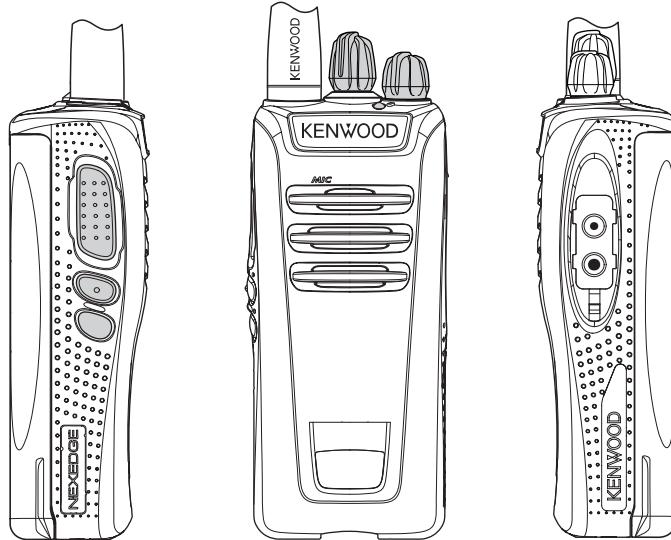


# KENWOOD

## SERVICE MANUAL

### UHF DIGITAL TRANSCEIVER

### NX-340, NX-340(U)



**Note :**

Lead free solder used in the board (material : Sn, Ag, In, Bi, melting point : 227 Centigrade)

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**REVISED**

This service has been revised due to the addition of NX-340 type K2, K3, P, M2, M3 and NX-340(U) type K2.

This service manual is applied for Hardware Ver 2.0 transceivers with B52xxxxx (K, M types) / B54xxxxx (K2, K3, P, M2, M3 types) or subsequent serial numbers.



This product uses Lead Free solder.

This product complies with the RoHS directive for the European market.

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Transceivers containing AMBE+2™ Vocoder: The AMBE+2™ voice coding technology is embedded in the firmware under the license of Digital Voice Systems, Inc.

### Service Manual List

Manual number	Model name	Market code	Remarks
No. RA024<Rev.001>	NX-340	K, M	First edition
	NX-340(U)	K	
No. RA024<Rev.002>	NX-340	K, K2, K3, P, M, M2, M3	Revised edition This service manual
	NX-340(U)	K, K2	

# SPECIFICATION

GENERAL		
Frequency Range	K, M	450~520MHz
	K2, P, M2, M3	400~470MHz
	K3	350~400MHz
Number of Channels	32	
Zones	2	
Max. Channels per Zone	16	
Channel Spacing	Analog	12.5/25kHz
	Digital	6.25/12.5kHz
Operating Voltage	7.5V DC ±20%	
Battery Life Battery Saver OFF/ON (5-5-90 at high power with KNB-45L (2000mAh))	Approx. 10/12 hours	
Operating Temperature Range	-30°C~+60°C (-22°F to +140°F)	
Frequency Stability	±1.0ppm	
Antenna Impedance	50Ω	
Dimensions (W x H x D) (Projections not included)	with KNB-45L	54 x 122 x 35.3 mm (2.13 x 4.80 x 1.39 in)
Weight (net)	Radio only	165 g (5.8 oz)
	with KNB-45L	281 g (9.9 oz)
RECEIVER		
Sensitivity	Digital@6.25kHz	0.25µV (3% BER)
	Digital@12.5kHz	0.25µV (3% BER)
	Analog	0.25µV (EIA 12dB SINAD)
Selectivity	Analog@25kHz	70dB
	Analog@12.5kHz	60dB
Intermodulation Distortion	Analog	70dB
Spurious Response	Analog	70dB
Audio Distortion	Less than 10%	
Audio Output	1W/12Ω (Internal speaker) 500mW/8Ω (External output)	
TRANSMITTER		
RF Power Output	High/Low	5W/1W
Spurious Response	70dB	
FM Hum & Noise	Analog@25kHz	45dB
	Analog@12.5kHz	40dB
Audio Distortion	Less than 10%	
Modulation	16K0F3E, 11K0F3E, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D, 8K30F1E, 8K30F1D, 8K30F7W	

Analog measurements made per TIA/EIA-603 and specifications shown are typical.

Digital measurements made per NXDN CAI and specifications shown are typical.

JVC KENWOOD Corporation reserves the right to change specifications without prior notice or obligation.

# SECTION 1 PRECAUTION

This service manual does not describe PRECAUTION.

# SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

## 2.1 CIRCUIT DESCRIPTION

### 2.1.1 Frequency Configuration

The receiver utilizes double conversion. The first IF is 49.95MHz and the second IF is 450kHz. The first Local oscillator is supplied from the PLL circuit.

The PLL circuit in the transmitter generates the necessary frequencies. Figure 1 shows the frequencies.

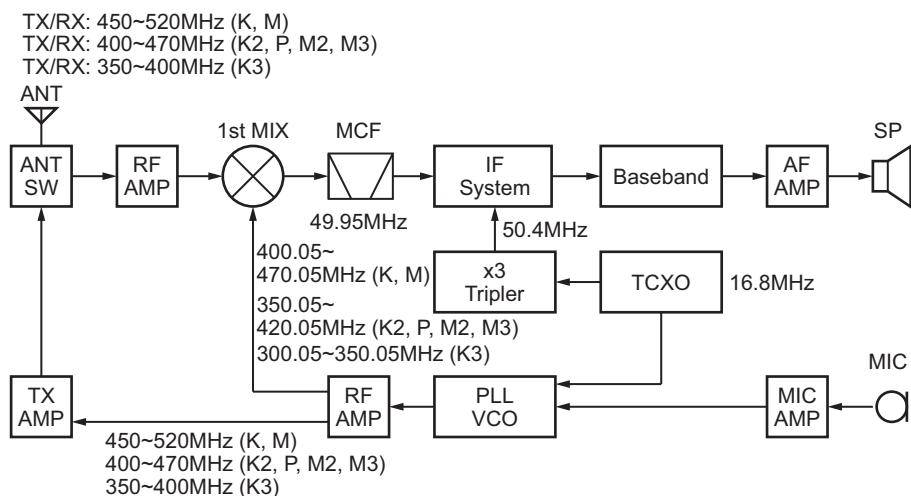


Fig.1 Frequency configuration

### 2.1.2 Receiver System

The receiver system is shown in Figure 2.

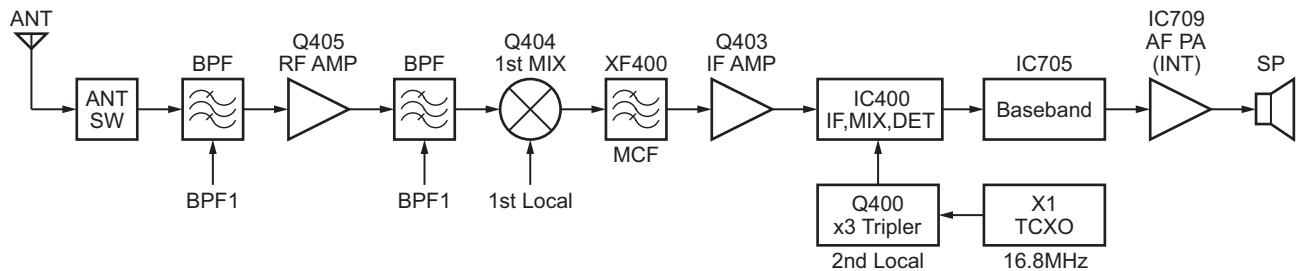


Fig.2 Receiver system

#### 2.1.2.1 Front End (RF Amplifier) Circuit

The signal coming from the antenna passes through the transmit/receive switching diode circuit (D201, D202, D203 and D204) and a BPF (L415 and L416), and is then amplified by the RF amplifier (Q405).

The resulting signal passes through a BPF (L410,L411 and L413) and goes to the mixer. The BPF is adjusted by variable capacitance diodes (D400, D401, D402, D403 and D404). The input voltage to the variable capacitance diodes is the regulated voltage output from the DC amplifier (IC704).

#### 2.1.2.2 First Mixer

The signal from the front end is mixed with the first local oscillator signal generated in the PLL circuit by Q404 to produce the first IF frequency of 49.95MHz.

The resulting signal passes through the XF400 MCF to cut the adjacent spurious and provide optimum characteristics, such as adjacent frequency selectivity.

### 2.1.2.3 IF Amplifier Circuit

The first IF signal is passed through a four-pole monolithic crystal filter (XF400) to remove the adjacent channel signal. The filtered first IF signal is amplified by the first IF amplifier (Q403) and is then applied to the IF system IC (IC400).

The IF system IC provides a second mixer, AGC+BPF, PLL FM detector, noise squelch and RSSI circuit.

The second mixer mixes the first IF signal (49.95MHz) with the signal of the second local oscillator output (Q400) and produces the second IF signal of 450kHz.

The second IF signal is passed through the internal bandpass filter of the IF system IC to remove the adjacent channel signal. The filtered second IF signal is amplified by the limiting amplifier and demodulated by the internal discriminator of the IF system IC.

The demodulated signal is routed to the audio circuit.

### 2.1.2.4 Audio Amplifier Circuit

The demodulated signal from IC400 is sent to an AF amplifier through IC705, and is routed to an audio power amplifier (INT:IC709, EXT:IC707) where it is amplified and output to the speaker.

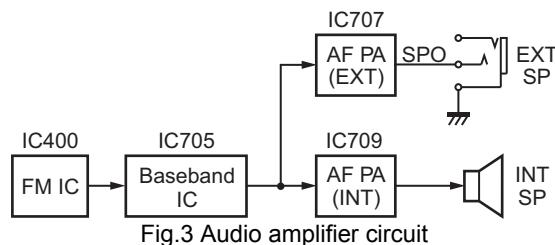


Fig.3 Audio amplifier circuit

### 2.1.2.5 Squelch Circuit

Part of the AF signal from the IC400 enters the FM IC (IC400) again, and the noise component is amplified and rectified by a filter and an amplifier to produce a DC voltage corresponding to the noise level.

There are 2 noise filters. Analog Narrow band, NXDN Narrow band and NXDN Very Narrow band will share the same noise filter (W\_N control is Low) whereas analog wide band will use another noise filter (W\_N control is High).

The selection of different noise filter is by 2 multiplexer (IC719 and IC720).

The DC signal from the FM IC goes to the analog port of the MCU (IC710). IC710 determines whether or not to output sounds from the speaker by checking if the input voltage is higher or lower than the preset value.

To output sounds from the speaker, IC710 sends a high signal to the EXTPSPSW line and turns IC707 on through Q709, Q710, Q713 and Q716. This explanation is for the external speaker amplifier. For the internal loudspeaker amplifier, IC710 sends a high signal to the INTSPSW line and turns IC709 on through Q711 and Q714.

## 2.1.3 Transmitter System

### 2.1.3.1 Microphone Amplifier Circuit

The signal from the microphone is limited by the AGC circuit, which is composed of D700, D701, Q705, Q706 and the mute switch (Q704). IC705 is composed of a high-pass filter, low-pass filter and pre-emphasis/IDC circuit.

The signal from the microphone and the low speed data from the MCU (IC710) enter the baseband IC (IC705) and pass through each path and are mixed inside the IC.

The output signal from the audio processor MOD2 goes to the VCO modulation input. The other output signal from MOD1 goes to the TCXO modulation input.

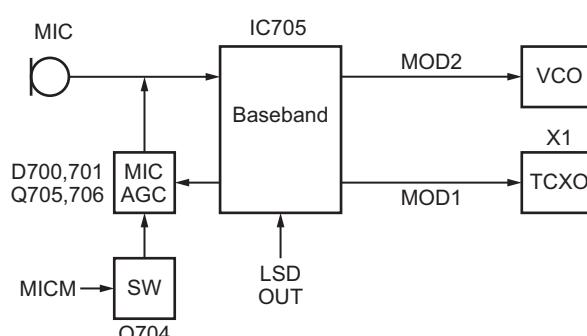


Fig.4 Microphone amplifier circuit

### 2.1.3.2 Drive and Final Amplifier Circuit

The signal from the T/R switch (D15 is on) is amplified by the pre-drive amplifier (Q201) to 20mW.

The output of the pre-drive amplifier is amplified by the drive amplifier (Q206) and the RF final amplifier (Q208) to 5.0W (1W when the power is low).

The drive amplifier and the RF final amplifier consist of two MOS FET stages.

The output of the RF final amplifier is then passed through the antenna switch (D203 and D204) and harmonic filter (LPF) and is applied to the antenna terminal.

### 2.1.3.3 APC Circuit

The APC circuit always monitors the current flowing through the drive amplifier (Q206) and RF power amplifier (Q208), and keeps it constant. The voltage drop at R230, R231 and R233 is caused by the current flowing through the RF final amplifier. This voltage is applied to the differential amplifier IC200 (1/2).

IC200 (2/2) compares the output voltage of IC200 (1/2) with the reference voltage from IC705 (32pin:AUXDAC1). The output of IC200 (2/2) controls the gate bias voltage of the RF power amplifier and the drive amplifier to make both voltages the same.

The change of power (high/low) is carried out by the change of the reference voltage.

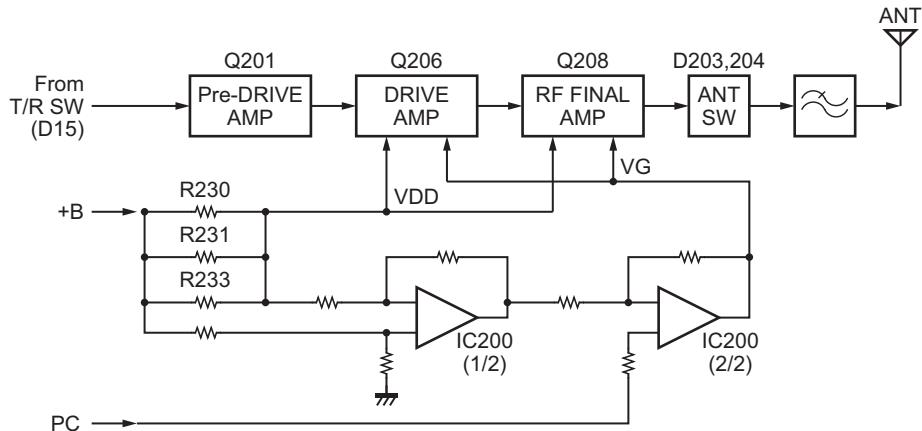


Fig.5 Drive and final amplifier and APC circuit

### 2.1.4 Frequency Synthesizer Unit

#### 2.1.4.1 Frequency synthesizer

The frequency synthesizer consists of the TCXO (X1), VCO, PLL-IC (IC2), and buffer amplifiers.

The TCXO generates 16.8MHz. The frequency stability of TCXO is 0.5ppm within the temperature range of -30°C to +60°C. The frequency tuning and modulation of the TCXO are done to apply voltage to pin 1 of the TCXO. The TCXO output is applied to pin 10 of the PLL-IC.

The VCO consists of 2 VCOs and covers a dual range of 400.05~470.05MHz (K, M), 350.05~420.05MHz (K2, P, M2, M3) or 300.05~350.05MHz (K3) and 450~520MHz (K, M), 400~470MHz (K2, P, M2, M3) or 350~400MHz (K3). The VCO generates 400.05~470.05MHz (K, M), 350.05~420.05MHz (K2, P, M2, M3) or 300.5~350.05MHz (K3) to provide the first local signal for reception. The operating frequency is generated by Q6 in transmitting mode and Q5 in receiving mode. The oscillation frequency is controlled by applying the VCO control voltage, obtained from the phase comparator (IC2) to the variable capacitance diodes (D5, D9, D11, and D13 while transmitting and D4, D7 and D12 while receiving).

The TX/RX pin of IC710 goes "high" in transmission mode, causing Q8 to turn off, and Q7 turn on. The TX/RX pin goes "low" in reception mode.

The output from Q5 and Q6 are amplified by a buffer amplifier (Q9) and RF amplifier (Q2), and are then sent to the PLL-IC. The PLL-IC consists of a prescaler, reference divider, phase comparator, and charge pump.

The input signal from pin 10 and 17 of the PLL-IC is divided down and compared at the phase comparator. The pulse output signal of the phase comparator is applied to the charge pump and transformed into a DC signal in the loop filter (LPF). The DC signal is applied to the CV of the VCO and is locked to keep the VCO frequency constant.

PLL data is output from PLL\_LE (pin 87), PLL\_DATA (pin 86) and PLL\_CLK (pin 88) of the MCU (IC710). The data is input to the PLL-IC when the channel is changed or when transmission is changed to reception and vice-versa. The PLL lock condition is always monitored by pin 70 (PLL\_LD) of the MCU. When the PLL is unlocked, PLL\_LD goes low.

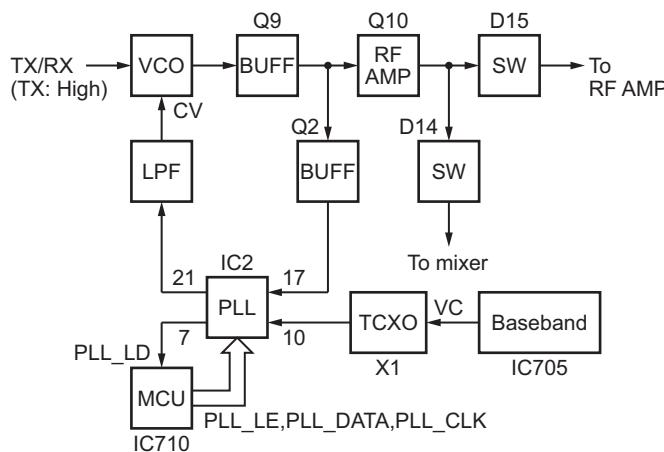


Fig.6 PLL block diagram

### 2.1.5 Control Circuit

The control consists of the MCU (IC710) and its peripheral circuits. It controls the TX-RX unit. IC710 mainly performs the following:

- (1) Switching between transmission and reception via the PTT signal input.
- (2) Reading channel information, frequency, and program data from the memory circuit.
- (3) Sending frequency program data to the PLL.
- (4) Controlling squelch on/off via the DC voltage from the squelch circuit.
- (5) Controlling the audio mute circuit via the decode data input.
- (6) Transmitting tone and encode data.

#### 2.1.5.1 Frequency Shift Circuit

The MCU (IC710) and baseband IC (IC705) operate at a clock frequency of 19.2MHz.

This oscillator frequency can be shifted by pin 8 of the MCU (IC710). When pin 8 is set to high, the beat shift function is ON. A beat sound may be able to be evaded from generation if "Beat Shift" is set to ON when it is generated in the internal spurious transmission modulated sound of the transceiver.

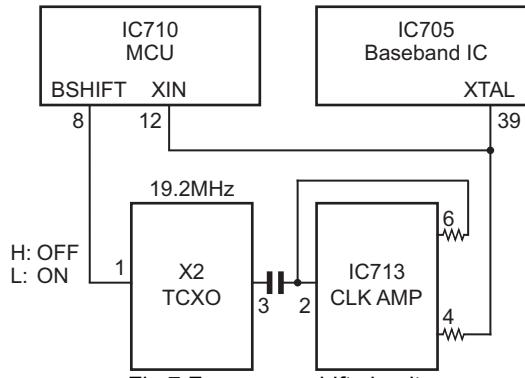


Fig.7 Frequency shift circuit

#### 2.1.5.2 Memory Circuit

The Memory circuit consists of the MCU (IC710) and EEPROM (IC700). The EEPROM has a capacity of 64K-bit and stores the channel information, the last channel data, the scan on status, and other parameters.

#### ■EEPROM

##### Note:

The EEPROM stores tuning data (Deviation, Squelch, etc.).

Realign the transceiver after replacing the EEPROM.

#### 2.1.5.3 Low Battery Warning

The battery voltage is monitored by the MCU (IC710 pin 33: BATT). When the battery voltage falls below 6.4V approximately, the red LED blinks, notifying the operator that it is time to replace the battery (When "Always" option (default setting) under the Battery Warning function in the FPU is selected).

If the battery voltage falls below 5.8V approximately, the transceiver does not transmit and a warning tone beeps when the PTT switch is pressed (When the Battery Warning Tone is selected in the FPU).

#### 2.1.5.4 Key Input

Keys and channel selector circuit.

The signal from the keys and channel selector are directly input to the MCU, as shown in Figure 8.

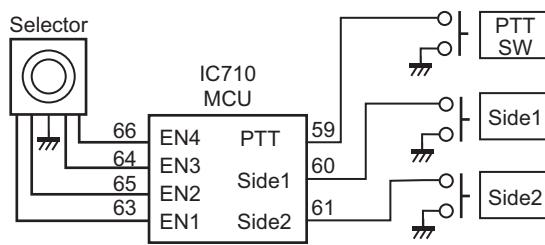


Fig.8 Key input

## 2.1.6 Signaling Circuit

### 2.1.6.1 Encode

#### ■ Low-speed data (QT, DQT)

Low-speed data is output from pin 29 of the MCU. The signal passes through the low pass CR filter, and goes to the audio processor (IC705). The signal is mixed with the audio signal and goes to the VCO and TCXO (X1) modulation input after passing through the D/A converter inside the audio processor (IC705) for BAL adjustment.

#### ■ High-speed data (2-tone, DTMF)

High-speed data (HSD) is output from pin 30 of the MCU. HSD deviation made by an adjustment in the MCU is passed through the low pass CR filter and is then applied to the baseband IC (IC705).

The signal is mixed with the audio signal and goes to the VCO and TCXO. The signal passes through low pass CR filter and D/A converter, and goes to the audio power amplifier. The level is controlled by the MCU.

#### ■ MSK (Fleet Sync/MDC-1200)

The MSK signal is generated in the audio processor (IC705). The signal passes through the D/A converter (inside the baseband IC: IC705) and is routed to the VCO. When encoding the MSK, the microphone input signal is muted.

### 2.1.6.2 Decode

#### ■ QT/DQT

The output signal from the FM IC (IC400) enters the MCU (IC710) through IC705. IC710 determines whether or not the QT or DQT matches the preset value, and controls the AFSW and speaker output sounds according to the squelch results.

#### ■ 2-tone

Part of the received AF signal output from the FM IC (IC400) passes through the baseband IC (IC705), and is compared before going to the MCU (IC710). IC710 checks whether or not the 2-tone data is necessary. If it matches, IC710 carries out a specified operation, such as turning the speaker on.

#### ■ MSK (Fleet Sync)

The MSK input signal from the FM IC (IC400) goes to IC705. The decoded information is then processed by the MCU.

#### ■ DTMF

The DTMF input signal from the FM IC (IC400) goes to IC705. The decoded information is then processed by the MCU.

### 2.1.7 Power Supply

There are five 5V power supplies and five 3.3V power supplies: 50M, 50V, 50C, 50R, 50T, 33M, 33MS, 33B, 33R and 33MD. 50M and 33M are always output while the power is on. 33MS is always output, but turns off when the power is turned off, to prevent a malfunction of the MCU. 50C is a common 5V and is output when SAVE is not set to ON. 50R is 5V for reception and is output during reception. 50T is 5V for transmission and is output during transmission. 50V is 5V for the SP/MIC connector. 33B is 3.3V for the baseband IC (IC705). 3R is 3.3V for the IF IC (IC400) and is sent when SAVE is not set to ON. 33MD is 3.3V for the MCU digital supply.

