



# SERVICE MANUAL

VHF/UHF DIGITAL TRANSCEIVER

**ID-880H**  
**ID-E880**

---

---

---

---

---

S-14529XZ-C1  
Apr. 2009

Icom Inc.

---

## INTRODUCTION

This service manual describes the latest technical information for the **ID-880H** and **ID-E880** VHF/UHF DIGITAL TRANSCEIVER at the time of publication.

MODEL	VERSION	TYPE OF EMISSION	Max. TX POWER (VHF/UHF)
ID-880H	[TPE]	F2D, F3E, F7W	25/25
	[USA]		50/50
	[KOR]		
	[AUS]		
	[CHN]		
	[EXP]		
ID-E880	[EUR]		
	[ITR]		
	[EUR-01]		

## 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.

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



## 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.ID TA31136FNG ID-880E/ID-880H MAIN UNIT 5 pieces  
8820001210 Screw 2438 screw ID-880H/ID-E880 Top cover 10 pieces

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

## REPAIR NOTES

1. Make sure that 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.

---

## TABLE OF CONTENTS

---

**SECTION 1 SPECIFICATIONS**

**SECTION 2 INSIDE VIEWS**

**SECTION 3 DISASSEMBLY INSTRUCTION**

**SECTION 4 CIRCUIT DESCRIPITON**

4-1	RECEIVER CIRCUITS.....	4-1
4-2	TRANSMITTER CIRCUITS.....	4-4
4-3	FREQUENCY SYNTHESIZER.....	4-6
4-4	CPU (MAIN UNIT; IC25) PORT ALLOCATION.....	4-7
4-5	VOLTAGE BLOCK DIAGRAM.....	4-8

**SECTION 5 ADJUSTMENT PROCEDURE**

5-1	PREPARATION.....	5-1
5-2	FREQUENCY AND TRANSMIT AMPLIFIER ADJUSTMENTS.....	5-3
5-3	ANALOG DEVIATION ADJUSTMENTS (VHF BAND).....	5-4
5-4	ANALOG DEVIATION ADJUSTMENTS (UHF BAND).....	5-5
5-5	DIGITAL DEVIATION ADJUSTMENT.....	5-6
5-6	RECEIVE SENSITIVITY ADJUSTMENT.....	5-7
5-7	S-METER ADJUSTMENT.....	5-8
5-8	SQUELCH ADJUSTMENT.....	5-9

**SECTION 6 PARTS LIST**

**SECTION 7 MECHANICAL PARTS**

**SECTION 8 BOARD LAYOUTS**

**SECTION 9 BLOCK DIAGRAM**

**SECTION 10 VOLTAGE DIAGRAM**

	CONTROL UNIT.....	10-1
	MAIN UNIT.....	10-2

## ◇ GENERAL

- Frequency coverage :

<For ID-880H> (unit: MHz)

Version	TX	RX
U.S.A.	144–148, 430–450	118–173.995* <sup>1</sup> , 230–549.995* <sup>2</sup> , 810–823.990* <sup>4</sup> , 849–868.990* <sup>4</sup> , 894–999.990* <sup>4</sup>
CHN EXP	136–173.995* <sup>1</sup> , 400–469.995* <sup>3</sup>	118–173.995* <sup>1</sup> , 230–549.995* <sup>3</sup> , 810–999.990* <sup>4</sup>
KOR	144–146, 430–440	144–146, 430–440
AUS	144–148, 430–440	144–148, 430–440
TPE	144–146, 430–432	144–146, 430–432

\*<sup>1</sup>Guaranteed 144–148 MHz only, \*<sup>2</sup>Guaranteed 430–450 MHz only,

\*<sup>3</sup>Guaranteed 430–440 MHz only, \*<sup>4</sup>Not Guaranteed

<For ID-E880> (unit: MHz)

Version	TX	RX
EUR	144–146, 430–440	118–173.995* <sup>1</sup> , 230–549.995* <sup>2</sup> , 810–999.990* <sup>5</sup>
ITA	144–146, 430–434 435–438	118–173.995* <sup>1</sup> , 230–549.995* <sup>3, 4</sup> , 810–999.990* <sup>5</sup>
EUR-1	144–146, 430–440	144–146, 430–440

\*<sup>1</sup>Guaranteed 144–146 MHz only, \*<sup>2</sup>Guaranteed 430–440 MHz only

\*<sup>3</sup>Guaranteed 430–434 MHz only, \*<sup>4</sup>Guaranteed 435–438 MHz only

\*<sup>5</sup>Not guaranteed

- Type of emission : FM, AM (Receive only), DV
- Number of memory channels : 1052 (incl. 50 scan edges and 2 calls)
- Frequency resolution : 5<sup>‡</sup>, 6.25<sup>‡</sup>, 8.33<sup>‡</sup>, 10, 12.5, 15<sup>‡</sup>, 20, 25,  
30, 50, 100, 125, 200 kHz  
<sup>‡</sup>Selectable depending on the operating frequency band.
- Operating temperature range : –10°C to +60°C; +14°F to +140°F
- Frequency stability : ±2.5 ppm (–10°C to +60°C)
- Power supply requirement : 13.8 V DC ±15%
- Current drain (at 13.8 V DC: approx.):
 

Transmit	at 50 W	VHF: 11.5 A*	UHF: 12.5 A*
		* 8.0 A (at 25 W) only for the TPE version	
Receive	standby	0.9 A	
(simultaneous receive)	max. audio	1.2 A	
- Antenna connector : SO-239 (50 Ω)
- Dimensions (proj. not included) : 150(W) × 40(H) × 199.2(D) mm  
5<sup>29</sup>/<sub>32</sub>(W) × 1<sup>9</sup>/<sub>16</sub>(H) × 7<sup>27</sup>/<sub>32</sub>(D) in
- Weight (approx.) : 1.3 kg; 2 lb 14 oz (not incl. cable)

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

## ◇ TRANSMITTER

- Modulation system :
 

FM	Variable reactance frequency modulation
DV (Digital)	GMSK reactance frequency modulation
- Output power : 50/15/5 W\* (approx.)  
\*25/15/5 W only for the TPE version.
- Max. frequency deviation : ±5.0 kHz (wide)  
±2.5 kHz (narrow)
- Spurious emissions : Less than –60 dB
- Microphone connector : 8-pin modular (600 Ω)

## ◇ RECEIVER

- Receive system : Double conversion superheterodyne
- Intermediate frequencies : 1st: 46.35 MHz, 2nd: 450 kHz
- Sensitivity (amateur bands only):
 

FM (12 dB SINAD)	Less than 0.18 μV
DV (BER 1%)	Less than 0.35 μV
- Squelch sensitivity<sup>†</sup> (threshold) : Less than 0.13 μV
- Selectivity<sup>†</sup> (typical) :
 

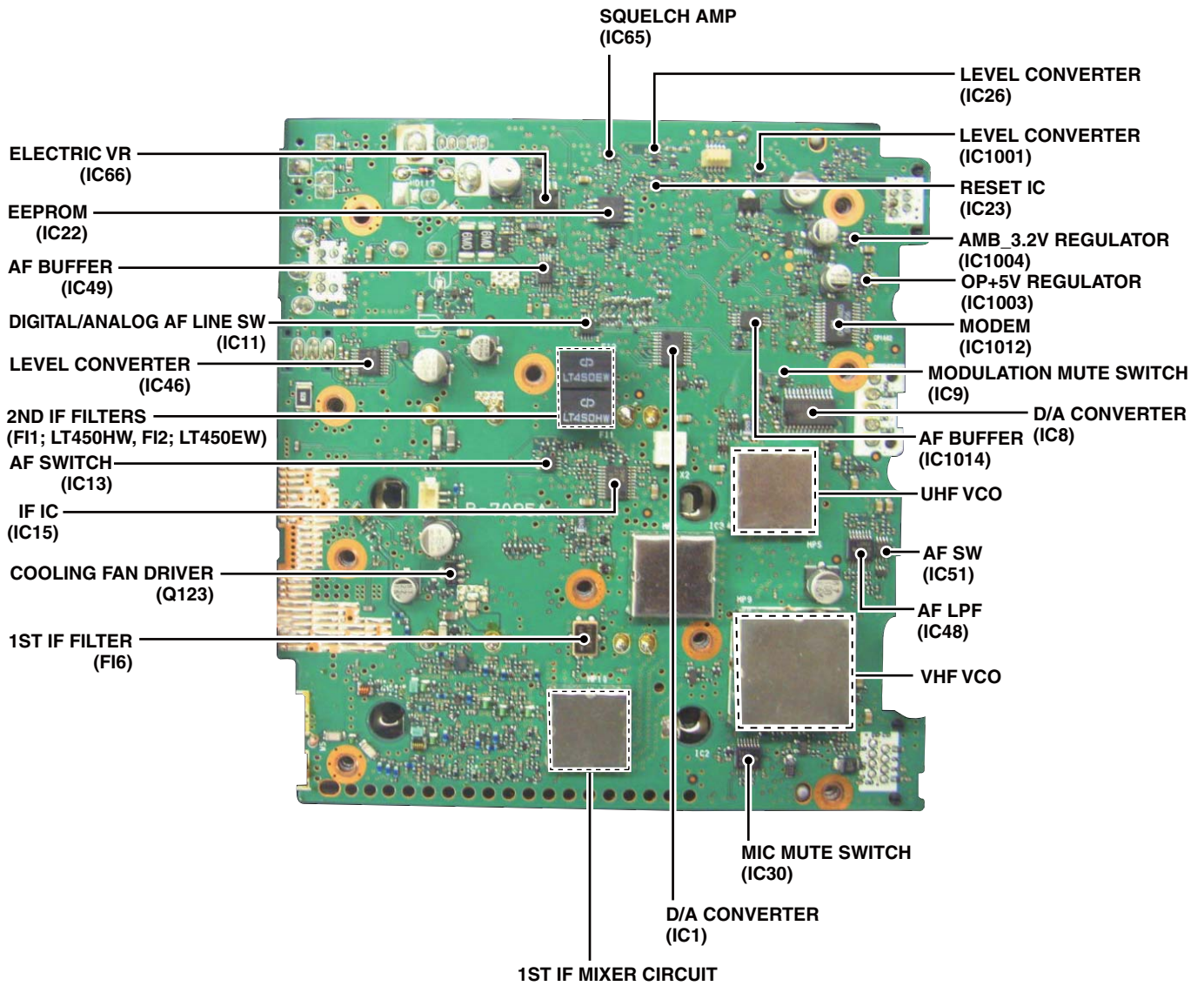
Wide	More than 10 kHz/6 dB Less than 30 kHz/60 dB
Narrow	More than 6 kHz/6 dB Less than 20 kHz/60 dB
DV	More than 50 dB
- Spurious and image rejection<sup>†</sup> : More than 60 dB
- AF output power<sup>†</sup> (at 13.8 V DC) : More than 2.0 W at 10% distortion with an 8 Ω load
- Ext. speaker connectors : 3-conductor 3.5 (d) mm (1<sup>1</sup>/<sub>8</sub>")/8 Ω

<sup>†</sup>Guaranteed 144–146 or 144–148 MHz and 430–440 or 440–450 MHz ranges only.

