OICOM

SERVICE MANUAL

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INTRODUCTION

This service manual describes the latest service information for the IC-207H VHF/UHF FM TRANSCEIVER at the time of publication.

MODEL	VERSION	SYMBOL
	Europe	EUR
10.00711	Italy	ITA
IC-207H	U.S.A	USA
	Asia	SEA

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

DANGER

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than 16 V. 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 order numbers
- 2. Component part number and name
- 3. Equipment model name and unit name
- 4. Quantity required

<SAMPLE ORDER>

1150000760 IC SC-1091 IC-207H MAIN UNIT 5 pieces 8810009020 Screw FH M2.6 x 5 ZK IC-207H Bottom cover 10 pieces

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

REPAIR NOTES

- Make sure a problem is internal before disassembling the transceiver.
- DO NOT open the transceiver until the transceiver is disconnected from its power source.
- DO NOT force any of the variable components. Turn them slowly and smoothly.
- DO NOT short any circuits or electronic parts. An insulated tuning tool MUST be used for all adjustments.
- DO NOT keep power ON for a long time when the transceiver is defective.
- DO NOT transmit power into a signal generator or a sweep generator.
- ALWAYS connect a 50 dB to 60 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
- READ the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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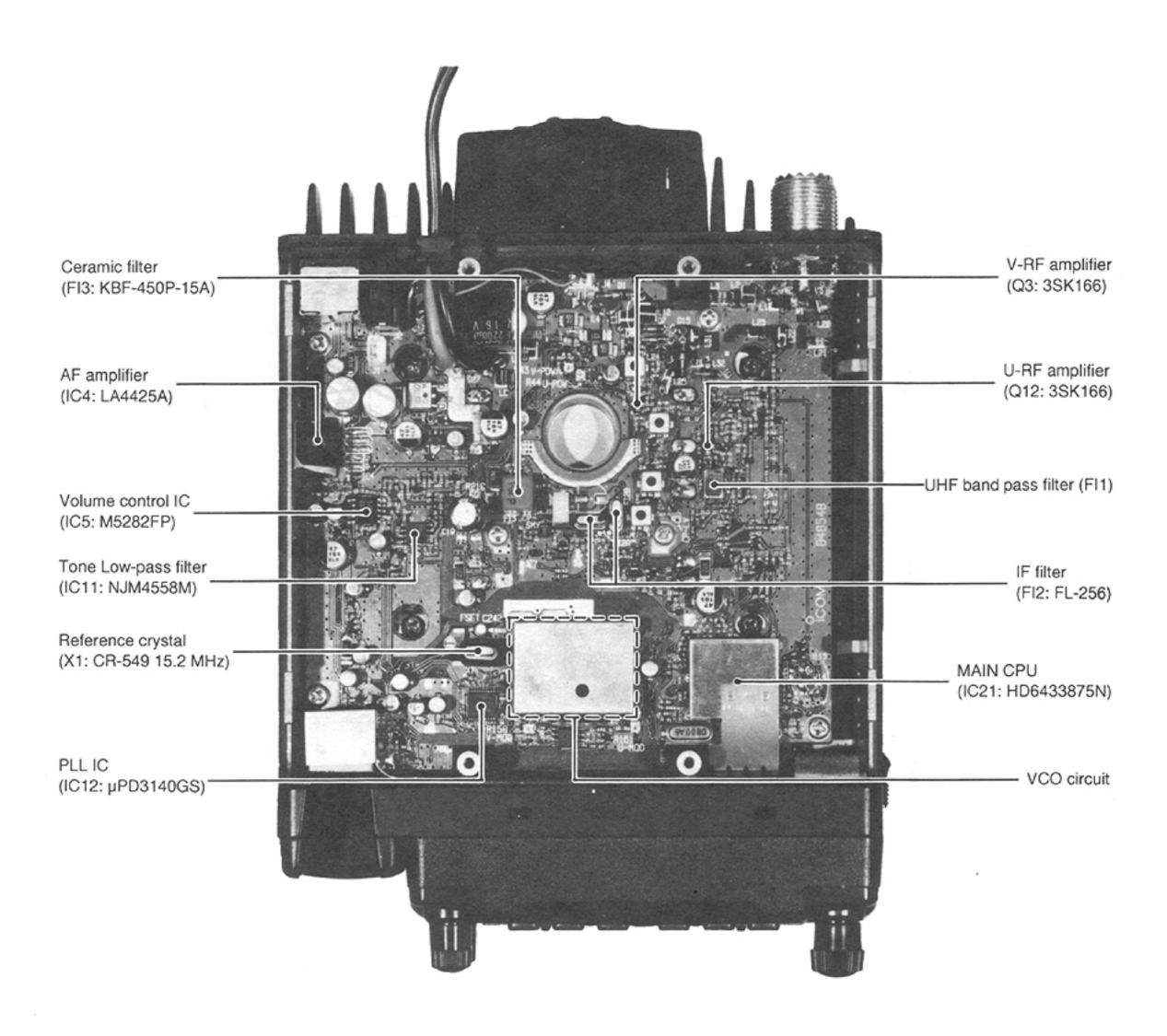
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SECTION 1 SPECIFICATIONS

				144 MHz band	430 (440) MHz band			
	Freque	2000	U.S.A	Tx: 140 MHz-150 MHz*1 Rx: 118 MHz-174 MHz*1	440 MHz-450 MHz			
	Europe		Europe	144 MHz-146 MHz 430 MHz-440 MH				
			S.E. Asia	Tx: 140 MHz-150 MHz*1 Rx: 136 MHz-174 MHz*1	430 MHz-440 MHz			
	Guaranteed frequency		Italy	Tx: 144 MHz-148 MHz*1 Rx: 136 MHz-174 MHz*1	Tx: 430 MHz-440 MHz Rx: 400 MHz-479 MHz*2			
			Guaranteed frequ	ency range: *144 MHz-148 MHz, *2430 N	MHz-440 MHz			
				FM (F3E), AM (USA	Rx only, 118–136 MHz)			
	Freque	Frequency stability		-11 -1411-1-1 - 1 - 1 - 1 - 1 - 1 - 1 -	60 °C; +14 °F to +140 °F)			
AL	Tuning	step	s	5, 10, 12.5, 15, 20, 2	5, 30, 50 kHz or 1 MHz			
ER	Externa	al DC	power	13.8 V [OC ±15 %			
GENERAL			High power	12.0 A	11.0 A			
ū	E _	_	Mid-High power	7.0 A	6.5 A			
	dra 8 V	Tx	Mid-Low power	5.5 A	5.5 A			
	urrent drain (at 13.8 V)		Low power	4.5 A	4.5 A			
	Cur	1020	Maximum audio	1.	0 A			
		Rx	Squelch closed	0	.8 A			
	Usable	Usable temperature range Dimensions (Projections not included)		-10 °C to +60 °C (+14 °F to +140 °F)				
				140 (W) × 40 (H) × 185.4 (D) mm 5 ½ (W) × 1 5/8 (H) × 7 5/16 (D) in				
	Antenn	a cor	nector	SO-239 (50 Ω)				
	Weight			1.17 kg; 2.58 lbs				
	RF out	put po	ower	High : 50 W	High : 35 W			
H	(at 13.8	3 V D	C)	Mid-High : 20 W	Mid-High : 20 W			
ĒΙ				Mid-Low : 10 W Low : 5 W	Mid-Low : 10 W Low : 5 W			
ANSMITTER				The state of the s				
2	Modula	-7.5	A THE SECOND SEC	Variable reactance frequency modulation				
₹	news management	1000	ncy deviation	±5.0 kHz				
H			nissions		an −60 dB			
4	201201200		connector	or 8-pin modular plug (600 Ω)				
	Receive				on superheterodyne			
	Interme	ediate	frequencies	1st : 46 2nd : 45	5.05 MHz 50 kHz			
[۔	Sensitiv	/ity		Less than 0.18 μV a	at 12 dB SINAD (typ.)			
	Squelc	h sen	sitivity	Less that	an 0.13 μV			
RECEIVER	Selectiv	ity		461	2 kHz/ - 6 dB 0 kHz/ - 60 dB			
ᆱ	Spuriou ratio	ıs an	d image rejection	More th	nan 60 dB			
	Audio o (at 13.8		t power	More than 2.0 W at 10 %	distortion with an 8 Ω load			
_ [Externa	al spe	aker connector	2-conductor 3.	5 mm (¹/s") (8 Ω)			

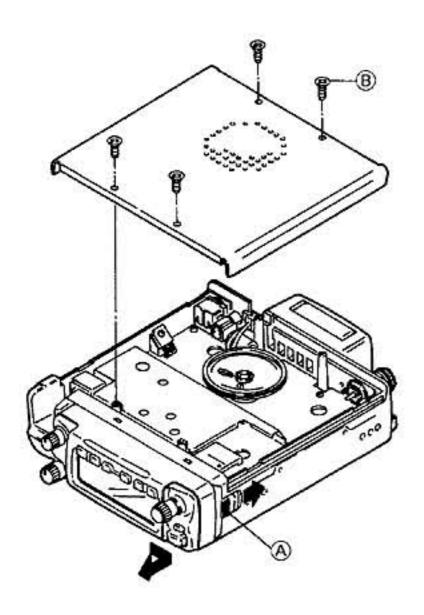
All stated specifications are subject to change without notice or obligation.

SECTION 2 INSIDE VIEW

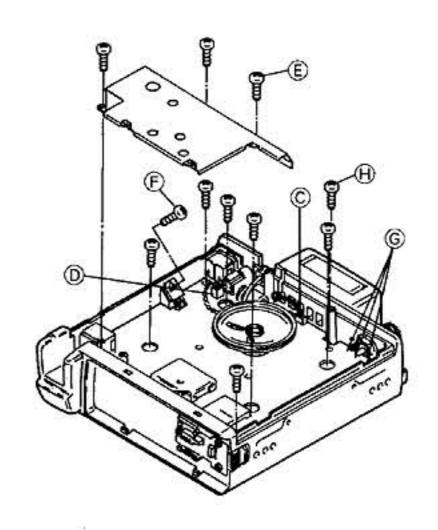


SECTION 3 DISASSEMBLY INSTRUCTIONS

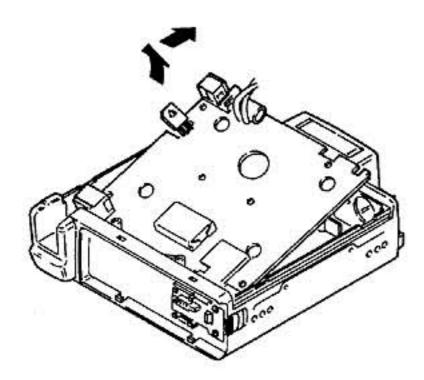
- Push the release buttom (A), then detach the control panel.



- 3 Disconnect the connector © from J4.
- ④ Disconnect the connector ® from J1 and remove the speaker.
- ⑤ Unscrew 3 screws ⑥ and remove the shield case.
- 6 Unscrew 1 screw F from IC4.
- ① Unsolder 3 points ⑤ from the antenna connector.
- ® Unscrew 7 screws ⊕.



Remove the MAIN unit from the chassis.



SECTION 4 CIRCUIT DESCRIPTION

4-1 RECEIVER CIRCUITS

4-1-1 DUPLEXER CIRCUIT

The transceiver has a duplexer (low-pass and high-pass filters) on the first stage from the antenna connector to separate the signals into VHF and UHF signals. The low-pass filter (L1-L3, C1-C3) is for VHF signals and the high-pass filter (L20, L21, C75-C77) is for UHF signals. The separated signals are applied to each RF circuit.

4-1-2 VHF ANTENNA SWITCHING CIRCUIT

The antenna switching circuit functions as a low-pass filter while receiving. However, its impedance becomes very high while transmitting by turning ON diodes (D7, D8). Thus transmit signals are blocked from entering the receiver circuits. The antenna switching circuit employs a $1/4 \lambda$ type diode switching system. The passed signals are then applied to the RF amplifier circuit.

4-1-3 VHF SQUELCH ATTENUATOR CIRCUIT

The current flow of the antenna switching circuit (D7, D8) is controlled by the [SQL] control via Q111. When the [SQL] control is rotated clockwise deeper than 12 o'clock, the current of D7 and D8 is increased. In this case, D7 and D8 act as an attenuator (max. 10 dB).

4-1-4 VHF RF CIRCUIT

The RF circuit amplifies signals within the range of frequency coverage and filters out-of-band signals.

The signal from the antenna switching circuit passes through a tunable bandpass filter (D10, L14, L15) where the object signals are led to the RF amplifier circuit (Q3).

The amplified signals at Q3 are then applied to the 3-stage tunable bandpass filter (D11-D13, D127, L16-L18) to suppress unwanted signals. The filtered signals are then applied to the 1st mixer circuit (Q4).

D10-D13 employ varactor diodes, that are controlled by the PLL lock voltage, to track the band pass filters. The PLL lock voltage is amplified at the DC-amplifier circuit (IC29, D129) and then applied to these diodes.

4-1-5 VHF 1ST MIXER CIRCUIT

The 1st mixer circuit converts the received signals to a fixed frequency of the 1st IF signal with a 1st LO (V-VCO output) frequency. By changing the PLL frequency, only the desired frequency will be passed through a pair of crystal filters at the next stage of the mixer.

The signals from the RF circuit are mixed with the 1st LO signal at the 1st mixer circuit (Q4) to produce a 46.05 MHz 1st IF signal.

4-1-6 1ST IF CIRCUIT

The 1st IF signal from either the VHF or UHF 1st mixer circuit is applied to a pair of crystal filters (FI2) to suppress out-of-band signals via a matching circuit (L38, C129). The filtered signal is amplified at the IF amplifier (Q54) and is then applied to the 2nd mixer circuit (IC10).

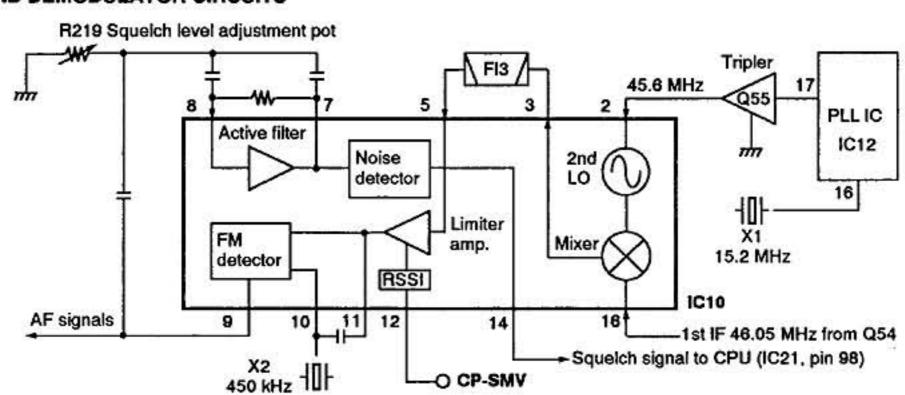
4-1-7 2ND IF AND DEMODULATOR CIRCUITS

The 2nd mixer circuit converts the 1st IF signal to a 2nd IF signal. A double superheterodyne system (which converts receive signals twice) improves the image rejection ratio and obtains stable receiver gain.

The FM IF IC (IC10) contains the 2nd local oscillator, 2nd mixer, limiter amplifier, quadrature detector, and s-meter detector circuits, etc.

The 1st IF signal from Q54 is applied to the 2nd mixer section of IC10 (pin 16), and is mixed with the 45.6 MHz 2nd LO signal generated by the tripler circuit (Q55) to produce the 450 kHz 2nd IF signal.

2ND MIXER AND DEMODULATOR CIRCUITS



The 2nd IF signal from IC10 (pin 3) is passed through the ceramic filter (FI3), where unwanted signals are suppressed, and is then applied to the 2nd IF and limiter amplifiers in IC10 (pin 5). The signal is applied to the FM detector section in IC10 for demodulation into AF signals.

The FM detector circuit employs a quadrature detection method (linear phase detection), which uses a ceramic discriminator (X2) for phase delay to obtain a non-adjusting circuit. The detected signal from IC10 (pin 9) is applied to the AF circuit and DIN connector (J3, pin 4) for data operation through the DATAOUT line.

4-1-8 AF AMPLIFIER CIRCUIT

The AF amplifier circuit amplifies the detected signals to drive a speaker. The AF circuit includes an AF mute circuit for the squelch.

AF signals from IC10 (pin 9) pass through the squelch mute switch (Q58), and are then applied to the active filter (Q57, Q56) which functions as a high-pass filter to subaudible tone signals for tone squelch operation.

The filtered signals pass through the volume control IC (IC5) and are then applied to the AF power amplifier (IC4, pin 1) via the AF mute switch (Q22). The amplified signals from IC4 (pin 4) drive the internal speaker (SP1) when no plug is connected to the [EXT EP] jack (J2).

4-1-9 SQUELCH CIRCUIT

A noise squelch circuit cuts out AF signals when no RF signal is received. By detecting noise components in the AF signal, the squelch circuit switches the squelch mute and AF mute switches.

Some of the noise components in the AF signals from IC10 (pin 9) are passed through the active filter (IC10, pins 8, 7), and then applied to the noise detector section. The variable resistor (R219) adjusts the input level of the active filter, and the level is used for squelch threshold reference. The detected noise signals are applied to the CPU (IC1, pin 98) via the SQLS line.

The [SQL] (CONTROL unit; R39) controls the input level of the sub-CPU (CONTROL unit; IC1, pin 8) in DC voltage. The sub-CPU reads the angle of the [SQL] rotation, then sends the squelch data to the CPU incorporated in the RDATA line. The CPU then controls the squelch mute (Q58) and AF mute (Q22) switches via the DMUT and AMUT lines, respectively.

4-1-10 UHF RF AND UHF 1ST MIXER CIRCUITS

The UHF RF signals are passed through part of a duplexer (high-pass filter; L20, L21, C75–C77). The signals are again passed through the low-pass filter (L22, L23, C78), antenna switching circuit (D15, D21–D23), and then amplified at the RF amplifier (Q12). A bandpass filter (FI1) is used at the next stage of the RF amplifier. The RF switch (D24, D25) turns on the UHF RF circuit when a UHF signal is received.

The filtered signals from the bandpass filter (FI1) are mixed with a 1st LO signal at the mixer circuit (Q13) to produce a 46.05 MHz 1st IF signal. The 1st LO signal is the PLL output frequency which comes from the U-VCO circuit (Q33, Q34).

4-2 TRANSMITTER CIRCUITS

4-2-1 MICROPHONE AMPLIFIER CIRCUIT

The microphone amplifier circuit amplifies audio signals from the microphone or the DIN connector to a level needed at the modulation circuit. The microphone amplifier circuit is commonly used for both the VHF and UHF bands.

The AF signals from the microphone are adjusted to match impedance at the MIC sensitivity switching circuit (IC28, D123). The adjusted AF signals (or 1200 bps packet signals from the DIN connector) pass through the MIC mute switch (Q75) and are then amplified at the microphone amplifier (Q72). The amplified signals are applied to the IDC amplifier (IC14b, pin 6) to control the maximum deviation. The output signals from the IDC amplifier (IC14b, pin 7) are passed through the splatter filter (IC14a, pin 3, 1) and then applied to each VCO circuit via the deviation adjustment pot.

The 9600 bps packet signals from the DIN connector (J3, pin 1) pass through the modulation switch (Q76, Q77) and are then applied to the buffer amplifier (IC13b). The amplified signals are then applied to the VCO circuit.

When 9600 bps packet signals are over-modulated, the 9600 bps limiter (IC13a) outputs a low level signal from pin 1 and the output signal is applied to the CPU (IC 21, pin 13) to stop transmission.

4-2-2 VHF MODULATION CIRCUIT

The modulation circuit modulates the VCO oscillating signal (RF signal) using the microphone audio signals.

Audio signals from IC14a pass through the frequency deviation control (R158), are then applied to the modulation circuit (D31) via the V-MOD mute switch (Q39) to change the reactance of D31, and modulate the oscillated signal at the V-VCO circuit (Q30, Q31). The VCO output is buffer-amplified at Q29 and Q27, and is then applied to the band switching circuit (D30).

4-2-3 VHF DRIVE AMPLIFIER CIRCUIT

The drive amplifier circuit amplifies the VCO oscillating signal to a level needed at the power amplifier.

The signals from the band switch (D30) pass through the low-pass filter (L49, C188, C189) and T/R switch (D6), and are then applied to the attenuator (R12-R14). The transmit signal from the attenuator is amplified at the pre-drive (Q2) and drive (Q1) amplifiers to obtain an approximate 26 dBm signal level. The amplified signal is then applied to the RF power amplifier (IC1).

4-2-4 VHF POWER AMPLIFIER CIRCUIT

The power amplifier circuit amplifies the driver signal to an output power level.

IC1 is a power module which has amplification output capabilities of about 60 W. The RF signal from the drive amplifier (Q1) is applied to IC1 (pin 1). The amplified signal from the power amplifier (IC1, pin 4) is passed through the antenna switching circuit (D1) and is then applied to the antenna connector via a low-pass filter (L1-L3, C1-C3).

4-2-5 APC CIRCUIT

The APC circuit protects the power module (IC1: VHF, IC3: UHF) and drive amplifier (Q1: VHF, Q9: UHF) from a mismatched output load and stabilizes transmit output power.

The APC detector circuit (D2 and D3: VHF, D16 and D17: UHF) detects forward signals and rectified signals respectively. The combined voltage is at a minimum level when the antenna is matched at 50 Ω and increases when it is mismatched. The combined voltage is applied to the APC amplifier (IC2, pin 3) and compared with a reference voltage which is supplied from the CPU (IC21, pins 68–75) as the POWC signal.