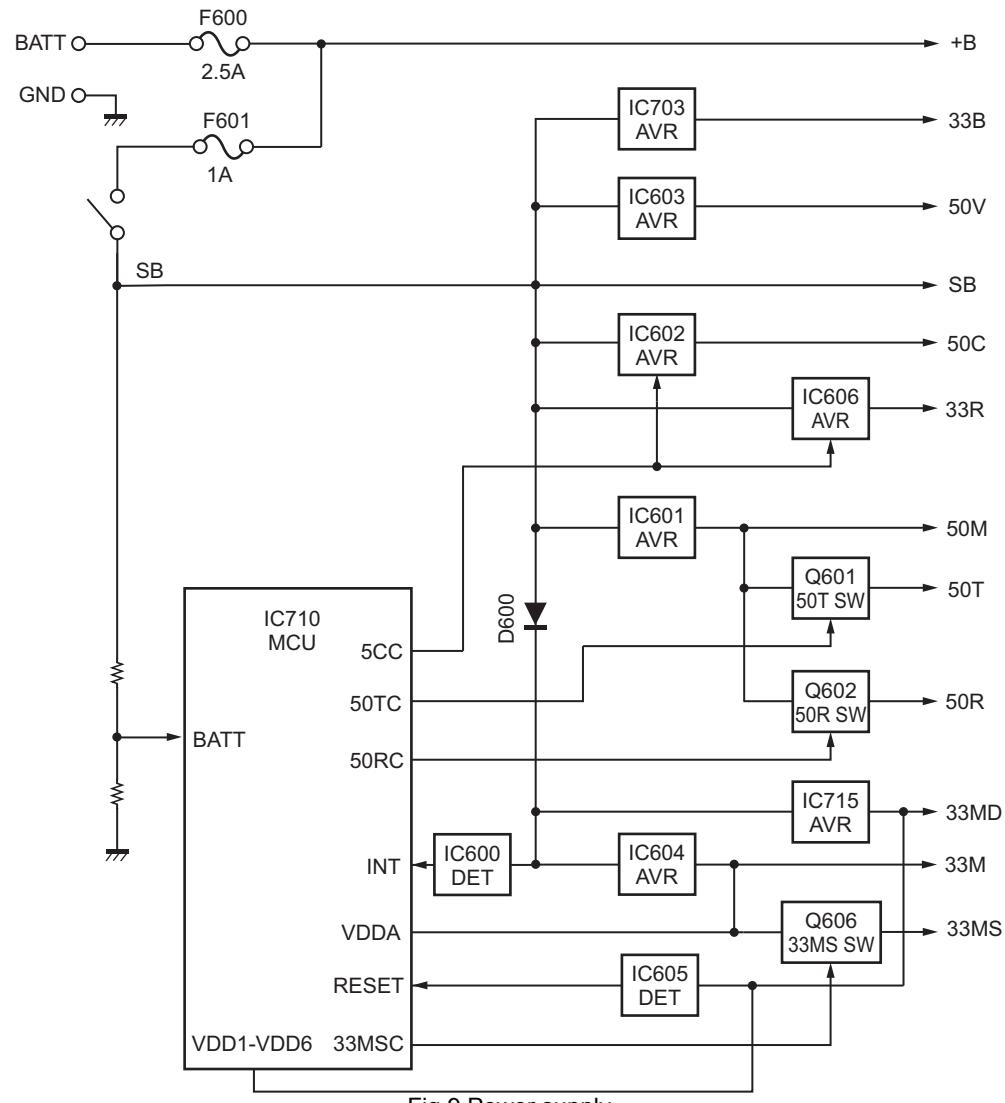


Fig.9 Power supply

### 2.1.8 NXDN Receiving

#### 2.1.8.1 For Digital Data Mode

The demodulated signal from IC400 (Pin13) is fed into the baseband IC (Pin 16) for NXDN decoding. The decoded digital data will pass to the MCU through the C-BUS. The MCU determines whether or not to output sound from the speaker by checking if the data matches.

### 2.1.8.2 For Digital Voice Mode

If the digital data matches in the MCU, the digital voice payload data will go into the Vocoder in the MCU for conversion to PCM. The PCM data will go to the baseband IC through the SPI input, where it will be converted to analog by the DAC. Analog voice will be filtered and finally sent to the audio amplifier.

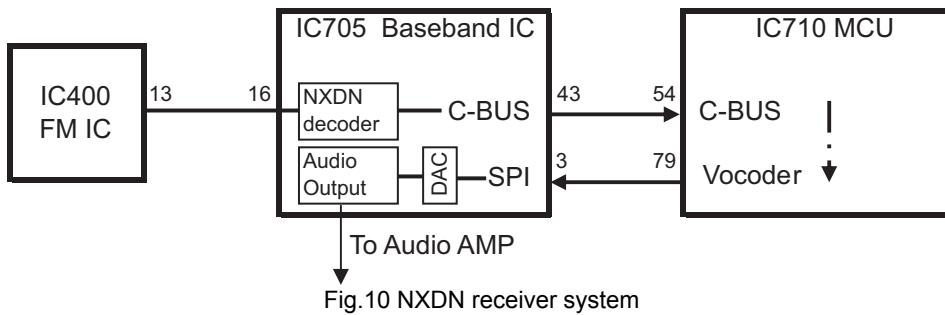


Fig.10 NXDN receiver system

### 2.1.9 NXDN Transmitting

#### 2.1.9.1 For Digital Data Mode

The digital data will be generated by the MCU, where it will be passed to the baseband IC, through the C-BUS for the encoding process. The encoded data will finally transmit through the TCXO and VCO modulation.

#### 2.1.9.2 For Digital Voice Mode

The analog voice from the microphone will go to the ADC (after the audio filter) to convert to PCM data. The PCM data will be sent to the Vocoder through the SPI output. The Vocoder will convert the PCM to NXDN protocol, where it will be sent to the baseband through the C-BUS. In the baseband IC, the data will be encoded and finally transmitted through the TCXO and VCO modulation.

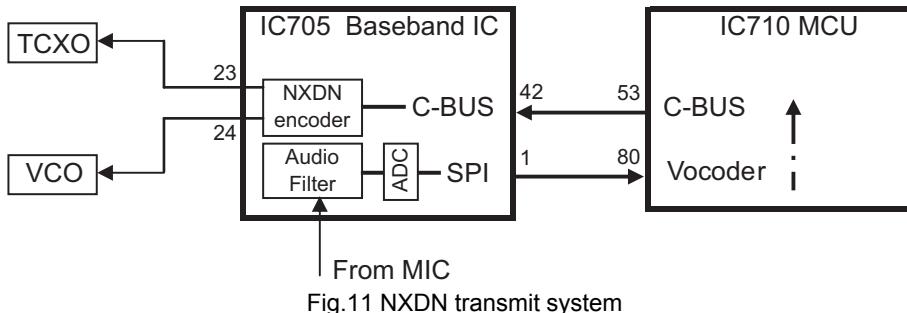


Fig.11 NXDN transmit system

## 2.2 SEMICONDUCTOR DATA

### 2.2.1 MCU: 2F405VGT6KFAA (TX-RX unit IC710)

Pin No.	Name	I/O	Function
1	MINVOL	O	Minimum volume control
2	DCSW	O	APC voltage discharge switch
3	APCSW	O	APC switch
4	TEST_1	O	Test land 1
5	TEST_2	O	Test land 2
6	VBAT	-	3.3V
7	BLULED	O	Blue LED light control (Hi: LED ON)
8	BSHIFT	O	MPU clock frequency shift
9	INSPMT	O	Internal speaker mute
10	VSS1	-	GND
11	VDD1	-	3.3V
12	XIN	I	Crystal (19.2MHz)
13	NC	O	No connection
14	NRST	I	MCU reset input
15	LSDI	I	QT/DQT decode
16	HSDDEC	I	2-tone decode

Pin No.	Name	I/O	Function
17	VOX	I	VOX level input
18	OPT4	I/O	Option port 4
19	VDD	-	33MD
20	VSSA	-	GND
21	VREF+	-	33M
22	VDDA	-	33M
23	5CC	O	5C control
24	CVIN	I	VCO lock voltage (for automatic alignment)
25	EMPTT	O	Emergency PTT
26	50VC	O	5V AVR control for GPS MIC option/OPT detection
27	VSS2	-	GND
28	VDD3	-	33MD
29	LSDO	O	QT/DQT output
30	HSDENC	O	BEEP/HSD output
31	5RC	O	5R control
32	1PINDET	I	2.5mm phone jack detection
33	BATT	I	Battery level input

Pin No.	Name	I/O	Function
34	RSSI	I	RSSI input
35	BUSY	I	BUSY input
36	TH_DET	I	Thermistor detection (Temperature detection)
37	33MSC	I/O	33M switch control
38	OPT1	O	Option port 1
39	OPTDET	I	Option detection
40	GRNLED	O	Green LED control (Hi: LED ON)
41	REDLED	O	Red LED control (Hi: LED ON)
42	MIC_MT	O	MIC mute
43	EXTSPMT	O	Speaker mute
44	ASSTSW	O	Assist switch
45	TX/RX	O	TX/RX switch (Hi: TX, Lo: RX)
46	INSPSW	O	Internal speaker switch
47	TEST_TX	O	UART_TX for test
48	TEST_RX	I	UART_RX for test
49	VCAP_1	-	2.2uF
50	VDD4	-	33MD
51	CML_CSN	O	Chip select for baseband IC
52	CML_SCLK	O	SCLK for baseband IC
53	CML_CDATA	O	Command for baseband IC
54	CML_RDATA	I	REPLY for baseband IC
55	FM_RSTN	O	Hardware reset for FM IC
56	FM_CSN	O	Chip select for FM IC
57	FM_SCLK	O	Clock for FM IC
58	FM_SDATA	I/O	Data I/O for FM IC
59	PTT	I	PTT key
60	PF1	I	Programmable function key input 1
61	PF2	I	Programmable function key input 2
62	FM_PDN	O	Power down port for LDO of FM IC
63	EN1	I	Encoder input 1
64	EN3	I	Encoder input 3
65	EN2	I	Encoder input 2
66	EN4	I	Encoder input 4
67	OPT3	I/O	Option port 3
68	TXD	O	Serial data to MIC jack
69	RXD	I	Serial data from MIC jack
70	PLL_UL	I	Unlock voltage for PLL
71	OPT2	I/O	Option port 2
72	SWDIO	I/O	SWDIO for SWD
73	VCAP_2	-	2.2uF
74	VSS3	-	GND
75	VDD5	-	33MD
76	SWCLK	I/O	SWCLK for SWD
77	CML_SSOUT	I	SPI chip select for baseband IC
78	CML_EPSCLK	I	Clock for SPI

Pin No.	Name	I/O	Function
79	CML_EPSO	O	SPI output
80	CML_EPSI	I	SPI input
81	EEP_DATAI	I	Data input for EEPROM
82	EEP_DATAO	O	Data output to EEPROM
83	EEP_CS	O	Chip select for EEPROM
84	EEP_CLK	O	Clock for EEPROM
85	EEP_WP	O	Write protect for EEPROM
86	PLL_DATA	O	Data output for PLL
87	PLL_LE	O	Chip select for PLL
88	PLL_CLK	O	Clock for PLL
89	SWO	O	SWO for SWD
90	SRST	I	SRST for SWD
91	OPT5	I/O	Option port 5
92	OPT6	I/O	Option port 6
93	OPT7	I/O	Option port 7
94	NC	I	No connection
95	W_N	O	Wide/Narrow Switch (Hi:W, Lo:other)
96	5TC	O	5T control
97	INT	I	Interrupt
98	CML_IRQN	I	IRQ for baseband IC
99	PDR_ON	-	GND
100	VDD6	-	33MD

## 2.3 COMPONENTS DESCRIPTION

### 2.3.1 TX-RX unit (X57-8510-XX)

Ref. No.	Part Name	Description
IC2	IC	PLL System
IC3	IC	DC amplifier (CV)
IC200	IC	DC amplifier (APC)
IC400	IC	IF System
IC600	IC	Voltage detector (INT)
IC601	IC	Voltage regulator (50M)
IC602	IC	Voltage regulator (50C)
IC603	IC	Voltage regulator (50V)
IC604	IC	Voltage regulator (33M)
IC605	IC	Voltage detector (Reset)
IC606	IC	Voltage regulator (33R)
IC700	IC	EEPROM
IC703	IC	Voltage regulator (33B)
IC704	IC	DC amplifier (BPF tune)
IC705	IC	Baseband system
IC706	IC	DC amplifier (VOX)
IC707	IC	AF power amplifier (EXT)
IC708	IC	AF amplifier

Ref. No.	Part Name	Description
IC709	IC	AF power amplifier (INT)
IC710	IC	MCU
IC713	IC	Clock buffer amplifier
IC715	IC	Voltage regulator (33MD)
IC717	IC	Audio buffer amplifier
IC719, 720	IC	Wide/Narrow multiplexer
Q1	FET	DC switch (Assist)
Q2	Transistor	PLL Fin amplifier
Q3	FET	Q1 control
Q4	Transistor	Rippler filter
Q5	FET	RX VCO
Q6	FET	TX VCO
Q7	FET	Q8 control
Q8	FET	TX/RX VCO DC switch
Q9	Transistor	Buffer amplifier
Q10	Transistor	RF amplifier
Q201	Transistor	Pre-drive amplifier
Q203	Transistor	Discharge switch
Q205	FET	APC control switch
Q206	FET	Drive amplifier
Q207	Transistor	DC switch (APC)
Q208	FET	Final amplifier
Q209	FET	DC switch (Power control)
Q210	Transistor	DC switch (Power control)
Q400	Transistor	Tripler (2nd local)
Q403	Transistor	1st IF amplifier
Q404	FET	1st mixer
Q405	FET	RX RF amplifier
Q600	Transistor	DC switch (BUSY LED)
Q601	FET	DC switch (50T)
Q602	FET	DC switch (50R)
Q603	FET	DC switch (MIN VOL)
Q604	Transistor	DC switch (RED LED)
Q605	Transistor	DC switch (BLUE LED)
Q606	FET	DC switch (33MS )
Q703	FET	Level shift (TXD)
Q704	Transistor	MIC mute switch
Q705	Transistor	MIC AGC amplifier
Q706	Transistor	MIC AGC amplifier
Q707	FET	Level shift (RXD)
Q708	Transistor	DC switch (EXT PTT)
Q709	Transistor	Q710 control
Q710	Transistor	DC switch (IC707 SB)
Q711	Transistor	Q715 control
Q712	Transistor	Pop noise mute control

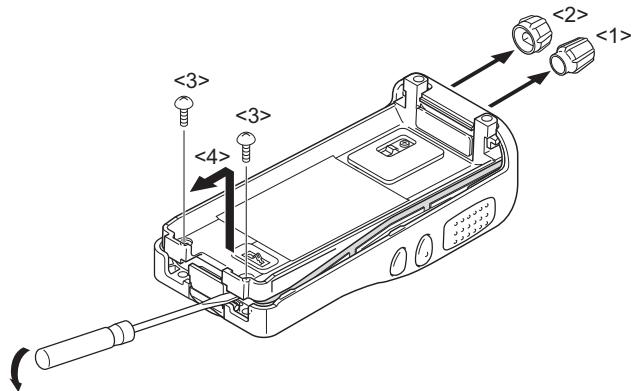
Ref. No.	Part Name	Description
Q713	FET	AF switch (EXT SP)
Q714	Transistor	DC switch (IC709 SB)
Q715	Transistor	Q714 control
Q716	FET	AF switch (EXT SP)
D4	Variable capacitance diode	RX VCO tune
D5	Variable capacitance diode	TX VCO tune
D7	Variable capacitance diode	RX VCO tune
D9	Variable capacitance diode	TX VCO tune
D10	Diode	Speed up
D11	Variable capacitance diode	TX assist
D12	Variable capacitance diode	RX assist
D13	Variable capacitance diode	Modulation
D14, 15	Diode	TX/RX switch
D200	Zener diode	Over voltage protection
D201-204	Diode	Antenna switch
D400-404	Variable capacitance diode	RX BPF tuning
D405	Variable capacitance diode	RX notch tune
D600	Diode	Voltage drop
D601	LED	Green (BUSY)
D602	LED	Red (TX)
D603	Diode	Voltage prevention
D604	LED	Blue
D700, 701	Diode	AF detector (MIC)
D702	Diode	AF detector (VOX)
D703	Diode	Limiter
D754	Diode	1 pin detection

## SECTION 3 DISASSEMBLY

### 3.1 Precautions for Disassembly

#### 3.1.1 Removing the Case Assembly from the Chassis

- (1) Remove the selector knob <1> and volume knob <2>.
- (2) Remove the two screws <3>.
- (3) Lift and remove the chassis from the case assembly <4>.  
(Use a flat-blade screwdriver to easily lift the chassis.)



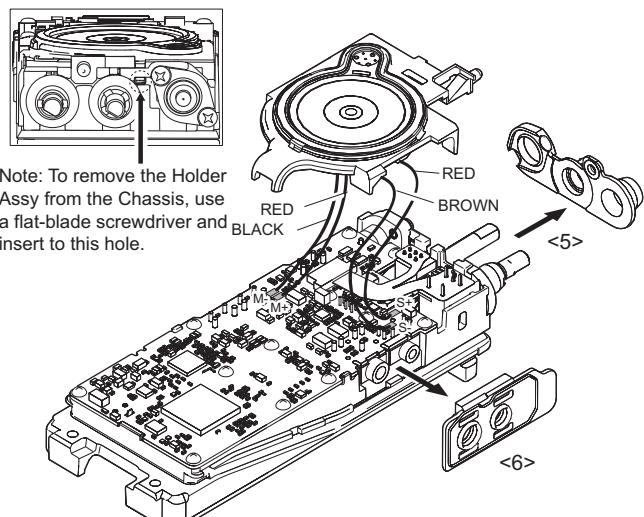
#### 3.1.2 Removing the Holder Assembly from the Chassis

- (1) Remove the packing <5> from the SMA, volume and selector.
- (2) Remove the holder from the chassis.

**Note:**

Take care to not cut the speaker and microphone leads.

- (3) Detach the solder of the speaker and microphone leads from the PCB beforehand.
- (4) Remove the packing <6> from the SP/MIC jack of the TX-RX unit.



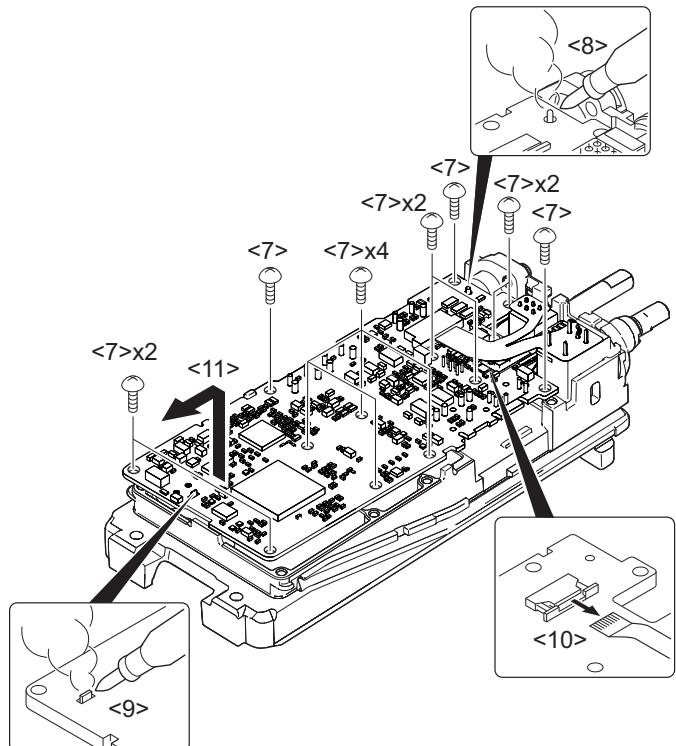
#### 3.1.3 Removing the TX-RX unit from the Chassis

- (1) Remove the thirteen screws <7> fixing the TX-RX unit.
- (2) Remove the solder of the antenna terminal with a soldering iron <8>.
- (3) Remove the solder of the positive terminal with a soldering iron <9>.

**Note:**

You can remove the TX-RX unit from the chassis without removing the solder at the positive terminal. However, in this case, you cannot attach the packing (G53-2218-03) that is on the positive terminal to the chassis during assembly. So, we advise you to remove the solder on the positive terminal first.

- (4) Remove the FPC from the flat cable connector <10>.
- (5) Lift and remove the TX-RX unit from the chassis <11>.

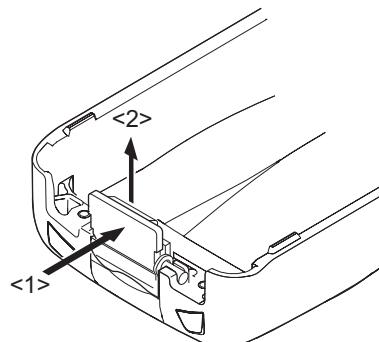


#### 3.1.4 Removing the Battery Release Lever from the Case Assembly

- (1) Press the upper part of the lever toward the inside of the case assembly. One side of the shaft will be removed <1>.
- (2) Lift and remove the battery release lever from the case assembly <2>.

**Note:**

Scratch and widen the glue hole if you are having difficulty removing the other end of the shaft. No glue is required when you reassemble the battery release lever.



### 3.2 Precautions for Reassembly

#### 3.2.1 Attaching the Battery Release Lever to the Case Assembly

- (1) Insert one side of the shaft into the hole at the lever fitting section on the case assembly <1>.

**Caution:**

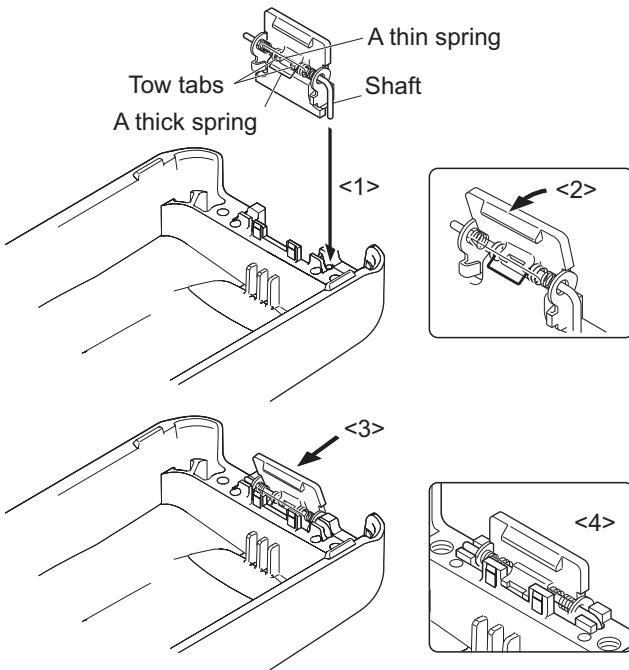
Position the thin spring (G01-4543-14) above the two tabs of the lever.

- (2) Tilt the battery release lever slightly forward <2>, so that the thick spring (G01-4542-04) is positioned below the case surface.
- (3) With the thick spring positioned below the case surface, attach the other side of the shaft to the case assembly by pressing the battery release lever <3> until it snaps into place <4>.

**Caution:**

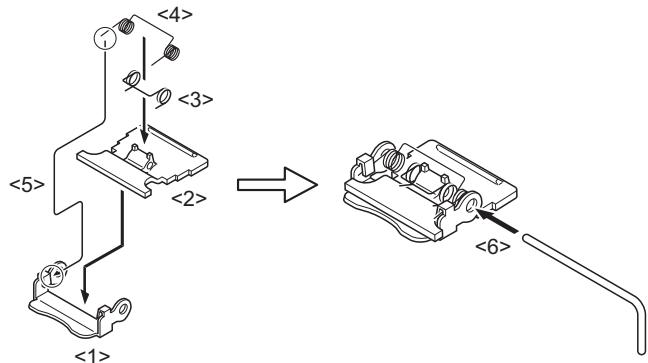
Be careful to not tilt the battery release lever too far forward.

If the battery release lever is pushed in this state where the two tabs come below the case surface, there is a possibility of damaging the two tabs.



#### 3.2.2 Assembling the Battery Release Lever

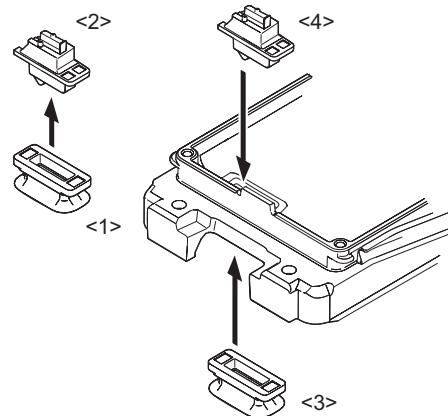
- (1) Place the lever <2> onto the stopper <1>.
- (2) Place the thick spring <3> onto the lever.
- (3) Hook the right and left ends of the thin spring <4> onto the tabs of the stopper, then place the thin spring onto the lever <5>.
- (4) Slide the shaft through the hole of the stopper and lever <6>.



#### 3.2.3 Attaching the Positive Terminal to the Chassis

Always attach the positive terminal to the chassis using the following procedures, before mounting the TX-RX unit onto the chassis.

- (1) Remove the holder assembly <2> from the packing <1> of the positive terminal.
- (2) Mount the packing of the positive terminal into the chassis hole <3>.
- (3) Mount the holder assembly into the packing of the positive terminal <4>.