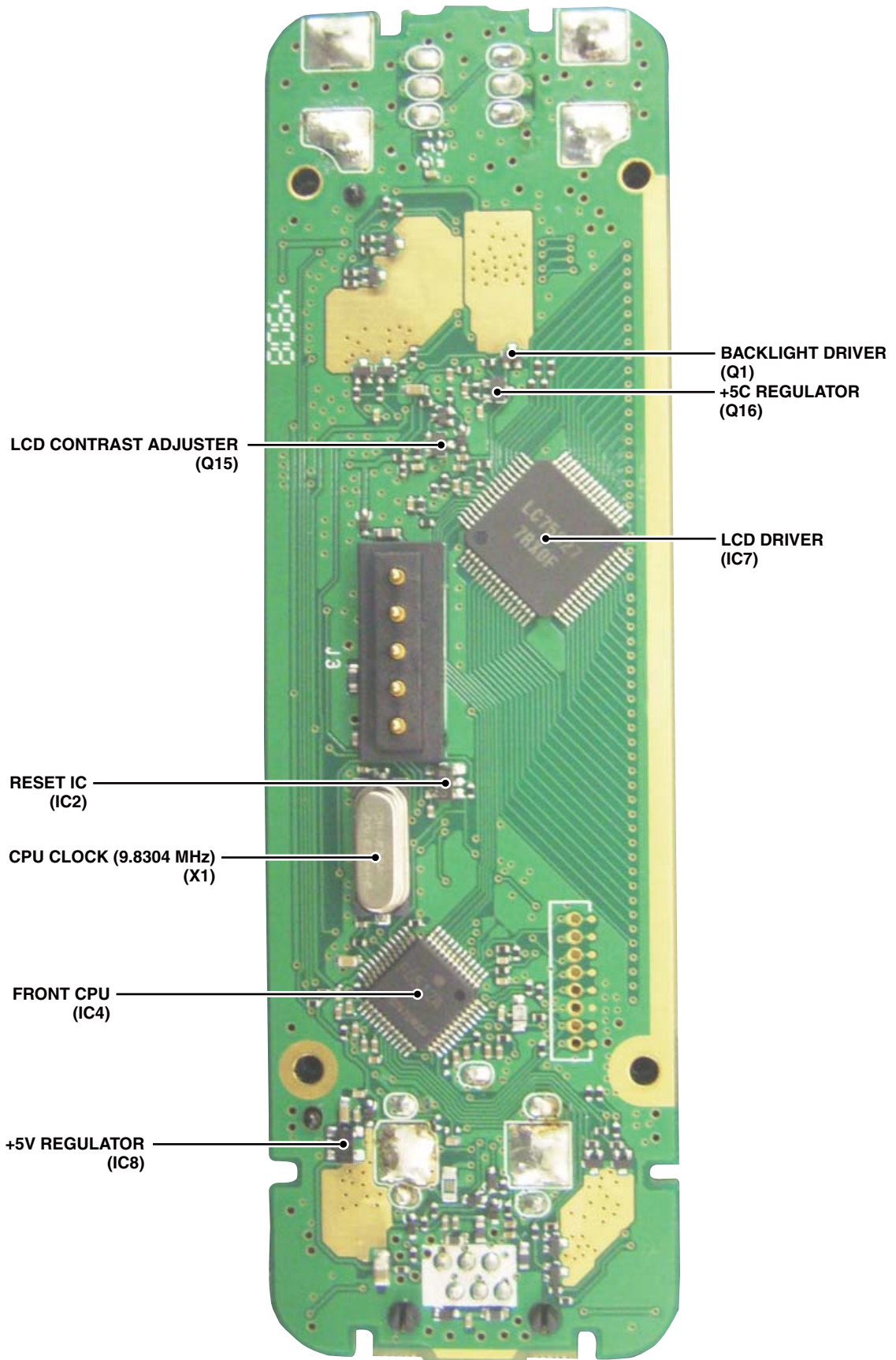
# SECTION 2

# INSIDE VIEWS

## • MAIN UNIT



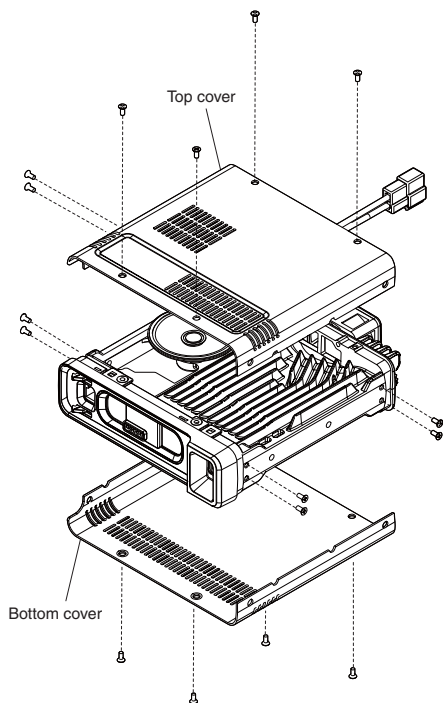
• CONTROL UNIT



# SECTION 3 DISASSEMBLY INSTRUCTION

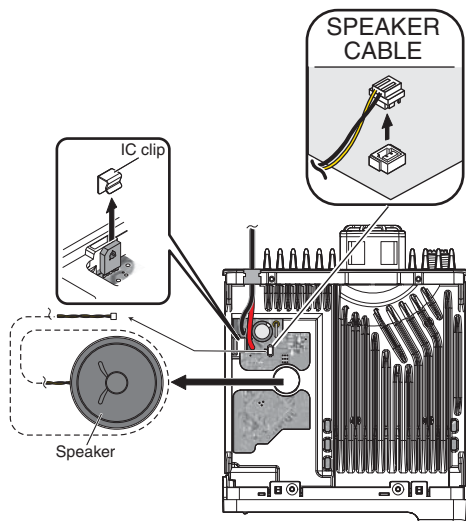
## 1. REMOVING TOP AND BOTTOM COVERS

- 1) Unscrew total of 18 screws; 4 screws from the top cover, 8 screws from the both sides and 4 screws from the bottom cover.
- 2) Remove the top cover and bottom cover as illustrated below.



## 2. REMOVING THE MAIN UNIT

- 1) Remove the IC clip from the chassis.
- 2) Disconnect the speaker cable from the MAIN UNIT, and remove the speaker from the chassis.

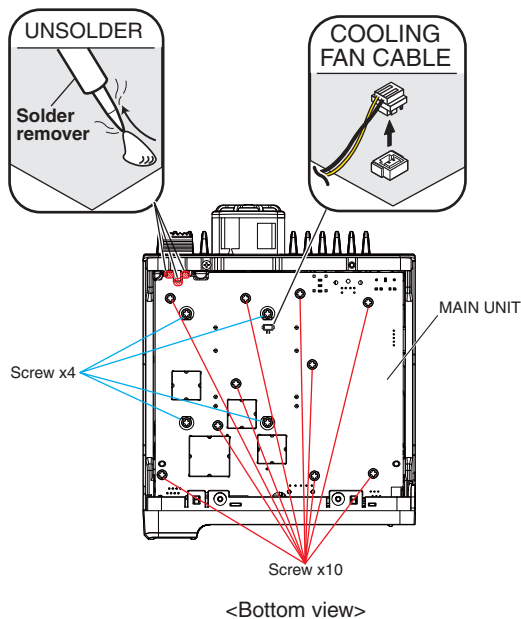


<Top view>

(Continued to right above.)

## 2. REMOVING THE MAIN UNIT (continued)

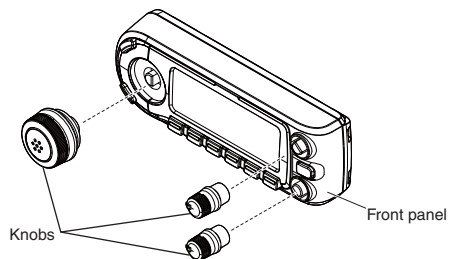
- 3) Unscrew 10 screws from the MAIN UNIT.
- 4) Unscrew 4 screws from the chassis.
- 5) Disconnect the cooling fan cable from the MAIN UNIT.
- 6) Unsolder total of 4 points, and take off the MAIN UNIT.



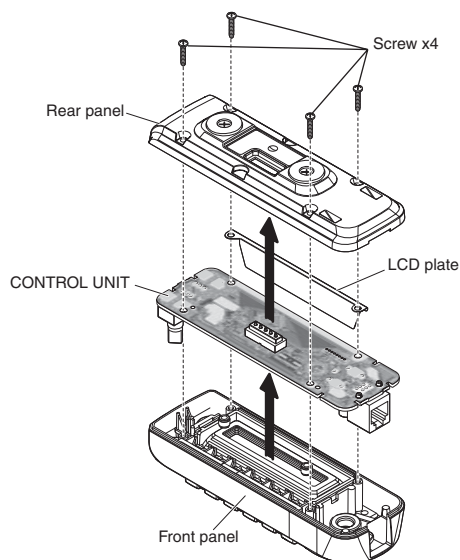
<Bottom view>

## 3. DISASSEMBLE THE CONTROL UNIT

- 1) Remove 3 knobs from the front panel.



- 2) Unscrew 4 screws from the rear panel.
- 3) Remove the LCD plate.
- 4) Take off the CONTROL UNIT from the front panel.



## 4-1 RECEIVE CIRCUITS

### RF CIRCUITS

#### 144 MHz BAND (118–174 MHz)

The RX signals (118–174 MHz) from the antenna are passed through two LPFs and TX/RX SW for VHF band (D59, 68, 75, 77), and applied to the RF circuit.

The RX signals are passed through the limiter (D78, 79) and BPF, and amplified by the RF AMP (Q33). The amplified RX signals are filtered by tuned BPF (D41, 44, 60) to remove unwanted signals, then applied to the 1st mixer (Q124).

The passband frequency of the tuned BPF (D41, 44, 60) is tuned by the tuning voltage from the D/A converter controlled by the CPU (IC25).

#### 300 MHz BAND (230–420 MHz)

The RX signals (230–420 MHz) from the antenna are passed through the LPF, HPF and TX/RX SW for UHF band (D30, 53, 61, 62, 177), and applied to the RF circuit.

The RX signals are passed through the RX SW (D56) and filtered by the tuned BPF (D57, 58) to remove unwanted signals, then applied to the RF AMP (Q35).

The amplified RX signals are filtered by another tuned BPF (D45, 51) to remove unwanted signals, and amplified by another RF AMP (Q34). The RF AMP (Q34) improves the isolation between the 1st mixer (IC64) and the tuned BPF.

The amplified RX signals are applied to the 1st mixer (IC64).

The pass-band frequencies of the tuned BPFs (D57, 58: D45, 51) are tuned by the tuning voltage from the D/A converter controlled by the CPU (IC25).

#### 440 MHz BAND (420–550 MHz)

The RX signals (420–550 MHz) from the antenna are passed through the LPF, HPF and TX/RX SW for UHF band (D30, 53, 61, 62, 177), and applied to the RF circuit.

The RX signals are passed through the RX SW (D16) and tuned BPF (D13) to remove unwanted signals, and applied to the RF AMP (Q19). The amplified RX signals are filtered by another tuned BPF (D12, 14, 23) to remove unwanted signals, then applied to the 1st mixer (Q125).

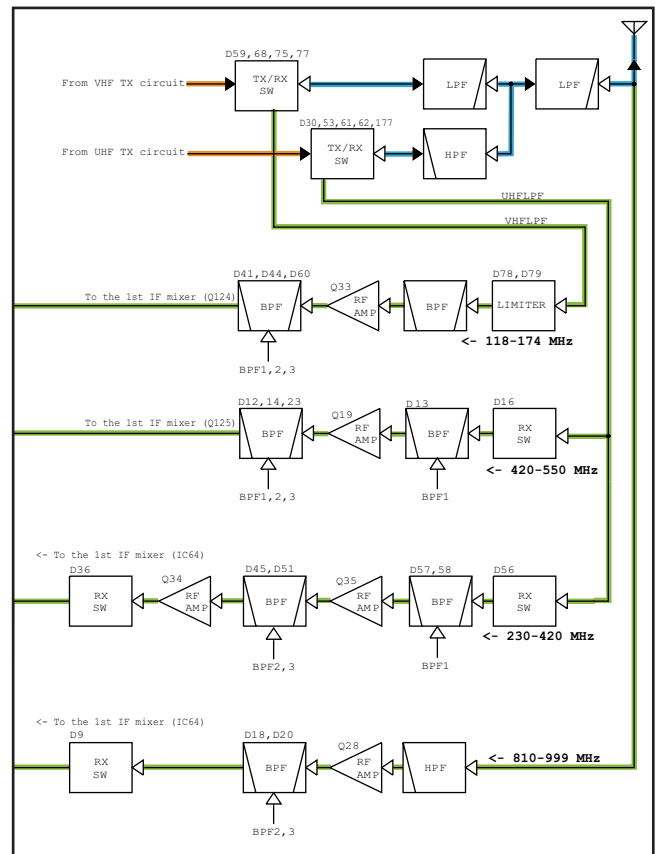
The pass-band frequencies of tuned BPFs (D13: D12, 14, 23) are controlled by the tuning voltage from the D/A converter controlled by the CPU (IC25).

#### 800 M Hz BAND (810–999 MHz)

The RX signals (810–999 MHz) from the antenna are passed through the HPF, and applied to the RF AMP (Q28). The amplified RX signals are filtered by the tuned BPF (D18, 20) to remove unwanted signals, then applied to the 1st mixer (IC64) via the RX SW (D9).

The pass-band frequency of tuned BPF (D18, 20) is tuned by the tuning voltage from the D/A converter controlled by the CPU (IC25).

### • RF CIRCUITS





**1st IF CIRCUITS**

**144 MHz BAND (118–174 MHz)**

The RX signals (118–174 MHz) from the RF circuit are applied to the G1 terminal of Q124 (1st IF mixer), and the 1st LO signals "140\_LO" are applied to the G2 terminal of it.

These input signals are mixed to be converted into the 46.350 MHz 1st IF signal.

**300 MHz (230–420 MHz) AND 800 MHz (810–999 MHz) BANDS**

The RX signals (230–420 MHz and 810–999 MHz) from the RF circuit are applied to the RX input terminal of IC64 (1st IF mixer), and the 1st LO signals "UHF\_LO" are applied to the LO input terminal of it.

These input signals are mixed to be converted into the 46.350 MHz 1st IF signal.

**440MHz BAND (420–550MHz)**

The RX signals (420–550MHz) from the RF circuit are applied to the G1 terminal of Q125 (1st IF mixer), and the 1st LO signals "440\_LO" are applied to the G2 terminal of it.

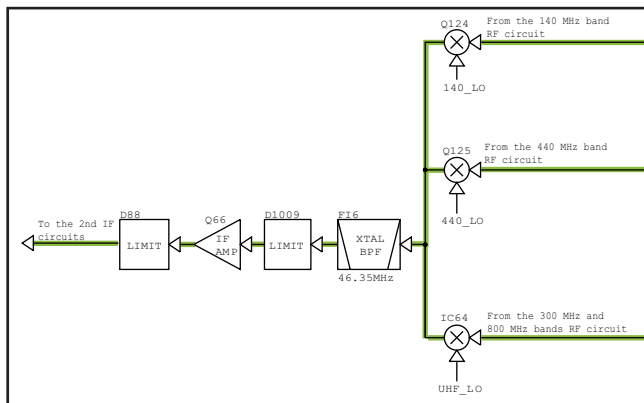
These input signals are mixed to be converted into the 46.350 MHz 1st IF signal.

