



# SERVICE MANUAL

SSB RADIO TELEPHONE

**IC-M700PRO**

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S-14410XZ-C1  
June, 2007

Icom Inc.

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## INTRODUCTION

This service manual describes the latest service information for the **IC-M700PRO** SSB RADIO TELEPHON at the time of publication.

MODEL	VERSION	ALARM UNIT
IC-M700PRO	GEN-1	N/A
	GEN-2	Yes
	GEN-21	N/A
	GEN-22	Yes
	GEN-24	N/A
	GEN-25	Yes
	CHN	N/A

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

## CAUTION

**NEVER** connect the transceiver to an AC outlet or to a DC power supply that uses more than specified. This will ruin the transceiver.

**DO NOT** expose the transceiver to rain, snow or any liquids.

**DO NOT** reverse the polarities of the power supply when connecting the transceiver.

**DO NOT** apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.



## ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom parts numbers
2. Component name
3. Equipment model name and unit name
4. Quantity required

### <ORDER EXAMPLE>

1110003491 S.IC TA31136FNG IC-M700PRO MAIN UNIT 5 pieces  
8820001210 Screw 2438 screw IC-M700PRO Top cover 10 pieces

Addresses are provided on the inside back cover for your convenience.

## REPAIR NOTES

1. Make sure the problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting a test equipment to the transceiver.

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### ■ GENERAL

- Frequency coverage : Receive 500 kHz–29.9999 MHz  
 Transmit 1.6000–2.9999 MHz 4.0000–4.9999 MHz  
 6.0000–6.9999 MHz 8.0000–8.9999 MHz  
 12.0000–13.9999 MHz 16.0000–17.9999 MHz  
 18.0000–19.9999 MHz 22.0000–22.9999 MHz  
 25.0000–27.50000 MHz
- Mode : J3E (USB), H3E (AM), J2B (AFSK), F1B (FSK), R3E, A1A (CW)  
 (Available modes differ with version)
- Number of channels : 150 channels (max.)—3 groups of 50 channels each
- Antenna impedance : 50  $\Omega$  (nominal)
- Usable temperature range : –30°C to +60°C; –22°F to +140°F
- Frequency stability :  $\pm 10$  Hz (–30°C to +60°C; –22°F to +140°F)  
 ( $\pm 20$  Hz above 15 MHz)
- Power supply requirement : 13.6 V DC  $\pm 15\%$  Negative ground
- Current drain (at 13.6 V DC) : Transmit (max. output power) 30 A  
 Receive (max. audio output) 2.5 A
- Dimensions (projections not included) : 291.4(W) $\times$ 116.4(H) $\times$ 315(D) mm; 11<sup>15</sup>/<sub>32</sub>(W) $\times$ 4<sup>19</sup>/<sub>32</sub>(H) $\times$ 12<sup>13</sup>/<sub>32</sub>(D) in
- Weight (with ant., battery case and cells) : 7.9 kg; 17 lb 7 oz
- Remote connector : NMEA D-sub 9-pin (female)
- ACC 1 connector : DIN 8-pin (female)
- ACC 2 connector : DIN 7-pin (female)

### ■ TRANSMITTER

- Output power (at 13.6 V DC) : 150, 60, 20 W PEP  
 (60, 20 W PEP only above 24 MHz)
- Spurious emissions : –75 dB typical
- Carrier suppressions : 65 dB typical
- Unwanted sideband suppression : 75 dB typical
- Microphone impedance : 600  $\Omega$

### ■ RECEIVER

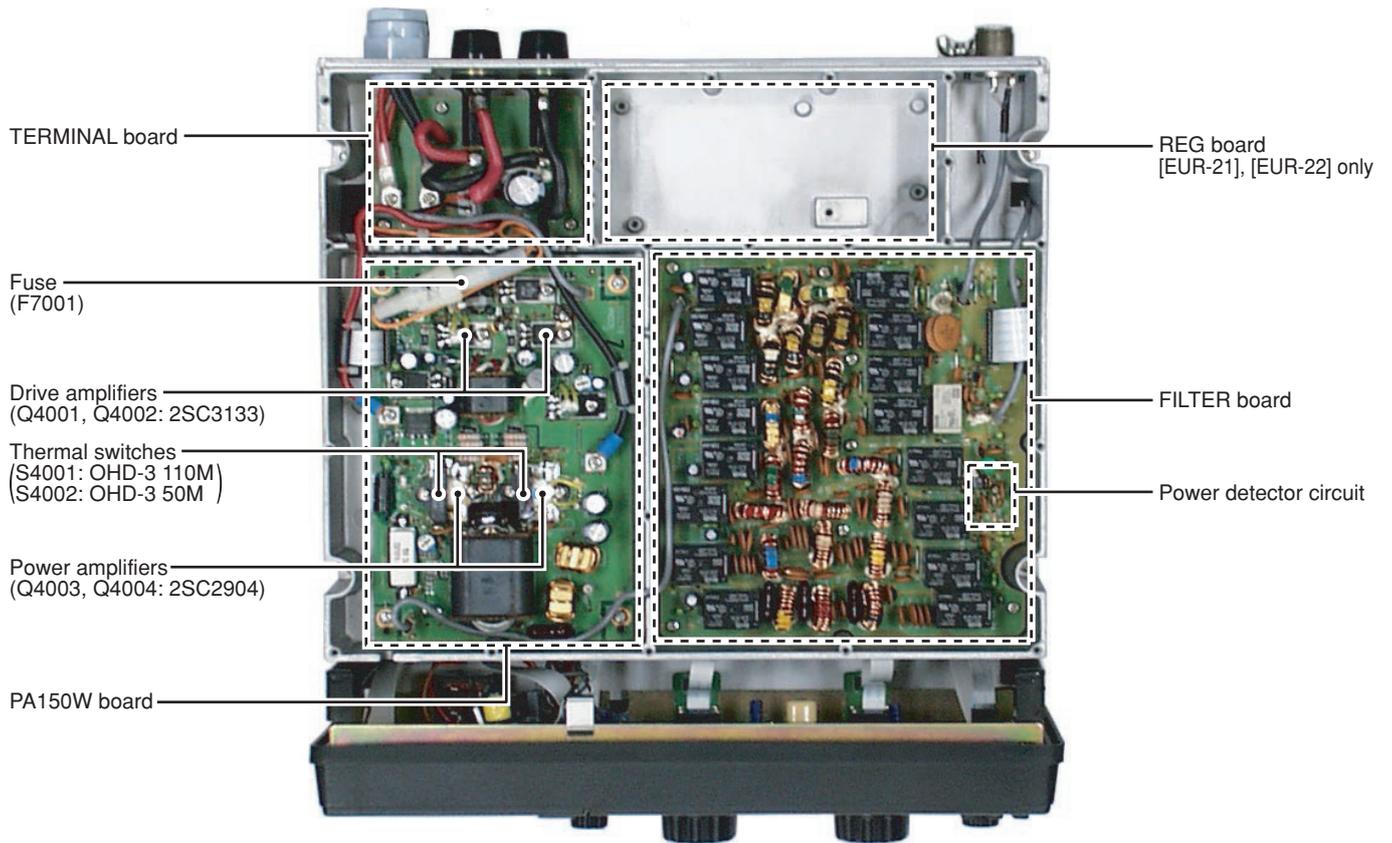
- Sensitivity :  
 J3E, R3E, J2B, A1A 0.35  $\mu$ V typical (1.8000–29.9999 MHz)  
 (for 12dB SINAD) 1.0  $\mu$ V (1.6000–1.7999 MHz)  
 6.3  $\mu$ V (0.5000–1.5999 MHz)  
 H3E (for 10dB S/N) 2.2  $\mu$ V typical (1.8000–29.9999 MHz)  
 6.3  $\mu$ V (1.6000–1.7999 MHz)  
 32  $\mu$ V (0.5000–1.5999 MHz)
- Spurious response rejection : 80 dB (1.6000–29.9999 MHz)
- Audio output power : 5.0 W typical (at 10% distortion with a 4  $\Omega$  load)
- Audio impedance : 4 to 8  $\Omega$
- Clarity variable range :  $\pm 150$  Hz

All stated specifications are subject to change without notice or obligation.

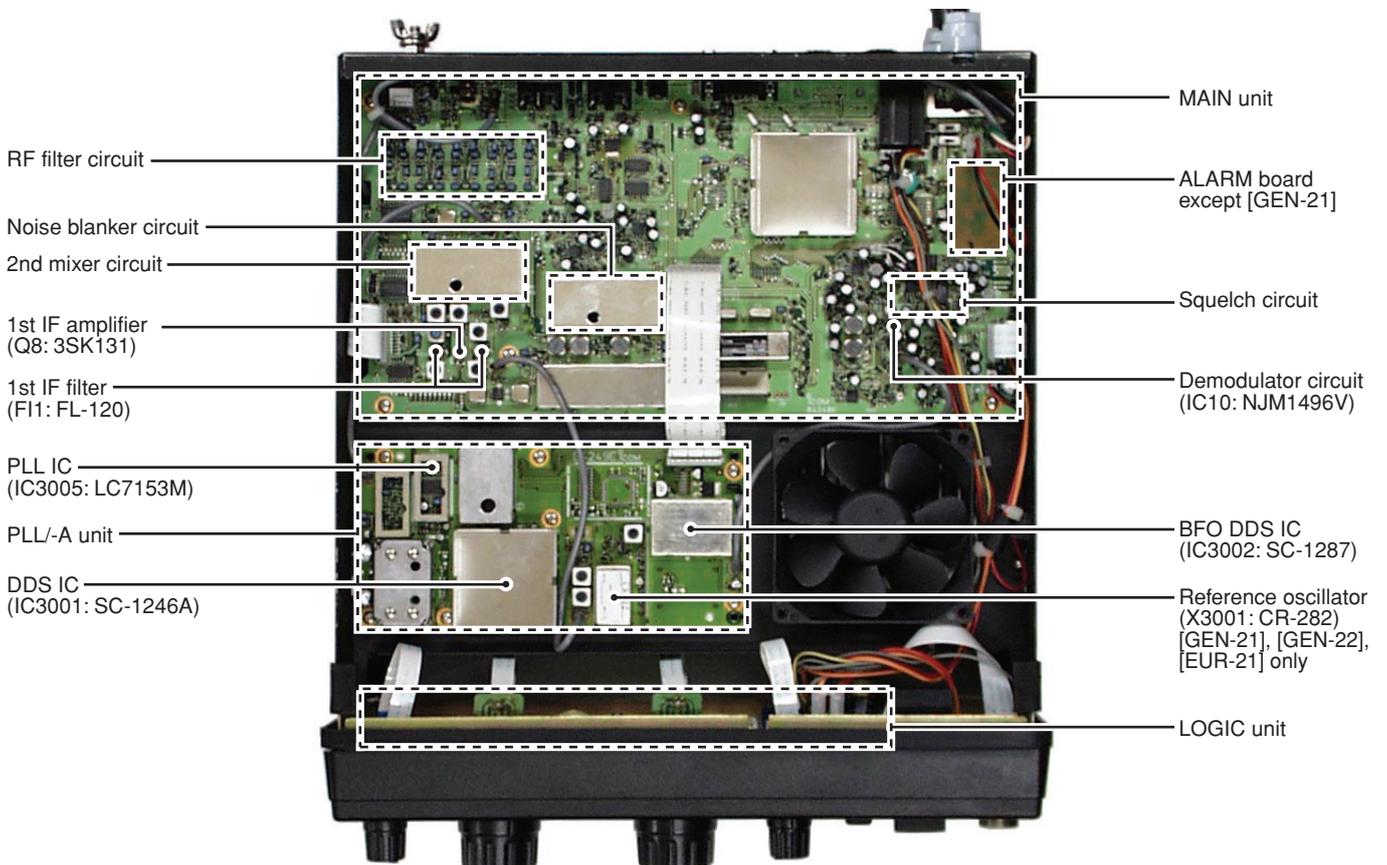
## SECTION 2

## INSIDE VIEWS

### • PA150W, FILTER AND TERMINAL BOARDS



### • MAIN, PLL AND LOGIC UNITS



## 3-1 RECEIVER CIRCUITS

### 3-1-1 RF FILTER CIRCUIT (MAIN UNIT)

Received signals from the antenna connector pass through the transmit/receive switching relay (FILTER board RL4317) and are then applied to the MAIN unit via J2.

The signals pass through the protection relay (RL2), 1.6 MHz cut off high-pass filter (L2–L4, C4–C8, C629) and are then applied to one of nine bandpass filters (including one low-pass filter for below 2.0 MHz). These filters are selected by the filter control signals (B0–B8) as described in the table below.

The filtered signals pass through the 30 MHz cut-off low-pass filter (L71, L72, C130–C134, C618), and are then applied to the 1st mixer circuit (Q6, Q7).

#### • RF FILTERS USED

Frequency (MHz)	Control signal	Entrance coil	Frequency (MHz)	Control signal	Entrance coil
0.5–1.999	B0	L49	10–13.999	B5	L28
2–2.999	B1	L8	14–17.999	B6	L33
3–4.999	B2	L13	18–23.999	B7	L38
5–6.999	B3	L18	24–29.999	B8	L43
7–9.999	B4	L23			

### 3-1-2 1ST MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st mixer circuit converts the received signals into a fixed frequency, 69.0115 MHz 1st IF signal using the PLL output frequency. By changing the PLL frequency, only the desired frequency is picked up at the pair of crystal filters (F11a, F11b) at the next stage.

The IF amplifier (Q8) and resonator circuits are designed between the filter pair. The PLL output signal (1LO) enters the MAIN unit via J3 and is amplified at the 1st LO amplifier (Q5) and then applied to the 1st mixer (Q6, Q7)

### 3-1-3 2ND MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st IF signal from the crystal filter (F11b) is converted again into a 9.0115 MHz 2nd IF signal at the 2nd mixer circuit (D52, L66, L67). The 60 MHz 2nd local signal (2LO) from the PLL unit enters the MAIN unit via J4 to be applied to the 2nd mixer.

The 2nd IF signal is passed through the noise blanker gate (D15, D16) and amplified at the 2nd IF amplifier (Q16) and then applied to one of the 9 MHz IF filters as described below. The passed signal is amplified at the two stage 2nd IF amplifiers (Q32, Q33) and is applied to a demodulator circuit (D39 for H3E or IC10 for J3E and others).

#### • 2ND IF FILTERS USED

MODE	Used filter	Control signal
J3E, R3E, FSK	F12	SEL8: low, H3E8: low
H3E	F13/F14	SEL8: low, H3E8: high
FSK narrow, A1A narrow	Optional narrow filter*	SEL8: high, H3E8: low

\*Built-in to the GMDSS versions

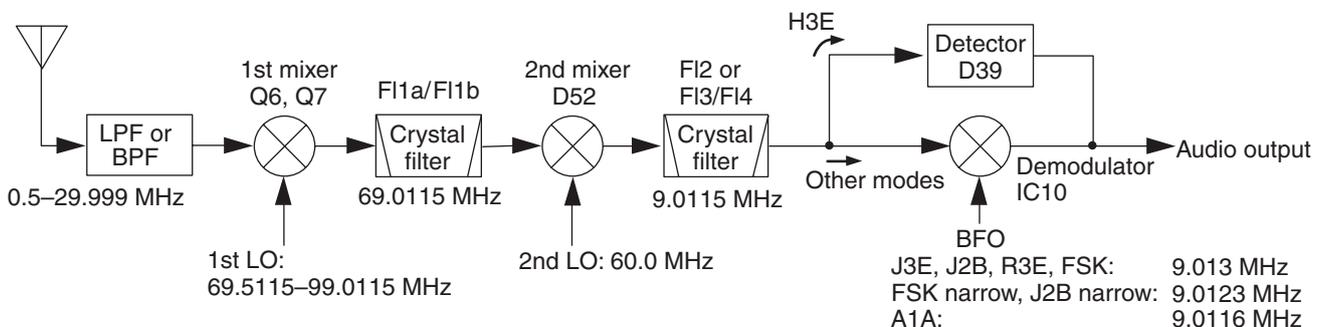
### 3-1-4 NOISE BLANKER CIRCUIT (MAIN UNIT)

The noise blanker circuit cuts off the IF circuit line at the moment of receiving a pulse-type noise.

A portion of the 2nd IF signal between resonator circuits (L83, L84 after stage of the 2nd mixer, D52) is amplified at the noise amplifiers (Q9, IC8, Q11). The signal is then detected at the noise detector (D17) to convert the noise components to DC voltages.

The signals are then applied to the noise blanker switch (Q13, Q14). At the moment the detected voltage exceeds the Q13's threshold level, Q14 outputs a blanking signal to close the noise blanker gate (D15, D16) by applying reverse-biased voltage. Q15 turns the noise blanker circuit ON and OFF.

#### • RECEIVE FREQUENCY CONSTRUCTION



The detected voltage is also applied to the noise blanker AGC circuit (Q12, Q10) and is then fed back to the noise amplifier (IC8) as a bias voltage. The noise AGC circuit prevents closure of the noise blanker gate for long periods by non-pulse-type noise. The time constant of the noise blanker AGC circuit is determined by R58 and C114.

### 3-1-5 DEMODULATOR CIRCUIT (MAN UNIT)

This circuit mixes the 2nd IF and BFO signals to pick up the AF components (except H3E mode). The 2nd IF signal from the 2nd IF amplifier (Q33) is applied to the balanced mixer (IC10, pin 1). The 9.0116–9.0130 MHz BFO signal from the PLL unit is also applied to IC10 (pin 10). AF signals are output from pin 12 and are then applied to the AF circuits.

### 3-1-6 H3E DETECTOR CIRCUIT (MAIN UNIT)

The 2nd IF signal from the 2nd IF amplifier (Q33) is applied to the AM detector circuit (D39) to be demodulated into AF signals. The detected signals are amplified at the buffer amplifier (Q45), and are then applied to the AF circuits.

### 3-1-7 AGC CIRCUIT (MAIN UNIT)

The AGC (Automatic Gain Control) circuit reduces IF amplifier gain to prevent the receiver circuit from distorting and to keep the audio output at a constant level.

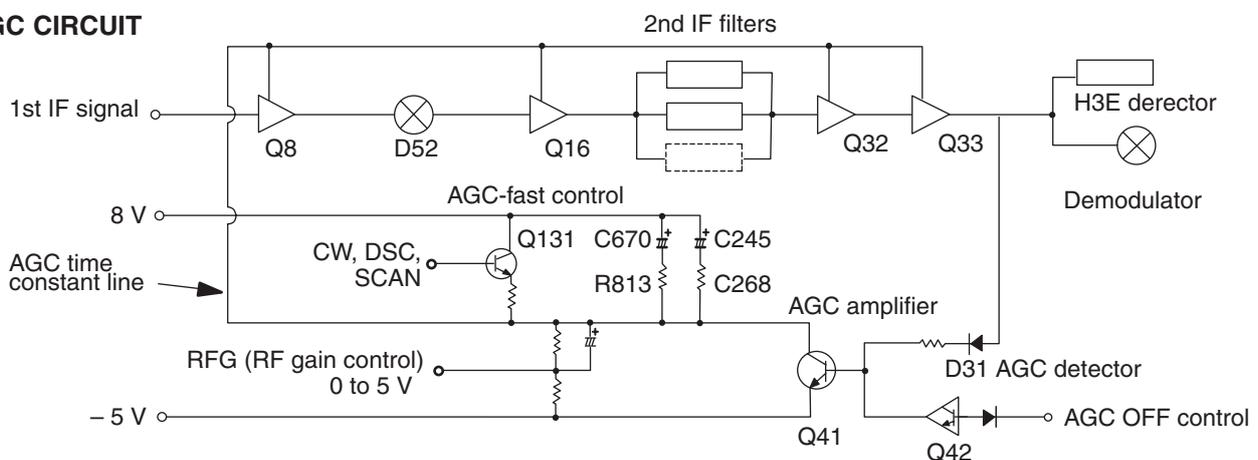
A portion of the IF signals from the 2nd IF amplifier (Q33) is detected at the AGC detector circuit (D31) and is then applied to the AGC amplifier (Q41) to control the AGC time constant line. The reference voltage of the AGC line is controlled by the "RFG" line which comes from the CPU for the RF gain setting.

When receiving a strong signal, the detected voltage increases and the voltage of the AGC line is decreased by the AGC amplifier (Q41) via the -5 V voltage line. The AGC line is used for the bias voltage of the IF amplifiers (Q8, Q16, Q32, Q33), so that these amplifiers reduce gain.

When the strong signal disappears, the AGC line voltage is released by C245/R268 and C670/R813.

The AGC switch (Q42, D38) turns the AGC circuit OFF when the AGC OFF function activates. The AGC-fast switch (Q131) sets the AGC line as fast-release during scanning, A1A mode selection and DSC operation.

#### • AGC CIRCUIT



### 3-1-8 S-METER CIRCUIT (MAIN UNIT)

The S-meter indicates the AGC level on the display, since the AGC level varies with the received signal strength.

The AGC bias voltage (AGC time constant line) from the AGC amplifier (Q41) is inverted and amplified at the meter amplifier (IC19b). The amplified signal is applied to the CPU via the "RSM" line.

### 3-1-9 AF AMPLIFIER CIRCUITS (MAIN UNIT AND LOGIC BOARD)

AF signals from the demodulator or H3E detector circuits pass through the active low-pass filter (IC20b) and squelch gate (IC12a), and are then applied to the electronic volume control (IC36). The CPU (IC132, pin 37) outputs the volume control signal (1 to 5 V) according to the [VOLUME] control setting.

The AF output signal from IC36 (9 pin) are supplied to the LOGIC unit via J23. The signals are amplified at the AF power amplifier (IC2007) and are then applied to the internal speaker via microphone connector (pins 3, 4) and external [SP] jack via the MAIN unit.

The speaker switch relay (RL2001) is connected to the (-) terminal of internal speaker for the [SPEAKER] switch function.

### 3-1-10 SQUELCH CIRCUIT (MAIN UNIT)

The transceiver has two squelch circuits, voice activated squelch for J3E/H3E and S-meter squelch for A1A/F1B/J2B.

#### (1) AF ACTIVATED SQUELCH

A portion of the AF signal from the active low-pass filter (IC20b) is amplified at the limiter amplifier (IC20a) and is then applied to the one-shot multi-vibrator (IC22c, IC22d). The one shot multi-vibrator functions as an F-V converter which generates a signal only when audio signals are received.

The output signals pass through the NOR gate (IC22b) and then the 3 Hz low-pass filter (IC21a) to remove the remaining noise components. The filtered signal is applied to the window comparator (IC21b). The NOR gate (IC22b) deactivates the audio activated squelch during A1A/F1B/J2B mode operation.

The comparator outputs “High” when the integrated signals exceed the reference voltage. C269, R310 and R780 are used as a time constant circuit. The resulting signal output from IC22a is inverted at Q46 and is then applied to the CPU as the “SQLS” signal. The CPU controls the squelch gate (IC12a) when the “SQLS” signal is received.

## (2) S-METER SQUELCH

The S-meter signal from IC19b is applied to the squelch comparator (IC19a) to close or open the squelch circuit. The reference voltage is adjusted by R257 and then applied to the (-) terminal of the comparator (IC19a). When the S-meter signal exceeds the reference voltage, the comparator outputs “High” to the CPU via IC22a and Q46 in the same manner as the voice activated squelch circuit.

## 3-2 TRANSMITTER CIRCUITS

### 3-2-1 MICROPHONE AMPLIFIER CIRCUIT (LOGIC BOARD)

The AF signals from the [MICROPHONE] connector are pass through the AF amplifier (IC2008a), and are applied to the balanced modulator (MAIN unit; IC9, pin 1) via the AF switch (IC38b). The microphone AGC circuit (D2008, D2009, Q2009) controls the amplifier gain to prevent signal distortion.

External modulation inputs from the ACC, NBDP, DSC sockets or a 2-tone emergency signal from the CPU are applied to the balanced modulator directly via AF switches (IC37–IC39).

### 3-2-2 MODULATION CIRCUIT (MAIN UNIT)

#### (1) J3E AND J2B MODES

The balanced modulator is used for J3E and J2B modes to add the audio signal to the BFO frequency, and outputs the IF signal while suppressing the BFO signal.

The AF signals from the microphone amplifier or external audio from the modulation terminals are applied to the balanced modulator (IC9, pin 1). The BFO signal from the PLL unit is applied to (IC9, pin 10) as a carrier signal. A double sideband signal is output from IC9 (pin 6), and is then applied to the 9 MHz filter (FI2) to create an SSB signal.

R238 adjusts the balanced level of IC9 for maximum carrier suppression. In J2B mode, the BFO frequency is shifted 1.7 kHz to set the transmit frequency the same as the displayed frequency.

The SSB signal from FI2 is amplified at the 9 MHz amplifiers (Q17–Q19) and is then applied to the mixer circuit (D52). The switching diode (D19) is turned ON when R8 voltage disappears.

#### (2) H3E AND R3E MODES

An SSB signal is applied to the IF amplifier (Q18) in the same manner as with J3E/J2B mode. The BFO signal from the PLL unit is amplified at the buffer amplifier (Q30) and is then applied to the IF amplifier (Q18) as a carrier signal to be added to an SSB signal. R211 and R212 adjust the carrier levels in H3E and R3E modes, respectively.

#### (3) A1A AND F1B MODES

The CW8 or FSK8 voltage are applied to the balanced modulator (IC9, pin 4) to upset the balance and create a carrier signal.

In A1A mode, the CW keying circuit (IC18a) controls the bias voltage of the IF amplifiers (Q18, Q19) and T/R switching diode (D19) to switch the carrier transmission.

In F1B mode, BFO frequency is shifted in the PLL unit to create the mark and space frequencies.

### 3-2-3 1ST MIXER CIRCUIT (MAIN UNIT)

The amplified signal from the IF amplifier (Q17) is mixed with a 60 MHz LO signal at the 1st mixer circuit (D52) to produce a 69.0115 MHz IF signal. The mixer is commonly used with the receiver 2nd mixer.

The 69.0115 MHz IF signal passes through the filter (FI1b) and is then applied to the 2nd mixer circuit.

### 3-2-4 2ND MIXER CIRCUIT (MAIN UNIT)

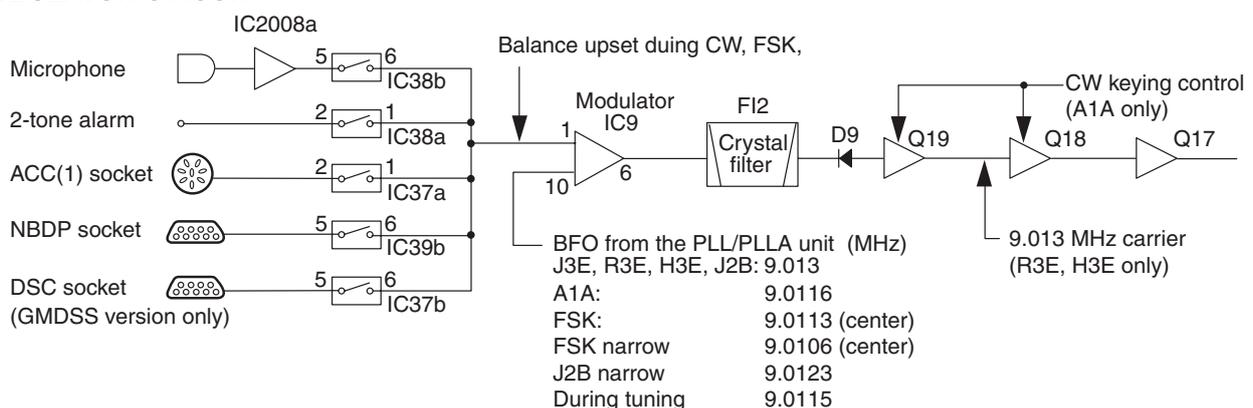
The filtered signal is mixed with a PLL output frequency (1LO: 69.5155–99.0155 MHz) at the 2nd mixer circuit (Q3, Q4) to produce an RF signal which is the same frequency as the displayed one.

### 3-2-5 RF FILTER CIRCUIT (MAIN UNIT)

The RF signal passes through the low-pass filter (L55, L56, C89–C93, C620, C628) and is then amplified at the RF amplifier (Q2).

The amplified signal is applied to one of nine RF filters. These RF filters are commonly used with the receiver circuit which consists of eight high-pass filters and one low-pass filter. The filtered signal is amplified at the RF amplifier (Q1) and is then applied to the PA150W board via J1.

## • MODULATOR CIRCUIT



### 3-2-6 POWER AMPLIFIER CIRCUIT (PA150W BOARD)

This circuit provides a stable 150 W (at 13.6 V) of output power. The RF signal from the MAIN unit is amplified at the pre-driver (Q4008), drivers (Q4001, Q4002), and power amplifiers (Q4003, Q4004).

The driver and power amplifiers form class AB push-pull circuits. Bias voltage to these transistors is produced by diodes (D4001–D4003) which have temperature junctions with the transistors.

The amplified signal is then applied to one of eight low-pass filters to suppress high harmonic components. The filtered signal passes through the power detector circuit (FILTER board; L4341) and transmit/receive switching relay (FILTER board; RL4317) and is then applied to the antenna connector.

#### • LOW-PASS FILTERS USED (FILTER BOARD)

Frequency (MHz)	Control signal	Entrance Relay	Frequency (MHz)	Control signal	Entrance Relay
0.5–1.999	L0	RL4301	10–13.999	L5	RL4311
2–2.999	L1	RL4303	14–17.999	L6	RL4313
3–4.999	L2	RL4305	18–19.999		
5–6.999	L3	RL4307	20–21.999	L7	RL4315
7–9.999	L4	RL4309	22–23.999		
			24–29.999		

### 3-2-7 ALC CIRCUIT

The transceiver has two ALC (Auto Level Control) loops for constant output power over all marine bands and for high power setting.

#### (1) IF ALC CIRCUIT (MAIN UNIT)

A portion of the IF signals from the IF amplifier (Q17) is applied to the IF ALC circuit. The signal is amplified at Q126 and then detected at the ALC detector (D46). The detected signal is amplified at the ALC amplifier (IC17b) and is then applied to the comparator (IC17a).

The reference voltage for the comparator is set by R184. The antenna tuning control voltage (TUN8) and low power set signal (POC1) are also affected by the reference voltage to decrease the IF signal level.

The comparator output controls the gate bias of the IF amplifier (Q19), so that the IF signal level is determined by the reference voltage of the comparator (IC17a).

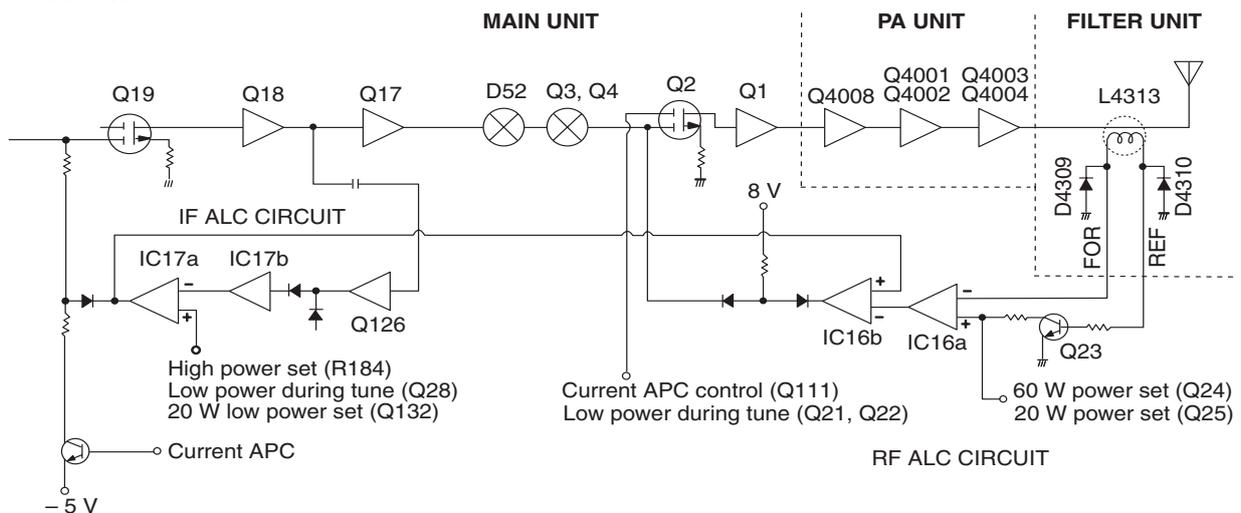
#### (2) RF ALC CIRCUIT (FILTER BOARD)

The RF output power level is detected at D4309 of the power detector circuit (FILTER board; L4341, D4309, D4310). The detected signal (“FOR” signal) is applied to the RF ALC amplifier (MAIN unit; IC16a).

The amplified signal enters the transmit gain controller (IC16b) which functions as an inversion amplifier. The gain controller decrease the gain of the IF amplifier (MAIN unit; Q2) to constant output power from differential amplifier gains which are occurred by their frequency characteristics.