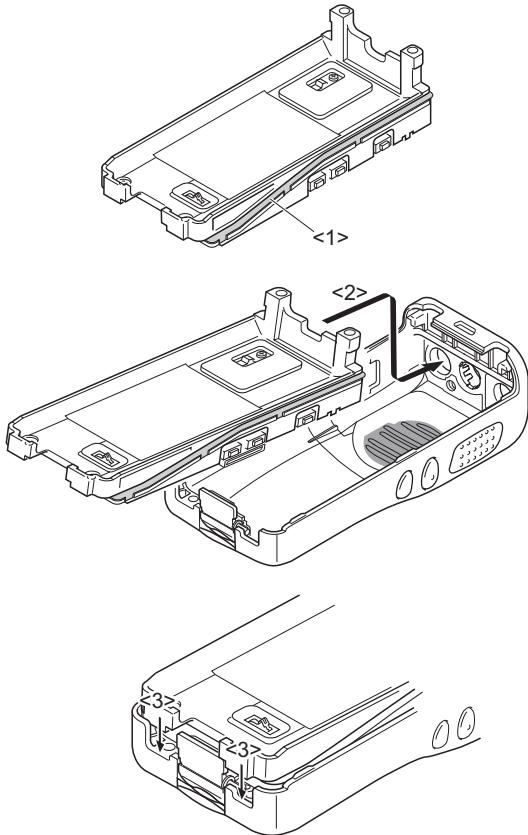


### 3.2.4 Mounting the Chassis to the Case Assembly

- (1) Confirm that the waterproof packing attached to the circumference of the chassis is securely inserted in the groove of the chassis <1>.
- (2) Insert the upper part of the chassis into the case assembly <2>.
- (3) Press the chassis <3> and the case assembly together to attach them.

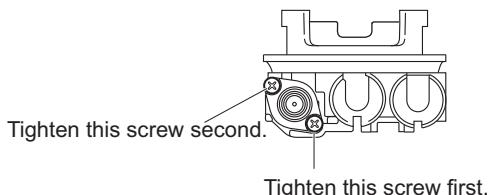
#### Caution:

If the packing of the SP/MIC is not at the correct position after attaching the chassis to the case assembly, reposition the packing with your fingers.



### 3.2.5 Attaching the Antenna Receptacle to the Chassis

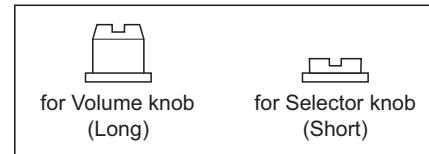
Screw the antenna receptacle to the chassis in the order shown in the drawing so that the antenna receptacle comes to the center of the case hole.



### 3.2.6 The Nuts of the Volume Knob and Channel Knob

Note that the shape, color and height of the nuts of the volume knob and channel knob are different from one another. (The nut of volume knob is silver, and the nut of channel knob is gold.) Use the following jig when removing the nuts of the volume knob and channel knob:

- Jig (Part No.: W05-1012-00)



## SECTION 4 ADJUSTMENT

### 4.1 Test Equipment Required for Alignment

Test Equipment	Major Specifications	
1. Standard Signal Generator (SSG)	Frequency Range	100 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	100 to 520MHz
	Measuring Range	Vicinity of 10W
3. Deviation Meter	Frequency Range	100 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 VM)	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. 3A Useful if ammeter equipped	

\*The test equipment which is not used for adjustment is contained in this table.

#### ■Antenna connector adapter

The antenna connector of this transceiver 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.)

#### ■Repair Jig (Chassis)

Use jig (Chassis) for repairing the transceiver. Place the TX-RX unit on the jig and fit it with screws.

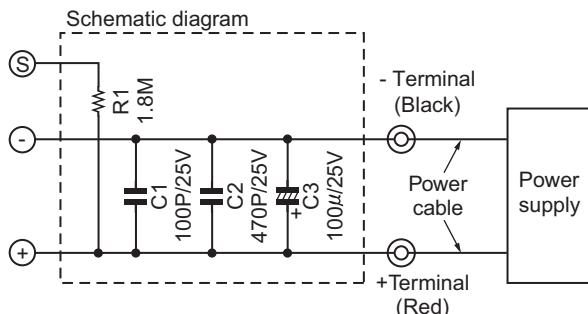
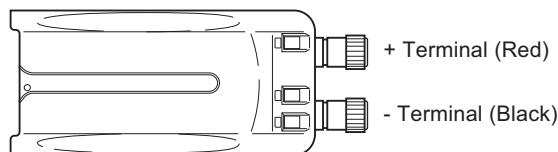
The jig facilitates the voltage check and protects the final amplifier FET when the voltage on the flow side of the TX-RX unit is checked during repairs.

#### ■Battery Jig (W05-1011-00)

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.

#### 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.



## 4.2 Frequency and Signaling

The transceiver 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	K, M		K2, P, M2, M3	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
1	485.05000	485.10000	435.05000	435.10000
2	450.05000	450.10000	400.05000	400.10000
3	519.95000	519.90000	469.95000	469.90000
4	485.00000	485.00000	435.00000	435.00000
5	485.20000	485.20000	435.20000	435.20000
6	485.40000	485.40000	435.40000	435.40000
7~16	-	-	-	-

CH	K3	
	RX (MHz)	TX (MHz)
1	375.05000	375.10000
2	350.05000	350.10000
3	399.95000	399.90000
4	375.00000	375.00000
5	375.20000	375.20000
6	375.40000	375.40000
7~16	-	-

### ■Analog mode signaling

No.	RX	TX
1	None	None
2	None	20 Hz Square Wave
3	QT 67.0 Hz	QT 67.0 Hz
4	QT 151.4 Hz	QT 151.4 Hz
5	QT 210.7 Hz	QT 210.7 Hz
6	QT 254.1 Hz	QT 254.1 Hz
7	DQT D023N	DQT D023N
8	DQT D754I	DQT D754I
9	DTMF Decode (Code: 159D)	DTMF Encode (Code: 159D)
10	None	DTMF (Code: 9)
11	None	MSK (1010..)
12	FleetSync: 100-1000	FleetSync: 100-1000
13	None	Single Tone: 1000 Hz
14	2-tone Decode: A: 304.7 Hz B: 3106.0 Hz	2-tone Encode: A: 304.7 Hz B: 3106.0 Hz
15	None	DTMF Tone: 1477 Hz
16	Single Tone: 979.9 Hz	Single Tone: 979.9 Hz
17	None	MSK PN9
18	None	DTMF (Code: 3)

### ■NXDN mode signaling

No.	RX	TX
1	RAN1	RAN1
2	None	PN9
3	RAN1	Maximum Deviation Pattern
4	FSW+PN9	Mod set-up *1
5	Tone Pattern (1031 Hz)	Tone Pattern (1031 Hz)

RAN: Radio Access Number

PN9: Pseudo-Random Pattern (for production only)

\*1: To output 150Hz square wave (for production only)

## 4.3 Preparations for Tuning the Transceiver

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

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

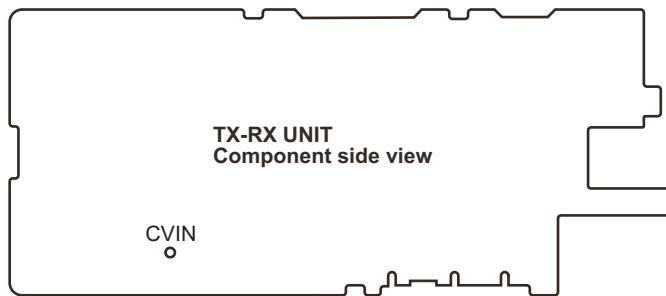
The speaker output connector must be terminated with a 8Ω dummy load and connected to an AC voltmeter and an audio distortion meter or a SINAD measurement meter at all times during tuning.

### ■5 reference level adjustments frequency

TEST CH	K, M		K2, P, M2, M3	
	RX (MHz)	TX (MHz)	RX (MHz)	TX (MHz)
Low	450.05000	450.10000	400.05000	400.10000
Low'	467.55000	467.60000	417.55000	417.50000
Center	485.05000	485.10000	435.05000	435.10000
High'	502.55000	502.60000	452.55000	452.50000
High	519.95000	519.90000	469.95000	469.90000

TEST CH	K3	
	RX (MHz)	TX (MHz)
Low	350.05000	350.10000
Low'	362.55000	362.50000
Center	375.05000	375.10000
High'	387.55000	387.50000
High	399.95000	399.90000

## 4.4 Adjustment Points



#### 4.5 Common Section

Item	Condition	Measurement			Adjustment			Specifications /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Setting	1) Power supply voltage DC power supply terminal : 7.5V							
2. Receive Assist voltage	1) Auto tuning <b>*Note 1</b>				FPU		4.0 ± 0.1V	
	2) CH: Low <b>*Note 2</b>	DVM	TX-RX	CVIN		Check	0.6V or more (at CVIN terminal)	
3. Transmit Assist voltage	1) Auto tuning <b>*Note 1</b>				FPU		4.0 ± 0.1V	
	2) CH: Low <b>*Note 2</b>	DVM	TX-RX	CVIN		Check	0.6V or more (at CVIN terminal)	

**\*Note 1:**

During test mode, click the [Tune Assist Voltage] button in test mode dialog box, then start automatic adjustment of the Receive/Transmit assist voltage.

**\*Note 2:**

The CV voltage checking of CH:2 (Default value) test frequency must be performed in test mode.

#### 4.6 Transmitter Section

Item	Condition	Measurement			Adjustment			Specifications /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. Frequency	(1)TEST CH: Center PTT ON	Frequency counter		ANT		FPU	435.100MHz (K2, P, M2, M3) 485.100MHz (K, M) 375.100MHz (K3)	±50Hz
2. High Transmit Power	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Battery Terminal voltage:7.5V (3)PTT ON	Power meter Ammeter		ANT		FPU	5.0W	±0.1W 2.0A or less
3. Low Transmit Power	(1)TEST CH: Low, Center, High (3 point) (2)Battery Terminal voltage:7.5V (3)PTT ON	Power meter Ammeter		ANT		FPU	1.0W	±0.1W 1.0A or less
4. DQT Balance 1 <b>*Note 3</b>	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscilloscope		ANT		FPU	Make the demodulation wave into square wave. 	
DQT Balance 2 <b>*Note 3</b>	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscilloscope		ANT		FPU	The Deviation of 20Hz frequency is fixed. Change the 1kHz adjustment value to become the same deviation of 20Hz within the specified range.	±15Hz
5. Maximum Deviation (Analog Narrow)	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscilloscope		ANT		FPU	2.0kHz (According to larger +, -)	±80Hz <b>Note:</b> FPU auto input 1kHz/ 150mV

Item	Condition	Measurement			Adjustment			Specifi-cations /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
(Analog Wide)	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	4.0kHz (According to larger +, -)	±80Hz <b>Note:</b> FPU auto input 1kHz/ 150mV
6. Maximum Deviation (NXDN Very Narrow) <b>*Note 4</b>	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	1.337kHz	±26Hz
(NXDN Narrow)	(1)TEST CH: Low, Low', Center, High', High (5 point) (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	3.056kHz	±59Hz
7. CW ID Devia-tion (NXDN Very Narrow) <b>*Note 4</b>	(1)TEST CH: Center (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	1.00kHz	±100Hz
8. DQT Devia-tion (Analog Narrow)	(1)TEST CH: Center (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	0.35kHz	±50Hz
(Analog Wide)	(1)TEST CH: Center (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	0.75kHz	±50Hz
9. QT Deviation (Analog Narrow)	(1)TEST CH: Center (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	0.35kHz	±50Hz
(Analog Wide)	(1)TEST CH: Center (2)Deviation meter filter LPF: 3kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	0.75kHz	±50Hz
10. DTMF Devia-tion (Analog Narrow)	(1)TEST CH: Center (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	1.5kHz	±50Hz
(Analog Wide)	(1)TEST CH: Center (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscillo-scope		ANT		FPU	3.0kHz	±50Hz

Item	Condition	Measurement			Adjustment			Specifications /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
11. MSK Deviation (Analog Narrow)	(1)TEST CH: Center (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscilloscope		ANT		FPU	1.5kHz	±50Hz
(Analog Wide)	(1)TEST CH: Center (2)Deviation meter filter LPF: 15kHz HPF: OFF (3)PTT ON	Deviation meter Oscilloscope		ANT		FPU	3.0kHz	±50Hz

**\*Note 3:**

Only 1 DQT Balance needs to be adjusted (either DQT Balance 1 or DQT Balance 2).

**\*Note 4:**

For the adjustment of the Maximum Deviation (NXDN Very Narrow) and CW ID Deviation (NXDN Very Narrow).

After adjusting the DQT Balance and Maximum Deviation (Analog), it is necessary to adjust the Maximum Deviation (NXDN Very Narrow) and CW ID Deviation (NXDN Very Narrow).

#### 4.7 Receiver Section

Item	Condition	Measurement			Adjustment			Specifications /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
1. RX Sensitivity (Semiautomatic)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -90dBm (7.08uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
*Note 5								
2. Open Squelch (Analog Narrow)	5 (1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) (K, M), -121dBm (0.2uV) (K2, K3, P, M2, M3) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(Analog Wide)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) (K, K2, P, M, M2, M3), -121dBm (0.2uV) (K3) AF Freq : 1kHz Mod Dev : ±3.0kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(NXDN Very Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -123dBm (0.158uV) AF Freq : 400Hz Mod Dev : ±1.1kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(NXDN Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -122dBm (0.178uV) AF Freq : 400Hz Mod Dev : ±2.2kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
3. Tight squelch (Analog Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -116dBm (0.35uV) (K, M, K3), -117dBm (0.32uV) (K2, P, M2, M3) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	

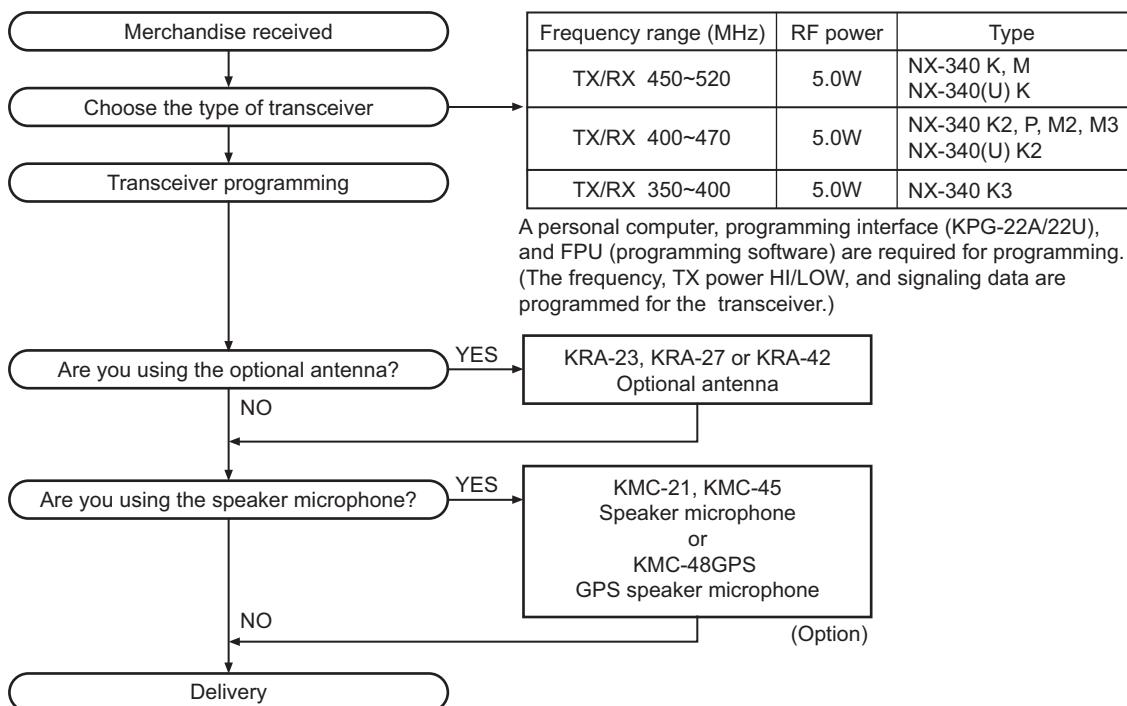
Item	Condition	Measurement			Adjustment			Specifications /Remarks
		Test-equipment	Unit	Terminal	Unit	Parts	Method	
(Analog Wide)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -116dBm (0.35uV) AF Freq : 1kHz Mod Dev : ±3.0kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
4. Low RSSI (Analog Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(Analog Wide)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) AF Freq : 1kHz Mod Dev : ±3.0kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(NXDN Very Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(NXDN Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -120dBm (0.22uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
5. High RSSI (Analog Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -80dBm (22.4uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(Analog Wide)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -80dBm (22.4uV) AF Freq : 1kHz Mod Dev : ±3.0kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
High RSSI (NXDN Very Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -80dBm (22.4uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	
(NXDN Narrow)	(1)TEST CH: Low, Center, High (3 point) (2)SSG output: -80dBm (22.4uV) AF Freq : 1kHz Mod Dev : ±1.5kHz	SSG Oscilloscope Audio Analyzer		ANT		FPU	Press [Start] (Auto tuning)	

**\*Note 5:**

(1) Only RX Sensitivity (Semiautomatic) needs to be adjusted (RX Sensitivity does not need to be adjusted again).

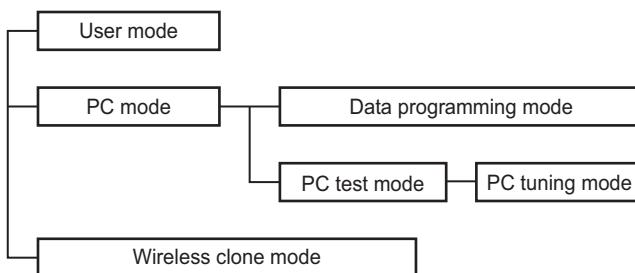
## SECTION 5 TROUBLESHOOTING

### 5.1 SYSTEM SET-UP



## 5.2 REALIGNMENT

### 5.2.1 Modes



Mode	Function
User mode	For normal use.
PC mode	Used to communication between the transceiver and PC.
Data programming mode	Used to read and write frequency data and other features to and from the transceiver.
PC test mode	Used to check the transceiver using the PC. This feature is included in the FPU.
Wireless clone mode	Used to transfer programming data from one transceiver to another.

### 5.2.2 How to Enter Each Mode

Mode	Operation
User mode	Power ON
PC mode	Received commands from PC
Wireless clone mode	[PTT] + [Side2] + Power ON (Two seconds)

### 5.2.3 PC Mode

#### 5.2.3.1 Preface

The transceiver is programmed by using a personal computer, a programming interface (KPG-22A/22U) and the FPU (programming software).

The programming software can be used with a PC. Figure 1 shows the setup of a PC for programming.

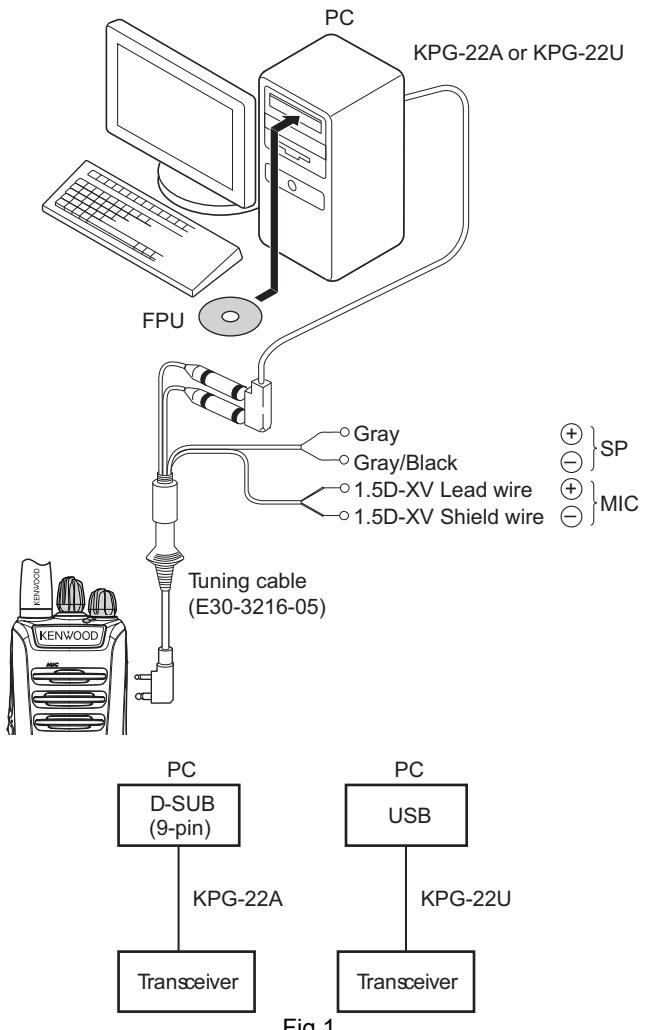


Fig.1

#### 5.2.3.2 Connection procedure

- (1) Connect the transceiver to the computer using the interface cable.

##### Note:

You must install the KPG-22U driver in the computer to use the USB programming interface cable (KPG-22U).

- (2) When the Power is switched on, you can immediately enter user mode. When the PC sends a command, the transceiver enters PC mode.

When data is transmitting from the transceiver, the red LED lights.

When data is being received by the transceiver, the green LED lights.

##### Note:

- The data stored in the computer must match the "Model Name and Model Type" when it is written into the EEPROM.
- Do not press the [PTT] key during data transmission or reception.

### 5.2.3.3 KPG-22A description (PC programming interface cable: Option)

The KPG-22A is required to interface the transceiver with the computer. It has a circuit in its D-sub connector (KPG-22A: 9-pin) case that converts the RS-232C logic level to the TTL level.

The KPG-22A connects the SP/MIC connector of the transceiver to the RS-232C serial port of the computer.

### 5.2.3.4 KPG-22U description (USB programming interface cable: Option)

The KPG-22U is a cable which connects to a USB port on a computer.

When using the KPG-22U, install the supplied CD-ROM (with driver software) in the computer. The KPG-22U driver runs under Windows XP, Vista, 7 or 8.

The latest version of the USB driver is available for download from the following URL:

<http://www.kenwood.com/usb-com/>

(This URL may change without notice.)

### 5.2.3.5 Programming software description

The FPU is the programming software for the transceiver supplied on a CD-ROM. This software runs under Windows XP, Vista, 7 or 8 on a PC. The software on this disk allows a user to program the transceiver via the Programming interface cable (KPG-22A/22U).

- Use the FPU that matches the market when you first set the market code and model name/frequency data to the service unit. A unit set by mistake cannot be restored.
- List of FPU for transceiver

Model	Type	FPU
NX-340	K, K2, K3, P, M, M2, M3	KPG-169D
NX-340(U)	K, K2	KPG-170D

### 5.2.3.6 Programming with a PC

If data is transferred to the transceiver from a PC with the FPU, the data for each set can be modified.

Data can be programmed into the EEPROM in RS-232C format via the SP/MIC jack.

In this mode, the PTT line operate as TXD and RXD data lines, respectively.

## 5.2.4 Wireless Clone Mode

### 5.2.4.1 Outline

“Wireless Clone Mode” copies the transceiver data to another transceiver.

The dealer can copy the transceiver data to another transceiver even without the use of a personal computer.

### 5.2.4.2 Example

The transceiver can copy the programming data to one or more transceivers via RF communication.

The clone source and clone target(s) must be in wireless clone mode.

### 5.2.4.3 Operation

- (1) To switch the clone target(s) to Wireless Clone mode, press and hold the [PTT] and [Side2] keys while turning the transceiver power ON.
- (2) Wait for 2 seconds. The LED will light orange and the transceiver will announce “Clone”.

- (3) Select a channel table number using the Side1 (increment channel table) and Side2 (decrement channel table) keys.
- (4) To switch the clone source to wireless clone mode, press and hold the [PTT] and [Side2] keys while turning the transceiver power ON.
- (5) Wait for 2 seconds. The LED will light orange and the transceiver will announce “Clone”.
- (6) Select the same channel table number as the clone target(s).
- (7) Press [PTT] on the clone source to begin data transmission.  
When the clone target starts to receive data, the LED will light green.  
When the clone source finishes sending data, a “confirmation” tone will sound.  
If data transmission fails while cloning, an “error” tone will sound from the target unit.
- (8) If the cloning fails, no data will be available in the target unit when it is returned to User mode.
- (9) When the cloning is successful, the target unit’s “Scan” and “Key lock” functions will return to their default values (Scan = OFF, Key lock = OFF).