The 1st IF signal converted by the 1st mixer is passed through the 1st IF filter (FI6) to remove unwanted signals.

FI6 is a 4-pole crystal filter contains two filters, and has adequate selectivity to extract wanted signal.

The filtered 1st IF signal is applied to the 1st IF AMP (Q66) via the limiter (D1009), and the amplified 1st IF signal is applied to the IF IC (IC15) via another limiter (D88).

**• 1ST IF CIRCUITS**



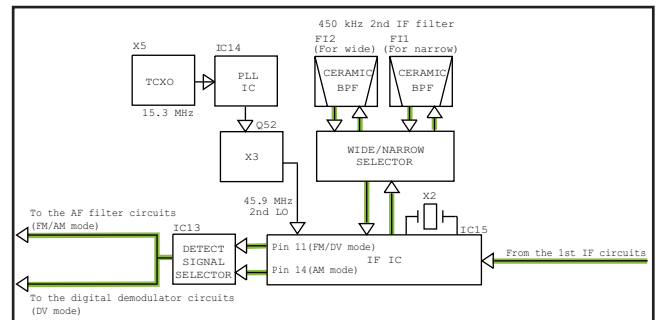
**2nd IF AND DEMODULATOR (for FM and AM) CIRCUITS**

The 1st IF signal from the 1st IF circuits is applied to the IF IC (IC15, pin 20). IC15 contains 2nd mixer, limiter AMP, noise AMP, quadrature detector, RSSI circuit and AM detector in its package.

The applied 1st IF signal is converted into the 450 kHz 2nd IF signal by being mixed with tripled reference frequency signal (45.9 MHz) from the PLL IC (IC14) via the tripler (Q52).

The converted 2nd IF signal is output from pin 3, and passed through the ceramic filter (FI1 for FM narrow and AM modes, FI2 for FM and DV modes) to remove sideband noise, then applied to the IF IC (from pin 7; FM/DV mode/ from pin 5; AM mode) again.

**• 2ND IF CIRCUITS**



**FM DEMODULATOR CIRCUITS**

In the FM mode, the filtered 2nd IF signal input from pin 7 is amplified by the internal limiter amplifier, and FM-demodulated at the internal quadrature detector. The demodulated AF signals are then output from pin 11 and applied to the AF circuits via the AF switch (IC13).

**AM DEMODULATOR CIRCUITS**

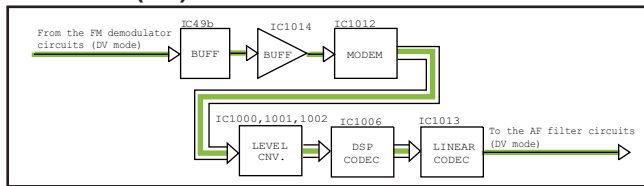
In the AM mode, the filtered 2nd IF signal input from pin 5 is amplified by the internal limiter amplifier, and AM-demodulated at the internal quadrature detector. The demodulated AF signals are output from pin 14 and applied to the AF filter circuits via the AF switch (IC13).

**DIGITAL (DV) DEMODULATOR CIRCUITS**

In the DV mode, the filtered 2nd IF signal input from pin 7 is amplified by the internal limiter amplifier, and FM-demodulated at the internal quadrature detector. The demodulated AF signals are applied to the digital demodulator circuits via the AF switch (IC13).

The FM-demodulated AF signals from the AF switch (IC13) are applied to the modem (IC1012) via the two buffers (IC49b; pins 6, 7 and IC1014), and converted into the digital signal. The converted digital signal is applied to the DSP CODEC (IC1) via the level converter (IC1000, 1001, 1002), to be decoded into the AMBE signal. The decoded AMBE signal is then applied to the liner CODEC IC (IC1006) to be converted into the analog audio signal. The converted AF signals are applied to the RX AF circuits.

**• DIGITAL (DV) DEMODULATOR CIRCUITS**



**AF FILTER CIRCUITS**

The demodulated AF signals are applied to the AF filter (Q47) via the digital/analog signal selector (IC11), to obtain suitable audio response for receive mode (FM, AM or DV).

The frequency response of the filter is controlled by “AFFIL\_SEL” signal from the CPU (IC25).

The filtered AF signals are applied to the variable pass-band frequency audio filter circuit (IC49a; pins 3, 1). The circuit reduces audible noises included in the demodulated AF signals.

The filtered AF signals are applied to the electric volume IC (IC66) which adjusts the loudness by “AF\_VOL\_DATA” and “AF\_VOL\_CK” signals from the CPU (IC25).

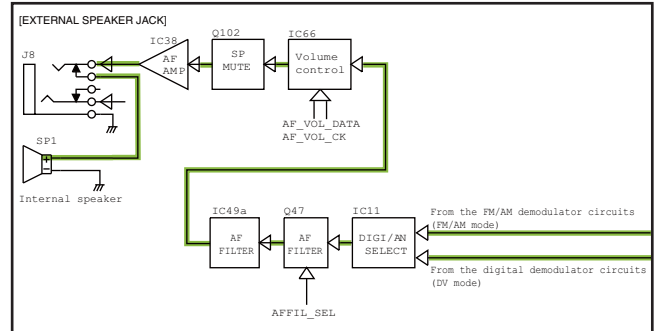
The level-adjusted AF signals are applied to the AF power AMP (IC38) via the AF mute SW (Q102).

**AF POWER AMPLIFIER**

The AF signals from the AF mute SW (Q102) are applied to the AF power AMP (IC38), and amplified to obtain AF output power. The power-amplified AF signals are applied to the internal speaker (CHASSIS; SP1) via J8.

If an external speaker is connected to the external speaker jack (J8), the power-amplified AF signals from the AF power AMP (IC38) are applied to the connected speaker via J8.

**• AF FILTER CIRCUITS AND AF POWER AMPLIFIER**



## 4-2 TRANSMITTER CIRCUITS

### TX AF CIRCUITS

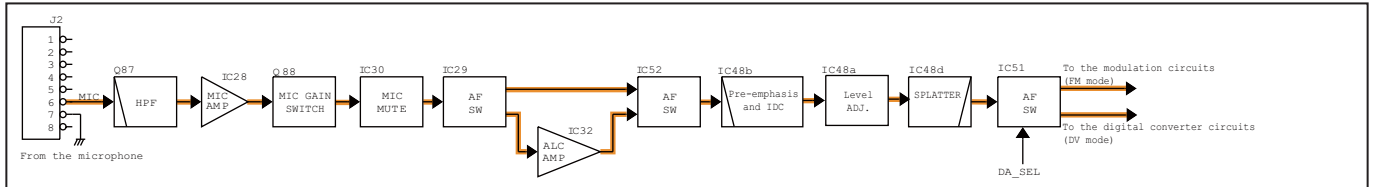
MIC signals from the connected microphone are passed through the HPF (Q87), and amplified by the MIC AMP (IC28). The amplified MIC signals are passed through the MIC gain SW (Q88) which selects the MIC sensitivity from “High” or “Low,” and the MIC mute SW (IC30), then passed through or bypassed the ALC AMP (IC32) via the AF SWs (IC29 and IC52).

In the DV mode, the MIC signals are applied to the ALC AMP (IC32) which automatically adjusts the level of MIC signals for digital processing,

The MIC signals from the AF SW (IC52) are passed through the pre-emphasis and IDC (for amplitude-limiting) circuits (IC48b), MIC level adjustment circuit (IC48a) and the splatter circuit (IC48d) which cuts off the 3 kHz and higher audio signals. The filtered MIC signals are applied to the modulation circuits via the AF SW (IC51; pins 1, 7).

In the DV mode, the filtered MIC signals are applied to the digital converter circuits before being applied to the modulation circuits via the AF SW (IC51; pins 1, 6).

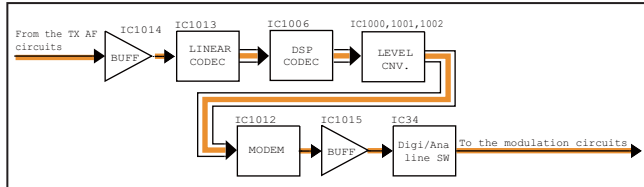
### • TX AF CIRCUITS



### DIGITAL CONVERTER CIRCUITS

The MIC signals from the TX AF circuits are applied to the liner CODEC IC (IC1013) via the buffer (IC1014), and encoded into the digital audio signal. The encoded digital audio signal is then applied to the DSP CODEC IC (IC1006) and converted into the AMBE signal. The AMBE signal is applied to the modem (IC1012) via the level converter (IC1000, 1001, 1002). The modem IC converts the AMBE signal into the analog signal, and output to the modulation circuits via the buffer (IC1015) and the digital/analog line SW (IC34).

### • DIGITAL CONVERTER CIRCUITS



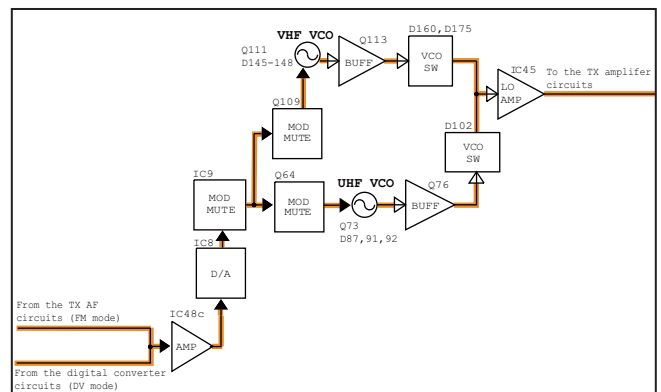
### MODULATION CIRCUITS

The AF signals from the TX AF circuits (in FM mode) or digital converter circuits (in DV mode) are applied to the AF AMP (IC48c). The amplified modulation signals are passed through the D/A converter (IC8) to be adjusted its level (=deviation), then applied to the VCO (VHF VCO: Q111, D145–148/UHF VCO: Q73, D87, 91, 92) via the modulation mute SWs (IC9, VHF; Q109/UHF; Q64) as the modulation signals.

The modulated VCO oscillating signal is passed through the buffer (VHF; Q113/UHF; Q76) and applied to the LO AMP (IC45) via the VCO SW (VHF; D160, 175/UHF; D102).

The amplified VCO output signals are applied to the TX amplifier circuits.

### • MODULATION CIRCUITS



**TX AMPLIFIER CIRCUITS (VHF BAND)**

The output signal of VHF VCO (Q111, D145-148) is passed through the LO SW (D155), LPF and ATT, then applied to the drive AMP (Q25) via the limiter (D29), to obtain adequate input level for the power AMP (power MOS-FET module; IC3).

The amplified TX signal is power-amplified to 50 W (approx.; 25 W for [TPE] ver.) of output power (max.) by the power AMP (IC3).

The power-amplified TX signal is passed through the LPF which attenuates harmonic components to prescribed level, then applied to the antenna connector via the power detector (D39, 47, 1005), TX/RX SW (D59, 68, 75, 77) and two LPFs.

**APC CIRCUITS (VHF BAND)**

A portion of the TX signal from IC3 is rectified at the power detector (D39, 47, 1005), and converted into the DC voltage which is in proportion to the RF power, and applied to the operational amplifier (IC4, pin 6). IC4 is an APC amplifier for both of V/UHF bands. The TX power setting voltage "PCON\_V" from the D/A converter (IC1) is applied to the pin 5 as a reference. IC4 is rolled as a differential amplifier which outputs voltage in inverse proportion to rectified one.

When the TX power increased, the rectified voltage also increased, that causes the decrease of output voltage of differential amplifier. The decrease of output voltage of differential amplifier causes the drop of the gate voltage of IC3, Thus the TX power maintained to keep stable level.

**TX AMPLIFIERS (UHF BAND)**

The output signal of UHF VCO (Q73, D87, 91, 92) is passed through the LO SW (D103), HPF and ATT, then applied to the pre-drive AMP (Q22). The amplified TX signal is applied to the drive AMP (Q26) via the limiter (D25) and amplified to obtain adequate input level for the power AMP (power MOS-FET module; IC2).

The amplified TX signal is power-amplified to 50 W (approx.; 25 W for [TPE] ver.) of output power by the power AMP (IC2).

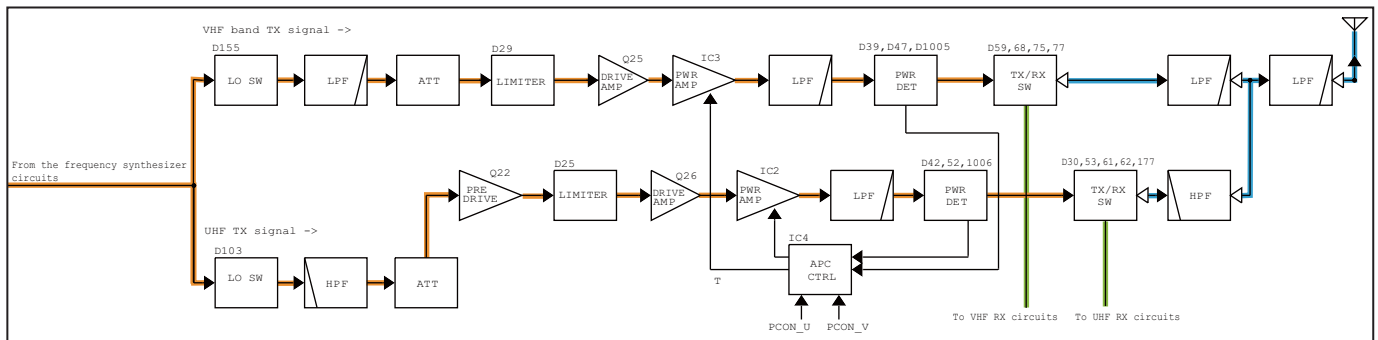
The power-amplified TX signal is passed through the LPF which attenuates harmonic components to prescribed level, then applied to the antenna connector via the power detector (D42, 52, 1006), TX/RX SW (D30, 53, 61, 62, 177), HPF and LPF.