The output voltage from the APC amplifier (IC2, pin 4) is applied to the APC control circuit (Q6-Q8) to control the bias voltage of the PA module (IC1: VHF, IC3: UHF) and drive amplifier (Q1: VHF, Q9: UHF).

4-2-6 UHF MODULATION CIRCUIT

The modulation circuit modulates the VCO oscillating signal (RF signal) using the microphone audio signals.

Audio signals from IC14a pass through the frequency deviation control (R161), are then applied to the modulation circuit (D126) via the U-MOD mute switch (Q40) to change the reactance of D126, and modulate the oscillated signal at the U-VCO circuit (Q34, Q35). The VCO output is buffer-amplified at Q33 and Q27, and is then applied to the V/UHF switching circuit (D30).

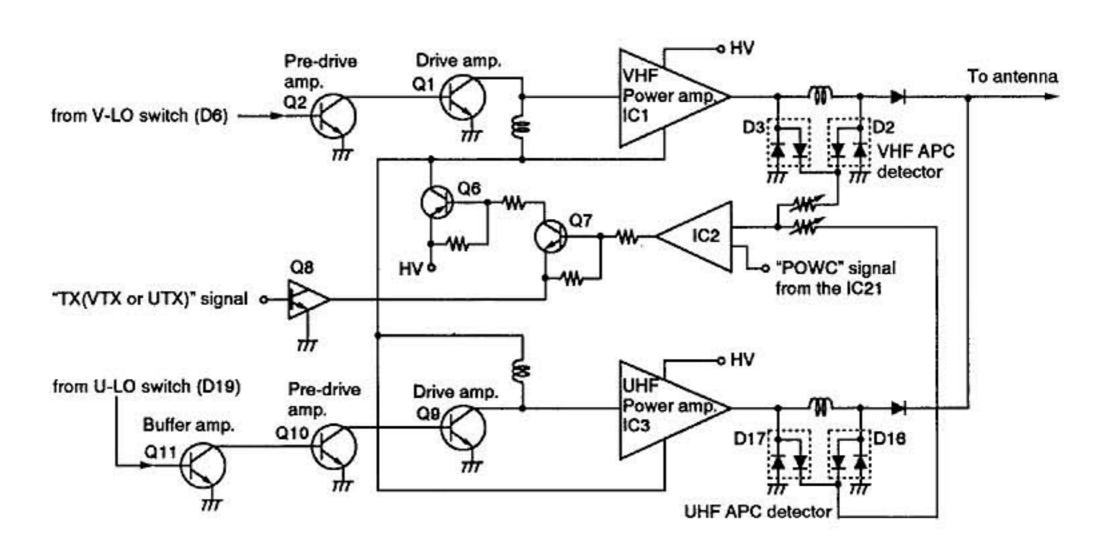
4-2-7 UHF DRIVE AND POWER AMPLIFIER CIRCUITS

The switched signal from the band switch (D30) is amplified at the buffer, pre-drive and the drive amplifiers (Q11, Q10, Q9) after being passed through the low-pass filter (L61, C111, C112) and T/R switch (D19). Then the amplified signal is applied to the UHF power amplifier circuit.

The drivers (Q9, Q10) obtain an approximate 26 dBm signal level.

The amplified signal from the drive amplifier (Q9) is applied to pin 5 of the power amplifier which has amplification output capabilities of about 40 W. The power amplified signal is output from pin 1 and then applied to the antenna connector via the antenna switching circuit (D15) and bandpass filter (L20–L23, C75–C78).

APC CIRCUIT



4-3 PLL CIRCUITS

4-3-1 GENERAL

A PLL circuit provides stable oscillation of the transmit frequency and the receive local frequency. The PLL circuit compares the phase of the divided VCO frequency to the reference frequency. The PLL output frequency is controlled by a crystal oscillator and the divided ratio of the programmable divider. IC12 is a dual PLL IC which controls VCO circuits for both VHF and UHF.

4-3-2 VHF LOOP

The generated signal at the V-VCO (Q30, Q31, D31) enters the PLL IC (IC12, pin 2) via buffer-amplifiers (Q29, Q28), is divided at the programmable divider section and is then applied to the phase detector section.

The phase detector compares the input signal with a reference frequency, and then outputs the out-of-phase signal (pulse-type signals) from pin 8.

The pulse-type signal is converted into DC voltage (lock voltage) at the loop filter (R172, R178, C252), and then applied to the V-VCO to stabilize the oscillated frequency.

The lock voltage is also applied to the RX tunable bandpass filter as the tuning signal via the DC amplifier circuit (IC29, D129).

4-3-3 UHF LOOP

The generated signal at the U-VCO (Q34, Q35, D33, D126) enters the PLL IC (IC12, pin 2) via buffer-amplifiers (Q33, Q28), is divided at the programmable divider section and is then applied to the phase detector section.

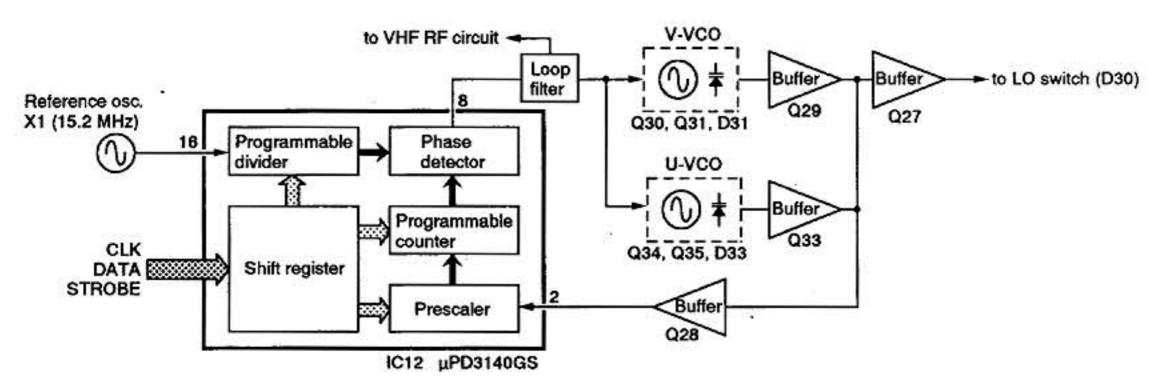
The phase detector compares the input signal with a reference frequency, and then outputs the out-of-phase signal (pulse-type signals) from pin 8.

The pulse-type signal is converted into DC voltage (lock voltage) at the loop filter (R172, R178, C252), and then applied to the U-VCO to stabilize the oscillated frequency.

4-4 POWER SUPPLY CIRCUITS 4-4-1 VOLTAGE LINE

Line	Description			
HV	The 13.8 V external DC power from the power connector.			
13.8 V	The same voltage as the HV line which is controlled by the power switching circuit (Q25, Q26). When the [PWR] switch is pushed, the CPU outputs the control signal to the power switching circuit to turn the circuit ON.			
8 V	Common 8 V converted from the 13.8 V line at the 8 V regulator circuit (IC8).			
6 V	Common 6 V converted from the 13.8 V line at the 6 V regulator circuit (IC7, D29). Common 5 V for the CPU produced at the CPU5V regulator circuit (IC6). The circuit outputs the voltage regardless of the power ON/OFF condition.			
CPU5V				
PLL5V	Common 5 V for PLL circuits produced from the CPU5V at the PLL 5V regulator circuit (Q45, Q46) using a control signal from the 8 V line.			
VT8V	8 V for VHF transmitter circuits converted from the 8 V line at the VT8V regulator circuit (Q37, Q38).			
UT8V	8 V for UHF transmitter circuits converted from the 8 V line at the UT8V regulator circuit (Q52, Q53).			
RX8V	8 V for common receiver circuits produced from the 4R8V and 1R8V line at the RX8V switching circuit (D41).			

PLL CIRCUIT



4-5 PORT ALLOCATIONS

4-5-1 CPU (MAIN unit IC21)

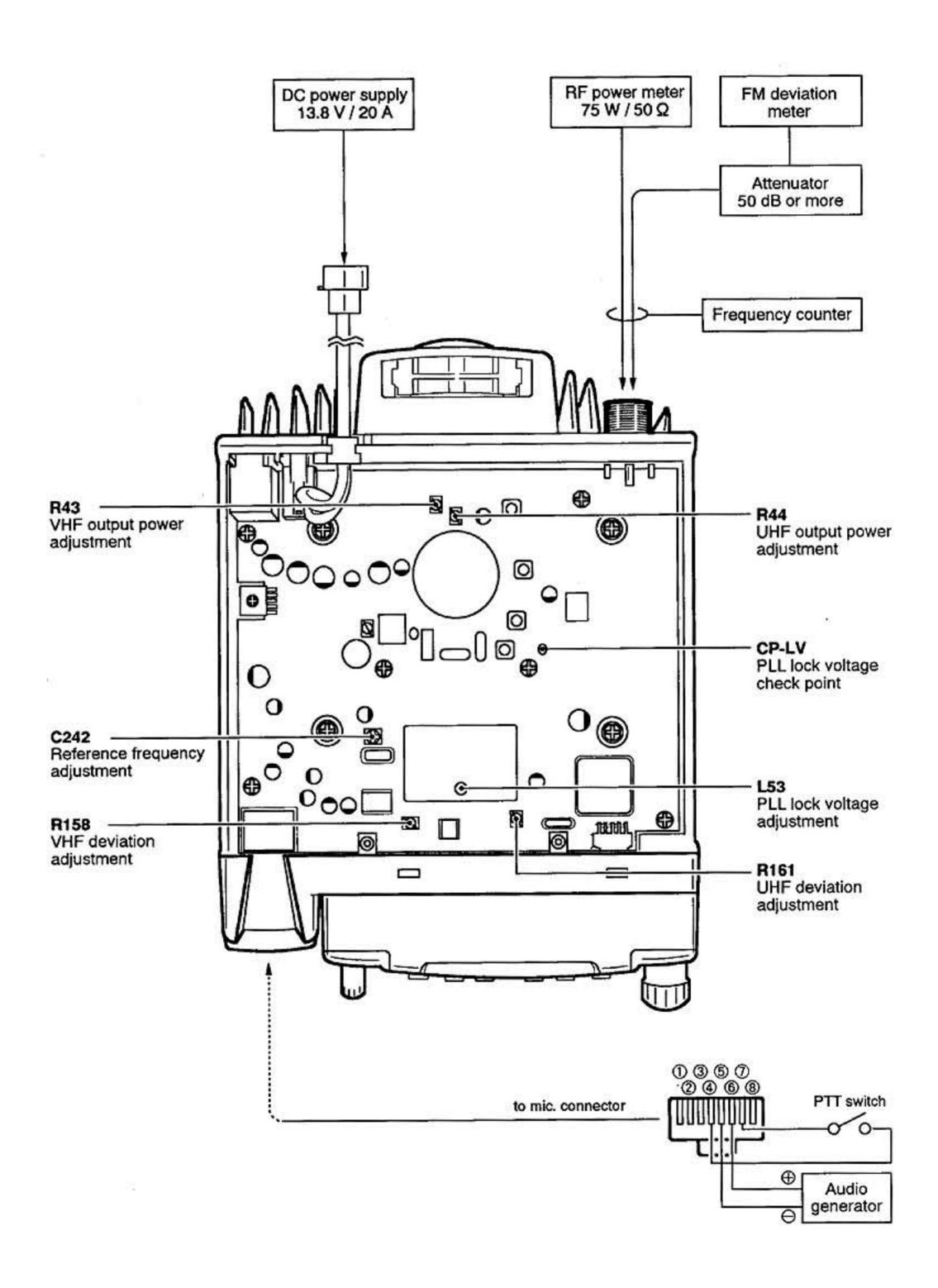
Pin number	Port name	Description	
1	TONEIN	Input port for CTCSS decoded signals.	
9	RES	Input port for the reset circuit signals	
12	FANC	Outputs cooling fan control signal. High: Fan activates	
13	LIMIT .	Input port to detect over modulation for packet transmission. Low: Over modulation	
16	RDATA	Input port for serial signal from the sub-CPU (CONTROL unit, IC1).	
17 •	TDATA	Ouput port for serial signal from the sub-CPU (CONTROL unit, IC1).	
22	EXTMIC	Input port to detect optional wireless microphone (HM-90) connection. Low: HM-90 is connected	
23	MICIN	Input port for microphone serial signal via the buffer-amp.	
24	РТТР	Input port for packet PTT signal. High: Packet PTT switch is ON	
25	E-TONE	Outputs 1750 Hz Europe tone signal	
26	PTTM	Input port for PTT switch.	
33-35	ISTB2— ISTB0	Output port for-initial matrix.	
36-39	INIO-INI3	Input ports for initial matrix.	
40	STBPL	Outputs strobe signals for PLL circuit.	
41	sck	Outputs clock to PLL.	
42	SDATA	Outputs'data signal to PLL.	
43	UNLK	Input port for PLL unlock signal. High: PLL unlock	
44	ESI	Input port for serial signal from EEPROM IC (IC25).	
45	ESO	Output port for serial signal to EEPROM IC (IC25).	
46	ECK	Outputs clock signal for the EEPROM IC (IC25).	
48	AMUT	Outputs AF mute switch (Q22) control signal. High: During squelched	
49	DMUT	Outputs squelch mute switch (Q58) control signal. High: During squelched	

Pin number	Port name	Description
50	MMUT	Outputs MIC mute switch control signal. High: Microphone audio is muted
51	DTMUT	Outputs DTMF mute signal. High: DTMF signals are muted
52	UTX	Output UT8V regulator (Q52, Q53) control signal. High: While transmitting on UHF band
53	VTX	Output VT8V regulator (Q38, Q37) control signal. High: While transmitting on VHF band
54	1RX	Outputs 1RX-BIAS selector (Q64, Q68) control signal. High: During RX on VHF band.
56	4RX	Outputs 4RX-BIAS selector (Q65, Q68) control signal. High: During RX on UHF band.
59	PCTRL	Outputs power switching circuit control signal. High: While turning power ON
60	vcos	Outputs shift signal for V-VCO circuit.
61	uvcov	Outputs U-VCO 8 V šwitch (Q41, Q43) control signal.
62	vvcov	Outputs V-VCO 8 V switch (Q42, Q43) control signal.
64—67	ATTC0- ATTC3	Output squelch attenuator control signal.
68-75	LPOC0- LPOC7	Output port for output power control signal.
77—84	VOLC0- VOLC7	Output volume level signals.
90	CTCSS	Outputs CTCSS tone signals.
91	DTMFE	Output port : DTMF signals while transmitting, : Beep audio signals while receiving.
98	SQLS	Input port for noise signals.
99	SMET	Input port for S-meter-level signal.
100	MU/D	Input port for up/down signal from a microphone. 0 V: [UP] 0.45 V: [DN]

SECTION 5 ADJUSTMENT PROCEDURES

5-1 PLL AND TRANSMITTER ADJUSTMENTS

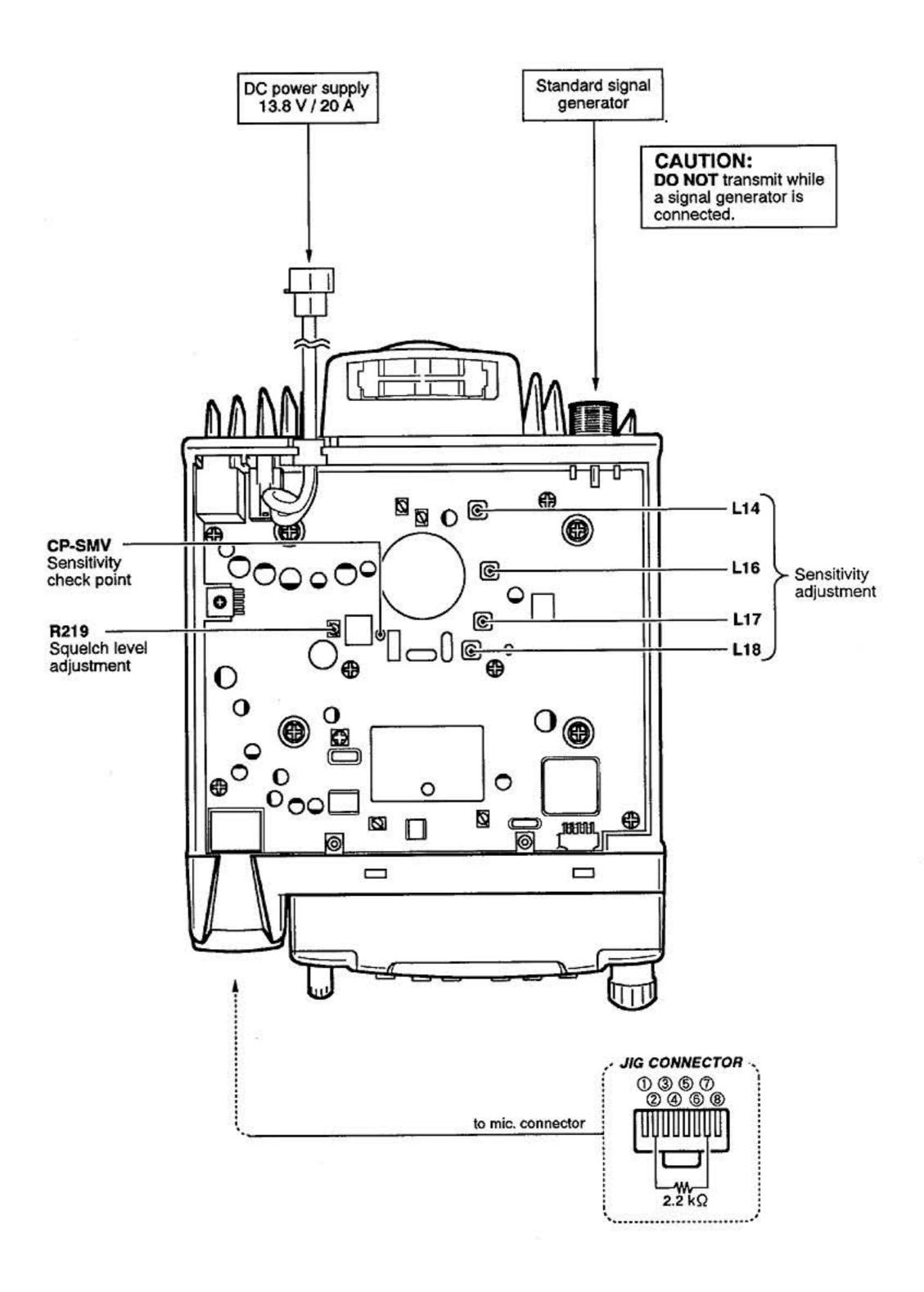
ADJUSTMENT		ADJUSTMENT CONDITIONS MEASUREMENT		WALTE	ADJUSTMENT			
ADJUSTMEN	41	UNIT		LOCATION	VALUE	UNIT	ADJUST	
PLL LOCK VOLTAGE	1	Operating frequency: 145.000 MHz Receiving	MAIN	Connect a digital multi-meter or an oscilloscope to the CP-LV.	2.5V	MAIN	L53	
PLL REFERENCE FREQUECY	1	Operating frequency: 440.000 MHz Simplex Transmitting	Rear panel	Loosely couple a frequency counter to the antenna connector.	440.0000 MHz	MAIN	C242	
VHF OUTPUT POWER	1	Operating frequency: 146.000 MHz (USA, SEA versions) 145.000 MHz (All other versions) [High/Low] switch: High Simplex Transmitting	Rear panel	Connect an RF power meter to the antenna connector.	50 W	MAIN	R43	
33	2	• [High/Low] switch: Low	1		5 W		Verify	
	3	• [High/Low] switch: Mid-Low	1		10 W			
	4	• [High/Low] switch: Mid-High			20 W			
UHF OUTPUT POWER	1	Operating frequency: 445.000 MHz (USA version only) 435.000 MHz (All other versions) [High/Low] switch: High Simplex Transmitting	Rear panel	Connect an RF power meter to the antenna connector.	35 W	MAIN	R44	
	2	• [High/Low] switch: Low		0	5 W		Verify	
	3	• [High/Low] switch: Mid-Low			10 W	1		
	4	• [High/Low] switch: Mid-High			20 W	1		
FREQUENCY DEVIATION		Operating frequency: 146.000 MHz (USA, SEA versions) 145.000 MHz (All other versions) Connect an audio generator to the microphone connector and set as; 20 mV/1.0 kHz Set an FM deviation meter as; HPF : 50 Hz LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 CTCSS tone: OFF Simplex Transmitting	Rear panel	Connect an FM deviation meter to the antenna connector through an attenuator.	±4.8 kHz	MAIN	R158	
	2	Operating frequency: 445.000 MHz (USA version only) 435.000 MHz (All other versions)					R161	



5-2 RECEIVER ADJUSTMENT

ADJUSTMENT		AD ILIETMENT CONDITIONS		MEASUREMENT	V41115	ADJUSTMENT	
ADJUSTMEN	ш	ADJUSTMENT CONDITIONS	UNIT	LOCATION	VALUE	UNIT	ADJUST
VHF SENSITIVITY	1	Operating frequency: 145.000 MHz Connect an SSG to the antenna connector and set as; Level: 1 mV* (-47 dBm) Mod.: 1.0 kHz (±3.5 kHz Dev.) Receiving	MAIN	Connect a DC volt meter to the CP-SMV.	Maximum DC voltage	MAIN	Adjust in sequence L14, L16 L17, L18
SQUELCH LEVEL	1	 Operating frequency: 146.000 MHz (USA, SEA versions) 145.000 MHz (All other versions) Squelch level: 7 (Use HM-98) R219: Max. clockwise Connect an SSG to the antenna connector and set as; Level: 0.079 μV*(-129 dBm) Mod.: 1.0 kHz (±3.5 kHz Dev.) Receiving 	Spea- ker		At the point where the AF signal just appears.	MAIN	R219
S-METER	1	 Connect a JIG to the microphone connector then turn ON the power. Operating frequency: 146.000 MHz (USA, SEA versions) 145.000 MHz (All other versions) Connect an SSG to the antenna connector and set as; Level: 1.0 μV* (-107 dBm) Mod.: 1.0 kHz (±3.5 kHz Dev.) Receiving 	Front panel		Push and hold the push the [MW] key • Verify that S-m (4 dots).	of the	HM-98.
	2	 Operating frequency: 445.000 MHz (USA version only) 435.000 MHz (All other versions) Connect an SSG to the antenna connector and set as; Level: 1.0 μV* (-107 dBm) Mod.: 1.0 kHz (±3.5 kHz Dev.) Receiving 					

^{*}This output level of a standard signal generator (SSG) is indicated as the SSG's open circuit.