#### Note:

- The dealer can clone data to two or more transceivers by repeating the above procedures.
- If the transceiver’s wireless clone Mode is configured as “Disabled”, it cannot enter Clone mode.
- The table shown in the next page covers the frequencies used for wireless cloning.
- Wireless clone mode cannot be entered in battery low state.
- A unit cannot be a “Source Unit” if it is not programmed. If [PTT] is pressed, an “error” tone will sound.
- The language available is only English.
- Once a unit is set to be the source, it cannot be a target after the data has been transmitted. This protects the data in the source unit.
- Electronic interface may cause a failure in data transfer during Wireless Cloning, such as when waveforms or electromagnetic fields are being performed at the workbench.
- **Wireless clone mode can be used ONLY by authorized service personnel.**
- **The wireless clone mode setting must be configured as “Disable” before being delivered to the end-user.**
- **To clone, replace the antenna from both the source transceiver and the target transceiver with a dummy load.**
- **The transmit output power is automatically set to Low in clone mode.**
- **Wireless clone mode does not function if Read Authorization Password or Overwrite Password has been configured in Data Password.**

• Clone frequency table

No.	K, M Operating frequency 450~520 (MHz)	K2, P, M2, M3 Operating frequency 400~470 (MHz)	K3 Operating frequency 350~400 (MHz)
1	450.000	400.000	350.000
2	452.000	402.000	351.000
3	454.000	404.000	352.000
4	456.000	405.000	353.000
5	458.000	408.000	354.000
6	460.000	410.000	355.000
7	462.000	412.000	356.000
8	464.000	414.000	357.000
9	466.000	416.000	358.000
10	469.000	418.000	359.000
11	470.000	419.000	360.000
12	472.000	422.000	361.000
13	474.000	424.000	362.000
14	476.000	426.000	363.000
15	478.000	428.000	364.000
16	480.500	430.000	365.000
17	482.000	432.000	366.000
18	484.000	434.000	367.000
19	486.000	436.000	368.000
20	488.000	438.000	369.000

### 5.3 Replacing TX-RX Unit

#### ■ TX-RX unit Information

Model Name	Original TX-RX unit Number	For Service TX-RX unit Number
NX-340 K	X57-8510-10	XC2-0100-10
NX-340 K2	X57-8510-11	XC2-0100-12
NX-340 K3	X57-8510-12	XC2-0100-14
NX-340 P	X57-8510-11	XC2-0101-01
NX-340 M	X57-8510-10	XC2-0100-21
NX-340 M2	X57-8510-11	XC2-0100-22
NX-340 M3	X57-8510-11	XC2-0100-23
NX-340U K	X57-8510-10	XC2-0100-11
NX-340U K2	X57-8510-11	XC2-0100-13

#### ■ Supplied Accessories of "Service TX-RX unit"

Item (Including Parts Number)	Quantity
TX-RX Unit (XC2-010)	1
Model Name Plate	1

#### ■ "Service TX-RX unit" Data

The following data is written on the service TX-RX unit:

Data Type	Description
Firmware	NX-240/340 Firmware
FPU Data (PC programming mode)	XC2-010 (NX-340/340U) K type data. XC2-010 (NX-340) M type data. XC2-010 (NX-340) P type data.
KENWOOD ESN	Model name: NX-340 or NX-340U Type: K, M or P The same number as the Model Name Plate label is written.
NXDN ESN	The same number as the Model Name Plate label is written.

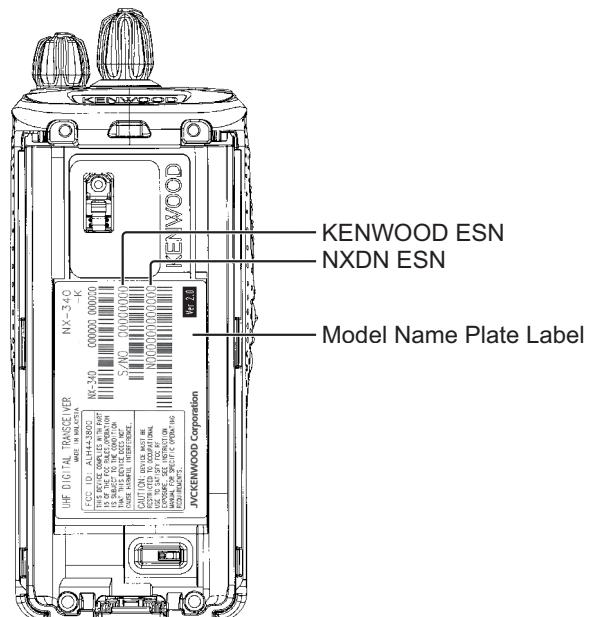
#### ■ After Changing the PCB

- (1) Using the KPG-169D (NX-340) / KPG-170D (NX-340U), select your desired item (Model Name and Frequency) from the Model> Product Information menu, then use Program> Write Data to the Transceiver to write the FPU data (PC Programming mode). When writing to the transceiver, a Warning Message, corresponding to the item selected, appears. Click [OK] to continue writing the data.
- (2) Enter Program> Test Mode, then adjust the various adjustment data (PC Test Mode) as described in the "SECTION 4 ADJUSTMENT".
- (3) Attach the new labels corresponding to the new printed circuit board. (Refer to the images below for label placement.)
- (4) If necessary, write the FPU data used by the customer with the KPG-169D (NX-340) / KPG-170D (NX-340U).

#### Note:

- When a new printed circuit board is used, the KENWOOD ESN changes, as does the Transceiver Information display of the KPG-169D (NX-340) / KPG-170D (NX-340U), but this does not have any effect on the operation of the transceiver.
- If changing to the original ESN, please contact our service center.

#### ■ Model Name Plate Label Layout



## 5.4 TERMINAL FUNCTION

### 5.4.1 TX-RX unit (X57-8510-XX)

Pin No.	Name	I/O	Function
<b>CN600</b>			
1	VOLOUT	O	Volume output to audio amplifier
2	VOLIN	I	Volume level input for audio control
3	SB	I	Power input after power switch
4	SB	I	Connect to pin 3
5	B	O	Power output after passing through the fuse
6	B	O	Connect to pin 5
7	VOLGND	-	GND for volume level
8	EN2	I	Rotary switch input
9	EN4	I	Rotary switch input
10	GND	-	GND
11	EN3	I	Rotary switch input
12	EN1	I	Rotary switch input

### 5.4.2 SP/MIC Connector Specification

Pin No.	Name	I/O	Signal Type	Function
1	PTT/RXD	I	Digital	PTT/RXD input
2	MICIN	I	Analog	External MIC input
3	MICO	O	Analog	Internal MIC output
4	OPTDET	I	Digital	External option detection
5	50V	O	Power	DC 5V output
6	AE	-	GND	GND
7	TXD	O	Digital	TXD output
8	NC	-	-	No connection
9	NC	-	-	No connection
10	SPO	O	Analog	Internal audio output

## SCHEMATIC DIAGRAM

■ TX-RX UNIT (X57-8510-10 (NX-340\_K, NX-340(U)\_K, NX-340\_M), X57-8510-11 (NX-340\_K2, NX-340(U)\_K2, NX-340\_M2, NX-340\_M3, NX-340\_P), X57-8510-12 (NX-340\_K3))

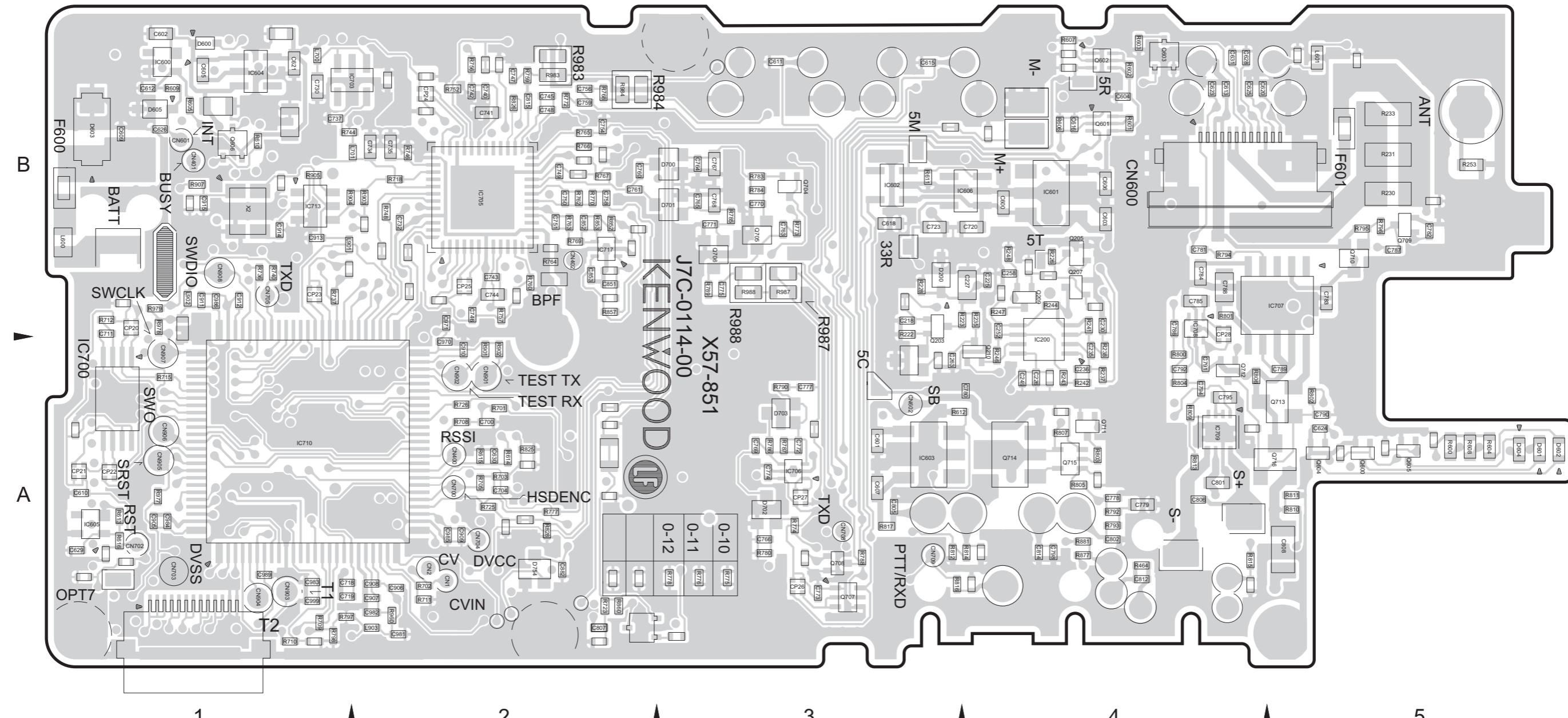
X57-8510-XX		C1N01	C1N02	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	R1	R2	R3	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R17	R18	R19	R20	R21	R22	R23	R24	R25	R26	R27	R28	R29	R30	R31	R32	R33	R34	R35	R36	R37	R38	R39	R40	R41	R42	R43	R44	R45	R46	R47	R48	R49	R50	R51	R52	R53	R54	R55	R56	R57	R58	R59	R60	R61	R62	R63	R64	R65	R66	R67	R68	R69	R70	R71	R72	R73	R74	R75	R76	R77	R78	R79	R80	R81	R82	R83	R84	R85	R86	R87	R88	R89	R90	R91	R92	R93	R94	R95	R96	R97	R98	R99	R100	R101	R102	R103	R104	R105	R106	R107	R108	R109	R110	R111	R112	R113	R114	R115	R116	R117	R118	R119	R120	R121	R122	R123	R124	R125	R126	R127	R128	R129	R130	R131	R132	R133	R134	R135	R136	R137	R138	R139	R140	R141	R142	R143	R144	R145	R146	R147	R148	R149	R150	R151	R152	R153	R154	R155	R156	R157	R158	R159	R160	R161	R162	R163	R164	R165	R166	R167	R168	R169	R170	R171	R172	R173	R174	R175	R176	R177	R178	R179	R180	R181	R182	R183	R184	R185	R186	R187	R188	R189	R190	R191	R192	R193	R194	R195	R196	R197	R198	R199	R200	R201	R202	R203	R204	R205	R206	R207	R208	R209	R210	R211	R212	R213	R214	R215	R216	R217	R218	R219	R220	R221	R222	R223	R224	R225	R226	R227	R228	R229	R230	R231	R232	R233	R234	R235	R236	R237	R238	R239	R240	R241	R242	R243	R244	R245	R246	R247	R248	R249	R250	R251	R252	R253	R254	R255	R256	R257	R258	R259	R260	R261	R262	R263	R264	R265	R266	R267	R268	R269	R270	R271	R272	R273	R274	R275	R276	R277	R278	R279	R280	R281	R282	R283	R284	R285	R286	R287	R288	R289	R290	R291	R292	R293	R294	R295	R296	R297	R298	R299	R300	R301	R302	R303	R304	R305	R306	R307	R308	R309	R310	R311	R312	R313	R314	R315	R316	R317	R318	R319	R320	R321	R322	R323	R324	R325	R326	R327	R328	R329	R330	R331	R332	R333	R334	R335	R336	R337	R338	R339	R340	R341	R342	R343	R344	R345	R346	R347	R348	R349	R350	R351	R352	R353	R354	R355	R356	R357	R358	R359	R360	R361	R362	R363	R364	R365	R366	R367	R368	R369	R370	R371	R372	R373	R374	R375	R376	R377	R378	R379	R380	R381	R382	R383	R384	R385	R386	R387	R388	R389	R390	R391	R392	R393	R394	R395	R396	R397	R398	R399	R400	R401	R402	R403	R404	R405	R406	R407	R408	R409	R410	R411	R412	R413	R414	R415	R416	R417	R418	R419	R420	R421	R422	R423	R424	R425	R426	R427	R428	R429	R430	R431	R432	R433	R434	R435	R436	R437	R438	R439	R440	R441	R442	R443	R444	R445	R446	R447	R448	R449	R450	R451	R452	R453	R454	R455	R456	R457	R458	R459	R460	R461	R462	R463	R464	R465	R466	R467	R468	R469	R470	R471	R472	R473	R474	R475	R476	R477	R478	R479	R480	R481	R482	R483	R484	R485	R486	R487	R488	R489	R490	R491	R492	R493	R494	R495	R496	R497	R498	R499	R500	R501	R502	R503	R504	R505	R506	R507	R508	R509	R510	R511	R512	R513	R514	R515	R516	R517	R518	R519	R520	R521	R522	R523	R524	R525	R526	R527	R528	R529	R530	R531	R532	R533	R534	R535	R536	R537	R538	R539	R540	R541	R542	R543	R544	R545	R546	R547	R548	R549	R550	R551	R552	R553	R554	R555	R556	R557	R558	R559	R560	R561	R562	R563	R564	R565	R566	R567	R568	R569	R570	R571	R572	R573	R574	R575	R576	R577	R578	R579	R580	R581	R582	R583	R584	R585	R586	R587	R588	R589	R590	R591	R592	R593	R594	R595	R596	R597	R598	R599	R600	R601	R602	R603	R604	R605	R606	R607	R608	R609	R610	R611	R612	R613	R614	R615	R616	R617	R618	R619	R620	R621	R622	R623	R624	R625	R626	R627	R628	R629	R630	R631	R632	R633	R634	R635	R636	R637	R638	R639	R640	R641	R642	R643	R644	R645	R646	R647	R648	R649	R650	R651	R652	R653	R654	R655	R656	R657	R658	R659	R660	R661	R662	R663	R664	R665	R666	R667	R668	R669	R670	R671	R672	R673	R674	R675	R676	R677	R678	R679	R680	R681	R682	R683	R684	R685	R686	R687	R688	R689	R690	R691	R692	R693	R694	R695	R696	R697	R698	R699	R700	R701	R702	R703	R704	R705	R706	R707	R708	R709	R710	R711	R712	R713	R714	R715	R716	R717	R718	R719	R720	R721	R722	R723	R724	R725	R726	R727	R728	R729	R730	R731	R732	R733	R734	R735	R736	R737	R738	R739	R740	R741	R742	R743	R744	R745	R746	R747	R748	R749	R750	R751	R752	R753	R754	R755	R756	R757	R758	R759	R760	R761	R762	R763	R764	R765	R766	R767	R768	R769	R770	R771	R772	R773	R774	R775	R776	R777	R778	R779	R780	R781	R782	R783	R784	R785	R786	R787	R788	R789	R790	R791	R792	R793	R794	R795	R796	R797	R798	R799	R800	R801	R802	R803	R804	R805	R806	R807	R808	R809	R810	R811	R812	R813	R814	R815	R816	R817	R818	R819	R820	R821	R822	R823	R824	R825	R826	R827	R828	R829	R830	R831	R832	R833	R834	R835	R836	R837	R838	R839	R840	R841	R842	R843	R844	R845	R846	R847	R848	R849	R850	R851	R852	R853	R854	R855	R856	R857	R858	R859	R860	R861	R862	R863	R864	R865	R866	R867	R868	R869	R870	R871	R872	R873	R874	R875	R876	R877	R878	R879	R880	R881	R882	R883	R884	R885	R886	R887	R888	R889	R890	R891	R892	R893	R894	R895	R896	R897	R898	R899	R900	R901	R902	R903	R904	R905	R906	R907	R908	R909	R910	R911	R912	R913	R914	R915	R916	R917	R918	R919	R920	R921	R922	R923	R924	R925	R926	R927	R928	R929	R930	R931	R932	R933	R934	R935	R936	R937	R938	R939	R940	R941	R942	R943	R944	R945	R946	R947	R948	R949	R950	R951

**MEMO**

# **PRINTED CIRCUIT BOARD**

■ TX-RX UNIT (X57-8510-10 (NX-340\_K, NX-340(U)\_K, NX-340\_M), X57-8510-11 (NX-340\_K2, NX-340(U)\_K2, NX-340\_M2, NX-340\_M3, NX-340\_P), X57-8510-12 (NX-340\_K3))

--- Component side view (J7C-0114-00) ---



#### ADDRESS TABLE OF BOARD PARTS

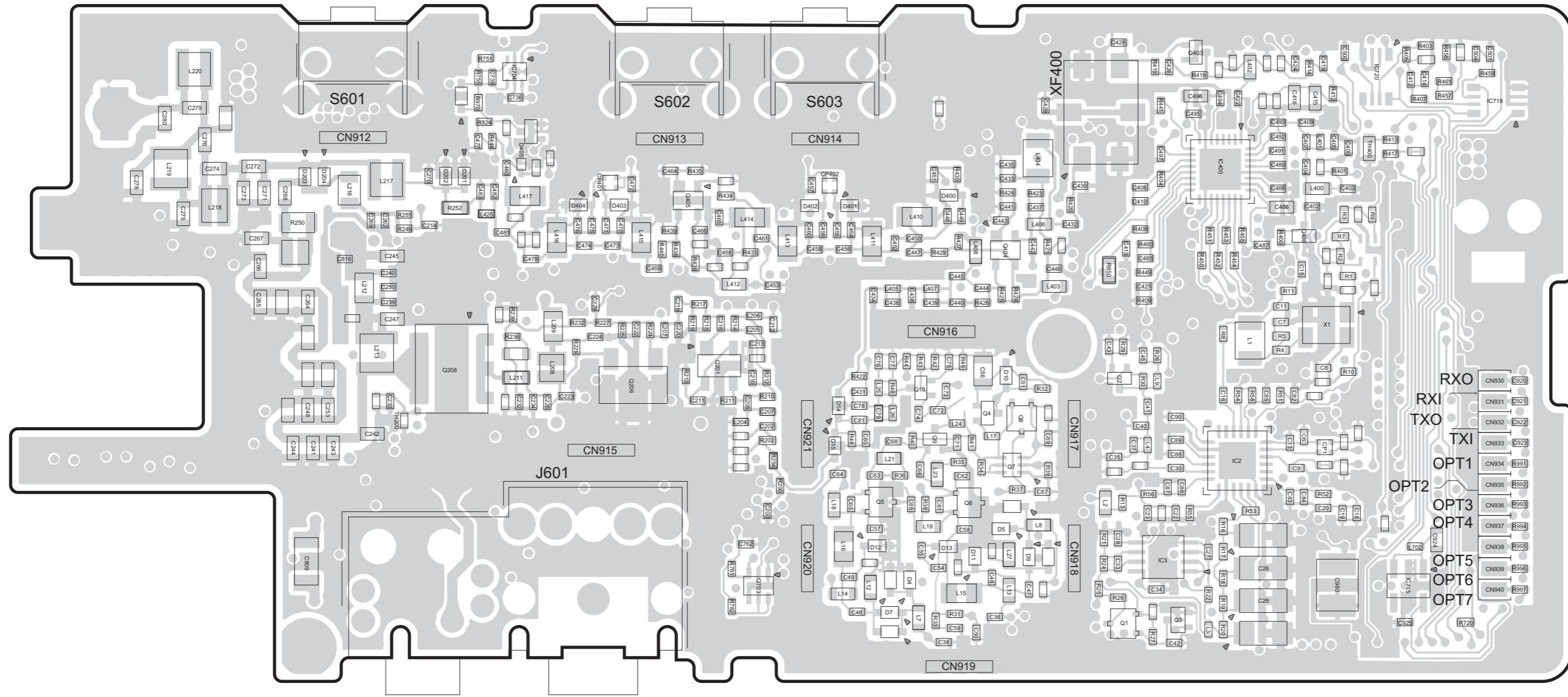
Each address may have an address error by one interval

Side A-1C Y ax X ax

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION						
IC		Q709	A- 5B	D702	A- 3A	R246	A- 4A	R614	A- 2A	R740	A- 1B	R773	A- 3B	R796	A- 5B	R817	A- 3A	R979	A- 1B	C601	A- 3A	C625	A- 4B	C741	A- 2B	C765	A- 3B	C785	A- 2B	C815	A- 2B	C982	A- 2A	CP28	A- 4B		
IC200	A- 4A	TRANSISTOR	Q710	A- 5B	D703	A- 3A	R247	A- 4B	R615	A- 2A	R744	A- 1B	R774	A- 3A	R797	A- 1A	R825	A- 2A	R983	A- 2B	C602	A- 1B	C626	A- 1B	C742	A- 2B	C766	A- 3A	C786	A- 4B	C851	A- 2B	C983	A- 1A	F600	A- 1B	
IC600	A- 1B	Q203	A- 3B	Q711	A- 4A	D754	A- 2A	R248	A- 4B	R616	A- 1A	R746	A- 2B	R775	A- 3A	R798	A- 1A	R826	A- 2B	R984	A- 2B	C603	A- 4B	C628	A- 4B	C743	A- 2B	C767	A- 3B	C787	A- 5B	C852	A- 2B	C984	A- 1A	F601	A- 5B
IC601	A- 4B	Q205	A- 4B	Q712	A- 4A	R253	A- 5B	R701	A- 2A	R748	A- 2B	R776	A- 3A	R800	A- 4A	R828	A- 2A	R987	A- 3B	C604	A- 4B	C629	A- 1A	C744	A- 2B	C768	A- 3B	C788	A- 4B	C853	A- 2B	C985	A- 2A	L600	A- 1B		
IC602	A- 3B	Q207	A- 4B	Q713	A- 5A	RESISTOR	R464	A- 4A	R702	A- 2A	R752	A- 2B	R777	A- 2A	R801	A- 4B	R852	A- 2B	R988	A- 3B	C605	A- 1B	C630	A- 2A	C745	A- 2B	C769	A- 3A	C789	A- 5A	C882	A- 2A	C986	A- 1B	L601	A- 5B	
IC603	A- 3A	Q209	A- 4B	Q714	A- 4A	R222	A- 3B	R600	A- 5A	R703	A- 2A	R756	A- 2B	R778	A- 3A	R802	A- 5A	R853	A- 2B	C606	A- 4B	C631	A- 4B	C746	A- 2B	C770	A- 3B	C790	A- 5A	C905	A- 1A	C989	A- 1A	L700	A- 1B		
IC604	A- 1B	Q210	A- 4A	Q715	A- 4A	R223	A- 4B	R601	A- 4B	R705	A- 2A	R757	A- 2B	R780	A- 3A	R803	A- 4A	R857	A- 2B	CAPACITOR	R607	A- 3A	C700	A- 2A	C747	A- 2B	C771	A- 3B	C791	A- 4A	C906	A- 2A	C999	A- 1A	L701	A- 2B	
IC605	A- 1A	Q600	A- 5A	Q716	A- 5A	R226	A- 4B	R602	A- 4B	R708	A- 2A	R759	A- 2B	R783	A- 3B	R804	A- 4A	R860	A- 2A	C218	A- 3B	C609	A- 1B	C704	A- 2A	C748	A- 2B	C772	A- 3A	C792	A- 4A	C907	A- 2A	L901	A- 1B		
IC606	A- 4B	Q601	A- 4B	R228	A- 3B	R603	A- 4B	R709	A- 1A	R760	A- 2B	R784	A- 3B	R805	A- 4A	R877	A- 4A	C225	A- 4B	C610	A- 1A	C711	A- 1B	C749	A- 2B	C773	A- 3A	C794	A- 4A	C908	A- 2A	OTHER	L902	A- 1B			
IC700	A- 1A	Q602	A- 4B	DIODE	R230	A- 5B	R604	A- 5A	R710	A- 1A	R762	A- 2B	R785	A- 3B	R806	A- 4A	R881	A- 4A	C226	A- 4A	C611	A- 3B	C718	A- 1A	C750	A- 2B	C774	A- 3A	C795	A- 4A	C909	A- 2A	X2	A- 1B			
IC703	A- 2B	Q603	A- 4B	D200	A- 3B	R231	A- 5B	R605	A- 1B	R711	A- 2A	R763	A- 2B	R786	A- 3A	R807	A- 4A	R901	A- 2A	C227	A- 4B	C612	A- 1B	C719	A- 1A	C751	A- 2B	C775	A- 3B	C798	A- 4A	C910	A- 2A	CN600	A- 4B		
IC705	A- 2B	Q604	A- 5A	D600	A- 1B	R233	A- 5B	R606	A- 4B	R712	A- 1B	R764	A- 2B	R787	A- 3A	R809	A- 4A	R902	A- 2A	C230	A- 4B	C613	A- 4B	C720	A- 4B	C754	A- 2B	C777	A- 3A	C801	A- 4A	C911	A- 1B	CP20	A- 1B		
IC706	A- 3A	Q605	A- 5A	D601	A- 5A	R235	A- 4B	R607	A- 4B	R715	A- 1A	R765	A- 2B	R788	A- 3A	R810	A- 5A	R903	A- 2B	C235	A- 4A	C615	A- 3B	C723	A- 3B	C756	A- 2B	C778	A- 4A	C802	A- 4A	C912	A- 1B	CP21	A- 1A		
IC707	A- 5B	Q606	A- 1B	D602	A- 5A	R237	A- 4A	R608	A- 5A	R718	A- 2B	R766	A- 2B	R789	A- 3B	R811	A- 5A	R904	A- 1B	C236	A- 4A	C616	A- 4B	C730	A- 1B	C758	A- 2B	C779	A- 4A	C805	A- 3A	C913	A- 1B	CP22	A- 1A		
IC708	A- 4B	Q704	A- 3B	D603	A- 1B	R238	A- 4A	R609	A- 1B	R723	A- 2A	R767	A- 2B	R790	A- 3A	R812	A- 3A	R905	A- 1B	C249	A- 4A	C618	A- 3B	C732	A- 2B	C759	A- 2B	C780	A- 4A	C806	A- 4A	C914	A- 1B	CP23	A- 1B		
IC709	A- 4A	Q705	A- 3B	D604	A- 5A	R241	A- 4B	R610	A- 1B	R725	A- 2A	R768	A- 2B	R792	A- 4A	R813	A- 4A	R907	A- 1B	C252	A- 4B	C620	A- 4B	C734	A- 2B	C760	A- 2B	C781	A- 4B	C807	A- 2A	C915	A- 1B	CP24	A- 2B		
IC710	A- 1A	Q706	A- 3B	D605	A- 1B	R242	A- 4A	R611	A- 3B	R726	A- 2A	R769	A- 2B	R793	A- 4A	R814	A- 4A	R960	A- 2A	C258	A- 4B	C621	A- 1B	C735	A- 2B	C761	A- 2B	C782	A- 5B	C808	A- 5A	C970	A- 2A	CP25	A- 2B		
IC713	A- 1B	Q707	A- 3A	D700	A- 3B	R243	A- 4A	R612	A- 3A	R736	A- 1B	R770	A- 2B	R794	A- 4B	R815	A- 4A	R977	A- 1A	C263	A- 3A	C623	A- 4B	C737	A- 1B	C763	A- 3B	C783	A- 4A	C812	A- 4A	C971	A- 2B	CP26	A- 3A		
IC717	A- 2B	Q708	A- 3A	D701	A- 3B	R244	A- 4B	R613	A- 1A	R737	A- 1B	R772	A- 2B	R795	A- 5B	R816	A- 3A	R978	A- 1B	C600	A- 4B	C624	A- 5A	C740	A- 2B	C764	A- 3B	C784	A- 4B	C814	A- 4A	C981	A- 2A	CP27	A- 3A		