**APC CIRCUITS (UHF BAND)**

A portion of the TX signal from IC2 is rectified at the power detector (D42, 52, 1006), and converted into the DC voltage which is in proportion to the RF power, and applied to the operational amplifier (IC4, pin 2). IC4 is an APC amplifier for both of V/UHF bands. The TX power setting voltage "PCON\_U" from the D/A converter (IC1) is applied to the pin 3 as a reference. IC4 is rolled as a differential amplifier which outputs voltage in inverse proportion to rectified one.

When the TX power increased, the rectified voltage also increased, that causes the decrease of output voltage of differential amplifier. The decrease of output voltage of differential amplifier causes the drop of the gate voltage of IC2, Thus the TX power maintained to keep stable level.

**• TX AMPLIFIER AND APC CIRCUITS**



### 4-3 FREQUENCY SYNTHESIZER

#### VCOs

##### VHF VCO

The VHF VCO is composed by the oscillator circuit (Q111, D145, 146, 147) and buffer AMP (Q113), and generates both of 1st LO signals and TX signal for VHF band.

The VCO oscillating signals are buffer-amplified by Q113, amplified by the LO AMP (IC45) to obtain adequate LO level, then applied to the TX amplifiers or 1st IF mixer via the LO SW, ATT and filter.

While transmitting;  
The VCO output signals from the LO AMP (IC45) are applied to the TX amplifiers via the LO SW (D155) as the TX signal.

While receiving;  
The VCO output signals from the LO AMP (IC45) are passed through the LO SW (D170), ATT and the LPF, then applied to the 1st IF mixer (Q124), as the 1st LO signals for 140 MHz band.

The VCO output signals from the LO AMP (IC45) are passed through the LO SW (D104), ATT, RF SW and LPF, then applied to the 1st IF mixer (Q125), as the 1st LO signals for 300 MHz band.

##### UHF VCO

The UHF VCO is composed by the oscillator circuit (Q73, D87, 91, 92) and buffer AMP (Q76), and generates both of 1st LO signals and TX signal for UHF band.

The VCO oscillating signals are buffer-amplified by Q76, amplified by the LO AMP (IC45) to obtain adequate LO level, then applied to the TX amplifiers or 1st IF mixer via the LO SW, ATT and filter.

While transmitting;  
The VCO output signals from the LO AMP (IC45) are applied to the TX amplifiers via the LO SW (D103) as the TX signal.

While receiving;  
The VCO output signals from the LO AMP (IC45) are passed through the LO SW (D101), ATT, doubler (HPF) and LPF, then applied to the 1st IF mixer (IC64), as the 1st LO signals for 800 MHz band.

The VCO output signals from the LO AMP (IC45) are passed through the LO SW (D179), ATT and the LPF, then applied to the 1st IF mixer (IC64), as the 1st LO signals for 440 MHz band.

#### PLL

The PLL circuit provides stable oscillation of the transmit frequency and receive 1st LO frequency. The PLL output frequency is controlled by control signals including divide ratio ("PLLCK," "PLLDATA" and "PLLSTB") from the CPU (IC25).

##### PLL (VHF VCO)

A portion of VHF VCO output signals from the buffer (Q113) are applied to the PLL IC (IC14) via the VCO switch (D175). The applied signals are divided at the prescaler and programmable counter.

The divided signal is phase-compared with the 15.3 MHz reference frequency signal from the reference frequency oscillator (X5), at the phase detector.

The phase difference is output from pin 5 as a pulse type signal after being passed through the internal charge pump.

The output signal is converted into the DC voltage (lock voltage) by passing through the loop filter (R694-698, C759-763). The lock voltage is applied to the variable capacitors (D145, 146), and locked to keep the VCO frequency constant.

##### PLL (UHF VCO)

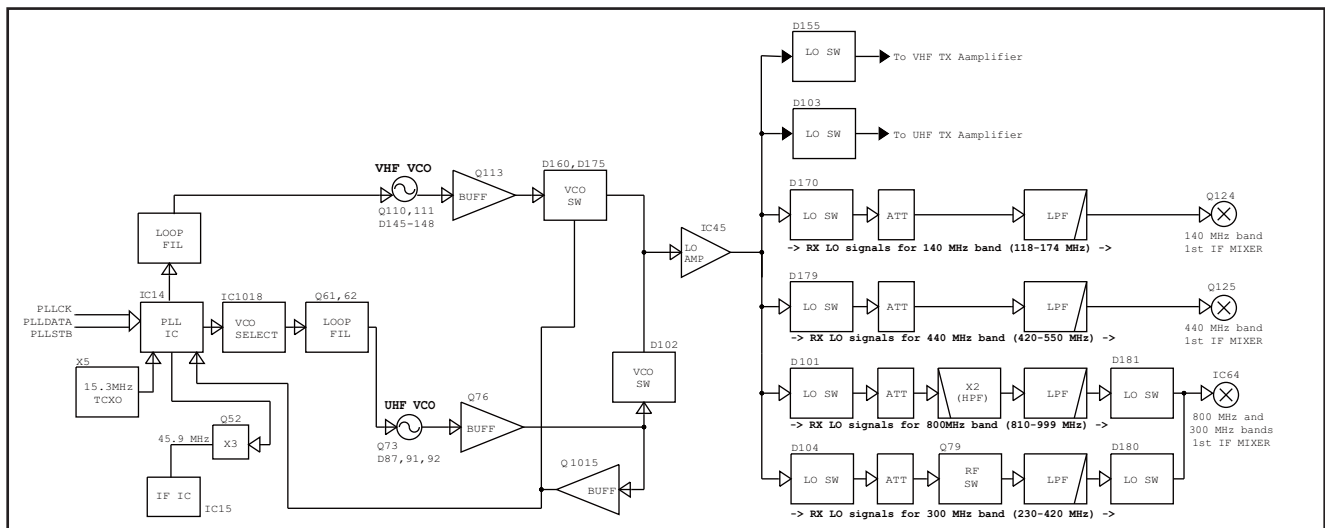
A portion of VHF VCO output signals from the buffer (Q76) are applied to the PLL IC (IC14) via the VCO switch (Q1015). The applied signals are divided at the prescaler and programmable counter.

The divided signal is phase-compared with the 15.3 MHz reference frequency signal from the reference frequency oscillator (X5), at the phase detector.

The phase difference is output from pins 15 and 16, and passed through the external charge pump (Q61, 62) to be converted into the pulse type signal.

The output signal is converted into the DC voltage (lock voltage) by passing through the loop filter (R355, 362, 365, 369, 378, C451, 456, 473). The lock voltage is applied to the variable capacitors (D91, 92), and locked to keep the VCO frequency constant.

#### • FREQUENCY SYNTHESIZER CIRCUITS



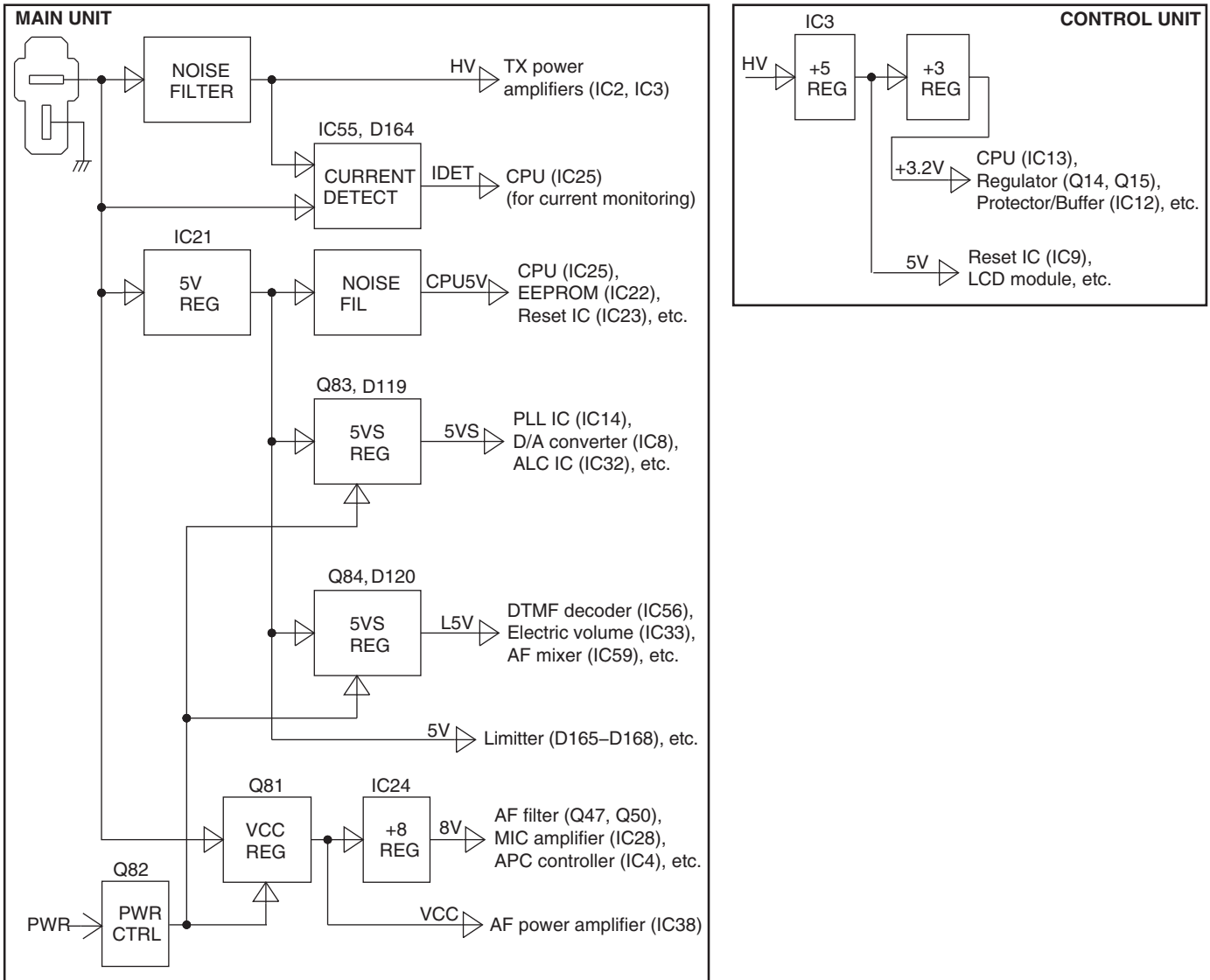
#### 4-4 CPU (MAIN UNIT; IC25) PORT ALLOCATION

PIN No.	LINE NAME	DESCRIPTION	I/O
3	AN	Audio response select signal. "H"=FM mode. "L"=DV mode.	O
4	DA_SEL	Cut-off frequency shifting signal to the HPF (IC48).	O
5	MM_MUTE	MIC mute signal to the MIC mute switch (IC30). "H"=MIC mute.	O
6	DCONT	ALC amplifier control signal to the AF switches (IC29 and IC52). "H"=ALC amplifier ON.	O
8	1200_9600SEL	Baud rate select signal to the packet modulation select switch (IC30).	O
9	P_PTT	Packet PTT detect signal.	I
10	P_SQL	Packet squelch control signal.	O
11	MIC_SENC	Microphone sensitivity select signal. "H"=High sensitivity.	O
16	DADJSEL	Modulation mute signal to the digital modulation switch (IC34).	O
17	MOD_DA	Modulation line switching signal to the MOD mute switches (IC9 and IC67). "H"=Modulation enable.	O
22	PLLSTB	Strobe signal to the PLL IC ( IC14).	O
23	AMC	AM-demodulator circuit control signal. "L"=While receiving in AM mode (AM-modulator and AGC circuits are activated).	O
24	DTCS_SEL	Tone filter switching signal to the LPF (Q100). "H"=DTCS mode. "L"=CTCSS mode.	O
25	R5C	RX circuits control signal. "H"=RX circuits is activated.	O
26	WN_SEL	2nd IF filter (Wide/Narrow) toggling signal. "H"=Narrow. "L"=Wide.	O
28	UTX_C	Transmitting control signal to the UT8 line regulator (Q13, 17). "H"=While transmitting in UHF band.	O
29	VCO_SHIFT	VCO oscillating frequency shift signal to the VHF VCO switch (Q110).	O
32	PLLCK	Clock signal to the PLL IC (IC14).	O
33	PLLDATA	Data to the PLL IC (IC14).	O
34	UNLOCK	PLL unlock signal from the PLL IC ( IC41).	I
35	MMUTE	Modulation mute signal to the MOD mute switch (Q64). "H"=Modulation muted.	O
36	VTX_C	Transmitting control signal to the VT8 line regulator (Q12, 15). "H"=While transmitting in VHF band.	O
37	PLLSW	Lock-up time control signal to the loop filter. "H"=Fast lock-up time.	O
38	UVCO_SEL	VCO power control signal to the VCO select switch (Q65, 68). "L"=UHF VCO is activated.	O
39	VVCO_SEL	VCO power control signal to the VCO select switch (Right band VHF; Q65, 68). "H"=VHF VCO is activated.	O
48	D5VC	Power control signal for the digital converter circuits.	O
52	AFFIL_SEL	Switching signal to the AF filter (Q47). "H"=FM "L"=AM/DV	O
55	DTCS	DTCS and CTCSS signals.	O