SECTION 6 PARTS LIST

[CONTROL UNIT]

REF. NO.	ORDER NO.		DESCRIPTION	
IC1	1140008530	s.ic	M38222M2-122HP	
IC2	1110003500	S.IC	S-80742SL-A6-T1	
IC3	1130005720	S.IC	TC7W04F (TE12L)	
IC4	1180000420	S.IC	TA78L05F (TE12R)	
Q1	1530002080	S.TRANSISTOR	2SC4081 T107 R	
Q2	1520000270	S.TRANSISTOR	31,71,70,71,71,71,71,71,71,71,71,71,71,71,71,71,	
Q3	1530002080		2SC4081 T107 R	
Q4 Q5	1510000620 1530002080		2SA1576 T107 S 2SC4081 T107 R	
D1	1750000550	S.DIODE	1SS355 TE-17	
D2	1750000550	S.DIODE	1SS355 TE-17	
X1	6080000810	S.CERAMIC	EFOS4914E3	
R1	7030000080	S.RESISTOR	MCR10EZHJ 2.2 Ω (2R2)	
R2 R3	7030000080	S.RESISTOR S.RESISTOR	MCR10EZHJ 2.2 Ω (2R2) ERJ3GEYJ 103 V (10 kΩ)	
R4	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	
R5	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)	
R6	7030000360	S.RESISTOR	MCR10EZHJ 680 Q (681)	
R7	7030000320	S.RESISTOR	MCR10EZHJ 330 Q (331)	
R8	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	
R9 R10	7030003840 7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 473 V (47 kQ) ERJ3GEYJ 102 V (1 kQ)	
R11	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)	
R12	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	
R13	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R14	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	
R15	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	
R16	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)	
R17 R18	7030003720	S.RESISTOR S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ) ERJ3GEYJ 224 V (220 kΩ)	
R19	7030003720	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kQ)	
R20	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kQ)	
R21	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	
R22	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	
R23	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)	
R24 R25	7030003560 7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 103 V (10 kQ) ERJ3GEYJ 102 V (1 kQ)	
R26	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R27	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)	
R28	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R29	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R30	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R31 R32	7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ) ERJ3GEYJ 102 V (1 kΩ)	
R33	7030003440	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kQ)	
R34	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R35	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R36	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R37	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	
R39	7210002920	VARIABLE	EVU-F2AF20B55 (580K)	
R40 R41	7030003640 7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ) ERJ3GEYJ 102 V (1 kΩ)	
R43	7210002920	VARIABLE	EVU-F2AF20B55 (560K)	
R44	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)	
C1	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A	
C2	4510004630		ECEVICA100SR	
C3	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A	
C4 C5	4030009000 4030008860	S.CERAMIC S.CERAMIC	C2012 JB 1C 224K-T-A C1608 JB 1H 102K-T-A	
C6	4510004630		ECEVICA100SR	
1				

CONTE	CONTROL UNIT]				
REF. NO.	ORDER NO.	D	ESCRIPTION		
C7	4510004630	S.ELECTROLYTIC	ECEV1CA100SR		
CB	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A		
C9	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C10	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C11	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C12	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C13	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C14	4030007090	S.CERAMIC S.CERAMIC	C1808 CH 1H 470J-T-A		
C15 C18	4030007090	S.CERAMIC	C1808 CH 1H 470J-T-A C1808 CH 1H 470J-T-A		
C17	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A		
C18	4030007090	S.CERAMIC	C1808 CH 1H 470J-T-A		
C19	4030007090	S.CERAMIC	C1808 CH 1H 470J-T-A		
C20	4030007090	S.CERAMIC	C1808 CH 1H 470J-T-A		
C21	4030007090	S.CERAMIC	C1808 CH 1H 470J-T-A		
C22	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A		
C23	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A		
DS1	5080000330	LAMP	HRS-7219A-RE		
DS2	5080000330	LAMP	HRS-7219A-RE		
DS3	5030001470	LCD	LD-HU4649E		
SI	2250000370	ENCODER	EVQ-VENF0124B		
S2	2260001890	S.SWITCH	SKQDPA		
S3	2280001890	S.SWITCH	SKQDPA		
S4	2280001890	S.SWITCH	SKQDPA		
S5	2260001890	S.SWITCH	SKQDPA		
S6	2260001890	S.SWITCH	SKODPA		
S7	2260001890	S.SWITCH	SKUDFA		
\$8 \$9	2280001890	S.SWITCH S.SWITCH	SKQDPA SKQDPA		
S10	2280001890	S.SWITCH	SKQDPA		
310	220001690	3.5WITCH	SKUDPA		
J1	6510019310	CONNECTOR	1729 FRONT CONNECTOR		
W2	7030003880	S.JUMPER	ERJ3GE JPW V		
EP1 EP2	0910047622 8930041630	PCB LCD CONTACT	B 4853B SRCN-1893-SP-N-W		

Q46

Q48

Q52

Q53

Q54

Q55

Q56

Q57

1590000430

1530002850

1510000580

1530002080

1530002900

1530002380

1530002060

1530002080

S.TRANSISTOR DTC144EU T107 S.TRANSISTOR 2SC4116-BL (TE85R)

S.TRANSISTOR 2SC4081 T107 R

S.TRANSISTOR 2SC4228-T2 R45

S.TRANSISTOR 2SC4081 T107 R S.TRANSISTOR 2SC4081 T107 R

S.TRANSISTOR 2SC4215-Y (TE85R)

S.TRANSISTOR 2SA1362-GR (TE85R)

ORDER REF. DESCRIPTION NO. NO. IC SC-1091 IC1 1150000760 S.IC TA75S01F (TE85R) IC2 1110002750 SC-1318 IC3 1150001620 IC IC LA4425A IC4 1110003090 S.IC M5282FP 70CD IC5 1110003300 S.IC TA7805F(TE18L) IC6 1180001070 IC7 S.IC TA78L05F (TE12R) 1180000420 TA7808F(TE18L) S.IC IC8 1180001250 S.IC µPC1676G-T1 IC9 1110001971 S.IC TA31136FN(D) IC10 1110003490 S.IC NJM4558M(T1) IC11 1110000960 S.IC uPD3140GS-E1 (DS8) IC12 1130007610 \$.IC IC13 NJM4558M(T1) 1110000980 S.IC NJM4558M(T1) IC14 1110000960 S.IC HD6433875NA39H IC21 1140006430 1130006550 S.IC TC7S08FU (TE85R) IC22 S.IC IC23 1110002750 TA75S01F (TE85R) S.IC TC7W04FU(TE12L) IC24 1130007110 S.IC IC28 X25180S(5V) 1190000340 S.IC S-80742SL-A6-T1 **IC27** 1110003500 S.IC TC7S66FU(TE85R) **IC28** 1130007020 1130008560 S.IC TC75S51F (TE85L) IC29 1530002340 S.TRANSISTOR 2SC2954-T2B Q1 S.TRANSISTOR 2SC3357-T2 Q2 1530002880 3SK166-2-T7 Q3 1580000490 S.FET **Q4** 1580000480 S.FET 3SK184-S (TX) S.TRANSISTOR DTC144EU T107 Q5 1590000430 S.TRANSISTOR 2SA1870 TLE Qe 1510000980 S.TRANSISTOR 2SC4081 T107 S Q7 1530002280 S.TRANSISTOR DTC143ZU T107 Q8 1590001320 S.TRANSISTOR 2SC2954-T2B Q9 1530002340 1530002680 S.TRANSISTOR 2SC3357-T2 Q10 S.TRANSISTOR 2SC4226-T2 R25 Q11 1530002920 Q12 1580000490 S.FET 3SK166-2-T7 Q13 1580000480 S.FET 3SK184-S (TX) S.TRANSISTOR DTC144EU T107 Q14 1590000430 S.TRANSISTOR 2SC4226-T2 R25 Q15 1530002920 Q18 S.TRANSISTOR 2SC4226-T2 R25 1530002920 Q17 1530002080 S.TRANSISTOR 2SC4081 T107 R 1530002920 Q18 S.TRANSISTOR 2SC4226-T2 R25 Q19 1580000480 S.FET 3SK184-S (TX) S.TRANSISTOR DTC144EU T107 Q20 1590000430 S.TRANSISTOR 2SC4228-T2 R25 Q21 1530002920 Q22 1530003090 S.TRANSISTOR 2SC4213-B (TE85R) S.TRANSISTOR 2SB798-T2 DK Q23 1520000200 S.TRANSISTOR 2SC4081 T107 R Q24 1530002060 S.TRANSISTOR 2SB1182 TL Q Q25 1520000270 1590002110 Q26 S.TRANSISTOR DTC143XU T107 1530002920 S.TRANSISTOR 2SC4226-T2 R25 Q27 1530002900 S.TRANSISTOR 2SC4228-T2 R45 **Q28** S.TRANSISTOR 2SC4228-T2 R25 **Q28** 1530002920 Q30 S.TRANSISTOR 2SC4228-T2 R25 1530002920 Q31 1530002920 S.TRANSISTOR 2SC4226-T2 R25 Q32 1590000430 S.TRANSISTOR DTC144EU T107 S.TRANSISTOR 2SC4228-T2 R25 Q33 1530002920 1530002920 S.TRANSISTOR 2SC4226-T2 R25 Q34 S.TRANSISTOR 2SC4228-T2 R25 Q35 1530002920 1510000580 S.TRANSISTOR 2SA1382-GR (TE85R) Q37 1530002080 S.TRANSISTOR 2SC4081 T107 R Q38 1530003090 S.TRANSISTOR 2SC4213-B (TE85R) Q39 S.TRANSISTOR 2SC4213-B (TE85R) 1530003090 Q40 S.TRANSISTOR DTA113ZU T107 Q41 1590001040 Q42 1590001040 S.TRANSISTOR DTA113ZU T107 Q43 1590002270 S.TRANSISTOR UMGON TL Q44 1530002080 S.TRANSISTOR 2SC4081 T107 R S.TRANSISTOR DTB123EK T147 Q45 1590000980

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
Q58	1590001450	S.FET	2SJ144-GR (TE85R)
Q59	1530002080		2SC4081 T107 R
Q60	1560000530	S.FET	2SK880-GR (TE85R)
Q61	1560000530	S.FET	2SK880-GR (TE85R)
Q62	1590001450	S.FET	2SJ144-GR (TE85R)
Q63	1590002410	S.TRANSISTOR	UMH2N TN
Q64	1590000980	S.TRANSISTOR	DTB123EK T147
Q65	1590000980		DTB123EK T147
Q66	1590000980		DTB123EK T147
Q87	1590000980		DTB123EK T147
Q68	1590002270	S.TRANSISTOR	
G68	1590002270	S.TRANSISTOR	3 THE RESERVE AND A STATE OF THE PARTY OF TH
Q70	1530002060		2SC4081 T107 R
Q71	1530002060		2SC4081 T107 R
Q72	1530002060		2SC4081 T107 R
Q73	1590001450	S.FET S.FET	2SJ144-GR (TE85R)
Q75	1590001450 1590001450	S.FET	2SJ144-GR (TE85R) 2SJ144-GR (TE85R)
Q76			DTC144EU T107
Q77 Q79	1590000430 1590000430		DTC144EU T107
Q101	1540000250	S.TRANSISTOR	
Q102	1590002420	S.TRANSISTOR	10 THE STATE OF TH
Q103	1530002420		2SC4081 T107 R
Q104	1530002060		2SC4081 T107 R
Q105	1510000780		2SA1586-Y (TE85R)
0108	1530002060		2SC4081 T107 R
Q108	1530002080		2SC4081 T107 R
Q111	1530002060		2SC4081 T107 R
D*	1740000040	DIODE	MIAOZ
D1	1710000310	DIODE	MI407
D2 D2	1790000980	S.DIODE S.DIODE	MA742(TX)
D3	1790000980 1750000370	S.DIODE	MA742(TX) DA221 TL
D4 D5	1750000370	S.DIODE	188355 TE-17
De De	1790000550	S.DIODE	MA862(TX)
D7	1710000290	DIODE	MI308
D8	1710000290	DIODE	MI308
D9	1750000550	S.DIODE	1SS355 TE-17
D10	1720000370	S.VARICAP	HVU350TRF
D11	1720000370	S.VARICAP	HVU350TRF
D12	1720000370	S.VARICAP	HVU350TRF
D13	1720000370	S.VARICAP	HVU350TRF
D14	1750000550	S.DIODE	1SS355 TE-17
D15	1710000310	DIODE	MI407
D16	1790000980	.S.DIODE	MA742(TX)
D17	1790000980	S.DIODE	MA742(TX)
D18	1750000370	S.DIODE	DA221 TL
D19	1790000820	S.DIODE	MA77(TW)
D20	1790000450	S.DIODE	MA862(TX)
D21	1710000730	S.DIODE	MI809-T11
D22	1710000290	DIODE	MI308
D23	1750000550	S.DIODE	1SS355 TE-17
D24	1790000450	S.DIODE	MA862(TX)
D25	1790000450	S.DIODE	MA862(TX)
D26	1790001010	S.ZENER	MA8043-L(TX)
D27	1730000520	ZENER	RD20E B2
D28	1790000700	DIODE	DSA3A1
D29	1750000550	S.DIODE	1SS355 TE-17
D30	1790000450	S.DIODE	MA862(TX)
D31	1720000370	S.VARICAP	HVU350TRF
D32	1790000620	S.DIODE	MA77(TW)
D33	1720000640	S.VARICAP	1SV284 (TPH3)
D35	1750000550	S.DIODE	1SS355 TE-17
D36	1160000080	S.DIODE	DAN202U T107
D37	1790000880	S.DIODE	MA133(TX)
D38	1730002340	S.ZENER	MARO47-M(TX)
D39	1790000980	S.DIODE	MA742(TX)
D40	1790001520	S.ZENER	MA8075-L(TX)
D41	1160000060	S.DIODE S.DIODE	DAN202U T107 DAN202U T107
D42 D43	1790000980	S.DIODE S.DIODE	MA742(TX)
D44	1790000980	S.DIODE	MA742(TX) MA728(TW)
D44 D45	1160000060	S.DIODE	DAN202U T107
155 YEAR 70 U.S.	1730002280	S.ZENER	MA8091-M(TX)
D101		With tall Shall	mneed I milital
D101 D102	1730002280	S.ZENER	MA8091-M(TX)

[MAIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION	REF. NO.	ORDER NO.		DESCRIPTION
D103	1750000550	S.DIODE	1SS355 TE-17	L42	6200005680	S.COIL	ELJRE 15NG-F
D104	1750000550	S.DIODE	1SS355 TE-17	L43	6200005650	S.COIL	ELJRE 8N2Z-F
0105	1750000550	S.DIODE	1SS355 TE-17	L44	6200005850	S.COIL	ELJRE 8N2Z-F
0108	1750000550	S.DIODE	1SS355 TE-17	L45	6200005680	S.COIL	ELJRE 15NG-F
0108	1750000350	S.DIODE	DA114 T107 [EUR], [ITA]	L46	6200005670	S.COIL	ELJRE 12NG-F
		S.DIODE	DAN202U T107 [SEA]	L47	6200005660	S.COIL	ELJRE 10NG-F
0109	1160000080			0.102010500			
	1750000160	S.DIODE	DA114 T107 except [SEA]	L48	6200005660	S.COIL	ELJRE 10NG-F
0110	1750000550	S.DIODE	1SS355 TE-17 except [EUR]	L49	6200005740	S.COIL	ELJRE 47NG-F
0111	1750000550	S.DIODE	1SS355 TE-17 [ITA], [SEA]	L50	6200003540	S.COIL	MLF1608D R22K-T
0112	1750000550	S.DIODE	1SS355 TE-17 [USA], [SEA]	L51	6200005720	S.COIL	ELJRE 33NG-F
0115	1710000600	DIODE	1SS254 [EUR]	L52	6200003540	S.COIL	MLF1608D R22K-T
0117	1750000550	S.DIODE	1SS355 TE-17 except [ITA]	L53	6130002420	S.COIL	LB-270
0118	1750000550	S.DIODE	1SS355 TE-17 except [ITA]	L54	6200004480	S.COIL	MLF1608D R82K-T
2119	1750000550	S.DIODE	1SS355 TE-17 except [USA]	L55	6200005710	S.COIL	ELJRE 27NG-F
2120	1750000550	S.DIODE	1SS355 TE-17	L56	6200002320	S.COIL	LQN 1A 8N8J04
2121	1750000550	S.DIODE	1SS355 TE-17	L57	6200004480	S.COIL	MLF1608D R82K-T
0123	1750000550	S.DIODE	1SS355 TE-17	L58	8200002850	S.COIL	NL 252018T-R82J
0128	1720000640	S.VARICAP	1SV284 (TPH3)	L59	6200002850	S.COIL	NL 252018T-R82J
0127	1750000550	S.DIODE	1SS355 TE-17	Leo	6200002090	S.COIL	ELJF8 681K-F
			1 TO THE PARTY OF	109997838			
128	1750000550	S.DIODE	1SS355 TE-17	L61	6200005690	S.COIL	ELJRE 18NG-F [SE
129	1790000980	S.DIODE	MA742(TX)	-270505	8200005700	S.COIL	ELJRE 22NG-F except [SE
				L101	6200005950	S.COIL	LQH 3N 2R2M04 (Q20)
				L102	6200004920	S.COIL	MLF1608A 2R2K-T
-11	2040001020	S.SAW	EFCH445MWNP1 [USA]	L103	6200004920	S.COIL	MLF1608A 2R2K-T
	2040001000	S.SAW	EFCH435MWNP1	L104	6200004920	S.COIL	MLF1608A 2R2K-T
		280202038	except [USA]	L105	8200005950	S.COIL	LQH 3N 2R2M04 (Q20)
12	2010002040	MONOLITHIC	FL-258 (46.05 MHz)	L108	6200004920	S.COIL	MLF1608A 2R2K-T
13	2020001150	CERAMIC	KBF-450P-15A	L107	8200001520	S.COIL	MLF2012D R82K-T
13	2020001130	CENAMIC	KDE-430F-13A	L108	8200004920	S.COIL	
				A 2 (1782) 455 (6)			MLF1608A 2R2K-T
& to:	Contractor			L110	6200005740	S.COIL	ELJRE 47NG-F
(1	6050009820	XTAL	CR-549 (15.2 MHz)	L111	6200002650	S.COIL	NL 252018T-R18J
(2	6070000200	DISCRIMINATOR	[ADD-07-07-07-07-07-07-07-07-07-07-07-07-07-	L112	6200002850	S.COIL	NL 252018T-R82J
(11	8050009800	S.XTAL	SMD-49 (8.000 MHz)	L113	6200000050	S.COIL	LQH 3N R39M 04
		- Committee of the Comm		L114	6200005190	S.COIL	MLF1808D R56K-T
				L115	8200005700	S.COIL	ELJRE 22NG-F
.1	6110002150	COIL	LA-385	L121	6200005690	S.COIL	ELJRE 18NG-F except [SE
2	6110001550	COIL	LA-235	L122	6200005690	S.COIL	ELJRE 18NG-F except [SE
.3	6110001610	COIL	LA-244	1.4.1.400	354334355	0	and the second s
4	6170000230	COIL	LW-25		l .		
	[17] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1	- CONTROL OF THE PARTY OF THE P	LA-235	R1	7030001130	S.RESISTOR	MCD6017U1 100 O (101)
L5	6110001550	COIL		(SALL 2-7)			MCR50JZHJ 100 Q (101)
.6	6110001550	COIL	LA-235	R2	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
.7	6200005740	S.COIL	ELJRE 47NG-F	R3	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
L8	6200003410	S.COIL	LL2012-F68NK	R4	7030001050	S.RESISTOR	MCR50JZHJ 22 Q (220)
.9	6200005710	S.COIL	ELJRE 27NG-F	R5	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
.10	6200003410	S.COIL	LL2012-F68NK	Re	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
.11	6200005690	S.COIL	ELJRE 18NG-F	R7	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
.12	8110001570	COIL	LA-237	R8	7030000180	S.RESISTOR	MCR10EZHJ 22 Q (220)
.13	6110001560	COIL	LA-236	R9	7030000180	S.RESISTOR	MCR10EZHJ 22 Ω (220)
.14	6150004360	S.COIL	LS-491	R10	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
.15	6200004600	S.COIL	MLF1608D R15K-T	R11	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
.16	6150004360	S.COIL	LS-491	R12	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
17	6150004360	S.COIL	LS-491	R13	7030003340	S.RESISTOR	ERJ3GEYJ 390 V (39 Ω)
			72 CON 10 CAT OF C.	. ACCURATE			2 (1) 하다 시작 (1) 1
.18	6150004360	S.COIL	LS-491	R14	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Q)
.19	6200004600	S.COIL	MLF1608D R15K-T	R15	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
.20	6110001520	COIL	LA-232	R16	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)
.21	6110001590	COIL	LA-242	R17	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
.22	8110001520	COIL	LA-232	R18	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
23	6110002130	COIL	LA-383	R19	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
24	6170000230	COIL	LW-25	R21	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
.25	6110001520	COIL	LA-232 [USA]	R22	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
	6110001590	COIL	LA-242 except [USA]	R24	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
.26	8200005680	S.COIL	ELJRE 15NG-F	R25	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
27	8200005700	S.COIL	ELJRE 22NG-F	R28	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)
.28	8200005700	S.COIL	ELJRE 22NG-F	R27	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
				40000000000	[: The HAND THE TANK THE TANK THE HER THE THE THE TANK THE
.29	6200005660	S.COIL	ELIRE 10NG-F	R28	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
.30	8200005720	S.COIL	ELJRE 33NG-F	R29	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
.31	6110001520	COIL	LA-232	R30	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
.32	6110001520	COIL	LA-232 ·	R31	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
.35	6200005740	S.COIL	ELJRE 47NG-F	R32	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
36	8200005710	S.COIL	ELJRE 27NG-F	R33	7030001190	S.RESISTOR	MCR50JZHJ 330 Q (331)
37	6200005690	S.COIL	ELJRE 18NG-F [SEA]	R34	7030003850	S.RESISTOR	ERJ3GEYJ 583 V (56 kΩ)
	6200006980	S.COIL	ELJRE R10G-F except [SEA]	R35	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 kΩ)
.38	8200003980	S.COIL	MLF1608A 1R0K-T	R36	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 kΩ)
	6200005740	S.COIL	ELJRE 47NG-F	R37	7030003790	S.RESISTOR	ERJ3GEYJ 824 V (820 kQ)
.39		2020-41.00-40.400	3.1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.			하시아 아니라 나를 가게 되지 않아 있다면서?	반 사람이 얼마나 가장하는 것이 하느님이 되었다. 하는 사람이 하는 사람이 되었다면 하는데 살아보다 하는데 살아보다.
4.50	8200005850	S.COIL	ELJRE 8N2Z-F	R38	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
.40 .41	6200005650	S.COIL	ELJRE 8N2Z-F	R39	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)

[MAIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
340	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
341	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)
842	7030003830	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R43	7310003580	S.TRIMMER	EVM-1XSX50 B15 (104)
144	7310003580	S.TRIMMER	EVM-1XSX50 B15 (104)
345	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
346	7030001130	S.RESISTOR	MCR50JZHJ 100 Q (101)
47	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R48 R49	7030003800	S.RESISTOR S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ) MCR50JZHJ 22 Q (220)
50	7030001030	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
351	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Q)
352	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
153	7030000180	S.RESISTOR	MCR10EZHJ 22 Q (220)
154	7030000180	S.RESISTOR	MCR10EZHJ 22 Q (220)
155	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
358	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)
157	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Q)
158	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
59	7030003420	S.RESISTOR S.RESISTOR	ERJ3GEYJ 881 V (880 Ω) ERJ3GEYJ 102 V (1 kΩ)
60	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
62	7030003880	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
63	7030003570	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
64	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
65	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
88	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
88	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
169	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
70	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
71	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
72	7030003880	S.RESISTOR S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ) ERJ3GEYJ 104 V (100 kΩ)
73	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
5	7030003680	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kQ)
76	7030003520	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
78	7030003330	S.RESISTOR	ERJ3GEYJ 121 V (120 Ω)
79	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
80	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kQ)
32	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
33	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Q)
34	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
35	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Q)
86	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Q)
17	7030003520	S.RESISTOR S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ) ERJ3GEYJ 271 V (270 Ω)
38 39	7030003370	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
90	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)
91	7030003780	S.RESISTOR	ERJ3GEYJ 684 V (680 kQ)
92	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
93	7030003830	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
4	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
15	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Q)
96	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
97	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Q)
8	7030003380	S.RESISTOR S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
90	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 Ω) ERJ3GEYJ 103 V (10 kΩ)
01	7030003360	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
102	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
03	7030000100	S.RESISTOR	MCR10EZHJ 4.7 Q (4R7)
05	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
06	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
07	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kQ)
80	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
09	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
110	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
111	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
112	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ) ERJ3GEYJ 102 V (1 kΩ)
1113	7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
115	7030003560	S.RESISTOR	MCR10EZHJ 470 Q (471)
116	703000340	S.RESISTOR	ERJ3GEYJ 470 V (47 Q)
1117	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Q)
118	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)
		S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)

REF. NO.	ORDER NO.		DESCRIPTION
R120	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω) [SEA]
	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω) except [SEA]
R121	7030003820	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R123	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R124	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Q)
R125	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R126	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R127	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R128	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R129	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R130	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R131	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R132	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R133	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R134	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R135	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R136	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R137	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R138 R139	7030003220	S.RESISTOR S.RESISTOR	ERJ3GEYJ 150 V (15 Ω) ERJ3GEYJ 470 V (47 Ω)
R140	7030003280	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R141	7030003690	S.RESISTOR	ERJ3GEYJ 272 V (120 kΩ)
R142	7030003480	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R143	7030003280	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R144	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R145	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R146	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R149	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R153	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R154	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kQ)
R155	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R156	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R157	7030003670	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)
R158	7310003580	S.TRIMMER	EVM-1XSX50 B15 (104)
R159	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R160	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)
R161	7310003580	S.TRIMMER	EVM-1XSX50 B15 (104)
R162	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R164	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R167 R168	7030003680	S.RESISTOR S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ) ERJ3GEYJ 104 V (100 kΩ)
R169	7030003880	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R170	7030003280	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kQ)
R171	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R172	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R178	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R179	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R180	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R181	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R182	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R184	7030003410	S.RESISTOR	ERJ3GEYJ 561 V (560 Ω)
R185	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R187	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 Ω)
R188	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R190	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R191	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R192	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω) ERJ3GEYJ 100 V (10 Ω)
R193 R194	7030003200	S.RESISTOR S.RESISTOR	ERJ3GEYJ 100 V (10 Ω) ERJ3GEYJ 331 V (330 Ω)
R194	7030003380	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R196	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R197	7030003440	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kQ)
R198	7030003460	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R199	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R200	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R201	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R202	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R203	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R204	7030003830	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R205	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R206	7030003570	S.RESISTOR	ERJ3GEYJ 123 V (12 kΩ)
R207	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R208	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R209	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)

[MAIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION	REF. NO.	ORDER NO.		DESCRIPTION
210	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R289	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
211	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MQ)	R290	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MQ)
212	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)	R291	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
213	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MQ)	R293	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
14	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)	R294	7030003830	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
15	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	R295	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
18	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)	R298	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
7	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kQ)	R297	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
8	7030000140	S.RESISTOR	MCR10EZHJ 10 Q (100)	R298	7030003730	S.RESISTOR	ERJ3GEYJ 274 V (270 kΩ
19	7310003810	S.TRIMMER	EVM-1XSX50 B14 (103)	R300	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
20	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)	R303	7030003820	S.RESISTOR	ERJ3GEYJ 155 V (1.5 MQ
21	7030003700	S.RESISTOR	ERJ3GEYJ 154 V (150 kΩ)	R401	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
22	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)	R402	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
23	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R404	7030003740	S.RESISTOR	ERJ3GEYJ 334 V (330 kΩ
24	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)	R405	7030003710	S.RESISTOR	ERJ3GEYJ 184 V (180 kΩ
25	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)	R406	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)
27	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)	R407	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)
28	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)	R408	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kQ)
29	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)	R409	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
30	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)	R410	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ
31	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	R411	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ
32	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)	R412	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
33	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)	R414	7030003810	S.RESISTOR	ERJ3GEYJ 125 V (1.2 MC
34	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R415	7030003780	S.RESISTOR	ERJ3GEYJ 884 V (880 ks
35	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R416	7030003740	S.RESISTOR	ERJ3GEYJ 334 V (330 kg
36	7030003670	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R417	7030003700	S.RESISTOR	ERJ3GEYJ 154 V (150 kg
37	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MQ)	R418	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kQ)
38	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)	R419	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kQ)
39	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R420	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kQ)
40	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kQ)	R421	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
41	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)	R422	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
42	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R424	7030003670	S.RESISTOR	ERJ3GEYJ 823 V (82 kQ)
43	7510000920	S.THERMISTOR	NTCCF2012 4CH 104KC-T	R425	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
44	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)	R426	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kQ)
45	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kQ)	R427	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
47	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)	R428	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
48	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)	R431	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
49	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kQ)	R432	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
50	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R433	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
51	7030003670	S.RESISTOR.	ERJ3GEYJ 823 V (82 kQ)	R434	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
52	7030003790	S.RESISTOR	ERJ3GEYJ 824 V (820 kQ)	R435	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
53	7030003770	S.RESISTOR	ERJ3GEYJ 564 V (560 kΩ)	R436	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
54	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)	R437	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
55	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)	R438	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
58	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kQ)	R439	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
57	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	R440	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
58	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	R443	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
59	7030003790	S.RESISTOR	ERJ3GEYJ 824 V (820 kΩ)	R444	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
60	7030003750	S.RESISTOR	ERJ3GEYJ 394 V (390 kQ)	R445	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
81	7030003390	S.RESISTOR	ERJ3GEYJ 391 V (390 Q)	R446	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
82	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)	R447	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
83	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ω)	R448	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
84	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)	R449	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
85	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)	R450	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
86	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)	R451	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
87	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)	R452	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
88	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)	R454	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
70	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	R455	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
71	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R458	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
72	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 kΩ)	R457	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ
73	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 kΩ)	R458	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
74	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)	R459	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
75	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R460	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
76	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)	R461	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
77	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R482	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
78	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R483	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
79	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R464	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
30	7030003890	S.RESISTOR	ERJ3GEYJ 124 V (120 kQ)	R465	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
81	7030003790	S.RESISTOR	ERJ3GEYJ 824 V (820 kΩ)	R466	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
82	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)	R467	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
33	7030003870	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)	R468	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
34	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)	R469	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
35	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)	R470	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
36	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)	R471	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ
		S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)	R472	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kg
37	7030003880	S.HESISTON	ERJ3GEYJ 104 V (100 kΩ)	11412	100000000		THE STATE OF THE S

[MAIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
R474	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
R475	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R476	7030000020	S.RESISTOR	MCR10EZHJ 1 Q (010)
R477 R478	7030001040	S.RESISTOR S.RESISTOR	MCR50JZHJ 18 Ω (180) ERJ3GEYJ 391 V (390 Ω)
R479	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R480	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R481	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kQ)
R482	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R483 R484	7030003800	S.RESISTOR S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ) ERJ3GEYJ 104 V (100 kΩ)
R485	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R486	7030000020	S.RESISTOR	MCR10EZHJ 1 Q (010)
R487	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R488	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R489	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R490 R491	7030003880 7030003500	S.RESISTOR S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ) ERJ3GEYJ 332 V (3.3 kΩ)
R492	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R497	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R498	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
R499	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kQ)
R501	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)
R502 R503	7030003440	S.RESISTOR S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ) ERJ3GEYJ 474 V (470 kΩ)
R504	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R505	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R506	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R507	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R508	7030003780 7030003480	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R510 R511	7030003480	S.RESISTOR S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ) ERJ3GEYJ 223 V (22 kΩ)
R512	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R513	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kQ)
R514	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R516	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kQ)
R517	7030003520 7030003640	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ) ERJ3GEYJ 473 V (47 kΩ)
R518 R519	7030003640	S.RESISTOR S.RESISTOR	ERJ3GEYJ 223 V (22 kQ)
R520	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 kΩ)
R521	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R522	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R523	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R524 R530	7030003370	S.RESISTOR S.RESISTOR	ERJ3GEYJ 271 V (270 Ω) ERJ3GEYJ 224 V (220 kΩ)
R532	7030003700	S.RESISTOR	ERJ3GEYJ 154 V (150 kΩ)
R533	7030003700	S.RESISTOR	ERJ3GEYJ 154 V (150 kΩ)
R534	7030003390	S.RESISTOR	ERJ3GEYJ 391 V (390 Q)
R535	7030000280	S.RESISTOR	MCR10EZHJ 150 Q (151) ERJ3GEYJ 103 V (10 kQ)
R536 R537	7030003580	S.RESISTOR S.RESISTOR	ERJ3GEYJ 332 V (3.3 kQ)
R538	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R539	7030003690	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R540	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R541	7030003840 7510000420	S.RESISTOR S.THERMISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R542 R543	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 kQ)
R544	7030000280	S.RESISTOR	MCR10EZHJ 150 Q (151)
R546	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Q)
	1	739	in the second
C1	4030011190	S.CERAMIC	GRM42-8 CH 270J 500PT
C1 C2	4030011190	S.CERAMIC S.CERAMIC	GRM42-8 CH 300J 500PT
C3	4030011180	S.CERAMIC	GRM42-8 CH 220J 500PT
C4	4030011260	S.CERAMIC	GRM42-8 W5R 102K 500PT
C5	4030011140	S.CERAMIC	GRM42-8 CH 120J 500PT
C6 C7	4030011250	S.CERAMIC S.CERAMIC	GRM42-6 W5R 471K 500PT GRM42-6 CK 010C 500PT
C8	4030011020	S.CERAMIC S.CERAMIC	GRM42-8 CH 300J 500PT
C9	4030011020	S.CERAMIC	GRM42-8 CK 010C 500PT
C10	4030011120	S.CERAMIC	GRM42-6 CH 100D 500PT
C11	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C12 C13	4030006860	S.CERAMIC S.CERAMIC	C1608 JB 1H 102K-T-A GRM42-6 CK 010C 500PT
C14	4030011020	S.CERAMIC S.CERAMIC	GRM42-8 CH 120J 500PT
C15	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
56.70	1000 - 400 PM (1200 PM)		

REF. NO.	ORDER NO.		DESCRIPTION
C16	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C17	4030011170	S.CERAMIC	GRM42-8 CH 180J 500PT
C18	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C19	4510008920	ELECTROLYTIC	25 MV 220 CG
C20 C21	4030007040	S.CERAMIC S.CERAMIC	C1608 CH 1H 180J-T-A C1608 CH 1H 180J-T-A
C22	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C23	4030006860	S.CERAMIC '	C1608 JB 1H 102K-T-A
C24	4510004830		ECEV1CA100SR
C25	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C28 C27	4030007020	S.CERAMIC S.CERAMIC	C1608 CH 1H 120J-T-A C1608 CH 1H 100D-T-A
C28	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C29	4030006930	S.CERAMIC	C1608 CH 1H 020C-T-A
C30	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C31	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C32	4030008880	S.CERAMIC	C1808 JB 1H 102K-T-A
C33 C34	4030007080	S.CERAMIC S.CERAMIC	C1608 CH 1H 270J-T-A C1608 CH 1H 150J-T-A
C36	4030007030	S.CERAMIC	C1608 CH 1H 020C-T-A
C37	4030006950	S.CERAMIC	C1608 CH 1H 040C-T-A
C38	4030006950	S.CERAMIC	C1608 CH 1H 040C-T-A
C39	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C40	4030006860 4030006860	S.CERAMIC S.CERAMIC	C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A
C41 C42	4030006860	S.CERAMIC S.CERAMIC	C1608 JB 1H 102K-1-A C1608 JB 1H 102K-T-A
C43	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C44	4030008950	S.CERAMIC	C1608 CH 1H 040C-T-A
C46	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C47	4030009570	S.CERAMIC	C1608 CH 1H 0R3B-T-A
C48	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C49 C50	4030007150 4030009570	S.CERAMIC S.CERAMIC	C1608 CH 1H 151J-T-A C1608 CH 1H 0R3B-T-A
C52	4030011280	S.CERAMIC	C1608 CH 1H 271J-T-A
C53	4030008950	S.CERAMIC	C1608 CH 1H 040C-T-A
C54	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C55	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C56	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C57 C58	4030008860 4030008860	S.CERAMIC S.CERAMIC	C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A
C60	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C81	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C82	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C63	4510004630		ECEVICA100SR
C64 C68	4030008860 4030008860	S.CERAMIC S.CERAMIC	C1808 JB 1H 102K-T-A C1808 JB 1H 102K-T-A
C69	4030008860	S.CERAMIC	C1808 JB 1H 102K-T-A
C70	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C71	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C72	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C73	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C74 C75	4550006350 4030011090	S.TANTALUM S.CERAMIC	TEMSVB2 1A 226M-8L GRM42-8 CH 070D 500PT
C78	4030011080	S.CERAMIC	GRM42-8 CH 040C 500PT
C77	4030011100	S.CERAMIC	GRM42-8 CH 080D 500PT
C78	4030011080	S.CERAMIC -	GRM42-8 CH 060D 500PT
C80	4030011250	S.CERAMIC	GRM42-8 W5R 471K 500PT
C81 C82	4030011090 4030011250	S.CERAMIC S.CERAMIC	GRM42-8 CH 070D 500PT GRM42-8 W5R 471K 500PT
C83	4030011250	S.CERAMIC S.CERAMIC	GRM42-8 CK 010C 500PT
C84	4030011120	S.CERAMIC	GRM42-8 CH 100D 500PT
1001740	4030011130	S.CERAMIC	[USA] GRM42-8 CH 110J 500PT
C85	4030006860	S.CERAMIC	except [USA] C1608 JB 1H 102K-T-A
C86	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C87	4030011020	S.CERAMIC	GRM42-8 CK 010C 500PT
C88	4030011150	S.CERAMIC	GRM42-8 CH 130J 500PT
C89 C90	4030006860 4030006860	S.CERAMIC S.CERAMIC	C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A
C91	4030006860	S.CERAMIC	GRM42-8 CH 040C 500PT
9550	4030011070	S.CERAMIC	[USA] GRM42-8 CH 050C 500PT
	Value de la constante de la co		except [USA]
C92	4030008880	S.CERAMIC	C1608 JB 1H 102K-T-A
C93	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A

ORDER REF. DESCRIPTION NO. NO. C94 4550008350 S.TANTALUM TEMSVB2 1A 226M-8L C95 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A **C97** 4030006930 S.CERAMIC C1608 CH 1H 020C-T-A S.CERAMIC C98 4030006930 C1608 CH 1H 020C-T-A 4030006980 **C99** S.CERAMIC C1608 CH 1H 050C-T-A C100 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C102 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C1608 CH 1H 070D-T-A C103 4030006980 S.CERAMIC S.CERAMIC C104 4030006860 C1608 JB 1H 102K-T-A C105 4030006930 S.CERAMIC C1608 CH 1H 020C-T-A S.CERAMIC C106 4030010780 C1608 CH 1H 1R5C-T-A S.CERAMIC C107 4030006860 C1608 JB 1H 102K-T-A S.CERAMIC C108 4030006860 C1608 JB 1H 102K-T-A C109 S.CERAMIC 4030007010 C1608 CH 1H 100D-T-A C110 S.CERAMIC 4030006860 C1608 JB 1H 102K-T-A S.CERAMIC C1608 CH 1H 100D-T-A C111 4030007010 S.CERAMIC C112 4030007010 C1608 CH 1H 100D-T-A [SEA] S.CERAMIC C1608 CH 1H 070D-T-A 4030006980 except [SEA] C113 4030007030 S.CERAMIC C1608 CH 1H 150J-T-A S.CERAMIC C114 4030008960 C1808 CH 1H 050C-T-A S.CERAMIC C115 4030006860 C1608 JB 1H 102K-T-A S.CERAMIC C116 4030008860 C1608 JB 1H 102K-T-A C117 4030007040 S.CERAMIC C1608 CH 1H 180J-T-A C119 S.CERAMIC 4030006860 C1608 JB 1H 102K-T-A C120 S.CERAMIC 4030006860 C1608 JB 1H 102K-T-A C121 S.CERAMIC 4030006860 C1608 JB 1H 102K-T-A C122 S.CERAMIC 4030006930 C1608 CH 1H 020C-T-A C123 S.CERAMIC 4030008950 C1608 CH 1H 040C-T-A C124 4030006940 S.CERAMIC C1608 CH 1H 030C-T-A C125 4030008970 S.CERAMIC C1808 CH 1H 080D-T-A [SEA] 4030008950 S.CERAMIC C1808 CH 1H 040C-T-A except [SEA] C126 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C127 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A C128 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C129 4030007020 S.CERAMIC C1808 CH 1H 120J-T-A S.CERAMIC C130 4030008880 C1608 JB 1H 102K-T-A S.CERAMIC C131 4030006860 C1808 JB 1H 102K-T-A S.CERAMIC C132 4030007040 C1608 CH 1H 180J-T-A C133 S.CERAMIC 4030008860 C1608 JB 1H 102K-T-A C134 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C135 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C136 4030009550 S.CERAMIC C1608 CH 1H 2R5B-T-A C137 4030006880 S.CERAMIC C1608 JB 1H 102K-T-A C138 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C1608 CH 1H 1R5C-T-A C139 4030010780 S.CERAMIC C140 4030010780 S.CERAMIC C1808 CH 1H 1R5C-T-A C1608 CH 1H 020C-T-A C141 4030006930 S.CERAMIC C142 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A S.CERAMIC C143 4030006940 C1608 CH 1H 030C-T-A C144 S.CERAMIC 4030006880 C1608 JB 1H 102K-T-A C145 S.CERAMIC 4030006930 C1608 CH 1H 020C-T-A S.CERAMIC C146 4030007050 C1608 CH 1H 220J-T-A S.CERAMIC C147 4030006860 C1608 JB 1H 102K-T-A C148 4030008680 S.CERAMIC C2012 JF 1C 105Z-T-A S.CERAMIC C149 4030006930 C1608 CH 1H 020C-T-A C150 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A C151 4030006860 S.CERAMIC C1608 CH 1H 050C-T-A C152 4030006960 S.CERAMIC S.CERAMIC C153 4030006960 C1608 CH 1H 050C-T-A S.CERAMIC C1808 CH 1H 020C-T-A C154 4030006930 S.CERAMIC C155 4030006860 C1608 JB 1H 102K-T-A C156 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C157 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C158 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C159 4030006990 S.CERAMIC C1608 CH 1H 080D-T-A C160 4030006930 S.CERAMIC C1608 CH 1H 020C-T-A [SEA] 4030008980 S.CERAMIC C1808 CH 1H 070D-T-A except [SEA] C161 S.ELECTROLYTIC ECEV1AA471UP 4510006260 C162 4030008760 S.CERAMIC C2012 X7R 1C 104K-T-A S.ELECTROLYTIC ECEV1CA331UP C163 4510006250

IMAIN UNIT!