■ TX-RX UNIT (X57-8510-10(NX-340\_K, NX-340(U)\_K, NX-340\_M), X57-8510-11(NX-340\_K2,NX-340(U)\_K2,NX-340\_M2,NX-340\_M3,NX-340\_P), X57-8510-12(NX-340\_K3))

--- Foil side view (J7C-0114-00) ---



5

4

3

2

1

## ● ADDRESS TABLE OF BOARD PARTS

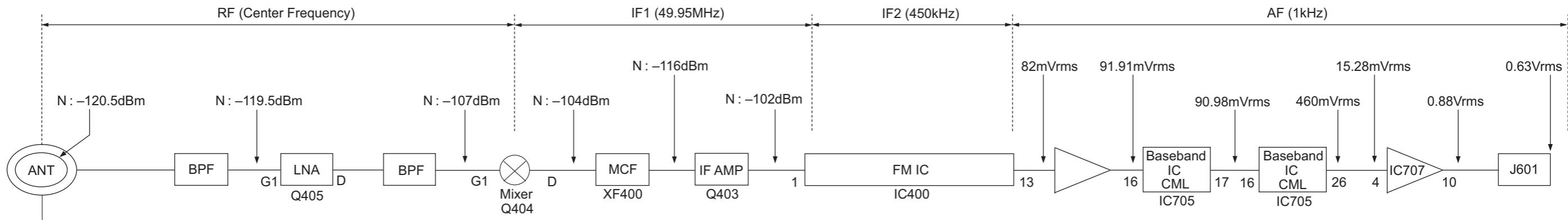
Each address may have an address error by one interval.

A-1C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION				
<b>IC</b>		R3	B- 1B	R34	B- 2A	R213	B- 3A	R413	B- 1B	R450	B- 2B	C40	B- 2A	C69	B- 2A	C211	B- 3A	C262	B- 4B	C412	B- 1B	C444	B- 2B	C473	B- 4B		
IC2	B- 2A	<b>DIODE</b>		R4	B- 1A	R35	B- 2A	R214	B- 3B	R414	B- 1B	R451	B- 2B	<b>CAPACITOR</b>		C41	B- 2A	C212	B- 3B	C264	B- 5B	C413	B- 2B	C445	B- 2B	C474	B- 4B
IC3	B- 2A	D4	B- 3A	R5	B- 1B	R36	B- 3A	R215	B- 3B	R417	B- 1B	R452	B- 2B	C6	B- 1A	C42	B- 2A	C72	B- 3A	C213	B- 5B	C414	B- 1B	C446	B- 2B	C475	B- 4B
IC400	B- 2B	D5	B- 2A	R7	B- 1B	R37	B- 2A	R217	B- 3B	R418	B- 2B	R453	B- 2B	C7	B- 1B	C43	B- 2A	C73	B- 3A	C214	B- 4B	C266	B- 5B	C415	B- 1B	C447	B- 3B
IC704	B- 4B	D7	B- 3A	R8	B- 2B	R38	B- 3A	R219	B- 3B	R419	B- 2B	R454	B- 2B	C8	B- 1A	C45	B- 2A	C74	B- 3A	C216	B- 3B	C267	B- 5B	C416	B- 1B	C448	B- 2B
IC715	B- 1A	D9	B- 2A	R9	B- 1B	R39	B- 2A	R224	B- 3B	R420	B- 2B	R455	B- 2B	C9	B- 1A	C46	B- 3A	C75	B- 2A	C219	B- 3B	C268	B- 5B	C419	B- 1B	C449	B- 2B
	D10	B- 2A	R10	B- 1A	R40	B- 3A	R225	B- 4B	R421	B- 2B	R457	B- 1B	C11	B- 1B	C47	B- 2A	C76	B- 3A	C220	B- 3B	C269	B- 4B	C421	B- 2B	C450	B- 3B	
<b>TRANSISTOR</b>		D11	B- 2A	R11	B- 1B	R41	B- 2A	R227	B- 4B	R422	B- 3A	R458	B- 1B	C13	B- 1A	C48	B- 2A	C77	B- 3A	C222	B- 3B	C270	B- 4B	C422	B- 2B	C451	B- 3B
Q1	B- 2A	D12	B- 3A	R13	B- 2A	R42	B- 3A	R229	B- 4A	R423	B- 2B	R459	B- 1B	C15	B- 1B	C49	B- 3A	C78	B- 3A	C223	B- 4A	C271	B- 5B	C424	B- 1B	C452	B- 3B
Q2	B- 2A	D13	B- 2A	R16	B- 2A	R43	B- 3A	R232	B- 4B	R424	B- 2B	R460	B- 2B	C16	B- 2A	C50	B- 2A	C79	B- 3A	C224	B- 4B	C272	B- 5B	C426	B- 2B	C453	B- 3B
Q3	B- 2A	D14	B- 3A	R17	B- 2A	R44	B- 3A	R236	B- 4B	R425	B- 2B	R461	B- 1B	C18	B- 1A	C51	B- 2A	C80	B- 3A	C228	B- 4A	C273	B- 5B	C428	B- 2B	C454	B- 3B
Q4	B- 2A	D15	B- 3A	R18	B- 2A	R45	B- 2A	R239	B- 4B	R426	B- 2B	R720	B- 1A	C19	B- 1A	C54	B- 3A	C81	B- 3A	C229	B- 4B	C274	B- 5B	C429	B- 2B	C455	B- 3B
Q5	B- 3A	D201	B- 4B	R19	B- 2A	R46	B- 3A	R249	B- 4B	R427	B- 2B	R751	B- 4B	C20	B- 1A	C55	B- 3A	C82	B- 1A	C232	B- 4A	C275	B- 5B	C430	B- 2B	C456	B- 3B
Q6	B- 2A	D202	B- 4B	R20	B- 2A	R48	B- 3A	R250	B- 5B	R428	B- 2B	R755	B- 4B	C22	B- 2A	C56	B- 2A	C83	B- 1A	C233	B- 4A	C276	B- 5B	C431	B- 3A	C457	B- 3B
Q7	B- 2A	D203	B- 5B	R21	B- 2A	R51	B- 1A	R251	B- 4B	R429	B- 3B	R781	B- 3A	C23	B- 2A	C57	B- 3A	C84	B- 1A	C234	B- 4A	C278	B- 5B	C432	B- 2B	C458	B- 3B
Q8	B- 2A	D204	B- 4B	R22	B- 2A	R52	B- 1A	R252	B- 4B	R430	B- 2B	R782	B- 3A	C26	B- 1A	C58	B- 2A	C85	B- 1A	C239	B- 4B	C279	B- 5B	C433	B- 2B	C459	B- 3B
Q9	B- 3A	D400	B- 2B	R24	B- 2A	R53	B- 2A	R254	B- 3A	R433	B- 3B	R824	B- 4B	C27	B- 2A	C59	B- 2A	C86	B- 2A	C240	B- 4B	C280	B- 5B	C434	B- 3B	C460	B- 3B
Q10	B- 3A	D401	B- 3B	R25	B- 2A	R54	B- 2A	R400	B- 1B	R34	B- 3B	R850	B- 2B	C28	B- 2A	C60	B- 3A	C87	B- 2A	C241	B- 5A	C400	B- 1B	C435	B- 2B	C461	B- 3B
Q201	B- 3A	D402	B- 3B	R26	B- 2A	R55	B- 2A	R401	B- 1B	R435	B- 3B	R970	B- 4B	C29	B- 1A	C61	B- 3A	C88	B- 2A	C242	B- 4A	C402	B- 1B	C436	B- 3B	C464	B- 2B
Q206	B- 4A	D403	B- 4B	R27	B- 2A	R56	B- 2A	R403	B- 1B	R436	B- 3B	R991	B- 1A	C30	B- 2A	C62	B- 2A	C89	B- 2A	C243	B- 4A	C403	B- 1B	C437	B- 2B	C465	B- 3B
Q208	B- 4A	D404	B- 4B	R28	B- 2A	R58	B- 2A	R404	B- 2B	R438	B- 3B	R992	B- 1A	C33	B- 2A	C63	B- 3A	C90	B- 2A	C244	B- 5A	C404	B- 1B	C438	B- 3B	C466	B- 3B
Q400	B- 1B	D405	B- 4B	R29	B- 2A	R200	B- 3A	R405	B- 1B	R439	B- 3B	R993	B- 1A	C34	B- 2A	C64	B- 3A	C200	B- 3A	C245	B- 4B	C405	B- 1B	C439	B- 3B	C468	B- 3B
Q403	B- 2B			R30	B- 2A	R202	B- 3A	R407	B- 1B	R440	B- 3B	R994	B- 1A	C35	B- 2A	C65	B- 3A	C202	B- 3A	C247	B- 4B	C406	B- 2B	C440	B- 3B	C469	B- 3B
Q404	B- 2B	<b>RESISTOR</b>		R31	B- 2A	R210	B- 3A	R408	B- 2B	R441	B- 2B	R995	B- 1A	C36	B- 2A	C66	B- 3A	C207	B- 3A	C248	B- 5A	C407	B- 1B	C441	B- 2B	C470	B- 4B
Q405	B- 3B	R1	B- 1B	R32	B- 2A	R211	B- 3A	R409	B- 2B	R444	B- 4B	R996	B- 1A	C37	B- 2A	C67	B- 2A	C208	B- 3A	C250	B- 4B	C409	B- 1B	C442	B- 2B	C471	B- 4B
Q703	B- 3A	R2	B- 1B	R33	B- 3A	R212	B- 3A	R412	B- 1B	R449	B- 2B	R997	B- 1A	C38	B- 3A	C68	B- 3A	C210	B- 3A	C253	B- 4A	C410	B- 2B	C443	B- 2B	C472	B- 4B

# LEVEL DIAGRAM

## ■ Receiver Section



To make measurements in the RF section, connect the RF level meter.

In the RF section, use a 0.01 $\mu$ F coupling capacitor.

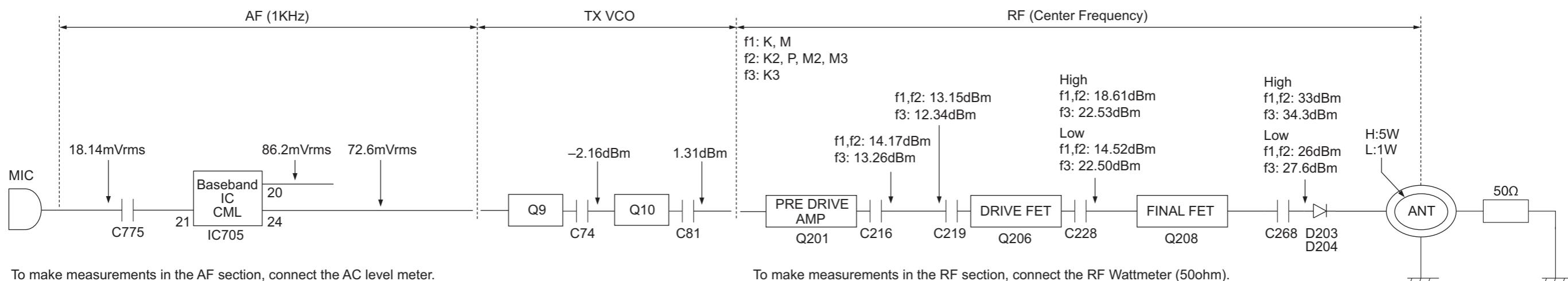
(The display shows the SSG input value required to obtain 12dB SINAD.)

To make measurement in the AF section, connect the AC level meter.

(ANT input: -53dBm, 1kHz FM, 1.5kHz Dev (Narrow).)

The AF output level is adjusted for a 0.6Vrms/8ohm by the Volume knob.

## ■ Transmitter Section



To make measurements in the AF section, connect the AC level meter.

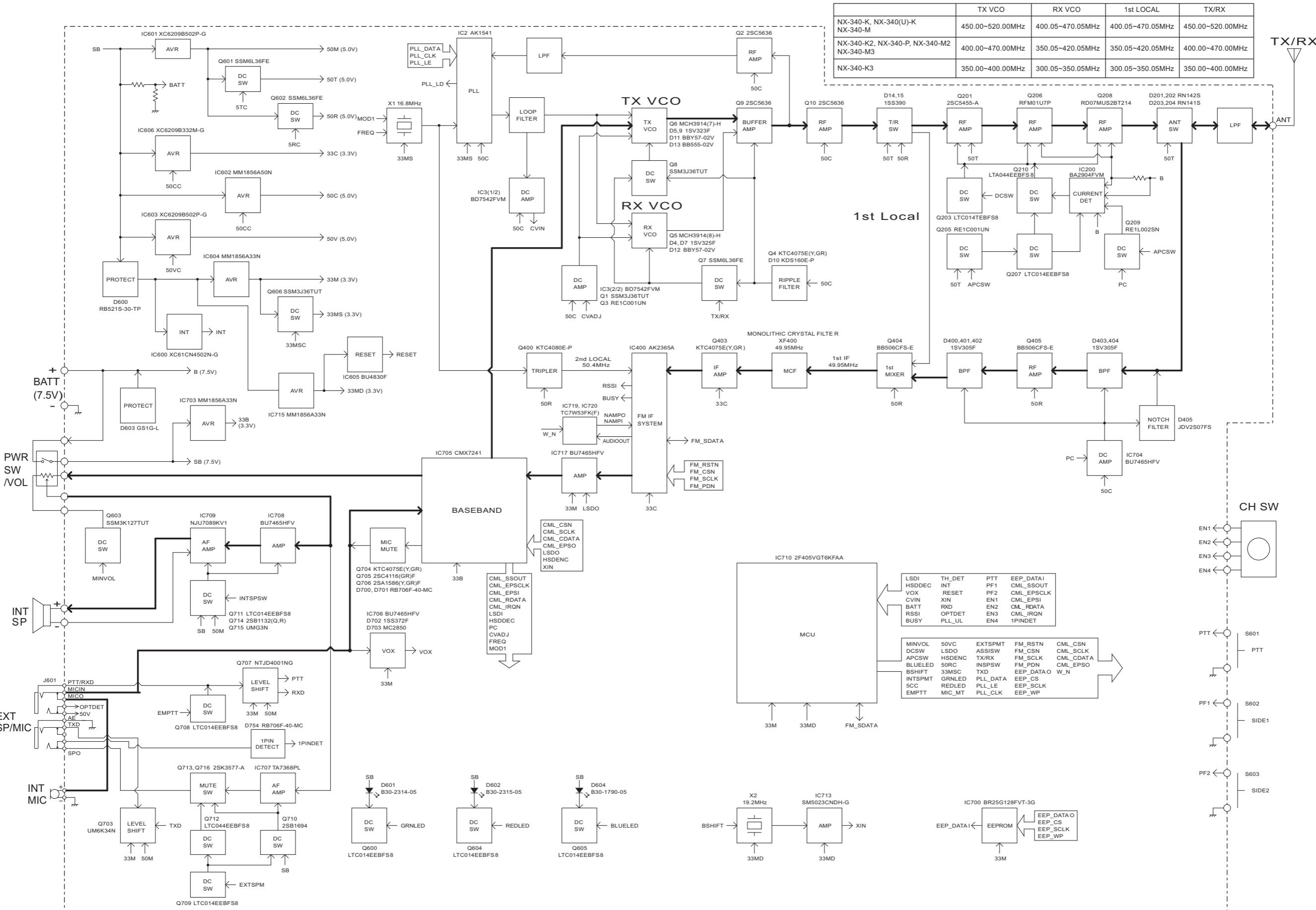
AG is set so that MIC input becomes 1.5kHz (Narrow) DEV at 1kHz MOD.

To make measurements in the RF section, connect the RF Wattmeter (50ohm).

In the RF section, use a 270pF coupling capacitor.

# BLOCK DIAGRAM

## ■ TX-RX UNIT (X57-8510-10 (NX-340\_K, NX-340(U)\_K, NX-340\_M), X57-8510-11 (NX-340\_K2, NX-340(U)\_K2, NX-340\_M2, NX-340\_M3, NX-340\_P), X57-8510-12 (NX-340\_K3))



# PARTS LIST

## [NX-340,NX-340(U)]

### \* SAFETY PRECAUTION

Parts identified by the ! symbol are critical for safety. Replace only with specified part numbers.

### \* BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine parts be used.

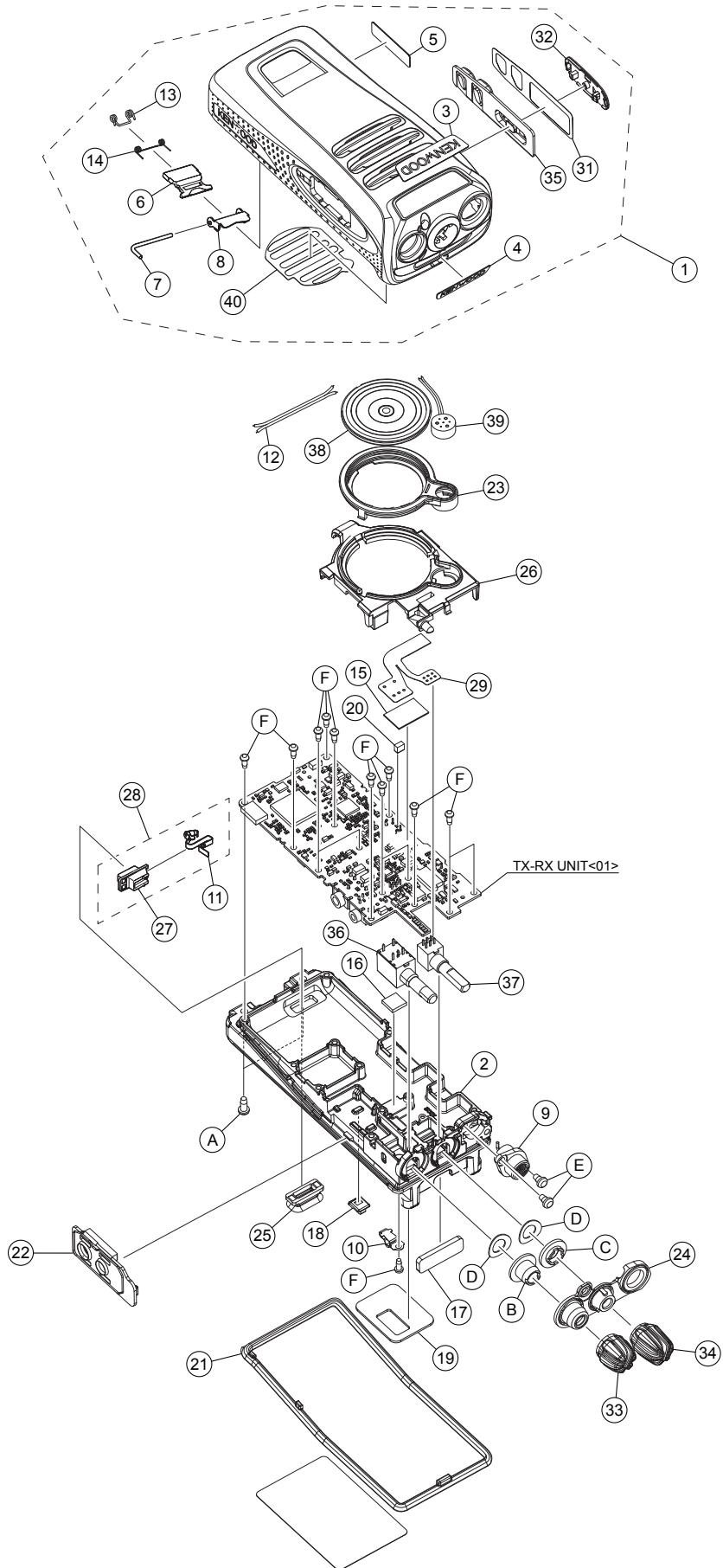
\* (x\_) in a description column shows the number of the used part.