PIN No.	LINE NAME	DESCRIPTION	I/O
56	DTMF	Beep, DTMF and european tone (E880 only) signals.	O
57	MIC_SEL	Connected microphone detect signal.	I
62	MICUD	[UP]/[DWN] key input from connected microphone (HM-154).	I
63	AMRSSI	Inputs RSSI signal (for AM mode) from the AGC line controller (Q44).	I
64	RSSI	While receiving; inputs RSSI signal from the IF IC (IC15).	I
65	IDET	Current level from the current detector (IC55, D163).	I
66	HVin	Divided voltage of the HV line.	I
69	WXALT	Demodulated Weather alert signal from the AF filter. ([USA] only)	I
70	DTCS_IN	Demodulated CTCSS and DTCS signals from the CTCSS filter (Q41).	I
71	TEMP	Transceiver's internal temperature from the thermal detector circuit (R509).	I
76	SCL	I/O port for clock signal to the EEPROM (IC22).	I/O
77	AF_VOL_CK	Serial clock signal to the electric volume IC (IC66).	O
78	AF_VOL_DATA	Data signal to the electric volume IC (IC66).	O
80	PWR	Power control signal to the PWR controller (Q82). "H"=While the transceiver power is ON.	O
82	SDA	Data signal to the EEPROM (IC22).	I/O
85	MIC_PTT	Input port for [PTT] key on the connected microphone.	I
101	SQL	Noise signal from the IF IC (IC15).	I
103	CL_SFT1	Clock frequency shift signal.	O
107	ACQ	ACQ signal to the modem IC (IC1012).	O
108	98_DATA	Communication signal to the connected microphone (HM-133).	I/O
109	TXDT	TX data (DV) to the modem IC (IC1012).	O
110	TXCK	TX clock signal (DV) to the modem IC (IC1012).	O
111	RXDT	RX data (DV) to the modem IC (IC1012).	I
112	RXCK	RX clock signal (DV) to the modem IC (IC1012).	I
113	AMBERES	Reset signal to the DSP CODEC (IC1006).	O
114	AMBECLK	Clock signal to the DSP CODEC (IC1006).	O
115	AMBEEPR	EPR (Encode Packet Ready) signal to the DSP CODEC (IC1006).	O
116	AMBESTB	Strobe signal to the DSP CODEC (IC1006).	O
122	RX_DATA	Data lines for the control unit.	I
123	TX_DATA	Data lines for the control unit.	O
127	TX232	Data bus for RS-232C communication.	O
128	RX232	Data bus for RS-232C communication.	I
129	DA_CK	Serial clock signal to the D/A converter.	O
130	DA_DATA	Serial data to the D/A converter.	O
131	AMBETXD	AMBE RX signal.	I
132	AMBETRD	AMBE TX signal.	O
134	DA_STB	Strobe signal to the D/A converter.	O
142	MOD_MUTE	Packet modulation mute signal.	O
143	FIL1(143pin)	AF filter circuits control signals.	O
144	FIL2(144Pin)		

# 4-5 VOLTAGE BLOCK DIAGRAM

Voltage from the power supply is routed to the whole of the transceiver via regulators and switches.



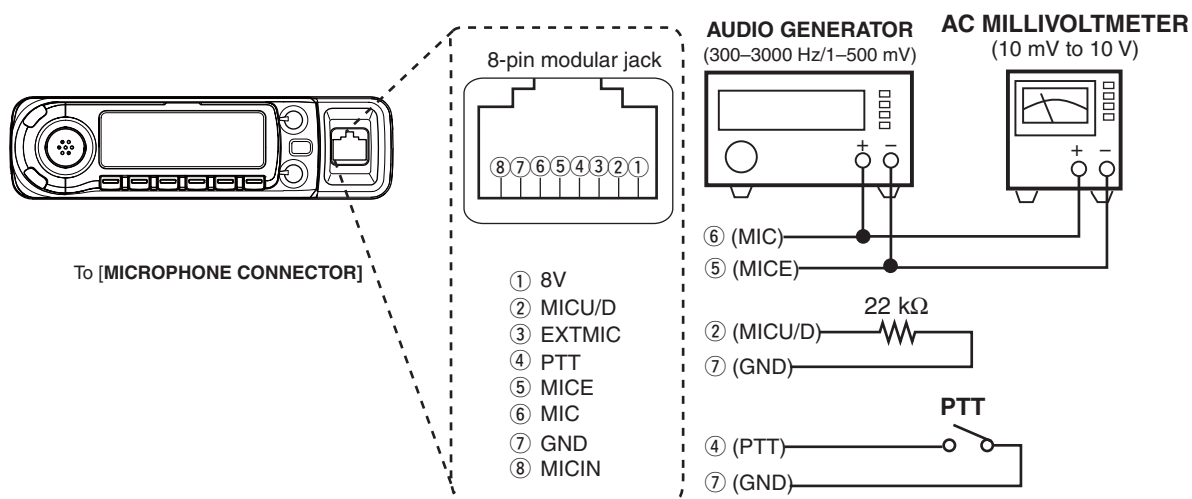
# SECTION 5 ADJUSTMENT PROCEDURE

## 5-1 PREPARATION

### ■ REQUIRED INSTRUMENTS

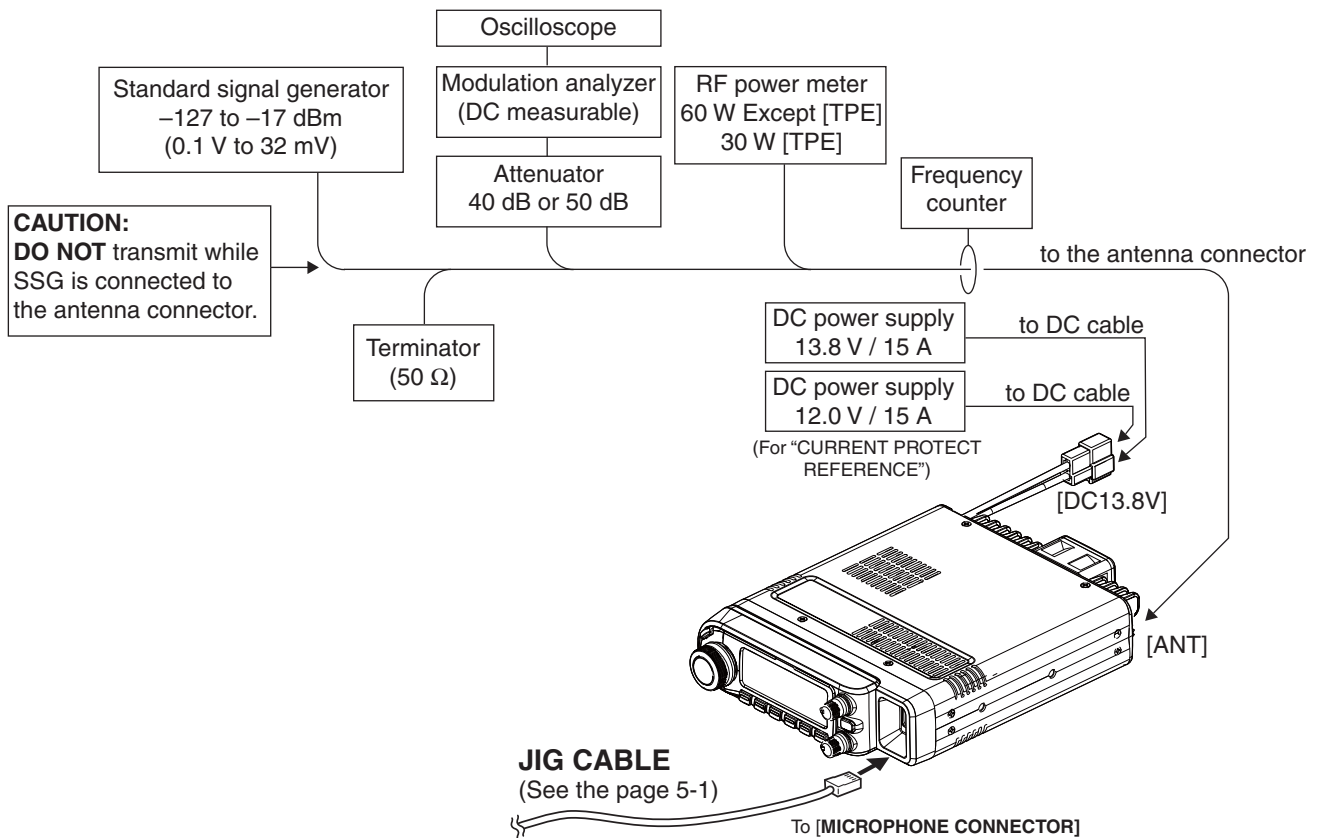
INSTRUMENTS	SPECIFICATION	INSTRUMENTS	SPECIFICATION
DC Cable	(Supplied with transceiver)	JIG cable	(See the illust below)
Power Supply	Output voltages : 13.8 V DC and 12.0 V DC Current capacity : More than 15 A	Multimeter	Input impedance : 50 k $\Omega$ Measuring range : 0.1–20V/0.01–5 A
RF Power Meter (terminated type)	Measuring range : 0.1–60 W Except [TPE] 0.1–30 W [TPE] Frequency range : 100–600 MHz Impedance : 50 $\Omega$ SWR : Less than 1.2 : 1	Standard Signal Generator (SSG)	Frequency range : 0.1–1200 MHz Output level : 0.04 $\mu$ V to 32 mV (–28 dBu to 90 dBu)
Frequency counter	Frequency range : 0.1–600 MHz Frequency accuracy : $\pm$ 0.1 ppm or better Input level : Less than 1 mW	Terminator	Impedance : 50 $\Omega$
Modulation Analyzer	Frequency range : 30–600 MHz Measuring range : 0 to $\pm$ 10 kHz	AC Millivoltmeter	Measuring range : 10 mV to 10 V
		Attenuator	Power attenuation : 40 dB Capacity : More than 100 W
		Audio generator	Frequency range : 300–3000 Hz Output level : 1–500 mV

### ■ JIG CABLE





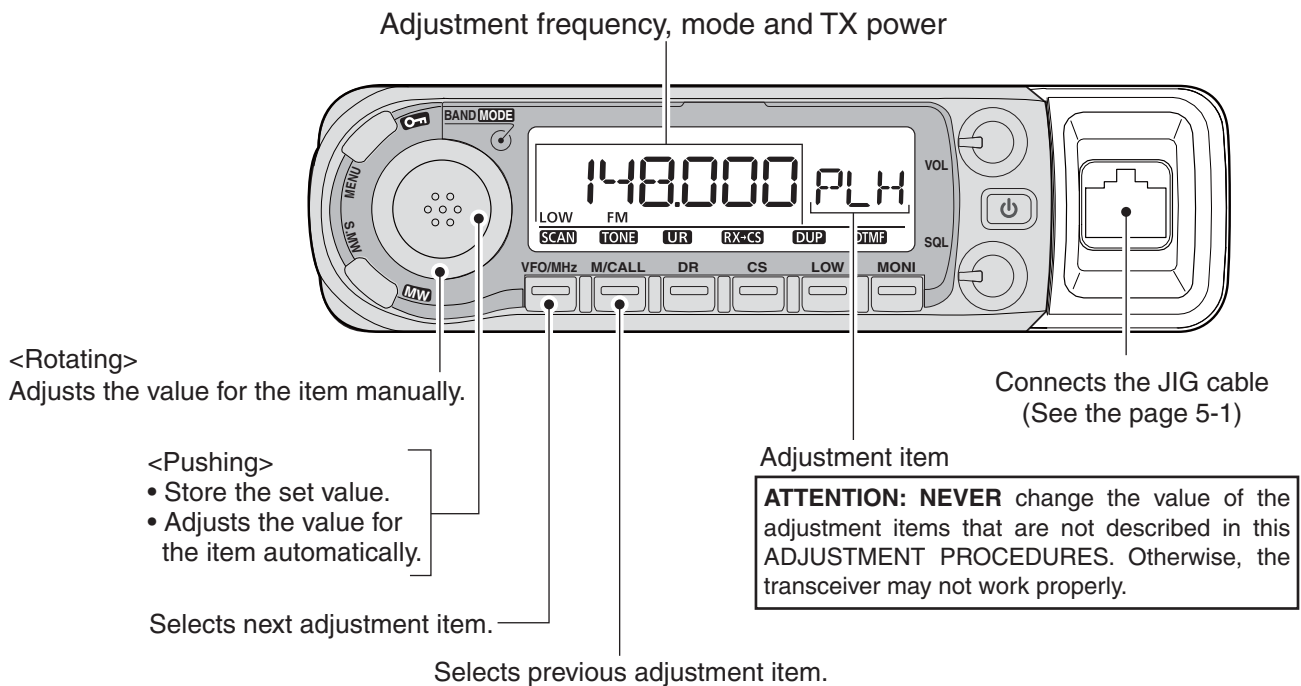
## CONNECTION



## ENTERING ADJUSTMENT MODE

- ① Turn the transceiver power OFF.
- ② Connect JIG cable (See the page 5-1) to the [MICROPHONE CONNECTOR].
- ③ Push and hold [MONI] and [BAND], turn the transceiver power ON.