REF. NO,	ORDER NO.	DESCRIPTION
C164	4510005810	S.ELECTROLYTIC ECEV1HAR47R
C165	4510004440	S.ELECTROLYTIC ECEV1HA010SR
C188	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C167	4030008630	S.CERAMIC C1808 JF 1C 104Z-T-A
C168	4030008850	S.CERAMIC C1608 JB 1H 471K-T-A
C169	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C171	4510006020	ELECTROLYTIC 16 MV 2200 HC
C172	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C173	4510004840	S.ELECTROLYTIC ECEV1CA470SP
C174	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C175	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C176	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C177	4510004840	S.ELECTROLYTIC ECEV1CA470SP
C178	4510004830	S.ELECTROLYTIC ECEV1CA100SR
C179	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C180	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C181	4510004640	S.ELECTROLYTIC ECEV1CA470SP
C182	4510004830	S.ELECTROLYTIC ECEV1CA100SR
C183	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C184	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C185	4510004840	S.ELECTROLYTIC ECEV1CA470SP
C186	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C187	4030008860	S.CERAMIC C1808 JB 1H 102K-T-A
C188	4030007050	S.CERAMIC C1608 CH 1H 220J-T-A
C189	4030007030	S.CERAMIC C1608 CH 1H 150J-T-A
C190	4030006960	S.CERAMIC C1608 CH 1H 050C-T-A
	V-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	[SEA]
	4030008940	S.CERAMIC C1608 CH 1H 030C-T-A
		except [SEA]
C191	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C192	4030006960	S.CERAMIC C1808 CH 1H 050C-T-A
C193	4030008880	S.CERAMIC C1608 JB 1H 102K-T-A
C194	4030008970	S.CERAMIC C1608 CH 1H 060D-T-A
C195	4030008880	S.CERAMIC C1608 JB 1H 102K-T-A
C196	4030007050	S.CERAMIC C1608 CH 1H 220J-T-A
	4030006860	[SEA] S.CERAMIC C1608 JB 1H 102K-T-A except [SEA]
C197	4030007060	S.CERAMIC C1808 CH 1H 270J-T-A
C198	4030008880	S.CERAMIC C1608 JB 1H 102K-T-A
C199	4030008880	S.CERAMIC C1608 JB 1H 102K-T-A
C200	4030006880	S.CERAMIC C1608 JB 1H 102K-T-A
C201	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C202	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C203	4030008860	S.CERAMIC C1608 JB 1H 102K-T-A
C204	4030009570	S.CERAMIC C1608 CH 1H 0R3B-T-A
C205	4030009570	S.CERAMIC C1608 CH 1H 0R3B-T-A
C208	4030008880	S.CERAMIC C1608 JB 1H 102K-T-A
C207	4030007170	S.CERAMIC C1608 CH 1H 221J-T-A
C208	4030007150	S.CERAMIC C1808 CH 1H 151J-T-A
C209	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C210	4550000530	S.TANTALUM TESVA 1V 104M1-8L
C211	4030006990	S.CERAMIC C1608 CH 1H 080D-T-A
C212	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C213	4030006880	S.CERAMIC C1608 JB 1H 102K-T-A
C214	4030006970	S.CERAMIC C1808 CH 1H 060D-T-A
	4030006940	S.CERAMIC C1608 CH 1H 030C-T-A
C215	403000000	except [SEA]
	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C216 C217	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 CH 1H 040C-T-A
C217	4030006860	S.CERAMIC C1808 CH 1H 040C-1-A
C219	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C220	4030007090	S.CERAMIC C1606 35 TH 102K-1-A
C221	4030007090	S.CERAMIC C1608 JB 1H 102K-T-A
C221	4030008860	S.CERAMIC C1606 JB TH 102K-1-A
C222	4030009570	S.CERAMIC C1608 CH 1H 0H3B-T-A
C225	4030008570	S.CERAMIC C1608 CH 1H 0H3B-1-A
	4030006860	- [- [- [- [- [- [- [- [- [- [
C226 C227		
C227 C231	4550000530 4030006860	
C231	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A S.CERAMIC C1808 JB 1H 102K-T-A
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	4030008860	[1.7] # [1.7]
C233		S.CERAMIC C1808 JB 1H 102K-T-A
C234 C235	4030006860 4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A

ORDER REF. DESCRIPTION NO. NO. 4030008680 S.CERAMIC C2012 JF 1C 105Z-T-A C236 C237 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A C238 4030006860 C239 S.CERAMIC C2012 JF 1C 105Z-T-A 4030008680 S.CERAMIC C1608 JB 1H 102K-T-A C240 4030008880 S.ELECTROLYTIC ECEV1CA100SR C241 4510004630 C242 S.TRIMMER CTZ3E-30C-W1 4610001980 C243 4030001820 S.CERAMIC GRM40 RH 220J 50PT C244 4030001800 S.CERAMIC **GRM40 RH 150J 50PT** C245 4030001830 S.CERAMIC GRM40 RH 330J 50PT C246 S.CERAMIC C1608 JB 1H 102K-T-A 4030006860 C247 4030006930 S.CERAMIC C1608 CH 1H 020C-T-A C248 4030006900 S.CERAMIC C1608 JB 1E 103K-T-A C249 4030007070 S.CERAMIC C1808 CH 1H 330J-T-A C252 4550002890 S.TANTALUM TESVA 1A 225M1-8L C254 4550000530 S.TANTALUM **TESVA 1V 104M1-8L** C255 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C258 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C259 S.CERAMIC C1608 JB 1H 102K-T-A 4030006860 C260 4030008880 S.CERAMIC C1608 JB 1H 102K-T-A C262 4030007020 S.CERAMIC C1808 CH 1H 120J-T-A C264 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C285 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C266 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A 4030006880 C267 S.CERAMIC C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A C288 4030006860 S.CERAMIC S.CERAMIC C1608 CH 1H 010C-T-A C269 4030006920 S.CERAMIC C1608 CH 1H 090D-T-A C270 4030007000 S.CERAMIC C1608 CH 1H 030B-T-A C271 4030009530 S.CERAMIC C1608 CH 1H 150J-T-A C272 4030007030 S.CERAMIC C1608 JB 1H 102K-T-A C273 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C274 4030006860 S.CERAMIC C1808 CH 1H 120J-T-A C275 4030007020 S.CERAMIC C2012 JF 1C 105Z-T-A C277 4030008680 S.CERAMIC C278 4030006860 C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 562K-T-A C279 4030008770 S.CERAMIC C1608 JB 1H 582K-T-A C280 4030008770 S.CERAMIC C1608 JB 1C 153K-T-A C281 4030008860 S.CERAMIC C1608 JB 1C 333K-T-A C282 4030008900 S.CERAMIC C1608 JB 1H 102K-T-A C283 4030008880 S.CERAMIC C284 4030008880 C1608 JB 1C 153K-T-A C1608 JB 1E 103K-T-A S.CERAMIC C285 4030006900 S.CERAMIC C2012 JF 1C 105Z-T-A C286 4030008680 C287 S.CERAMIC C1608 JB 1H 102K-T-A 4030006860 C289 4030008630 S.CERAMIC C1608 JF 1C 104Z-T-A S.CERAMIC C1608 JF 1C 104Z-T-A C290 4030008630 S.CERAMIC C1608 JB 1E 103K-T-A C291 4030006900 S.CERAMIC C1608 CH 1H 181J-T-A C292 4030007180 C293 4030008900 S.CERAMIC C1608 JB 1E 103K-T-A S.CERAMIC C1608 JB 1E 103K-T-A C294 4030008900 C295 4030008630 S.CERAMIC C1608 JF 1C 104Z-T-A 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C296 C298 4030007170 S.CERAMIC C1608 CH 1H 221J-T-A C299 4030007170 S.CERAMIC C1608 CH 1H 221J-T-A S.CERAMIC C300 4030006860 C1808 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A C301 4030006860 S.CERAMIC 4030008680 C2012 JF 1C 105Z-T-A C302 S.CERAMIC C303 4030007140 C1608 CH 1H 121J-T-A S.CERAMIC C2012 JB 1E 473K-T-A C304 4030005110 C1608 JF 1C 104Z-T-A S.CERAMIC C305 4030008630 4030007130 C1608 CH 1H 101J-T-A S.CERAMIC C306 4030006900 C307 S.CERAMIC C1608 JB 1E 103K-T-A C308 4030008630 S.CERAMIC C1608 JF 1C 104Z-T-A 4030008630 S.CERAMIC C309 C1608 JF 1C 104Z-T-A C1608 JF 1C 104Z-T-A C310 4030008630 S.CERAMIC S.CERAMIC C311 4030009980 C1608 JB 1H 152K-T-A 4030008910 S.CERAMIC C1608 JB 1C 393K-T-A C312 4030008630 S.CERAMIC C1808 JF 1C 104Z-T-A C313 S.CERAMIC C314 4030006860 C1808 JB 1H 102K-T-A C315 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A C316 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C317 C318 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A S.CERAMIC C319 4030006860 C1808 JB 1H 102K-T-A C320 4030008860 S.CERAMIC C1608 JB 1H 102K-T-A C321 4030008630 S.CERAMIC C1608 JF 1C 104Z-T-A

[MAIN UNIT]

REF.	ORDER	BP64DIRTIGH
NO.	NO.	DESCRIPTION
C322	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C323	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C324	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C325	4030007130	S.CERAMIC C1608 CH 1H 101J-T-A
C328 C327	4030007120 4030008470	S.CERAMIC C1608 CH 1H 820J-T-A S.CERAMIC C1608 JB 1H 272K-T-A
C328	4030009490	S.CERAMIC C1608 JB 1H 821K-T-A
C329	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C330 C331	4030008630 4510004630	S.CERAMIC C1608 JF 1C 104Z-T-A S.ELECTROLYTIC ECEV1CA100SR
C332	4030007020	S.CERAMIC C1608 CH 1H 120J-T-A
C333	4030008900	S.CERAMIC C1608 JB 1C 333K-T-A
C334	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C335 C336	4510004440 4510004630	S.ELECTROLYTIC ECEV1HA010SR S.ELECTROLYTIC ECEV1CA100SR
C337	4030008860	S.CERAMIC C1808 JB 1H 102K-T-A
C338	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C339 C340	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C340	4030008860	S.CERAMIC C1608 JB 1H 102K-T-A
C342	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C343	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C344 C345	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A S.CERAMIC C1608 JF 1C 104Z-T-A
C348	4030008860	S.CERAMIC C1808 JB 1H 102K-T-A
C347	4030008830	S.CERAMIC C1608 JF 1C 104Z-T-A
C348 C350	4510004630 4030006860	S.ELECTROLYTIC ECEV1CA100SR S.CERAMIC C1608 JB 1H 102K-T-A
C351	4030008830	S.CERAMIC C1808 JF 1C 104Z-T-A
C352	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C353	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C355 C356	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C357	4030008860	S.CERAMIC C1808 JB 1H 102K-T-A
C358	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C359 C360	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C401	4030006900	S.CERAMIC C1808 JB 1E 103K-T-A
C402	4030008830	S.CERAMIC C1808 JF 1C 104Z-T-A
C403	4510004630	S.ELECTROLYTIC ECEV1CA100SR
C404 C406	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 CH 1H 470J-T-A
C407	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C408	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C409 C410	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C411	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C412	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C413	4030006860	S.CERAMIC C1808 JB 1H 102K-T-A
C414 C415	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C416	4030007090	S.CERAMIC C1808 CH 1H 470J-T-A
C417	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A
C418 C422	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A S.CERAMIC C1608 CH 1H 220J-T-A
C422	4030007050	S.CERAMIC C1608 CH 1H 220J-T-A
C424	4030009660	S.CERAMIC C1808 JF 1C 224Z-T-A
C425	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A S.CERAMIC C1608 JB 1E 103K-T-A
C426 C428	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A S.CERAMIC C1608 JB 1E 103K-T-A
C429	4030006900	S.CERAMIC C1608 J8 1E 103K-T-A
C430	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C432 C433	4030008900	S.CERAMIC C1608 JB 1E 103K-T-A S.CERAMIC C1608 JF 1C 104Z-T-A
C434	4030006930	S.CERAMIC C1608 CH 1H 020C-T-A
C435	4030008680	S.CERAMIC C2012 JF 1C 105Z-T-A
C437	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 JB 1H 102K-T-A
C438 C439	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C1608 CH 1H 470J-T-A
C440	4030006960	S.CERAMIC C1608 CH 1H 050C-T-A
C441	4030007110	S.CERAMIC C1608 CH 1H 680J-T-A
C442 C443	4030007110	S.CERAMIC C1608 CH 1H 680J-T-A S.CERAMIC C1608 JF 1C 104Z-T-A
C444	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C445	4030008630	S.CERAMIC C1608 JF 1C 104Z-T-A
C448	4030010780	S.CERAMIC C1808 CH 1H 1R5C-T-A

ORDER REF. DESCRIPTION NO. NO. C447 4030007010 S.CERAMIC C1808 CH 1H 100D-T-A C489 4030011080 S.CERAMIC GRM42-6 CH 060D 500PT C490 4030007090 S.CERAMIC C1808 CH 1H 470J-T-A S.ELECTROLYTIC ECEV1CA220SR C491 4510005310 C492 4550002890 S.TANTALUM TESVA 1A 225M1-8L S.CERAMIC C493 4030006860 C1608 JB 1H 102K-T-A C494 4550002890 S.TANTALUM **TESVA 1A 225M1-8L** 4030009570 S.CERAMIC C495 C1608 CH 1H 0R3B-T-A C496 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A C497 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C498 4030006860 C1608 JB 1H 102K-T-A C499 4030006860 S.CERAMIC C1808 JB 1H 102K-T-A C500 4030011080 S.CERAMIC GRM42-8 CH 060D 500PT 4030006860 S.CERAMIC C501 C1808 JB 1H 102K-T-A C502 4030006860 S.CERAMIC C1608 JB 1H 102K-T-A S.CERAMIC C503 4030008860 C1608 JB 1H 102K-T-A C1608 JB 1H 102K-T-A C504 4030006860 S.CERAMIC C505 4030008860 S.CERAMIC C1808 JB 1H 102K-T-A C508 4030008680 S.CERAMIC C2012 JF 1C 105Z-T-A C1808 JB 1H 102K-T-A C507 4030006860 S.CERAMIC C508 4030006980 S.CERAMIC C1608 CH 1H 070D-T-A C509 4030008560 S.CERAMIC C1608 CH 1H 300J-T-A C510 4030008860 S.CERAMIC C1808 JB 1H 102K-T-A C512 4510004640 S.ELECTROLYTIC ECEV1CA470SP C513 4030010780 S.CERAMIC C1608 CH 1H 1R5C-T-A C517 4030007170 S.CERAMIC C1808 CH 1H 221J-T-A S.CERAMIC C518 4030007170 C1608 CH 1H 221J-T-A C521 4030006990 S.CERAMIC C1608 CH 1H 080D-T-A except [SEA] C522 4030007030 S.CERAMIC C1608 CH 1H 150J-T-A except [SEA] C523 4030007000 S.CERAMIC C1608 CH 1H 090D-T-A except [SEA] C526 4030006980 S.CERAMIC C1608 CH 1H 070D-T-A except [SEA] C527 4030006870 S.CERAMIC C1608 JB 1H 222K-T-A except [SEA] 8510014790 CONNECTOR J1 53253-0210 8450001440 J2 CONNECTOR HSJ1403-01-010 8450001840 CONNECTOR J3 TCS7588-43-201 J4 6510014960 S.CONNECTOR B2B-ZR-SM3-TF J11 8510018480 CONNECTOR 52018-8845 J12 8510019321 CONNECTOR 1729 REAR CONNECTOR-1 7120000470 W١ JUMPER ERDS2T0 W2 ERDS2T0 7120000470 JUMPER W3 7120000470 JUMPER ERDS2T0 W4 8900004880 CABLE OPC-465 W5 7030003860 **ERJ3GE JPW V** S.JUMPER W6 7030003860 S.JUMPER ERJ3GE JPW V W7 7030003860 S.JUMPER ERJ3GE JPW V W9 7030000010 S.JUMPER MCR10EZHJ JPW (000) W14 7120000470 **JUMPER** except [EUR] ERDS2T0 7030003860 W15 S.JUMPER ERJ3GE JPW V 7030003860 S.JUMPER W16 ERJ3GE JPW V W17 7030003860 S.JUMPER ERJ3GE JPW V W18 7030003860 S.JUMPER ERJ3GE JPW V W19 7030003860 S.JUMPER ERJ3GE JPW V **ERJ3GE JPW V** W20 7030003860 S.JUMPER

S:JUMPER

S.JUMPER

S.JUMPER

S.JUMPER

S.JUMPER

ERJ3GE JPW V

MCR10EZHJ JPW (000)

W21

W22

W23

W24

W29

W30

W31

W32

W33

W34

W36

W37

W38

W39

7030003860

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REF. NO.	ORDER NO.		DESCRIPTION	
W40	7030000010	S.JUMPER	MCR10EZHJ JPW (000)	
W41	7030003860	S.JUMPER	ERJ3GE JPW V	
W42	7030003860	S.JUMPER	ERJ3GE JPW V	
W43	7030003860	S.JUMPER	ERJ3GE JPW V	
W44	7030003860	S.JUMPER		SEA)
W45	7030003860	S.JUMPER	이번 경기 시청하다면서 현실에 되어지지 않아 보니까요? 요즘 없는 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	SEA]
	100000000	O.S.G.IIII Z.I.	LINGS N. T.	<u>,</u>
EP1	0910047635	PCB	B 4854E	
			V	
		i i		

SECTION 7 MECHANICAL PARTS

[CONTROL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510019310	1729 front connector	1
R39	7210002920	EVU-F2AF20B55 (560K) [SQL]	1
R43	7210002920	EVU-F2AF20B55 (560K) [VOL]	1
S1	2250000370	Encoder EVQ-VENF0124B	1
DS3	5030001470	LCD LD-HU4649E	ĭ
EP2	8930041630	LCD CONTACT SRCN-1893-SP-N-W	1
MP1	8210014720	1893 front panel (A)	1
MP2	8210014160	1893 rear panel [SEA]	1
	8210014830	1893 rear panel (A) expect [SEA]	1
MP3	8930041850	1893 LCD filter	1
MP4	8210014170	1893 reflector	1
MP5	8930041530	1893 A-key	1
MP6	8930041540	1893 B-key	1
MP7	8610010311	Knob K224-1	1
MP8	8930006440	Spring (F)	1
MP9	8610010320	Knob K225	6
MP10	8930041880	1893 key sponge	1
MP11	8610010330	Knob N257	1
MP13	8610010340	Knob N258	1
MP15	8610010350	Knob N259	1
MP17	8810008990	PH BT M2 X10 ZK	3
MP18	8810008990	PH BT M2 X10 ZK	2
MP20	8510011220	1893 LCD plate	1
MP21	8930043831	Insulation sheet (FF)-1	3

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY
J3	6450001840	Connector TCS7568-43-201	1
J12	6510019321	1729 rear connector-1	1
MP1	8510009720	1647 VCO case	1
MP2	8930037120	1647 M-holder	2
MP3	8930038170	1647 spacer	1
MP4	8510011290	1893 A-CPU plate	1
MP5	8510011310	1893 A-shield plate	1
MP6	8510011300	1893 modular plate expect [SEA]	1

[UNPACKING]