### - Contents -

Exploded view of general assembly and parts list .....	3-2
Electrical parts list .....	3-4
Packing materials and accessories parts list .....	3-12

# Exploded view of general assembly and parts list

Block No.M1MM



## General assembly

Block No. [M][1][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	A02-4228-23	PLASTIC CABINET ASSY		
2	A1A-0029-00	CHASSIS		
3	B43-1693-04	BADGE(KENWOOD-FRONT)		
4	B43-1694-04	BADGE(KENWOOD)		
5	B43-1700-04	BADGE(NEXEDGE)		
6	D10-0649-03	LEVER		
7	D21-0863-04	SHAFT		
8	D32-0441-13	STOPPER		
9	E04-0477-15	RF COAXIAL RECEPTACLE(SMA)		
10	E23-1253-24	TERMINAL(GROUND)		
11	E23-1395-04	TERMINAL(+VE)		
12	E37-1288-05	PARALLEL CORD		
13	G01-4542-04	COIL SPRING(LEVER)		
14	G01-4543-14	COIL SPRING(STOPPER)		
15	G10-1348-04	FIBROUS SHEET(X57-IC)		
16	G11-4465-04	RUBBER SHEET(FET)		
17	G13-2009-04	CUSHION(CHASSIS)		
18	G13-2033-04	CUSHION(GROUND)		
19	G13-2034-24	CUSHION(CHASSIS)		
20	G13-2448-04	CUSHION(X57,SP)		
21	G53-1604-03	PACKING(CHASSIS)		
22	G53-2215-03	PACKING(SP/MIC)		
23	G53-2216-03	PACKING(SP)		
24	G53-2217-02	PACKING(VOLUME/SELECTOR)		
25	G53-2218-03	PACKING(+VE)		
26	J19-5578-22	HOLDER(SP)		
27	J19-5579-03	HOLDER(+VE)		
28	J19-5580-03	HOLDER ASSY		
29	J87-0054-05	FPC(VOLUME/SELECTOR)		
31	J99-0783-04	ADHESIVE SHEET(PTT)		
32	K29-9612-03	BUTTON KNOB(PTT)		
33	K29-9614-03	KNOB(VOLUME)		
34	K29-9615-03	KNOB(SELECTOR)		
35	K29-9625-03	BUTTON KNOB(PF)		
36	R31-0670-35	VARIABLE RESISTOR		
37	S60-0450-05	ROTARY SWITCH		
38	T0H-0011-00	SPEAKER		
39	T91-0659-15	MIC ELEMENT		
40	G10-1854-04	FIBROUS SHEET(SP)		
A	N09-6621-05	PAN HEAD SCREW	(x2)	
B	N14-0849-05	CIRCULAR NUT(VOLUME)		
C	N14-0869-05	CIRCULAR NUT(SELECTOR)		
D	N19-2214-05	SPECIAL WASHER(VOL/SELECTOR)	(x2)	
E	N30-2604-48	PAN HEAD MACHINE SCREW	(x2)	
F	N83-2005-48	PAN HEAD TAPTRITE SCREW	(x14)	
-	XC2-0100-10	SERVICE TX-RX UNIT		340_K
-	XC2-0100-11	SERVICE TX-RX UNIT		340_U_K
-	XC2-0100-12	SERVICE TX-RX UNIT		340_K2
-	XC2-0100-13	SERVICE TX-RX UNIT		340_U_K2
-	XC2-0100-14	SERVICE TX-RX UNIT		340_K3
-	XC2-0100-21	SERVICE TX-RX UNIT		340_M
-	XC2-0100-22	SERVICE TX-RX UNIT		340_M2
-	XC2-0100-23	SERVICE TX-RX UNIT		340_M3
-	XC2-0101-01	SERVICE TX-RX UNIT		340_P

# Electrical parts list

## TX-RX UNIT

**X57-8510-10(NX-340\_K,NX-340(U)\_K,NX-340\_M)**

**X57-8510-11(NX-340\_K2,NX-340(U)\_K2,NX-340\_M2,  
NX-340\_M3,NX-340\_P)**

**X57-8510-12(NX-340\_K3)**

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local
IC2	AK1541	IC(MOS-IC)		
IC3	BD7542FVM	IC(MOS-IC)		
IC200	BA2904FVM	IC(MOS-IC)		
IC400	AK2365A	IC		
IC600	XC61CN4502N-G	IC(MOS-IC)		
IC601	XC6209B502P-G	IC(MOS-IC)		
IC602	MM1856A50N	BI-POLAR IC		
IC603	XC6209B502P-G	IC(MOS-IC)		
IC604	MM1856A33N	BI-POLAR IC		
IC605	BU4830F	IC(MOS-IC)		
IC606	XC6209B332M-G	IC(MOS-IC)		
IC700	BR25G128FVT-3G	ROM IC		
IC703	MM1856A33N	BI-POLAR IC		
IC704	BU7465HFV	IC(MOS-IC)		
IC705	CMX7241	IC(MOS-IC)		
IC706	BU7465HFV	IC(MOS-IC)		
IC707	TA7368FG	IC(MOS-IC)		
IC708	BU7465HFV	IC(MOS-IC)		
IC709	NJU7089KV1	IC(MOS-IC)		
IC710	2F405VGT6KFAA	MICROPROCESSOR IC		
IC713	SM5023CNDH-G	IC(MOS-IC)		
IC715	MM1856A33N	BI-POLAR IC		
IC717	BU7465HFV	IC(MOS-IC)		
IC719	TC7W53FKF	IC(MOS-IC)		
IC720	TC7W53FKF	IC(MOS-IC)		
Q1	SSM3J36TUT	FET		
Q2	2SC5636	TRANSISTOR		
Q3	RE1C001UN	FET		
Q4	KTC4075E(Y,GR)	TRANSISTOR		
Q5	MCH3914-H/8/	FET		
Q6	MCH3914(7)-H	FET		
Q7	SSM6L36FE	FET		
Q8	SSM3J36TUT	FET		
Q9	2SC5636	TRANSISTOR		
Q10	2SC5636	TRANSISTOR		
Q201	2SC5455-A	TRANSISTOR		
Q203	LTC014TEBFS8	DIGI TRANSISTOR		
Q205	RE1C001UN	FET		
Q206	RFM01U7PF	FET		
Q207	LTC014EEBFS8	DIGI TRANSISTOR		
Q208	RD07MUS2BT214	FET		
Q209	RE1L002SN	FET		
Q210	LTA044EEBFS8	DIGI TRANSISTOR		
Q400	KTC4080E-P	TRANSISTOR		
Q403	KTC4075E(Y,GR)	TRANSISTOR		
Q404	BB506CFS-E	FET		
Q405	BB506CFS-E	FET		
Q600	LTC014EEBFS8	DIGI TRANSISTOR		
Q601	SSM6L36FE	FET		
Q602	SSM6L36FE	FET		
Q603	SSM3K127TUT	FET		
Q604	LTC014EEBFS8	DIGI TRANSISTOR		
Q605	LTC014EEBFS8	DIGI TRANSISTOR		
Q606	SSM3J36TUT	FET		
Q703	UM6K34N	FET		
Q704	KTC4075E(Y,GR)	TRANSISTOR		
Q705	2SC4116(GR)F	TRANSISTOR		
Q706	2SA1586(Y,GR)F	TRANSISTOR		
Q707	NTJD4001NG	FET		
Q708	LTC014EEBFS8	DIGI TRANSISTOR		
Q709	LTC014EEBFS8	DIGI TRANSISTOR		
Q710	2SB1694	TRANSISTOR		
Q711	LTC014EEBFS8	DIGI TRANSISTOR		
Q712	LTC044EEBFS8	DIGI TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
Q713	2SK3577-A	FET		
Q714	2SB1132(Q,R)	TRANSISTOR		
Q715	UMG3N	DIGITAL TRANSISTOR ARRAY		
Q716	2SK3577-A	FET		
D4	1SV325F	VARIABLE CAPACITANCE DIODE		
D5	1SV325F	VARIABLE CAPACITANCE DIODE	340_K,340_U_K,340_M	
D5	1SV323F	VARIABLE CAPACITANCE DIODE	340_K,340_U_K,340_K	
D7	1SV325F	VARIABLE CAPACITANCE DIODE	3,340_M2,340_M3,340_P	
D9	1SV325F	VARIABLE CAPACITANCE DIODE	340_K,340_U_K,340_M	
D9	1SV323F	VARIABLE CAPACITANCE DIODE	340_K,340_U_K,340_K	
D10	KDS160E-P	DIODE		
D11	BBY57-02V	VARIABLE CAPACITANCE DIODE		
D12	BBY57-02V	VARIABLE CAPACITANCE DIODE		
D13	BB555-02V	VARIABLE CAPACITANCE DIODE		
D14	1SS390	DIODE		
D15	1SS390	DIODE		
D200	UDZW5.1(B)	ZENER DIODE		
D201	RN142S	DIODE		
D202	RN142S	DIODE		
D203	RN141S	DIODE		
D204	RN141S	DIODE		
D400	1SV305F	VARIABLE CAPACITANCE DIODE		
D401	1SV305F	VARIABLE CAPACITANCE DIODE		
D402	1SV305F	VARIABLE CAPACITANCE DIODE		
D403	1SV305F	VARIABLE CAPACITANCE DIODE		
D404	1SV305F	VARIABLE CAPACITANCE DIODE		
D405	JDV2S07FS	VARIABLE CAPACITANCE DIODE		
D600	RB521S-30-TP	DIODE		
D601	B30-2314-05	LED(GREEN)		
D602	B30-2315-05	LED(RED)		
D603	GS1G-L	DIODE		
D604	B30-1790-05	LED(BLUE)		
D605	UDZW5.1(B)	ZENER DIODE		
D700	RB706F-40-MC	DIODE		
D701	RB706F-40-MC	DIODE		
D702	1SS372F	DIODE		
D703	MC2850	DIODE		
D754	RB706F-40-MC	DIODE		
C6	CC73HCH1H101JC	CAPACITOR	100PF J	
C7	CC73HCH1H100B	C CAPACITOR	10PF B	
C8	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C9	CC73HCH1H101JC	CAPACITOR	100PF J	
C11	CC73HCH1H100B	C CAPACITOR	10PF B	
C13	CC73HCH1H101JC	CAPACITOR	100PF J	
C15	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C16	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C18	CK73HB1H271K	C CAPACITOR	270PF K	
C19	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C20	CK73HBB1A104K	C CAPACITOR	0.1UF K	
C22	CK73HB1H271K	C CAPACITOR	270PF K	
C23	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C26	CS77MA1D1R5M TA E	CAPACITOR	1.5UF 35WV	
C27	CK73HB1H271K	C CAPACITOR	270PF K	
C28	CK73HB1H271K	C CAPACITOR	270PF K	
C29	CS77MA1V0R1M TA E	CAPACITOR	0.1UF 35WV	
C30	CK73HB1H271K	C CAPACITOR	270PF K	
C33	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C34	CK73HBB1A104K	C CAPACITOR	0.1UF K	
C35	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,340_U_K,340_K 2,340_U_K,340_M,340_P 0_M2,340_M3,340_P
C35	CC73HCH1H100B	C CAPACITOR	10PF B	340_K3
C36	CK73HB1A105K	C CAPACITOR	1.0UF K	340_K,340_U_K,340_M
C36	CK73HBB1A104K	C CAPACITOR	0.1UF K	340_K,340_U_K,340_K 2,340_M2,340_M3,340_P
C37	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340_U_K,340_K 2,340_U_K,340_M,340_P 0_M2,340_M3,340_P
C37	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K3
C38	CK73HB1H271K	C CAPACITOR	270PF K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C40	CC73HCH1H080B	C CAPACITOR	8.0PF B		C84	CK73HB1H103K	C CAPACITOR	0.01UF K	
C41	CC73HCH1H100C	C CAPACITOR	10PF C		C85	CK73HB1A473K	C CAPACITOR	0.047UF K	
C42	CK73HBB1A104K	C CAPACITOR	0.1UF K		C86	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C43	CK73HB1H271K	C CAPACITOR	270PF K		C87	CC73HCH1H101J	C CAPACITOR	100PF J	
C45	CK73HB1H271K	C CAPACITOR	270PF K		C88	CC73HCH1H101J	C CAPACITOR	100PF J	
C46	CC73HCH1H560JC	C CAPACITOR	56PF J	340_K,340U_K,340_M	C89	CK73HB1A224K	C CAPACITOR	0.22UF K	
C46	CC73HCH1H101JC	C CAPACITOR	100PF J	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	C90	CK73HB1A224K	C CAPACITOR	0.22UF K	
C47	CC73HCH1H220JC	C CAPACITOR	22PF J	340_K,340U_K,340_M	C200	CK73HB1H271K	C CAPACITOR	270PF K	
C47	CC73HCH1H200JC	C CAPACITOR	20PF J	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	C202	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,340U_K,340_M
C48	CC73HCH1H070B	C CAPACITOR	7.0PF B	340_K,340U_K,340_M	C202	CK73HB1H271K	C CAPACITOR	270PF K	340_K,340U_K,340_K 3,340_M2,340_M3,340_P
C48	CC73HCH1H4R5B	C CAPACITOR	4.5PF B	340_K,340U_K,2,34 0_M2,340_M3,340_P	C207	CC73HCH1H180JC	C CAPACITOR	18PF J	340_K,340U_K,340_M
C48	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K3	C207	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,2,34 0_M2,340_M3,340_P
C49	CC73HCH1H100C	C CAPACITOR	10PF C	340_K,340U_K,340_M	C207	CC73HCH1H070B	C CAPACITOR	7.0PF B	340_K3
C49	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,340U_K,2,34 0_M2,340_M3,340_P	C208	CC73HCH1H150JC	C CAPACITOR	15PF J	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M2,340_M3,340_P
C49	CC73HCH1H100B	C CAPACITOR	10PF B	340_K3	C208	CC73HCH1H200JC	C CAPACITOR	20PF J	340_K3
C50	CK73HB1H271K	C CAPACITOR	270PF K		C210	CK73HB1A224K	C CAPACITOR	0.22UF K	
C51	CK73HB1H271K	C CAPACITOR	270PF K		C211	CK73HB1H271K	C CAPACITOR	270PF K	
C54	CC73HCH1HR75B	C CAPACITOR	0.75PF B	340_K,340U_K,340_M	C212	CK73HB1H271K	C CAPACITOR	270PF K	
C54	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C213	CK73HB1H271K	C CAPACITOR	270PF K	
C55	CC73HCH1HR75B	C CAPACITOR	0.75PF B	340_K,340U_K,340_M	C214	CK73HB1H271K	C CAPACITOR	270PF K	
C55	CC73HCH1H010B	C CAPACITOR	1.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C216	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M2,340_M3,340_P
C56	CK73FB0J226M	C CAPACITOR	22UF M		C216	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K3
C57	CC73HCH1H4R5B	C CAPACITOR	4.5PF B		C218	CK73HBB1A104K	C CAPACITOR	0.1UF K	
C58	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,340_M	C219	CK73HB1H271K	C CAPACITOR	270PF K	
C58	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C220	CC73HCH1H100C	C CAPACITOR	10PF C	
C59	CK73HB1A105K	C CAPACITOR	1.0UF K		C222	CK73HB1H271K	C CAPACITOR	270PF K	
C60	CC73HCH1H060B	C CAPACITOR	6.0PF B	340_K,340U_K,340_M	C223	CC73HCH1H160JC	C CAPACITOR	16PF J	340_K,340U_K,340_M
C60	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C223	CC73HCH1H240JC	C CAPACITOR	24PF J	340_K,2,340U_K,2,34 0_M2,340_M3,340_P
C61	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,340_M	C223	CC73HCH1H100B	C CAPACITOR	10PF B	340_K3
C61	CC73HCH1H060B	C CAPACITOR	6.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C224	CK73HB1H271K	C CAPACITOR	270PF K	
C62	CC73HCH1H050B	C CAPACITOR	5.0PF B		C225	CK73HB1H271K	C CAPACITOR	270PF K	
C63	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,340_M	C226	CK73HB1H271K	C CAPACITOR	270PF K	
C63	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C227	CK73FB1A105K	C CAPACITOR	1.0UF K	340_K,340U_K,340_M
C64	CK73HB1H271K	C CAPACITOR	270PF K		C227	CK73FBB1A225K	C CAPACITOR	2.2UF K	340_K,2,340U_K,2,340_K 3,340_M2,340_M3,340_P
C65	CK73HB1H271K	C CAPACITOR	270PF K		C228	CC73HCH1H151JC	C CAPACITOR	150PF J	340_K,340U_K,340_M
C66	CC73HCH1H0R5B	C CAPACITOR	0.5PF B		C228	CK73HB1H271K	C CAPACITOR	270PF K	340_K,2,340U_K,2,34 0_M2,340_M3,340_P
C67	CK73HB1H271K	C CAPACITOR	270PF K		C228	CC73HCH1H101JC	C CAPACITOR	100PF J	340_K3
C68	CC73HCH1H0R3B	C CAPACITOR	0.3PF B	340_K,340U_K,340_M	C229	CK73HB1H271K	C CAPACITOR	270PF K	
C68	CC73HCH1H0R5B	C CAPACITOR	0.5PF B	340_K,2,340U_K,340_K 3,340_M2,340_M3,340_P	C230	CC73HCH1H470JC	C CAPACITOR	47PF J	
C69	CK73HB1H271K	C CAPACITOR	270PF K		C232	CK73HB1H271K	C CAPACITOR	270PF K	
C71	CK73HB1H271K	C CAPACITOR	270PF K		C233	CK73HB1H271K	C CAPACITOR	270PF K	
C72	CC73HCH1H330JC	C CAPACITOR	33PF J		C234	CC73HCH1H330JC	C CAPACITOR	33PF J	340_K,340U_K,340_M
C73	CC73HCH1H100B	C CAPACITOR	10PF B		C234	CC73HCH1H120JC	C CAPACITOR	12PF J	340_K,2,340U_K,2,34 0_M2,340_M3,340_P
C74	CC73HCH1H150JC	C CAPACITOR	15PF J		C234	CC73HCH1H240JC	C CAPACITOR	24PF J	340_K3
C75	CK73HB1H271K	C CAPACITOR	270PF K		C235	CC73HCH1H470JC	C CAPACITOR	47PF J	
C76	CK73HB1H271K	C CAPACITOR	270PF K		C236	CC73HCH1H100B	C CAPACITOR	10PF B	
C77	CK73HBB1A104K	C CAPACITOR	0.1UF K		C239	CC73HCH1H151JC	C CAPACITOR	150PF J	
C78	CC73HCH1H070B	C CAPACITOR	7.0PF B	340_K,340U_K,340_M	C240	CC73HCH1H151JC	C CAPACITOR	150PF J	
C78	CC73HCH1H130JC	C CAPACITOR	13PF J	340_K,2,340U_K,2,34 0_M2,340_M3,340_P	C241	CC73GCH1H180G	C CAPACITOR	18PF G	340_K,2,340U_K,2,340_K 3,340_M2,340_M3,340_P
C78	CC73HCH1H150JC	C CAPACITOR	15PF J	340_K3	C242	CC73GCH1H330J	C CAPACITOR	33PF J	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M2,340_M3,340_P
C79	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,340_M	C242	CC73GCH1H020B	C CAPACITOR	2.0PF B	340_K3
C79	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,2,340U_K,2,34 3,340_M2,340_M3,340_P	C243	CC73GCH1H180G	C CAPACITOR	18PF G	340_K,2,340U_K,2,34 0_M2,340_M3,340_P
C80	CC73HCH1H050B	C CAPACITOR	5.0PF B		C244	CC73GCH1H150G	C CAPACITOR	15PF G	
C81	CC73HCH1H150JC	C CAPACITOR	15PF J	340_K,340U_K,340_M	C245	CK73GBB1A105KC	C CAPACITOR	1.0UF K	
C81	CC73HCH1H100C	C CAPACITOR	10PF C	340_K,2,340U_K,2,34 0_M2,340_M3,340_P	C247	CK73GBB1C104K	C CAPACITOR	0.1UF K	
C81	CC73HCH1H180JC	C CAPACITOR	18PF J	340_K3	C248	CC73GCH1H150G	C CAPACITOR	15PF G	340_K,340U_K,340_M
C82	CC73HCH1H101JC	C CAPACITOR	100PF J		C248	CC73GCH1H180G	C CAPACITOR	18PF G	340_K3
C83	CC73HCH1H101JC	C CAPACITOR	100PF J		C249	CK73HBB1H471KC	C CAPACITOR	470PF K	
					C250	CK73HBB1E103K	C CAPACITOR	0.01UF K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C252	CK73HB1H271K	C CAPACITOR	270PF K		C426	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C253	CC73GCH1H130J	C CAPACITOR	13PF J	340_K,340U_K,34 0_M,340_M,340_P	C428	CC73HCH1H020B	C CAPACITOR	2.0PF B	
C258	CK73HB1H271K	C CAPACITOR	270PF K		C429	CC73HCH1H100C	C CAPACITOR	10PF C	340_K,340U_K,340_M
C262	CK73HBB1A104K	C CAPACITOR	0.1UF K		C429	CC73HCH1H090B	C CAPACITOR	9.0PF B	340_K,340U_K,34 0_M,340_M,340_P
C263	CK73HB1H271K	C CAPACITOR	270PF K		C429	CC73HCH1H110J	C CAPACITOR	11PF J	340_K3
C264	CC73GCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,34 0_M,340_M,340_P	C430	CC73HCH1H020B	C CAPACITOR	2.0PF B	340_K,340U_K,34 0_K3,340_M
C265	CC73GCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,34 0_M,340_M,340_P	C430	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,34 0_M,340_M,340_P
C265	CC73GCH1H080B	C CAPACITOR	8.0PF B	340_K3	C431	CK73HB1H271K	C CAPACITOR	270PF K	
C266	CC73GCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,34 0_M,340_M,340_P	C432	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C266	CC73GCH1H060B	C CAPACITOR	6.0PF B	340_K3	C433	CK73HB1H271K	C CAPACITOR	270PF K	
C267	CC73GCH1H060B	C CAPACITOR	6.0PF B	340_K,340U_K,340_M	C434	CC73HCH1H010B	C CAPACITOR	1.0PF B	340_K,340U_K,340_M
C267	CC73GCH1H070B	C CAPACITOR	7.0PF B	340_K,340U_K,34 0_M,340_M,340_P	C435	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C267	CC73GCH1H080B	C CAPACITOR	8.0PF B	340_K3	C436	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	340_K,340U_K,340_M
C268	CC73GCH1H101J	C CAPACITOR	100PF J	340_K,340U_K,340_M	C437	CC73HCH1H150J	C CAPACITOR	15PF J	
C268	CK73GB1H471K	C CAPACITOR	470PF K	340_K,340U_K,340_K 3,340_M,340_M,340_P	C438	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,340_M
C269	CK73HB1H271K	C CAPACITOR	270PF K		C438	CC73HCH1H080B	C CAPACITOR	8.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P
C270	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,340_M	C439	CC73HCH1H020B	C CAPACITOR	2.0PF B	340_K,340U_K,340_M
C270	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P	C439	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P
C271	CC73GCH1H060B	C CAPACITOR	6.0PF B	340_K,340U_K,34 0_K3,340_M	C440	CC73HCH1H1R5B	C CAPACITOR	1.5PF B	340_K,340U_K,340_M
C271	CC73GCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,34 0_M,340_M,340_P	C440	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P
C272	CC73GCH1H101J	C CAPACITOR	100PF J	340_K,340U_K,340_M	C441	CK73HBB1E103K	C CAPACITOR	0.01UF K	
C272	CC73GCH1H300J	C CAPACITOR	30PF J	340_K,340U_K,340_K 3,340_M,340_M,340_P	C442	CC73HCH1H010B	C CAPACITOR	1.0PF B	
C273	CC73GCH1HR75B	C CAPACITOR	0.75PF B	340_K,340U_K,340_M	C443	CK73HB1H271K	C CAPACITOR	270PF K	
C273	CC73GCH1H1R5B	C CAPACITOR	1.5PF B	340_K,340U_K,34 0_M,340_M,340_P	C444	CK73HB1H271K	C CAPACITOR	270PF K	
C273	CC73GCH1H030B	C CAPACITOR	3.0PF B	340_K3	C445	CC73HCH1H020B	C CAPACITOR	2.0PF B	340_K,340U_K,340_M
C274	CC73GCH1H020B	C CAPACITOR	2.0PF B	340_K,340U_K,340_M	C445	CC73HCH1H3R5B	C CAPACITOR	3.5PF B	340_K,340U_K,34 0_M,340_M,340_P
C274	CC73GCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P	C445	CC73HCH1H070B	C CAPACITOR	7.0PF B	340_K3
C275	CC73GCH1H060B	C CAPACITOR	6.0PF B	340_K,340U_K,340_K 2,340_M,340_M,340_P	C446	CK73HB1H271K	C CAPACITOR	270PF K	
C275	CC73GCH1H110J	C CAPACITOR	11PF J	340_K3	C447	CK73HB1H271K	C CAPACITOR	270PF K	
C276	CC73GCH1H0R3B	C CAPACITOR	0.3PF B	340_K,340U_K,34 0_K3,340_M	C448	CC73HCH1H1R5B	C CAPACITOR	1.5PF B	340_K,340U_K,340_K 2,340_M,340_M,340_P
C278	CC73GCH1H070B	C CAPACITOR	7.0PF B	340_K,340U_K,340_K	C448	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	340_K3
C279	CC73GCH1H010B	C CAPACITOR	1.0PF B	340_K,340U_K,340_K 2,340_M,340_M,340_P	C449	CC73HCH1H110G	C CAPACITOR	11PF G	
C279	CC73GCH1H040B	C CAPACITOR	4.0PF B	340_K3	C449	CC73HCH1H240J	C CAPACITOR	24PF J	340_K,340U_K,340_K 0_M,340_M,340_P
C280	CC73GCH1H0R5B	C CAPACITOR	0.5PF B	340_K3	C449	CC73HCH1H390J	C CAPACITOR	39PF J	340_K3
C400	CK73HBB1A104K	C CAPACITOR	0.1UF K		C450	CC73HCH1H020B	C CAPACITOR	2.0PF B	340_K,340U_K,340_M
C402	CC73HCH1H330J	C CAPACITOR	33PF J		C450	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K,340U_K,340_K 3,340_M,340_M,340_P
C403	CK73HBB1E103K	C CAPACITOR	0.01UF K		C451	CK73HB1H271K	C CAPACITOR	270PF K	340_K,340U_K,340_M
C404	CC73HCH1H220J	C CAPACITOR	22PF J		C451	CK73HB1E104K	C CAPACITOR	0.10UF K	340_K,340U_K,340_K 3,340_M,340_M,340_P
C405	CC73HCH1H820J	C CAPACITOR	82PF J		C452	CC73HCH1HR75B	C CAPACITOR	0.75PF B	340_K,340U_K,340_M
C406	CK73HB1H271K	C CAPACITOR	270PF K		C452	CC73HCH1H010B	C CAPACITOR	1.0PF B	340_K,340U_K,340_K 0_M,340_M,340_P
C407	CC73HCH1H390J	C CAPACITOR	39PF J		C452	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	340_K3
C409	CC73HCH1H820J	C CAPACITOR	82PF J		C453	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	
C410	CK73HB1H271K	C CAPACITOR	270PF K		C453	CK73HB1H271K	C CAPACITOR	270PF K	
C412	CC73CH1H560J	C CAPACITOR	56PF J		C454	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K,340U_K,340_K 2,340_M,340_M,340_P
C413	CK73HB1H182K	C CAPACITOR	1800PF K		C454	CC73HCH1H050B	C CAPACITOR	5.0PF B	340_K3
C414	CK73HBB1H681K	C CAPACITOR	680PF K		C455	CC73HCH1H110G	C CAPACITOR	11PF G	
C415	CK73GB0J106K	C CAPACITOR	10UF K		C455	CC73HCH1H240J	C CAPACITOR	24PF J	340_K,340U_K,340_K 0_M,340_M,340_P
C416	CK73HB1H271K	C CAPACITOR	10UF K		C455	CC73HCH1H390J	C CAPACITOR	39PF J	340_K3
C419	CK73HB1H271K	C CAPACITOR	270PF K		C456	CC73HCH1HR75B	C CAPACITOR	0.75PF B	340_K,340U_K,340_M
C421	CK73HB1A333K	C CAPACITOR	0.033UF K		C456	CC73HCH1H010B	C CAPACITOR	1.0PF B	340_K,340U_K,340_K 0_M,340_M,340_P
C422	CK73HB1E103K	C CAPACITOR	0.01UF K		C456	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	340_K3
C424	CK73HBB1E103K	C CAPACITOR	0.01UF K		C457	CK73HB1H271K	C CAPACITOR	270PF K	340_K,340U_K,340_M