Entering adjustment mode, the function display shows the adjustment item and conditions as below.



## QUITTING ADJUSTMENT MODE

- Disconnect the JIG cable, then turn the transceiver power OFF.

## 5-2 FREQUENCY AND TRANSMIT AMPLIFIER ADJUSTMENT

Select an adjustment item using [VFO/MHz] / [M/CALL], then set the adjustment value as specified using [DIAL].

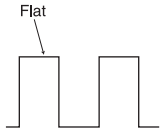
ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
<b>REFERENCE FREQUENCY</b>	[REF]	1) Connect an RF power meter to the antenna connector. 2) Loose couple a frequency counter to the antenna connector. 3) While transmitting, adjust the TX frequency using [DIAL], then push [BAND] to store the adjustment value.	435.0000 MHz <sup>1)</sup> 440.0000 MHz <sup>2)</sup>
<b>VHF BAND TRANSMIT POWER</b>	[PHL]	1 • Connect an RF power meter to the antenna connector.	–
[Hi power] (BAND LOW)	[PHL]	2 • While transmitting, adjust the TX power using [DIAL], then push [BAND] to store the adjustment value.	50 W (Except [TPE]) 25 W ([TPE])
(BAND HIGH)	[PHH]		
[Mid power] (BAND LOW)	[PML]		15 W
(BAND HIGH)	[PMH]		
[Low power] (BAND LOW)	[PLL]	4	5 W
(BAND HIGH)	[PLH]		
<b>VHF BAND CURRENT PROTECT REFERENCE</b>	[PHL]	1) Set the power supply voltage to 12.0 V. 2) Connect an RF power meter to the antenna connector.	–
[BAND LOW]	[PHL]	2 • While transmitting, push [BAND] to store the adjustment value.	(Automatic adjustment)
[BAND HIGH]	[PHH]		
<b>UHF BAND TRANSMIT POWER</b>	[PHL]	1 • Connect an RF power meter to the antenna connector.	–
[Hi power] (BAND LOW)	[PHL]	2 • While transmitting, adjust the TX power using [DIAL], then push [BAND] to store the adjustment value.	50 W (Except [TPE]) 25 W ([TPE])
(BAND HIGH)	[PHH]		
[Mid power] (BAND LOW)	[PML]		15 W
(BAND HIGH)	[PMH]		
[Low power] (BAND LOW)	[PLL]	4	5 W
(BAND HIGH)	[PLH]		
<b>UHF BAND CURRENT PROTECT REFERENCE</b>	[PHL]	1) Set the power supply voltage to 12.0 V. 2) Connect an RF power meter to the antenna connector.	–
(BAND LOW)	[PHL]	2 • While transmitting, push [BAND] to store the adjustment value.	(Automatic adjustment)
(BAND HIGH)	[PHH]		

<sup>1)</sup>Except [USA], [AUS], [CHN], [EXP]

<sup>2)</sup>[USA], [AUS], [CHN], [EXP]

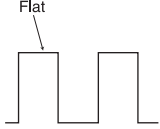
### 5-3 ANALOG DEVIATION ADJUSTMENTS (VHF BAND)

Select an adjustment item using [VFO/MHz] / [M/CALL], then set the adjustment value as specified using [DIAL].

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
VHF BAND FM DEVIATION	[FMS]	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) Connect an audio generator and an AC millivoltmeter to the JIG cable (See the page 5-1).	—
		2) 1) Set the audio generator as;	±4.2 kHz
		3) Frequency : 1 kHz	±2.1 kHz
		4) Level : 80 mVrms [USA] : 20 mVrms Except [USA]	±4.2 kHz
		5) 2) While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±2.1 kHz
[BAND LOW] (FM)			
[BAND LOW] (FMN)			
[BAND HIGH] (FM)			
[BAND HIGH] (FMN)			
VHF BAND MODULATION BALANCE	[FMB]	1) No audio signals are applied. 2) Connect an oscilloscope to the modulation analyzer.	—
		2) • While transmitting, adjust the waveform using [DIAL], then push [BAND] to store the adjustment value.	Set to square waves
		3)	
		4)	
		5)	
[BAND LOW] (FM)			
[BAND LOW] (FMN)			
[BAND HIGH] (FM)			
[BAND HIGH] (FMN)			
DTCS DEVIATION	[MDT]	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) No audio signals are applied.	—
		2) • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±0.80 kHz
		3) • Push [VFO/MHz] to skip this item.	—
[VHF BAND] (FM)			
[VHF BAND] (FMN)			
CTCSS DEVIATION	[MCT]	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) No audio signals are applied.	—
		2) • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±0.75 kHz
		3) • Push [VFO/MHz] to skip this item.	—
[VHF BAND] (FM)			
[VHF BAND] (FMN)			

## 5-4 ANALOG DEVIATION ADJUSTMENTS (UHF BAND)

Select an adjustment item using [VFO/MHz] / [M/CALL], then set the adjustment value as specified using [DIAL].

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
<b>UHF BAND FM DEVIATION</b>	[FMS]	1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) Connect an audio generator and an AC millivoltmeter to the JIG cable (See the page 5-1).	—
[BAND LOW] (FM)		2) 1) Set the audio generator as; Frequency : 1 kHz	±4.2 kHz
[BAND LOW] (FMN)		3) Level : 80 mVrms [USA]	±2.1 kHz
[BAND HIGH] (FM)		4) : 20 mVrms Except [USA]	±4.2 kHz
[BAND HIGH] (FMN)		5) 2) While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±2.1 kHz
<b>VHF BAND MODULATION BALANCE</b>	[FMB]	1) 1) No audio signals are applied. 2) Connect an oscilloscope to the modulation analyzer.	—
[BAND LOW] (FM)		• While transmitting, adjust the waveform using [DIAL], then push [BAND] to store the adjustment value.	Set to square wave 
[BAND LOW] (FMN)			
[BAND HIGH] (FM)			
[BAND HIGH] (FMN)			
<b>DTCS DEVIATION</b>	[MDT]	1) 1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) No audio signals are applied.	—
[UHF BAND] (FM)		4) • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±0.80 kHz
[UHF BAND] (FMN)		5) • Push [VFO/MHz] to skip this item.	—
<b>CTCSS DEVIATION</b>	[MCT]	1) 1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) No audio signals are applied.	—
[UHF BAND] (FM)		4) • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±0.75 kHz
[UHF BAND] (FMN)		5) • Push [VFO/MHz] to skip this item.	—

## 5-5 DIGITAL DEVIATION ADJUSTMENT

Select an adjustment item using [VFO/MHz] / [M/CALL], then set the adjustment value as specified using [DIAL].

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
VHF BAND DV DEVIATION	[MDS]	1 • Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2	-
(BAND LOW)		2 • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±1.2 kHz
(BAND HIGH)			
VHF BAND DV MODULATION BALANCE	[MDB]	1 1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) Connect an oscilloscope to the modulation analyzer.	-
(BAND LOW)		2 • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	Minimum deviation
(BAND HIGH)			
UHF BAND DV DEVIATION	[MDS]	1 • Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2	-
(BAND LOW)		2 • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	±1.2 kHz
(BAND HIGH)			
UHF BAND DV MODULATION BALANCE	[MDB]	1 1) Connect a modulation analyzer to the antenna connector through an attenuator, and set is as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P-P)/2 2) Connect an oscilloscope to the modulation analyzer.	-
(BAND LOW)		2 • While transmitting, adjust the deviation using [DIAL], then push [BAND] to store the adjustment value.	Minimum deviation
(BAND HIGH)			

## 5-6 RECEIVE SENSITIVITY ADJUSTMENT

- 1) Select an adjustment item using [VFO/MHz] / [M/CALL].
- 2) Set the SSG as specified (frequency, deviation and output level).
- 3) Push [BAND] to adjust (automatic) and store the adjustment value.

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
RECEIVE SENSITIVITY	[LT1]	1 • Connect an SSG to the antenna connector and set as; Modulation : 1 kHz Deviation : 3.5 kHz Level : 0 dB $\mu$ (-107 dBm) <sup>†</sup>	Push [BAND] (Automatic adjustment)
		2 • Set the SSG as; Frequency : (Displayed on the function display)	
	[MT1]	3 • Set the SSG as; Frequency : (Displayed on the function display)	
	[HT1]	4 • Set the SSG as; Frequency : (Displayed on the function display)	
	[LT2]	5 • Set the SSG as; Frequency : (Displayed on the function display)	
	[MT2]	6 • Set the SSG as; Frequency : (Displayed on the function display)	
	[HT2]	7 • Set the SSG as; Frequency : (Displayed on the function display)	
	[LT3]	8 • Set the SSG as; Frequency : (Displayed on the function display)	
	[MT3]	9 • Set the SSG as; Frequency : (Displayed on the function display)	
	[HT3]	10 • Set the SSG as; Frequency : (Displayed on the function display)	
	[UT3]	11 • Set the SSG as; Frequency : (Displayed on the function display)	
	[LT4]	12 • Set the SSG as; Frequency : (Displayed on the function display)	
	[MT4]	13 • Set the SSG as; Frequency : (Displayed on the function display)	
	[HT4]	14 • Set the SSG as; Frequency : (Displayed on the function display)	
	[UT4]	15 • Set the SSG as; Frequency : (Displayed on the function display)	
	[LT5]	16 • Set the SSG as; Frequency : (Displayed on the function display)	
	[MT5]	17 • Set the SSG as; Frequency : (Displayed on the function display)	
	[HT5]	18 • Set the SSG as; Frequency : (Displayed on the function display)	

<sup>†</sup>; This output level of a standard signal generator (SSG) is indicated as SSG's open circuit.

## 5-7 S-METER ADJUSTMENT

- 1) Select an adjustment item using [VFO/MHz] / [M/CALL].
- 2) Set the SSG as specified (frequency and output level).
- 3) Push [BAND] to adjust (automatic) and store the adjustment value.

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION	VALUE
S-METER		1 • Connect an SSG to the antenna connector and set as; Modulation : None	Push [BAND]. (Automatic adjustment)
(S3 level) [VHF band 1] (FM)	[S31]	2 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(S3 level) [VHF band 1] (FMN)	[S31]	3 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(Full scale) [VHF band 1] (FM)	[SF1]	4 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(Full scale) [VHF band 1] (FMN)	[SF1]	5 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(S3 level) [VHF band 2] (FM)	[S32]	6 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(S3 level) [VHF band 2] (FMN)	[S32]	7 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(Full scale) [VHF band 2] (FM)	[SF2]	8 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(Full scale) [VHF band 2] (FMN)	[SF2]	9 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(S3 level) [UHF band 1] (FM)	[S33]	10 • Set the SSG as; Frequency : 300.020 MHz Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(S3 level) [UHF band 1] (FMN)	[S33]	11 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(Full scale) [UHF band 1] (FM)	[SF3]	12 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(Full scale) [UHF band 1] (FMN)	[SF3]	13 • Set the SSG as; Frequency : 300.020 MHz Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(S3 level) [UHF band 2] (FM)	[S34]	14 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(S3 level) [UHF band 2] (FMN)	[S34]	15 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(Full scale) [UHF band 2] (FM)	[SF4]	16 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(Full scale) [UHF band 2] (FMN)	[SF4]	17 • Set the SSG as; Frequency : (Displayed on the function display) Level : +12 dBμ (-95 dBm) <sup>†</sup>	
(S3 level) [UHF band 3] (FM)	[S35]	18 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	
(S3 level) [UHF band 3] (FMN)	[S35]	19 • Set the SSG as; Frequency : (Displayed on the function display) Level : -2 dBμ (-109 dBm) <sup>†</sup>	

<sup>†</sup>; This output level of a standard signal generator (SSG) is indicated as SSG's open circuit.

### 5-7 S-METER ADJUSTMENT (continued)

- 1) Select an adjustment item using [VFO/MHz] / [M/CALL].
- 2) Set the SSG as specified (frequency and output level).
- 3) Push [BAND] to adjust (automatic) and store the adjustment value.

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION		VALUE
(Full scale) [UHF band 3] (FM)	[SF5]	20	<ul style="list-style-type: none"> <li>• Set the SSG as;</li> <li>Frequency : (Displayed on the function display)</li> <li>Level : +12 dBμ (-95 dBm)<sup>†</sup></li> </ul>	Push [BAND]. (Automatic adjustment)
(Full scale) [UHF band 3] (FMN)	[SF5]	21		

<sup>†</sup>; This output level of a standard signal generator (SSG) is indicated as SSG's open circuit.