The bias voltage of the RF ALC amplifier (IC16a) is controlled by the low power control signal (POC1 for 20 W, POC2 for 60 W) and APC signal.

#### • ALC CIRCUIT



### 3-2-8 APC CIRCUIT

The APC (Auto Power Control) circuit protects the power amplifiers on the PA unit from high SWR and excessive current.

#### (1) SWR APC (FILTER BOARD AND MAIN UNIT)

The reflected wave signal appears and increases on the antenna connector. When the antenna is mismatched, D4310 of the power detector circuit (FILTER board; D4309, D4310, L4341) detects the signal and applies it to the APC amplifier (MAIN unit; Q23). The amplified signal decreases the bias voltage of the RF ALC amplifier to reduce the output power.

#### (2) CURRENT APC (PA150W BOARD AND MAIN UNIT)

The power transistor current is detected from the different voltages between both terminals of a 0.012 Ω resistor (R4026) on the PA150W board. The detected voltage is applied to the differential amplifier (IC4002b). When the current of the final transistors is more than 30 A, the detected voltage is applied to the APC amplifier controller (MAIN unit; Q111) to reduce the gate-2 voltage of the IF amplifier (MAIN unit; Q2) and thus reduce the output power.

### 3-2-9 TEMPERATURE DETECTION (PA150W BOARD)

Thermal switches (S4001, S4002) protect the final transistors from excessive temperatures. When the temperature of the final transistors exceeds 50°C (122°F), S4002 is turned ON to start the cooling fan. When the temperature of the final transistors exceeds 110°C (230°F), S4001 is turned ON to control the “POC2” line and sets the power to 60 W.

### 3-2-10 RF METER CIRCUIT (MAIN UNIT)

The output of the ALC amplifier (IC16a) is applied to the CPU (pin 31) to indicate the transmit power level on the display.

For antenna current meter indication, the “ANTC” signal from an optional AT-130E is applied to the CPU (pin 32).

### 3-3 PLL CIRCUIT

#### 3-3-1 GENERAL

The PLL unit generates a 1st LO frequency (69.5115–99.0114 MHz), 2nd LO frequency (60 MHz) and a BFO frequency (9.0106–9.013 MHz) for the MAIN unit. The 1st LO PLL adopts a mixerless dual loop PLL system. The BFO uses a DDS and a 2nd LO as a fixed frequency double that the crystal oscillator.

#### 3-3-2 1ST LO PLL (PLL UNIT)

The 1st LO PLL contains a main loop and reference loop as a dual loop system. The reference loop generates a 10.65 to 10.75 MHz frequency using a DDS circuit, and the main loop generates a 69.5115 to 99.0114 MHz frequency using the reference loop frequency.

##### (1) REFERENCE LOOP PLL

The oscillated signal at the reference VCO (Q3005, D3003) is amplified at the buffer amplifiers (Q3006, Q3011) and is then applied to the DDS IC (IC3001, pin 46). The signal is then divided and detected on phase with the DDS generated frequency.

The detected signal output from IC3001 (pin 56) is converted into a DC voltage (lock voltage) at the loop filter (R3018, R3019, C3044) and then fed back to the varactor diode (D3003) in the VCO circuit.

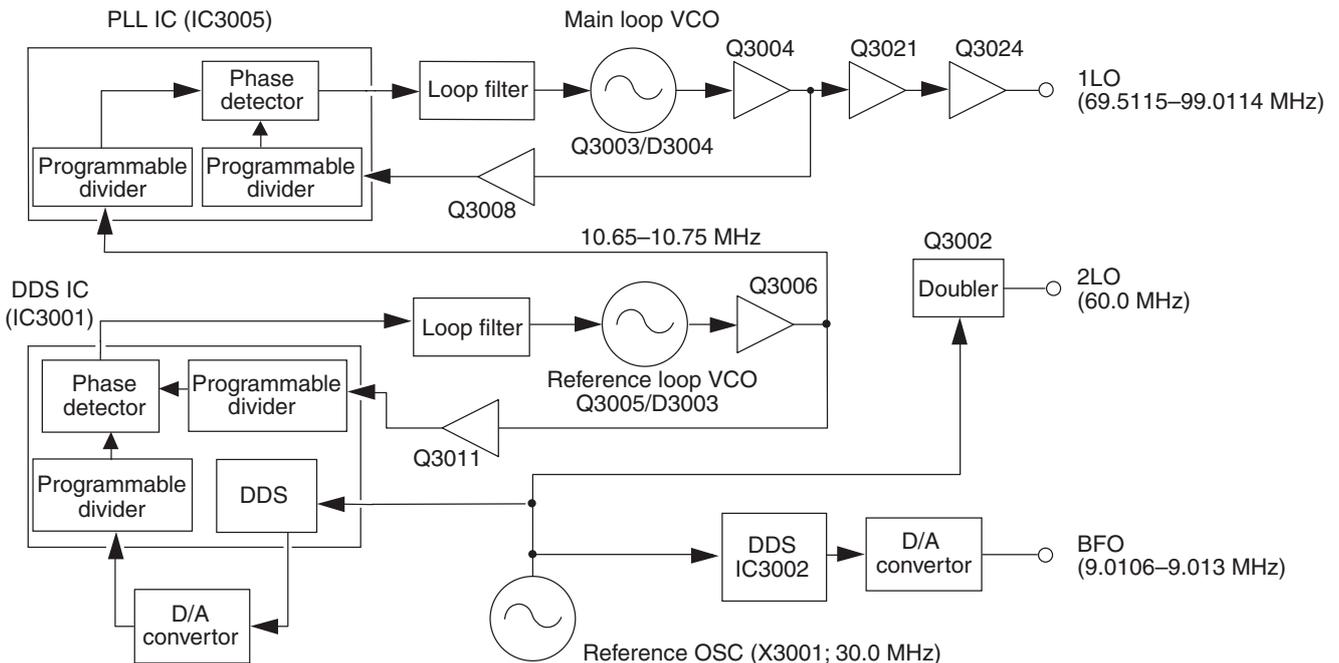
##### (2) MAIN LOOP PLL

The oscillated signal at the main loop VCO (Q3003, D3004) is amplified at the buffer amplifiers (Q3004, Q3008), and is then applied to the PLL IC (IC3005, pin 14). The signal is then divided and detected on phase with the reference loop output frequency.

The detected signal output from IC3005 (pins 3009, 3010) is converted into a DC voltage (lock voltage) at the loop filter and then fed back to the varactor diode (D3004) in the VCO circuit.

The oscillated signal is amplified at the buffer amplifiers (Q3004, Q3021, Q3024) and then applied to the MAIN unit as a 1st LO signal.

#### • PLL CIRCUIT



### 3-3-3 2ND LO AND REFERENCE OSCILLATOR CIRCUITS

The reference oscillator (X3001) generates 30.0 MHz frequency used for the both DDS ICs as a system clock and for the LO output. The oscillated signal is doubled at the driver (Q3002) and picked up the 60 MHz frequency at the resonator circuit (L3004, L3005). The 60 MHz signal is applied to the MAIN unit as a 2nd LO signal.

### 3-3-4 BFO CIRCUIT

The DDS IC (IC3002) generates a 10-bit digital signal using the 30 MHz system clock. The digital signal is converted to an analog wave signal at the D/A converter (R3120–R3139). The analog wave is passed through the low-pass filter (L3037, L3038, C3154–C3158), and is then applied to the MAIN unit as the BFO signal. The PA unit separate grounding from the other units to obtain floating.

### 3-4 PORT ALLOCATIONS CPU (MAIN unit; IC132)

Pin number	Port name	Description
1	RES	Input port for the CPU reset signal. When receiving a "LOW" pulse, the CPU is reset.
10	RXDO	Data input port from the sub CPU in the FRONT unit.
11	TXDO	Data output port to the sub CPU in the FRONT unit.
16	NSEN	Input port to the sub CPU in the FRONT unit.
17	POC2	Outputs low power control signal for 60 W power.
18	POC1	Outputs low power control signal for 20 W power.
20	CWIN	Input port for the CW keying. High: When key is closed.
21	ASEN	Outputs a "SEND" control signal for the ACC (1) and ACC (2) sockets.
22	CSEN	Outputs a "SEND" control signal for T8 and R8 voltage line control. Low : For transmit.
23	ALMS	Outputs an alarm control signal to activate the 2-tone emergency alarm encoder. High : Alarm ON.
24	ALMC	Outputs a tone switching signal for the 2-tone emergency alarm encoder. High : High tone.
25	SCL	Outputs a clock signal for the EEPROM (IC134).
26	SDA	Data bus line for the EEPROM (IC134).
27	SO	Outputs a serial signal for the EEPROM (IC135).
28	SDA	Data bus line for the EEPROM (IC135).
30	RSM	Input port for the S-meter indication.
31	MFOR	Input port for the RF-meter indication.
32	ANTC	Input port for the antenna current meter indication for [EUR] version. The ANTC signal can be received when an optional AT-130E is connected.
33	SQLS	Input port for the squelch detected signal. High : When squelch is open.
34	TRC	Input port for the transmit/receive switching signal.
35	SCAS	Input port for the scan control signal from the ACC (1) socket.
36	RFG	Outputs RF gain control signal to the AGC circuit.

**(MAIN unit; IC132)–Continued**

<b>Pin number</b>	<b>Port name</b>	<b>Description</b>
37	AFG	Outputs AF gain control signal to the control (IC36).
39	STAT	Outputs the "tuner start" pulse to an optional AT-130E.
40	BEEP	Outputs a BEEP signal (1 kHz or 500 Hz).
41	STB1	Outputs a strobe signal to the main loop PLL IC (C3005).
42	STB2	Outputs a strobe signal to the reference loop DSS IC (IC3001).
48	STB3	Outputs a strobe signal to the BFO PLL IC (IC3002).
49	DATA	Outputs a data signal to PLL and DDS ICs.
50	CK	Outputs a clock signal to PLL and DDS ICs.
51	SQL C	Outputs an AF mute signal for squelch function. High : Squelch closed.
52	NBS	Outputs a "noise blanker" signal. High : Noise blanker is on
53	AGCS	Outputs an AGC -OFF signal. High: AGC deactivate.
54	NMS	Outputs an external NBDP equipment control signal. Low: During NBDP data output.
55	P20	Outputs a strobe signal for an initial matrix.
57–60	P17–P14	Input ports for an initial matrix.
61–64	PD–PA	Output band signals for RF LPF and BPF selection.
65–67	J2B, R3E, H3E	Outputs mode signals.
68	KEY	Input port for an optional AT-130E. Low : During tuning.
69	CW	Outputs a mode signal.
70	TUNE	Outputs an antenna tuner tuning control signal for transceiver's power/mode control.
71	FSEL	Outputs a narrow filter selection signal. Low : Optional narrow filter selection.
72	PROG	Outputs a program scan control signal for "AGC fast" and "audio squelch" deactivation.

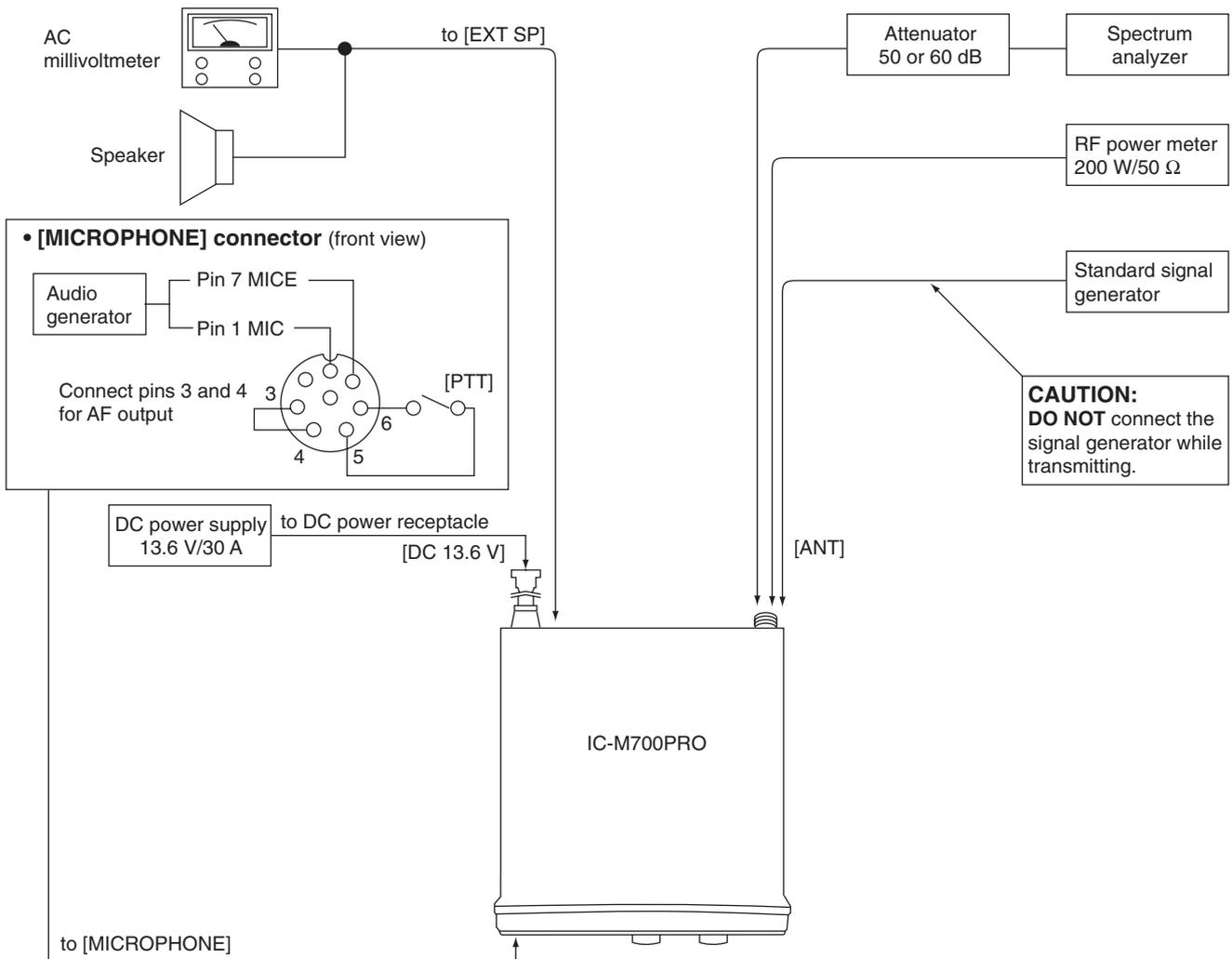
# SECTION 4 ADJUSTMENT PROCEDURE

## 4-1 PREPARATION

### • REQUIRED TEST EQUIPMENT

EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
DC power supply	Output voltage : 13.6 V DC Current capacity : 30 A or more	Audio generator	Frequency range : 300–3000 Hz Measuring range : 1–500 mV
RF power meter (terminated type)	Measuring range : 10–200 W Frequency range : 1.8–30 MHz Impedance : 50 Ω SWR : Less than 1.2 : 1	Standard signal generator (SSG)	Frequency range : 0.1–30 MHz Output level : 0.1 μV–32 mV (–127 to –17 dBm)
Frequency counter	Frequency range : 0.1–100 MHz Frequency accuracy : ±1 ppm or better Sensitivity : 100 mV or better	Oscilloscope	Frequency range : DC–100 MHz Measuring range : 0.01–10 V
RF voltmeter	Frequency range : 0.1–100 MHz Measuring range : 0.01–10 V	AC millivoltmeter	Measuring range : 10 mV–10 V
DC voltmeter	Input impedance : 50 Ω/V DC or better	External speaker	Input impedance : 4 Ω Capacity : 6 W or more
Spectrum analyzer	Frequency minimum : At least 90 MHz Spectrum bandwidth : 100 kHz or more	Attenuator	Power attenuation : 50 or 60 dB Capacity : 150 W or more
		DC ammeter	Measurement capability: 1 A/3 A/50 A

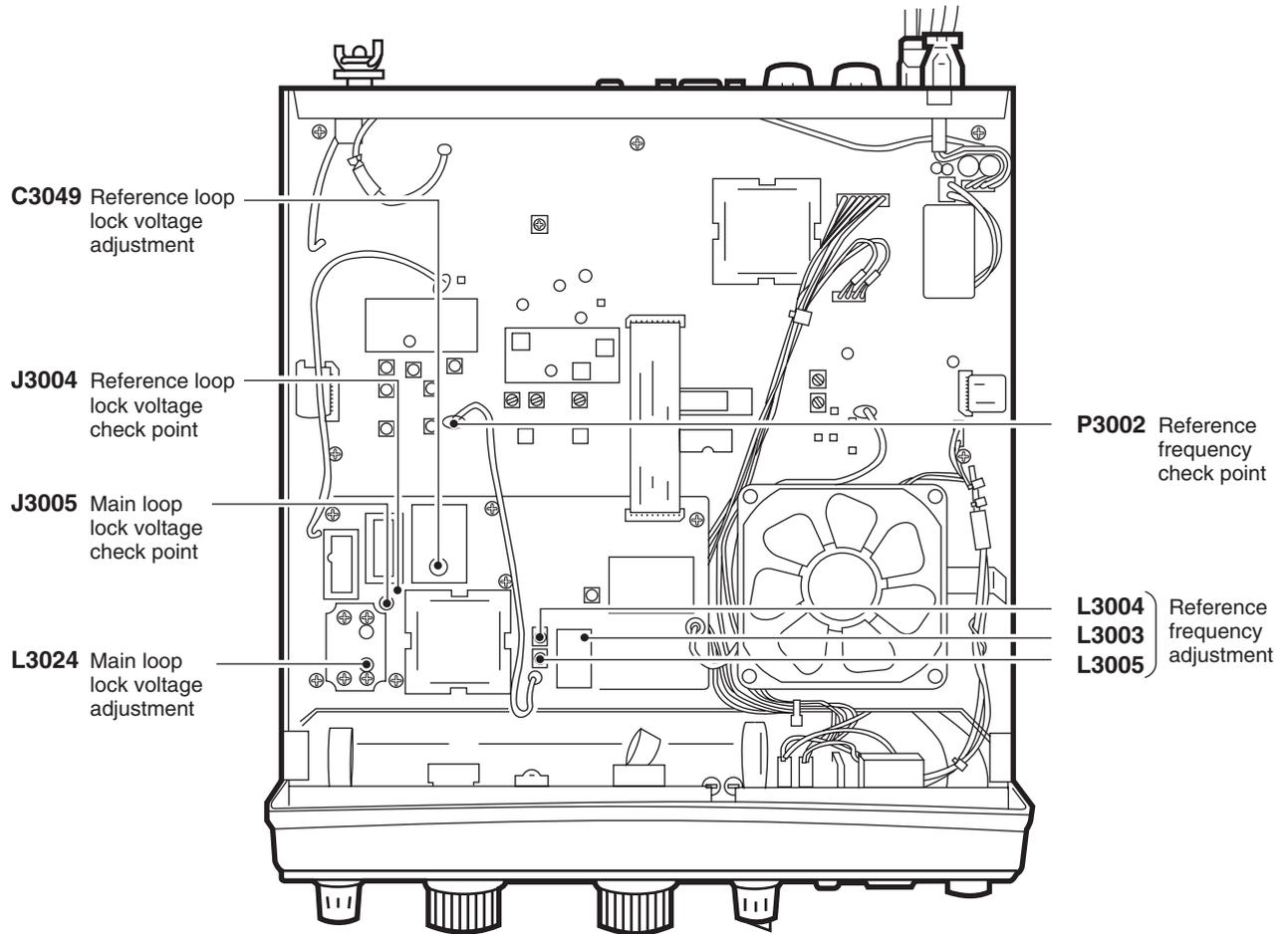
### • CONNECTION



## 4-2 PLL ADJUSTMENTS

ADJUSTMENT		ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
REFERENCE LOOP LOCK VOLTAGE	1	<ul style="list-style-type: none"> <li>• Display frequency : 7.9999 MHz</li> <li>• Mode : J3E</li> <li>• Receiving</li> </ul>	PLL	Connect a digital multimeter or oscilloscope to check point J3004.	3.2 V	PLL	C3049
	2	<ul style="list-style-type: none"> <li>• Display frequency : 0.0300 MHz</li> </ul>			More than 1.5 V		Verify
MAIN LOOP LOCK VOLTAGE	1	<ul style="list-style-type: none"> <li>• Display frequency : 0.5000 MHz</li> <li>• Receiving</li> </ul>	PLL	Connect a digital multimeter or oscilloscope to check point J3005.	4.0 V	PLL	L3024
	2	<ul style="list-style-type: none"> <li>• Display frequency : 29.9999 MHz</li> </ul>			More than 1.0 V		Verify
REFERENCE FREQUENCY	1	<ul style="list-style-type: none"> <li>• Wait for 5 min. after power ON.</li> <li>• Terminate P3002 to ground with a 50 ohms resistor.</li> <li>• Receiving</li> </ul>	PLL	Connect an RF voltmeter to check point P3002.	Maximum level (More than +2 dBm)	PLL	L3004, L3005
	2			Connect a frequency counter to check point P3002.	60.000000 MHz		L3003

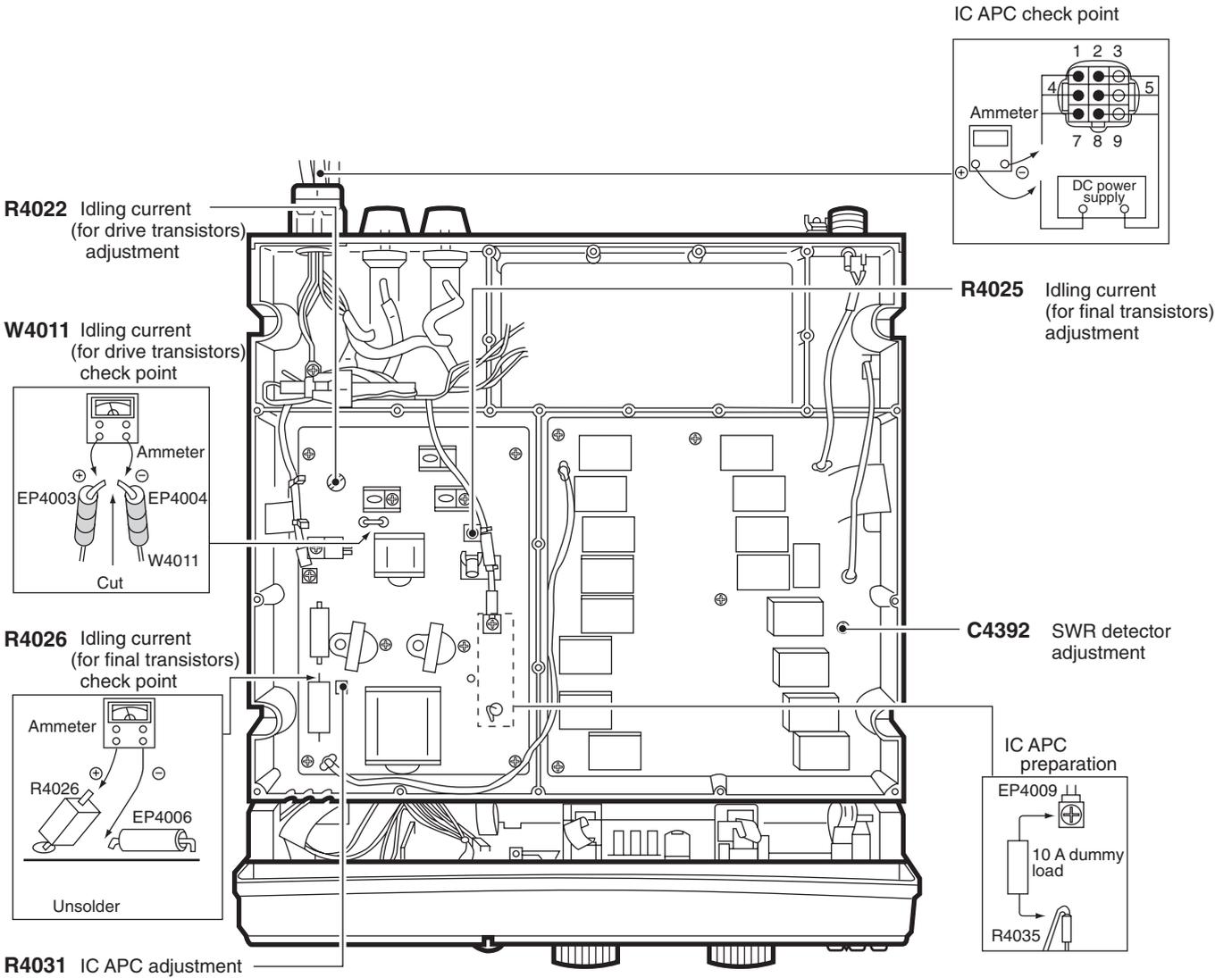
• MAIN AND PLL UNITS



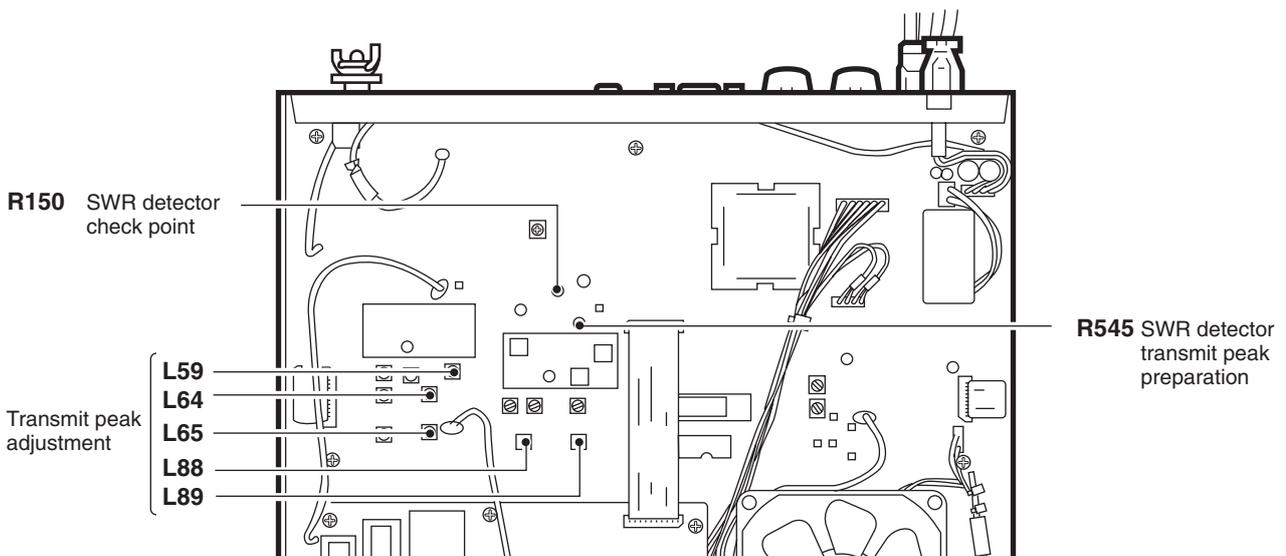
## 4-3 TRANSMITTER ADJUSTMENTS

ADJUSTMENT	ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT POINT		
		UNIT	LOCATION		UNIT	ADJUST	
IDLING CURRENT (For drive transistors)	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• mode : J3E</li> <li>• Apply no audio signal to the [MICROPHONE] connector.</li> <li>• Transmitting</li> </ul>	PA	Cut the lead wire (W4011) and connect a DC ammeter (1 A) to the cut points.	100 mA	PA	R4022
	After adjustment, re-solder the lead wire (W4011).						
(For final transistors)	2	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• mode : J3E</li> <li>• Apply no audio signal to the [MICROPHONE] connector.</li> <li>• Transmitting</li> </ul>	PA	Unsolder R4026 and connect the DC ammeter (3 A) to the unsoldered points.	500 mA	PA	R4025
	After adjustment, re-solder R4026.						
IC APC	1	<ul style="list-style-type: none"> <li>• Display frequency : 22.0000 MHz</li> <li>• Mode : J3E</li> <li>• Preset R4031 on the PA unit to the maximum counterclockwise position.</li> <li>• Connect a dummy load (10 A) between lead of R4035 (power line) and EP4009 (power ground) on the PA unit.</li> <li>• Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 100 mV rms</li> <li>• Connect an RF power meter to the [ANT] connector.</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect a DC ammeter (50 A) between the DC power supply and DC power receptacle (DC input +).	30 A	PA	R4031
	After adjustment, remove the dummy load.						
SWR DETECTOR	1	<ul style="list-style-type: none"> <li>• Display frequency : 22.0000 MHz</li> <li>• Mode : J3E</li> <li>• Ground the lead of R545 on the MAIN unit with a wire.</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	140 W	Audio generator	Output level
	2	<ul style="list-style-type: none"> <li>• Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz</li> <li>• Transmitting</li> </ul>	MAIN	Connect a DC voltmeter to R150.	Minimum level	FILTER	C4392
	After adjustment, remove the wire from R545.						
TRANSMIT PEAK	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Ground the lead of R545 on the MAIN unit with a wire.</li> <li>• Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 3 mV</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	Maximum output power	MAIN	Adjust in sequence L89, L88, L65, L64, L59
	After adjustment, remove the wire from R545.						