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C457	CK73HB1E104K	C CAPACITOR	0.10UF K	340_K2,340U_K,340_K 3,340_M2,340_M3,340_P	C495	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C458	CC73HCH1H1R5B	C CAPACITOR	1.5PF B		C496	CK73GB0J106K C	CAPACITOR	10UF K	
C459	CC73HCH1H110G	C CAPACITOR	11PF G	340_K,340U_K,340_M	C497	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C459	CC73HCH1H240JC	CAPACITOR	24PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C500	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C459	CC73HCH1H390JC	CAPACITOR	39PF J	340_K3	C501	CK73HBB1H681K C	CAPACITOR	680PF K	
C460	CC73HCH1H2R5B	C CAPACITOR	2.5PF B	340_K,340U_K,340_M	C504	CC73HCH1H101JC	CAPACITOR	100PF J	
C460	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C600	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C460	CC73HCH1H040B	C CAPACITOR	4.0PF B	340_K3	C601	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C461	CK73HB1H271K	C CAPACITOR	270PF K		C602	CK73GXR1C225K C	CAPACITOR	2.2UF K	
C464	CK73HB1H271K	C CAPACITOR	270PF K		C603	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C465	CK73HB1H271K	C CAPACITOR	270PF K		C604	CK73HB1H271K C	CAPACITOR	270PF K	
C466	CK73HB1H271K	C CAPACITOR	270PF K		C605	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C468	CK73HBB1A104K C	CAPACITOR	0.1UF K		C606	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C469	CC73HCH1H101JC	CAPACITOR	100PF J	340_K,340U_K,340_M	C607	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C469	CC73HCH1H271JC	CAPACITOR	270PF J	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	C609	CK73HB1H271K C	CAPACITOR	270PF K	
C470	CC73HCH1H0R3B	C CAPACITOR	0.3PF B	340_K,340U_K,340_M	C610	CK73HB1H271K C	CAPACITOR	270PF K	
C470	CC73HCH1H020B	C CAPACITOR	2.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C611	CK73HB1H271K C	CAPACITOR	270PF K	
C470	CC73HCH1H030B	C CAPACITOR	3.0PF B	340_K3	C612	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C471	CC73HCH1H110G	C CAPACITOR	11PF G	340_K,340U_K,340_M	C613	CK73HB1H271K C	CAPACITOR	270PF K	
C471	CC73HCH1H240JC	CAPACITOR	24PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C615	CK73HB1H271K C	CAPACITOR	270PF K	
C471	CC73HCH1H330JC	CAPACITOR	33PF J	340_K3	C616	CK73HB1H271K C	CAPACITOR	270PF K	
C472	CK73HB1H271K	C CAPACITOR	270PF K	340_K,340U_K,340_M	C618	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C472	CK73HB1E104K	C CAPACITOR	0.10UF K	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	C620	CK73HB1H271K C	CAPACITOR	270PF K	
C473	CC73HCH1H040B C	CAPACITOR	4.0PF B	340_K,340U_K,340_K 2,340U_K2,340_M34 0_M2,340_M3,340_P	C621	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C473	CC73HCH1H4R5B	C CAPACITOR	4.5PF B	340_K3	C623	CK73HB1H271K C	CAPACITOR	270PF K	
C474	CC73HCH1H040B C	CAPACITOR	4.0PF B		C624	CK73HB1H271K C	CAPACITOR	270PF K	
C475	CC73HCH1H110G C	CAPACITOR	11PF G	340_K,340U_K,340_M	C625	CK73HB1H271K C	CAPACITOR	270PF K	
C475	CC73HCH1H240JC	CAPACITOR	24PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C626	CK73HB1H271K C	CAPACITOR	270PF K	
C475	CC73HCH1H330JC	CAPACITOR	33PF J	340_K3	C628	CK73HB1H271K C	CAPACITOR	270PF K	
C476	CC73HCH1H1R5B C	CAPACITOR	1.5PF B	340_K,340U_K,340_M	C629	CK73HBB1E103K C	CAPACITOR	0.01UF K	
C476	CC73HCH1H060B C	CAPACITOR	6.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C630	CK73HB1H271K C	CAPACITOR	270PF K	
C476	CC73HCH1H050B C	CAPACITOR	5.0PF B	340_K3	C631	CK73HB1H271K C	CAPACITOR	270PF K	
C477	CK73HB1H271K	C CAPACITOR	270PF K		C700	CK73HB1H271K C	CAPACITOR	270PF K	
C478	CC73HCH1H300JC	CAPACITOR	30PF J	340_K,340U_K,340_M	C704	CK73HBB1H102K C	CAPACITOR	1000PF K	
C478	CC73HCH1H270JC	CAPACITOR	27PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C711	CK73HB1H271K C	CAPACITOR	270PF K	
C478	CC73HCH1H330JC	CAPACITOR	33PF J	340_K3	C718	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C476	CC73HCH1H1R5B C	CAPACITOR	1.5PF B	340_K,340U_K,340_M	C719	CK73HBB1H102K C	CAPACITOR	1000PF K	
C476	CC73HCH1H060B C	CAPACITOR	6.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C720	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C476	CC73HCH1H050B C	CAPACITOR	5.0PF B	340_K3	C723	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C477	CK73HB1H271K	C CAPACITOR	270PF K		C730	CK73GBB1A105K C	CAPACITOR	1.0UF K	
C478	CC73HCH1H300JC	CAPACITOR	30PF J	340_K,340U_K,340_M	C732	CK73HB1H271K C	CAPACITOR	270PF K	
C478	CC73HCH1H270JC	CAPACITOR	27PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C734	CK73GB0J106K C	CAPACITOR	10UF K	
C478	CC73HCH1H330JC	CAPACITOR	33PF J	340_K3	C735	CK73GB0J106K C	CAPACITOR	10UF K	
C476	CC73HCH1H1R5B C	CAPACITOR	1.5PF B	340_K,340U_K,340_M	C736	CK73HB1H271K C	CAPACITOR	270PF K	
C476	CC73HCH1H060B C	CAPACITOR	6.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C737	CK73HB1A105K C	CAPACITOR	1.0UF K	
C476	CC73HCH1H050B C	CAPACITOR	5.0PF B	340_K3	C739	CK73HBB1E103K C	CAPACITOR	0.01UF K	
C477	CK73HB1H271K	C CAPACITOR	270PF K		C740	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C478	CC73HCH1H300JC	CAPACITOR	30PF J	340_K,340U_K,340_M	C741	CK73GB0J106K C	CAPACITOR	10UF K	
C478	CC73HCH1H270JC	CAPACITOR	27PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C742	CK73HB1H271K C	CAPACITOR	270PF K	
C478	CC73HCH1H330JC	CAPACITOR	33PF J	340_K3	C743	CK73HB1H103K C	CAPACITOR	0.010UF K	
C480	CC73HCH1H090B C	CAPACITOR	9.0PF B	340_K,340U_K,340_M	C744	CK73GB0J106K C	CAPACITOR	10UF K	
C480	CC73HCH1H270JC	CAPACITOR	27PF J	340_K2,340U_K2,34 0_M2,340_M3,340_P	C745	CK73HBB1A104K C	CAPACITOR	0.1UF K	
C480	CC73HCH1H390JC	CAPACITOR	39PF J	340_K3	C746	CK73HB1H271K C	CAPACITOR	270PF K	
C481	CC73HCH1H050B C	CAPACITOR	5.0PF B	340_K,340U_K,340_M	C747	CK73HBB1H152K C	CAPACITOR	1500PF K	
C481	CC73HCH1H060B C	CAPACITOR	6.0PF B	340_K2,340U_K2,34 0_M2,340_M3,340_P	C748	CK73HB1A105K C	CAPACITOR	1.0UF K	
C481	CC73HCH1H390JC	CAPACITOR	39PF J	340_K3	C749	CC73HCH1H101JC	CAPACITOR	100PF J	
C482	CC73HCH1H050B C	CAPACITOR	5.0PF B	340_K,340U_K,340_M	C750	CC73HCH1H101JC	CAPACITOR	100PF J	
C482	CC73HCH1H100B C	CAPACITOR	10PF B	340_K3	C751	CK73HB1H271K C	CAPACITOR	270PF K	
C483	CC73HCH1H010B C	CAPACITOR	1.0PF B		C754	CC73HCH1H101JC	CAPACITOR	100PF J	
C485	CK73HBB1H102KC	CAPACITOR	1000PF K		C756	CK73HB1A105K C	CAPACITOR	1.0UF K	
C486	CK73GB0J106K C	CAPACITOR	10UF K		C758	CK73HB0J475M C	CAPACITOR	4.7UF M	
C487	CK73HBB1A104K C	CAPACITOR	0.1UF K		C759	CK73HB1A105K C	CAPACITOR	1.0UF K	
C488	CK73HB1A224K C	CAPACITOR	0.22UF K		C760	CK73HB1A474K C	CAPACITOR	0.47UF K	
C489	CK73HB1A105K C	CAPACITOR	1.0UF K		C761	CK73HB1A474K C	CAPACITOR	0.47UF K	
C491	CK73HB1A105K C	CAPACITOR	1.0UF K		C762	CK73HB1H271K C	CAPACITOR	270PF K	
C492	CC73HCH1H101JC	CAPACITOR	100PF J		C763	CK73HB1A473K C	CAPACITOR	0.047UF K	
C493	CC73HCH1H101JC	CAPACITOR	100PF J		C764	CK73HB1H271K C	CAPACITOR	270PF K	
C494	CK73HB1A224K C	CAPACITOR	0.22UF K		C765	CK73HB1H271K C	CAPACITOR	270PF K	
					C766	CK73HB1A474K C	CAPACITOR	0.47UF K	
					C767	CK73GB0J225K C	CAPACITOR	2.2UF K	
					C768	CK73GB0J225K C	CAPACITOR	2.2UF K	
					C769	CK73HB1A474K C	CAPACITOR	0.47UF K	
					C770	CK73HB1H271K C	CAPACITOR	270PF K	
					C771	CK73HB1H271K C	CAPACITOR	270PF K	
					C772	CC73HCH1H470JC	CAPACITOR	47PF J	
					C773	CK73HB1H271K C	CAPACITOR	270PF K	
					C774	CK73HB1H271K C	CAPACITOR	270PF K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C775	CK73HBB1A104K C	CAPACITOR	0.1UF K		R11	RK73HB1J122J	MG RESISTOR	1.2K J 1/16W	
C777	CK73HBB1A683K C	CAPACITOR	0.068UF K		R13	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
C778	CK73HB1H271K C	CAPACITOR	270PF K		R16	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
C779	CK73GB0J106K C	CAPACITOR	10UF K		R17	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
C780	CK73HB1H271K C	CAPACITOR	270PF K		R18	RK73HB1J152J	MG RESISTOR	1.5K J 1/16W	
C781	CK73HBB1A104K C	CAPACITOR	0.1UF K		R19	RK73HB1J391J	MG RESISTOR	390 J 1/16W	
C782	CK73HB1H271K C	CAPACITOR	270PF K		R20	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
C783	CK73GBB1A105K C	CAPACITOR	1.0UF K		R21	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W	
C784	CK73GXR1C225K C	CAPACITOR	2.2UF K		R22	RK73HB1J103J	MG RESISTOR	10K J 1/16W	
C785	CK73GB0J106K C	CAPACITOR	10UF K		R24	RK73HB1J474J	MG RESISTOR	470K J 1/16W	
C786	CK73HB1A224K C	CAPACITOR	0.22UF K		R25	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W	340_K,340U_K,340_M
C787	CK73HBB1A104K C	CAPACITOR	0.1UF K		R25	RK73HB1J106J	MG RESISTOR	10M J 1/16W	340_K,340U_K,340_K 3,340_M,340_M,340_P
C788	CK73FB0J226M C	CAPACITOR	22UF M		R26	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
C789	CC73HCH1H101J C	CAPACITOR	100PF J		R27	RK73HB1J103J	MG RESISTOR	10K J 1/16W	
C790	CK73HB1A473K C	CAPACITOR	0.047UF K		R28	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
C791	CK73HBB1A104K C	CAPACITOR	0.1UF K		R29	RK73HB1J220J	MG RESISTOR	22 J 1/16W	
C792	CC73HCH1H101J C	CAPACITOR	100PF J		R30	RK73HB1J154J	MG RESISTOR	150K J 1/16W	
C794	CK73HBB1A683K C	CAPACITOR	0.068UF K		R31	RK73HB1J183J	MG RESISTOR	18K J 1/16W	340_K,340U_K,340_M
C795	CK73GBB1A105K C	CAPACITOR	1.0UF K		R31	RK73HB1J104J	MG RESISTOR	100K J 1/16W	340_K,340U_K,2,34 0_M,2,340_M,3,340_P
C798	CK73HB1H271K C	CAPACITOR	270PF K		R31	RK73HB1J563J	MG RESISTOR	56K J 1/16W	340_K3
C801	CK73GBB1A105K C	CAPACITOR	1.0UF K		R32	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W	340_K,340U_K,340_M
C802	CK73HB1H271K C	CAPACITOR	270PF K		R32	RK73HB1J332J	MG RESISTOR	3.3K J 1/16W	340_K,340U_K,2,340_K 3,340_M,2,340_M,3,340_P
C805	CK73HB1H271K C	CAPACITOR	270PF K		R33	RK73HB1J224J	MG RESISTOR	220K J 1/16W	340_K,340U_K,340_M
C806	CK73HB1H271K C	CAPACITOR	270PF K		R33	RK73HB1J563J	MG RESISTOR	56K J 1/16W	340_K,340U_K,2,340_K 3,340_M,2,340_M,3,340_P
C807	CK73HBB1A104K C	CAPACITOR	0.1UF K		R34	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
C808	CK73EB0J476M C	CAPACITOR	47UF M		R35	RK73HB1J680J	MG RESISTOR	68 J 1/16W	
C809	CK73EB0J476M C	CAPACITOR	47UF M		R36	RK73HB1J151J	MG RESISTOR	150 J 1/16W	340_K,340U_K,340_M
C812	CK73HB1H271K C	CAPACITOR	270PF K	340_K,2,340U_K,2,340_K 3,340_M,2,340_M,3,340_P	R36	RK73HB1J221J	MG RESISTOR	220 J 1/16W	340_K,2,340U_K,2,340_K 3,340_M,2,340_M,3,340_P
C814	CK73HBB1A104K C	CAPACITOR	0.1UF K		R37	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
C815	CK73HB1A105K C	CAPACITOR	1.0UF K		R38	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
C816	CK73HB1H271K C	CAPACITOR	270PF K	340_K,2,340U_K,2,340_K 3,340_M,2,340_M,3,340_P	R39	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
C851	CK73HBB1A104K C	CAPACITOR	0.1UF K		R40	RK73HB1J154J	MG RESISTOR	150K J 1/16W	
C852	CK73HB1H152K C	CAPACITOR	1500PU K		R41	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
C853	CK73HBB1A104K C	CAPACITOR	0.1UF K		R42	RK73HB1J682J	MG RESISTOR	6.8K J 1/16W	340_K,340U_K,340_M
C882	CK73HB1A105K C	CAPACITOR	1.0UF K		R42	RK73HB1J123J	MG RESISTOR	12K J 1/16W	340_K,2,340U_K,2,340_K 3,340_M,2,340_M,3,340_P
C905	CK73HBB1A104K C	CAPACITOR	0.1UF K		R43	RK73HB1J562J	MG RESISTOR	5.6K J 1/16W	
C906	CK73HB1H103K C	CAPACITOR	10000PF K		R44	RK73HB1J220J	MG RESISTOR	22 J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M,2,340_M,3,340_P
C907	CK73HB1H103K C	CAPACITOR	10000PF K		R44	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
C908	CK73HR0J105K C	CAPACITOR	1.0UF K		R45	RK73HB1J331J	MG RESISTOR	330 J 1/16W	
C909	CK73HBB1A104K C	CAPACITOR	0.1UF K		R46	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W	
C910	CK73HB0J225K C	CAPACITOR	2.2UF K		R48	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W	
C911	CK73HBB1A104K C	CAPACITOR	0.1UF K		R51	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
C912	CK73HB0J225K C	CAPACITOR	2.2UF K		R52	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
C913	CK73HBB1A104K C	CAPACITOR	0.1UF K		R53	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
C914	CK73HB1H103K C	CAPACITOR	0.010UF K		R54	RK73HB1J103J	MG RESISTOR	10K J 1/16W	
C915	CK73HB1H103K C	CAPACITOR	0.010UF K		R55	RK73HB1J273J	MG RESISTOR	27K J 1/16W	
C920	CK73HBB1A104K C	CAPACITOR	0.1UF K		R56	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
C921	CK73HBB1A104K C	CAPACITOR	0.1UF K		R58	RK73HB1J103J	MG RESISTOR	10K J 1/16W	
C922	CK73HBB1A104K C	CAPACITOR	0.1UF K		R200	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W	
C923	CK73HBB1A104K C	CAPACITOR	0.1UF K		R202	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
C924	CK73GBB1A105K C	CAPACITOR	1.0UF K		R210	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
C925	CK73HB1A105K C	CAPACITOR	1.0UF K		R211	RK73HB1J152J	MG RESISTOR	1.5K J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M,2,340_M,3,340_P
C970	CK73HB1H102K C	CAPACITOR	1000PF K		R211	RK73HB1J821J	MG RESISTOR	820 J 1/16W	340_K3
C971	CK73HBB1A104K C	CAPACITOR	0.1UF K		R212	RK73HB1J182J	MG RESISTOR	1.8K J 1/16W	
C980	CS77MB20J101M TA E	CAPACITOR	100UF 35WV		R213	RK73HB1J220J	MG RESISTOR	22 J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M,2,340_M,3,340_P
C981	CK73HB0J475M C	CAPACITOR	4.7UF M		R213	RK73HB1J330J	MG RESISTOR	33 J 1/16W	340_K3
C982	CK73HR0J105K C	CAPACITOR	1.0UF K		R214	RK73HB1J561J	MG RESISTOR	560 J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M,2,340_M,3,340_P
C983	CK73HB1H102K C	CAPACITOR	1000PF K		R214	RK73HB1J331J	MG RESISTOR	330 J 1/16W	340_K3
C984	CK73HBB1H102K C	CAPACITOR	1000PF K		R215	RK73HB1J821J	MG RESISTOR	820 J 1/16W	
C985	CK73HBB1H102K C	CAPACITOR	1000PF K		R217	RK73HB1J5R6J	MG RESISTOR	5.6 J 1/16W	
C986	CK73HBB1H102K C	CAPACITOR	1000PF K		R219	RK73HB1J821J	MG RESISTOR	820 J 1/16W	
C989	CK73HBB1A104K C	CAPACITOR	0.1UF K						
C999	CK73HBB1A104K C	CAPACITOR	0.1UF K						
R1	RK73HB1J103J	MG RESISTOR	10K J 1/16W						
R2	RK73HB1J334J	MG RESISTOR	330K J 1/16W						
R3	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R4	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R5	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R7	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R8	RK73HB1J331J	MG RESISTOR	330 J 1/16W						
R9	RK73HB1J104J	MG RESISTOR	100K J 1/16W	340_K,340U_K,340_M					
R9	RK73HB1J823J	MG RESISTOR	82K J 1/16W	340_K,2,340U_K,2,34 0_M,2,340_M,3,340_P					
R9	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W	340_K3					
R10	RK73HB1J101J	MG RESISTOR	100 J 1/16W						