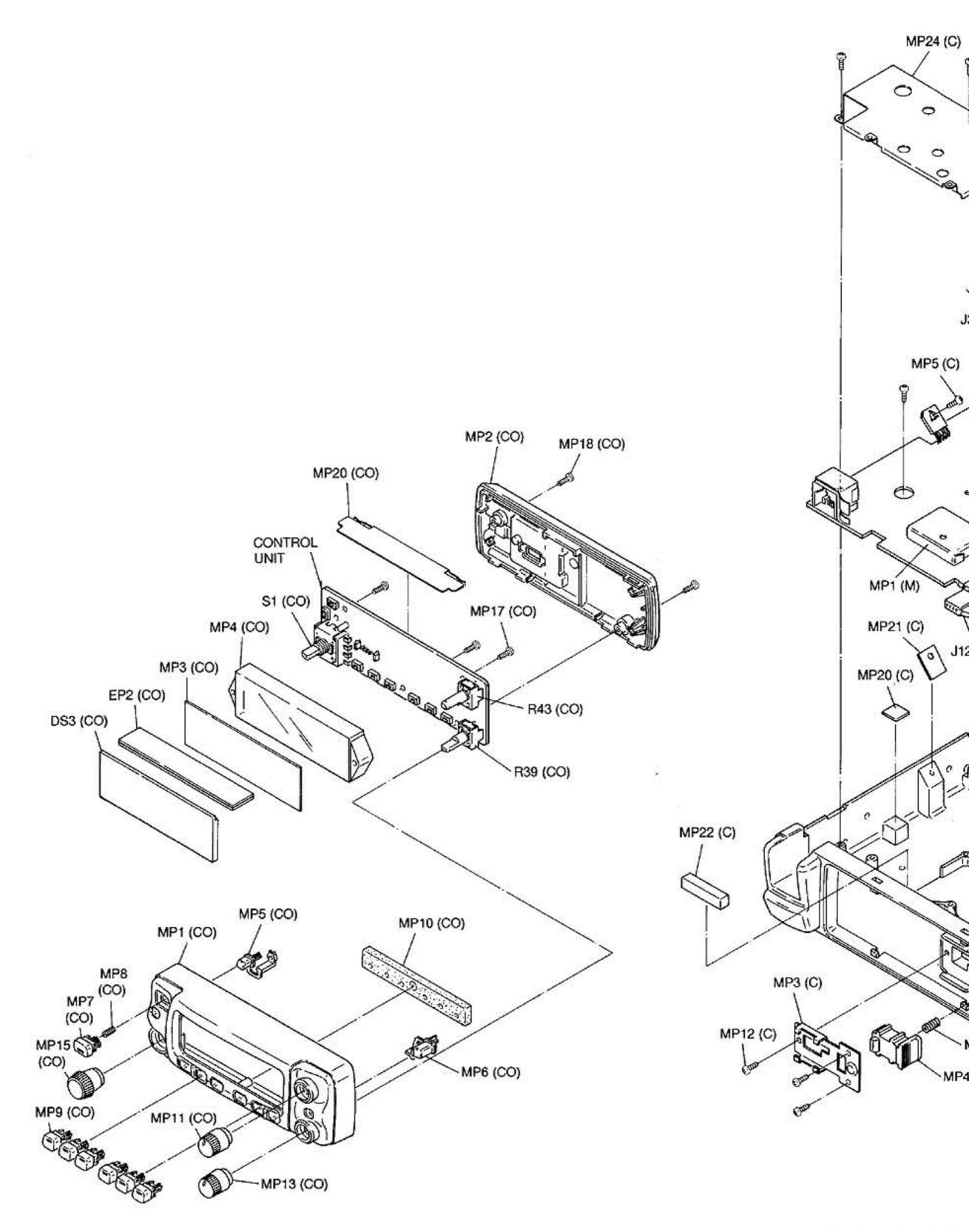
REF. NO.	ORDER NO.	DESCRIPTION	QTY
F1	5210000080	Fuse FGB 20A	1
W1	Optional product	Cable OPC-346	1
MC1	Optional product	Microphone HM-98 expect [SEA]	1
	Optional product	Microphone HM-96 [SEA]	
MP1	8010016380	1542 MOBIL BRACKET (B)	ĭ
MP3	8820000530	Flange volt M4 X 8 NI	4
MP4	8810000470	PH M5 X12 (+-)	4
MP5	8810000950	PH A M5 X16	4
MP6	8850000150	Flat washer M 5 NI BS	4
MP7	8850000390	Spring washer M 5	4
MP8	8830000120	Nut M 5	4

[CHASSIS PART]

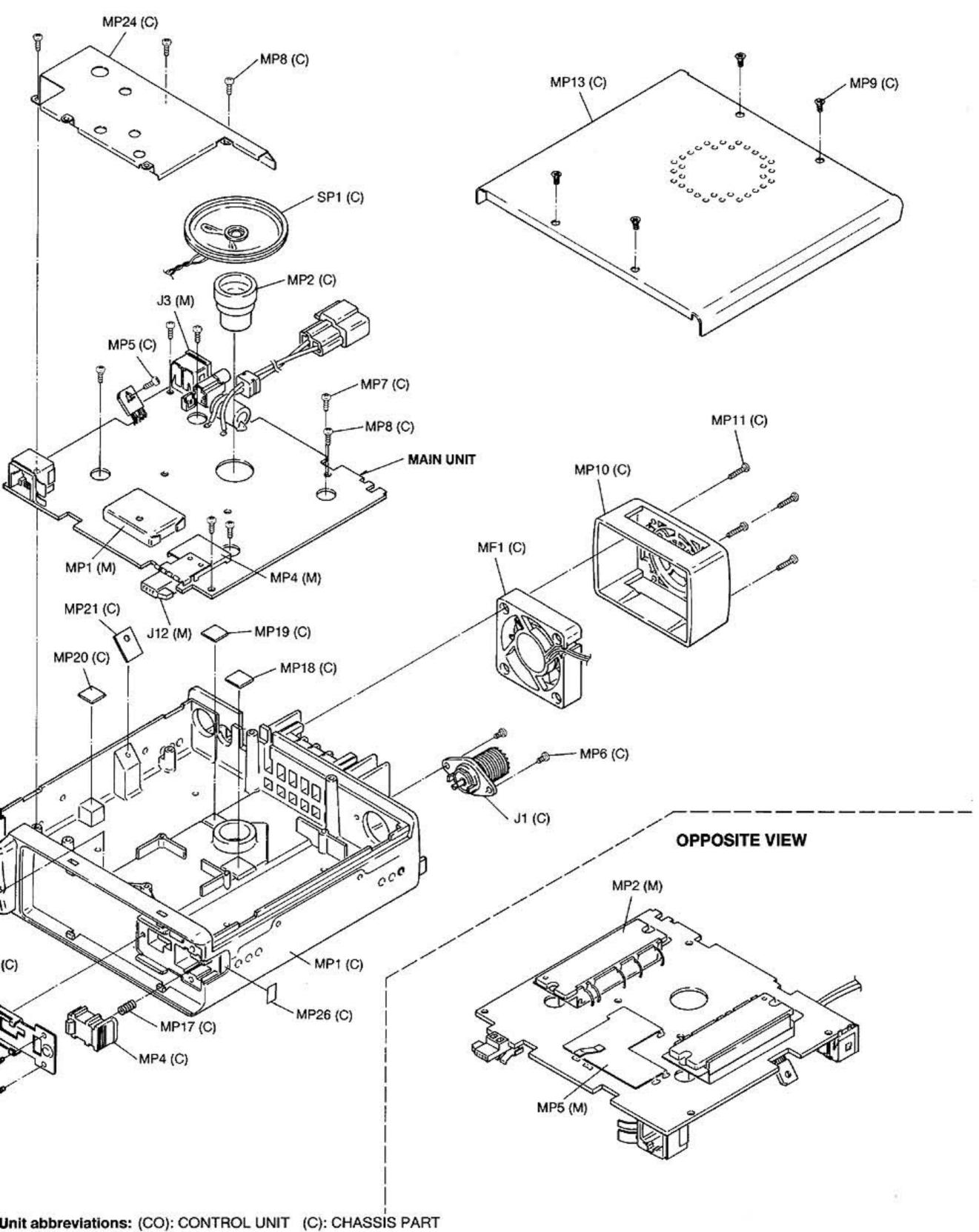
REF. NO. ORDER NO.		DESCRIPTION	QTY	
J1	6510004880	Connector MR-DSE-01	1	
MF1	2710000590	Fan MF40D-12H-001	1	
SP1	2510000820	Speaker VS-57-0814	1	
MP1	8010016782	1893 chassis-2	1	
MP2	8930041571	1893 SP rubber-1	.1	
MP3	8930041551	1893 OPC plate-1	1	
MP4	8930041560	1893 release button	1	
MP5	8810009140	PH M2.6 X 6 ZK	1	
MP6	8810008630	PH BT M3 X 6 NI-ZU	2	
MP7	8810008660	PH BT M3 X 8 NI-ZU	4	
MP8	8810008660	PH BT M3 X 8 NI-ZU	6	
MP9	8810009020	FH M2.6 X 5 ZK	4	
MP10	8110005750	1729 fan cover	1	
MP11	8810009110	PH 0 M2.6 X16 ZK	4	
MP12	8810009140	PH M2.6 X 6 ZK	3	
MP13	8110005960	1893 cover	1	
MP17	8930041870	Spring (AC)	1	
MP18	8930039610	Thermally sheet (C)	1	
MP19	8930039610	Thermally sheet (C)	1	
MP20	8930039610	Thermally sheet (C)	1	
MP21	8930043010	1893 sheet	1	
MP22	8930043020	Rubber sheet (AC)	1	
MP24	8510011200	1893 shield cover	1	
MP26	8930043840	1893 A-sheet	1	

Screw abbreviations

BT: Self-tapping FH: Flat head NI-ZK: Nickel-Zinc PH: Pan head ZK: Black BS: Brass



Unit abbreviations: (CO



(M): MAIN UNIT

SECTION 8 SEMI-CONDUCTOR INFORMATION

• TRANSISTOR AND FET'S

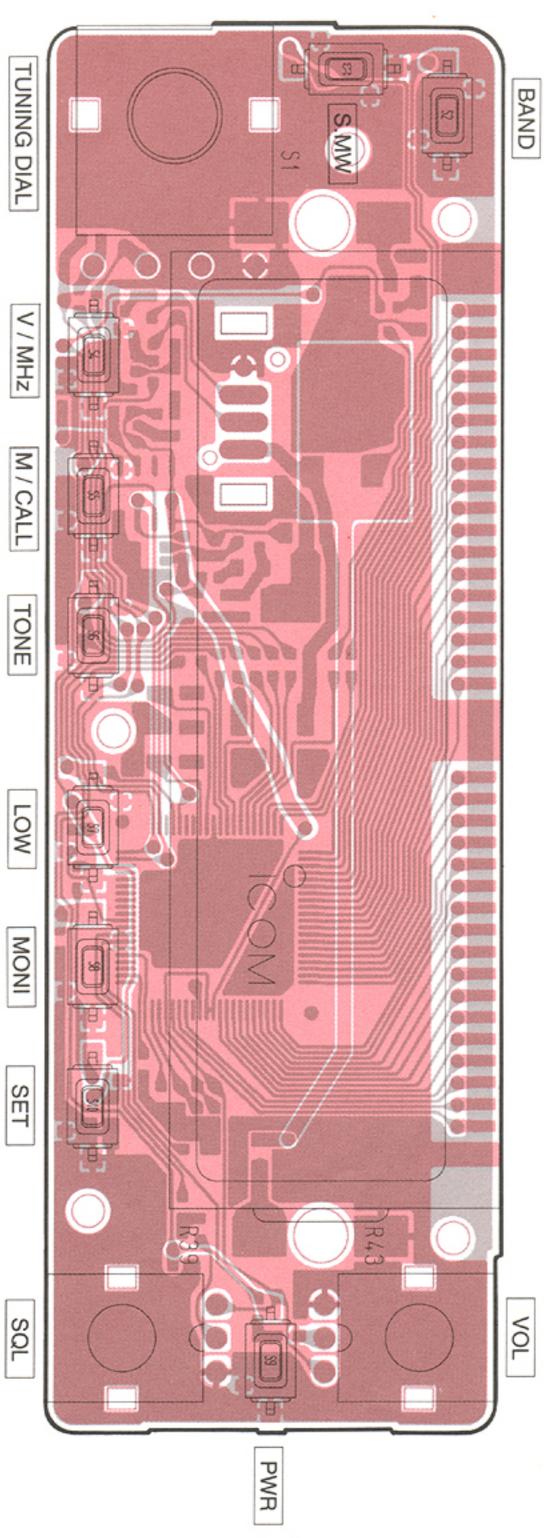
2SA1362 GR (Symbol: AEG)	2SA1576 S (Symbol: FS)	2SA1586 Y (Symbol: SY)	2SA1870 TLE (Symbol: A1870)	2SB1182 (Symbol: B1182)
				BC E
2SB798 DK (Symbol: DK)	2SC2954 (Symbol: QK)	2SC3357 (Symbol: RK)	2SC4081 R (Symbol: BR)	2SC4081 S (Symbol: BS)
2SC4116 BL (Symbol: LL)	2SC4213 B (Symbol: AB)	2SC4215 Y (Symbol: QY)	2SC4226 R25 (Symbol: R25)	2SC4228 T2 (Symbol: R45)
2SD999 CK (Symbol: CK)	2SJ144 GR (Symbol: VG)	3SK166 2 (Symbol: K)	3SK184 S (Symbol: 3R)	DTA113ZU (Symbol: 111)
	\$ C C C C C C C C C C C C C C C C C C C	* [2	
DTB123EK (Symbol: F12)	DTC143XU T107 (Symbol: 43)	DTC143ZU (Symbol: 123)	DTC144EU (Symbol: 26)	UMD3N TL (Symbol: D3)
UMG9N TL (Symbol: G9)	UMH2N TN (Symbol: H2)			
		53 2 5		

• DIODES

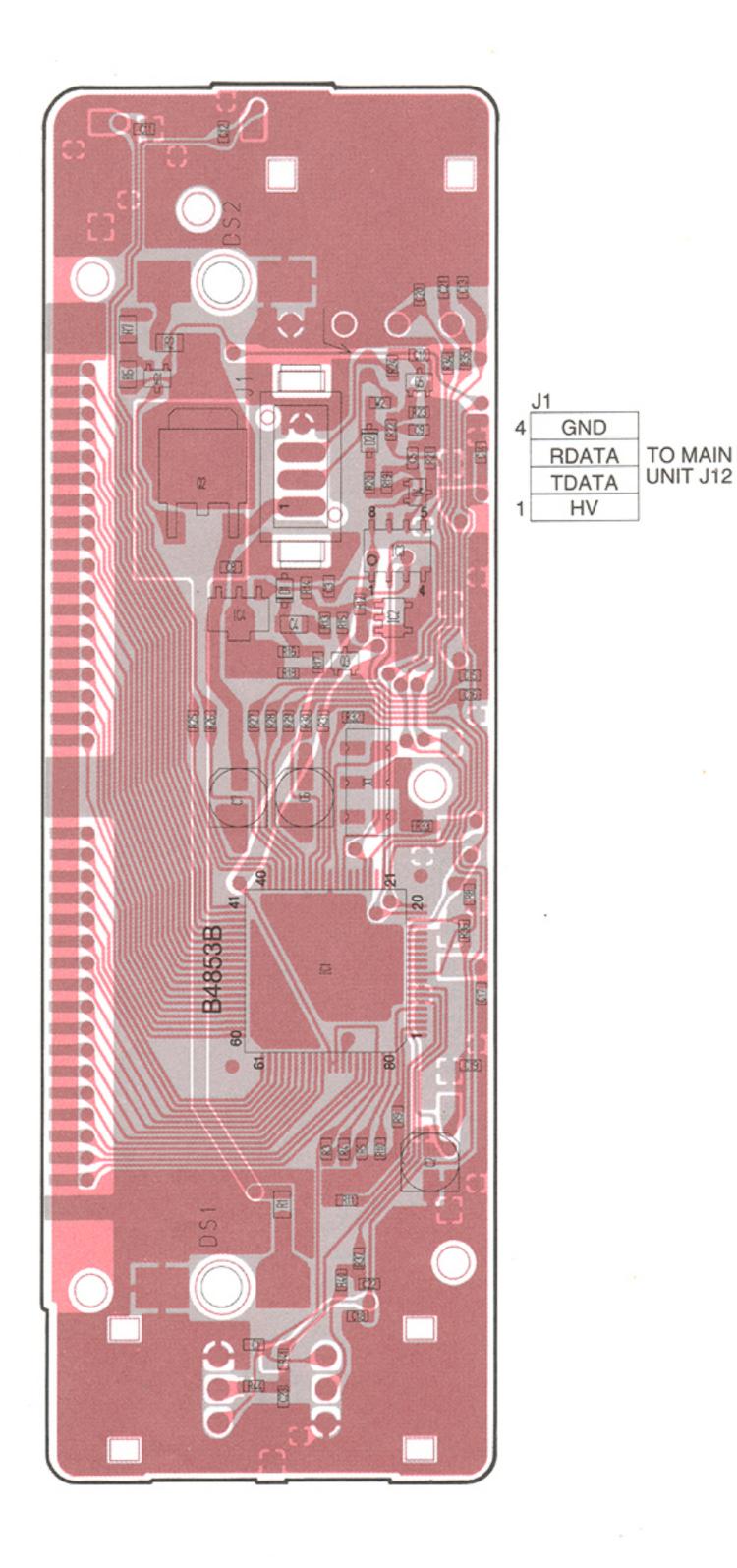
1SV284 (TPH3) (Symbol: TL)	DA114 (Symbol: AV)	DA221 (Symbol: K)	(Symbol: N)
d_ _ p			
MA742 (Symbol: M1U)	MA8075 L (TX) (Symbol: 7_5)	MA862 (Symbol: M1I)	
	□ ■ □□		1 =
	(Symbol: TL)	(Symbol: AV) MA742 (Symbol: M1U) (Symbol: 7_5)	(Symbol: AV) (Symbol: K) MA742 (Symbol: M1U) (Symbol: 7_5) (Symbol: M1I)