### 5-8 SQUELCH ADJUSTMENT

- 1) Select an adjustment item using [VFO/MHz] / [M/CALL].
- 2) Push [BAND] to adjust (automatic) and store the adjustment value.

ADJUSTMENT	ADJUSTMENT ITEM	OPERATION		VALUE
SQUELCH [VHF band 1] (FM)	[SQ1]	1	<ul style="list-style-type: none"> <li>• Connect a terminator to the antenna connector.</li> </ul>	Push [BAND]. (Automatic adjustment)
[VHF band 1] (FMN)	[SQ1]	2		
[VHF band 2] (FM)	[SQ2]	3		
[VHF band 2] (FMN)	[SQ2]	4		
[UHF band 1] (FM)	[SQ3]	5		
[UHF band 1] (FMN)	[SQ3]	6		
[UHF band 2] (FM)	[SQ4]	7		
[UHF band 2] (FMN)	[SQ4]	8		
[UHF band 3] (FM)	[SQ5]	9		
[UHF band 3] (FMN)	[SQ5]	10		



## SECTION 6

## PARTS LIST

## [CONTROL UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC2	1110005991	S.IC S-80945CNMC-G9F-T2G	B	49.5/15.5
IC4	1140014930	S.IC UPD78F0512AGA(R)-GAM-AX	B	31.9/13.4
IC7	1130014930	S.IC LC75827W-E	B	69.8/24
IC8	1180003460	S.REG NJM2831F05-TE1-#ZZZB	B	18.9/6.7
Q1	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	85.2/21.4
Q6	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	92.3/9.6
Q7	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	8/24.4
Q8	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	95/11.1
Q9	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	10.5/24.4
Q10	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	84.1/8.7
Q11	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	17.4/27.7
Q12	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	84.1/10.7
Q13	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	17.4/30.1
Q14	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	80.2/15.5
Q15	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	77.8/15.2
Q16	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	82.3/20.2
D4	1790001001	S.ZEN MAZ8062GLL	B	30/21.5
D5	1790001251	S.DIO MA2S1110GL	B	78.3/17.2
D8	1790001251	S.DIO MA2S1110GL	B	14.2/17.6
D9	1790001251	S.DIO MA2S1110GL	B	11.8/12.3
D10	1790001251	S.DIO MA2S1110GL	B	15.8/19.1
D11	1790001251	S.DIO MA2S1110GL	B	13.2/19.3
D12	1790001251	S.DIO MA2S1110GL	B	71.3/8.9
D13	1790001251	S.DIO MA2S1110GL	B	4.4/15.1
D14	1790001251	S.DIO MA2S1110GL	B	2.1/5/8.8
D15	1790001830	S.VAR AVR-M1005C270MTAAB	B	75.6/12.2
D16	1790001830	S.VAR AVR-M1005C270MTAAB	T	58.6/8.4
D17	1790001830	S.VAR AVR-M1005C270MTAAB	T	64.4/9.2
D18	1790001830	S.VAR AVR-M1005C270MTAAB	T	51.1/12
X1	6050012471	S.XTA CR-836A(SMD-49/9.8304 MHz) <JJE>	B	44.1/10.2
R3	7210003340	VAR R0903N-B50K L-20F 50K		
R4	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	35.5/20.2
R7	7210003340	VAR R0903N-B50K L-20F 50K		
R8	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	33.7/20.2
R13	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.1/17.3
R20	7030005530	S.RES ERJ2GEJ 100 X (10)	B	8.3/11.4
R21	7030009280	S.RES ERJ2GEJ 391 X	B	84.7/19.3
R22	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	76.1/19
R24	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	12.1/13.4
R25	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	13.4/20.5
R41	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	36/8.2
R42	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	92.6/7.7
R43	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	11.5/22.7
R44	7030005570	S.RES ERJ2GEJ 820 X (82)	B	91.7/7.7
R45	7030005570	S.RES ERJ2GEJ 820 X (82)	B	6.5/24.4
R46	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	95.5/9.1
R47	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	12/24.1
R48	7030005570	S.RES ERJ2GEJ 820 X (82)	B	94.5/9.1
R49	7030005570	S.RES ERJ2GEJ 820 X (82)	B	5.6/25.2
R50	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.2/8.2
R51	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	19.1/27.6
R52	7030005570	S.RES ERJ2GEJ 820 X (82)	B	85.5/13.1
R53	7030005570	S.RES ERJ2GEJ 820 X (82)	B	20.1/28.4
R54	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.2/10.2
R55	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	19/29.6
R56	7030005570	S.RES ERJ2GEJ 820 X (82)	B	84.4/12.2
R57	7030005570	S.RES ERJ2GEJ 820 X (82)	B	20.2/29.6
R58	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	74.9/18.6
R59	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	74.7/15.7
R60	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	73.9/14.8
R65	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	49.3/2.7
R66	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	73.6/3
R67	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	7.2/2.3
R72	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	33.2/12
R73	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	36.1/11.3
R76	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82/16.1
R77	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	77.2/13.4
R78	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	28/20.2
R79	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	72.7/13.7
R83	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	48.7/17.7
R100	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	81.3/14.1
R101	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	71.2/14.2
R102	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	35.1/21.4
R110	7030007270	S.RES ERJ2GEJ 151 X (150)	T	38.8/20.5
R111	7030007270	S.RES ERJ2GEJ 151 X (150)	T	38.5/19.6
R112	7030007270	S.RES ERJ2GEJ 151 X (150)	T	43.2/21.7
R113	7030007270	S.RES ERJ2GEJ 151 X (150)	T	45.5/21.7
R114	7030007270	S.RES ERJ2GEJ 151 X (150)	T	52.8/19.6
R115	7030007270	S.RES ERJ2GEJ 151 X (150)	T	50.2/20
R116	7030007270	S.RES ERJ2GEJ 151 X (150)	T	67.7/19.5
R117	7030007270	S.RES ERJ2GEJ 151 X (150)	T	65.5/19.5
R120	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.6/24.1
R121	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.6/23
R122	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	84.2/24.7
R123	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	84.2/23.6
R124	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	94.8/2.7
R125	7030000010	S.RES MCR10EZHJ JPW (000)	B	15.5/15.5
R126	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	82.4/18.4
R127	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	61.9/9.1

## [CONTROL UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R128	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	59.8/9.1
R129	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	32/8
R130	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.8/5.1
R131	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	30.9/4.2
R132	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	28.4/6.8
R133	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	51.8/11.1
R134	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	9.4/12.4
R135	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	29.8/23.2
R136	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	31.9/23.3
R137	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	27.1/23.5
R138	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	32.2/22.4
R139	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	15.3/20.1
R140	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	13.3/14.2
R141	7030010040	S.RES ERJ2GEJ-JPW	T	38/11.6
R142	7030010040	S.RES ERJ2GEJ-JPW	B	37.7/13
R146	7030010040	S.RES ERJ2GEJ-JPW	B	27.9/18
R147	7030009280	S.RES ERJ2GEJ 391 X	B	98/11.8
R148	7030009280	S.RES ERJ2GEJ 391 X	B	98.5/10.7
R149	7030009280	S.RES ERJ2GEJ 391 X	B	23.3/27.4
R150	7030009280	S.RES ERJ2GEJ 391 X	B	23.3/28.3
R151	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	76.8/11.9
R152	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	60.7/9.1
R153	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	63.2/9.4
R154	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	9.4/8.9
C2	4030016790	S.CER ECJ0EB1C103K	B	34.6/20.2
C4	4030016790	S.CER ECJ0EB1C103K	B	32.8/20.2
C5	4030017430	S.CER ECJ0EC1H101J	B	83.7/16.1
C7	4030017430	S.CER ECJ0EC1H101J	B	12.2/15.1
C8	4030017430	S.CER ECJ0EC1H101J	B	82.4/17.4
C10	4030017430	S.CER ECJ0EC1H101J	B	12.2/20.6
C16	4030016790	S.CER ECJ0EB1C103K	B	31.7/6.3
C24	4030019500	S.CER GRM21BB31A106KE18 (GRM40 B)	B	8.2/9.7
C25	4030016790	S.CER ECJ0EB1C103K	B	23.2/7.9
C26	4030017040	S.CER ECJ0EB1A333K	B	47.1/14.3
C27	4030017460	S.CER ECJ0EB1E102K	B	21.4/7.8
C28	4030019120	S.CER GRM188B31E105KA75D	B	21.7/6.7
C29	4030017460	S.CER ECJ0EB1E102K	B	3.8/17
C30	4030017420	S.CER ECJ0EC1H470J	B	12.2/16
C31	4030017420	S.CER ECJ0EC1H470J	B	11.3/20.5
C34	4030016790	S.CER ECJ0EB1C103K	B	80.4/18.7
C35	4030016930	S.CER ECJ0EB1A104K	B	75.8/16.9
C36	4030016930	S.CER ECJ0EB1A104K	B	74.3/16.6
C37	4030016930	S.CER ECJ0EB1A104K	B	74.1/17.5
C42	4030017460	S.CER ECJ0EB1E102K	B	53.1/8
C43	4030017460	S.CER ECJ0EB1E102K	B	75.9/13.4
C44	4030017460	S.CER ECJ0EB1E102K	T	35.2/11.1
C45	4030017460	S.CER ECJ0EB1E102K	T	37/11.6
C46	4030017460	S.CER ECJ0EB1E102K	B	19.2/15.8
C48	4030016930	S.CER ECJ0EB1A104K	B	76.7/17.2
C49	4030017460	S.CER ECJ0EB1E102K	B	72.7/12.8
C50	4030016790	S.CER ECJ0EB1C103K	B	30/20.1
C51	4030016790	S.CER ECJ0EB1C103K	B	80.3/9.9
C52	4030019120	S.CER GRM188B31E105KA75D	B	82.4/13.2
C53	4030016790	S.CER ECJ0EB1C103K	B	101/14.6
C54	4030017490	S.CER C1608 JB 1A 105K-T	B	34.5/7.2
C55	4030017400	S.CER ECJ0EC1H220J	B	50.6/8.6
C56	4030017400	S.CER ECJ0EC1H220J	B	37.7/8.4
C57	4030017420	S.CER ECJ0EC1H470J	B	26.9/18.9
C58	4030017420	S.CER ECJ0EC1H470J	B	26.8/17.1
C59	4030017420	S.CER ECJ0EC1H470J	B	26.3/16.2
C60	4030017420	S.CER ECJ0EC1H470J	B	30.6/7.2
C61	4030017420	S.CER ECJ0EC1H470J	B	30.1/6.3
C62	4030017420	S.CER ECJ0EC1H470J	B	28.7/7.7
C63	4030017420	S.CER ECJ0EC1H470J	B	27.3/8.5
C64	4030017420	S.CER ECJ0EC1H470J	B	26.1/9.3
C65	4030017420	S.CER ECJ0EC1H470J	B	27.3/9.4
C66	4030017420	S.CER ECJ0EC1H470J	B	26.8/19.9
J2	6510023170	CON 3008L-6P6C <KIN>		
J3	6510027270	CON 3167 FRONT CONNECTOR <CCP>		
DS1	5040003470	S.LED HT-297UY/UYG <SHO>	T	37/20.6
DS2	5040003470	S.LED HT-297UY/UYG <SHO>	T	59.2/20.6
DS4	5040003470	S.LED HT-297UY/UYG <SHO>	T	44.4/20.6
DS5	5040003470	S.LED HT-297UY/UYG <SHO>	T	81.4/20.6
DS7	5040003470	S.LED HT-297UY/UYG <SHO>	T	51.7/20.6
DS8	5040003470	S.LED HT-297UY/UYG <SHO>	T	74/20.6
DS10	5040003470	S.LED HT-297UY/UYG <SHO>	T	66.6/20.6
DS11	5040003470	S.LED HT-297UY/UYG <SHO>	T	88.8/20.6
DS13	5040003460	S.LED VYPY1111C-4B73A	T	35.8/3
DS14	5040003460	S.LED VYPY1111C-4B73A	T	47.2/3
DS15	5040003460	S.LED VYPY1111C-4B73A	T	58.6/3
DS16	5040003460	S.LED VYPY1111C-4B73A	T	6.9/33
DS17	5040003460	S.LED VYPY1111C-4B73A	T	4.9/2.5
DS18	5040003460	S.LED VYPY1111C-4B73A	T	70/3
DS20	5030003190	LCD TAK-43542 <ITAK>	T	
DS21	5040003460	S.LED VYPY1111C-4B73A	T	81.4/3
DS22	5040003460	S.LED VYPY1111C-4B73A	T	92.8/3
DS23	5040003460	S.LED VYPY1111C-4B73A	T	5.3/26.2
DS24	5040003460	S.LED VYPY1111C-4B73A	T	7.2/8.9