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R222	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		R436	RK73HB1J474J	MG RESISTOR	470K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P
R223	RK73HB1J561J	MG RESISTOR	560 J 1/16W		R436	RK73HB1J333J	MG RESISTOR	33K J 1/16W	340_K3
R224	RK73HB1J151J	MG RESISTOR	150 J 1/16W		R438	RK73HB1J104J	MG RESISTOR	100K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P
R225	RK73HB1J183J	MG RESISTOR	18K J 1/16W		R438	RK73HB1J563J	MG RESISTOR	56K J 1/16W	340_K3
R226	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W		R439	RK73HB1J823J	MG RESISTOR	82K J 1/16W	340_K,340U_K,340_M
R227	RK73HB1J103J	MG RESISTOR	10K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P	R439	RK73HB1J184J	MG RESISTOR	180K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P
R227	RK73HB1J183J	MG RESISTOR	18K J 1/16W	340_K3	R439	RK73HB1J474J	MG RESISTOR	470K J 1/16W	340_K3
R228	RK73HB1J333J	MG RESISTOR	33K J 1/16W		R440	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R229	RK73HB1J470J	MG RESISTOR	47 J 1/16W		R441	RK73HH1J473D	MG RESISTOR	47K D 1/16W	
R230	RK73EB2ER39J	MG RESISTOR	0.39 J 1/4W		R444	RK73HB1J474J	MG RESISTOR	470K J 1/16W	
R231	RK73EB2ER39J	MG RESISTOR	0.39 J 1/4W		R449	RK73HB1J224J	MG RESISTOR	220K J 1/16W	
R232	RK73HB1J183J	MG RESISTOR	18K J 1/16W		R450	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R233	RK73EB2ER39J	MG RESISTOR	0.39 J 1/4W		R451	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R235	RK73HB1J182J	MG RESISTOR	1.8K J 1/16W		R452	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R236	RK73HB1J150J	MG RESISTOR	15 J 1/16W	340_K,340U_K,340_M	R453	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R236	RK73HB1J151J	MG RESISTOR	150 J 1/16W	340_K,340U_K,340_K 0_M2,340_M3,340_P	R454	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R236	RK73HB1J331J	MG RESISTOR	330 J 1/16W	340_K3	R455	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R237	RK73HH1J154D	MG RESISTOR	150K D 1/16W		R457	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R238	RK73HH1J154D	MG RESISTOR	150K D 1/16W		R458	RK73HB1J821J	MG RESISTOR	820 J 1/16W	340_K,340U_K,34 0_K3,340_M
R239	RK73HB1J183J	MG RESISTOR	18K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P	R458	RK73HB1J681J	MG RESISTOR	680 J 1/16W	340_K,340U_K,34 0_M2,340_M3,340_P
R239	RK73HB1J153J	MG RESISTOR	15K J 1/16W	340_K3	R459	RK73HB1J332J	MG RESISTOR	3.3K J 1/16W	
R241	RK73HH1J474D	MG RESISTOR	470K D 1/16W		R460	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W	
R242	RK73HH1J474D	MG RESISTOR	470K D 1/16W		R461	RK73HB1J184J	MG RESISTOR	180K J 1/16W	
R243	RK73HB1J103J	MG RESISTOR	10K J 1/16W		R464	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R244	RK73HB1J563J	MG RESISTOR	56K J 1/16W		R600	RK73GB2A221J	MG RESISTOR	220 J 1/10W	
R246	RK73HB1J474J	MG RESISTOR	470K J 1/16W		R601	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R247	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R602	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R248	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W		R603	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R249	RK73HB1J271J	MG RESISTOR	270 J 1/16W		R604	RK73GB2A331J	MG RESISTOR	330 J 1/10W	
R250	RK73FB2B000J	MG RESISTOR	0.0 J 1/8W		R605	RK73HB1J223J	MG RESISTOR	22K J 1/16W	
R251	RK73HB1J271J	MG RESISTOR	270 J 1/16W		R606	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R252	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W		R607	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R253	RK73GB2A823J	MG RESISTOR	82K J 1/10W		R608	RK73GB2A271J	MG RESISTOR	270 J 1/10W	
R254	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		R609	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R400	RK73HB1J334J	MG RESISTOR	330K J 1/16W		R610	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R401	RK73HB1J101J	MG RESISTOR	100 J 1/16W		R611	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R403	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W		R612	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R404	RK73HB1J564J	MG RESISTOR	560K J 1/16W		R613	RK73HB1J104J	MG RESISTOR	100K J 1/16W	
R405	RK73HB1J474J	MG RESISTOR	470K J 1/16W		R614	RK73HH1J824D	MG RESISTOR	820K D 1/16W	
R407	RK73HB1J332J	MG RESISTOR	3.3K J 1/16W		R615	RK73HH1J394D	MG RESISTOR	390K D 1/16W	
R408	RK73HB1J332J	MG RESISTOR	3.3K J 1/16W		R616	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R409	RK73HB1J563J	MG RESISTOR	56K J 1/16W		R701	RK73HH1J103D	MG RESISTOR	10K D 1/16W	
R412	RK73HB1J100J	MG RESISTOR	10 J 1/16W		R702	RK73HH1J103D	MG RESISTOR	10K D 1/16W	
R413	RK73HB1J184J	MG RESISTOR	180K J 1/16W		R703	RK73HB1J153J	MG RESISTOR	15K J 1/16W	
R414	RK73HB1J101J	MG RESISTOR	100 J 1/16W		R705	RK73HB1J103J	MG RESISTOR	10K J 1/16W	
R417	RK73HB1J684J	MG RESISTOR	680K J 1/16W	340_K,340U_K,340_M	R708	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R417	RK73HB1J564J	MG RESISTOR	560K J 1/16W	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	R709	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W	
R418	RK73HB1J564J	MG RESISTOR	560K J 1/16W		R710	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R419	RK73HB1J121J	MG RESISTOR	120 J 1/16W		R711	RK73HH1J103D	MG RESISTOR	10K D 1/16W	
R420	RK73HB1J101J	MG RESISTOR	100 J 1/16W		R712	RK73HB1J473J	MG RESISTOR	47K J 1/16W	
R421	RK73HB1J470J	MG RESISTOR	47 J 1/16W		R715	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R422	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W		R718	RK73HB1J820J	MG RESISTOR	82 J 1/16W	
R423	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W		R720	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R424	RK73HB1J391J	MG RESISTOR	390 J 1/16W		R723	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R425	RK73HB1J563J	MG RESISTOR	56K J 1/16W		R725	RK73HB1J473J	MG RESISTOR	47K J 1/16W	
R426	RK73HB1J124J	MG RESISTOR	120K J 1/16W		R726	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W	
R427	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R736	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R428	RK73HB1J563J	MG RESISTOR	56K J 1/16W		R737	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R429	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		R740	RK73HB1J472J	MG RESISTOR	4.7K J 1/16W	
R430	RK73HB1J474J	MG RESISTOR	470K J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P	R744	RK73HB1J150J	MG RESISTOR	15 J 1/16W	
R433	RK73HB1J562J	MG RESISTOR	5.6K J 1/16W		R746	RK73HB1J222J	MG RESISTOR	2.2K J 1/16W	
R434	RK73HB1J100J	MG RESISTOR	10 J 1/16W		R748	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R435	RK73HB1J181J	MG RESISTOR	180 J 1/16W	340_K,340U_K,340_K 2,340U_K2,340_M,34 0_M2,340_M3,340_P	R751	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W	
R435	RK73HB1J271J	MG RESISTOR	270 J 1/16W	340_K3	R752	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	
R762	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R755	RK73HB1J564J	MG RESISTOR	560K J 1/16W	
					R756	RK73HB1J100J	MG RESISTOR	10 J 1/16W	
					R757	RK73HB1J473J	MG RESISTOR	47K J 1/16W	
					R759	RK73HB1J153J	MG RESISTOR	15K J 1/16W	
					R760	RK73HB1J473J	MG RESISTOR	47K J 1/16W	
					R762	RK73HB1J104J	MG RESISTOR	100K J 1/16W	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R763	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R988	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W	
R764	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		R991	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R765	RK73HB1J273J	MG RESISTOR	27K J 1/16W		R992	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R766	RK73HB1J334J	MG RESISTOR	330K J 1/16W	340_K,340U_K,340_M	R993	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R766	RK73HB1J274J	MG RESISTOR	270K J 1/16W	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	R994	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R767	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R995	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R768	RK73HB1J103J	MG RESISTOR	10K J 1/16W		R996	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R769	RK73HB1J104J	MG RESISTOR	100K J 1/16W		R997	RK73HB1J101J	MG RESISTOR	100 J 1/16W	
R770	RK73HB1J124J	MG RESISTOR	120K J 1/16W		L1	LR77Z0AE4R7J	SMALL FIXED INDUCTOR(4.7UH)		
R772	RK73HB1J154J	MG RESISTOR	150K J 1/16W		L2	L92-0442-05	SMALL FIXED INDUCTOR(21.9NH)		
R773	RK73HB1J103J	MG RESISTOR	10K J 1/16W		L3	LB73HOAV-003	SMALL FIXED INDUCTOR(220NH)		
R774	RK73HB1J101J	MG RESISTOR	100 J 1/16W		L4	LK73HOAM6N8J	SMALL FIXED INDUCTOR(16.9NH)	340_K,340U_K,340_M	
R775	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	340_K,340U_K,340_M	L4	LK73HOAM15NJ	SMALL FIXED INDUCTOR(15NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R776	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	340_K2,340U_K2,340_M 0_M2,340_M3,340_P	L7	L41-1885-53	SMALL FIXED INDUCTOR(12.2NH)		
R777	RK73HB1J104J	MG RESISTOR	100K J 1/16W		L8	L41-1885-53	SMALL FIXED INDUCTOR(12.2NH)		
R778	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W	340_K3	L9	LK73HOAM22NJ	SMALL FIXED INDUCTOR(16.9NH)		
R780	RK73HB1J474J	MG RESISTOR	470K J 1/16W		L12	L41-1885-53	SMALL FIXED INDUCTOR(12.2NH)		
R781	RK73HB1J682J	MG RESISTOR	6.8K J 1/16W		L13	L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)		
R782	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L14	L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)		
R783	RK73HB1J272J	MG RESISTOR	2.7K J 1/16W		L15	L41-1578-14	SMALL FIXED INDUCTOR(15NH)	340_K,340U_K,340_M	
R784	RK73HB1J123J	MG RESISTOR	12K J 1/16W		L15	L41-2278-14	SMALL FIXED INDUCTOR(22NH)	340_K2,340U_K2,340_M 0_M2,340_M3,340_P	
R785	RK73HB1J273J	MG RESISTOR	27K J 1/16W		L15	L41-3378-14	SMALL FIXED INDUCTOR(33NH)	340_K3	
R786	RK73HB1J104J	MG RESISTOR	100K J 1/16W		L16	L41-1885-53	SMALL FIXED INDUCTOR(18NH)	340_K,340U_K,340_M	
R787	RK73HB1J105J	MG RESISTOR	1.0M J 1/16W		L16	L41-1878-14	SMALL FIXED INDUCTOR(18NH)	340_K,340U_K,340_M	
R788	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L16	L41-2278-14	SMALL FIXED INDUCTOR(22NH)	340_K2,340U_K2,340_M 0_M2,340_M3,340_P	
R789	RK73HB1J103J	MG RESISTOR	10K J 1/16W		L16	L41-3378-14	SMALL FIXED INDUCTOR(33NH)	340_K3	
R790	RK73HB1J103J	MG RESISTOR	10K J 1/16W		L16	L41-2278-14	SMALL FIXED INDUCTOR(33NH)	340_K3	
R792	RK73HB1J471J	MG RESISTOR	470 J 1/16W		L17	LB73HOAV-003	SMALL FIXED INDUCTOR(220NH)		
R793	RK73HB1J182J	MG RESISTOR	1.8K J 1/16W		L18	L41-2785-53	SMALL FIXED INDUCTOR(0.27UH)		
R794	RK73HB1J152J	MG RESISTOR	1.5K J 1/16W		L19	L41-2785-53	SMALL FIXED INDUCTOR(0.27UH)		
R795	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L21	L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)		
R796	RK73HB1J561J	MG RESISTOR	560 J 1/16W		L23	L41-1885-53	SMALL FIXED INDUCTOR(12.2NH)		
R797	RK73HB1J334D	MG RESISTOR	330K D 1/16W		L24	LK73HOAM27NJ	SMALL FIXED INDUCTOR(27NH)		
R798	RK73HH1J154D	MG RESISTOR	150K D 1/16W		L25	LK73HOAM27NJ	SMALL FIXED INDUCTOR(27NH)		
R800	RK73HB1J183J	MG RESISTOR	18K J 1/16W		L26	LK73HOAM8N2J	SMALL FIXED INDUCTOR(8.2NH)	340_K,340U_K,340_M	
R801	RK73HB1J101J	MG RESISTOR	100 J 1/16W		L26	LK73HOAM6N8J	SMALL FIXED INDUCTOR(16.9NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R802	RK73HB1J474J	MG RESISTOR	470 K 1/16W		L27	L41-1885-53	SMALL FIXED INDUCTOR(0.18UH)	340_K,340U_K,340_M	
R803	RK73HB1J331J	MG RESISTOR	330 J 1/16W		L27	L41-2785-53	SMALL FIXED INDUCTOR(0.27UH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R804	RK73HB1J124J	MG RESISTOR	120K J 1/16W		L204	LK73HOAM8N2J	SMALL FIXED INDUCTOR(8.2NH)	340_K,340U_K,340_M	
R805	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		L204	LK73HOAM10NJ	SMALL FIXED INDUCTOR(10NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R806	RK73HB1J103J	MG RESISTOR	10K J 1/16W		L205	LK73HOAM33NJ	SMALL FIXED INDUCTOR(33NH)		
R807	RK73HB1J332J	MG RESISTOR	3.3K J 1/16W		L206	LB73HOAV-002	CHIP FERRITE BEADS		
R809	RK73HB1J103J	MG RESISTOR	10K J 1/16W		L207	LK73HOAM12NJ	SMALL FIXED INDUCTOR(12NH)		
R810	RK73HB1J334J	MG RESISTOR	330K J 1/16W		L208	L34-4574-05	AIR-CORE COIL		
R811	RK73HB1J274J	MG RESISTOR	270K J 1/16W		L209	LB73FOAW-002	CHIP FERRITE BEADS		
R812	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L211	L40-1263-92	SMALL FIXED INDUCTOR(1.2NH)	340_K,340U_K,340_M	
R813	RK73HB1J823J	MG RESISTOR	82K J 1/16W		L211	L40-2263-92	SMALL FIXED INDUCTOR(2.2NH)	340_K2,340U_K2,340_K 0_M2,340_M3,340_P	
R814	RK73HB1J273J	MG RESISTOR	27K J 1/16W		L211	LK73G0AF2N7S	SMALL FIXED INDUCTOR(2.7NH)	340_K3	
R815	RK73HB1J101J	MG RESISTOR	100 J 1/16W		L212	LB73FOAW-002	CHIP FERRITE BEADS		
R816	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W		L213	LR79ZODD21N9J	SMALL FIXED INDUCTOR(21.9NH)		
R817	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		L216	LR79ZOCAR22J	SMALL FIXED INDUCTOR(220NH)		
R824	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W		L217	LR79ZODD16N9J	SMALL FIXED INDUCTOR(16.9NH)		
R825	RK73HB1J104J	MG RESISTOR	100K J 1/16W		L218	LR79ZODD12N2J	SMALL FIXED INDUCTOR(12.2NH)		
R826	RK73HB1J104J	MG RESISTOR	100K J 1/16W		L219	LR79ZODD21N9J	SMALL FIXED INDUCTOR(21.9NH)		
R828	RK73HB1J333J	MG RESISTOR	33K J 1/16W		L220	LR79ZODD16N9J	SMALL FIXED INDUCTOR(16.9NH)		
R850	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W		L400	L41-1885-53	SMALL FIXED INDUCTOR(12.2NH)		
R852	RK73HB1J123J	MG RESISTOR	12K J 1/16W		L401	L40-1085-71	SMALL FIXED INDUCTOR(100NH)		
R853	RK73HB1J123J	MG RESISTOR	12K J 1/16W		L402	L40-1591-86	SMALL FIXED INDUCTOR(1.5UH)		
R857	RK73HB1J100J	MG RESISTOR	10 J 1/16W		L403	LB73GOBD-005	CHIP FERRITE BEADS		
R860	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W		L404	L41-6885-39	SMALL FIXED INDUCTOR(0.68UH)		
R877	RK73HB1J102J	MG RESISTOR	1.0K J 1/16W		L405	LK73HOAM15NJ	SMALL FIXED INDUCTOR(15NH)	340_K,340U_K,340_M	
R881	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L405	LK73HOAM12NJ	SMALL FIXED INDUCTOR(12NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R901	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L406	L41-2285-53	SMALL FIXED INDUCTOR(0.22UH)		
R902	RK73HB1J473J	MG RESISTOR	47K J 1/16W		L407	LK73HOAM15NJ	SMALL FIXED INDUCTOR(15NH)	340_K,340U_K,340_M	
R903	RK73HB1J220J	MG RESISTOR	22 J 1/16W		L407	LK73HOAM12NJ	SMALL FIXED INDUCTOR(12NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R904	RK73HB1J820J	MG RESISTOR	82 J 1/16W		L407	LK73HOAM12NJ	SMALL FIXED INDUCTOR(12NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R905	RK73HB1J474J	MG RESISTOR	470K J 1/16W		L407	LK73HOAM12NJ	SMALL FIXED INDUCTOR(12NH)	340_K2,340U_K2,340_K 3,340_M2,340_M3,340_P	
R907	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R960	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R970	RK73HB1J000J	MG RESISTOR	0.0 J 1/16W						
R977	RK73HB1J103J	MG RESISTOR	10K J 1/16W						
R978	RK73HB1J103J	MG RESISTOR	10K J 1/16W						
R979	RK73HB1J103J	MG RESISTOR	10K J 1/16W						
R983	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W						
R984	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W						
R987	RK73GB2A000J	MG RESISTOR	0.0 J 1/10W						

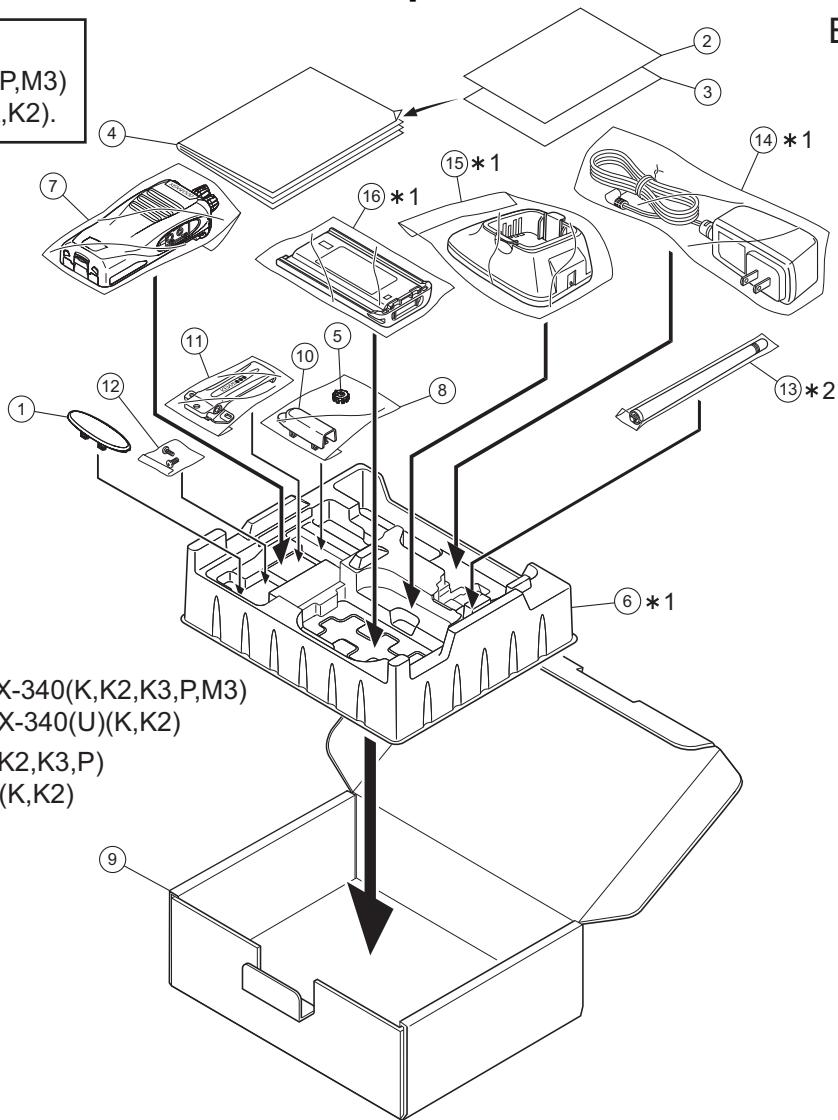
△ Symbol No.	Part No.	Part Name	Description	Local
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L408	LK73G0AF18NJ	SMALL FIXED INDUCTOR(18NH)	340_K,340U_K,340_M	
L408	LK73G0AF27NJ	SMALL FIXED INDUCTOR(27NH)	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	
L410	L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)		
L411	L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)		
L412	LB73G0BD-005	CHIP FERRITE BEADS		
L413	L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)		
L414	L41-2785-14	SMALL FIXED INDUCTOR(270NH)		
L415	L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)		
L416	L41-8268-14	SMALL FIXED INDUCTOR(8.2NH)		
L417	L41-5678-14	SMALL FIXED INDUCTOR(56NH)	340_K,340U_K,340_M	
L417	L41-6878-14	SMALL FIXED INDUCTOR(68NH)	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	
L420	LK73H0AM18NJ	SMALL FIXED INDUCTOR(18NH)	340_K,340U_K,340_M	
L420	LK73H0AM8N2J	SMALL FIXED INDUCTOR(8.2NH)	340_K,340U_K,340_K 3,340_M2,340_M3,340_P	
L600	L92-0472-05	CHIP FERRITE		
L601	LB73G0BD-005	CHIP FERRITE BEADS		
L700	LB73H0AV-001	BEADS CORE		
L701	LB73H0AV-001	BEADS CORE		
L702	LB73H0AV-001	BEADS CORE		
L901	LB73H0AV-003	SMALL FIXED INDUCTOR(220NH)		
L902	LB73H0AV-003	SMALL FIXED INDUCTOR(220NH)		
L903	LB73H0AV-003	SMALL FIXED INDUCTOR(220NH)		
CN600	E40-6922-05	FLAT CABLE CONNECTOR		
CN912	E23-1167-05	TERMINAL		
CN913	E23-1167-05	TERMINAL		
CN914	E23-1167-05	TERMINAL		
CN915	E23-1167-05	TERMINAL		
CN916	E23-1167-05	TERMINAL		
CN917	E23-1167-05	TERMINAL		
CN918	E23-1167-05	TERMINAL		
CN919	E23-1167-05	TERMINAL		
CN920	E23-1167-05	TERMINAL		
CN921	E23-1167-05	TERMINAL		
CP1	RK74HA1J101J	CHIP-COM	100 J 1/16W	
CP20	RK75HA1J473J	CHIP-COM	47K J 1/16W	
CP21	RK75HA1J473J	CHIP-COM	47K J 1/16W	
CP22	RK74HA1J102J	CHIP-COM	1.0K J 1/16W	
CP23	RK75HA1J473J	CHIP-COM	47K J 1/16W	
CP24	RK74HA1J102J	CHIP-COM	1.0K J 1/16W	
CP25	RK75HA1J473J	CHIP-COM	47K J 1/16W	
CP26	RK75HA1J103J	CHIP-COM	10K J 1/16W	
CP27	RK75HA1J474J	CHIP-COM	470K J 1/16W	
CP28	RK75HA1J103J	CHIP-COM	10K J 1/16W	
CP401	RK75HA1J474J	CHIP-COM	470K J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M2,340_M3,340_P
CP401	RK74HA1J104J	NET RESISTOR	100K J 1/16W	340_K3
CP402	RK75HA1J474J	CHIP-COM	470K J 1/16W	340_K,340U_K,340_K 2,340U_K,2,340_M,34 0_M2,340_M3,340_P
CP402	RK74HA1J104J	NET RESISTOR	100K J 1/16W	340_K3
F600	F53-0324-15	FUSE(2.5A)		
F601	F53-0319-15	FUSE(1A)		
J601	E11-0703-05	PHONE JACK (SP/MIC)		
S601	S70-0414-05	TACT SWITCH		
S602	S70-0414-05	TACT SWITCH		
S603	S70-0414-05	TACT SWITCH		
TH200	ERTJ0EV104J	THERMISTOR		
TH400	NCP18WM224J03	THERMISTOR		
X1	L77-3128-05	TCXO(16.8MHZ)		
X2	L77-3129-05	TCXO(19.2MHZ)		
XF400	L71-0684-05	MCF(49.95MHZ)		

## Packing materials and accessories parts list

Illustration is  
NX-340(K,K2,K3,P,M3)  
and NX-340(U)(K,K2).

Block No.M2MM



## Packing and accessories

Block No. [M][2][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	B09-0758-03	CAP(SP/MIC)		
2	-----	PAMPHLET(SAR)		
3	-----	PAMPHLET(VOCODER)		
4	B62-2580-10	INSTRUCTION MANUAL		340_K,340U_K,340_K2,340U_K2,340_K3,340_P
4	B62-2581-10	INSTRUCTION MANUAL		340_M,340_M2,340_M3
5	D32-0456-03	STOPPER(SELECTOR)		
6	H12-4319-05	PACKING FIXTURE		340_K,340U_K,340_K2,340U_K2,340_K3,340_M3,340_P
7	-----	PROTECTION BAG (100/200/0.07)		
8	-----	PROTECTION BAG		
9	H52-2589-01	ITEM CARTON CASE		340_K,340U_K,340_K2,340U_K2,340_K3,340_M3,340_P
9	H52-2588-01	ITEM CARTON CASE		340_M,340_M2
10	J19-5577-03	HOLDER(SP/MIC)		
11	J29-0734-15	BELT CLIP		
12	N99-2089-05	SCREW SET		
13	T90-1039-25	WHIP ANTENNA		340_K,340U_K,340_K2,340U_K2,340_P
13	T90-1032-65	HELICAL ANTENNA		340_K3
14	W08-1246-25	AC ADAPTER		340_K3
14	W08-1247-25	AC ADAPTER		340_K,340U_K,340_K2,340U_K2
14	W08-1327-15	AC ADAPTER		340_M3
14	W08-1326-15	AC ADAPTER		340_P
15	W08-1249-45	CHARGER		340_K,340U_K,340_K2,340U_K2,340_K3
15	W08-1331-05	CHARGER		340_M3,340_P
16	-----	BATTERY ASSY(KNB-45L_M)		340_K,340U_K,340_K2,340U_K2,340_K3,340_M,340_P
16	-----	BATTERY ASSY(KNB-53N_M)		340_M3

**MEMO**



# KENWOOD

JVC KENWOOD Corporation  
Communications Systems Business Operation

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