• PA AND FILTER BOARDS



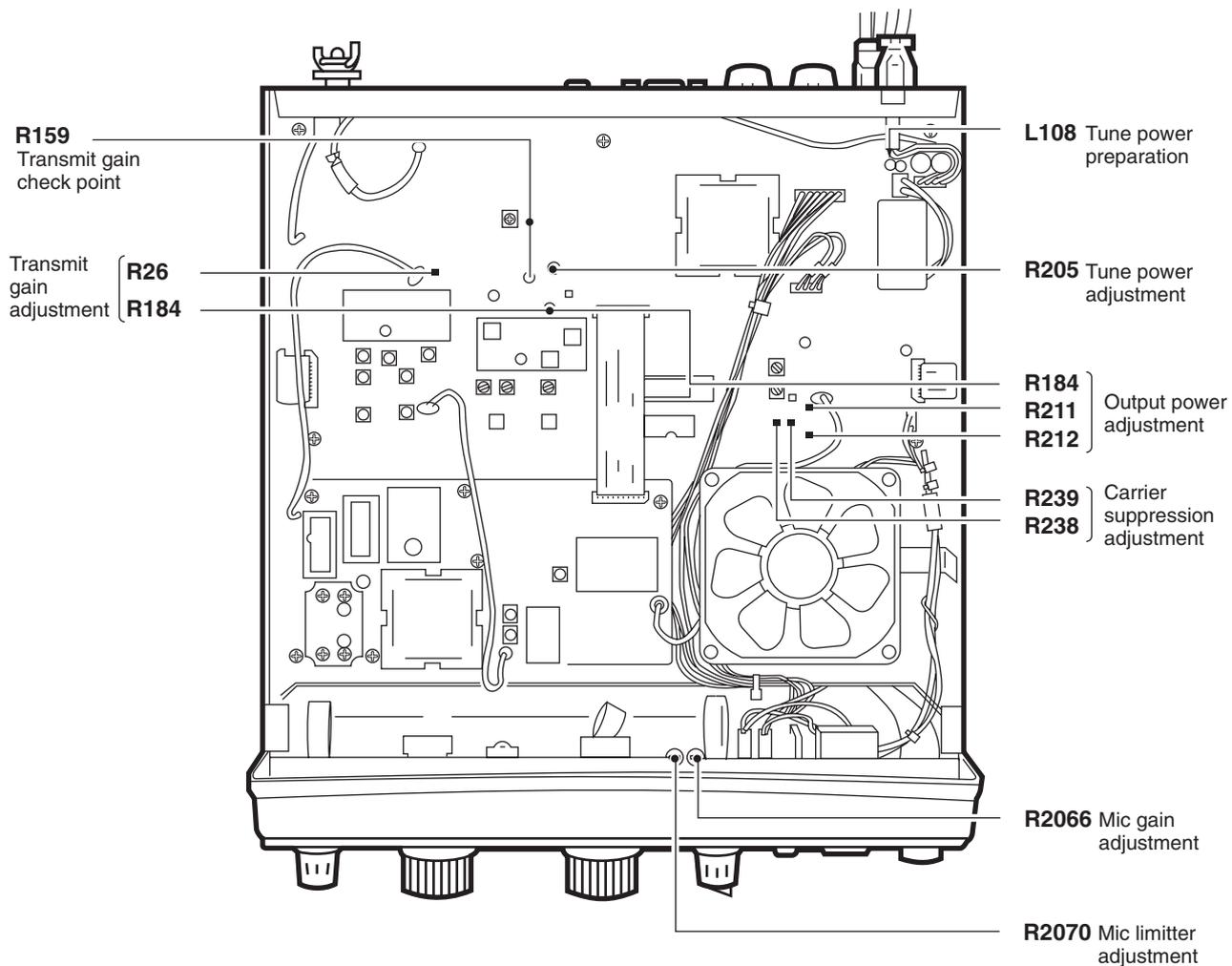
• MAIN UNIT



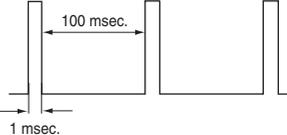
## TRANSMITTER ADJUSTMENTS (continued)

ADJUSTMENT	ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT POINT		
		UNIT	LOCATION		UNIT	ADJUST	
TRANSMIT GAIN	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• mode : A1A</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	140 W	MAIN	R184
	2	<ul style="list-style-type: none"> <li>• Display frequency : 16.3650 MHz</li> <li>• Transmitting</li> </ul>	MAIN	Connect a digital multimeter to R159.	0.5 V		R26
OUTPUT POWER	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : H3E</li> <li>• Apply no audio signal to the [MICROPHONE] connector.</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	45 W	MAIN	R211
	2	<ul style="list-style-type: none"> <li>• Mode : R3E</li> <li>• Transmitting</li> </ul>			2.0 W		R212
	3	<ul style="list-style-type: none"> <li>• Mode : A1A</li> <li>• Transmitting</li> </ul>			140 W		R184
CARRIER SUPPRESSION	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Apply no audio signal to the [MICROPHONE] connector.</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect a spectrum analyzer or RF voltmeter to the [ANT] connector via an attenuator.	Minimum carrier level (Less than -40 dB)	MAIN	Adjust alternately R238, R239
TUNE POWER	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Ground the lead of L108 (KEY line) on the MAIN unit with a wire.</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	10 W	MAIN	R205
POWER METER	1	<ul style="list-style-type: none"> <li>• While pushing the [SQL] and [ENT] switches, turn power ON.</li> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Connect an audio generator to the [MICROPHONE] connector and set as:</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	17 W	Audio generator	Output level
	2	<ul style="list-style-type: none"> <li>• Set the transmit power: [PO-1] (20 W PEP)</li> <li>• Transmitting</li> </ul>			Push the [DIMMER] switch.	Font Panel	[DIMMER]
MIC LIMITTER	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Disconnect BFO plug (J5) on the MAIN unit.</li> <li>• Connect an audio generator to the [MICROPHONE] connector and set as:</li> <li>• Transmitting</li> </ul>	MAIN	Connect an oscilloscope to R243.	70 mV PEP	LOGIC	R2070
MIC GAIN	1	<ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Connect an audio generator to the [MICROPHONE] connector and set as:</li> <li>• Transmitting</li> </ul>	Rear Panel	Connect an RF power meter to the [ANT] connector.	100 W	LOGIC	R2066

• MAIN UNIT AND LOGIC BOARD



## 4-4 RECEIVER ADJUSTMENTS

ADJUSTMENT	ADJUSTMENT CONDITION	MEASUREMENT		VALUE	ADJUSTMENT POINT	
		UNIT	LOCATION		UNIT	ADJUST
RECEIVER GAIN	1 <ul style="list-style-type: none"> <li>• Display frequency : 2.1820 MHz</li> <li>• Mode : J3E</li> <li>• Noise blanker : OFF</li> <li>• Squelch : OFF</li> <li>• Speaker : OFF</li> <li>• AGC : ON</li> <li>• RF gain : 9</li> <li>• R223 (MAIN unit) : Max. clockwise</li> <li>• R257 (MAIN unit) : Max. counter clockwise</li> <li>• R300 (MAIN unit) : Center</li> <li>• Connect a standard signal generator to the [ANT] connector and set as:               <ul style="list-style-type: none"> <li>Frequency : 2.1815 MHz</li> <li>Level : 0.5 <math>\mu</math>V (-113 dBm)</li> <li>modulation : OFF</li> </ul> </li> <li>• Receiving</li> </ul>	Rear Panel	Connect an AC millivoltmeter to the [EXT SP] jack with a 4 dummy load.	Maximum output level	MAIN	Adjust in sequence L74, L75, L78, L79, L83, L84, L85, L92, L93
CLARITY	1 <ul style="list-style-type: none"> <li>• While pushing the [SQL] and [CL] switches, turn power ON.</li> </ul>	Set the [CLARITY] control to the center position and push the [DIMMER] switch.			Front Panel	[CLARITY]
TOTAL GAIN	1 <ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Connect a standard signal generator to the [ANT] connector and set as:               <ul style="list-style-type: none"> <li>Frequency : 12.2315 MHz</li> <li>Level : 0.32 mV (-57 dBm)</li> <li>modulation : OFF</li> </ul> </li> <li>• Receiving</li> </ul>	Rear Panel	Connect an AC millivoltmeter to the [EXT SP] jack with a 4 ohms dummy load.	1.0 V	Front Panel	[VOLUME]
	2 <ul style="list-style-type: none"> <li>• Set the signal generator to OFF (no output).</li> </ul>			-30 dB (32 mV)		
S-METER	1 <ul style="list-style-type: none"> <li>• While pushing the [SQL] and [T ONLY] switches, turn power ON.</li> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> </ul>	Function display	S/Rf meter	Push the [DIMMER] switch.	Font Panel	[DIMMER]
	2 <ul style="list-style-type: none"> <li>• Connect a standard signal generator to the [ANT] connector and set as:               <ul style="list-style-type: none"> <li>Frequency : 12.2315 MHz</li> <li>Level : 1 mV (-47 dBm)</li> </ul> </li> <li>• Receiving</li> </ul>			7th dot just appears while pushing the [DIMMER]. 		Verify
NOISE BLANKER	1 <ul style="list-style-type: none"> <li>• Display frequency : 12.2300 MHz</li> <li>• Mode : J3E</li> <li>• Connect a standard signal generator to the [ANT] connector and set as:               <ul style="list-style-type: none"> <li>Frequency : 12.2315 MHz</li> <li>Level : 3.2 <math>\mu</math>V (-97 dBm)</li> </ul> </li> <li>Add the following signal into the signal generator output.</li> </ul>  <ul style="list-style-type: none"> <li>• Receiving</li> </ul>	MAIN	Connect an oscilloscope to R59.	Adjust the maximum noise wave displayed on the oscilloscope.	MAIN	L80, L81

This output level of the standard signal generator (SSG) is indicated as SSG's open circuit.

# SECTION 5

# PARTS LIST

## [FRONT UNIT]

REF NO.	ORDER NO.		DESCRIPTION
S2801	2260001581	SW	JPZ2120-0301F
SP2801	2510000441	SP	F77G08-6205 (-13)
W2807	8900015350	CBL	OPC-522A (P1.25,N6,L100) <TJM>
W2808	8900015350	CBL	OPC-522A (P1.25,N6,L100) <TJM>
W2809	8900005370	CBL	OPC-524 (N:10 L:150)
W2810	8900015350	CBL	OPC-522A (P1.25,N6,L100) <TJM>
W2811	8900015350	CBL	OPC-522A (P1.25,N6,L100) <TJM>

## [LOGIC-J UNIT]

REF NO.	ORDER NO.		DESCRIPTION
IC2001	1140006931	S.IC	HD6433834A95FV (SX-1632SA)
IC2002	1140005130	S.IC	HD66100F
IC2003	1110005711	S.IC	S-80842CLUA-B63-T2G
IC2005	1180001461	S.IC	uPC78L05T-E1-AZ
IC2006	1180001451	S.IC	uPC78L08T-E1-AZ
IC2007	1110002550	IC	TA7252AP
IC2008	1110000960	S.IC	NJM4558M-TE1
Q2002	1530001971	S.TR	2SC1623-T2B-A-L6
Q2003	1520000290	TR	2SB1015-Y
Q2005	1530001971	S.TR	2SC1623-T2B-A-L6
Q2006	1530001971	S.TR	2SC1623-T2B-A-L6
Q2007	1590001380	S.TR	DTC114EKA T146
Q2008	1590001380	S.TR	DTC114EKA T146
Q2009	1530001971	S.TR	2SC1623-T2B-A-L6
Q2011	1590001380	S.TR	DTC114EKA T146
Q2012	1590001380	S.TR	DTC114EKA T146
Q2013	1590001380	S.TR	DTC114EKA T146
D2001	1750000021	S.DIO	1SS184 (TE85R,F)
D2002	1730000831	S.ZEN	RD9.1M-T2B-A B1
D2003	1750000021	S.DIO	1SS184 (TE85R,F)
D2004	1750000021	S.DIO	1SS184 (TE85R,F)
D2005	1750000021	S.DIO	1SS184 (TE85R,F)
D2006	1750000021	S.DIO	1SS184 (TE85R,F)
D2007	1750000021	S.DIO	1SS184 (TE85R,F)
D2008	1750000021	S.DIO	1SS184 (TE85R,F)
D2009	1750000021	S.DIO	1SS184 (TE85R,F)
D2010	1750000021	S.DIO	1SS184 (TE85R,F)
X2001	6050009450	XTL	CR-513 (9.8304 MHz)
L2002	6910000670	COL	BL01RN1A1D2B (BL01RN1-A62)
L2003	6910000670	COL	BL01RN1A1D2B (BL01RN1-A62)
L2004	6200003261	S.COL	NLV32T-101J
L2005	6910000670	COL	BL01RN1A1D2B (BL01RN1-A62)
L2006	6200003261	S.COL	NLV32T-101J
L2007	6200003261	S.COL	NLV32T-101J
L2008	6200003261	S.COL	NLV32T-101J
L2009	6200003261	S.COL	NLV32T-101J
L2010	6170000140	COL	LW-15
			[GEN-24] only
R2003	7030000520	S.RES	MCR10EZHZ 15 k
R2005	7030000400	S.RES	MCR10EZHZ 1.5 k
R2007	7030000430	S.RES	MCR10EZHZ 2.7 k
R2009	7030000580	S.RES	MCR10EZHZ 47 k
R2011	7030000580	S.RES	MCR10EZHZ 47 k
R2012	7030000740	S.RES	MCR10EZHZ 1 M
R2013	7030000580	S.RES	MCR10EZHZ 47 k
R2014	7030000580	S.RES	MCR10EZHZ 47 k
R2015	7030000380	S.RES	MCR10EZHZ 1 k
R2016	7030000380	S.RES	MCR10EZHZ 1 k
R2017	7030000620	S.RES	MCR10EZHZ 100 k
R2018	7030000380	S.RES	MCR10EZHZ 1 k
R2019	7030000700	S.RES	MCR10EZHZ 470 k
R2020	7030000660	S.RES	MCR10EZHZ 220 k
R2021	7030000660	S.RES	MCR10EZHZ 220 k
R2022	7030000620	S.RES	MCR10EZHZ 100 k
R2024	7030000010	S.RES	MCR10EZHZ JPW (000)
R2039	7030000580	S.RES	MCR10EZHZ 47 k
R2040	7030000560	S.RES	MCR10EZHZ 33 k
R2041	7030000460	S.RES	MCR10EZHZ 4.7 k
R2042	7030000580	S.RES	MCR10EZHZ 47 k
R2043	7030000520	S.RES	MCR10EZHZ 15 k
R2044	7030000500	S.RES	MCR10EZHZ 10 k
R2045	7030000500	S.RES	MCR10EZHZ 10 k
R2046	7030000500	S.RES	MCR10EZHZ 10 k
R2047	7030000470	S.RES	MCR10EZHZ 5.6 k
R2048	7030000380	S.RES	MCR10EZHZ 1 k
R2049	7030000580	S.RES	MCR10EZHZ 47 k
R2054	7010003241	RES	PSD1/4V 47
R2055	7030000500	S.RES	MCR10EZHZ 10 k
R2056	7030000020	S.RES	MCR10EZHZ 1 (010)
R2057	7030000380	S.RES	MCR10EZHZ 1 k

## [LOGIC-J UNIT]

REF NO.	ORDER NO.		DESCRIPTION
R2058	7010003101	RES	PSD1/4V 3.3
R2061	7030000260	S.RES	MCR10EZHZ 100 (101)
R2062	7030000440	S.RES	MCR10EZHZ 3.3 k
R2063	7030000300	S.RES	MCR10EZHZ 220 (221)
R2064	7030000610	S.RES	MCR10EZHZ 82 k
R2065	7030000620	S.RES	MCR10EZHZ 100 k
R2066	7310004980	TRI	KVSF639AC 103 10 k
R2067	7030000540	S.RES	MCR10EZHZ 22 k
R2068	7030000610	S.RES	MCR10EZHZ 82 k
R2069	7030000380	S.RES	MCR10EZHZ 1 k
R2070	7310004960	TRI	KVSF639AC 104 100 k
R2071	7030000400	S.RES	MCR10EZHZ 1.5 k
R2072	7030000360	S.RES	MCR10EZHZ 680 (681)
R2073	7030000340	S.RES	MCR10EZHZ 470 (471)
R2077	7030000530	S.RES	MCR10EZHZ 18 k
R2078	7030000500	S.RES	MCR10EZHZ 10 k
R2079	7030000530	S.RES	MCR10EZHZ 18 k
R2080	7030000500	S.RES	MCR10EZHZ 10 k
R2081	7030000530	S.RES	MCR10EZHZ 18 k
R2082	7030000500	S.RES	MCR10EZHZ 10 k
R2083	7030000530	S.RES	MCR10EZHZ 18 k
R2084	7030000530	S.RES	MCR10EZHZ 18 k
R2085	7030000580	S.RES	MCR10EZHZ 47 k
R2086	7030000540	S.RES	MCR10EZHZ 22 k
R2087	7030000520	S.RES	MCR10EZHZ 15 k
R2088	7030000580	S.RES	MCR10EZHZ 47 k
R2090	7030000240	S.RES	MCR10EZHZ 68 (680)
			[GEN-24] only
C2002	4030004740	S.CER	C2012 JB 1H 472K-T
C2003	4030004740	S.CER	C2012 JB 1H 472K-T
C2004	4030004740	S.CER	C2012 JB 1H 472K-T
C2005	4030004880	S.CER	C2012 CH 1H 120J-T
C2006	4030004880	S.CER	C2012 CH 1H 120J-T
C2007	4030004750	S.CER	C2012 JB 1H 103K-T
C2008	4310000520	MLR	50 F2D 224J
C2009	4030004750	S.CER	C2012 JB 1H 103K-T
C2012	4510005150	ELE	50 ME 10 HC
C2013	4030004740	S.CER	C2012 JB 1H 472K-T
C2014	4030004740	S.CER	C2012 JB 1H 472K-T
C2015	4030004740	S.CER	C2012 JB 1H 472K-T
C2016	4030004740	S.CER	C2012 JB 1H 472K-T
C2017	4030004740	S.CER	C2012 JB 1H 472K-T
C2018	4030004740	S.CER	C2012 JB 1H 472K-T
C2019	4030004740	S.CER	C2012 JB 1H 472K-T
C2020	4510004601	ELE	16 ME 1000 HC
C2021	4030004740	S.CER	C2012 JB 1H 472K-T
C2022	4510007480	ELE	16 ME 470 CA
C2023	4030008960	S.CER	C2012 JB 1C 104K-T
C2024	4510005120	ELE	16 ME 47 HC
C2025	4510004990	ELE	16 ME 100 HC
C2026	4510005120	ELE	16 ME 47 HC
C2027	4030004740	S.CER	C2012 JB 1H 472K-T
C2028	4510008400	ELE	25 ME 22 HC
C2029	4510008400	ELE	25 ME 22 HC
C2030	4030004740	S.CER	C2012 JB 1H 472K-T
C2031	4510005490	ELE	50 ME 2R2 HC
C2032	4510005481	ELE	50 ME 1 HC
C2033	4510005481	ELE	50 ME 1 HC
C2034	4510008410	ELE	25 ME 4R7 HC
C2035	4510008410	ELE	25 ME 4R7 HC
C2036	4510005120	ELE	16 ME 47 HC
C2037	4510008410	ELE	25 ME 4R7 HC
C2038	4510005500	ELE	16 ME 10 HC
C2039	4030004740	S.CER	C2012 JB 1H 472K-T
C2040	4510005120	ELE	16 ME 47 HC
C2041	4030004740	S.CER	C2012 JB 1H 472K-T
C2042	4510005120	ELE	16 ME 47 HC
C2043	4030004740	S.CER	C2012 JB 1H 472K-T
C2044	4510005500	ELE	16 ME 10 HC
C2049	4030008960	S.CER	C2012 JB 1C 104K-T
C2050	4030008960	S.CER	C2012 JB 1C 104K-T
C2060	4310000480	MLR	50 F2D 104J
			[GEN-24] only
RL2001	6330001330	RLY	AG 201344
J2007	6510003391	CNR	B03B-EH-S (LF) (SN)
J2008	6510018381	CNR	10FE-BT-VK-N
J2009	6510018391	CNR	06FE-BT-VK-N
J2010	6510018391	CNR	06FE-BT-VK-N
J2011	6510018391	CNR	06FE-BT-VK-N
J2012	6510018391	CNR	06FE-BT-VK-N
J2013	6510010021	CNR	RTB-1.5-2F (LF)
J2014	6510010021	CNR	RTB-1.5-2F (LF)
DS2001	5080000401	LMP	HRT-3290A-F-PF G30
DS2002	5080000401	LMP	HRT-3290A-F-PF G30
DS2003	5080000401	LMP	HRT-3290A-F-PF G30
DS2004	5010000220	LCD	DLC-8300P
S2003	2260002230	SW	SW-158 (SKHHPM)
S2004	2260002230	SW	SW-158 (SKHHPM)
S2005	2260002230	SW	SW-158 (SKHHPM)
S2006	2260002230	SW	SW-158 (SKHHPM)

S.=Surface mount

**[LOGIC-J UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	
S2007	2260002230	SW	SW-158 (SKHHPM)
S2008	2260002230	SW	SW-158 (SKHHPM)
S2009	2260002230	SW	SW-158 (SKHHPM)
S2010	2260002230	SW	SW-158 (SKHHPM)
S2011	2260002230	SW	SW-158 (SKHHPM)
S2012	2260002230	SW	SW-158 (SKHHPM)
S2013	2260002230	SW	SW-158 (SKHHPM)
S2014	2260002230	SW	SW-158 (SKHHPM)
S2015	2260002230	SW	SW-158 (SKHHPM)
S2016	2260002230	SW	SW-158 (SKHHPM)
S2017	2260002230	SW	SW-158 (SKHHPM)
S2018	2260002230	SW	SW-158 (SKHHPM)
S2019	2260002230	SW	SW-158 (SKHHPM)
S2020	2260002230	SW	SW-158 (SKHHPM)
S2021	2260002230	SW	SW-158 (SKHHPM)
S2022	2260002230	SW	SW-158 (SKHHPM)
S2023	2260002230	SW	SW-158 (SKHHPM)
S2024	2260002230	SW	SW-158 (SKHHPM)
S2025	2260002230	SW	SW-158 (SKHHPM)
S2026	2260002230	SW	SW-158 (SKHHPM)
S2027	2260002230	SW	SW-158 (SKHHPM)
W2012	7030000010	S.RES	MCR10EZJH JPW (000)
W2013	7030000010	S.RES	MCR10EZJH JPW (000)
W2014	7030000010	S.RES	MCR10EZJH JPW (000)
W2015	7030000010	S.RES	MCR10EZJH JPW (000)
W2018	7030000010	S.RES	MCR10EZJH JPW (000)
W2023	7030011280	JMP	J1/4ZC
EP2002	9034701901	TUB	IRRAX 0.7 (d) L=20 mm

**[MAIN UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	
Q32	1580000620	S.FET	3SK131-T2 MAS
Q33	1580000620	S.FET	3SK131-T2 MAS
Q34	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q35	1590000680	S.TR	DTC114EUA T106
Q36	1590001330	S.TR	DTA114EUA T106
Q40	1590000680	S.TR	DTC114EUA T106
Q41	1530003091	S.TR	2SC4213-B (TE85R,F)
Q42	1590000680	S.TR	DTC114EUA T106
Q43	1590000680	S.TR	DTC114EUA T106
Q44	1590001330	S.TR	DTA114EUA T106
Q45	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q46	1590000680	S.TR	DTC114EUA T106
Q52	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q54	1540000441	S.TR	2SD1619T-TD-E
Q55	1590000680	S.TR	DTC114EUA T106
Q56	1590000680	S.TR	DTC114EUA T106
Q57	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q58	1530003301	S.TR	2SC3647S-TD-E
Q59	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q60	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q61	1540000441	S.TR	2SD1619T-TD-E
Q62	1540000441	S.TR	2SD1619T-TD-E
Q64	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q65	1590000680	S.TR	DTC114EUA T106
Q69	1590000680	S.TR	DTC114EUA T106
Q70	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q71	1590001330	S.TR	DTA114EUA T106
Q72	1590000680	S.TR	DTC114EUA T106
Q74	1590001330	S.TR	DTA114EUA T106
Q78	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q79	1590000680	S.TR	DTC114EUA T106
Q80	1590000680	S.TR	DTC114EUA T106
Q82	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q83	1590000680	S.TR	DTC114EUA T106
Q84	1590000680	S.TR	DTC114EUA T106
Q101	1510000771	S.TR	2SA1586-GR (TE85R,F)
Q102	1590000680	S.TR	DTC114EUA T106
Q103	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q104	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q106	1510000771	S.TR	2SA1586-GR (TE85R,F)
Q111	1510000771	S.TR	2SA1586-GR (TE85R,F)
Q113	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q114	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q115	1590000680	S.TR	DTC114EUA T106
Q119	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q122	1590000680	S.TR	DTC114EUA T106
Q123	1590000680	S.TR	DTC114EUA T106
Q124	1590000680	S.TR	DTC114EUA T106
Q125	1590000680	S.TR	DTC114EUA T106
Q126	1560000331	S.FET	2SK210-GR (TE85R,F)
Q128	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q129	1590000680	S.TR	DTC114EUA T106
Q130	1590001330	S.TR	DTA114EUA T106
Q131	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q132	1590000680	S.TR	DTC114EUA T106
Q135	1590001330	S.TR	DTA114EUA T106
Q137	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q138	1540000441	S.TR	2SD1619T-TD-E
Q139	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q140	1590000680	S.TR	DTC114EUA T106
Q141	1590000680	S.TR	DTC114EUA T106
D1	1790000450	S.DIO	MA862 (TX)
D2	1790000450	S.DIO	MA862 (TX)
D3	1790000620	S.DIO	MA77 (TX)
D4	1790000620	S.DIO	MA77 (TX)
D5	1790000450	S.DIO	MA862 (TX)
D6	1790000450	S.DIO	MA862 (TX)
D7	1790000450	S.DIO	MA862 (TX)
D8	1790000450	S.DIO	MA862 (TX)
D9	1790000450	S.DIO	MA862 (TX)
D10	1790000450	S.DIO	MA862 (TX)
D11	1790000450	S.DIO	MA862 (TX)
D12	1790000450	S.DIO	MA862 (TX)
D13	1790000450	S.DIO	MA862 (TX)
D14	1790000450	S.DIO	MA862 (TX)
D15	1790000450	S.DIO	MA862 (TX)
D16	1790000450	S.DIO	MA862 (TX)
D17	1790000691	S.DIO	HSM88ASRTR-E
D18	1790000620	S.DIO	MA77 (TX)
D19	1710001240	DIO	L204BBB
D20	1750000271	S.DIO	1SS301 (TE85R,F)
D21	1790000450	S.DIO	MA862 (TX)
D22	1790000450	S.DIO	MA862 (TX)
D23	1790000450	S.DIO	MA862 (TX)
D24	1790000450	S.DIO	MA862 (TX)
D25	1790000450	S.DIO	MA862 (TX)
D26	1790000450	S.DIO	MA862 (TX)
D27	1750000271	S.DIO	1SS301 (TE85R,F)
D28	1750000271	S.DIO	1SS301 (TE85R,F)
D30	1790000450	S.DIO	MA862 (TX)
D31	1790000691	S.DIO	HSM88ASRTR-E
D32	1750000520	S.DIO	DAN222TL
D33	1790000450	S.DIO	MA862 (TX)
D34	1750000520	S.DIO	DAN222TL
D35	1750000271	S.DIO	1SS301 (TE85R,F)
D36	1750000271	S.DIO	1SS301 (TE85R,F)
D37	1750000271	S.DIO	1SS301 (TE85R,F)
D38	1730000121	ZEN	RD6,2E-AZ B2
D39	1790000691	S.DIO	HSM88ASRTR-E
D40	1750000301	S.DIO	1SS302 (TE85R,F)
D41	1750000271	S.DIO	1SS301 (TE85R,F)
D42	1750000271	S.DIO	1SS301 (TE85R,F)

**[MAIN UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	
IC4	1160000131	S.IC	TD62783AFG (S,EL)
IC5	1160000131	S.IC	TD62783AFG (S,EL)
IC6	1160000131	S.IC	TD62783AFG (S,EL)
IC8	1110003141	IC	LA1150N-E
IC9	1110004840	S.IC	NJM1496V-TE1
IC10	1110004840	S.IC	NJM1496V-TE1
IC11	1130011190	S.IC	BU4011BF-E2
IC12	1140003831	S.IC	TC4W66F (TE12L,F)
IC16	1110000960	S.IC	NJM4558M-TE1
IC17	1110000960	S.IC	NJM4558M-TE1
IC18	1110000960	S.IC	NJM4558M-TE1
IC19	1110000960	S.IC	NJM4558M-TE1
IC20	1110000960	S.IC	NJM4558M-TE1
IC21	1110000960	S.IC	NJM4558M-TE1
IC22	1130011170	S.IC	BU4001BF-E2
IC23	1110001401	S.IC	uPC1555G2-E1-A
IC24	1180001251	S.IC	TA7808F (TE16L,Q)
IC27	1170000281	S.IC	TLP121 (GB-TPL,F)
IC31	1130013520	S.IC	CD4028BNSR
IC32	1130003761	S.IC	TC4S81F (TE85R,F)
IC33	1130003761	S.IC	TC4S81F (TE85R,F)
IC34	1130011200	S.IC	BU4069UBF-E2
IC35	1130013470	S.IC	CD4071BNSR
IC36	1110003300	S.IC	M5282FP 70CD
IC38	1140003831	S.IC	TC4W66F (TE12L,F)
IC39	1140003831	S.IC	TC4W66F (TE12L,F)
IC131	1180000421	S.IC	TA78L05F (TE12R,F)
IC132	1140007231	S.IC	HD6433378B31FV (SX-2086) [CHN] only
	1140009071	S.IC	HD6433378B49FV (SX-2086A) [GEN-25] only
IC133	1110005711	S.IC	S-80842CLUA-B63-T2G
IC134	1130007291	S.IC	24LC16BT-I/SNG
IC135	1130007291	S.IC	24LC16BT-I/SNG
Q1	1530003151	S.TR	2SC4673D-TD-E
Q2	1580000620	S.FET	3SK131-T2 MAS
Q3	1580000620	S.FET	3SK131-T2 MAS
Q4	1580000620	S.FET	3SK131-T2 MAS
Q5	1530003151	S.TR	2SC4673D-TD-E
Q6	1560000721	S.FET	2SK2171-4-TD-E
Q7	1560000721	S.FET	2SK2171-4-TD-E
Q8	1580000620	S.FET	3SK131-T2 MAS
Q9	1560000331	S.FET	2SK210-GR (TE85R,F)
Q10	1510000771	S.TR	2SA1586-GR (TE85R,F)
Q11	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q12	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q13	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q14	1590001330	S.TR	DTA114EUA T106
Q15	1590000680	S.TR	DTC114EUA T106
Q16	1580000620	S.FET	3SK131-T2 MAS
Q17	1540000441	S.TR	2SD1619T-TD-E
Q18	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q19	1580000620	S.FET	3SK131-T2 MAS
Q20	1590000680	S.TR	DTC114EUA T106
Q21	1590000680	S.TR	DTC114EUA T106
Q22	1590000680	S.TR	DTC114EUA T106
Q23	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q24	1590000680	S.TR	DTC114EUA T106
Q25	1590000680	S.TR	DTC114EUA T106
Q26	1510000771	S.TR	2SA1586-GR (TE85R,F)
Q27	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q28	1590000680	S.TR	DTC114EUA T106
Q30	1530002691	S.TR	2SC4116-GR (TE85R,F)
Q31	1530003091	S.TR	2SC4213-B (TE85R,F)

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
D43	1750000271	S.DIO 1SS301 (TE85R,F)
D45	1750000271	S.DIO 1SS301 (TE85R,F)
D46	1790000691	S.DIO HSM88ASRTR-E
D47	1750000271	S.DIO 1SS301 (TE85R,F)
D48	1750000271	S.DIO 1SS301 (TE85R,F)
D49	1790000450	S.DIO MA862 (TX)
D50	1750000520	S.DIO DAN222TL
D51	1790000450	S.DIO MA862 (TX)
D53	1750000271	S.DIO 1SS301 (TE85R,F)
D59	1750000271	S.DIO 1SS301 (TE85R,F)
D60	1750000271	S.DIO 1SS301 (TE85R,F)
D61	1750000271	S.DIO 1SS301 (TE85R,F)
D62	1750000271	S.DIO 1SS301 (TE85R,F)
D63	1750000271	S.DIO 1SS301 (TE85R,F)
D65	1750000271	S.DIO 1SS301 (TE85R,F)
D66	1750000271	S.DIO 1SS301 (TE85R,F)
D68	1750000271	S.DIO 1SS301 (TE85R,F)
D69	1750000301	S.DIO 1SS302 (TE85R,F)
D70	1750000301	S.DIO 1SS302 (TE85R,F)
D73	1730000211	ZEN RD9.1E-AZ B3
D74	1730000101	ZEN RD5.1E-AZ B2
D75	1750000301	S.DIO 1SS302 (TE85R,F)
D76	1750000301	S.DIO 1SS302 (TE85R,F)
D79	1750000271	S.DIO 1SS301 (TE85R,F)
D88	1790000691	S.DIO HSM88ASRTR-E
D89	1750000271	S.DIO 1SS301 (TE85R,F)
D90	1750000271	S.DIO 1SS301 (TE85R,F)
D97	1750000271	S.DIO 1SS301 (TE85R,F)
D98	1750000271	S.DIO 1SS301 (TE85R,F)
D99	1790000450	S.DIO MA862 (TX)
D100	1750000301	S.DIO 1SS302 (TE85R,F)
D101	1750000301	S.DIO 1SS302 (TE85R,F)
D102	1750000271	S.DIO 1SS301 (TE85R,F)
D103	1750000271	S.DIO 1SS301 (TE85R,F)
D206	1710000160	DIO 1SS133
D210	1750000271	S.DIO 1SS301 (TE85R,F)
D211	1750000271	S.DIO 1SS301 (TE85R,F)
D212	1750000271	S.DIO 1SS301 (TE85R,F)
D213	1750000301	S.DIO 1SS302 (TE85R,F)
D214	1750000301	S.DIO 1SS302 (TE85R,F)
D215	1750000301	S.DIO 1SS302 (TE85R,F)
D217	1750000271	S.DIO 1SS301 (TE85R,F)
D218	1750000301	S.DIO 1SS302 (TE85R,F)
D220	1730000251	ZEN RD12E-AZ B2
D222	1750000271	S.DIO 1SS301 (TE85R,F)
D223	1750000271	S.DIO 1SS301 (TE85R,F)
D224	1730000501	ZEN RD13E-AZ B2
D225	1750000271	S.DIO 1SS301 (TE85R,F)
D226	1750000271	S.DIO 1SS301 (TE85R,F)
D227	1750000271	S.DIO 1SS301 (TE85R,F)
D228	1750000271	S.DIO 1SS301 (TE85R,F)
D230	1750000271	S.DIO 1SS301 (TE85R,F)
D235	1750001360	S.DIO L709CER (9401)
D236	1750001360	S.DIO L709CER (9401)
D241	1790001240	S.DIO MA25728-(TX)
D242	1790001240	S.DIO MA25728-(TX)
D243	1730002360	S.ZEN MA8062-M (TX)
D244	1710000160	DIO 1SS133
FI1	2010001010	FIL 69M15B (FL-120)
FI2	2010000320	FIL 9M22D2 (FL-30)
FI3	2010000950	FIL 9M 6A1 (FL-116)
FI4	2010000950	FIL 9M 6A1 (FL-116)
X2	6050009661	S.XTL MA-406 (9.8304 MHz-F)
L1	6140000060	COL LR-18
L2	6180002480	COL LAL 03NA 820K
L3	6200002961	S.COL NLV32T-4R7J
L4	6200003101	S.COL NLV32T-3R9J
L7	6200003261	S.COL NLV32T-101J
L8	6200002961	S.COL NLV32T-4R7J
L9	6200003321	S.COL NLV32T-3R3J
L10	6200003101	S.COL NLV32T-3R9J
L11	6200001851	S.COL NLV32T-5R6J
L12	6200003261	S.COL NLV32T-101J
L13	6200002991	S.COL NLV32T-2R2J
L14	6200002991	S.COL NLV32T-2R2J
L15	6200002991	S.COL NLV32T-2R2J
L16	6200003081	S.COL NLV32T-1R8J
L17	6200003261	S.COL NLV32T-101J
L18	6200003071	S.COL NLV32T-1R5J
L19	6200003071	S.COL NLV32T-1R5J
L20	6200003081	S.COL NLV32T-1R8J
L21	6200003061	S.COL NLV32T-1R2J
L22	6200003261	S.COL NLV32T-101J
L23	6200003331	S.COL NLV32T-1R0J
L24	6200003331	S.COL NLV32T-1R0J
L25	6200003331	S.COL NLV32T-1R0J
L26	6200003051	S.COL NLV32T-R82J
L27	6200003261	S.COL NLV32T-101J
L28	6200003051	S.COL NLV32T-R82J
L29	6200003041	S.COL NLV32T-R68J
L30	6200003041	S.COL NLV32T-R68J
L31	6200003041	S.COL NLV32T-R68J
L32	6200003261	S.COL NLV32T-101J
L33	6200003041	S.COL NLV32T-R68J
L34	6200003031	S.COL NLV32T-R47J
L35	6200003031	S.COL NLV32T-R47J
L36	6200002981	S.COL NLV32T-R56J
L37	6200003261	S.COL NLV32T-101J

