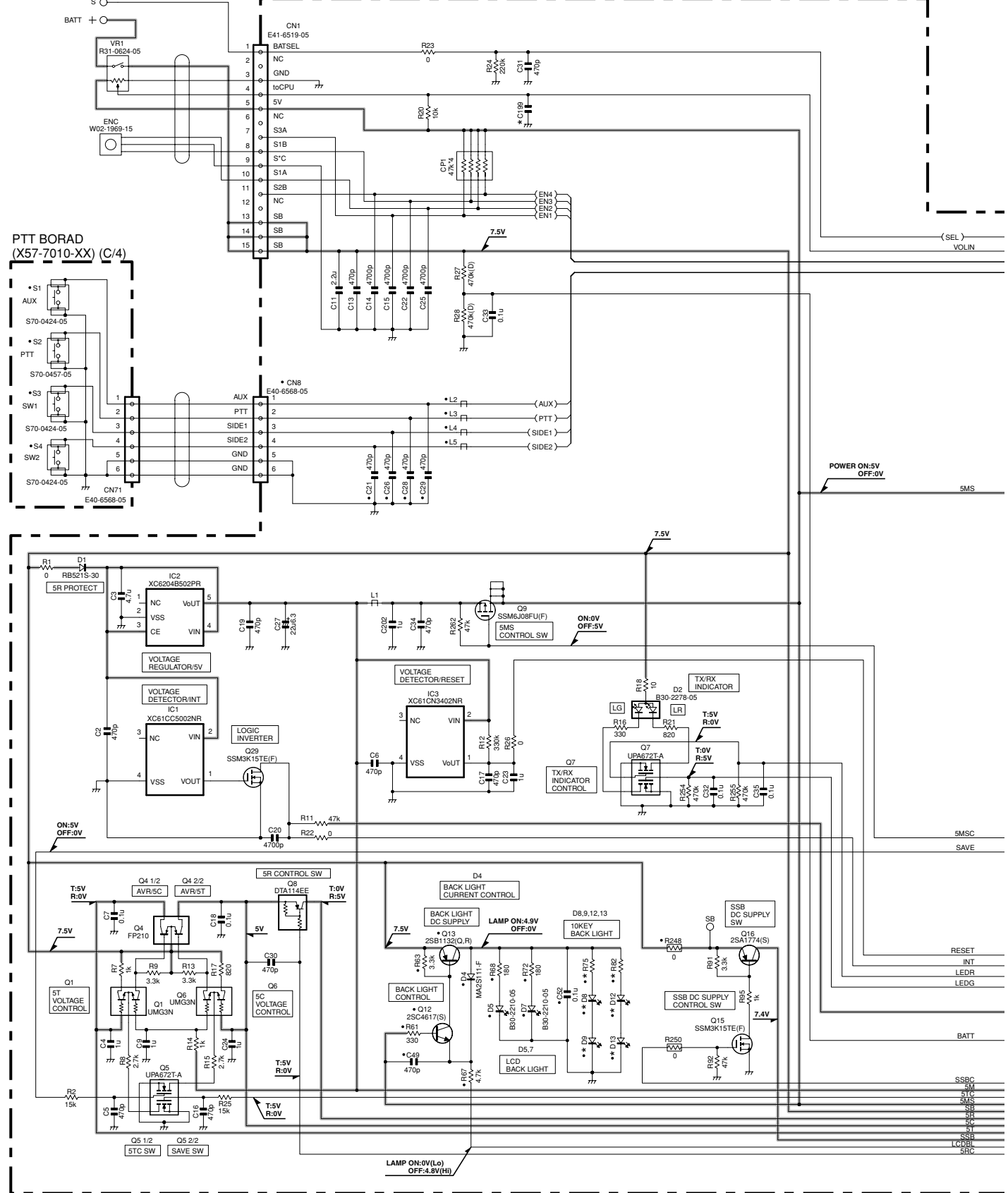
(D/4)

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

J79-0084-09
D/4

TK-3170/3173 SCHEMATIC DIAGRAM

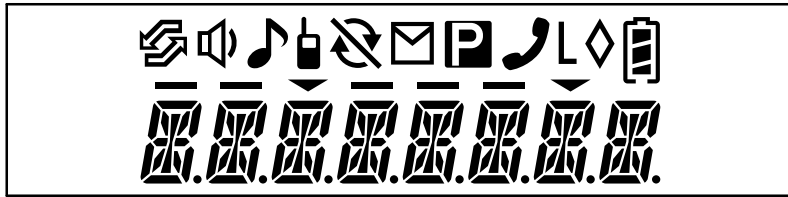
TX-RX UNIT : CONTROL SECTION (X57-7010-XX) (B/4)



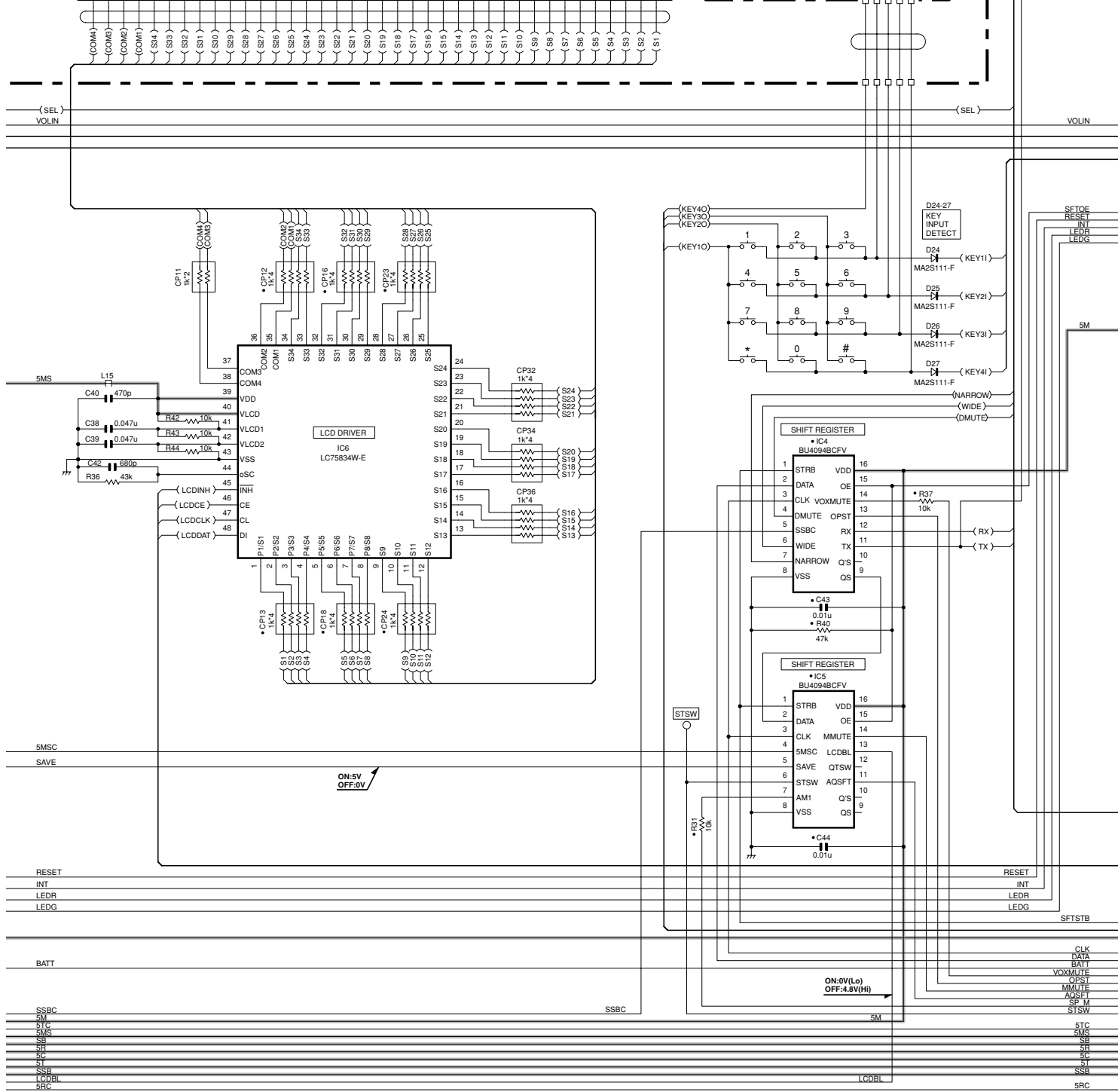
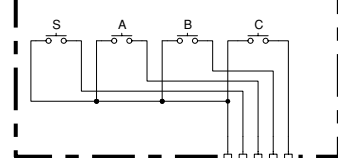
SCHEMATIC DIAGRAM TK-3170/3173