SECTION 9 BOARD LAYOUTS

TOP VIEW

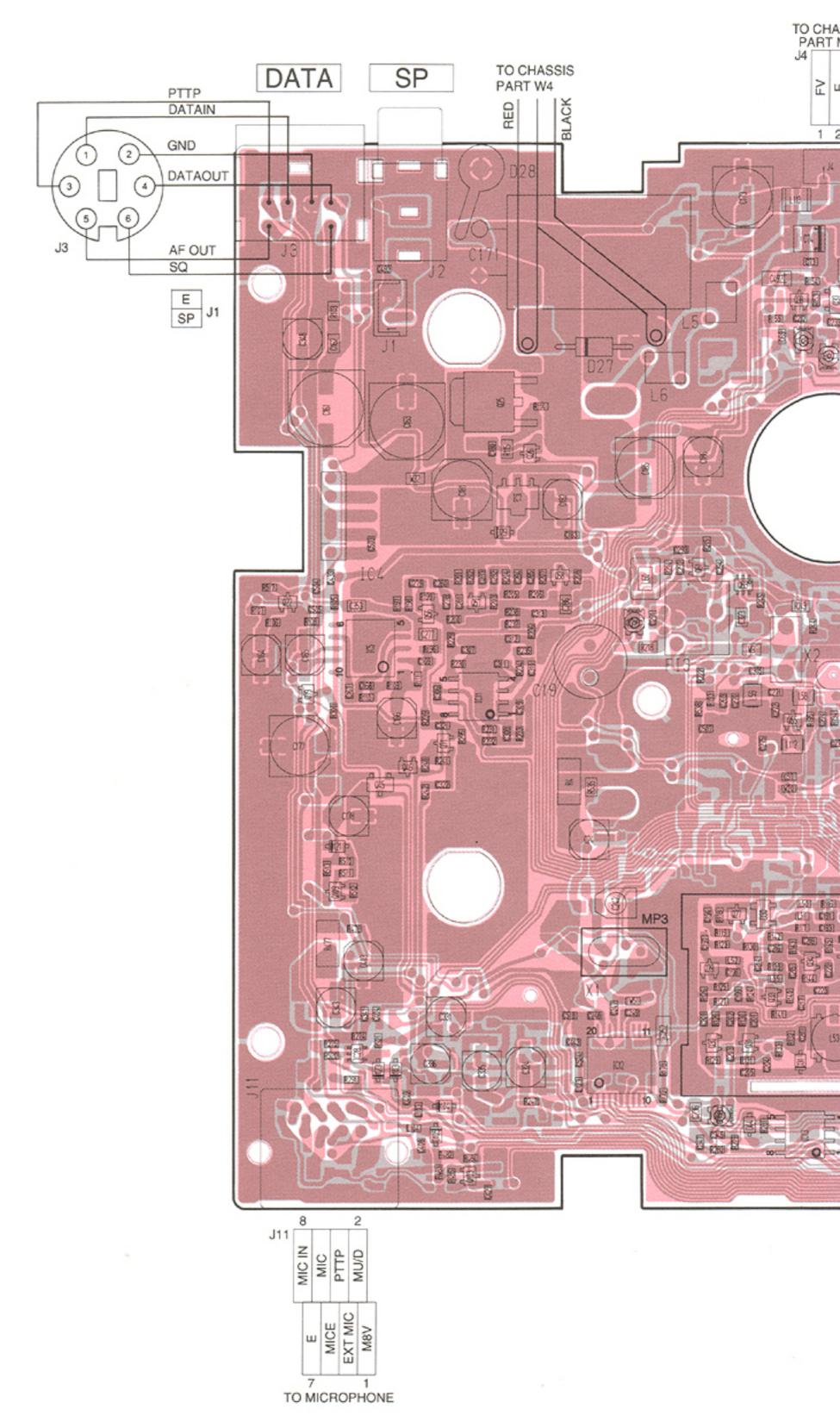


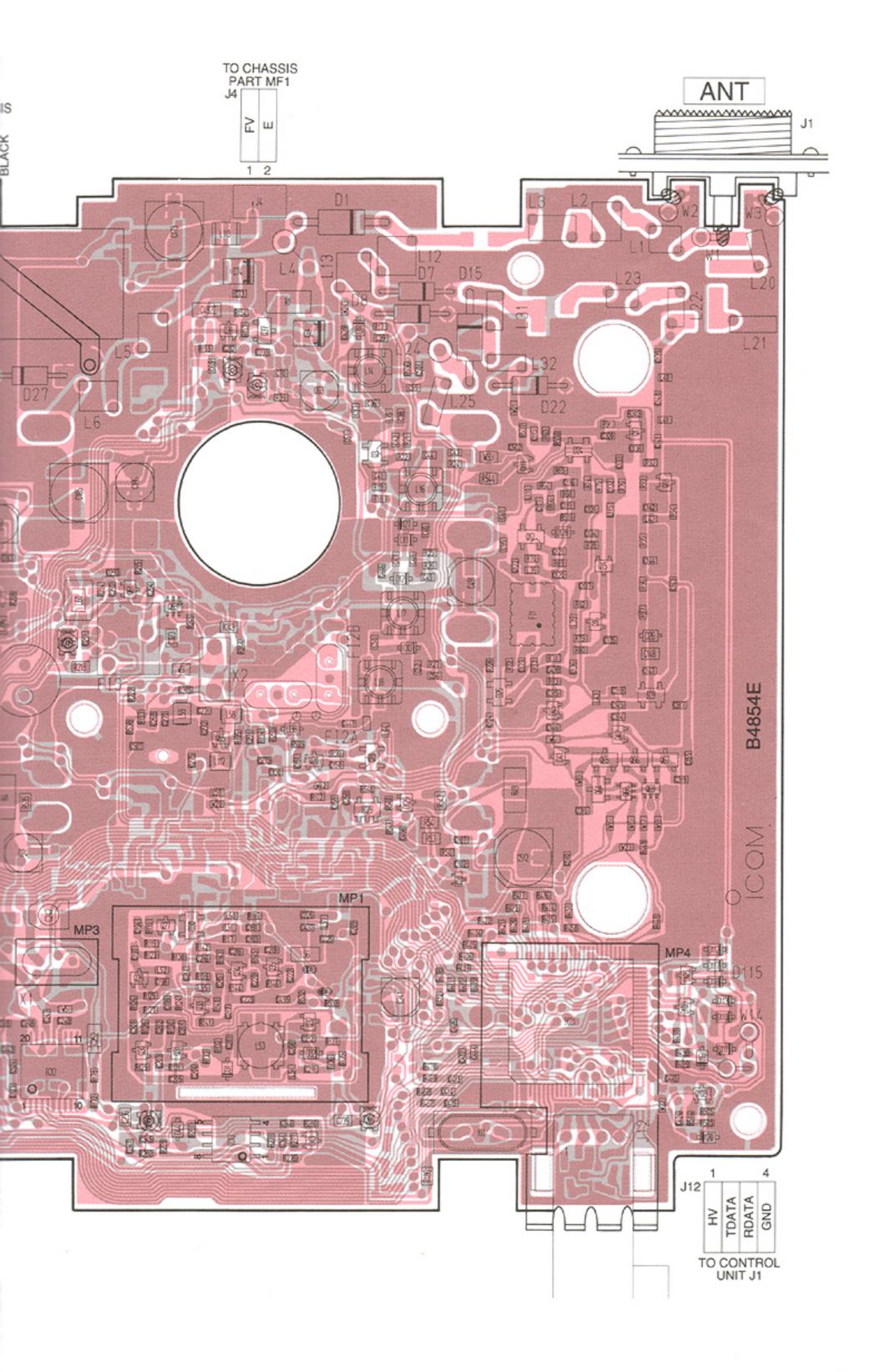
BOTTOM VIEW



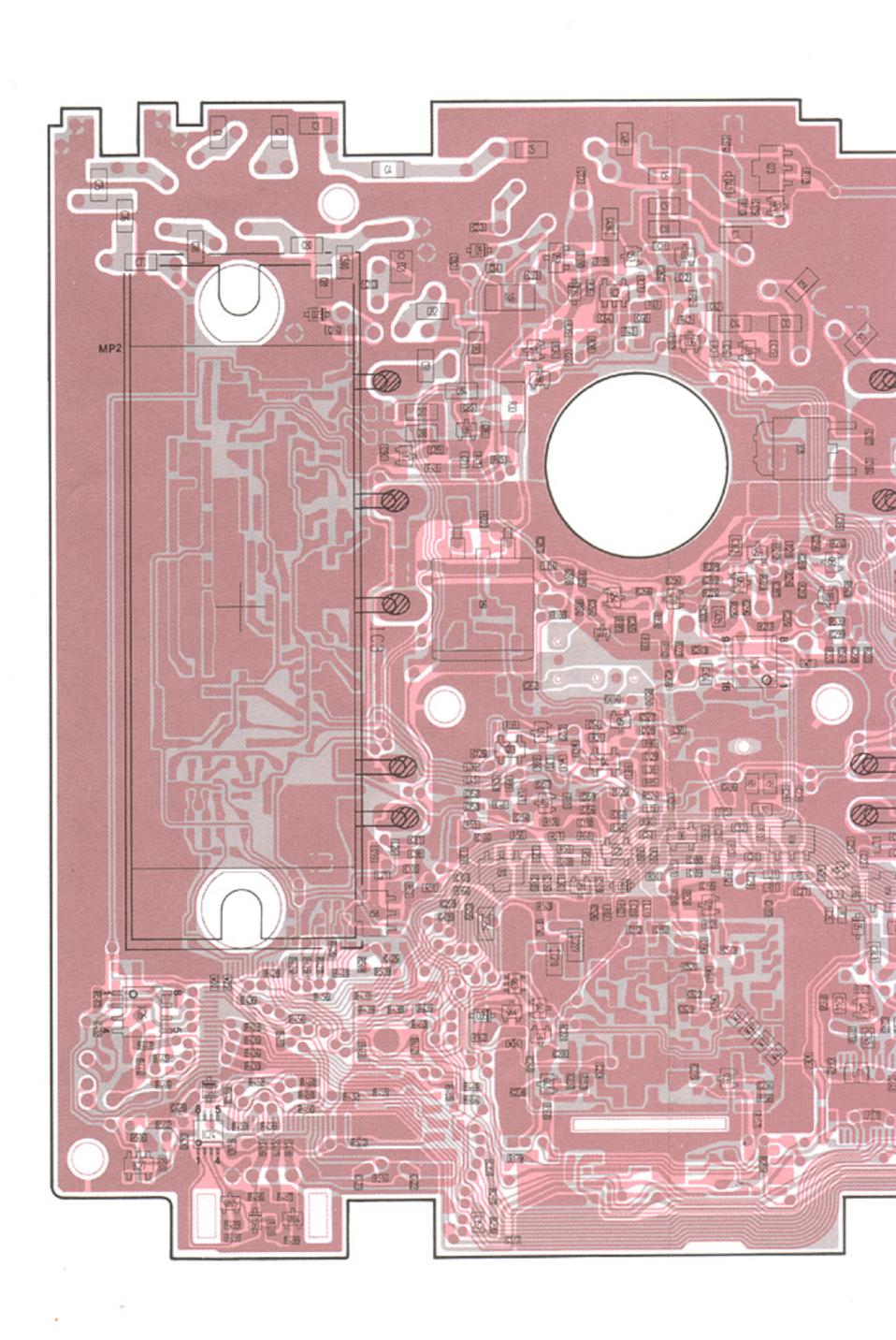
9-2 MAIN UNIT

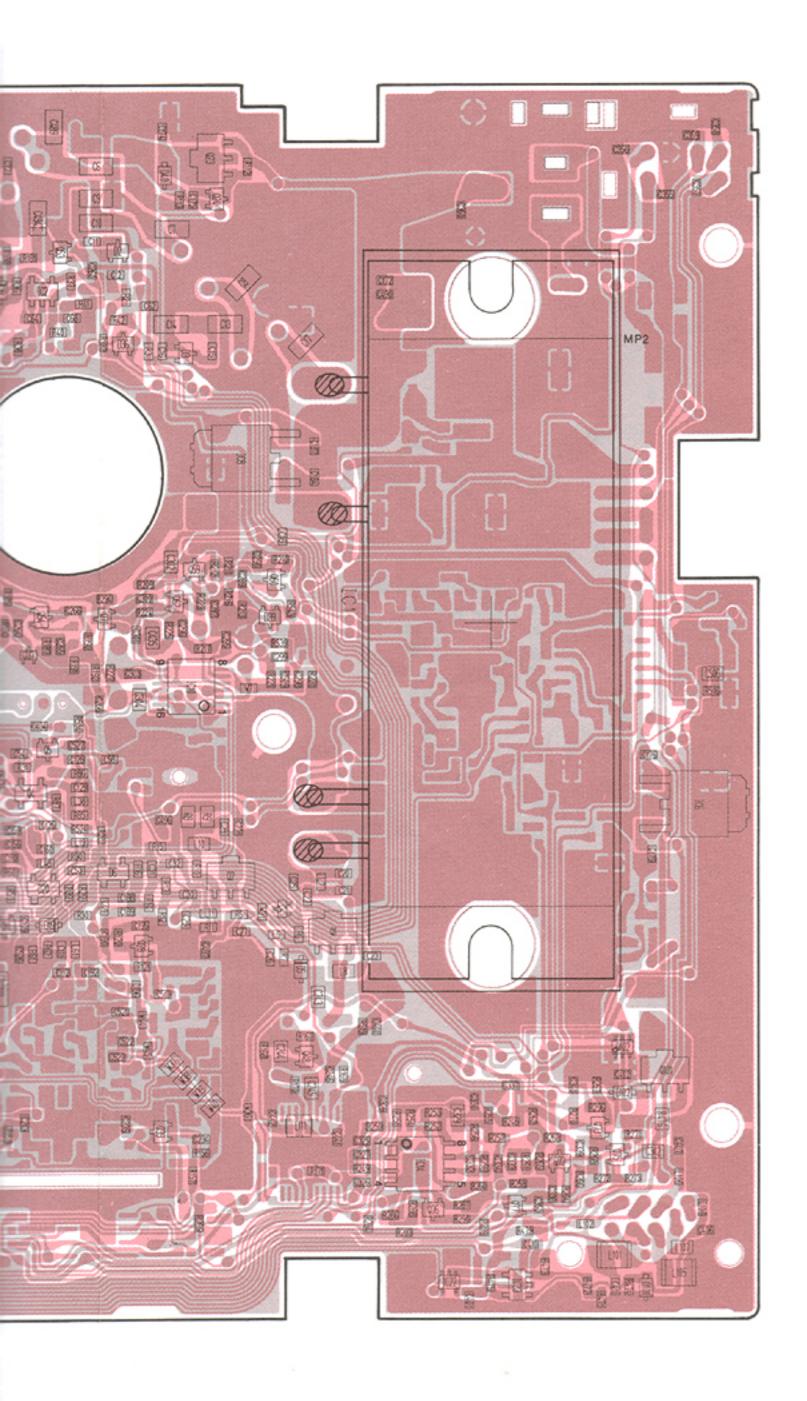
TOP VIEW



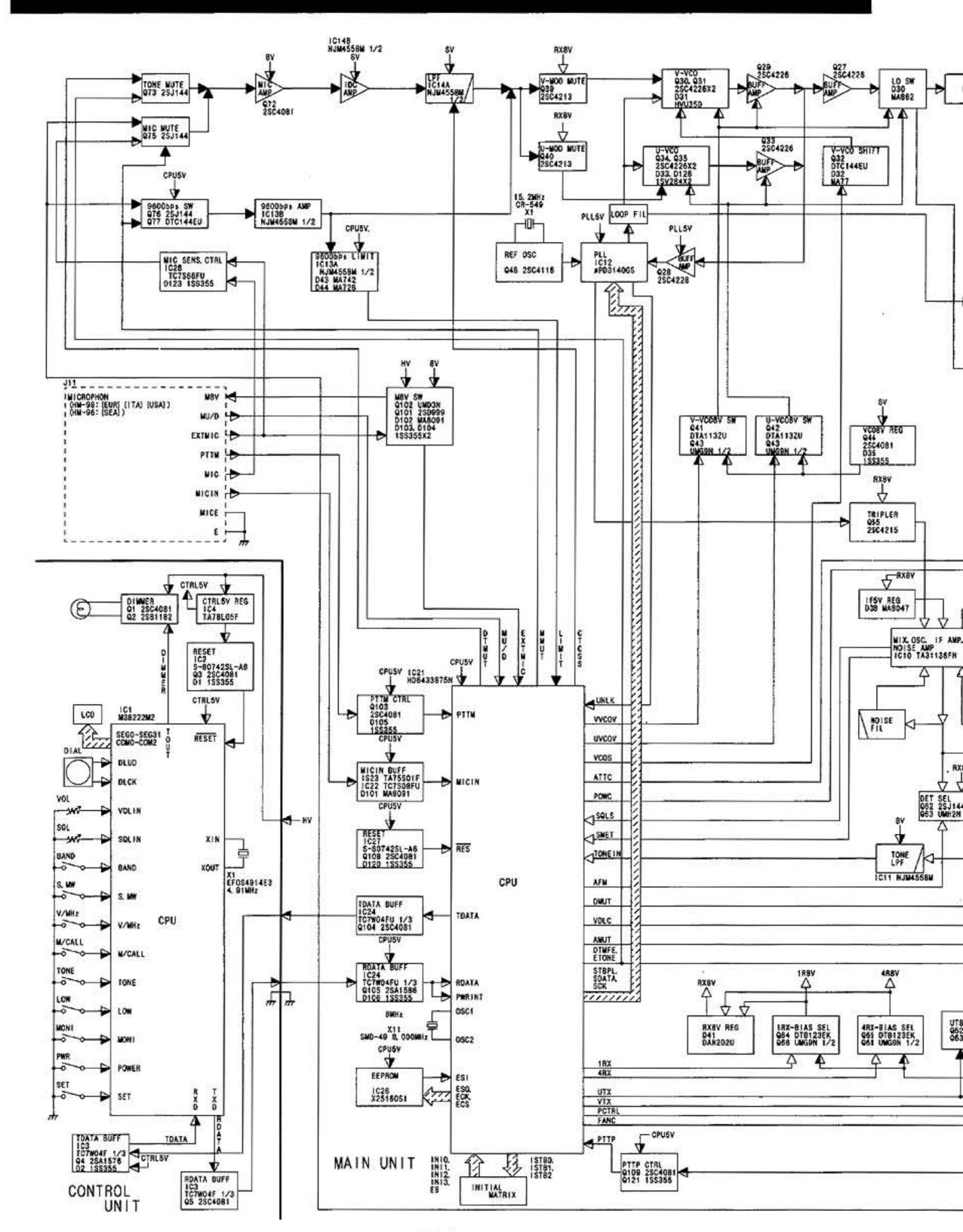


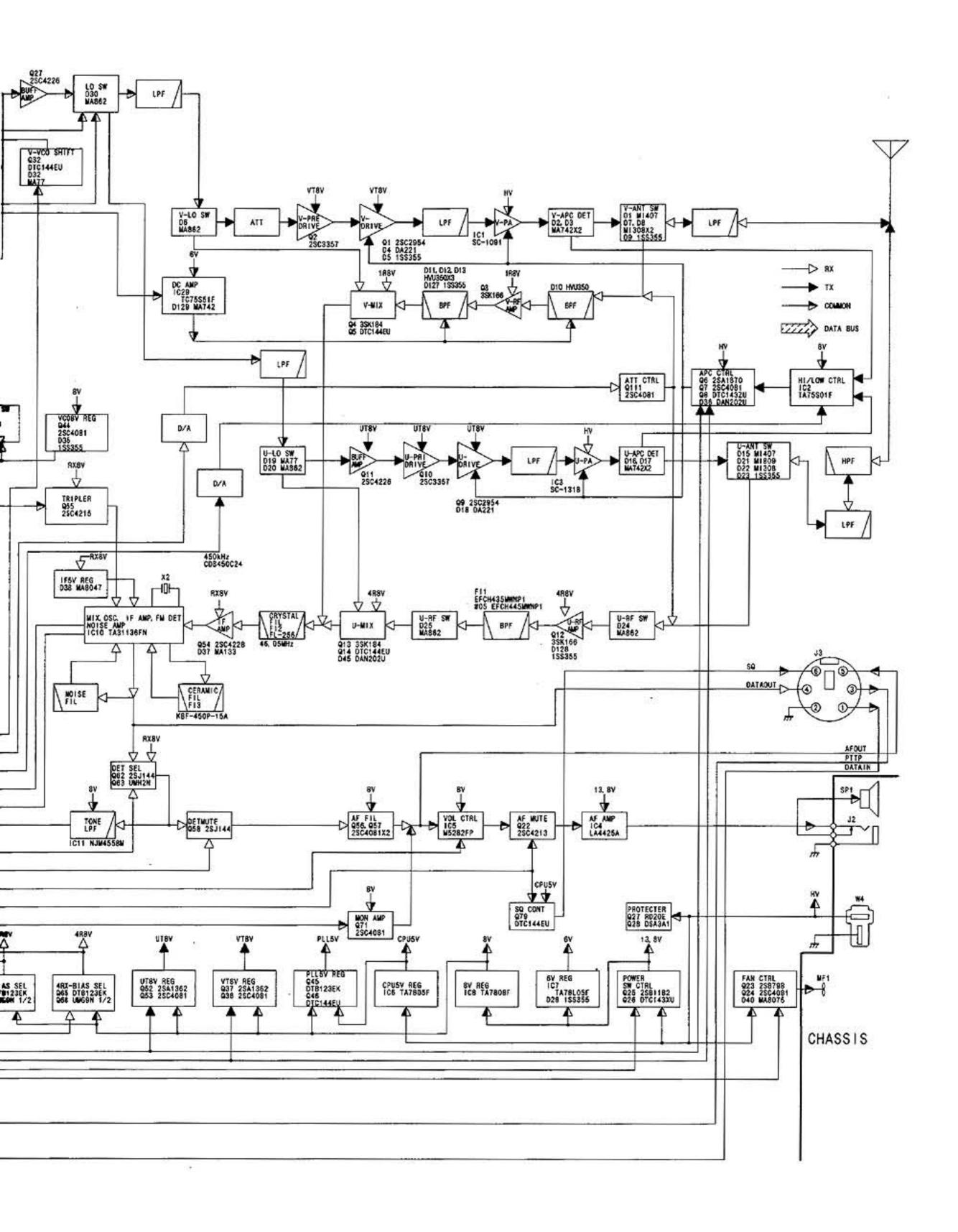
BOTTOM VIEW





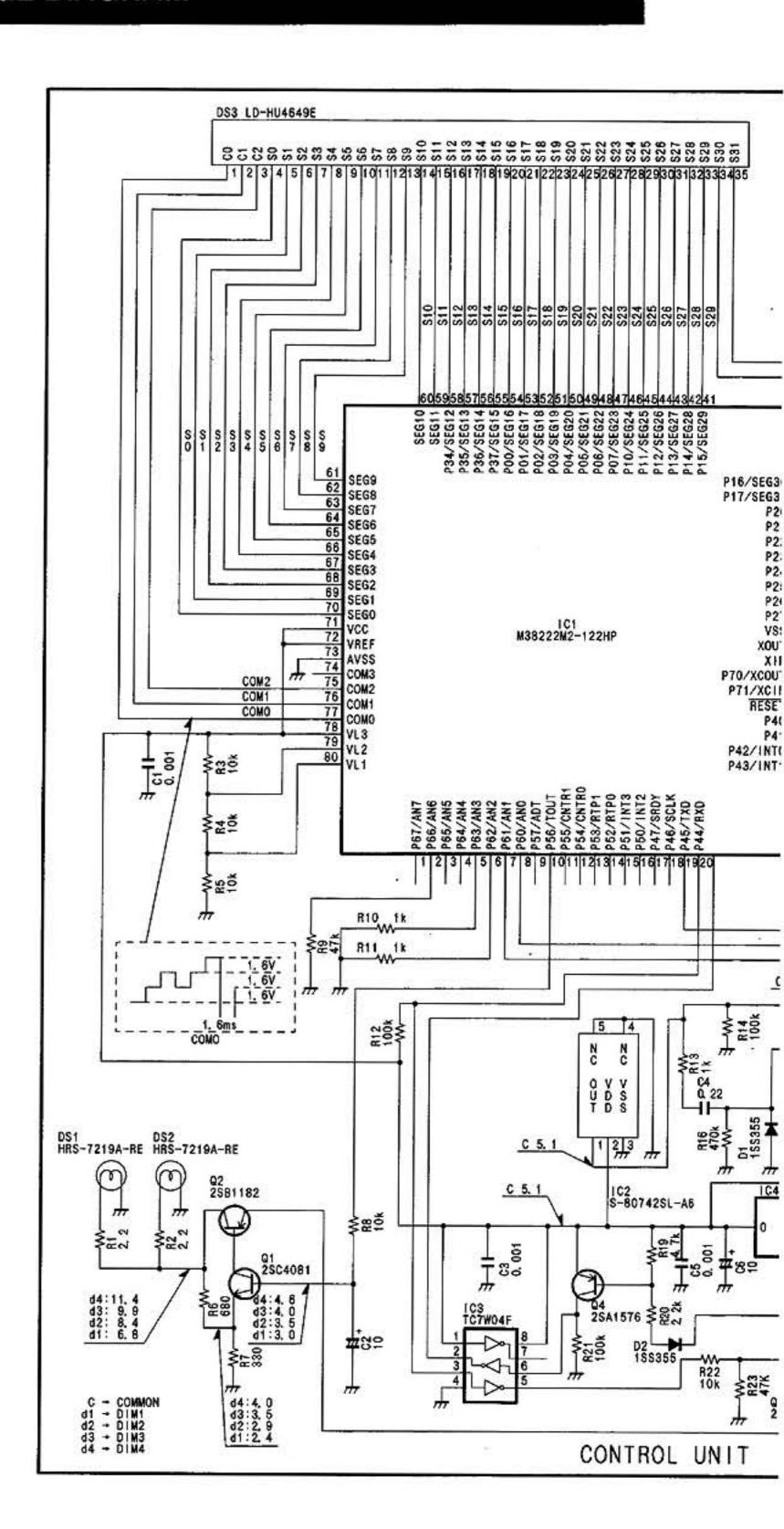
SECTION 10 BLOCK DIAGRAM

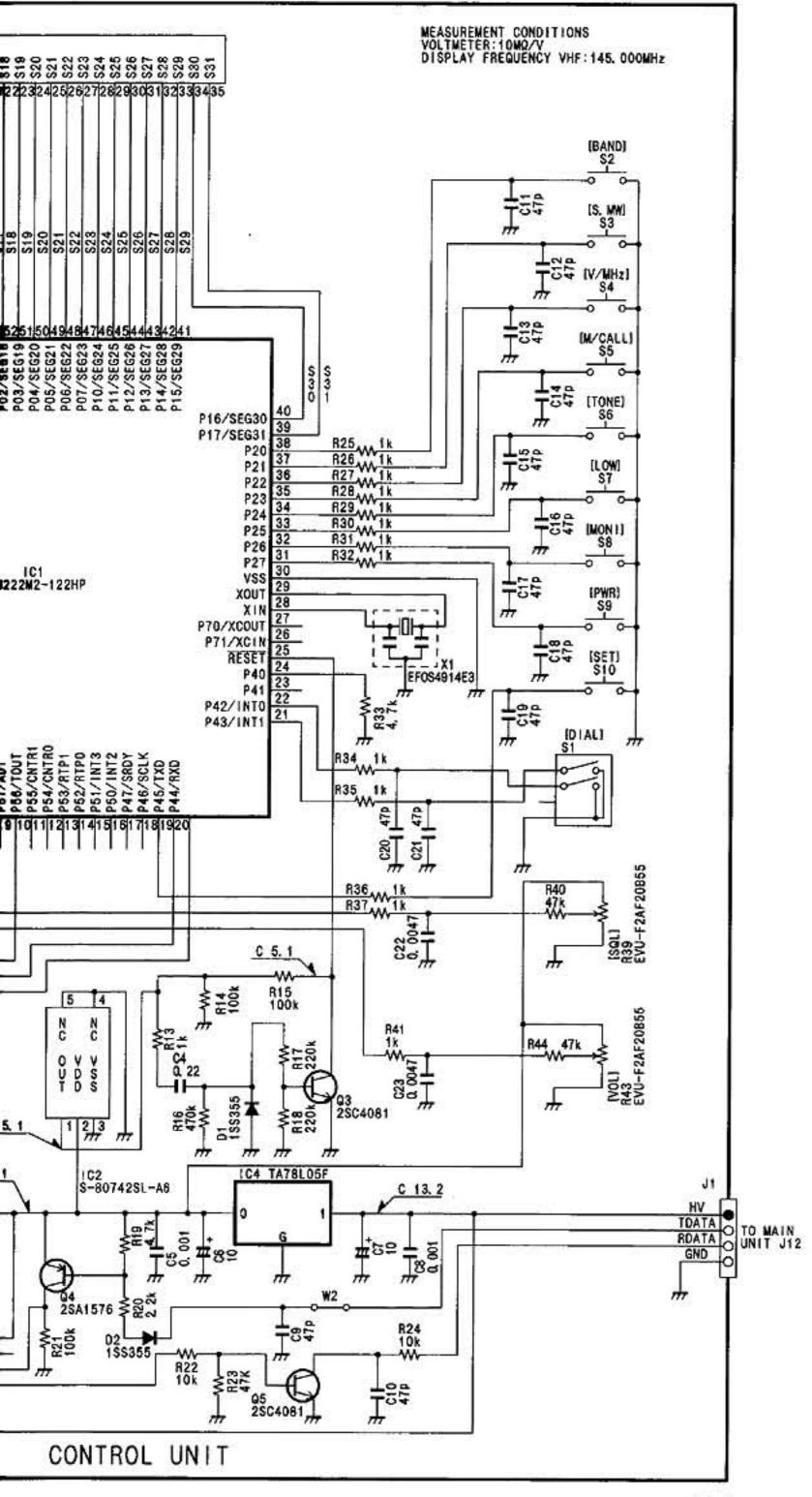




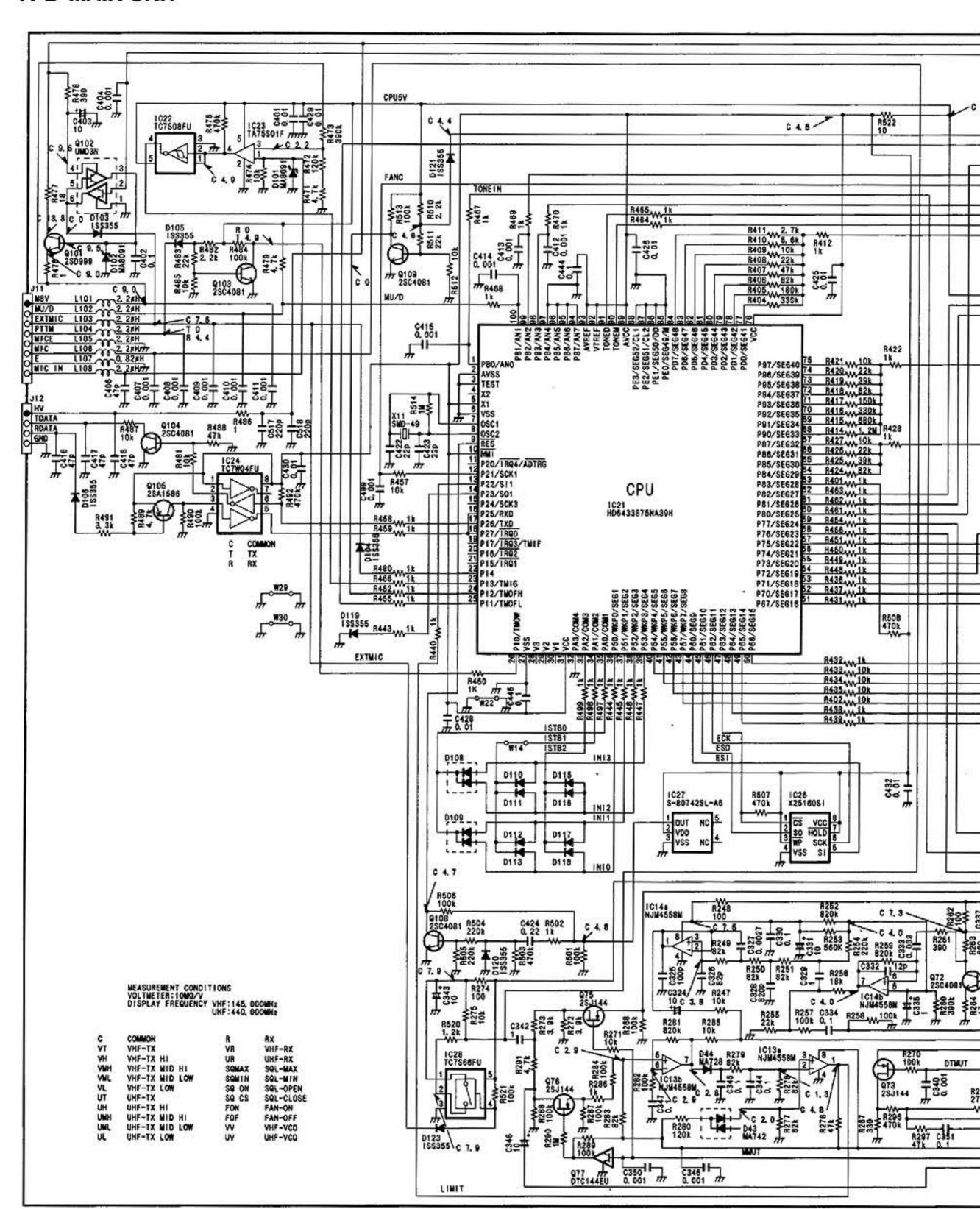
SECTION 11 VOLTAGE DIAGRAM

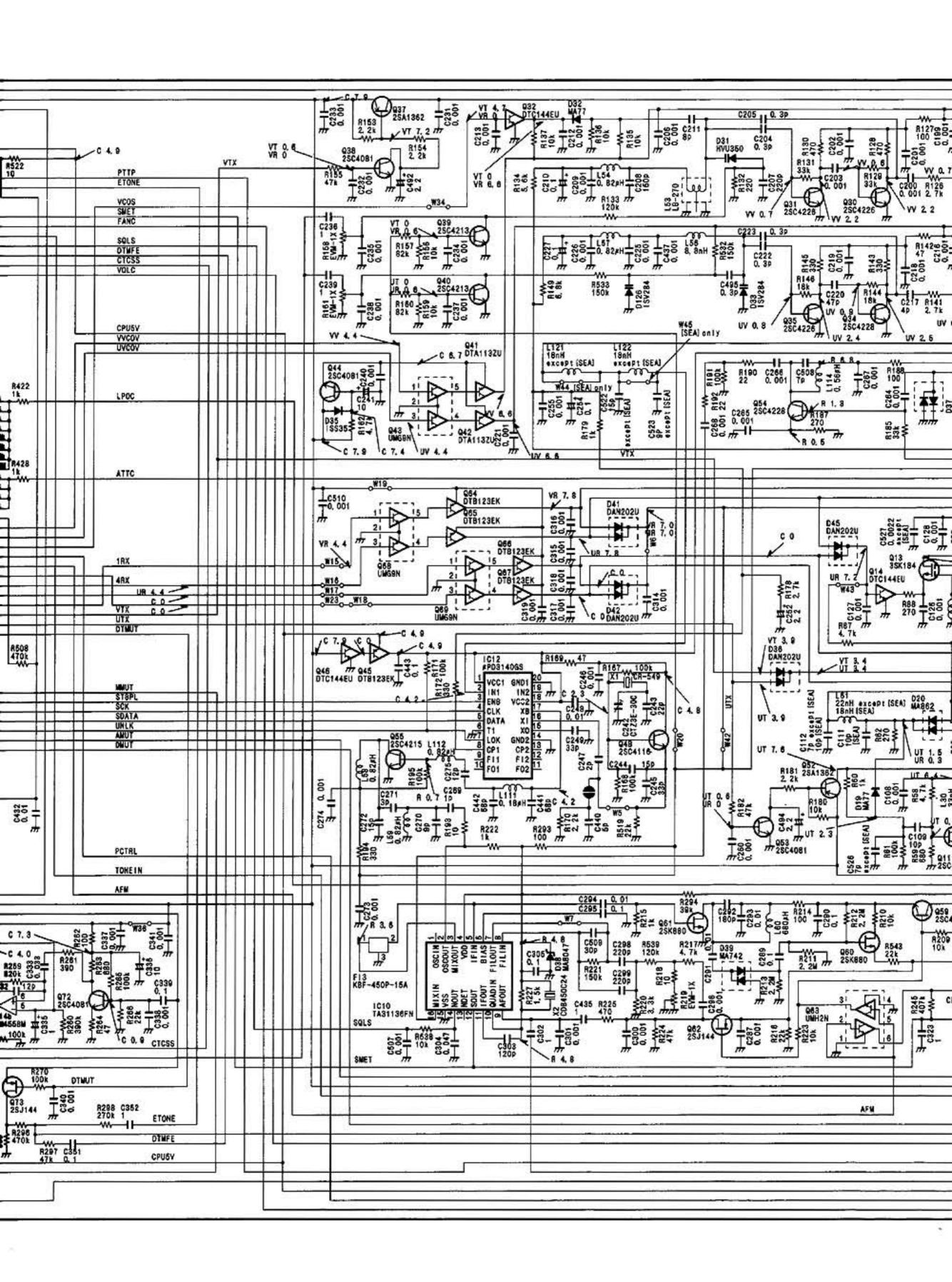
11-1 CONTROL UNIT

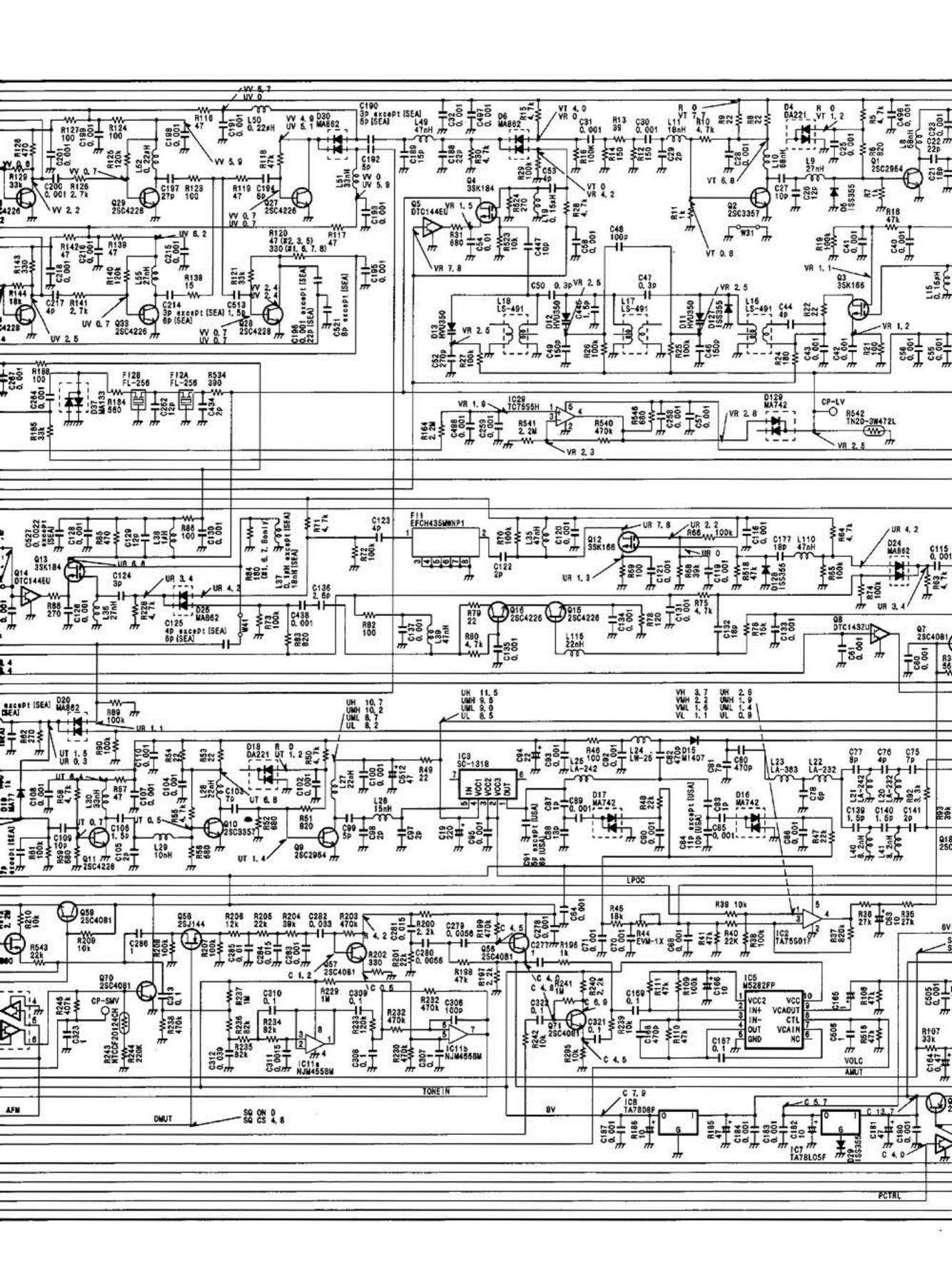


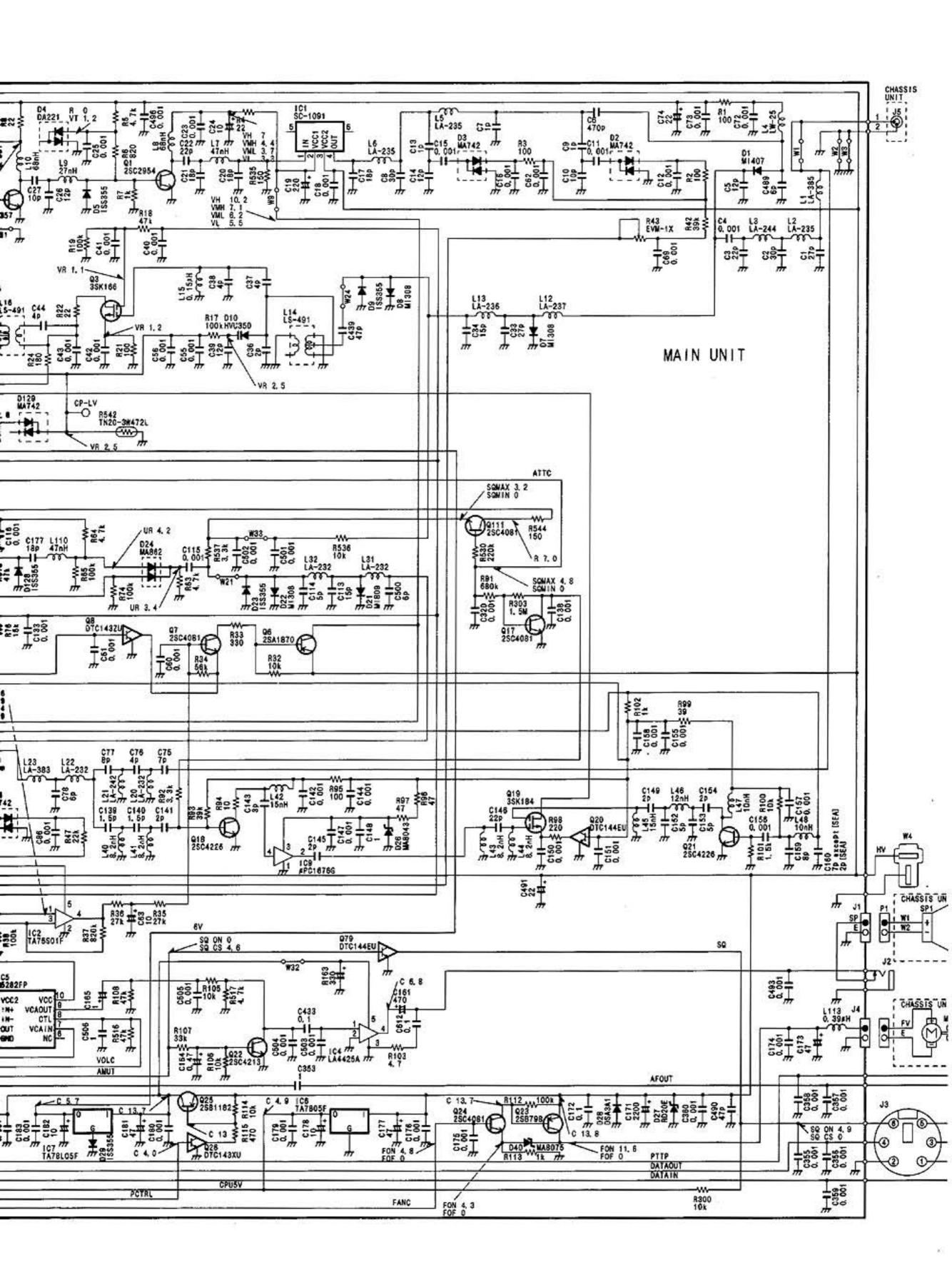