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
L38	6200003031	S.COL NLV32T-R47J
L39	6200003251	S.COL NLV32T-R39J
L40	6200003251	S.COL NLV32T-R39J
L41	6200003251	S.COL NLV32T-R39J
L42	6200003261	S.COL NLV32T-101J
L43	6200003021	S.COL NLV32T-R33J
L44	6200003011	S.COL NLV32T-R27J
L45	6200003011	S.COL NLV32T-R27J
L46	6200003021	S.COL NLV32T-R33J
L49	6200001851	S.COL NLV32T-5R6J
L50	6200002961	S.COL NLV32T-4R7J
L51	6180001710	COL LAL 03NA 561K
L52	6140002060	COL LR-225 (RIB3X6.5X3 3A6)
L53	6180001710	COL LAL 03NA 561K
L54	6200003261	S.COL NLV32T-101J
L55	6200003331	S.COL NLV32T-1R0J
L56	6200003041	S.COL NLV32T-R68J
L57	6200003261	S.COL NLV32T-101J
L58	6140002220	COL LR-270 (TR6X3X2 3A9)
L59	6150004270	COL LS-483A (C-14924)
L60	6140000930	COL LR-116
L61	6200001831	S.COL NLV32T-100J
L62	6200003021	S.COL NLV32T-R33J
L63	6200003001	S.COL NLV32T-R22J
L64	6150004280	COL LS-484B (C-14927)
L65	6150004280	COL LS-484B (C-14927)
L66	6140002060	COL LR-225 (RIB3X6.5X3 3A6)
L67	6140002060	COL LR-225 (RIB3X6.5X3 3A6)
L69	6200003061	S.COL NLV32T-1R2J
L70	6200003061	S.COL NLV32T-1R2J
L71	6200003001	S.COL NLV32T-R22J
L72	6200003011	S.COL NLV32T-R27J
L73	6140000930	COL LR-116
L74	6150004270	COL LS-483A (C-14924)
L75	6150002430	COL LS-254
L76	6110001620	COL LA-245
L77	6200001831	S.COL NLV32T-100J
L78	6150004280	COL LS-484B (C-14927)
L79	6150004250	COL LS-471A (C-14922)
L80	6150004050	COL LS-466
L81	6150004050	COL LS-466
L82	6200003261	S.COL NLV32T-101J
L83	6150004310	COL LS-487A (C-14930)
L84	6150004290	COL LS-485A (C-14928)
L85	6150004290	COL LS-485A (C-14928)
L86	6200001831	S.COL NLV32T-100J
L87	6140001601	COL LR-178 LF
L88	6150001590	COL LS-175
L89	6150001590	COL LS-175
L90	6200003141	S.COL NLV32T-150J
L91	6200003141	S.COL NLV32T-150J
L92	6150004430	COL LS-501 (C-14872)
L93	6150004300	COL LS-486A (C-14929)
L94	2040000490	COL EXC-ELDR25C
L95	6180000960	COL LAL 03NA 102K
L96	6180000960	COL LAL 03NA 102K
L100	6200003091	S.COL NLV32T-2R7J
L101	2040000490	COL EXC-ELDR25C
L102	2040000490	COL EXC-ELDR25C
L103	2040000490	COL EXC-ELDR25C
L104	2040000490	COL EXC-ELDR25C
L105	6910003570	COL 2943-666663
L106	6910003570	COL 2943-666663
L107	6180001710	COL LAL 03NA 561K
L108	6180001710	COL LAL 03NA 561K
L115	6200003261	S.COL NLV32T-101J
L116	6200003261	S.COL NLV32T-101J
L117	6180001710	COL LAL 03NA 561K
L118	6180001710	COL LAL 03NA 561K
L119	6180001710	COL LAL 03NA 561K
L120	6180001710	COL LAL 03NA 561K
L121	6180001710	COL LAL 03NA 561K
L122	6180001710	COL LAL 03NA 561K
L123	6200003021	S.COL NLV32T-R33J
L124	6200003001	S.COL NLV32T-R22J
L125	6200003261	S.COL NLV32T-101J
L126	6180000990	COL LAL 04NA 101K
L127	6200003261	S.COL NLV32T-101J
L129	6180000900	COL LAL 03NA 101K
L130	6180000900	COL LAL 03NA 101K
L131	6180000900	COL LAL 03NA 101K
L132	6200003261	S.COL NLV32T-101J
L133	2040000490	COL EXC-ELDR25C
L134	2040000490	COL EXC-ELDR25C
L135	2040000490	COL EXC-ELDR25C
L136	2040000490	COL EXC-ELDR25C
L137	6200003331	S.COL NLV32T-1R0J
L138	2040000490	COL EXC-ELDR25C
L139	6200001831	S.COL NLV32T-100J
L140	6200003261	S.COL NLV32T-101J
L141	2040000490	COL EXC-ELDR25C
L142	6180000900	COL LAL 03NA 101K
L143	2040000490	COL EXC-ELDR25C
L144	6200003261	S.COL NLV32T-101J
L145	6200003261	S.COL NLV32T-101J
L147	6200003261	S.COL NLV32T-101J
L148	6200001711	S.COL NLV32T-220J
L149	6200003191	S.COL NLV32T-470J
R1	7030003380	S.RES ERJ3GEYJ 331 V (330)
R3	7030003380	S.RES ERJ3GEYJ 331 V (330)
R5	7030003200	S.RES ERJ3GEYJ 100 V (10)
R6	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
R8	7030003400	S.RES ERJ3GEYJ 471 V (470)
R9	7030003400	S.RES ERJ3GEYJ 471 V (470)
R10	7030003400	S.RES ERJ3GEYJ 471 V (470)
R11	7030003360	S.RES ERJ3GEYJ 221 V (220)
R12	7030003360	S.RES ERJ3GEYJ 221 V (220)
R13	7030003360	S.RES ERJ3GEYJ 221 V (220)
R14	7030003360	S.RES ERJ3GEYJ 221 V (220)
R15	7030003360	S.RES ERJ3GEYJ 221 V (220)
R16	7030003360	S.RES ERJ3GEYJ 221 V (220)
R17	7030003360	S.RES ERJ3GEYJ 221 V (220)
R18	7030003360	S.RES ERJ3GEYJ 221 V (220)
R19	7030003360	S.RES ERJ3GEYJ 221 V (220)
R20	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R21	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R22	7030003400	S.RES ERJ3GEYJ 471 V (470)
R23	7030003400	S.RES ERJ3GEYJ 471 V (470)
R24	7030003400	S.RES ERJ3GEYJ 471 V (470)
R25	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R26	7310005110	S.TRI RH03ADCS2X (470)
R27	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R29	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R32	7030003340	S.RES ERJ3GEYJ 151 V (150)
R34	7030003340	S.RES ERJ3GEYJ 151 V (150)
R35	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R36	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R37	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R38	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R43	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R44	7030003280	S.RES ERJ3GEYJ 470 V (47)
R45	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R46	7030003200	S.RES ERJ3GEYJ 100 V (10)
R47	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R48	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R49	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R50	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R51	7030003320	S.RES ERJ3GEYJ 101 V (100)
R52	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R53	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R54	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R55	7030003320	S.RES ERJ3GEYJ 101 V (100)
R56	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R57	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R58	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R60	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R61	7030003540	S.RES ERJ3GEYJ 682 V (6.8 k)
R62	7030003380	S.RES ERJ3GEYJ 331 V (330)
R63	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R65	7030003280	S.RES ERJ3GEYJ 470 V (47)
R66	7030003200	S.RES ERJ3GEYJ 100 V (10)
R67	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R68	7030003280	S.RES ERJ3GEYJ 470 V (47)
R69	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R70	7030003400	S.RES ERJ3GEYJ 471 V (470)
R71	7030003400	S.RES ERJ3GEYJ 471 V (470)
R72	7030003400	S.RES ERJ3GEYJ 471 V (470)
R73	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R74	7030003280	S.RES ERJ3GEYJ 470 V (47)
R76	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R77	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R79	7030003800	S.RES ERJ3GEYJ 105 V (1 M)
R80	7030003320	S.RES ERJ3GEYJ 101 V (100)
R81	7030003320	S.RES ERJ3GEYJ 101 V (100)
R82	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R83	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R84	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R85	7030003360	S.RES ERJ3GEYJ 221 V (220)
R86	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R87	7030003660	S.RES ERJ3GEYJ 683 V (68 k)
R88	7030003610	S.RES ERJ3GEYJ 273 V (27 k)
R89	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R90	7510000290	TMR ERT-D2ZGL 301S
R91	7030003320	S.RES ERJ3GEYJ 101 V (100)
R92	7030003320	S.RES ERJ3GEYJ 101 V (100)
R94	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R97	7030003320	S.RES ERJ3GEYJ 101 V (100)
R99	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R100	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R102	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R103	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R104	7030003320	S.RES ERJ3GEYJ 101 V (100)
R105	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R106	7030003380	S.RES ERJ3GEYJ 331 V (330)
R107	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R108	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R109	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R110	7030003320	S.RES ERJ3GEYJ 101 V (100)
R111	7030003380	S.RES ERJ3GEYJ 331 V (330)
R112	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R113	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R114	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R116	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R117	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R118	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R119	7030003320	S.RES ERJ3GEYJ 101 V (100)
R120	7030003320	S.RES ERJ3GEYJ 101 V (100)
R121	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R122	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R123	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R124	7030003320	S.RES ERJ3GEYJ 101 V (100)
R125	7030003320	S.RES ERJ3GEYJ 101 V (100)
R126	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R127	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R128	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R129	7030003320	S.RES ERJ3GEYJ 101 V (100)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
R130	7030003320	S.RES ERJ3GEYJ 101 V (100)
R132	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R133	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R134	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R135	7030003320	S.RES ERJ3GEYJ 101 V (100)
R136	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R138	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R139	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R140	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R143	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R149	7030003200	S.RES ERJ3GEYJ 100 V (10)
R157	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R158	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R161	7030003840	S.RES ERJ3GEYJ 225 V (2.2 M)
R162	7030003800	S.RES ERJ3GEYJ 105 V (1 M)
R163	7030003840	S.RES ERJ3GEYJ 225 V (2.2 M)
R164	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R165	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R166	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R167	7030003360	S.RES ERJ3GEYJ 221 V (220)
R168	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R169	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R170	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R172	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R173	7030003320	S.RES ERJ3GEYJ 101 V (100)
R174	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R175	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R176	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R177	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R183	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R184	7310005020	S.TRI RH03ADC14X (10 k)
R185	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R186	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R187	7030003360	S.RES ERJ3GEYJ 221 V (220)
R188	7030003360	S.RES ERJ3GEYJ 221 V (220)
R189	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R190	7030003320	S.RES ERJ3GEYJ 101 V (100)
R191	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R192	7030003360	S.RES ERJ3GEYJ 221 V (220)
R193	7030003360	S.RES ERJ3GEYJ 221 V (220)
R194	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R196	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R197	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R198	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R199	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R200	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R201	7030003360	S.RES ERJ3GEYJ 221 V (220)
R202	7030003590	S.RES ERJ3GEYJ 183 V (18 k)
R204	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R205	7310000660	TRI RH0621C14J19A (103)
R207	7030003320	S.RES ERJ3GEYJ 101 V (100)
R208	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R209	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R210	7030003340	S.RES ERJ3GEYJ 151 V (150)
R211	7310005110	S.TRI RH03ADCS2X (470)
R212	7310005100	S.TRI RH03ADC12X (100)
R213	7510000240	TMR ERT-D2ZGL 332S
R214	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R215	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R216	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R217	7030003600	S.RES ERJ3GEYJ 103 V (10 k)
R218	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R219	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R220	7030003400	S.RES ERJ3GEYJ 471 V (470)
R221	7030003320	S.RES ERJ3GEYJ 101 V (100)
R222	7030003320	S.RES ERJ3GEYJ 101 V (100)
R223	7310005050	S.TRI RH03ADCS3X (4.7 k)
R224	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R225	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R226	7030003400	S.RES ERJ3GEYJ 471 V (470)
R227	7030003320	S.RES ERJ3GEYJ 101 V (100)
R228	7030003320	S.RES ERJ3GEYJ 101 V (100)
R229	7030003360	S.RES ERJ3GEYJ 221 V (220)
R230	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R231	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R232	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R233	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R234	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R235	7030004050	S.RES ERJ3GEYJ 1R0 V (1)
R236	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R237	7030003390	S.RES ERJ3GEYJ 391 V (390)
R238	7310005080	S.TRI RH03ADCN3X (3.3 k)
R239	7030003400	S.RES ERJ3GEYJ 471 V (470)
R240	7030003400	S.RES ERJ3GEYJ 471 V (470)
R241	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R242	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R243	7010006930	RES PSD1/4 470
R244	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R245	7030003360	S.RES ERJ3GEYJ 221 V (220)
R246	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R247	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R254	7030003360	S.RES ERJ3GEYJ 221 V (220)
R255	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R256	7030003320	S.RES ERJ3GEYJ 101 V (100)
R257	7310000660	TRI RH0621C14J19A (103)
R258	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R259	7030003840	S.RES ERJ3GEYJ 225 V (2.2 M)
R261	7030003840	S.RES ERJ3GEYJ 225 V (2.2 M)
R262	7030003800	S.RES ERJ3GEYJ 105 V (1 M)
R263	7030003800	S.RES ERJ3GEYJ 105 V (1 M)
R264	7030003360	S.RES ERJ3GEYJ 221 V (220)
R265	7030003710	S.RES ERJ3GEYJ 184 V (180 k)
R266	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R267	7030003800	S.RES ERJ3GEYJ 105 V (1 M)

[GEN-24] only

[GEN-24] only

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
R268	7030003280	S.RES ERJ3GEYJ 470 V (47)
R269	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R270	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R271	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R272	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R273	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R274	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R275	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R276	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R277	7030003360	S.RES ERJ3GEYJ 221 V (220)
R278	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R279	7030003320	S.RES ERJ3GEYJ 101 V (100)
R280	7030003380	S.RES ERJ3GEYJ 331 V (330)
R281	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R282	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R283	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R284	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R285	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R286	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R287	7030003650	S.RES ERJ3GEYJ 563 V (56 k)
R290	7030003400	S.RES ERJ3GEYJ 471 V (470)
R292	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R293	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R294	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R295	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R296	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R297	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R298	7030003320	S.RES ERJ3GEYJ 101 V (100)
R299	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R300	7310000660	TRI RH0621C14J19A (103) [GEN-24] only
R301	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R302	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R303	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R304	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R305	7030003840	S.RES ERJ3GEYJ 225 V (2.2 M)
R306	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R307	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R308	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R310	7030003770	S.RES ERJ3GEYJ 564 V (560 k)
R324	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R325	7030003320	S.RES ERJ3GEYJ 101 V (100)
R328	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R329	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R333	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R334	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R335	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R336	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R337	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R338	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R339	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R340	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R342	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R344	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R345	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R346	7030003400	S.RES ERJ3GEYJ 471 V (470)
R348	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R349	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R350	7030003400	S.RES ERJ3GEYJ 471 V (470)
R352	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R353	7030003400	S.RES ERJ3GEYJ 471 V (470)
R354	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R362	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R363	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R364	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R365	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R369	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R370	7030003550	S.RES ERJ3GEYJ 822 V (8.2 k)
R371	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R372	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R373	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R374	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R375	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R376	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R381	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R382	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R385	7030003360	S.RES ERJ3GEYJ 221 V (220)
R386	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R387	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R388	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R389	7030003590	S.RES ERJ3GEYJ 183 V (18 k)
R390	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R391	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R392	7030003380	S.RES ERJ3GEYJ 331 V (330)
R394	7030003280	S.RES ERJ3GEYJ 470 V (47)
R395	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R396	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R403	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R404	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R411	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R412	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R414	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R415	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R416	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R448	7030003380	S.RES ERJ3GEYJ 331 V (330)
R450	7030003380	S.RES ERJ3GEYJ 331 V (330)
R481	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R493	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R494	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R501	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R502	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R503	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R504	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R505	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R506	7030003680	S.RES ERJ3GEYJ 104 V (100 k)

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
R510	7030003540	S.RES ERJ3GEYJ 682 V (6.8 k)
R515	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R517	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R518	7030003400	S.RES ERJ3GEYJ 471 V (470)
R519	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R520	7030003380	S.RES ERJ3GEYJ 331 V (330)
R522	7030003380	S.RES ERJ3GEYJ 331 V (330)
R525	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R526	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R527	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R528	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R529	7070000281	RES ERX1SJ 2R2 (2.2)
R533	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R534	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R535	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R536	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R537	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R538	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R539	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R540	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R541	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R542	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R543	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R544	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R601	7030003400	S.RES ERJ3GEYJ 471 V (470)
R602	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R603	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R604	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R605	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R606	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R607	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R608	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R609	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R610	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R611	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R612	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R633	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R634	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R635	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R636	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R637	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R638	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R639	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R640	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R641	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R642	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R646	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R647	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R648	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R650	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R651	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R652	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R653	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R654	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R655	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R657	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R658	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R659	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R663	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R664	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R670	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R671	7030003540	S.RES ERJ3GEYJ 682 V (6.8 k)
R672	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R673	7030003590	S.RES ERJ3GEYJ 183 V (18 k)
R674	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R675	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R676	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R677	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R678	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R679	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R680	7030003360	S.RES ERJ3GEYJ 221 V (220)
R681	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R682	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R683	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R684	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R690	7030003200	S.RES ERJ3GEYJ 100 V (10)
R691	7030003200	S.RES ERJ3GEYJ 100 V (10)
R692	7030003200	S.RES ERJ3GEYJ 100 V (10)
R693	7030003200	S.RES ERJ3GEYJ 100 V (10)
R694	7030003200	S.RES ERJ3GEYJ 100 V (10)
R695	7030003200	S.RES ERJ3GEYJ 100 V (10)
R696	7030003200	S.RES ERJ3GEYJ 100 V (10)
R697	7030003200	S.RES ERJ3GEYJ 100 V (10)
R699	7030003320	S.RES ERJ3GEYJ 101 V (100)
R700	7030003320	S.RES ERJ3GEYJ 101 V (100)
R701	7010007560	RES ERDS2TJ 1R0 (1)
R702	7030003400	S.RES ERJ3GEYJ 471 V (470)
R703	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R704	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R705	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R706	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R707	7030003360	S.RES ERJ3GEYJ 221 V (220)
R708	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R709	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R714	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R719	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R720	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R721	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R722	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R723	7030003580	S.RES ERJ3GEYJ 153 V (15 k)
R724	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R725	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R726	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R729	7030003680	S.RES ERJ3GEYJ 104 V (100 k)

[GEN-24] only

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
R731	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R732	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R733	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R734	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R735	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R736	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R738	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R739	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R740	7030003320	S.RES ERJ3GEYJ 101 V (100)
R741	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R742	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R743	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R752	7030003320	S.RES ERJ3GEYJ 101 V (100)
R753	7030003400	S.RES ERJ3GEYJ 471 V (470)
R754	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R755	7030003640	S.RES ERJ3GEYJ 473 V (47 k)
R756	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R764	7030003620	S.RES ERJ3GEYJ 333 V (33 k)
R765	7030003380	S.RES ERJ3GEYJ 331 V (330)
R766	7030003200	S.RES ERJ3GEYJ 100 V (10)
R771	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)
R772	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R773	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)
R774	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R777	7030003760	S.RES ERJ3GEYJ 474 V (470 k)
R778	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R779	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R781	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R782	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R783	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R784	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R785	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R786	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R787	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R788	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R789	7030003340	S.RES ERJ3GEYJ 151 V (150)
R790	7030003380	S.RES ERJ3GEYJ 331 V (330)
R791	7030003320	S.RES ERJ3GEYJ 101 V (100)
R792	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R793	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R794	7030003360	S.RES ERJ3GEYJ 221 V (220)
R796	7030003320	S.RES ERJ3GEYJ 101 V (100)
R798	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R799	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R800	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R801	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R802	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R803	7510000540	TMR ERT-D2ZGL 171S
R804	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R805	7030003670	S.RES ERJ3GEYJ 823 V (82 k)
R806	7030003720	S.RES ERJ3GEYJ 224 V (220 k)
R807	7510000300	TMR ERT-D2ZGL 601S
R808	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R809	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R810	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R811	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R812	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R813	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R820	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R821	7030003600	S.RES ERJ3GEYJ 223 V (22 k)
R822	7030003680	S.RES ERJ3GEYJ 104 V (100 k)
R823	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R824	7030009220	S.RES ERJ12YJ561U
R825	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R826	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)
R827	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R828	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R829	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R830	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R831	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R832	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R833	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R834	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R835	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R836	7030007360	S.RES ERJ1WYJ470U (47)
R837	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R838	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R839	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R840	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)
R841	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R842	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R843	7030003420	S.RES ERJ3GEYJ 681 V (680)
R844	7310005020	S.TRI RH03ADC14X (10 k)
R845	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R858	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R876	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R885	7030003510	S.RES ERJ3GEYJ 392 V (3.9 k)
R886	7030003510	S.RES ERJ3GEYJ 392 V (3.9 k)
R887	7030003320	S.RES ERJ3GEYJ 101 V (100)
R888	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)
R900	7030003440	S.RES ERJ3GEYJ 102 V (1 k)
R901	7030003560	S.RES ERJ3GEYJ 103 V (10 k)
R902	7510001350	TMR ERT-D2ZGL 103S
R903	7510000230	TMR ERT-D2ZGL 251S
R904	7030003280	S.RES ERJ3GEYJ 470 V (47)
C2	4030008920	S.CER C1608 JB 1H 473K-T
C3	4030006880	S.CER C1608 JB 1H 472K-T
C4	4030006870	S.CER C1608 JB 1H 222K-T
C5	4030006900	S.CER C1608 JB 1H 103K-T
C6	4030010020	S.CER C1608 JB 1H 122K-T
C7	4030008860	S.CER C1608 JB 1H 153K-T
C8	4030006870	S.CER C1608 JB 1H 222K-T

[GEN-24] only

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C9	4030008920	S.CER C1608 JB 1H 473K-T
C10	4030008920	S.CER C1608 JB 1H 473K-T
C11	4030006870	S.CER C1608 JB 1H 222K-T
C13	4030009970	S.CER C1608 JB 1H 182K-T
C14	4030008920	S.CER C1608 JB 1H 473K-T
C17	4030009980	S.CER C1608 JB 1H 152K-T
C18	4030010750	S.CER C1608 CH 1H 201J-T
C19	4030009980	S.CER C1608 JB 1H 152K-T
C20	4030008470	S.CER C1608 JB 1H 272K-T
C21	4030008850	S.CER C1608 JB 1H 123K-T
C22	4030009980	S.CER C1608 JB 1H 152K-T
C25	4030010040	S.CER C1608 JB 1H 561K-T
C26	4030007140	S.CER C1608 CH 1H 121J-T
C27	4030010040	S.CER C1608 JB 1H 561K-T
C28	4030009980	S.CER C1608 JB 1H 152K-T
C29	4030006880	S.CER C1608 JB 1H 472K-T
C30	4030006860	S.CER C1608 JB 1H 102K-T
C33	4030010040	S.CER C1608 JB 1H 561K-T
C34	4030007130	S.CER C1608 CH 1H 101J-T
C35	4030006850	S.CER C1608 JB 1H 471K-T
C36	4030010040	S.CER C1608 JB 1H 561K-T
C37	4030009970	S.CER C1608 JB 1H 182K-T
C38	4030006850	S.CER C1608 JB 1H 471K-T
C41	4030006850	S.CER C1608 JB 1H 471K-T
C42	4030007100	S.CER C1608 CH 1H 560J-T
C44	4030006850	S.CER C1608 JB 1H 471K-T
C45	4030006870	S.CER C1608 JB 1H 222K-T
C50	4030007080	S.CER C1608 CH 1H 390J-T
C53	4030006870	S.CER C1608 JB 1H 222K-T
C54	4030007170	S.CER C1608 CH 1H 221J-T
C58	4030007090	S.CER C1608 CH 1H 470J-T
C59	4030007170	S.CER C1608 CH 1H 221J-T
C61	4030009980	S.CER C1608 JB 1H 152K-T
C62	4030007160	S.CER C1608 CH 1H 181J-T
C65	4030010750	S.CER C1608 CH 1H 201J-T
C66	4030007050	S.CER C1608 CH 1H 220J-T
C67	4030007160	S.CER C1608 CH 1H 181J-T
C68	4030007160	S.CER C1608 CH 1H 181J-T
C69	4030009980	S.CER C1608 JB 1H 152K-T
C70	4030007150	S.CER C1608 CH 1H 151J-T
C73	4030007150	S.CER C1608 CH 1H 151J-T
C74	4030007040	S.CER C1608 CH 1H 180J-T
C75	4030007130	S.CER C1608 CH 1H 101J-T
C76	4030007150	S.CER C1608 CH 1H 151J-T
C77	4030006860	S.CER C1608 JB 1H 102K-T
C78	4030007130	S.CER C1608 CH 1H 101J-T
C80	4030008920	S.CER C1608 JB 1H 473K-T
C81	4030008920	S.CER C1608 JB 1H 473K-T
C82	4030006880	S.CER C1608 JB 1H 472K-T
C83	4030008920	S.CER C1608 JB 1H 473K-T
C84	4030008920	S.CER C1608 JB 1H 473K-T
C85	4030006880	S.CER C1608 JB 1H 472K-T
C87	4030006880	S.CER C1608 JB 1H 472K-T
C88	4030008920	S.CER C1608 JB 1H 473K-T
C89	4030007030	S.CER C1608 CH 1H 150J-T
C90	4030006960	S.CER C1608 CH 1H 050C-T
C91	4030007080	S.CER C1608 CH 1H 390J-T
C92	4030007040	S.CER C1608 CH 1H 180J-T
C93	4030007050	S.CER C1608 CH 1H 220J-T
C94	4030008920	S.CER C1608 JB 1H 473K-T
C95	4030008920	S.CER C1608 JB 1H 473K-T
C96	4030006960	S.CER C1608 CH 1H 050C-T
C98	4030006860	S.CER C1608 JB 1H 102K-T
C99	4030006880	S.CER C1608 JB 1H 472K-T
C100	4030006880	S.CER C1608 JB 1H 472K-T
C101	4030007090	S.CER C1608 CH 1H 470J-T
C102	4030007090	S.CER C1608 CH 1H 470J-T
C103	4030007170	S.CER C1608 CH 1H 221J-T
C104	4030006930	S.CER C1608 CH 1H 020C-T
C106	4030006880	S.CER C1608 JB 1H 472K-T
C107	4030006880	S.CER C1608 JB 1H 472K-T
C108	4030006880	S.CER C1608 JB 1H 472K-T
C109	4030006880	S.CER C1608 JB 1H 472K-T
C110	4510006160	ELE 25 ME 10 HC
C111	4030006860	S.CER C1608 JB 1H 102K-T
C112	4030006880	S.CER C1608 JB 1H 472K-T
C113	4030008920	S.CER C1608 JB 1H 473K-T
C114	4510006160	ELE 25 ME 10 HC
C115	4030007140	S.CER C1608 CH 1H 121J-T
C116	4030007050	S.CER C1608 CH 1H 220J-T
C117	4510005120	ELE 16 ME 47 HC
C118	4510006160	ELE 25 ME 10 HC
C120	4030006880	S.CER C1608 JB 1H 472K-T
C121	4030007030	S.CER C1608 CH 1H 150J-T
C122	4030007030	S.CER C1608 CH 1H 150J-T
C123	4030007040	S.CER C1608 CH 1H 180J-T
C126	4030007100	S.CER C1608 CH 1H 560J-T
C127	4030006880	S.CER C1608 JB 1H 472K-T
C130	4030007120	S.CER C1608 CH 1H 820J-T
C131	4030007030	S.CER C1608 CH 1H 150J-T
C132	4030007150	S.CER C1608 CH 1H 151J-T
C133	4030007010	S.CER C1608 CH 1H 100D-T
C134	4030007120	S.CER C1608 CH 1H 820J-T
C135	4030008920	S.CER C1608 JB 1H 473K-T
C136	4030007010	S.CER C1608 CH 1H 100D-T
C139	4030007000	S.CER C1608 CH 1H 090D-T
C140	4030008920	S.CER C1608 JB 1H 473K-T
C141	4030006880	S.CER C1608 JB 1H 472K-T
C142	4030007030	S.CER C1608 CH 1H 150J-T
C143	4030006960	S.CER C1608 CH 1H 050C-T
C144	4030006860	S.CER C1608 JB 1H 102K-T
C145	4030006880	S.CER C1608 JB 1H 472K-T
C146	4030006880	S.CER C1608 JB 1H 472K-T
C147	4030006880	S.CER C1608 JB 1H 472K-T

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C148	4030006880	S.CER C1608 JB 1H 472K-T
C149	4030006880	S.CER C1608 JB 1H 472K-T
C150	4030006990	S.CER C1608 CH 1H 080D-T
C151	4030006880	S.CER C1608 JB 1H 472K-T
C152	4030006880	S.CER C1608 JB 1H 472K-T
C153	4030006930	S.CER C1608 CH 1H 020C-T
C154	4030008920	S.CER C1608 JB 1H 473K-T
C155	4030006860	S.CER C1608 JB 1H 102K-T
C156	4030006880	S.CER C1608 JB 1H 472K-T
C157	4030006880	S.CER C1608 JB 1H 472K-T
C158	4030006880	S.CER C1608 JB 1H 472K-T
C159	4030006880	S.CER C1608 JB 1H 472K-T
C160	4030008920	S.CER C1608 JB 1H 473K-T
C161	4030006850	S.CER C1608 JB 1H 471K-T
C162	4030006880	S.CER C1608 JB 1H 472K-T
C163	4030008920	S.CER C1608 JB 1H 473K-T
C164	4510008400	ELE 25 ME 22 HC
C165	4030006880	S.CER C1608 JB 1H 472K-T
C166	4510008400	ELE 25 ME 22 HC
C167	4030007010	S.CER C1608 CH 1H 100D-T
C168	4510005490	ELE 50 ME 2R2 HC
C169	4030006880	S.CER C1608 JB 1H 472K-T
C170	4030008920	S.CER C1608 JB 1H 473K-T
C171	4030006880	S.CER C1608 JB 1H 472K-T
C172	4030008930	S.CER C2012 JB 1C 563K-T
C173	4030008920	S.CER C1608 JB 1H 473K-T
C174	4030006880	S.CER C1608 JB 1H 472K-T
C175	4030006880	S.CER C1608 JB 1H 472K-T
C176	4030006880	S.CER C1608 JB 1H 472K-T
C177	4030006880	S.CER C1608 JB 1H 472K-T
C178	4030006880	S.CER C1608 JB 1H 472K-T
C179	4030006880	S.CER C1608 JB 1H 472K-T
C180	4030006880	S.CER C1608 JB 1H 472K-T
C181	4030006880	S.CER C1608 JB 1H 472K-T
C182	4030006880	S.CER C1608 JB 1H 472K-T
C183	4030007030	S.CER C1608 CH 1H 150J-T
C184	4030006990	S.CER C1608 CH 1H 080D-T
C185	4030007030	S.CER C1608 CH 1H 150J-T
C186	4030006880	S.CER C1608 JB 1H 472K-T
C187	4030006880	S.CER C1608 JB 1H 472K-T
C188	4030006880	S.CER C1608 JB 1H 472K-T
C189	4030006880	S.CER C1608 JB 1H 472K-T
C190	4030006900	S.CER C1608 JB 1H 103K-T
C191	4030006880	S.CER C1608 JB 1H 472K-T
C192	4030006880	S.CER C1608 JB 1H 472K-T
C193	4510006160	ELE 25 ME 10 HC
C194	4030006880	S.CER C1608 JB 1H 472K-T
C195	4030006900	S.CER C1608 JB 1H 103K-T
C196	4030006880	S.CER C1608 JB 1H 472K-T
C197	4030006880	S.CER C1608 JB 1H 472K-T
C198	4030006880	S.CER C1608 JB 1H 472K-T
C199	4510005120	ELE 16 ME 47 HC
C201	4030006880	S.CER C1608 JB 1H 472K-T
C202	4030007170	S.CER C1608 CH 1H 221J-T
C203	4030007050	S.CER C1608 CH 1H 220J-T
C205	4030011600	S.CER C1608 JB 1E 104K-T
C206	4510001910	ELE 25 MS7 10UF (5X7)
C207	4030012610	S.CER C2012 JB 1C 474K-T
C208	4030006880	S.CER C1608 JB 1H 472K-T
C209	4030011600	S.CER C1608 JB 1E 104K-T
C210	4510001910	ELE 25 MS7 10UF (5X7)
C211	4030006880	S.CER C1608 JB 1H 472K-T
C212	4030006880	S.CER C1608 JB 1H 472K-T
C214	4510001910	ELE 25 MS7 10UF (5X7)
C215	4030011600	S.CER C1608 JB 1E 104K-T
C216	4030007050	S.CER C1608 CH 1H 220J-T
C217	4030006880	S.CER C1608 JB 1H 472K-T
C218	4510008400	ELE 25 ME 22 HC
C222	4030007170	S.CER C1608 CH 1H 221J-T
C225	4030006880	S.CER C1608 JB 1H 472K-T
C226	4510008400	ELE 25 ME 22 HC
C228	4030006880	S.CER C1608 JB 1H 472K-T
C229	4030006850	S.CER C1608 JB 1H 471K-T
C230	4510006160	ELE 25 ME 10 HC
C231	4510006160	ELE 25 ME 10 HC
C232	4030006860	S.CER C1608 JB 1H 102K-T
C234	4510006160	ELE 25 ME 10 HC
C235	4510006160	ELE 25 ME 10 HC
C236	4510006160	ELE 25 ME 10 HC
C237	4030006880	S.CER C1608 JB 1H 472K-T
C238	4030007130	S.CER C1608 CH 1H 101J-T
C239	4030007150	S.CER C1608 CH 1H 151J-T
C240	4030006880	S.CER C1608 JB 1H 472K-T
C242	4030007090	S.CER C1608 CH 1H 470J-T
C243	4510008400	ELE 25 ME 22 HC
C244	4030008920	S.CER C1608 JB 1H 473K-T
C245	4510005490	ELE 50 ME 2R2 HC
C246	4030006880	S.CER C1608 JB 1H 472K-T
C248	4030006860	S.CER C1608 JB 1H 102K-T
C250	4510005120	ELE 16 ME 47 HC
C251	4510008400	ELE 25 ME 22 HC
C252	4030008920	S.CER C1608 JB 1H 473K-T
C253	4030014300	S.CER C1608 JB 1E 563K-T
C254	4030012610	S.CER C2012 JB 1C 474K-T
C256	4030009980	S.CER C1608 JB 1H 152K-T
C257	4310000610	MLR 50 F2D 472J
C258	4510008410	ELE 25 ME 4R7 HC
C259	4030007170	S.CER C1608 CH 1H 221J-T
C260	4030006880	S.CER C1608 JB 1H 472K-T
C261	4510005120	ELE 16 ME 47 HC
C262	4310000360	MLR 50 F2D 103J
C263	4510004990	ELE 16 ME 100 HC
C264	4310000360	MLR 50 F2D 103J
C265	4510004910	ELE 16 ME 10 SWN