TX-RX UNIT (X57-7010-XX) (B/4)

B38-0901-05

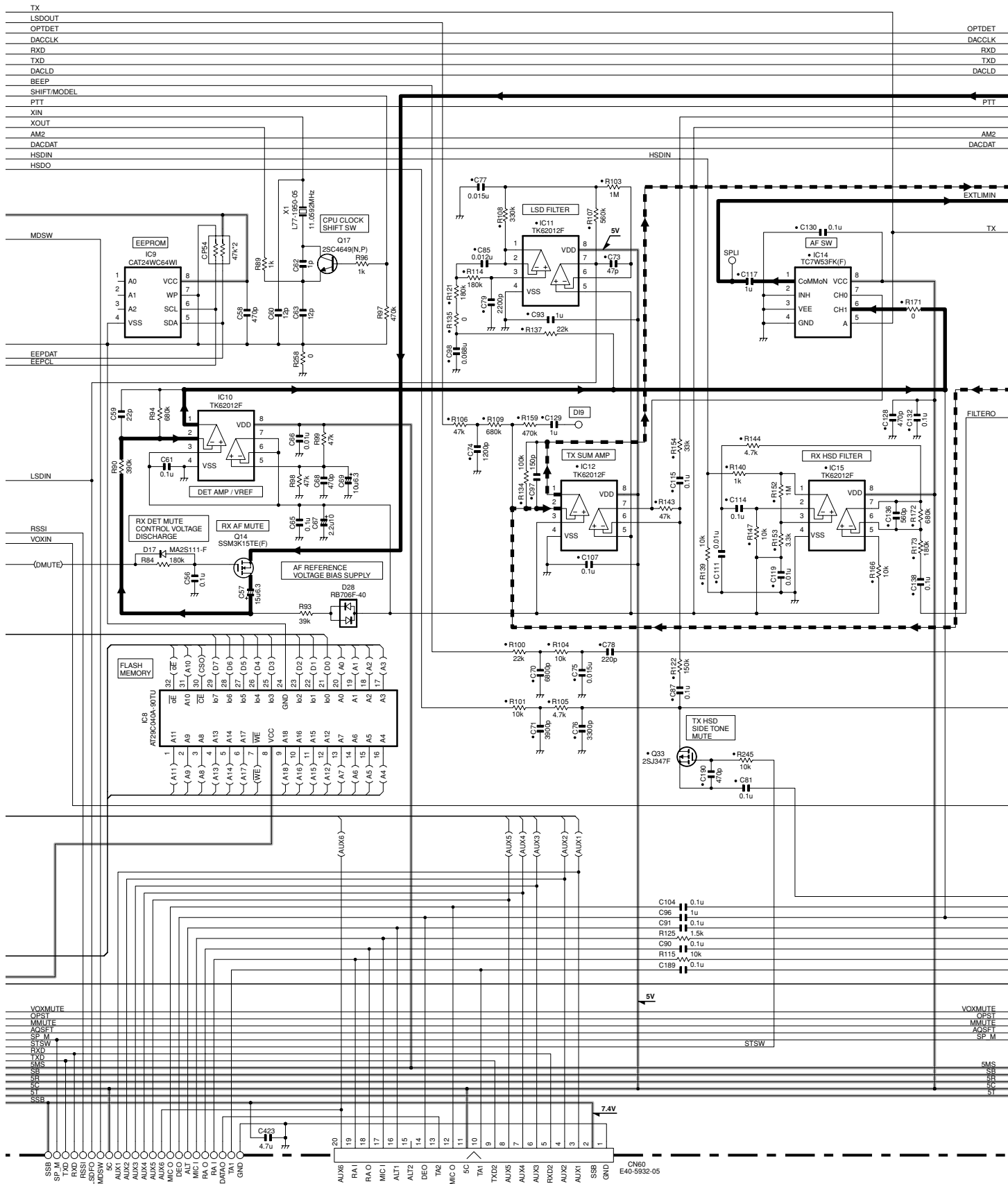


4KEY BOARD
(X57-7010-XX) (D/4)



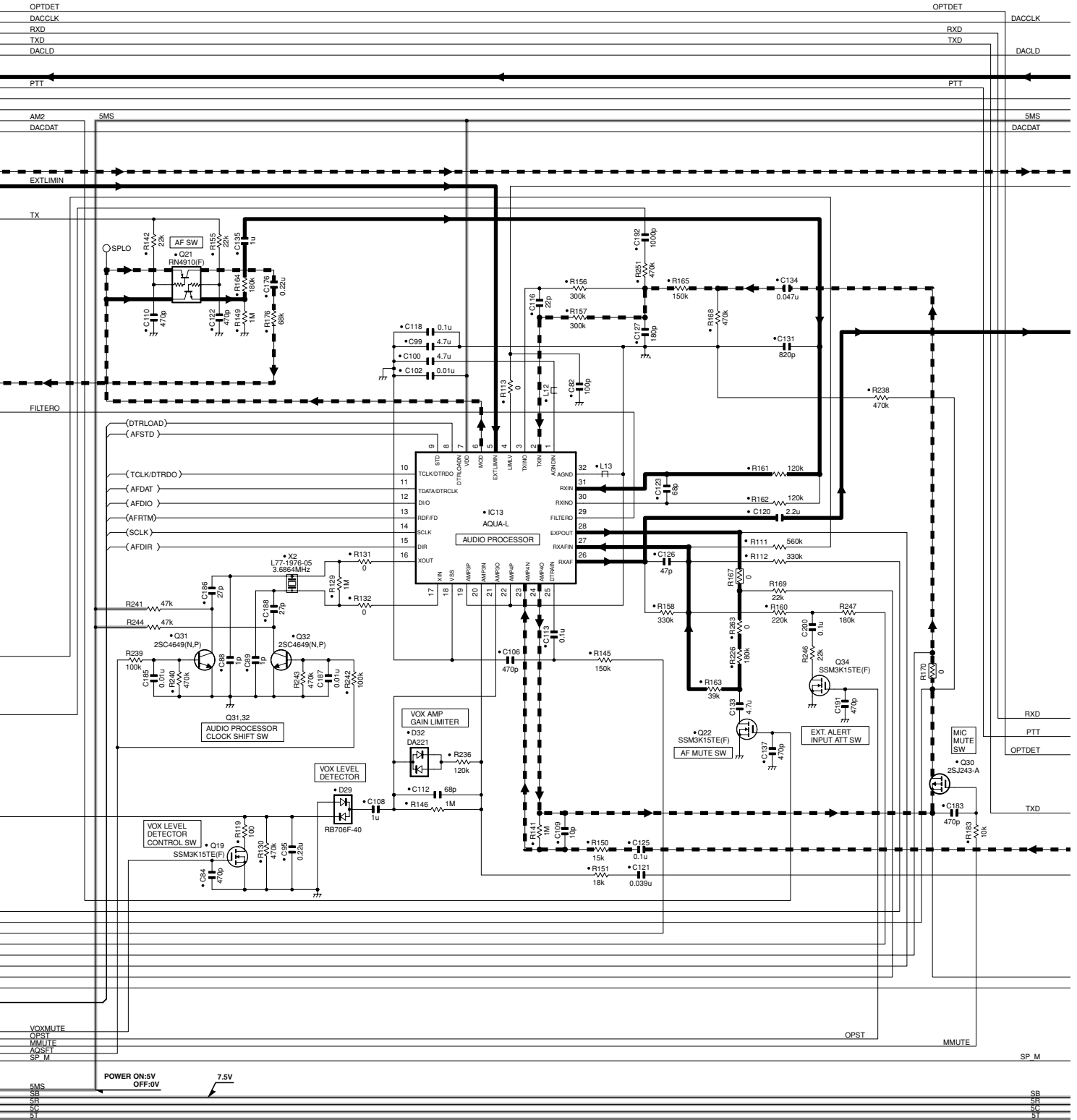
SCHEMATIC DIAGRAM TK-3170/3173

TX-RX UNIT (X57-7010-XX) (B/4)