11-2 MAIN UNIT









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<Corporate Headquarters>

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Phone: (604) 273-7400 Fax: (604) 273-1900

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Communication Equipment Himmelgeister Str. 100, D-40225 Düsseldorf, Germany Phone : 0211 346047

Fax : 0211 333639

Icom (Australia) Pty. Ltd.

A.C.N. 006 092 575

290-294 Albert Street, Brunswick, Victoria, 3056, Australia

Phone: 03 9387 0666 Fax : 03 9387 0022

Icom (UK) Ltd.

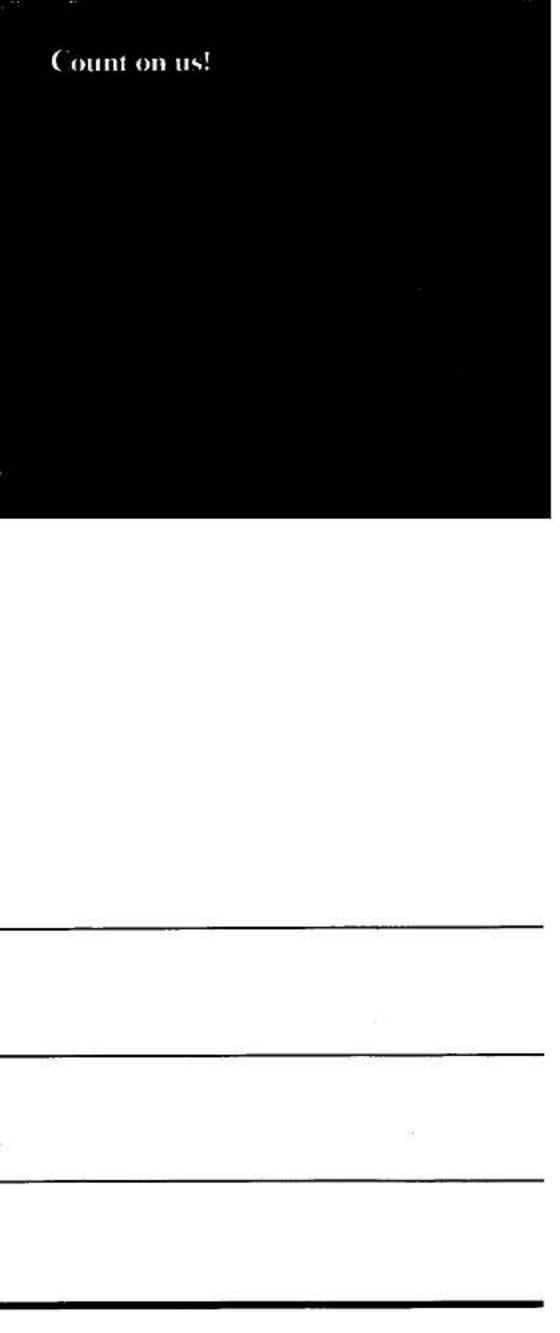
Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K.

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