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C266	4510008410	ELE 25 ME 4R7 HC
C267	4510008420	ELE 50 ME R47 HC
C268	4510005120	ELE 16 ME 47 HC
C269	4510005490	ELE 50 ME 2R2 HC
C270	4510008410	ELE 25 ME 4R7 HC
C275	4510005120	ELE 16 ME 47 HC
C276	4030006880	S.CER C1608 JB 1H 472K-T
C277	4510008410	ELE 25 ME 4R7 HC
C278	4510005250	ELE 50 ME 2R2 SWN
C279	4510005250	ELE 50 ME 2R2 SWN
C280	4510005250	ELE 50 ME 2R2 SWN
C282	4030006880	S.CER C1608 JB 1H 472K-T
C283	4030006900	S.CER C1608 JB 1H 103K-T
C284	4030006900	S.CER C1608 JB 1H 103K-T
C285	4510008420	ELE 50 ME R47 HC
C286	4510008420	ELE 50 ME R47 HC
C287	4510006160	ELE 25 ME 10 HC
C288	4030006880	S.CER C1608 JB 1H 472K-T
C289	4030006880	S.CER C1608 JB 1H 472K-T
C290	4510006160	ELE 25 ME 10 HC
C293	4510006160	ELE 25 ME 10 HC
C294	4310000380	MLR 50 F2D 153J
C295	4310000380	MLR 50 F2D 153J
C296	4310000380	MLR 50 F2D 153J
C297	4030008920	S.CER C1608 JB 1H 473K-T
C298	4510006160	ELE 25 ME 10 HC
C299	4510003790	ELE 16 ME 10 SWB
C300	4030006880	S.CER C1608 JB 1H 472K-T
C301	4510003790	ELE 16 ME 10 SWB
C302	4030006880	S.CER C1608 JB 1H 472K-T
C303	4510003850	ELE 50 ME 2R2 SWB
C304	4510001360	ELE 16 MS5 22UF
C305	4550007830	TAN 204M1602106M4F
C306	4030006900	S.CER C1608 JB 1H 103K-T
C307	4030006860	S.CER C1608 JB 1H 102K-T
C317	4030006880	S.CER C1608 JB 1H 472K-T
C319	4030006880	S.CER C1608 JB 1H 472K-T
C320	4030006880	S.CER C1608 JB 1H 472K-T
C321	4030006880	S.CER C1608 JB 1H 472K-T
C322	4030006880	S.CER C1608 JB 1H 472K-T
C323	4030006880	S.CER C1608 JB 1H 472K-T
C324	4030006880	S.CER C1608 JB 1H 472K-T
C325	4030006880	S.CER C1608 JB 1H 472K-T
C326	4030006880	S.CER C1608 JB 1H 472K-T
C343	4510008410	ELE 25 ME 4R7 HC
C361	4030006880	S.CER C1608 JB 1H 472K-T
C362	4030006880	S.CER C1608 JB 1H 472K-T
C363	4030006880	S.CER C1608 JB 1H 472K-T
C364	4030006880	S.CER C1608 JB 1H 472K-T
C374	4030006880	S.CER C1608 JB 1H 472K-T
C387	4030006880	S.CER C1608 JB 1H 472K-T
C397	4030006880	S.CER C1608 JB 1H 472K-T
C398	4030006880	S.CER C1608 JB 1H 472K-T
C401	4030008920	S.CER C1608 JB 1H 473K-T
C403	4030006880	S.CER C1608 JB 1H 472K-T
C408	4030007130	S.CER C1608 CH 1H 101J-T
C409	4030006880	S.CER C1608 JB 1H 472K-T
C410	4030006880	S.CER C1608 JB 1H 472K-T
C411	4030006880	S.CER C1608 JB 1H 472K-T
C412	4030006880	S.CER C1608 JB 1H 472K-T
C413	4030006880	S.CER C1608 JB 1H 472K-T
C414	4030006880	S.CER C1608 JB 1H 472K-T
C416	4030006880	S.CER C1608 JB 1H 472K-T
C417	4030006880	S.CER C1608 JB 1H 472K-T
C418	4030006880	S.CER C1608 JB 1H 472K-T
C419	4030006880	S.CER C1608 JB 1H 472K-T
C420	4030006880	S.CER C1608 JB 1H 472K-T
C421	4030006880	S.CER C1608 JB 1H 472K-T
C434	4030006880	S.CER C1608 JB 1H 472K-T
C435	4030006880	S.CER C1608 JB 1H 472K-T
C436	4510005490	ELE 50 ME 2R2 HC
C437	4030008920	S.CER C1608 JB 1H 473K-T
C438	4030007030	S.CER C1608 CH 1H 150J-T
C439	4030007010	S.CER C1608 CH 1H 100D-T
C444	4030011600	S.CER C1608 JB 1E 104K-T
C448	4030006880	S.CER C1608 JB 1H 472K-T
C449	4510008410	ELE 25 ME 4R7 HC
C450	4030006880	S.CER C1608 JB 1H 472K-T
C451	4510008410	ELE 25 ME 4R7 HC
C452	4030006880	S.CER C1608 JB 1H 472K-T
C454	4030006880	S.CER C1608 JB 1H 472K-T
C455	4510004591	ELE 16 ME 470 HC
C456	4030007010	S.CER C1608 CH 1H 100D-T
C457	4030006920	S.CER C1608 CH 1H 010C-T
C458	4030007010	S.CER C1608 CH 1H 100D-T
C459	4030006970	S.CER C1608 CH 1H 060D-T
C460	4030006920	S.CER C1608 CH 1H 010C-T
C461	4030006860	S.CER C1608 JB 1H 102K-T
C462	4030006880	S.CER C1608 JB 1H 472K-T
C463	4030006860	S.CER C1608 JB 1H 102K-T
C464	4030006880	S.CER C1608 JB 1H 472K-T
C502	4510004471	ELE FYL0H 4732F
C503	4510006160	ELE 25 ME 10 HC
C504	4510003820	ELE 50 ME R22 SWB
C509	4030007020	S.CER C1608 CH 1H 120J-T
C510	4030007020	S.CER C1608 CH 1H 120J-T
C511	4030006880	S.CER C1608 JB 1H 472K-T
C512	4030006880	S.CER C1608 JB 1H 472K-T
C513	4030006880	S.CER C1608 JB 1H 472K-T
C514	4030006880	S.CER C1608 JB 1H 472K-T
C515	4030006880	S.CER C1608 JB 1H 472K-T
C516	4030006880	S.CER C1608 JB 1H 472K-T
C517	4030006880	S.CER C1608 JB 1H 472K-T
C518	4030006880	S.CER C1608 JB 1H 472K-T

[GEN-24] only

S.=Surface mount

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C519	4030006880	S.CER C1608 JB 1H 472K-T
C520	4030006880	S.CER C1608 JB 1H 472K-T
C521	4030006880	S.CER C1608 JB 1H 472K-T
C522	4030006880	S.CER C1608 JB 1H 472K-T
C523	4030006880	S.CER C1608 JB 1H 472K-T
C524	4030006880	S.CER C1608 JB 1H 472K-T
C525	4030006880	S.CER C1608 JB 1H 472K-T
C526	4030006880	S.CER C1608 JB 1H 472K-T
C527	4030006880	S.CER C1608 JB 1H 472K-T
C528	4030006880	S.CER C1608 JB 1H 472K-T
C531	4030006880	S.CER C1608 JB 1H 472K-T
C532	4030006880	S.CER C1608 JB 1H 472K-T
C533	4030006880	S.CER C1608 JB 1H 472K-T
C534	4030006880	S.CER C1608 JB 1H 472K-T
C535	4030006880	S.CER C1608 JB 1H 472K-T
C538	4030006880	S.CER C1608 JB 1H 472K-T
C539	4030006880	S.CER C1608 JB 1H 472K-T
C542	4030006880	S.CER C1608 JB 1H 472K-T
C543	4030006880	S.CER C1608 JB 1H 472K-T
C544	4030006880	S.CER C1608 JB 1H 472K-T
C546	4030006880	S.CER C1608 JB 1H 472K-T
C547	4030006880	S.CER C1608 JB 1H 472K-T
C548	4030006880	S.CER C1608 JB 1H 472K-T
C550	4030006880	S.CER C1608 JB 1H 472K-T
C551	4030006880	S.CER C1608 JB 1H 472K-T
C555	4030006880	S.CER C1608 JB 1H 472K-T
C558	4510005120	ELE 16 ME 47 HC
C559	4030006880	S.CER C1608 JB 1H 472K-T
C560	4030006880	S.CER C1608 JB 1H 472K-T
C561	4030007130	S.CER C1608 CH 1H 101J-T
C562	4030008920	S.CER C1608 JB 1H 473K-T
C564	4030006880	S.CER C1608 JB 1H 472K-T
C565	4030006880	S.CER C1608 JB 1H 472K-T
C568	4030006880	S.CER C1608 JB 1H 472K-T
C569	4030006880	S.CER C1608 JB 1H 472K-T
C571	4030008920	S.CER C1608 JB 1H 473K-T
C572	4030008920	S.CER C1608 JB 1H 473K-T
C573	4030008920	S.CER C1608 JB 1H 473K-T
C574	4030007130	S.CER C1608 CH 1H 101J-T
C581	4030006880	S.CER C1608 JB 1H 472K-T
C582	4030006880	S.CER C1608 JB 1H 472K-T
C583	4030006880	S.CER C1608 JB 1H 102K-T
C584	4030006880	S.CER C1608 JB 1H 472K-T
C597	4030006880	S.CER C1608 JB 1H 472K-T
C598	4510008420	ELE 50 ME R47 HC
C599	4510005000	ELE 16 ME 220 HC
C600	4510004910	ELE 16 ME 10 SWN
C601	4510004910	ELE 16 ME 10 SWN
C609	4510008400	ELE 25 ME 22 HC
C614	4510005210	ELE 50 ME 1 SWN
C618	4030007030	S.CER C1608 CH 1H 150J-T
C620	4030006920	S.CER C1608 CH 1H 010C-T
C622	4030006850	S.CER C1608 JB 1H 471K-T
C623	4030009980	S.CER C1608 JB 1H 152K-T
C624	4030007140	S.CER C1608 CH 1H 121J-T
C625	4030006870	S.CER C1608 JB 1H 222K-T
C628	4030007030	S.CER C1608 CH 1H 150J-T
C629	4030008850	S.CER C1608 JB 1H 123K-T
C631	4510008410	ELE 25 ME 4R7 HC
C632	4510006160	ELE 25 ME 10 HC
C633	4030008920	S.CER C1608 JB 1H 473K-T
C634	4030008920	S.CER C1608 JB 1H 473K-T
C635	4510003790	ELE 16 ME 10 SWB
C637	4030006860	S.CER C1608 JB 1H 102K-T
C639	4030009980	S.CER C1608 JB 1H 152K-T
C640	4030006880	S.CER C1608 JB 1H 472K-T
C641	4030006880	S.CER C1608 JB 1H 472K-T
C642	4030006880	S.CER C1608 JB 1H 472K-T
C643	4030006880	S.CER C1608 JB 1H 472K-T
C644	4030006880	S.CER C1608 JB 1H 472K-T
C645	4030006880	S.CER C1608 JB 1H 472K-T
C646	4030006860	S.CER C1608 JB 1H 102K-T
C647	4030006850	S.CER C1608 JB 1H 471K-T
C648	4030006880	S.CER C1608 JB 1H 472K-T
C650	4030008920	S.CER C1608 JB 1H 473K-T
C651	4030007050	S.CER C1608 CH 1H 220J-T
C654	4030006880	S.CER C1608 JB 1H 472K-T
C663	4030007050	S.CER C1608 CH 1H 220J-T
C664	4030006880	S.CER C1608 JB 1H 472K-T
C665	4030006880	S.CER C1608 JB 1H 472K-T
C666	4030006880	S.CER C1608 JB 1H 472K-T
C667	4030006880	S.CER C1608 JB 1H 472K-T
C668	4030006880	S.CER C1608 JB 1H 472K-T
C669	4030006880	S.CER C1608 JB 1H 472K-T
C670	4510005150	ELE 50 ME 10 HC
C671	4510004990	ELE 16 ME 100 HC
C672	4510004990	ELE 16 ME 100 HC
C673	4510004990	ELE 16 ME 100 HC
C674	4510003840	ELE 50 ME 1 SWB
C683	4510004910	ELE 16 ME 10 SWN
C684	4510008420	ELE 50 ME R47 HC
C685	4030011600	S.CER C1608 JB 1E 104K-T
C686	4510001910	ELE 25 MS7 10UF (5X7)
C687	4510001910	ELE 25 MS7 10UF (5X7)
C688	4510001910	ELE 25 MS7 10UF (5X7)
C690	4030011600	S.CER C1608 JB 1E 104K-T
C708	4030011600	S.CER C1608 JB 1E 104K-T
C711	4030011600	S.CER C1608 JB 1E 104K-T
C712	4030011600	S.CER C1608 JB 1E 104K-T
C713	4030011600	S.CER C1608 JB 1E 104K-T
C717	4030006880	S.CER C1608 JB 1H 472K-T
C718	4030011600	S.CER C1608 JB 1E 104K-T
C1051	4030006880	S.CER C1608 JB 1H 472K-T

[GEN-24] only

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION
RL2	6330001320	RLY AHY103
J1	6510017150	CNR TMP-S01X-C1
J2	6510017150	CNR TMP-S01X-C1
J3	6510007020	CNR TMP-J01X-V6
J4	6510007020	CNR TMP-J01X-V6
J5	6510007020	CNR TMP-J01X-V6
J6	6450001240	CNR HLJ4306-01-3000
J7	6450001440	CNR HSJ1403-01-010
J9	6510017660	CNR 52045-1645
J11	6510023120	CNR CD6109SA1J0 <CVI>
J12	6450001581	CNR TCS5073-2841577
J13	6510024541	CNR TCS5073-2741577
J15	6510003401	CNR B04B-EH-S (LF) (SN)
J16	6510003431	CNR B07B-EH-S (LF) (SN)
J19	6510017660	CNR 52045-1645
J20	6510003391	CNR B03B-EH-S (LF) (SN)
J22	6510017650	CNR 52045-1045
J23	6510003401	CNR B04B-EH-S (LF) (SN)
J29	6510018150	S.CNR 4-175638-0
J30	6510017950	S.CNR 4-175638-4
J32	6510010021	CNR RTB-1.5-2F (LF)
J33	6450001560	CNR PD-72
S9	2220000520	SW ESD-11V120
S11	2220000520	SW ESD-11V120
W1	7120000470	JMP ERDS2T0
W10	7030003860	S.RES ERJ3GE JPW V
W11	7120000470	JMP ERDS2T0
W12	7030003860	S.RES ERJ3GE JPW V
W13	7120000490	JMP ERD25T0
W14	7030003860	S.RES ERJ3GE JPW V
W17	7030003860	S.RES ERJ3GE JPW V
W18	7030003860	S.RES ERJ3GE JPW V
W23	7030003860	S.RES ERJ3GE JPW V
W24	7030003860	S.RES ERJ3GE JPW V
W25	7030003860	S.RES ERJ3GE JPW V
W27	7030003860	S.RES ERJ3GE JPW V
W32	7030011280	JMP J1/4ZC
W33	7030003860	S.RES ERJ3GE JPW V
W34	7030003860	S.RES ERJ3GE JPW V

[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION
IC3001	1140007881	S.IC TC190G08EFG0046JDZ/SC1246A
IC3002	1140004550	S.IC M65343FP/SC1287
IC3003	1180001071	S.IC TA7805F (TE16L,Q)
IC3004	1130004831	S.IC TC7SU04F (TE85R,F)
IC3005	1130007661	S.IC LC7153M-TLM-E
IC3006	1130004831	S.IC TC7SU04F (TE85R,F)
IC3008	1130004831	S.IC TC7SU04F (TE85R,F)
Q3001	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3002	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3003	1560000721	S.FET 2SK2171-4-TD-E
Q3004	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3005	1560000331	S.FET 2SK210-GR (TE85R,F)
Q3006	1530002691	S.TR 2SC4116-GR (TE85R,F)
Q3007	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3008	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3010	1530002691	S.TR 2SC4116-GR (TE85R,F)
Q3011	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3021	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3022	1590001330	S.TR DTA114EUA T106
Q3024	1530002601	S.TR 2SC4215-O (TE85R,F)
Q3025	1530002691	S.TR 2SC4116-GR (TE85R,F)
D3001	1750000271	S.DIO 1SS301 (TE85R,F)
D3002	1750000271	S.DIO 1SS301 (TE85R,F)
D3003	1790000540	S.VCP MA338 (TX)
D3004	1720000671	S.VCP HVU17TRF-E
D3005	1750000071	S.DIO 1SS226 (TE85R,F)
D3015	1790000491	S.DIO HSM88ASTR-E
D3016	1790000491	S.DIO HSM88ASTR-E
D3020	1720000671	S.VCP HVU17TRF-E
FI3001	2020001140	S.CER SFECA10.7MA5-A-TC (SFECA10.7MA-
X3001	6050011400	XTL CR-282. (30.00000 MHz)
L3001	6200001831	S.COL NLV32T-100J
L3002	6170000230	COL LW-25
L3003	6150004370	COL LS-472C (C-15045)
L3004	6150004250	COL LS-471A (C-14922)
L3005	6150004250	COL LS-471A (C-14922)
L3007	6200003261	S.COL NLV32T-101J

S.=Surface mount



[PLL UNIT]

REF NO.	ORDER NO.	DESCRIPTION
C3091	4030007140	S.CER C1608 CH 1H 121J-T
C3092	4030011340	S.CER C1608 CH 1H 471J-T
C3093	4510004591	ELE 16 ME 470 HC
C3094	4030006860	S.CER C1608 JB 1H 102K-T
C3096	4510004591	ELE 16 ME 470 HC
C3097	4030006880	S.CER C1608 JB 1H 472K-T
C3098	4030006920	S.CER C1608 CH 1H 010C-T
C3099	4030006860	S.CER C1608 JB 1H 102K-T
C3100	4030006880	S.CER C1608 JB 1H 472K-T
C3101	4030006930	S.CER C1608 CH 1H 020C-T
C3102	4030006880	S.CER C1608 JB 1H 472K-T
C3105	4030006860	S.CER C1608 JB 1H 102K-T
C3106	4030006880	S.CER C1608 JB 1H 472K-T
C3109	4030006880	S.CER C1608 JB 1H 472K-T
C3110	4030006880	S.CER C1608 JB 1H 472K-T
C3111	4030006880	S.CER C1608 JB 1H 472K-T
C3124	4030007090	S.CER C1608 CH 1H 470J-T
C3125	4030006860	S.CER C1608 JB 1H 102K-T
C3129	4030006880	S.CER C1608 JB 1H 472K-T
C3130	4030007110	S.CER C1608 CH 1H 680J-T
C3132	4030006960	S.CER C1608 CH 1H 050C-T
C3133	4030006880	S.CER C1608 JB 1H 472K-T
C3135	4030007060	S.CER C1608 CH 1H 270J-T
C3136	4030007020	S.CER C1608 CH 1H 120J-T
C3137	4030007060	S.CER C1608 CH 1H 270J-T
C3138	4030006980	S.CER C1608 CH 1H 070D-T
C3139	4030007040	S.CER C1608 CH 1H 180J-T
C3141	4030006880	S.CER C1608 JB 1H 472K-T
C3142	4030006880	S.CER C1608 JB 1H 472K-T
C3143	4030006880	S.CER C1608 JB 1H 472K-T
C3144	4030006880	S.CER C1608 JB 1H 472K-T
C3145	4030006880	S.CER C1608 JB 1H 472K-T
C3154	4030007040	S.CER C1608 CH 1H 180J-T
C3155	4030007000	S.CER C1608 CH 1H 090D-T
C3156	4030007060	S.CER C1608 CH 1H 270J-T
C3157	4030006960	S.CER C1608 CH 1H 050C-T
C3158	4030008560	S.CER C1608 CH 1H 300J-T
C3161	4030006880	S.CER C1608 JB 1H 472K-T
C3164	4030006880	S.CER C1608 JB 1H 472K-T
C3165	4030006880	S.CER C1608 JB 1H 472K-T
C3170	4030007090	S.CER C1608 CH 1H 470J-T
C3171	4030011280	S.CER C1608 CH 1H 271J-T
C3173	4030006880	S.CER C1608 JB 1H 472K-T
C3174	4030006880	S.CER C1608 JB 1H 472K-T
C3175	4030006880	S.CER C1608 JB 1H 472K-T
C3177	4030006880	S.CER C1608 JB 1H 472K-T
C3178	4030006880	S.CER C1608 JB 1H 472K-T
C3179	4030006880	S.CER C1608 JB 1H 472K-T
C3180	4030006880	S.CER C1608 JB 1H 472K-T
C3181	4030006880	S.CER C1608 JB 1H 472K-T
C3182	4030006860	S.CER C1608 JB 1H 102K-T
C3183	4030007130	S.CER C1608 CH 1H 101J-T
C3201	4030007060	S.CER C1608 CH 1H 270J-T
C3202	4030007010	S.CER C1608 CH 1H 100D-T
C3203	4030006960	S.CER C1608 CH 1H 050C-T
C3204	4030006880	S.CER C1608 JB 1H 472K-T
C3205	4030007090	S.CER C1608 CH 1H 470J-T
J3004	6510003081	CNR RT01T-1.0B (LF)
J3005	6510003081	CNR RT01T-1.0B (LF)
J3006	6910003141	CNR IMSA-9202B-1-02Z041-PT1
J3007	6510017660	CNR 52045-1645
P3004	6910003120	CNR IMSA-9206H-T
W3007	7030003860	S.RES ERJ3GE JPW V
W3010	7030003860	S.RES ERJ3GE JPW V
W3011	7030003860	S.RES ERJ3GE JPW V

[GEN-24] only

[GEN-24] only  
[GEN-24] only  
[GEN-24] only  
[GEN-24] only  
[GEN-24] only

[FILTER-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
Q4301	1590002190	TR DTC114ES TP
D4301	1710000061	DIO 1SS55-T4-AZ
D4302	1710000061	DIO 1SS55-T4-AZ
D4303	1710000061	DIO 1SS55-T4-AZ
D4304	1710000061	DIO 1SS55-T4-AZ
D4305	1710000061	DIO 1SS55-T4-AZ
D4306	1710000061	DIO 1SS55-T4-AZ
D4307	1710000061	DIO 1SS55-T4-AZ
D4308	1710000061	DIO 1SS55-T4-AZ
D4309	1710000981	DIO MBD701G
D4310	1710000981	DIO MBD701G
D4311	1710000061	DIO 1SS55-T4-AZ
L4301	6180000900	COL LAL 03NA 101K
L4302	6140001990	COL LR-226 (T68-2)
L4303	6140002000	COL LR-227 (T68-2)
L4304	6180000900	COL LAL 03NA 101K
L4305	6180000900	COL LAL 03NA 101K
L4306	6140002900	COL LR-263 <KN>
L4307	6140002820	COL LR-235 <KN>
L4308	6140002830	COL LR-236 <KN>
L4309	6180000900	COL LAL 03NA 101K
L4310	6180000900	COL LAL 03NA 101K
L4311	6140002850	COL LR-238 <KN>
L4312	6140002820	COL LR-235 <KN>
L4313	6140002820	COL LR-235 <KN>
L4314	6180000900	COL LAL 03NA 101K
L4315	6180000900	COL LAL 03NA 101K
L4316	6140002840	COL LR-237 <KN>
L4317	6140002900	COL LR-263 <KN>
L4318	6140002900	COL LR-263 <KN>
L4319	6180000900	COL LAL 03NA 101K
L4320	6180000900	COL LAL 03NA 101K
L4321	6140002860	COL LR-241 <KN>
L4322	6140002840	COL LR-237 <KN>
L4323	6140002840	COL LR-237 <KN>
L4324	6180000900	COL LAL 03NA 101K
L4325	6180000900	COL LAL 03NA 101K
L4327	6140002880	COL LR-243 <KN>
L4328	6140002870	COL LR-242 <KN>
L4329	6140002870	COL LR-242 <KN>
L4330	6180000900	COL LAL 03NA 101K
L4331	6180000900	COL LAL 03NA 101K
L4332	6140003580	COL LR-399 (3.5%)
L4333	6140002870	COL LR-242 <KN>
L4334	6180000900	COL LAL 03NA 101K
L4335	6180000900	COL LAL 03NA 101K
L4336	6140002890	COL LR-262 <KN>
L4337	6140002890	COL LR-262 <KN>
L4338	6180000900	COL LAL 03NA 101K
L4339	6180000900	COL LAL 03NA 101K
L4340	6180000900	COL LAL 03NA 101K
L4341	6140002530	COL LR-291 (TR10X5X5 3A6)
L4342	6140001460	COL LR-170
L4343	6180000900	COL LAL 03NA 101K
L4344	6180000900	COL LAL 03NA 101K
L4345	6140002830	COL LR-236 <KN>
L4346	6140003570	COL LR-398 (3.5%)
R4301	7010004372	RES PSD1/4 22 k
R4302	7010007240	RES PSD1/4V 100 K
R4303	7010006980	RES PSD1/4 10 K
R4304	7010007240	RES PSD1/4V 100 K
R4305	7010007180	RES PSD1/4V 22 K
R4306	7010006980	RES PSD1/4 10 K
R4307	7010004701	RES PSD1/2 68
R4308	7010000911	RES R25X T-24J 10
R4309	7540000010	ABS DSA-301LA
R4312	7010004272	RES PSD1/4 4.7 k
R4313	7010007140	RES PSD1/4V 4.7K
R4314	7010007290	RES PSD1/4V 1 M
C4301	4020000980	CYR UP050 B 104K-NA-CZ
C4302	4320000270	DMI DM20C 102J5
C4303	4010006410	CER HM13SJ SL 471J 500V
C4304	4010006410	CER HM13SJ SL 471J 500V
C4305	4320000320	DMI DM20C 222J5
C4306	4010005360	CER HM11SJ SL 301J 500V
C4307	4010005880	CER HM95SJ SL 271J 500V
C4308	4320000330	DMI DM20C 272J5
C4309	4010005850	CER HM95SJ SL 181J 500V
C4310	4010005480	CER HM60SJ CH 100D 500V
C4311	4010005930	CER HM11SJ SL 391J 500V
C4312	4010005930	CER HM11SJ SL 391J 500V
C4313	4010005370	CER HM11SJ SL 331J 500V
C4314	4010005930	CER HM11SJ SL 391J 500V
C4315	4020000980	CYR UP050 B 104K-NA-CZ
C4316	4020000980	CYR UP050 B 104K-NA-CZ
C4317	4010005690	CER HM60SJ SL 300J 500V
C4318	4010005370	CER HM11SJ SL 331J 500V
C4319	4010006410	CER HM13SJ SL 471J 500V
C4320	4010005370	CER HM11SJ SL 331J 500V
C4321	4010005880	CER HM95SJ SL 271J 500V
C4322	4010005880	CER HM95SJ SL 271J 500V
C4323	4010005880	CER HM95SJ SL 271J 500V
C4324	4010006410	CER HM13SJ SL 471J 500V
C4325	4010006410	CER HM13SJ SL 471J 500V
C4326	4010006410	CER HM13SJ SL 471J 500V
C4327	4010005880	CER HM95SJ SL 271J 500V