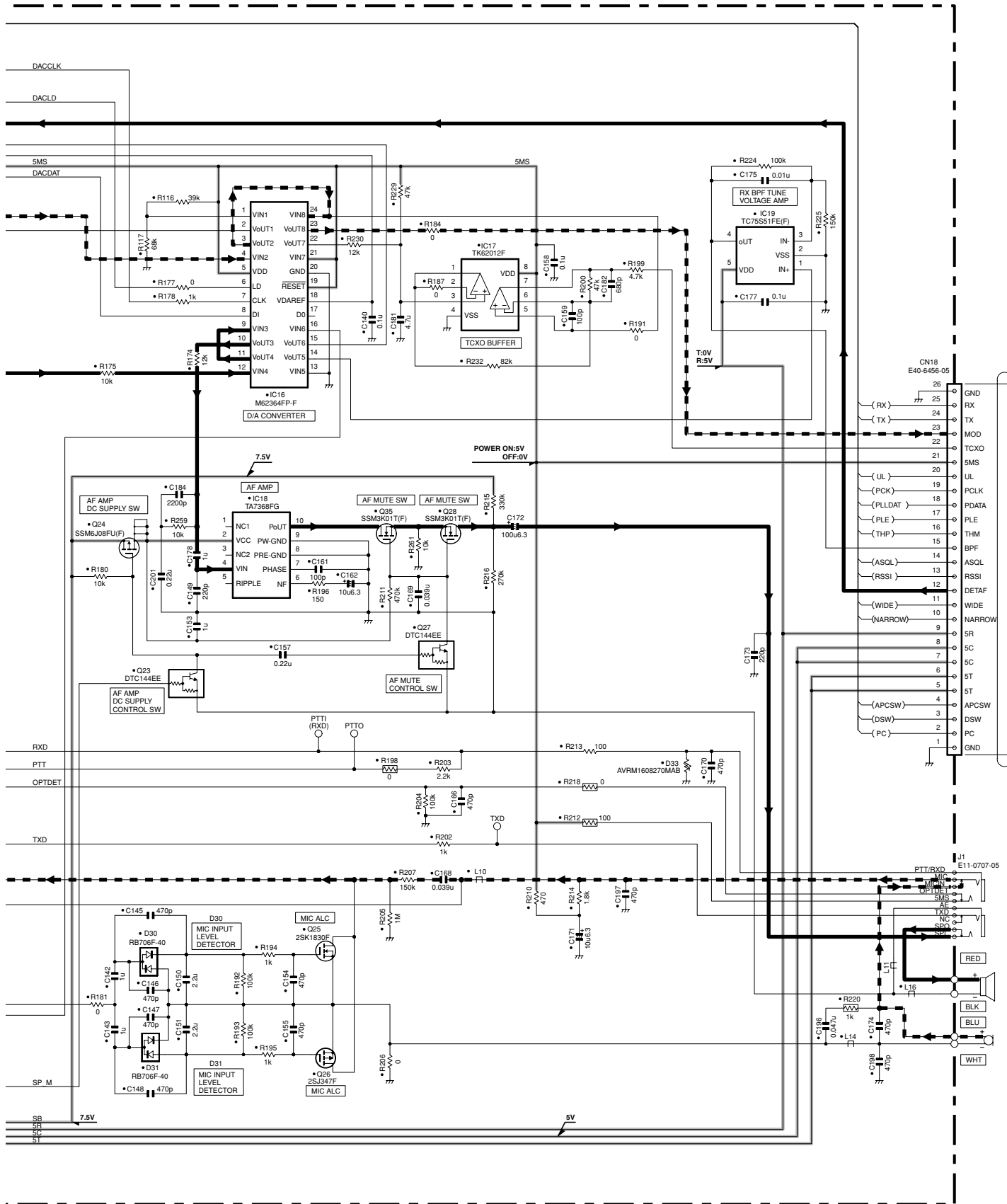
TK-3170/3173 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-7010-XX) (B/4)



SCHEMATIC DIAGRAM TK-3170/3173

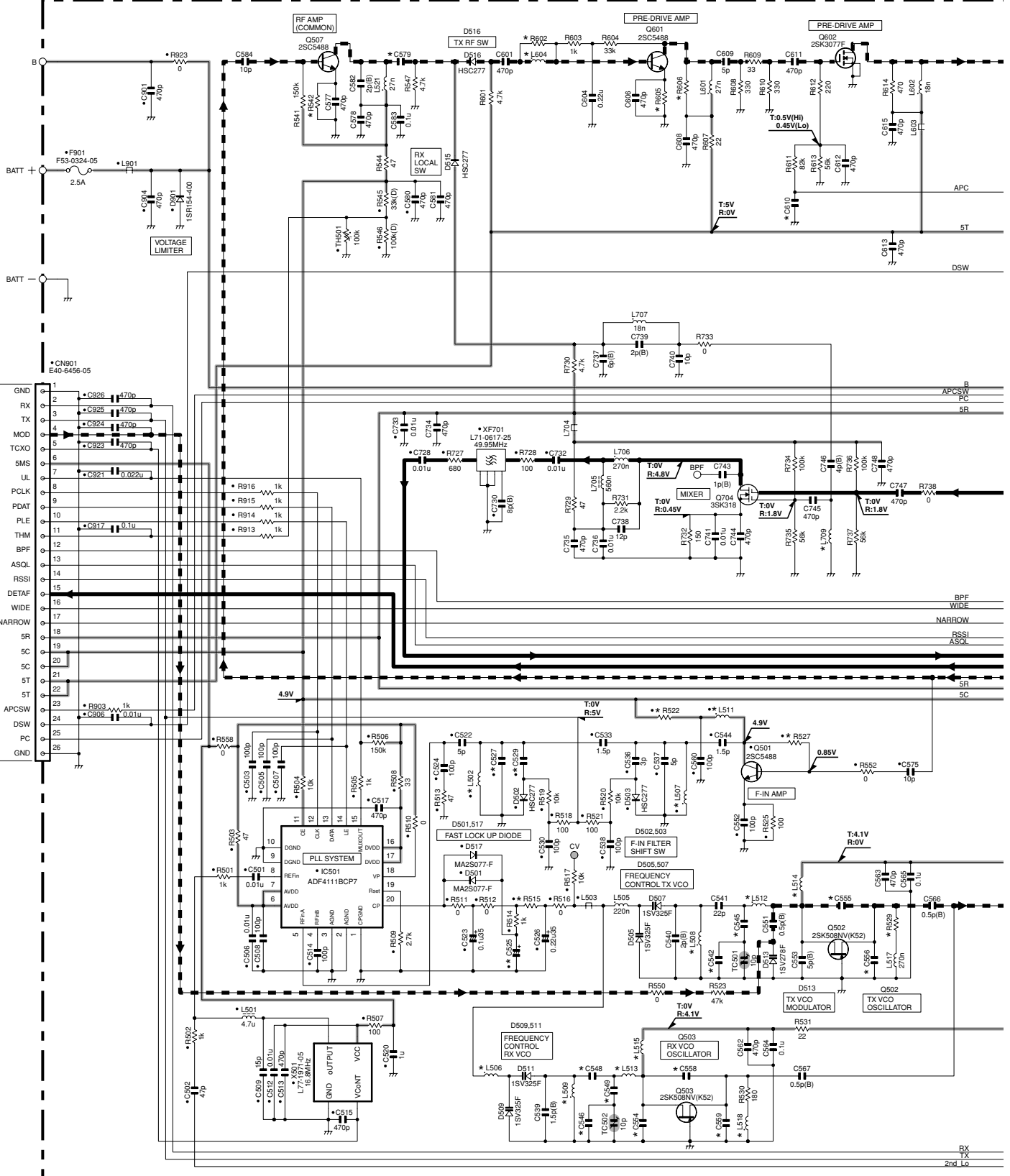
TX-RX UNIT (X57-7010-XX) (B/4)



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

TK-3170/3173 SCHEMATIC DIAGRAM

TX-RX UNIT (X57-7010-XX) (A/4)

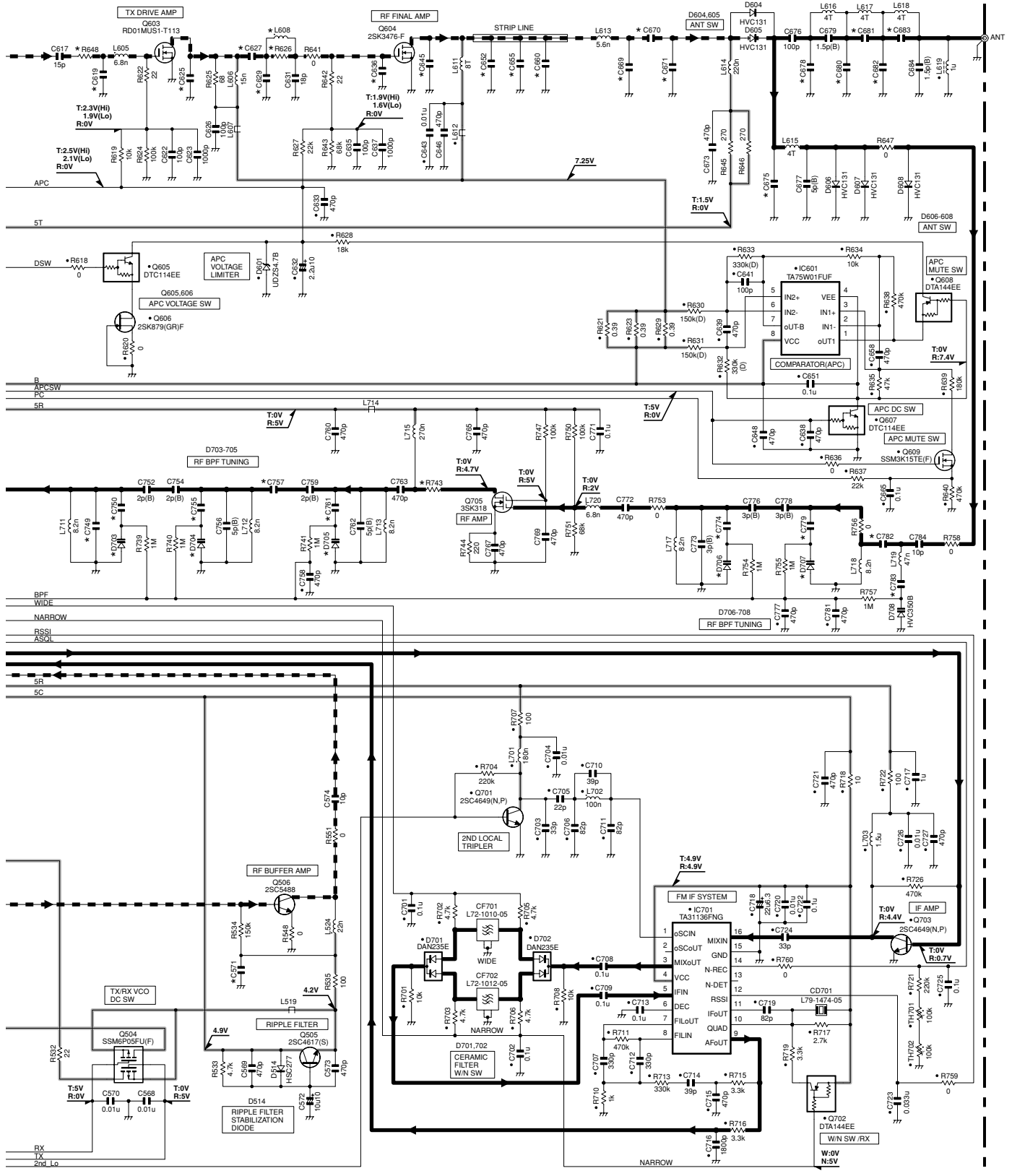


	L502	L506	L507	L508	L509	L511	L512	L513	L514	L515	L518	L604	L709	R515	R522	R527	R529	R542	R602	R605	R606			
-10	K	TK-3170 (4KEY)																						
-11	K4	TK-3170 (16KEY)																						
-14	K	TK-3173 (4KEY)	3.3n	220n	3.3n	82n	82n	12n	18n	22n	150n	180n	150n	18n	27n	560	22	220k	150	68	NO	47	NO	
-14	K4	TK-3173 (16KEY)																						
-21	M	TK-3170 (16KEY)																						
-12	K3	TK-3170 (4KEY)																						
-13	K6	TK-3170 (16KEY)	3.9n	270n	3.9n	220n	120n	15n	22n	27n	220n	220n	270n	NO	33n	330	100	100k	180	330	0	100	470	
-22	M3	TK-3170 (4KEY)																						

	C525	C527	C529	C542	C545	C546	C548	C549	C554	C555	C556	C558	C559	C579	C610		
-10	K	TK-3170 (4KEY)															
-11	K4	TK-3170 (16KEY)															
-14	K	TK-3173 (4KEY)	2.2u/10V	5p	3p	1.5p	9p	1.5p	47p	8p(B)	4p(B)	4p(B)	4p(B)	6p(B)	9p(B)	4p(B)	NO
-15	K4	TK-3173 (16KEY)															
-21	M	TK-3170 (16KEY)															
-12	K3	TK-3170 (4KEY)															
-13	K6	TK-3170 (16KEY)	1u/25V	8p	2p	NO	15p	NO	33p	27p	5p(B)	5p(B)	6p(B)	5p(B)	8p(B)	3p(B)	470p
-22	M3	TK-3170 (4KEY)															

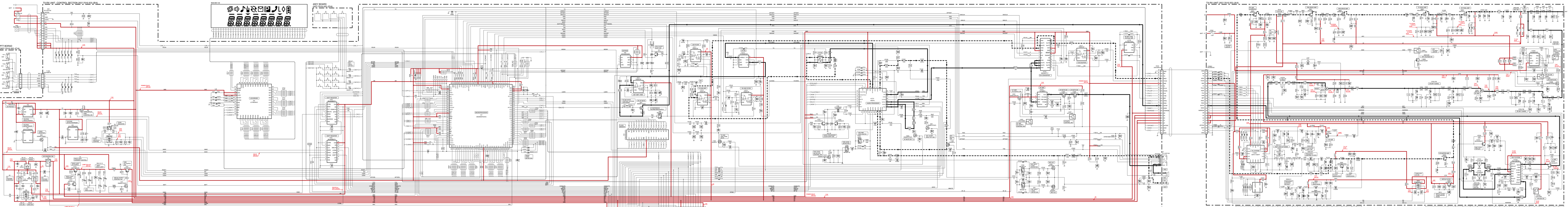
SCHEMATIC DIAGRAM TK-3170/3173

TX-RX UNIT (X57-7010-XX) (A/4)



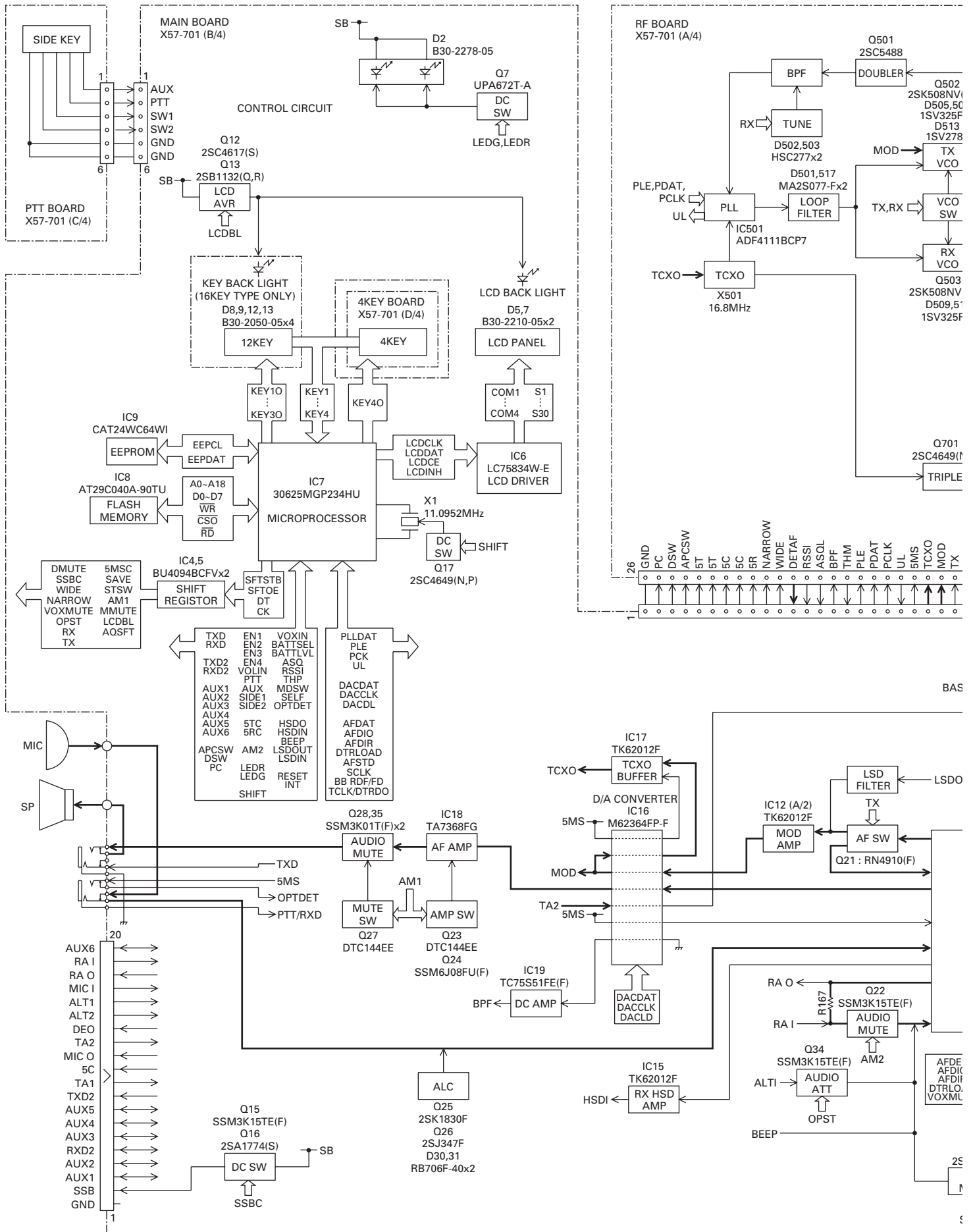
X57-7010-XX (A/4)		D703	D704	D705	D706	D707	L608	R626	R648	R743	C571	C619	C625	C627	C629	C636	C645	C652	C655	C660	C666	C670	
-10	K	TK-3170 (4KEY)																					
-11	K4	TK-3170 (16KEY)	HVC355B	HVC355B	HVC355B	HVC355B	HVC355B	NO	0	0	100	0.1u	15p	7p	39p	15p	22p	22p	NO	22p	6p(B)	33p	
-14	K	TK-3173 (4KEY)																					
-15	K4	TK-3173 (16KEY)																					
-21	M	TK-3170 (16KEY)																					
-12	K3	TK-3170 (4KEY)	HVC350B	HVC350B	HVC350B	HVC350B	HVC350B	1.2n	NO	5.6	47	470p	NO	12p	27p	27p	18p	15p	NO	27p	15p	8p(B)	100p
-13	K6	TK-3170 (16KEY)																					
-22	M3	TK-3170 (4KEY)																					