[GEN-24] only  
[GEN-24] only

[GEN-24] only

[GEN-24] only

[GEN-21], [GEN-22] only

S.=Surface mount

[FILTER-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
C4328	4010005370	CER	HM11SJ SL 331J 500V
C4329	4010005370	CER	HM11SJ SL 331J 500V
C4330	4010006410	CER	HM13SJ SL 471J 500V
C4331	4010005930	CER	HM11SJ SL 391J 500V
C4332	4010005370	CER	HM11SJ SL 331J 500V
C4333	4010005820	CER	HM74SJ SL 121J 500V
C4334	4010005820	CER	HM74SJ SL 121J 500V
C4335	4010005930	CER	HM11SJ SL 391J 500V
C4336	4010005930	CER	HM11SJ SL 391J 500V
C4337	4010005750	CER	HM60SJ SL 680J 500V
C4338	4020000980	CYP	UP050 B 104K-NA-CZ
C4339	4010006900	CER	HE80SJ YB 472K 50V
C4340	4010005870	CER	HM95SJ SL 221J 500V
C4341	4010005370	CER	HM11SJ SL 331J 500V
C4342	4010005370	CER	HM11SJ SL 331J 500V
C4343	4010005930	CER	HM11SJ SL 391J 500V
C4344	4010005830	CER	HM74SJ SL 151J 500V
C4345	4010005370	CER	HM11SJ SL 331J 500V
C4346	4010006410	CER	HM13SJ SL 471J 500V
C4347	4010005780	CER	HM60SJ SL 101J 500V
C4348	4010005360	CER	HM11SJ SL 301J 500V
C4349	4010006900	CER	HE80SJ YB 472K 50V
C4350	4010006900	CER	HE80SJ YB 472K 50V
C4351	4010005850	CER	HM95SJ SL 181J 500V
C4352	4010005370	CER	HM11SJ SL 331J 500V
C4353	4010005820	CER	HM74SJ SL 121J 500V
C4354	4010005880	CER	HM95SJ SL 271J 500V
C4355	4010005360	CER	HM11SJ SL 301J 500V
C4356	4010005740	CER	RT-HM60SK SL 560J 500V
C4357	4010005560	CER	HM60SJ SL 050C 500V
C4358	4010005360	CER	HM11SJ SL 301J 500V
C4359	4010006900	CER	HE80SJ YB 472K 50V
C4360	4010006900	CER	HE80SJ YB 472K 50V
C4361	4010005930	CER	HM11SJ SL 391J 500V
C4362	4010005820	CER	HM74SJ SL 121J 500V
C4363	4010005930	CER	HM11SJ SL 391J 500V
C4364	4010005770	CER	HM60SJ SL 820J 500V
C4365	4010005870	CER	HM95SJ SL 221J 500V
C4366	4010006900	CER	HE80SJ YB 472K 50V
C4367	4010006900	CER	HE80SJ YB 472K 50V
C4368	4010005880	CER	HM95SJ SL 271J 500V
C4369	4010008600	CER	HP74SJ SL 101J 1KV
C4370	4010005370	CER	HM11SJ SL 331J 500V
C4371	4010005750	CER	HM60SJ SL 680J 500V
C4372	4010005770	CER	HM60SJ SL 820J 500V
C4373	4010006900	CER	HE80SJ YB 472K 50V
C4374	4010006900	CER	HE80SJ YB 472K 50V
C4377	4010005860	CER	HM95SJ SL 201J 500V
C4378	4010008610	CER	HP60SJ SL 470J 1KV
C4379	4010005870	CER	HM95SJ SL 221J 500V
C4380	4010006900	CER	HE80SJ YB 472K 50V
C4381	4010006900	CER	HE80SJ YB 472K 50V
C4382	4010005830	CER	HM74SJ SL 151J 500V
C4383	4010005560	CER	HM60SJ SL 220J 500V
C4384	4010005360	CER	HM11SJ SL 301J 500V
C4385	4010008610	CER	HP60SJ SL 470J 1KV
C4386	4010005830	CER	HM74SJ SL 151J 500V
C4387	4010006900	CER	HE80SJ YB 472K 50V
C4388	4010006850	CER	HE40SJ YB 471K 50V
C4389	4010006850	CER	HE40SJ YB 471K 50V
C4390	4010006380	CER	HE90SJ SL 471J 50V
C4391	4010006380	CER	HE90SJ SL 471J 50V
C4392	4610002240	TRI	ECR-LA030E52
C4393	4010006310	CER	HE60SJ SL 181J 50V
C4394	4010006900	CER	HE80SJ YB 472K 50V
C4395	4010006900	CER	HE80SJ YB 472K 50V
C4396	4010006900	CER	HE80SJ YB 472K 50V
C4398	4010007600	CER	HM17SJ YB 103K 500V
C4399	4010007600	CER	HM17SJ YB 103K 500V
C4400	4010006280	CER	HE50SJ SL 101J 50V
C4401	4010006110	CER	HE40SJ SL 180J 50V
C4402	4010006280	CER	HE50SJ SL 101J 50V
C4404	4010006900	CER	HE80SJ YB 472K 50V
C4406	4020000990	CYP	UP050 B 473K-NA-CZ
C4407	4510006160	ELE	25 ME 10 HC
C4408	4010005730	CER	HM60SJ SL 470J 500V
C4409	4010005480	CER	HM60SJ CH 100D 500V
C4410	4010005820	CER	HM74SJ SL 121J 500V
C4411	4010005480	CER	HM60SJ CH 100D 500V
C4412	4010005770	CER	HM60SJ SL 820J 500V
C4413	4010005740	CER	RT-HM60SK SL 560J 500V
C4414	4010005480	CER	HM60SJ CH 100D 500V
C4415	4010005780	CER	HM60SJ SL 101J 500V
C4416	4010006900	CER	HE80SJ YB 472K 50V
C4417	4010005780	CER	HM60SJ SL 101J 500V
C4420	4010005770	CER	HM60SJ SL 820J 500V
C4421	4010005660	CER	HM60SJ SL 220J 500V
C4422	4510005481	ELE	50 ME 1 HC
C4423	4510005481	ELE	50 ME 1 HC
C4424	4510005481	ELE	50 ME 1 HC
C4425	4510005481	ELE	50 ME 1 HC
C4426	4510005481	ELE	50 ME 1 HC
C4427	4510005481	ELE	50 ME 1 HC
C4428	4510005481	ELE	50 ME 1 HC
C4429	4010005640	CER	HM60SJ SL 180J 500V
C4430	4010006900	CER	HE80SJ YB 472K 50V
C4431	4010005480	CER	HM60SJ CH 100D 500V
RL4301	6330001571	RLY	AJS1315F-K1
RL4302	6330001571	RLY	AJS1315F-K1
RL4303	6330001571	RLY	AJS1315F-K1
RL4304	6330001571	RLY	AJS1315F-K1
RL4305	6330001571	RLY	AJS1315F-K1

[FILTER-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
RL4306	6330001571	RLY	AJS1315F-K1
RL4307	6330001571	RLY	AJS1315F-K1
RL4308	6330001571	RLY	AJS1315F-K1
RL4309	6330001571	RLY	AJS1315F-K1
RL4310	6330001571	RLY	AJS1315F-K1
RL4311	6330001571	RLY	AJS1315F-K1
RL4312	6330001571	RLY	AJS1315F-K1
RL4313	6330001571	RLY	AJS1315F-K1
RL4314	6330001571	RLY	AJS1315F-K1
RL4315	6330001571	RLY	AJS1315F-K1
RL4316	6330001571	RLY	AJS1315F-K1
RL4317	6330000781	RLY	AGP2013F
J4303	6510018571	CNR	16FE-BT-VK-N
J4304	6510007020	CNR	TMP-J01X-V6
W4302	9019601025	JMP	74/98/025/X98/X98
W4303	9019601025	JMP	74/98/025/X98/X98
W4304	9019601025	JMP	74/98/025/X98/X98
W4305	9019601025	JMP	74/98/025/X98/X98
W4306	9019601025	JMP	74/98/025/X98/X98
W4307	9019601025	JMP	74/98/025/X98/X98
W4308	9019601025	JMP	74/98/025/X98/X98
W4309	9019601025	JMP	74/98/025/X98/X98
W4310	9019601025	JMP	74/98/025/X98/X98
W4312	6910001031	JMP	IPS-1041-4-PT
W4313	6910001031	JMP	IPS-1041-4-PT
W4314	6910001031	JMP	IPS-1041-4-PT
W4315	9008503020	JMP	74/98/030/X98/X98
W4316	9019601025	JMP	74/98/025/X98/X98
W4317	9008503020	JMP	74/98/030/X98/X98
W4319	7030011280	JMP	J1/4ZC
W4320	6910001031	JMP	IPS-1041-4-PT
W4321	6910001031	JMP	IPS-1041-4-PT
W4328	9019601025	JMP	74/98/025/X98/X98
W4329	7120000380	JMP	JPW 01 R-01
W4330	7120000470	JMP	ERDS2T0

[PA150W-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	
IC4001	1110002031	IC	TA7808S (Q)
IC4002	1110000960	S.IC	NJM4558M-TE1
IC4003	1170000290	S.IC	PS2701-1-F3
IC4004	1170000290	S.IC	PS2701-1-F3
Q4001	1530000191	TR	2SC3133-01
Q4002	1530000191	TR	2SC3133-01
Q4003	1530000200	TR	2SC2904
Q4004	1530000200	TR	2SC2904
Q4005	1510001040	S.TR	2SA1037AKT146S
Q4006	1540000501	TR	2SD1585-AZ K
Q4007	1530001971	S.TR	2SC1623-T2B-A-L6
Q4008	1530000791	TR	2SC1971-01
D4001	1790000710	VSR	MA29B
D4002	1790000710	VSR	MA29B
D4003	1790000710	VSR	MA29B
D4004	1710000831	S.DIO	DF30SC4M-7072
L4001	6140002350	COL	LR-274 (RIB4X7X5 3A6)
L4003	6140003610	COL	LR-402 (SK-08MD-10X2Y)
L4004	6140002980	COL	LR-143 <KN>
L4005	2040000490	COL	EXC-ELDR25C
L4006	6140002220	COL	LR-270 (TR6X3X2 3A9)
L4007	2040000490	COL	EXC-ELDR25C
L4009	6140000610	COL	LR-83
L4010	6140002990	COL	LR-148 <KN>
L4011	2040000490	COL	EXC-ELDR25C
L4012	6170000140	COL	LW-15
L4013	6140003610	COL	LR-402 (SK-08MD-10X2Y)
L4014	6200003261	S.COL	NLV32T-101J
L4016	6180001220	COL	LAL 04NA 100K
L4018	2040000490	COL	EXC-ELDR25C
L4020	6200003261	S.COL	NLV32T-101J
L4021	6200003261	S.COL	NLV32T-101J
L4022	6200003261	S.COL	NLV32T-101J
L4023	6180001220	COL	LAL 04NA 100K
R4004	7010000211	RES	PSN1/4V 47
R4005	7010000211	RES	PSN1/4V 47
R4006	7030006490	S.RES	MCR100JZHJ 68 (680)
R4007	7030006490	S.RES	MCR100JZHJ 68 (680)
R4008	7070000321	RES	ERX1SJ 3R3 (3.3)
R4009	7070000321	RES	ERX1SJ 3R3 (3.3)
R4010	7070000321	RES	ERX1SJ 3R3 (3.3)
R4011	7070000321	RES	ERX1SJ 3R3 (3.3)
R4012	7070000321	RES	ERX1SJ 3R3 (3.3)
R4013	7070000321	RES	ERX1SJ 3R3 (3.3)
R4014	7010004651	RES	PSD1/2 10
R4015	7010004651	RES	PSD1/2 10
R4016	7070000281	RES	ERX1SJ 2R2 (2.2)
R4017	7070000281	RES	ERX1SJ 2R2 (2.2)

S.=Surface mount

[PA150W-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
R4018	7030000460	S.RES MCR10EZHZ 4.7 k
R4019	7030000460	S.RES MCR10EZHZ 4.7 k
R4020	7010004741	RES PSD1/2 150
R4022	7310004950	TRI KVSF687AC 101 100
R4023	7070000311	RES ERG1SJ 100 (10)
R4024	7030000290	S.RES MCR10EZHZ 180 (181)
R4025	7310004940	TRI KVSF637AC 471 470
R4026	7100000890	RES RWL5 0R012J
R4027	7030000600	S.RES MCR10EZHZ 68 k
R4028	7030000600	S.RES MCR10EZHZ 68 k
R4029	7030000560	S.RES MCR10EZHZ 33 k
R4030	7030000560	S.RES MCR10EZHZ 33 k
R4031	7310004970	TRI KVSF637AC 472 4.7 k
R4032	7030000740	S.RES MCR10EZHZ 1 M
R4033	7030000500	S.RES MCR10EZHZ 10 k
R4034	7010000301	RES PSN1/4V 270
R4035	7070000251	RES ERX2SJ 4R7 (4.7)
R4036	7010000331	RES PSN1/4V 470
R4039	7010000091	RES PSN1/4V 4.7
R4040	7030000650	S.RES MCR100ZJH 100 (101)
R4044	7010000331	RES PSN1/4V 470
R4045	7030000140	S.RES MCR10EZHZ 10 (100)
R4046	7030000290	S.RES MCR10EZHZ 180 (181)
R4047	7010000051	RES PSN1/4V 2.2
R4048	7010000061	RES PSN1/4V 2.7
R4049	7010000281	RES PSN1/4V 180
R4050	7010000411	RES PSN1/4V 2.2 k
R4051	7030000340	S.RES MCR10EZHZ 470 (471)
R4052	7030000150	S.RES MCR10EZHZ 12 (120)
R4053	7030000340	S.RES MCR10EZHZ 470 (471)
R4061	7030000010	S.RES MCR10EZHZ JPW (000)
R4062	7030000010	S.RES MCR10EZHZ JPW (000)
R4063	7030000010	S.RES MCR10EZHZ JPW (000)
R4064	7030000010	S.RES MCR10EZHZ JPW (000)
R4065	7030000010	S.RES MCR10EZHZ JPW (000)
R4066	7030000010	S.RES MCR10EZHZ JPW (000)
R4067	7030000010	S.RES MCR10EZHZ JPW (000)
R4068	7030000010	S.RES MCR10EZHZ JPW (000)
C4003	4010005360	CER HM11SJ SL 301J 500V
C4004	4010005360	CER HM11SJ SL 301J 500V
C4006	4310000360	MLR 50 F2D 103J
C4007	4310000360	MLR 50 F2D 103J
C4008	4030000505	S.CER C2012 CH 1H 331J-T
C4010	4030011760	S.CER GRM55R1X2D682JV01L (GRM44-1) [GEN-24] only
C4011	4030011760	S.CER GRM55R1X2D682JV01L (GRM44-1) [GEN-24] only
C4012	4010006410	CER HM13SJ SL 471J 500V
C4013	4030018370	S.CER ERF22X 6C1H 102J D01L
C4014	4030018370	S.CER ERF22X 6C1H 102J D01L
C4015	4030011760	S.CER GRM55R1X2D682JV01L (GRM44-1) [GEN-24] only
C4016	4030011760	S.CER GRM55R1X2D682JV01L (GRM44-1) [GEN-24] only
C4018	4030004740	S.CER C2012 JB 1H 472K-T
C4019	4030004740	S.CER C2012 JB 1H 472K-T
C4020	4510005120	ELE 16 ME 47 HC
C4021	4510004990	ELE 16 ME 100 HC
C4022	4030005110	S.CER C2012 JB 1E 473K-T
C4023	4510004510	ELE 25 ME 470 HC
C4024	4030005110	S.CER C2012 JB 1E 473K-T
C4026	4510006160	ELE 25 ME 10 HC
C4027	4030004740	S.CER C2012 JB 1H 472K-T
C4028	4510004601	ELE 16 ME 1000 HC
C4029	4030005110	S.CER C2012 JB 1E 473K-T
C4030	4030005110	S.CER C2012 JB 1E 473K-T
C4031	4030005110	S.CER C2012 JB 1E 473K-T
C4032	4030004990	S.CER C2012 CH 1H 101J-T
C4033	4030011790	S.CER GRM55R52A684ZD01L (GRM44-1) [GEN-24] only
C4034	4030004740	S.CER C2012 JB 1H 472K-T
C4035	4510005040	ELE 25 ME 1000 HC
C4036	4030004740	S.CER C2012 JB 1H 472K-T
C4038	4030004740	S.CER C2012 JB 1H 472K-T
C4045	4320000340	DMI DM20C 472J5
C4046	4030004740	S.CER C2012 JB 1H 472K-T
C4047	4030004740	S.CER C2012 JB 1H 472K-T
C4048	4030004740	S.CER C2012 JB 1H 472K-T
C4050	4510005040	ELE 25 ME 1000 HC
C4051	4510004591	ELE 16 ME 470 HC
C4052	4510006160	ELE 25 ME 10 HC
C4053	4030004740	S.CER C2012 JB 1H 472K-T
C4054	4030004740	S.CER C2012 JB 1H 472K-T
C4055	4030018370	S.CER ERF22X 6C1H 102J D01L
C4056	4030004740	S.CER C2012 JB 1H 472K-T
C4057	4320000220	DMI DM19C 681J5
C4059	4030004740	S.CER C2012 JB 1H 472K-T
C4063	4510004591	ELE 16 ME 470 HC
C4064	4030005030	S.CER C2012 CH 1H 221J-T
C4065	4020000990	CYR UP050 B 473K-NA-CZ
C4066	4020000990	CYR UP050 B 473K-NA-CZ
C4067	4010008570	CER RPER11H473K2K1A01
C4068	4030004740	S.CER C2012 JB 1H 472K-T
C4069	4030005110	S.CER C2012 JB 1E 473K-T
C4070	4030004720	S.CER C2012 JB 1H 102K-T
C4071	4030004890	S.CER C2012 CH 1H 150J-T
C4072	4030008960	S.CER C2012 JB 1C 104K-T
C4077	4030004720	S.CER C2012 JB 1H 102K-T
C4078	4030008960	S.CER C2012 JB 1C 104K-T
C4079	4030004990	S.CER C2012 CH 1H 101J-T
J4002	6510007020	CNR TMP-J01X-V6
J4003	6510018381	CNR 10FE-BT-VK-N
J4004	6510003081	CNR RT01T-1.0B (LF)
J4005	6510003081	CNR RT01T-1.0B (LF)

[PA150W-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
S4001	6910006900	TML OHD-3 110M
S4002	6910000050	TML OHD-3 50M
W4001	7030011280	JMP J1/4ZC
W4002	7030011280	JMP J1/4ZC
W4003	7120000470	JMP ERDS2T0
W4004	7120000470	JMP ERDS2T0
W4008	9045201001	WIR 74/98/040/X98/X98
W4009	9045201001	WIR 74/98/040/X98/X98
W4010	9040401001	JMP 74/98/050/X98/X98
W4011	9056000180	WIR 74/98/080/X98/X98
EP4003	6910000610	BEA FSRH050100RN000B (FSOH050RN01)
EP4004	6910000610	BEA FSRH050100RN000B (FSOH050RN01)
EP4006	6910000630	BEA FSRH070140RN000B (FSOH070RN)
EP4008	6510018330	TER F4053A
EP4009	6510018330	TER F4053A
EP4010	9001602001	TUB IRRAX 0.7 (d) L=10 mm
EP4011	9001602001	TUB IRRAX 0.7 (d) L=10 mm
EP4012	9034701901	TUB IRRAX 0.7 (d) L=20 mm
EP4014	9029305901	TUB IRRAX 1 (d) L=15 mm

[TERMINAL-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
C7001	4510005980	ELE 16 ME 4700 HC
C7002	4010006900	CER HE80SJ YB 472K 50V
C7003	4010006890	CER HE60SJ YB 222K 50V
C7004	4010006890	CER HE60SJ YB 222K 50V
C7005	4010006900	CER HE80SJ YB 472K 50V
C7006	4010006900	CER HE80SJ YB 472K 50V
J7001	6510010021	CNR RTB-1.5-2F (LF)
EP7003	6510018330	TER F4053A
EP7004	6510018330	TER F4053A
EP7010	9017680190	TUB 10 L=25MM

[SENSOR1-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
J2601	6510018391	CNR 06FE-BT-VK-N
S2601	2260002430	SW SW-165 (SRBM1L)

[SENSOR2-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
J2701	6510018391	CNR 06FE-BT-VK-N
S2701	2260002430	SW SW-165 (SRBM1L)

[MIC-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
J2301	6510009211	CNR 14RS-8H-MI-AU (F) -1
J2302	6510018381	CNR 10FE-BT-VK-N

[VR1-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION
R2401	7210002540	VAR TP96N937-15F-10KB-1540
J2401	6510018390	CNR 06FE-BT-M
J2401	6510018391	CNR 06FE-BT-VK-N

S.=Surface mount

**[VR2-J BOARD]**

REF NO.	ORDER NO.	DESCRIPTION	
R2501	7210002730	VAR	TP96N944-15F-10KB-1632
J2501	6510018391	CNR	06FE-BT-VK-N

**[ALARM BOARD] ([GEN-22], [GEN25] only)**

REF NO.	ORDER NO.	DESCRIPTION	
IC5001	1130007800	S.IC	S-7116AF-TF
Q5001	1530002691	S.TR	2SC4116-GR (TE85R,F)
X5001	6060000150	S.CER	CSAC3.58MGCD512-TC (300CD)
R5001	7030003620	S.RES	ERJ3GEYJ 333 V (33 k)
R5002	7030003640	S.RES	ERJ3GEYJ 473 V (47 k)
R5003	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)
R5004	7030003640	S.RES	ERJ3GEYJ 473 V (47 k)
R5005	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)
R5006	7030003680	S.RES	ERJ3GEYJ 104 V (100 k)
R5007	7030003710	S.RES	ERJ3GEYJ 184 V (180 k)
R5008	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)
R5009	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)
R5010	7030003640	S.RES	ERJ3GEYJ 473 V (47 k)
C5001	4550007610	S.TAN	F931E474MAABMA
C5002	4550006210	S.TAN	ECST1CX106R
C5002	4550007510	S.TAN	F931C106MBABMA

S.=Surface mount

# SECTION 6

# MECHANICAL PARTS

## [MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510017150	TMP-S01X-C1	1
J2	6510017150	TMP-S01X-C1	1
J3	6510007020	TMP-J01X-V6	1
J4	6510007020	TMP-J01X-V6	1
J5	6510007020	TMP-J01X-V6	1
J6	6450001240	HLJ4306-01-3000	1
J7	6450001440	HSJ1403-01-010	1
J9	6510017660	52045-1645	1
J11	6510023120	CD6109SA1J0	1
J12	6450001581	TCS5073-2841577	1
J13	6510024541	TCS5073-2741577	1
J15	6510003401	B04B-EH-S (LF) (SN)	1
J16	6510003431	B07B-EH-S (LF) (SN)	1
J19	6510017660	52045-1645	1
J20	6510003391	B03B-EH-S (LF) (SN)	1
J22	6510017650	52045-1045	1
J23	6510003401	B04B-EH-S (LF) (SN)	1
J32	6510010021	RTB-1.5-2F (LF)	1
J33	6450001560	PD-72	4
S9	2220000520	ESD11V120	1
S11	2220000520	ESD11V120	1
W1	7120000470	ERDS2T0	1
W11	7120000470	ERDS2T0	1
W13	7120000490	ERD25T0	1
W32	7030011280	J1/4Z	1
MP1	8510000231	220 SHIELD CASE-1	1
MP2	8510000241	220 Shield case cover-1	1
MP3	8510002200	VCO case (FX-15)	1
MP4	8510000231	220 SHIELD CASE-1	1
MP5	8510008300	963 DDS SHIELD CASE	1
MP6	8510008310	963 DDS SHIELD COVER	1
MP8	8510001060	Shield case (SX-65)	1
MP9	8510001740	Shield case TOP cover (SX-117)	1
MP10	8930011830	9Mfilter holder	1
MP11	8510004640	220 Shield plate (C)	1
MP12	8930005440	Insulation sheet (E)	1
MP13	8510004640	220 Shield plate (C)	1
MP14	8930005440	Insulation sheet (E)	1
MP15	8510000241	220 Shield case cover-1	1
MP16	8930005320	Filter spacer	2
MP17	8930005200	crystal holder	1
MP18	8930005200	crystal holder	1

## [CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
MF1001	2710000520	SB0812H-ICOM-00	1
W1003	8900006220	OPC-539	1
W1012	8900006082	OPC-567B	1
EP1001	6910013480	Super ground (MGB12-07B)	1
MP1003	8010015771	1632 MAIN CHASSIS-1	1
MP1004	8930035801	Rubber leg (J)-1	4
MP1005	8850000180	Flat washer M5 SUS	3
MP1006	8850000500	S-washer M5 SUS	1
MP1007	8830000250	Nut M5 SUS	1
MP1008	8830000370	Nut M5 SUS	1
MP1010	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	7
MP1011	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	7
MP1015	8810009851	Screw BT B0 4X12NI-ZC3 (BT)	4
MP1018	8110005512	1632 COVER-2	1
MP1020	8210012221	1632 REAR PANEL-1	1
MP1022	8930035780	1632 REAR SEAL	1
MP1024	8930035750	1632 CONNECTOR PLATE	1
MP1029	8810003841	Screw BiH M3X8 SUS SSBC	1
MP1030	8810003841	Screw BiH M3X8 SUS SSBC	4
MP1031	8820000551	Cap volt M4X8 ZK3	4
MP1038	8810003841	Screw BiH M3X8 SUS SSBC	9
MP1040	8810008790	Screw M3X6 NI	4
MP1045	8930037030	1562 STAND-OFF	2
MP1050	8930037900	Thermal sheet (BB)	1
MP1051	8930040020	Thermal sheet (BJ)	4
MP1059	8930050321	THERMALLY SHEET (M)-1	1
MP1060	8930050331	THERMALLY SHEET (N)-1	1

## [LOGIC-J UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2002	6510016960	7P-SCN	1
J2003	6510016930	4P-SCN	1
J2007	6510003391	B03B-EH-S (LF) (SN)	1
J2008	6510018381	10FE-BT-VK-N	1
J2009	6510018391	06FE-BT-VK-N	1
J2010	6510018391	06FE-BT-VK-N	1
J2011	6510018391	06FE-BT-VK-N	1
J2012	6510018391	06FE-BT-VK-N	1
J2013	6510010021	RTB-1.5-2F (LF)	1
J2014	6510010021	RTB-1.5-2F (LF)	1
P2002	6510003670	EHR-07	1
P2003	6510003640	EHR-04	1
DS2004	5010000220	DLC-8300P	1
W2001	9016320320	51/99/330/B06/B24	1
W2002	9086800830	Cable 00	1
W2003	9016320330	14/01/330/B06/B24	1
W2004	9016320340	14/03/330/B06/B24	1
W2005	9016320350	14/00/330/B06/B24	1
W2006	9016320940	23/04/330/B06/B24	1
W2007	9016320360	14/02/330/B06/B24	1
W2008	9016320320	51/99/330/B06/B24	1
W2009	9086800830	Cable 00	1
W2010	9016320320	51/99/330/B06/B24	1
W2011	9086800830	Cable 00	1
W2022	9034103010	13/02/050/W04/W04	1
W2023	7030011280	J1/4Z	1
EP2002	9034701901	IRRAX D=0.7 L=20MM	1
MP2001	8410002002	1632 HEATSINK PLATE-2	1
MP2002	8930035621	1632 LCD HOLDER-1	1
MP2003	8930036280	1632 LCD-L FILTER	1
MP2004	8930046100	1632 LCD-U FILTER (A)	1
MP2006	8810004301	Screw PH M3X10 ZK3	1
MP2007	8830000191	NUT M3 BS-CD NI	1
MP2008	8930036570	1632 LAMP Rubber	3

## [MIC-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2301	6510009211	14RS-8H-MI-AU (F)-1	1
J2302	6510018381	10FE-BT-VK-N	1

## [VR1-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
R2401	7210002540	TP96N937-15F-10KB-1540	1
J2401	6510018391	06FE-BT-VK-N	1

## [VR2-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
R2501	7210002730	TP96N944-15F-10KB-1632	1
J2501	6510018391	06FE-BT-VK-N	1

## [SENSOR1-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2601	6510018391	06FE-BT-VK-N	1
S2601	2260002430	SW-165	1

## [SENSOR2-J BOARD]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2701	6510018391	06FE-BT-VK-N	1
S2701	2260002430	SW-165	1

Screw abbreviations

A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

**[FRONT PARTS]**

REF NO.	ORDER NO.	DESCRIPTION	QTY.
P2801	6510003630	EHR-03	1
P2802	6510011270	S2P-SVF	1
S2801	2260001581	JPZ2120-0301F	1
SP2801	2510000441	F77G08-62051	1
W2801	9016320400	51/99/180/B06/W12A	1
W2802	9012410001	Wire 00 A	1
W2807	8900015350	OPC-522A	1
W2808	8900015350	OPC-522A	1
W2809	8900005370	OPC-524	1
W2810	8900015350	OPC-522A	1
W2811	8900015350	OPC-522A	1
W2812	9016320950	13/02/100/B07/W04	1
W2813	9016320960	13/03/100/B07/W04	1
MP2801	8210015172	1632 FRONT PANEL (B)-1	1
MP2802	8310035581	1632 WINDOW PLATE	1
MP2803	8930035591	1632 3-KEY-1	1
MP2804	8930035600	1632 4-KEY	1
MP2805	8930035610	1632 14-KEY	1
MP2806	8930035640	1632 POWER KEY	1
MP2807	8930035650	1632 1-KEY	1
MP2808	8930035660	1632 2-KEY	1
MP2809	8610009751	Knob N-232-1	2
MP2810	8610009760	Knob N-233	2
MP2811	8210012200	1632 MASK PLATE	1
MP2812	8930035581	1632 SENSOR SEAL-1	2
MP2813	8930035572	1632 Knob PLATE-2	1
MP2814	8930050110	Saran net (A)	1
MP2815	8930069770	Knob SPRING NO.6600P	2
MP2816	8930035630	1632 FRONT SEAL	1
MP2817	8930031830	O-ring SO-008-17	2
MP2818	8010016025	1632 SUB CHASSIS-5	1
MP2819	8810007410	Screw PH M3X6 NI	4
MP2820	8810008661	Screw BT B0 3X8 NI-ZC3 (BT)	7
MP2821	8930036350	1632 T-KEY	1
MP2822	8930036320	1632 KEY SPACER	1
MP2823	8810008790	Screw M3X6 NI	2
MP2824	8610009240	Knob spring NO.7800P	2
MP2831	8930045080	1632 CLIP	1
MP2832	8930050270	1632 LCD SPONGE	1

**[PLL UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J3001	6510007900	TBP-P01X-A1	1
J3002	6510007900	TBP-P01X-A1	1
J3003	6510007900	TBP-P01X-A1	1
J3004	6510003081	RT01T-1.0B (LF)	1
J3005	6510003081	RT01T-1.0B (LF)	1
J3006	6910003141	IMSA-9202B-1-02Z041-PT1	1
J3007	6510017660	52045-1645	1
P3001	6510003240	TMP-P01X-A1	1
P3002	6510003240	TMP-P01X-A1	1
P3003	6510003240	TMP-P01X-A1	1
P3004	6910003120	IMSA-9206H-T	1
W3001	9009130165	62/99/200/C24/C31	1
W3002	9086700300	Cabel 8	1
W3003	9009130165	62/99/200/C24/C31	1
W3004	9086700300	Cabel 8	1
W3005	9009130165	62/99/200/C24/C31	1
W3006	9086700300	Cabel 8	1
EP3002	6910000630	FSOH070RN	1
EP3003	9010001410	Tube D=8.0	1
MP3001	8510009221	1386 SHIELD CASE-1	1
MP3002	8510009861	1632 SHIELD COVER-1	1
MP3003	8510008300	963 DDS SHIELD CASE	1
MP3004	8510008310	963 DDS SHIELD COVER	1
MP3005	851000231	220 SHIELD CASE-1	1
MP3006	8510017760	194 VCO CASE (B)-1	1
MP3007	8510017770	194 VCO CASE FUTA (G)	1
MP3008	8510005330	Coil case (SX-644)	1
MP3010	8810008860	Setscrew (A) 2.6X5	4
MP3011	8510002200	VCO case (FX-15)	1
MP3012	8510006941	DTMF SHIELD CASE-1 (FX-863)	1
MP3013	8510002200	VCO case (FX-15)	1
MP3014	8510000210	194 Shield plate	1
MP3015	8930005570	Insulation sheet (U)	1
MP3017	8950000180	Cable tie -80	2
MP3018	8930050240	1632 PLL SPRING	1

**[PA-J UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J4601	6510000370	MR-DS	1
P4601	6510003240	TMP-P01X-A1	1
P4602	6510011270	S2P-SVF	1
P4603	6510011270	S2P-SVF	1
F4601	5220000210	FH052 S	1
F4602	5220000210	FH052 S	1
F4603	5210000090	FGB 30A	1
F4604	5210000090	FGB 30A	1
W4601	9016321100	62/99/130/C31/W11D	1
W4602	9012410034	Wire 08 D	1
W4603	8900005701	OPC-569A	1
W4604	8900015270	OPC-564A	1
W4605	8900005780	OPC-565	1
W4606	9016320210	13/00/180/B07/B07	1
W4607	9016320310	13/02/180/B07/B07	1
EP4605	6910000340	P101 KD	1
EP4609	6910000310	B312D bush	1
MP4601	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	4
MP4603	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	4
MP4604	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	8
MP4605	8810003841	Screw BIH M3X8 SUS SSBC	2
MP4608	8410002173	1632 HEATSINK (A)-3	1
MP4609	8110005392	1632 PA COVER-2	1
MP4610	8930035790	1632 ANT PLATE	1
MP4611	8810008631	Screw BT B0 3X6 NI-ZC3 (BT)	25
MP4612	8810007410	Screw PH M3X6 NI	1
MP4613	8810007410	Screw PH M3X6 NI	1
MP4614	8810007410	Screw PH M3X6 NI	1
MP4615	8810007410	Screw PH M3X6 NI	1
MP4616	8810007410	Screw PH M3X6 NI	1
MP4617	8810008460	Setscrew (H) 2.6X16 NI	1
MP4618	8810008490	Setscrew (H) 2.6X8 NI	1
MP4619	8810008490	Setscrew (H) 2.6X8 NI	1
MP4620	8810008460	Setscrew (H) 2.6X16 NI	1
MP4628	8930020810	Washer (M)	2
MP4631	8810007410	Screw PH M3X6 NI	2
MP4632	8810007410	Screw PH M3X6 NI	2
MP4634	8930036300	1632 FH-B SEAL	2
MP4635	8930015750	Thermal sheet (S)	1
MP4636	8930037870	1632 PA-A SHEET	4
MP4637	8930037880	1632 PA-B SHEET	4