X57-7010-XX (A/4)		C671	C675	C678	C680	C681	C682	C683	C749	C750	C755	C757	C761	C774	C779	C782	C783	
-10	K	TK-3170 (4KEY)																
-11	K4	TK-3170 (16KEY)	4.5p(B)	2p(B)	3p(B)	4p(B)	2p(B)	5p(B)	2p(B)	3.5p(B)	33p	33p	1.5p(B)	33p	33p	33p	6p(B)	
-14	K	TK-3173 (4KEY)																
-15	K4	TK-3173 (16KEY)																
-21	M	TK-3170 (16KEY)																
-12	K3	TK-3170 (4KEY)	5p(B)	4p(B)	4p(B)	7p(B)	3p(B)	7p(B)	2.5p(B)	4p(B)	18p	18p	2p(B)	18p	18p	22p	8p(B)	
-13	K6	TK-3170 (16KEY)																
-22	M3	TK-3170 (4KEY)																

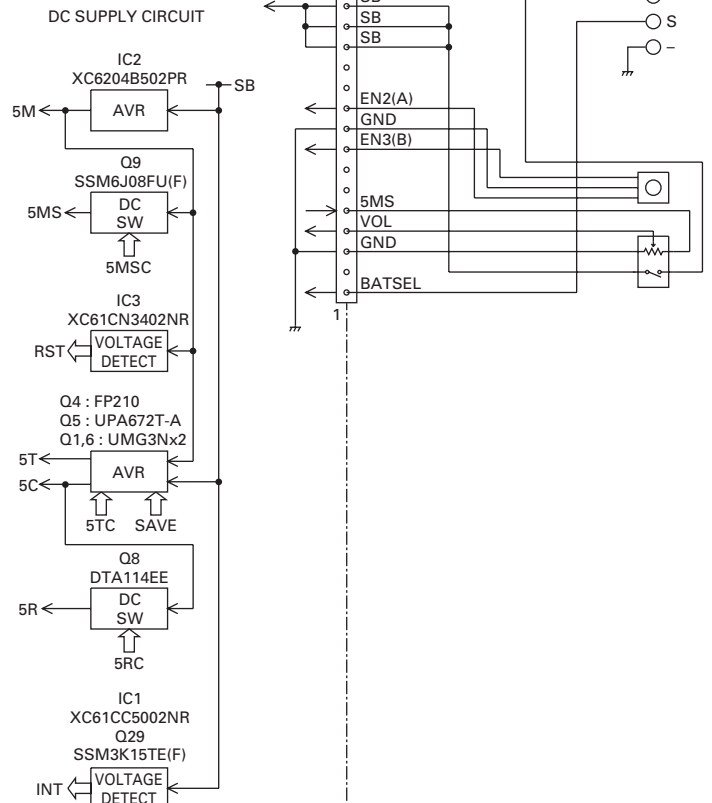
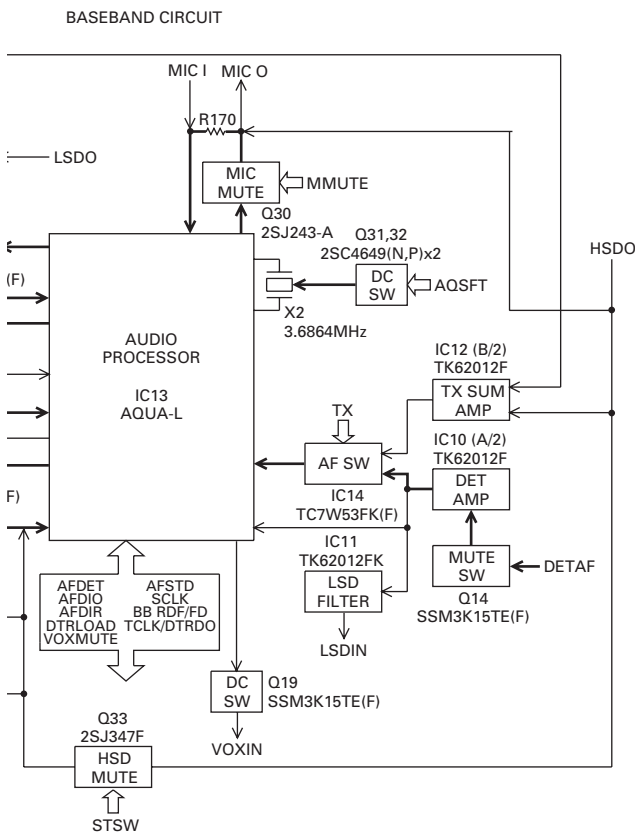
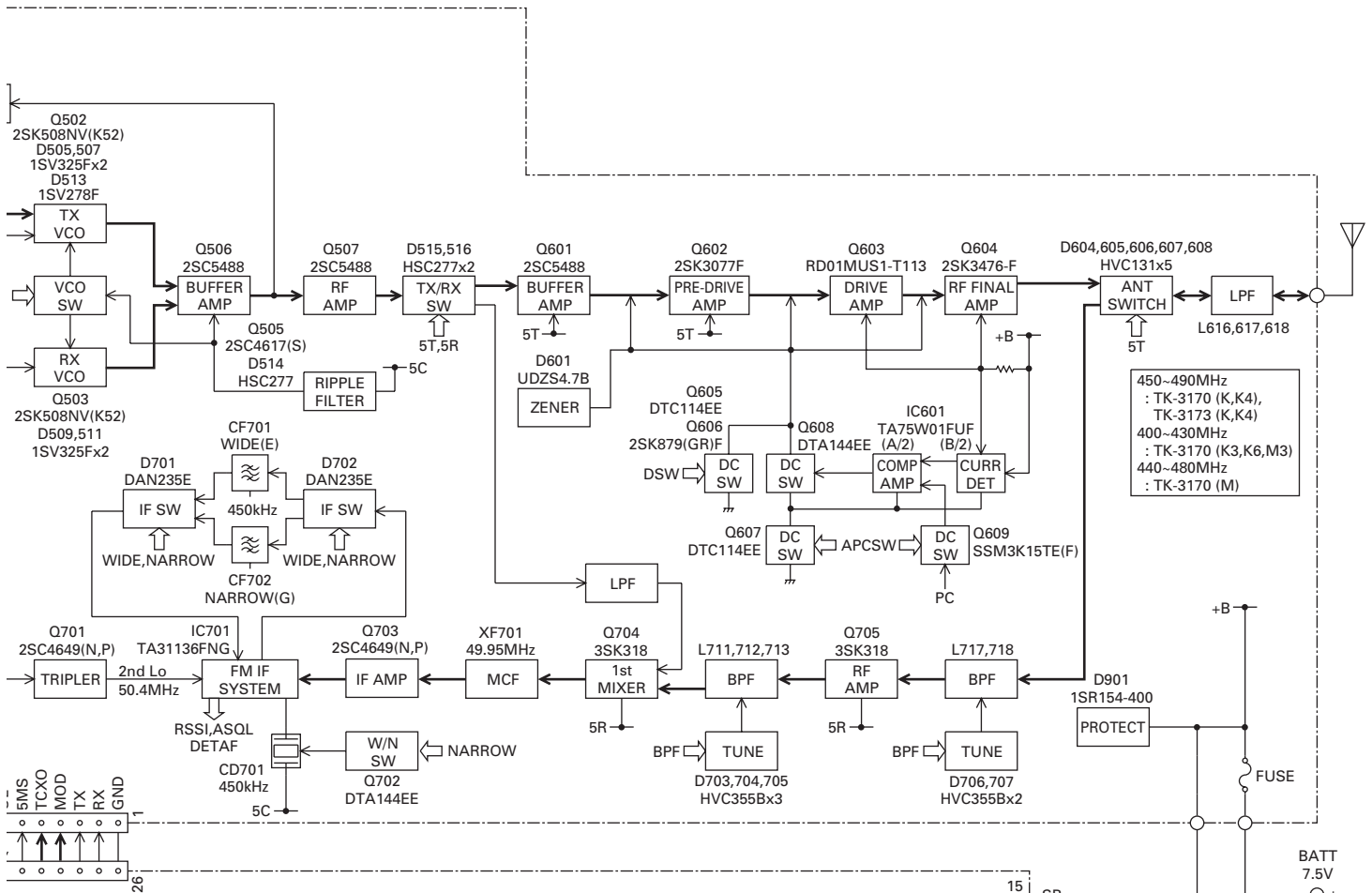


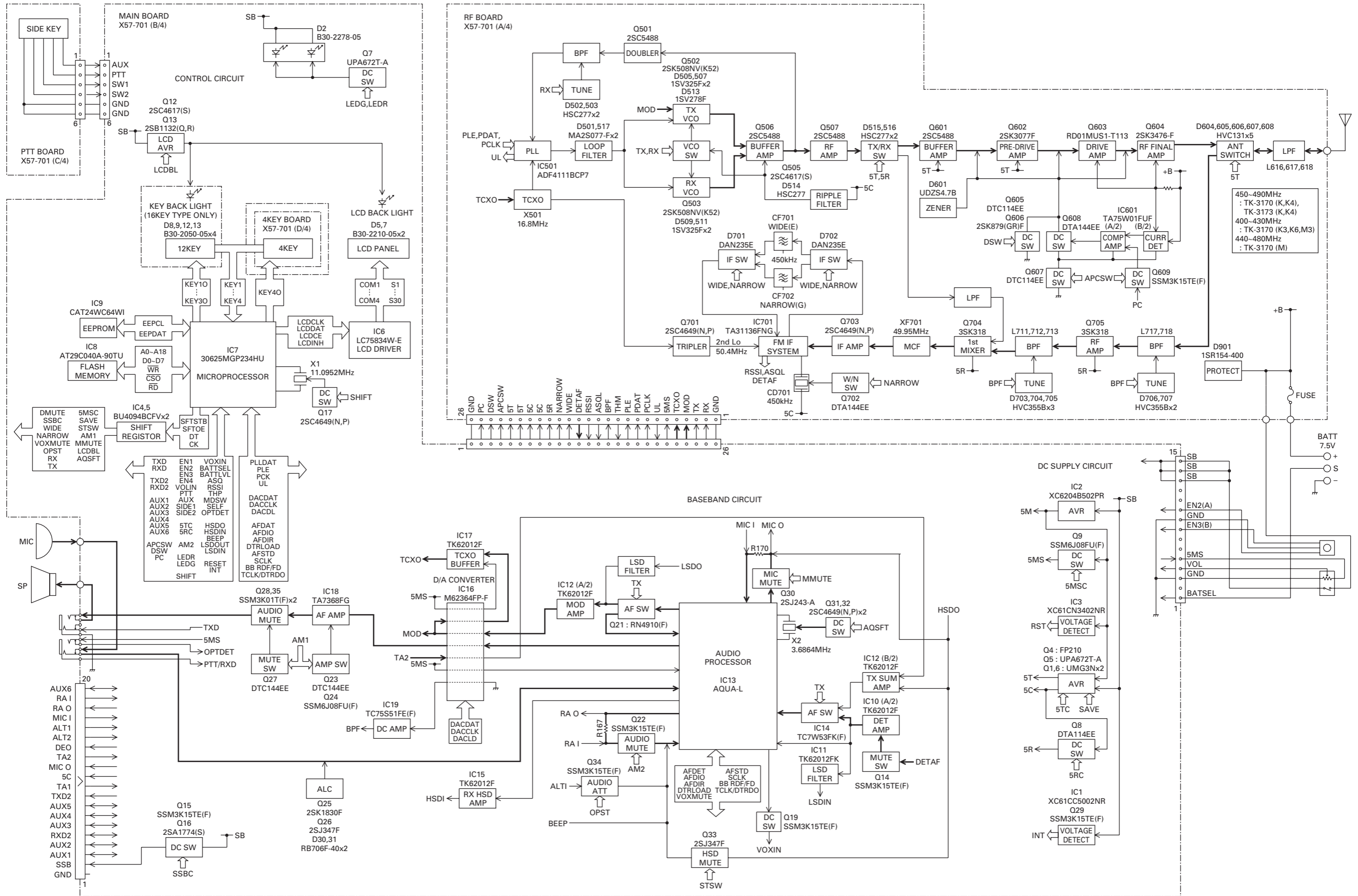
NO	REF ID	QTY	DESCRIPTION	UNIT	REMARKS
1	TX DRIVER AMP	1	6BD6	VACUUM TUBE	
2	TX OSC	1	6BD6	VACUUM TUBE	
3	TX AMPLIFIER	1	6BD6	VACUUM TUBE	
4	TX TRANSMITTER	1	6BD6	VACUUM TUBE	
5	RX OSC	1	6BD6	VACUUM TUBE	
6	RX AMPLIFIER	1	6BD6	VACUUM TUBE	
7	RX TRANSMITTER	1	6BD6	VACUUM TUBE	
8	RX DRIVER AMP	1	6BD6	VACUUM TUBE	
9	KEY BOARD (D44)	1	D44	KEYBOARD	
10	PTT BOARD (A4)	1	A4	PTT BOARD	
11	CONTROL SECTION (A4)	1	A4	CONTROL SECTION	
12	RESISTOR	100	100K	RESISTOR	
13	RESISTOR	50	50K	RESISTOR	
14	RESISTOR	20	20K	RESISTOR	
15	RESISTOR	10	10K	RESISTOR	
16	RESISTOR	5	5K	RESISTOR	
17	RESISTOR	2	2K	RESISTOR	
18	RESISTOR	1	1K	RESISTOR	
19	RESISTOR	1	500	RESISTOR	
20	RESISTOR	1	100	RESISTOR	
21	RESISTOR	1	50	RESISTOR	
22	RESISTOR	1	20	RESISTOR	
23	RESISTOR	1	10	RESISTOR	
24	RESISTOR	1	5	RESISTOR	
25	RESISTOR	1	2	RESISTOR	
26	RESISTOR	1	1	RESISTOR	
27	RESISTOR	1	0.5	RESISTOR	
28	RESISTOR	1	0.2	RESISTOR	
29	RESISTOR	1	0.1	RESISTOR	
30	RESISTOR	1	0.05	RESISTOR	
31	RESISTOR	1	0.02	RESISTOR	
32	RESISTOR	1	0.01	RESISTOR	
33	CAPACITOR	100	100P	CAPACITOR	
34	CAPACITOR	50	50P	CAPACITOR	
35	CAPACITOR	20	20P	CAPACITOR	
36	CAPACITOR	10	10P	CAPACITOR	
37	CAPACITOR	5	5P	CAPACITOR	
38	CAPACITOR	2	2P	CAPACITOR	
39	CAPACITOR	1	1P	CAPACITOR	
40	CAPACITOR	1	0.5P	CAPACITOR	
41	CAPACITOR	1	0.2P	CAPACITOR	
42	CAPACITOR	1	0.1P	CAPACITOR	
43	CAPACITOR	1	0.05P	CAPACITOR	
44	CAPACITOR	1	0.02P	CAPACITOR	
45	CAPACITOR	1	0.01P	CAPACITOR	
46	CAPACITOR	1	0.005P	CAPACITOR	
47	CAPACITOR	1	0.002P	CAPACITOR	
48	CAPACITOR	1	0.001P	CAPACITOR	
49	CAPACITOR	1	0.0005P	CAPACITOR	
50	CAPACITOR	1	0.0002P	CAPACITOR	
51	CAPACITOR	1	0.0001P	CAPACITOR	
52	CAPACITOR	1	0.00005P	CAPACITOR	
53	CAPACITOR	1	0.00002P	CAPACITOR	
54	CAPACITOR	1	0.00001P	CAPACITOR	
55	CAPACITOR	1	0.000005P	CAPACITOR	
56	CAPACITOR	1	0.000002P	CAPACITOR	
57	CAPACITOR	1	0.000001P	CAPACITOR	
58	CAPACITOR	1	0.0000005P	CAPACITOR	
59	CAPACITOR	1	0.0000002P	CAPACITOR	
60	CAPACITOR	1	0.0000001P	CAPACITOR	
61	CAPACITOR	1	0.00000005P	CAPACITOR	
62	CAPACITOR	1	0.00000002P	CAPACITOR	
63	CAPACITOR	1	0.00000001P	CAPACITOR	
64	CAPACITOR	1	0.000000005P	CAPACITOR	
65	CAPACITOR	1	0.000000002P	CAPACITOR	
66	CAPACITOR	1	0.000000001P	CAPACITOR	
67	CAPACITOR	1	0.0000000005P	CAPACITOR	
68	CAPACITOR	1	0.0000000002P	CAPACITOR	
69	CAPACITOR	1	0.0000000001P	CAPACITOR	
70	CAPACITOR	1	0.00000000005P	CAPACITOR	
71	CAPACITOR	1	0.00000000002P	CAPACITOR	
72	CAPACITOR	1	0.00000000001P	CAPACITOR	
73	CAPACITOR	1	0.000000000005P	CAPACITOR	
74	CAPACITOR	1	0.000000000002P	CAPACITOR	
75	CAPACITOR	1	0.000000000001P	CAPACITOR	
76	CAPACITOR	1	0.0000000000005P	CAPACITOR	
77	CAPACITOR	1	0.0000000000002P	CAPACITOR	
78	CAPACITOR	1	0.0000000000001P	CAPACITOR	
79	CAPACITOR	1	0.00000000000005P	CAPACITOR	
80	CAPACITOR	1	0.00000000000002P	CAPACITOR	
81	CAPACITOR	1	0.00000000000001P	CAPACITOR	
82	CAPACITOR	1	0.000000000000005P	CAPACITOR	
83	CAPACITOR	1	0.000000000000002P	CAPACITOR	
84	CAPACITOR	1	0.000000000000001P	CAPACITOR	
85	CAPACITOR	1	0.0000000000000005P	CAPACITOR	
86	CAPACITOR	1	0.0000000000000002P	CAPACITOR	
87	CAPACITOR	1	0.0000000000000001P	CAPACITOR	
88	CAPACITOR	1	0.00000000000000005P	CAPACITOR	
89	CAPACITOR	1	0.00000000000000002P	CAPACITOR	
90	CAPACITOR	1	0.00000000000000001P	CAPACITOR	