**[PA150W-J UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J4001	6510007900	TBP-P01X-A1	1
J4002	6510007020	TMP-J01X-V6	1
J4003	6510018381	10FE-BT-VK-N	1
J4004	6510003081	RT01T-1.0B (LF)	1
J4005	6510003081	RT01T-1.0B (LF)	1
P4001	6510003240	TMP-P01X-A1	1
S4001	6910006900	OHD-3 110M	1
S4002	6910000050	OHD3-50M	1
W4001	7030011280	J1/4Z	1
W4002	7030011280	J1/4Z	1
W4003	7120000470	ERDS2T0	1
W4004	7120000470	ERDS2T0	1
W4005	9026353010	31/02/070/W07/W07	1
W4006	9009130241	62/99/530/C24/C31	1
W4007	9011450130	Wire /08/	1
W4008	9045201001	74/98/040/X98/X98	1
W4009	9045201001	74/98/040/X98/X98	1
W4010	9040401001	74/98/050/X98/X98	1
W4011	9056000180	74/98/080/X98/X98	1
EP4003	6910000610	FSOH050RN01	1
EP4004	6910000610	FSOH050RN01	1
EP4006	6910000630	FSOH070RN	1
EP4008	6510018330	F4053A	1
EP4009	6510018330	F4053A	1
EP4010	9001602001	IRRAX D=0.7 L=10MM	2
EP4011	9001602001	IRRAX D=0.7 L=10MM	2
EP4012	9034701901	IRRAX D=0.7 L=20MM	2
EP4013	6910000630	FSOH070RN	1
EP4014	9029305901	IRRAX D=1.0 L=15MM	2
MP4001	8860000110	Earth lug B3 (M4) BS AG	1
MP4002	8860000110	Earth lug B3 (M4) BS AG	1
MP4003	8950000180	Cable tie -80	2

**[FILTER-J BOARD]**

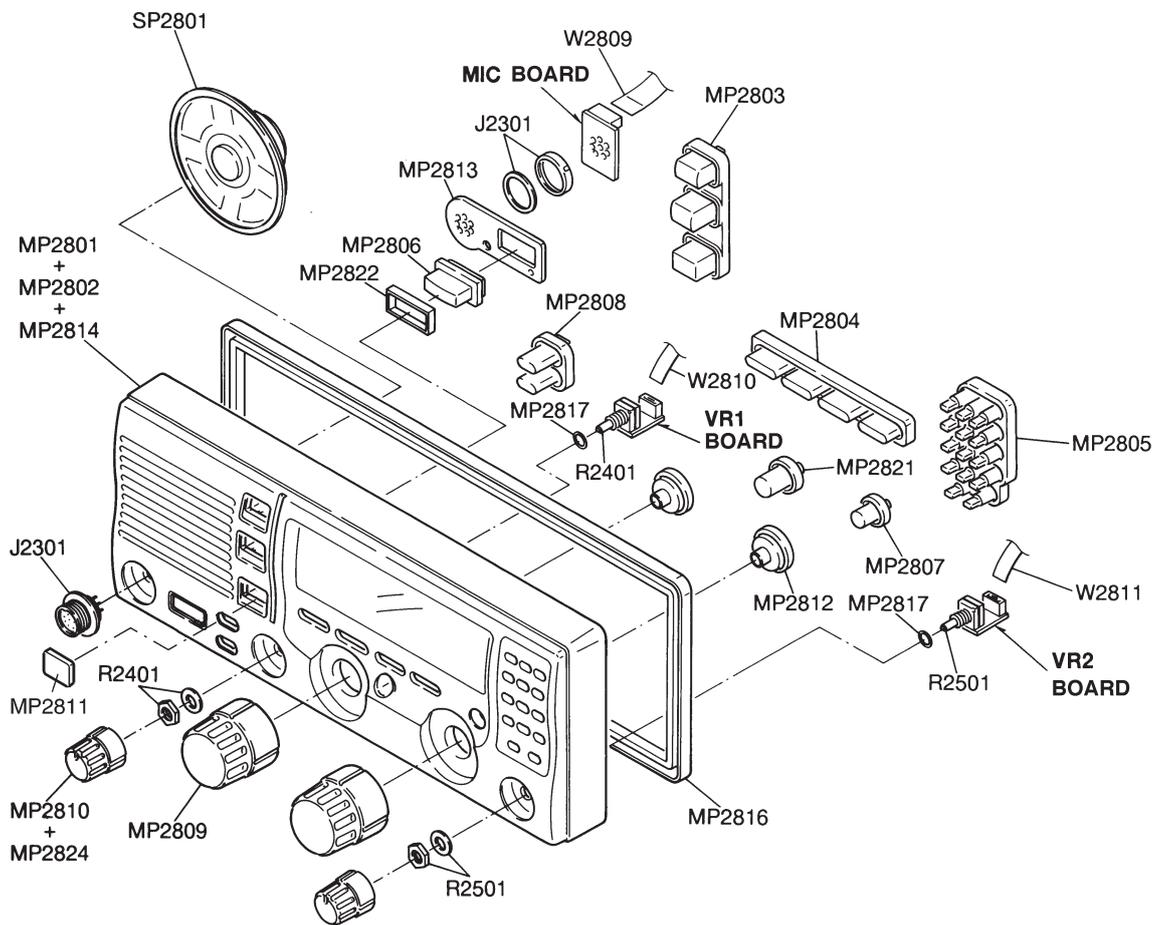
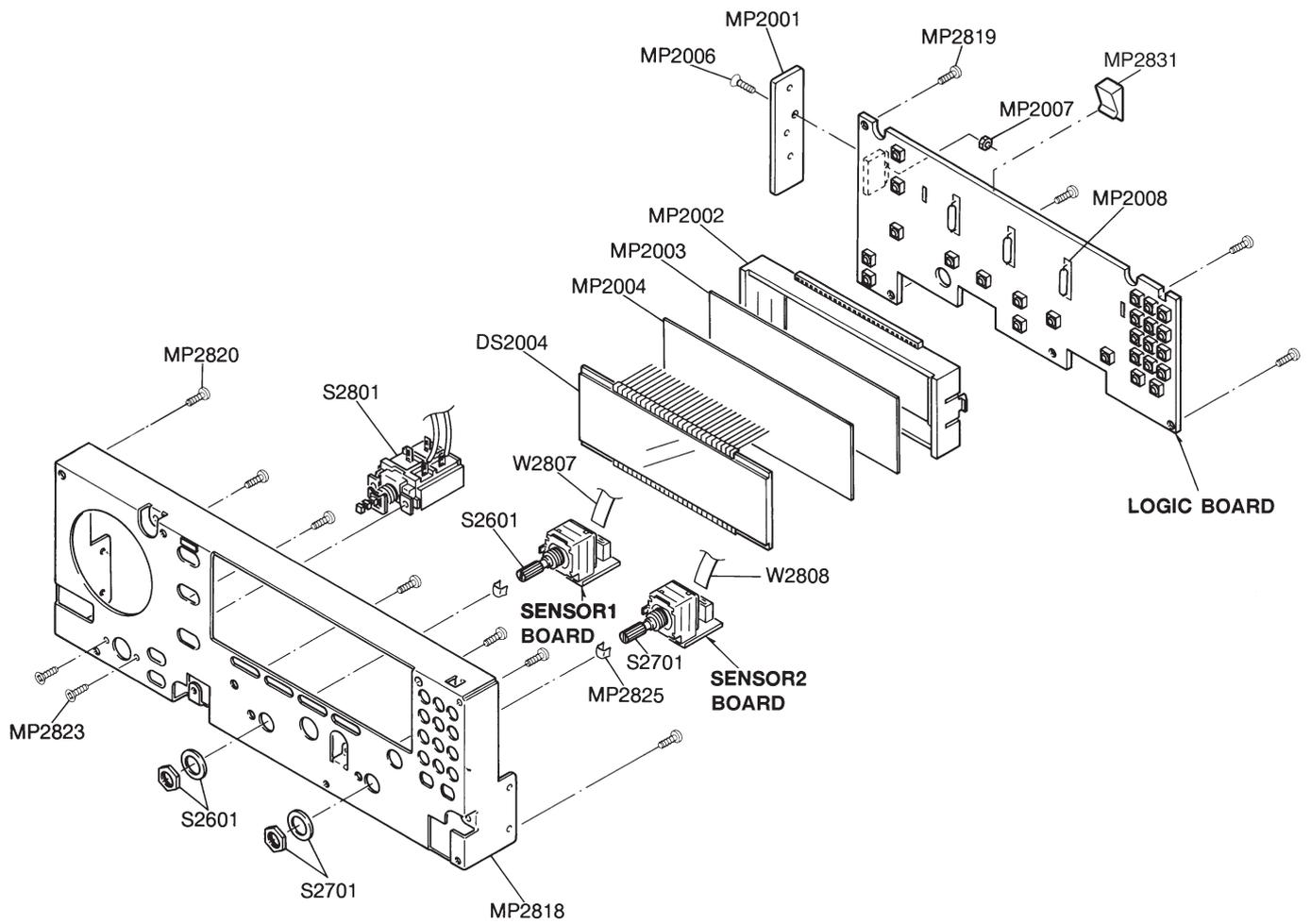
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J4301	6510007900	TBP-P01X-A1	1
J4302	6510007900	TBP-P01X-A1	1
J4303	6510018571	16FE-BT-VK-N	1
J4304	6510007020	TMP-J01X-V6	1
P4301	6510003240	TMP-P01X-A1	1
P4302	6510003240	TMP-P01X-A1	1
W4302	9019601025	74/98/025/X98/X98	1
W4303	9019601025	74/98/025/X98/X98	1
W4304	9019601025	74/98/025/X98/X98	1
W4305	9019601025	74/98/025/X98/X98	1
W4306	9019601025	74/98/025/X98/X98	1
W4307	9019601025	74/98/025/X98/X98	1
W4308	9019601025	74/98/025/X98/X98	1
W4309	9019601025	74/98/025/X98/X98	1
W4310	9019601025	74/98/025/X98/X98	1
W4312	6910001031	IPS-1041-4-PT	1
W4313	6910001031	IPS-1041-4-PT	1
W4314	6910001031	IPS-1041-4-PT	1
W4315	9008503020	74/98/030/X98/X98	1
W4316	9019601025	74/98/025/X98/X98	1
W4317	9008503020	74/98/030/X98/X98	1
W4319	7030011280	J1/4Z	1
W4320	6910001031	IPS-1041-4-PT	1
W4321	6910001031	IPS-1041-4-PT	1
W4323	9014130390	62/99/290/C24/C31	1
W4324	9011450130	Wire /08/	1
W4325	9014140050	62/99/220/C24/C31	1
W4326	9011450130	Wire /08/	1
W4328	9019601025	74/98/025/X98/X98	1
W4329	7120000380	JPW-01 R-01	1
W4330	7120000470	ERDS2T0	1
MP4301	8930014140	Earth spring (D)	1

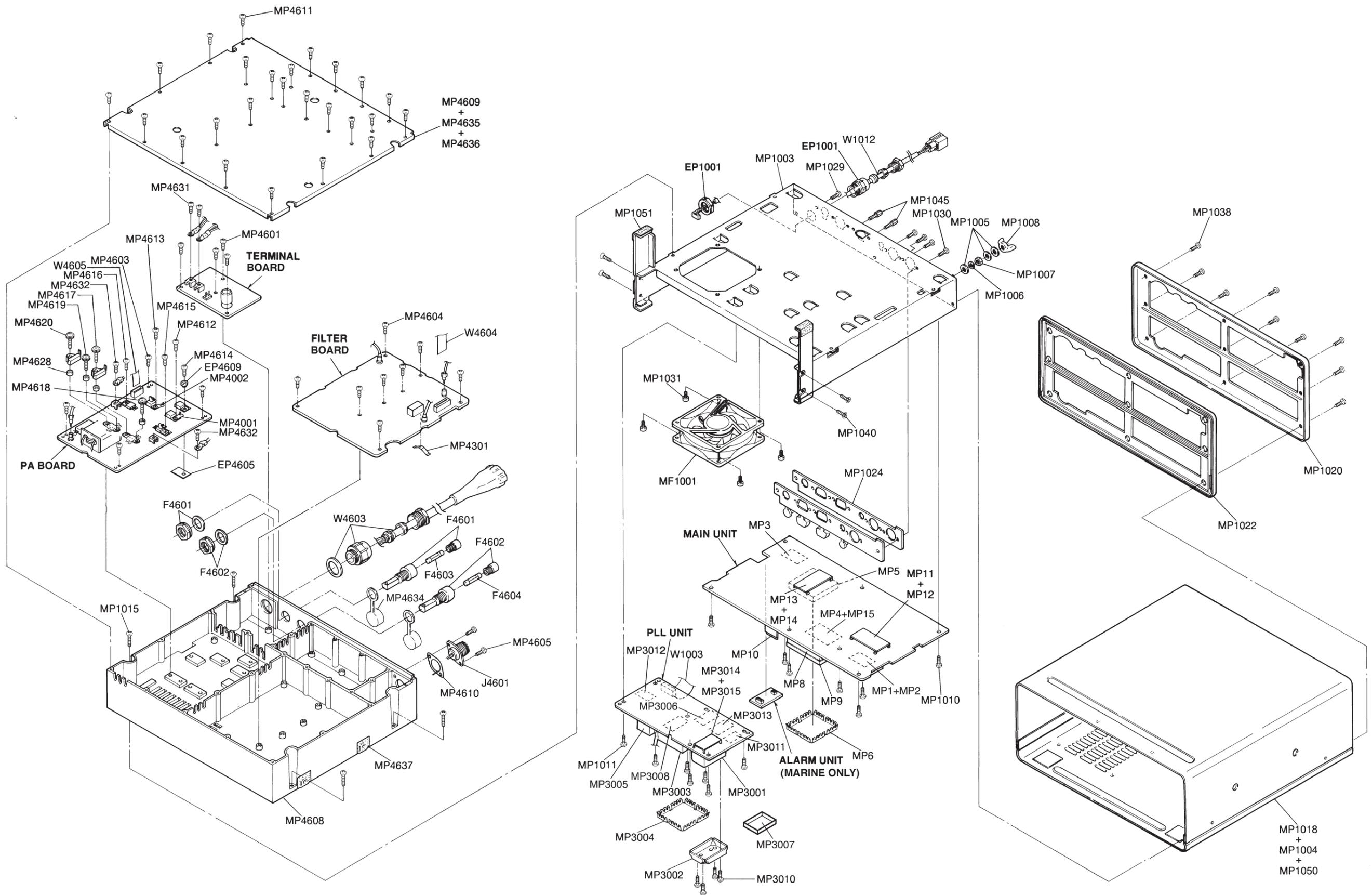
**[TERMINAL-J BOARD]**

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J7001	6510010021	RTB-1.5-2F (LF)	1
P7001	6510011270	S2P-SVF	1
F7001	5220000110	TFH-S30	1
F7002	5210000061	FGB 5A PBF	1
EP7003	6510018330	F4053A	1
EP7004	6510018330	F4053A	1
EP7005	6910000630	FSOH070RN	1
EP7006	6910000630	FSOH070RN	1
EP7007	6510013860	FV2-S3.3	1
EP7008	6510013860	FV2-S3.3	1
EP7009	6910000640	FSOH090RN	1
EP7010	9017680190	Tube D=10.0 L=25MM	1
MP7001	8950000180	Cable tie -80	2
MP7002	8950000180	Cable tie -80	2
MP7003	8950000180	Cable tie -80	2

**[ACCESSORIES]**

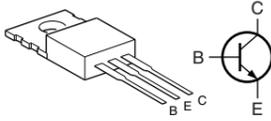
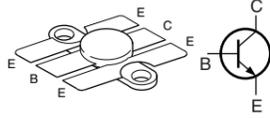
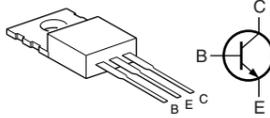
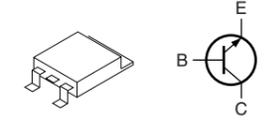
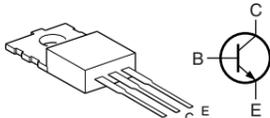
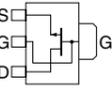
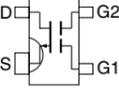
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1201	6450001271	TCP0577-715267	1
J1202	6450001281	TCP0587-715467	1
J1203	5610000440	AP-301BK	1
P1201	5610000150	CL07A04M	1
P1202	5610000160	215001-2M	4
MC1201	7700001980	EM-101	1
F1201	5210000090	FGB 30A	2
F1202	5210000061	FGB 5A PBF	2
W1201	8900015990	OPC-568A	1
EP1202	6910009540	WS07MF-0A	4
MP1203	8850000180	Flat washer M5 SUS	4
MP1207	8830000260	Nut M6 SUS	8
MP1208	8850000510	S-washer M6 SUS	4
MP1211	8010016140	1632 MOBIL BRACKET	1
MP1212	8810001500	Screw BT A0 6X30 SUS	4
MP1214	8810001470	Screw BT A0 3.5X30 SUS	2
MP1215	8850000200	Flat washer M6 6X20X1.5 SUS	8
MP1216	8820000170	Screw (A) M5X10 SUS (SX-260)	4
MP1217	8930036560	1632 CUSHION Rubber	4
MP1218	8950004140	1632 MIC HANGER	1
MP1219	8810003500	Hex head bolt M6X50 SUS	4





# SECTION 7 SEMICONDUCTOR INFORMATION

## • TRANSISTOR AND FET'S

<b>2SA1037K R</b> (Symbol: FR) 	<b>2SA1586 GR</b> (Symbol: SG) 	<b>2SC1623</b> (Symbol: No Symbol) 	<b>2SC1971</b> (Symbol: 43F) 
<b>2SC2904</b> 	<b>2SC3133</b> 	<b>2SC3647S</b> (Symbol: CC) 	<b>2SC4116 GR</b> (Symbol: LG) 
<b>2SC4213 B</b> (Symbol: AB) 	<b>2SC4215 O</b> (Symbol: QO) 	<b>2SC4673D</b> (Symbol: CO) 	<b>2SD1448</b> (Symbol: 46) 
<b>2SD1585K</b> 	<b>2SD1619 T</b> (Symbol: DB) 	<b>2SK210 GR</b> (Symbol: YG) 	<b>2SK2171 4</b> (Symbol: KM) 
<b>3SK131 MAS</b> (Symbol: V11) 	<b>DTA114EU</b> (Symbol: 14) 	<b>DTC114EK</b> (Symbol: 24) 	<b>DTC114ES</b> (Symbol: E.SK) 
<b>DTC114EU</b> (Symbol: 24) 			

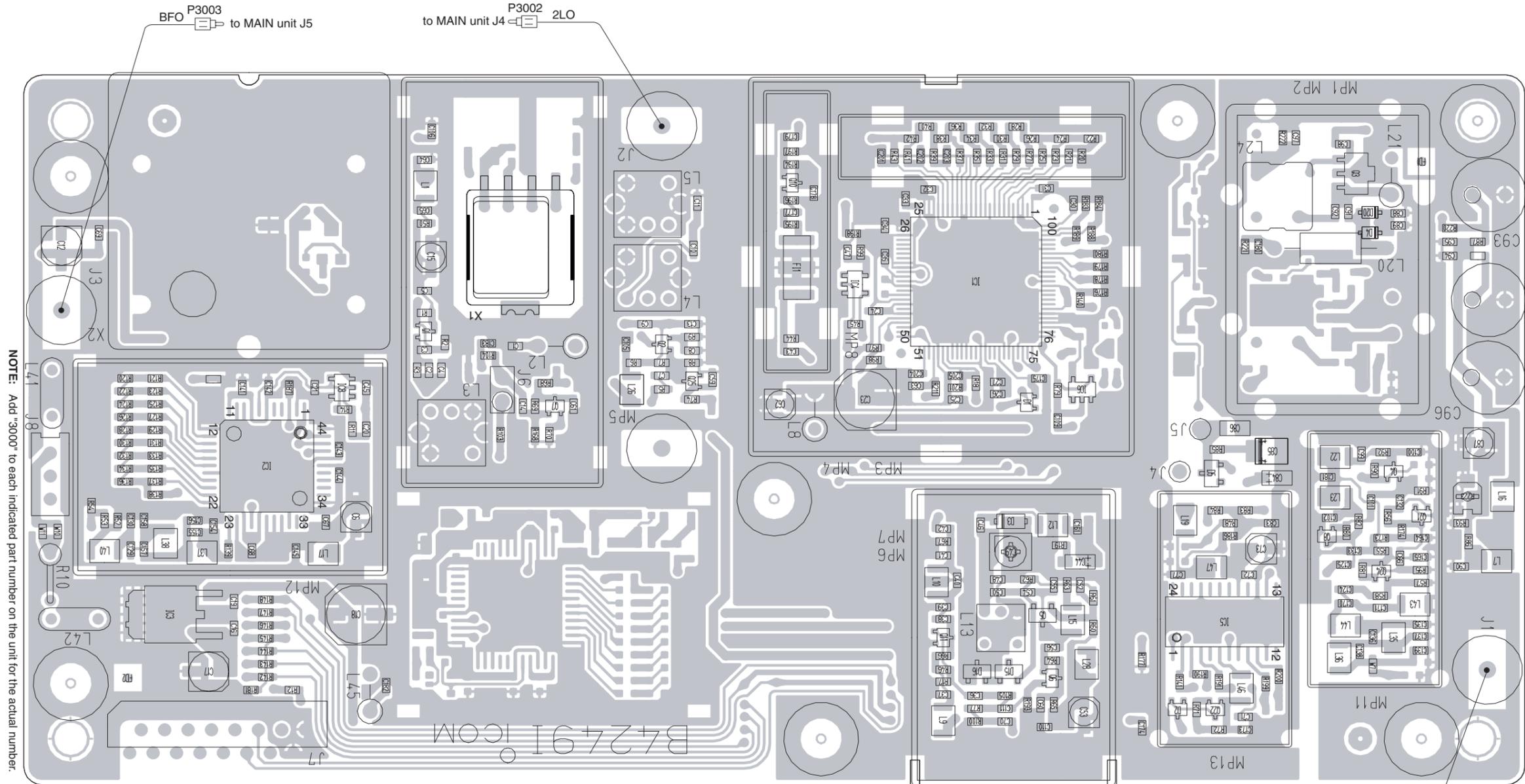
## • DIODES

<b>1SS184</b> (Symbol: B3) 	<b>1SS226</b> (Symbol: C3) 	<b>1SS301</b> (Symbol: B3) 	<b>1SS302</b> (Symbol: C3) 
<b>DF30SC4M</b> (Symbol: 30SC4M) 	<b>HSM88AS</b> (Symbol: C1) 	<b>HSM88ASR</b> (Symbol: C3) 	<b>HVM17-01TR</b> (Symbol: T6) 
<b>MA862</b> (Symbol: M11) 	<b>ND433G</b> (Symbol: 433) 		

# SECTION 8

# BOARD LAYOUTS

## • PLL UNIT



NOTE: Add "3000" to each indicated part number on the unit for the actual number.

16	GND	15	GND
15	PFSK	14	8V
14	STB2	13	STB1
13	CON2	12	CON1
12	CON0	11	DRST
11	STB3	10	DATA
10	CK	9	13.6
9	13.6	8	1

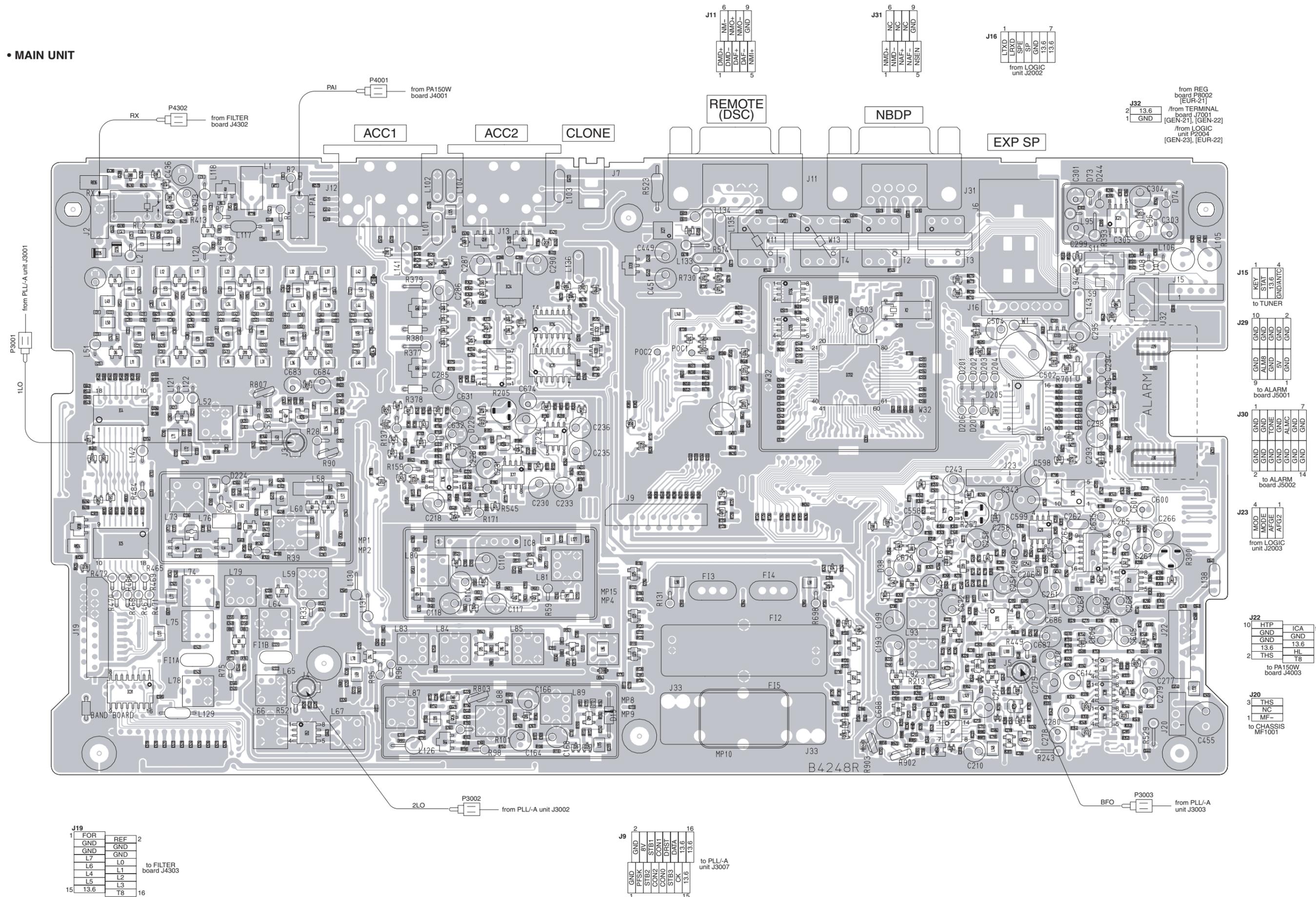
to MAIN unit J9

P3003 BFO to MAIN unit J5

P3002 2LO to MAIN unit J4

P3001 1LO to MAIN unit J3

• MAIN UNIT



J11

6	NM+
5	NM-
4	NMO+
3	NMO-
2	NMI+
1	NMI-

J31

6	NC
5	NC
4	NC
3	NAF+
2	NAF-
1	NSEN

J16

1	LTXD
2	LFXD
3	SPE
4	SP
5	GND
6	13.6
7	13.6

from LOGIC unit J2002

J32

2	13.6
1	GND

from REG board P8002 (EUR-21)  
/from TERMINAL board J7001 (GEN-21), (GEN-22)  
/from LOGIC unit P2004 (GEN-23), (EUR-22)

J15

1	KEY
2	STAT
3	13.6
4	GND/ANTIC

to TUNER

J29

10	GND
9	GND
8	ALMB
7	GND
6	ALMB
5	GND
4	5V
3	GND
2	GND
1	GND

to ALARM board J5001

J30

1	GND
2	GND
3	GND
4	ALMB
5	GND
6	ALMB
7	GND
8	GND
9	GND
10	GND
11	GND
12	GND
13	GND
14	GND

to ALARM board J5002

J23

4	MOD
3	MODE
2	AFGE
1	AFGE

from LOGIC unit J2003

J22

10	HTP
9	GND
8	GND
7	13.6
6	13.6
5	HL
4	T8
3	THS
2	T8
1	T8

to PA150W board J4003

J20

3	THS
2	NC
1	MF-

to CHASSIS MF1001

J19

1	FOR
2	REF
3	GND
4	GND
5	GND
6	L7
7	L0
8	L1
9	L2
10	L3
11	L4
12	L5
13	L6
14	L7
15	13.6
16	T8

to FILTER board J4303

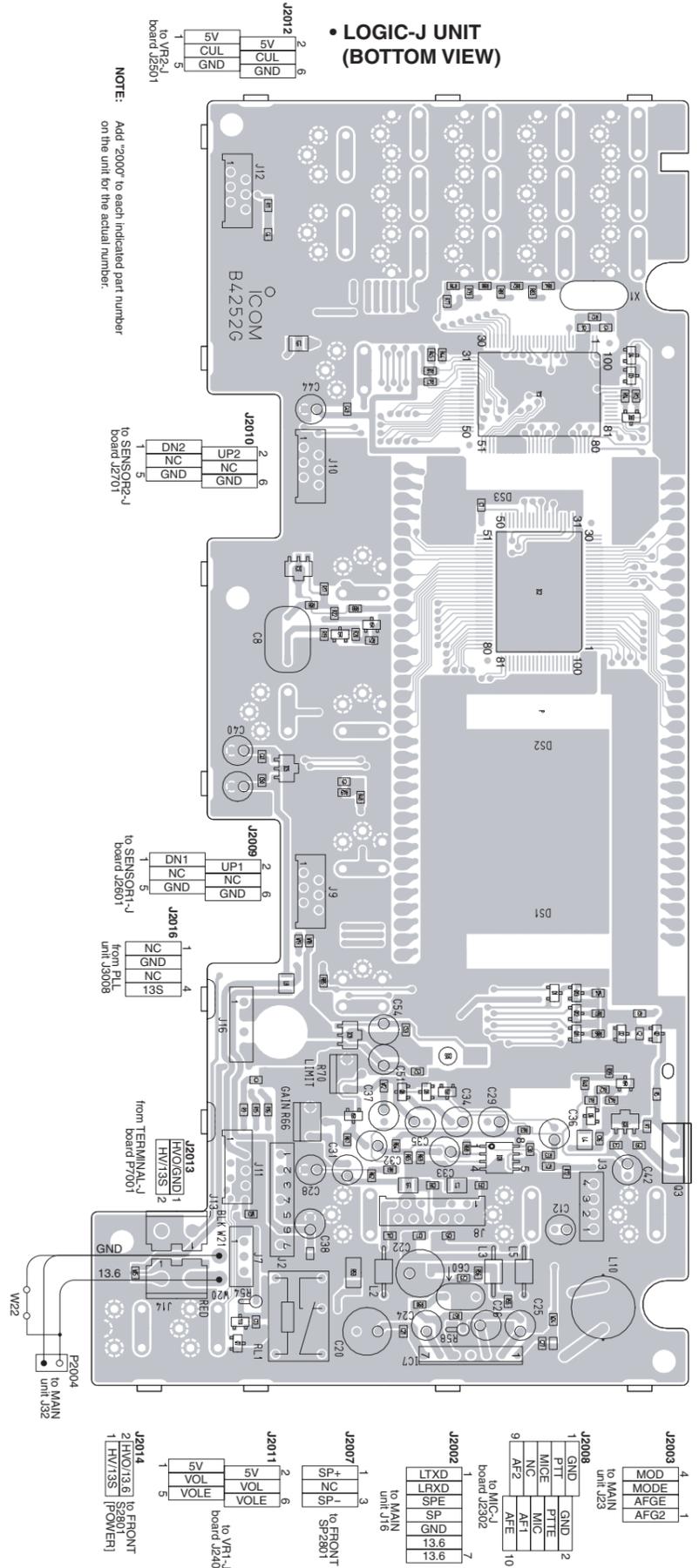
J9

2	GND
1	GND
16	PFSK
15	STB2
14	STB1
13	CON2
12	CON1
11	CON1
10	STB3
9	DATA
8	OK
7	13.6
6	13.6
5	13.6
4	13.6
3	13.6
2	13.6
1	13.6

to PLL/A unit J3007

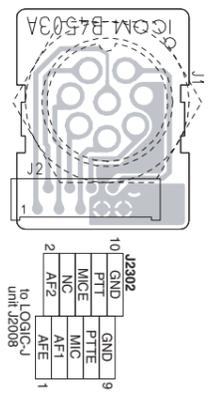


**• LOGIC-J UNIT  
(BOTTOM VIEW)**



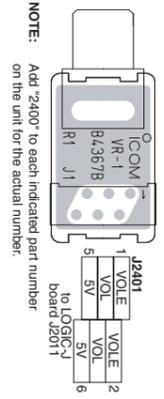
NOTE: Add "2000" to each indicated part number on the unit for the actual number.

**• MIC-J BOARD**



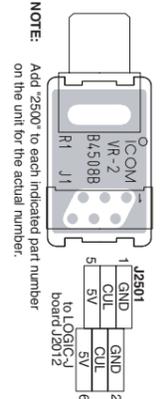
NOTE: Add "2300" to each indicated part number on the unit for the actual number. J2301 located bottom side of the point.