TK-3170/3173 BLOCK DIAGRAM



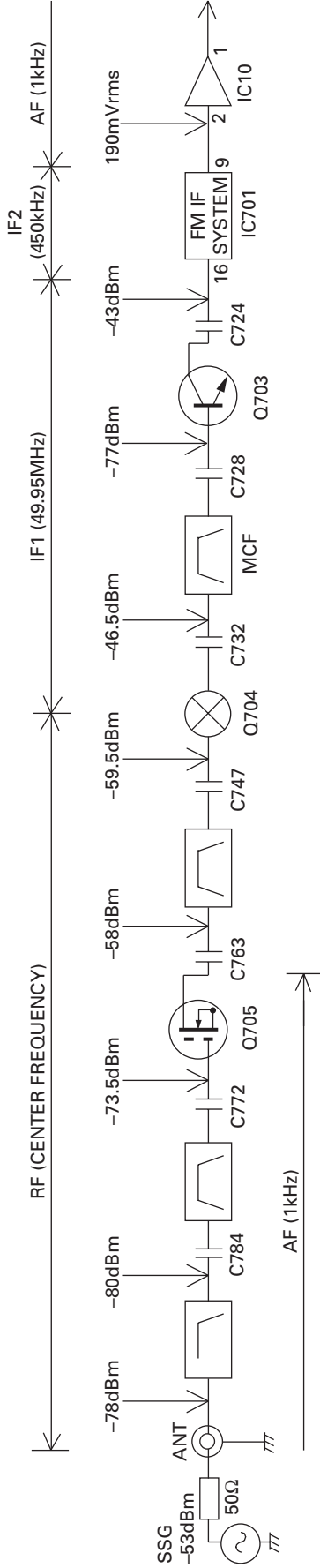
BLOCK DIAGRAM TK-3170/3173



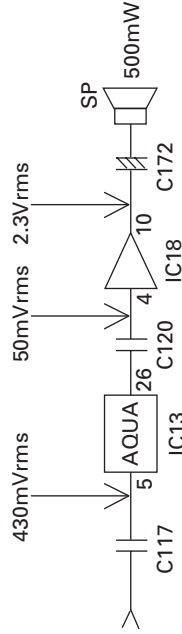


LEVEL DIAGRAM

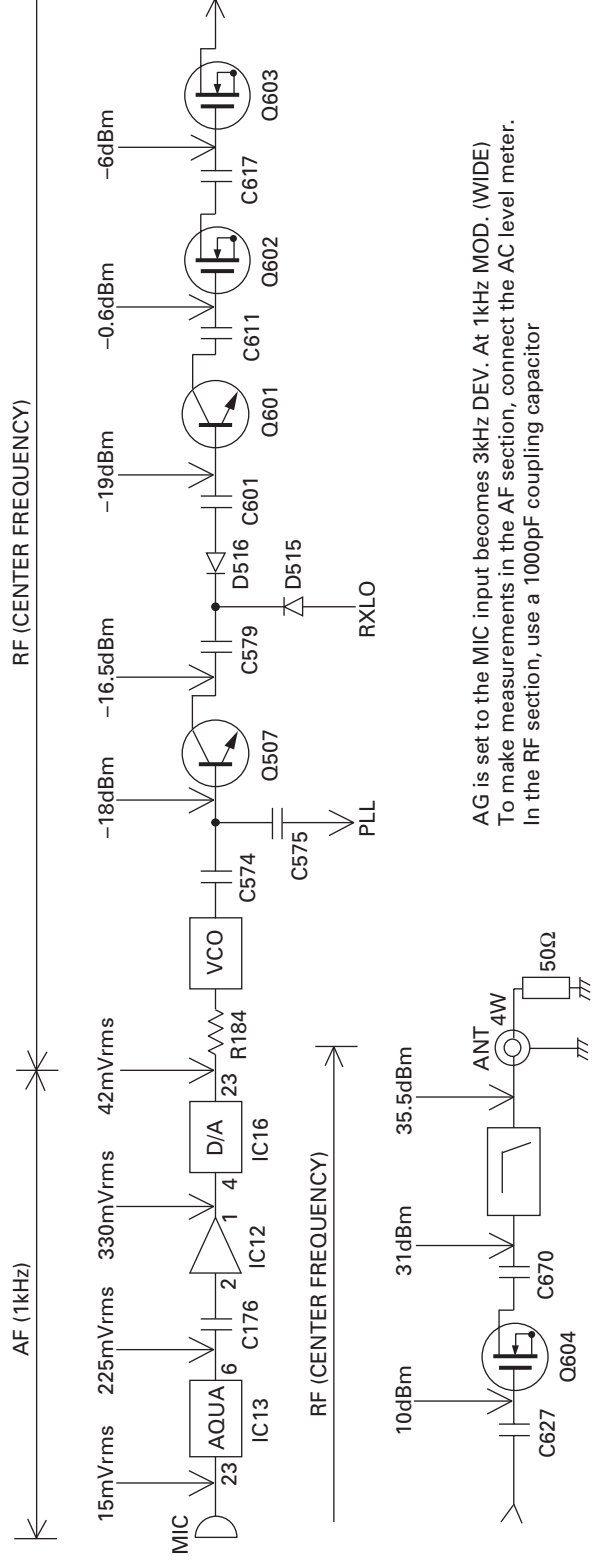
Receiver Section



To make measurements in the AF section, connect the AC level meter. (ANT input : -53dBm, 1kHz FM, 3kHz DEV (WIDE).)
In the RF section, use a high impedance probe. (ANT input : -53dBm, MOD off.)



Transmitter Section



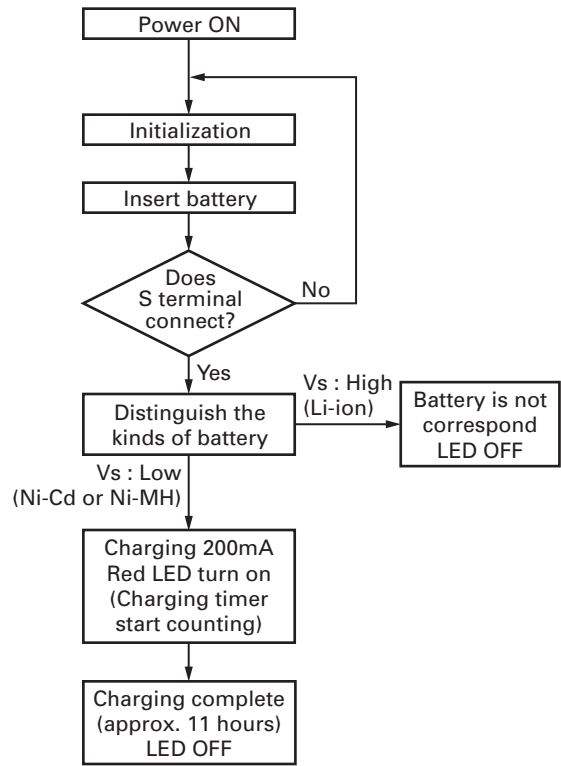
AG is set to the MIC input becomes 3kHz DEV. At 1kHz MOD. (WIDE)
To make measurements in the AF section, connect the AC level meter.
In the RF section, use a 1000pF coupling capacitor

KSC-30 (CHARGER)

External View



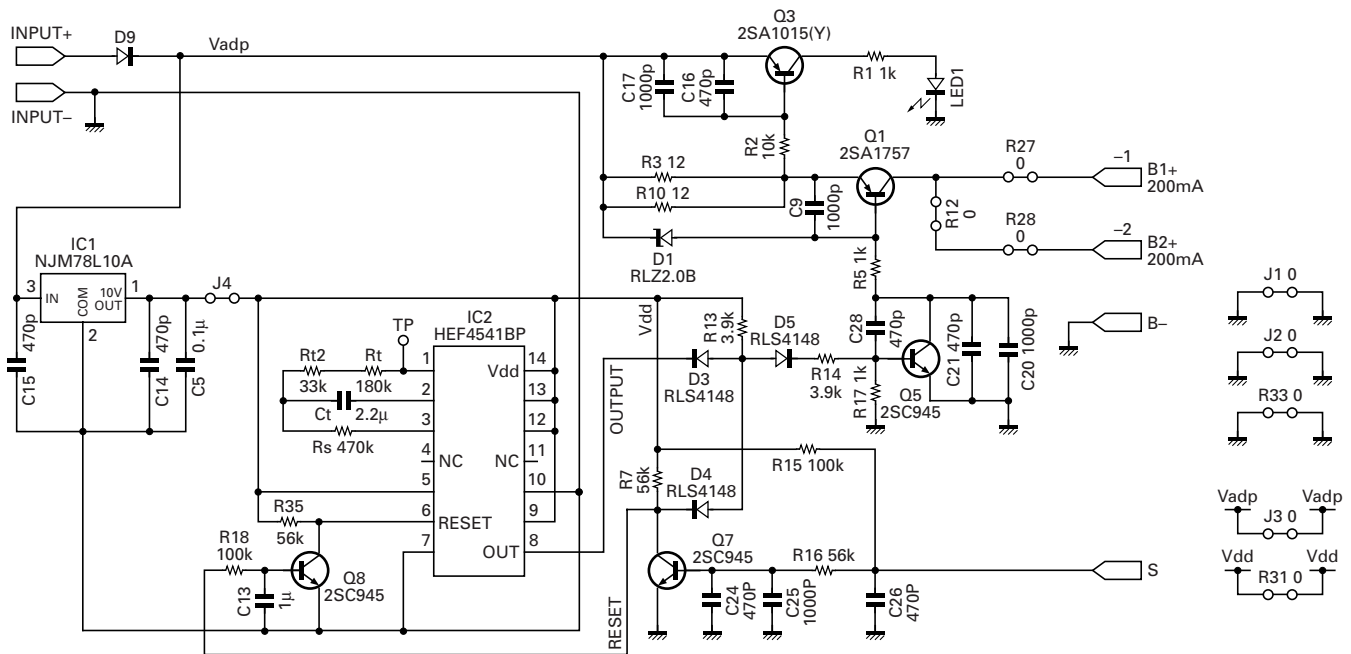
Operating Flow Chart



Parts List

Ref. No.	New parts	Parts No.	Description	Destination
		E03-0460-08	DC jack	
		E23-1321-08	Relay terminal	
		W08-0996-05	AC adapter 120V AC 60Hz	K
		W08-0997-05	AC adapter 230V AC 50Hz	T
		W08-0998-05	AC adapter 230V AC 50Hz	E

Schematic Diagram



TK-3170/3173

SPECIFICATIONS

GENERAL

Frequency range	450~490MHz (K,K4)	440~480MHz (M)	400~430MHz (K3,K6,M3)
Number of channels	Zone : Max. 128 per radio	Conv. Ch : Max. 128 per zone	
	TK-3173 : Trunking GID : Max. 250 per zone		
Channel spacing	Wide : 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	-22°F~+140°F (-30°C~+60°C)		
Frequency stability	\pm 2.5ppm (-22°F~+140°F)		
Antenna impedance	50 Ω		
Channel frequency spread	40MHz (K,K4,M)	30MHz (K3,K6,M3)	
Dimensions (W x H x D)	2-7/32 x 4-9/32 x 1-1/4 in. (56 x 109 x 31.7 mm) with KNB-24L or 35L battery		
(Projections not included)	2-7/32 x 4-9/32 x 1-1/2 in. (56 x 109 x 37.9 mm) with KNB-25A or 26N battery		
Weight (net)	12.0 oz. (340 g) with battery (KNB-35L), antenna (KRA-23) and beltclip (KBH-12)		

RECEIVER (Measurements made per EIA/TIA-603)

Sensitivity (12dB SINAD)	Wide : 0.25 μ V	Narrow : 0.28 μ V
Selectivity	Wide : 70dB	Narrow : 65dB
Intermodulation distortion	Wide : 65dB	Narrow : 60dB
Spurious response	65dB	
Audio output (4 Ω impedance)	500mW with less than 5% distortion	

TRANSMITTER (Measurements made per EIA/TIA-603)

RF power output	HI : 4W	LO : 1W
Spurious response	70dB	
Modulation	Wide : 16K0F3E	Narrow : 11K0F3E
FM hum & noise	Wide : 45dB	Narrow : 43dB
Audio distortion	W/N : Less than 5%	

Kenwood Corporation

2967-3, Ishikawa-machi, Hachioji-shi, Tokyo, 192-8525 Japan

Kenwood U.S.A. Corporation

P.O. BOX 22745, 2201 East Dominguez Street, Long Beach, CA 90801-5745, U.S.A.

Kenwood Electronics Canada Inc.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

Kenwood Electronics Deutschland GmbH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

Kenwood Electronics Belgium N.V.

Leuvensesteenweg 248 J, 1800 Vilvoorde, Belgium

Kenwood Electronics France S.A.

13, Boulevard Ney, 75018 Paris, France

Kenwood Electronics UK Limited

KENWOOD House, Dwight Road, Watford, Herts., WD18 9EB United Kingdom

Kenwood Electronics Europe B.V.

Amsterdamseweg 37, 1422 AC Uithoorn, The Netherlands

Kenwood Electronics Italia S.p.A.

Via G. Sirtori, 7/9 20129 Milano, Italy

Kenwood Ibérica, S.A.

Bolivia, 239-08020 Barcelona, Spain

Kenwood Electronics Australia Pty. Ltd.

(A.C.N. 001 499 074)

16 Giffnock Avenue, Centrecourt Estate, North Ryde, N.S.W. 2113 Australia

Kenwood Electronics (Hong Kong) Ltd.

Unit 3712-3724, Level 37, Tower one Metroplaza, 223 Hing Fong Road, Kwai Fong, N.T., Hong Kong

Kenwood Electronics Singapore Pte Ltd

1 Ang Mo Kio Street 63, Singapore 569110