**• VR1-J BOARD**



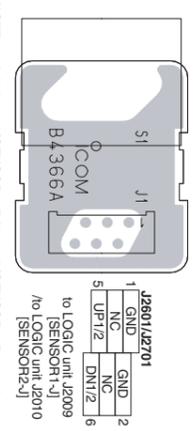
NOTE: Add "2400" to each indicated part number on the unit for the actual number.

**• VR2-J BOARD**



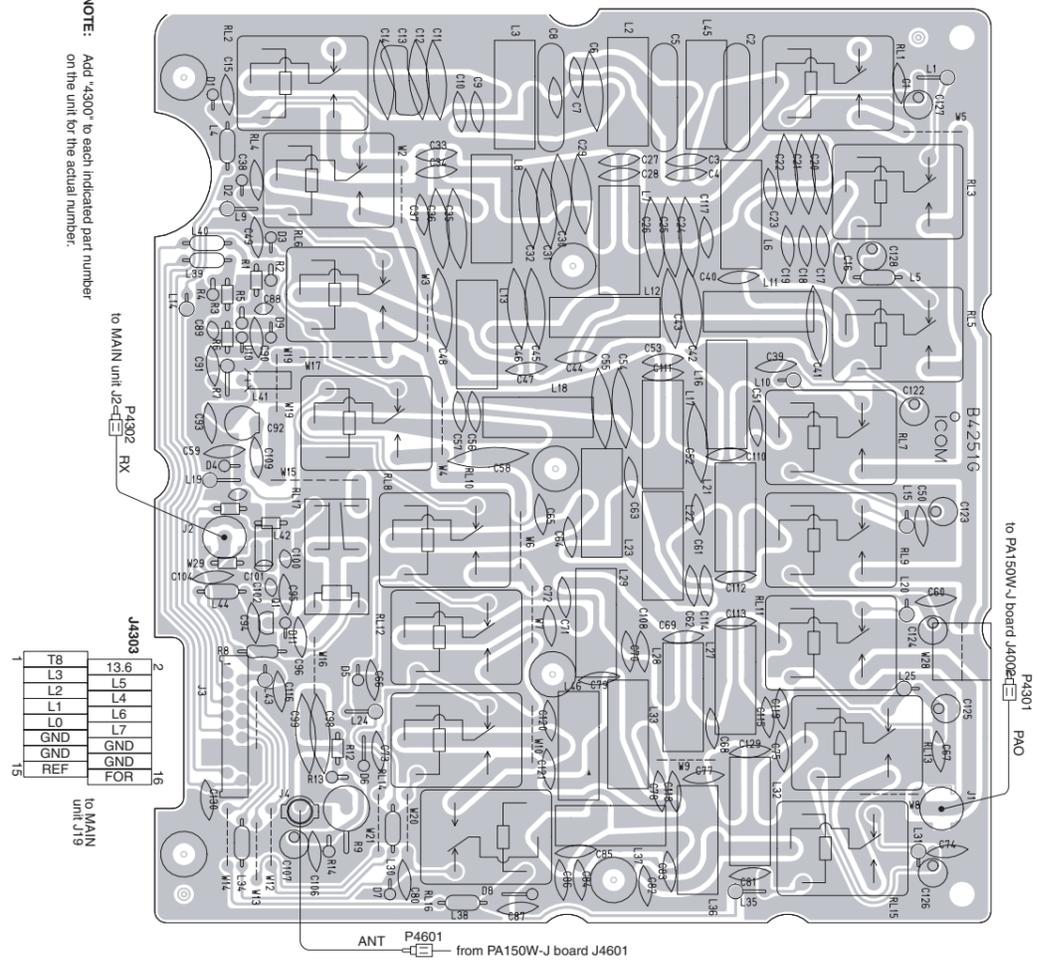
NOTE: Add "2500" to each indicated part number on the unit for the actual number.

**• SENSOR1-J/SENSOR2-J BOARD**



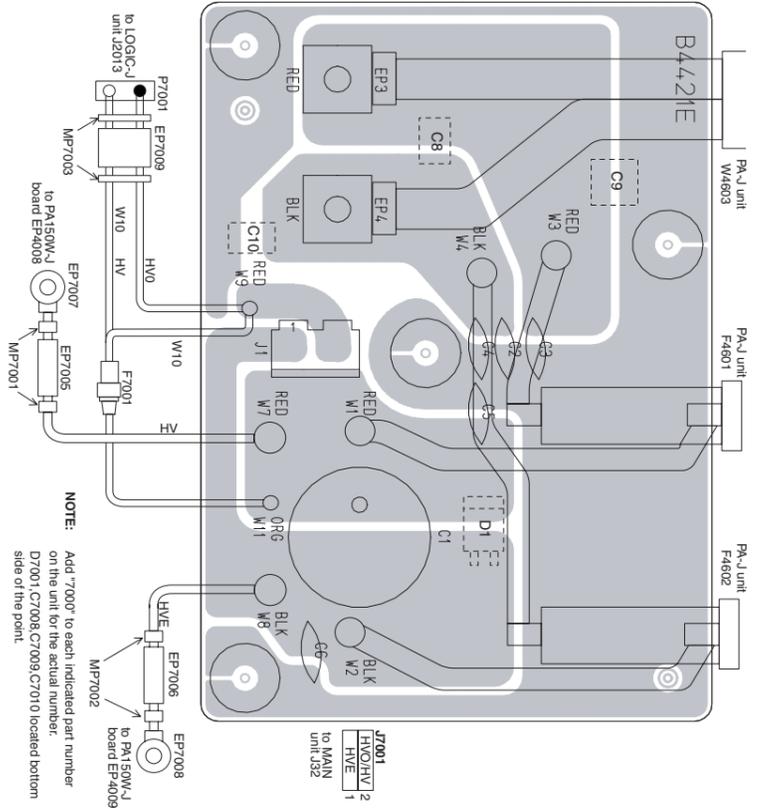
NOTE: Add "2600" (SENSOR1-J) / "2700" (SENSOR2-J) to each indicated part number on the unit for the actual number.

**• FILTER-J BOARD**



NOTE: Add "4300" to each indicated part number on the unit for the actual number.

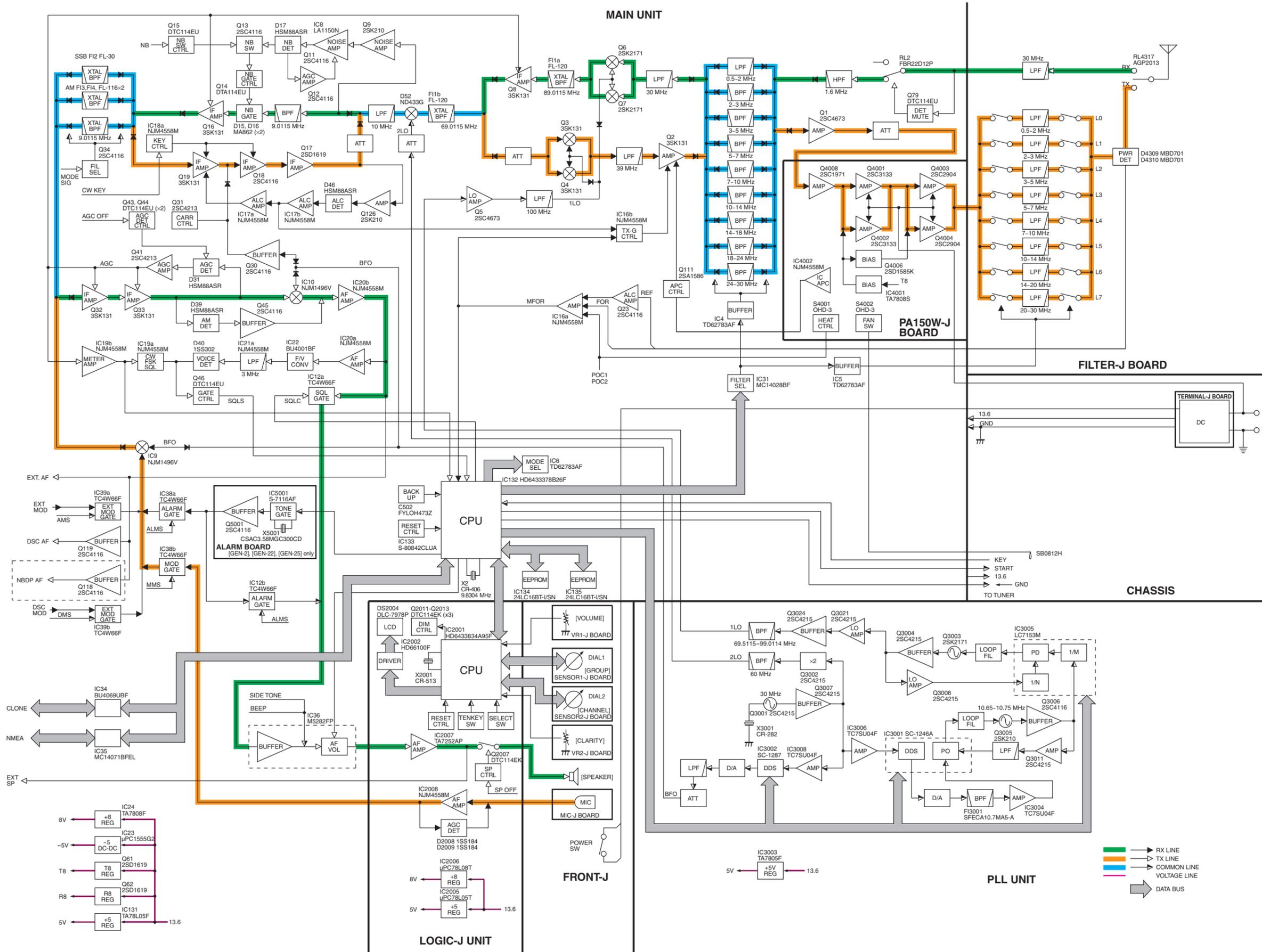
**• TERMINAL-J BOARD**



NOTE: Add "7000" to each indicated part number on the unit for the actual number. D7001, C7008, C7009, C7010 located bottom side of the point.

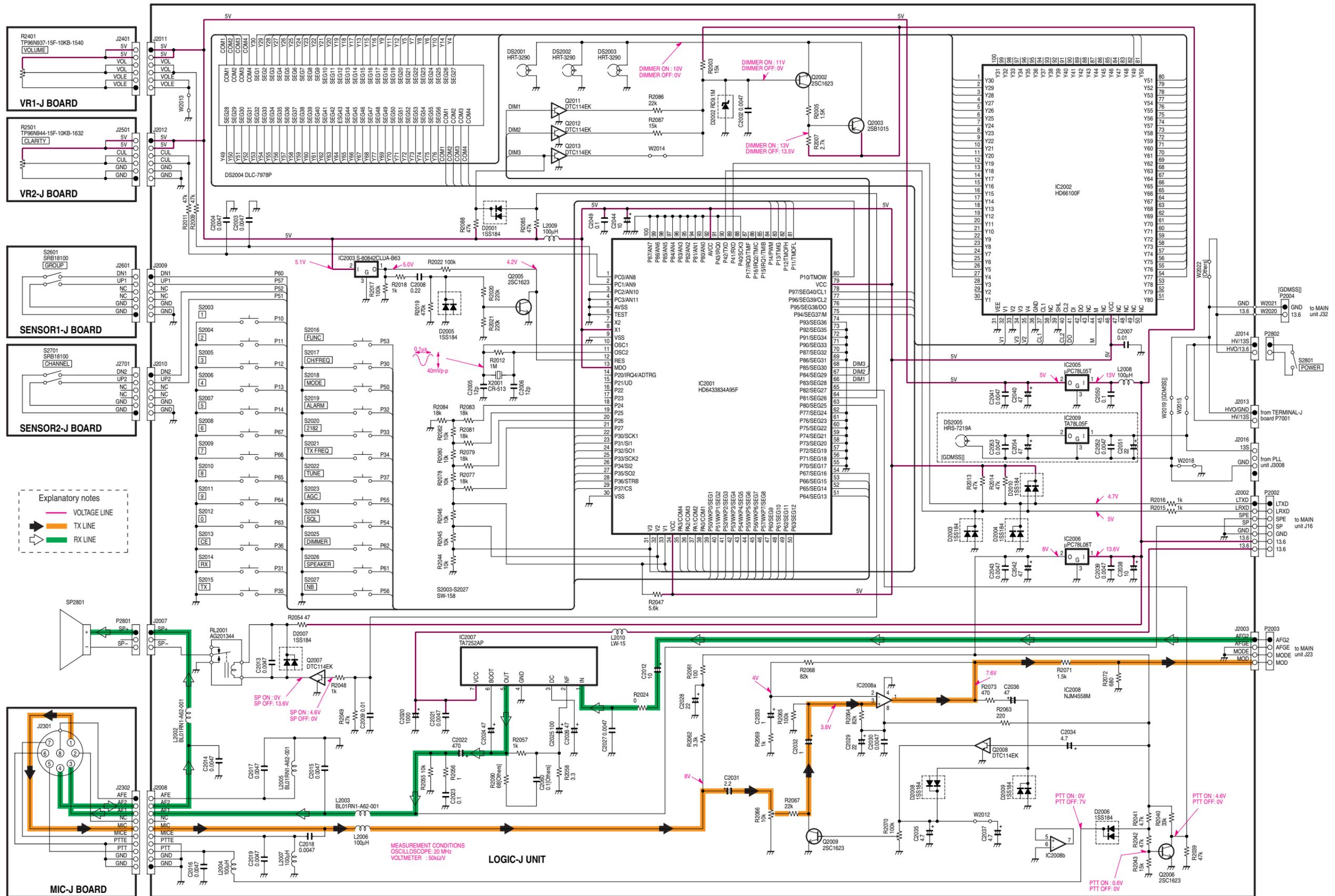
# SECTION 9

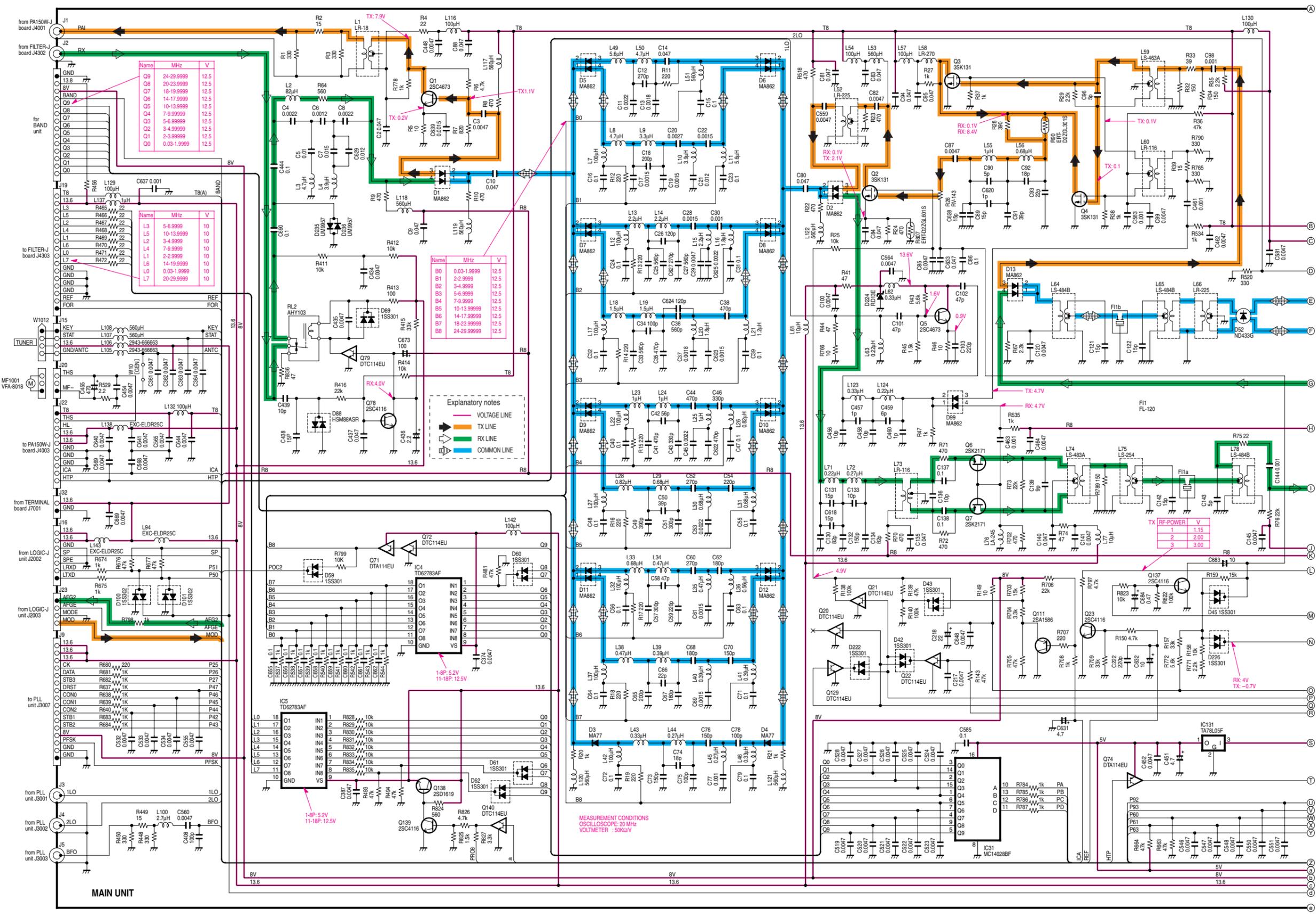
# BLOCK DIAGRAM



# SECTION 10

# VOLTAGE DIAGRAM



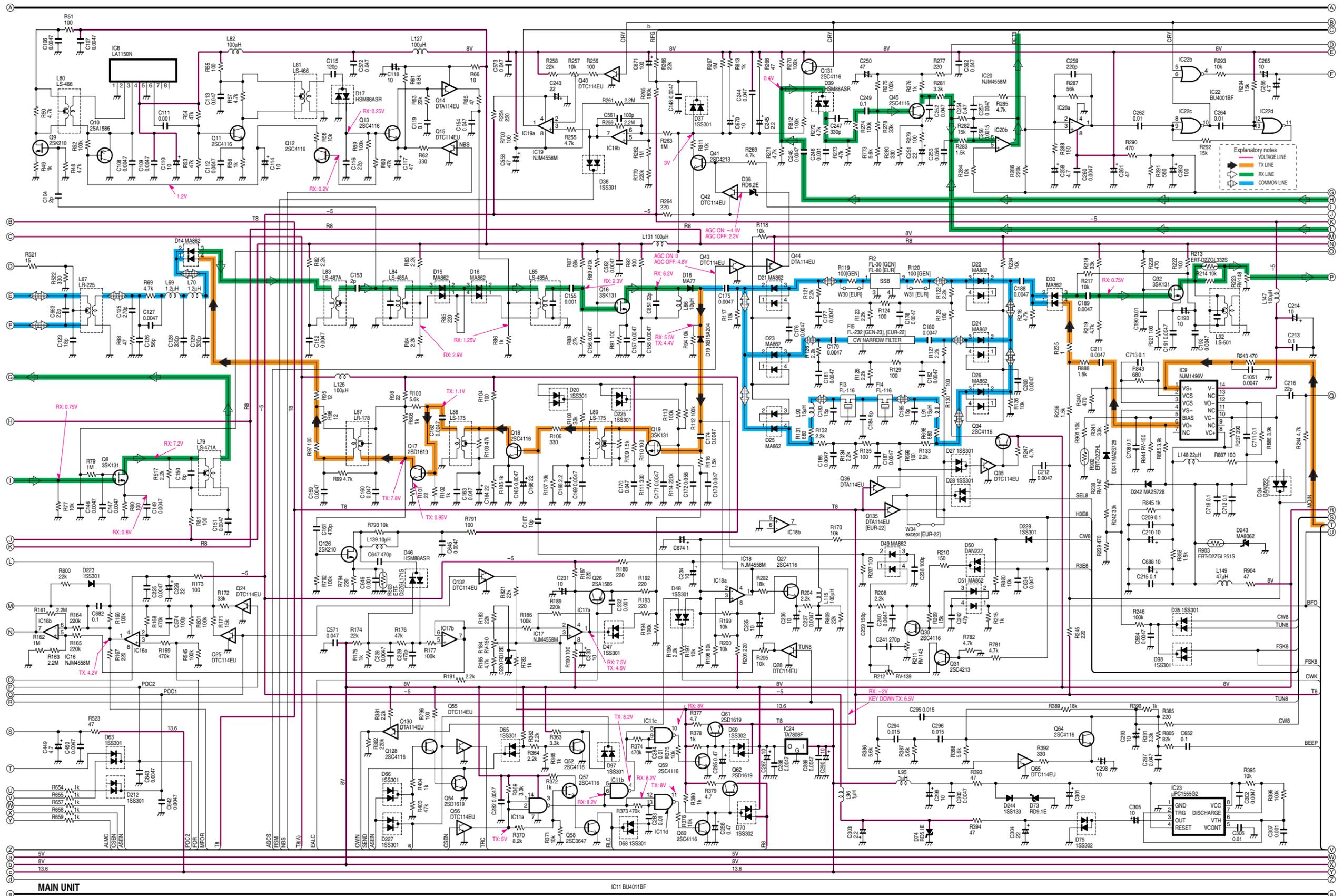


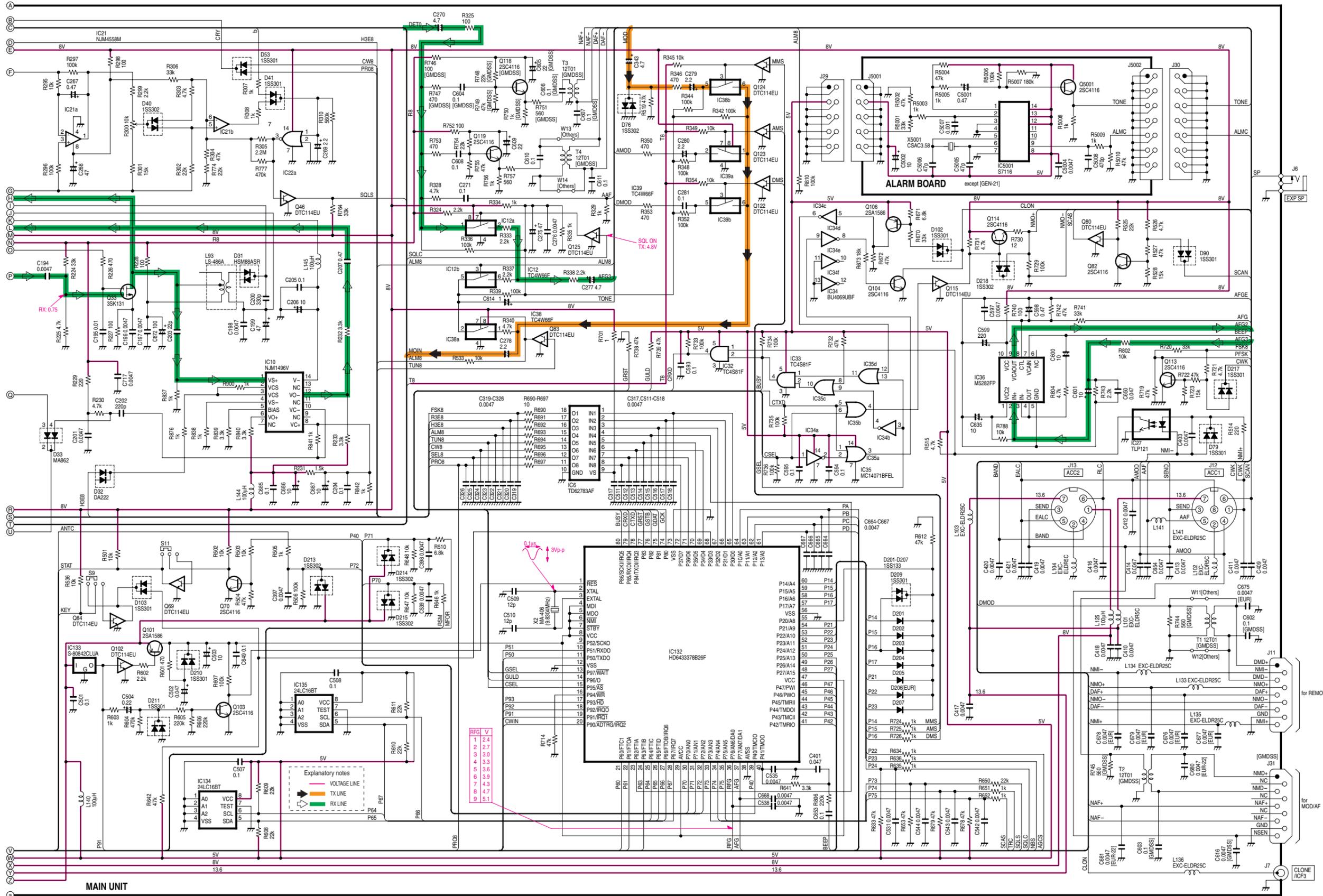
MEASUREMENT CONDITIONS  
 OSCILLOSCOPE: 20 MHz  
 VOLTMETER: 50kV

**Explanatory notes**

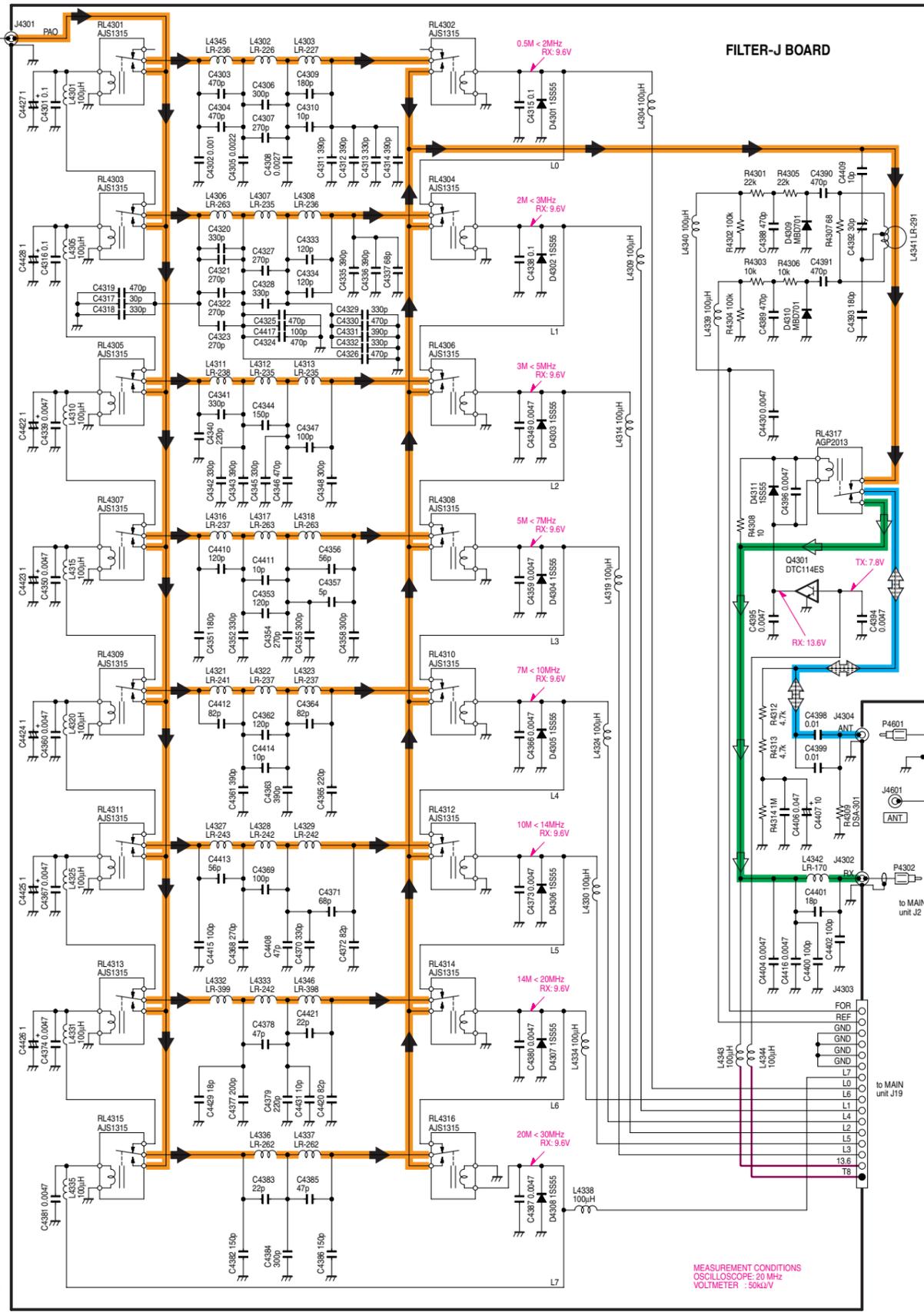
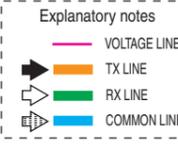
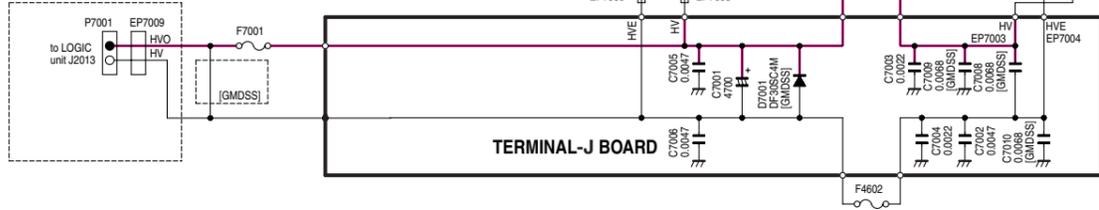
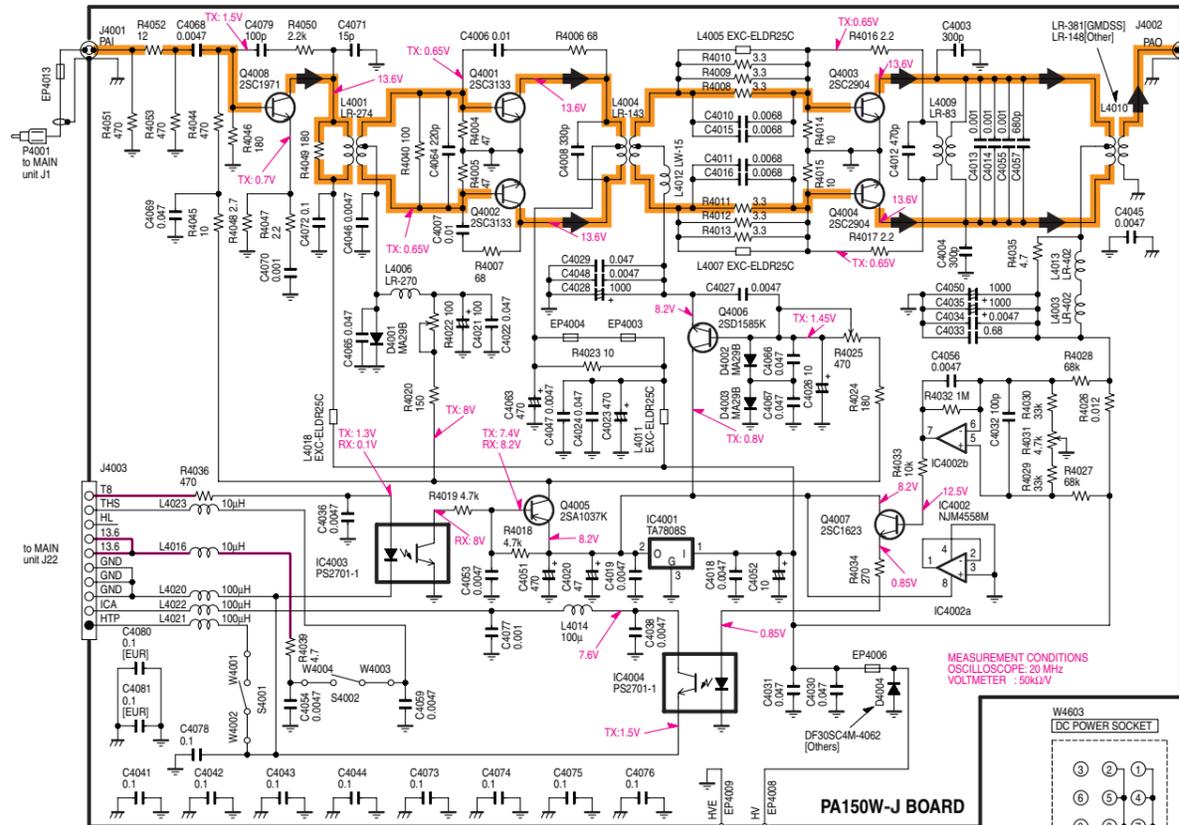
- VOLTAGE LINE
- TX LINE
- RX LINE
- COMMON LINE

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