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

[CONTROL UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
S3	2260003190	S.SWI SKQYPAE010	T	110.3/17.5
S4	2260003190	S.SWI SKQYPAE010	T	35.9/5.8
S5	2260003190	S.SWI SKQYPAE010	T	47.3/5.8
S6	2260003190	S.SWI SKQYPAE010	T	58.7/5.8
S7	2260003190	S.SWI SKQYPAE010	T	70.1/5.8
S8	2260003190	S.SWI SKQYPAE010	T	81.5/5.8
S9	2260003190	S.SWI SKQYPAE010	T	92.9/5.8
S10	2260003190	S.SWI SKQYPAE010	T	6.1/5.7
S11	2260003190	S.SWI SKQYPAE010	T	6.1/29.6
S14	2250000660	ENC SW-170(EC12D1564402)		
EP2	8930079110	LCD SRCN-3167-SP-N-W (SHJ)		
EP9	6910012350	S.BEA MMZ1608Y 102BT	B	4.4/19.3
EP10	6910012350	S.BEA MMZ1608Y 102BT	B	11.6/18.1
EP11	6910012350	S.BEA MMZ1608Y 102BT	B	9.4/21.8
EP12	6910012350	S.BEA MMZ1608Y 102BT	B	10.9/15.9
EP13	6910012350	S.BEA MMZ1608Y 102BT	B	58.2/7.9
EP14	6910012350	S.BEA MMZ1608Y 102BT	B	70.4/10.8

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1110004310	S.IC M62352GP 75EC	T	77.4/91.7
IC2	1150002122	IC S-AU82AL(I,Q)		
IC3	1150002162	IC S-AV32A(I2,Q)		
IC4	1110004050	S.IC NJM3404AV-TE1-#FMZB	B	49.7/37.2
IC8	1190000350	S.IC M62363FP-650C	T	104.7/79.8
IC9	1130007021	S.IC TC7S66FU(TE85L,F)	T	99/85.7
IC11	1130008511	S.IC TC7W53FU(TE12L,F)	T	60.8/95.6
IC13	1130008511	S.IC TC7W53FU(TE12L,F)	T	53.6/69.1
IC14	1140005991	S.IC MB15A02PFV1-G-BND-ERE1	B	104.2/51.1
IC15	1110007300	S.IC NJM2552V-TE1-#ZZZB	T	67/65.5
IC17	1130007021	S.IC TC7S66FU(TE85L,F)	T	99.5/62.2
IC20	1180003510	S.REG NJM2831F12-TE1-#ZZZB	B	45.9/124
IC21	1180003470	S.REG NJM2835DL1-05-TE1-#ZZZB	B	24.4/102.1
IC22	1140012950	S.IC 24LC512T-I/SM	T	65.1/118.3
IC23	1110005991	S.IC S-80945CNMC-G9F-T2G	T	74.4/123.9
IC24	1180001251	S.IC TA7808F(TE16L,Q)	B	23.2/94.9
IC25	1140014910	S.IC HD64F2505FC26DV (EMPTY)	B	74.5/115.1
IC26	1110006490	S.IC LMV321IDCKR	T	73.7/129.2
IC28	1130007371	S.IC TA75S558F(TE85L,F)	T	104.9/13.3
IC29	1130008511	S.IC TC7W53FU(TE12L,F)	B	96.3/14.4
IC30	1130011770	S.IC CD4066BPWR	T	94/11.2
IC32	1110005310	S.IC AN6123MS	B	91.1/8.7
IC34	1130007021	S.IC TC7S66FU(TE85L,F)	T	89.5/105.9
IC38	1110003091	IC LA4425A-E		
IC42	1130007021	S.IC TC7S66FU(TE85L,F)	T	105.9/33.1
IC45	1110006870	S.IC UPC2709TB-E3	B	95.8/50.4
IC46	1120003020	S.IC MAX3221PWR	T	18.5/88.5
IC48	1110006350	S.IC LM2902PWR	T	115.1/52.8
IC49	1110006740	S.IC LMV3581PWR	T	52.5/106.2
IC51	1130008511	S.IC TC7W53FU(TE12L,F)	T	119.5/52.8
IC52	1130008511	S.IC TC7W53FU(TE12L,F)	B	96.3/7.9
IC53	1110006490	S.IC LMV321IDCKR	T	114.5/68.9
IC55	1190002500	S.IC ZXCT1022E5TA	T	44.7/111.6
IC64	1110005230	S.IC UPC2757TB-E3	T	58.7/13
IC65	1110006490	S.IC LMV321IDCKR	T	64.8/128.8
IC66	1110004490	S.IC M62429FP 700C	T	52.5/120.3
IC67	1130007021	S.IC TC7S66FU(TE85L,F)	T	98.1/82.2
IC1000	1130013650	S.IC TC74VHC125FK(EL,K)	B	92.7/123.1
IC1001	1130013570	S.IC SN74LVC1G07DCK	T	94/126.3
IC1002	1130013640	S.IC TC74VHCT125AFK(E,K)	B	87.4/128.4
IC1003	1180003380	S.REG NJU7775F32-TE1-#ZZZB	T	114.3/105.4
IC1004	1180003380	S.REG NJU7775F32-TE1-#ZZZB	T	112.2/113.5
IC1006	1130010920	S.IC AMBE-2020	B	107.9/100.7
IC1009	1130007021	S.IC TC7S66FU(TE85L,F)	T	102.9/103.7
IC1010	1130011930	S.IC SN74LVC1G04DCKR	B	105.9/112.1
IC1011	1130013440	S.IC SN74LVC2G74DCTR	B	119.5/93.3
IC1012	1110005430	S.IC CMX589AD5/TR	T	109.8/97.2
IC1013	1130011631	S.IC AD73311ARSZ <FE>	B	94.3/99.8
IC1014	1110005290	S.IC NJM2115V-TE1-#ZZZB	T	92.7/97.5
IC1015	1110006490	S.IC LMV321IDCKR	T	100.6/98.7
IC1016	1130014260	S.IC SN74LVC2GU04DCKR	B	54.9/119.1
IC1018	1130007021	S.IC TC7S66FU(TE85L,F)	B	105.6/57.1
Q3	1590003241	S.TRA UNR9114G0L	T	45.8/52.2
Q6	1590003241	S.TRA UNR9114G0L	T	47.9/52.2
Q9	1590003241	S.TRA UNR9114G0L	T	49.9/52.2
Q11	1590003241	S.TRA UNR9114G0L	T	52.1/52.3
Q12	1590003291	S.TRA UNR9213G0L	T	82.7/84.6
Q13	1590003291	S.TRA UNR9213G0L	T	87.3/28.2
Q14	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	25.8/53.4
Q15	1510000581	S.TRA 2SA1362-GR(TE85R,F)	T	79/84.9
Q17	1510000581	S.TRA 2SA1362-GR(TE85R,F)	T	82.6/27.6
Q19	1580000800	S.FET 3SK324UG-TL-E	T	36.4/22.2
Q21	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	33.3/43.2
Q22	1530003231	S.TRA 2SC5085-Y(TE85R,F)	B	83.7/42.5
Q25	1530004100	S.TRA MT3S20P(TE12L,F)	B	81/81.8
Q26	1530004100	S.TRA MT3S20P(TE12L,F)	B	74.8/43
Q28	1580000800	S.FET 3SK324UG-TL-E	T	31.6/7.7
Q31	1590003231	S.TRA UNR9113G0L	B	53.5/37
Q33	1580000790	S.FET 3SK318YB-TL-E	T	34.4/29.1
Q34	1530003260	S.TRA 2SC5006-T1	T	49.8/12.9
Q35	1530003810	S.TRA 2SC5008-T1	T	37.5/12.9
Q36	1590003231	S.TRA UNR9113G0L	B	52.9/40.7
Q41	1590001650	S.TRA XP4601(TX)	T	65.5/112.3
Q43	1590003241	S.TRA UNR9114G0L	T	55.3/72.4
Q44	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	59/53.3
Q46	1590003241	S.TRA UNR9114G0L	T	53/72.2
Q47	1590001190	S.TRA XP6501-(TX).AB	T	59.4/104.6
Q50	1590003291	S.TRA UNR9213G0L	T	65/103.4
Q52	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	98.7/41.7
Q53	1590003231	S.TRA UNR9113G0L	T	65.6/72.2
Q54	1590003291	S.TRA UNR9213G0L	T	58.4/72.4
Q56	1590003231	S.TRA UNR9113G0L	T	65.6/70.1
Q59	1590003291	S.TRA UNR9213G0L	T	68.4/70.1
Q61	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	101.8/59.5
Q62	1530002691	S.TRA 2SC4116-GR(TE85R,F)	B	104.3/59.8
Q64	1590003291	S.TRA UNR9213G0L	T	94.3/77.8
Q65	1590001650	S.TRA XP4601(TX)	T	87.6/72.4
Q66	1530003221	S.TRA 2SC4406-4-TL-E	T	64.5/54.2
Q68	1590001650	S.TRA XP4601(TX)	T	89.5/76.9
Q73	1530003582	S.TRA 2SC5231A-8-TL-E	T	93.4/67.3
Q76	1530003810	S.TRA 2SC5008-T1	T	91.9/64.6
Q79	1590003291	S.TRA UNR9213G0L	T	79.2/45.4
Q81	1520000460	S.TRA 2SB1132 T100 R	B	32.2/96.4
Q82	1590003451	S.TRA UNR9214G0L	T	37.3/102.3
Q83	1510000671	S.TRA 2SA1588-GR(TE85R, F)	T	35/102.1
Q84	1510000671	S.TRA 2SA1588-GR(TE85R, F)	T	33.9/97.4
Q86	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	105.3/8.5
Q87	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	111.4/14.3
Q88	1590003291	S.TRA UNR9213G0L	T	97.2/16.4
Q90	1590003291	S.TRA UNR9213G0L	T	90.2/12.2
Q92	1590003231	S.TRA UNR9113G0L	T	6.3/116.1
Q93	1590003291	S.TRA UNR9213G0L	T	15.3/103.9

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
Q94	1510000581	S.TRA 2SA1362-GR(TE85R,F)	T	99.9/113.1
Q96	1520000460	S.TRA 2SB1132 T100 R	T	92.1/119.8
Q97	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	91.7/115.8
Q99	1590002270	S.TRA UMG9NTR	T	119.3/48.2
Q100	1590003291	S.TRA UNR9213G0L	T	77.1/111.6
Q102	1530003091	S.TRA 2SC4213-B(TE85R,F)	T	51.2/127.7
Q109	1590003291	S.TRA UNR9213G0L	T	108.5/24.6
Q110	1590003451	S.TRA UNR9214G0L	T	106.8/29.2
Q111	1530003582	S.TRA 2SC5231A-8-TL-E	T	94.1/24.5
Q113	1530003582	S.TRA 2SC5231A-8-TL-E	T	96.9/31.3
Q118	1590003291	S.TRA UNR9213G0L	T	96.3/115
Q121	1590003291	S.TRA UNR9213G0L	T	107.6/31.2
Q122	1590003291	S.TRA UNR9213G0L	T	98.1/64.4
Q123	1520000460	S.TRA 2SB1132 T100 R	T	35/47.2
Q124	1580000800	S.FET 3SK324UG-TL-E	T	66.5/20.9
Q125	1580000800	S.FET 3SK324UG-TL-E	T	62.4/17.7
Q126	1520000460	S.TRA 2SB1132 T100 R	B	40.2/100.7
Q1002	1510000771	S.TRA 2SA1586-GR(TE85L,F)	T	106.2/109.8
Q1003	1590003291	S.TRA UNR9213G0L	T	103.9/108.4
Q1004	1590003291	S.TRA UNR9213G0L	T	102/106
Q1005	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	105.9/114.7
Q1006	1530003990	S.TRA 2SC4738-BL(TE85L,F)	B	119.3/97.3
Q1007	1590003291	S.TRA UNR9213G0L	T	107.5/90.8
Q1008	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	54.7/116.4
Q1009	1530002691	S.TRA 2SC4116-GR(TE85R,F)	B	51.7/120.7
Q1010	1530003990	S.TRA 2SC4738-BL(TE85L,F)	T	115.5/23.1
Q1011	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	56/37.2
Q1012	1510000771	S.TRA 2SA1586-GR(TE85L,F)	B	44.9/43.7
Q1013	1590003291	S.TRA UNR9213G0L	T	56.3/56.2
Q1014	1510000771	S.TRA 2SA1586-GR(TE85L,F)	T	109/73.3
Q1015	1530003582	S.TRA 2SC5231A-8-TL-E	B	95.3/57.3
Q1016	1590003291	S.TRA UNR9213G0L	T	64.9/122.7
D1	1790001241	S.DIO MA2S7280GL	T	35.9/18.8
D2	1790001241	S.DIO MA2S7280GL	T	28.1/27.5
D3	1790001241	S.DIO MA2S7280GL	T	28.9/9.9
D9	1790001621	S.DIO 1SV308(TPL3,F)	T	51.2/6
D12	1750000721	S.VAR HVC375BTRF-E	T	49/20
D13	1750000711	S.VAR HVC350BTRF-E	T	31.6/24.6
D14	1750000711	S.VAR HVC350BTRF-E	T	47/20.9
D16	1790001621	S.DIO 1SV308(TPL3,F)	T	27.2/20.6
D18	1720000701	S.VAR 1SV305(TPL3,F)	T	43.2/7.8
D20	1720000701	S.VAR 1SV305(TPL3,F)	T	46.5/8.6
D23	1750000711	S.VAR HVC350BTRF-E	T	43.7/21.5
D25	1790001251	S.DIO MA2S1110GL	B	79.7/37.8
D29	1790001251	S.DIO MA2S1110GL	B	85.1/80.8
D30	1790001621	S.DIO 1SV308(TPL3,F)	B	13.7/29.5
D31	1750000520	S.DIO DAN222TL	B	68.5/39.3
D36	1790001621	S.DIO 1SV308(TPL3,F)	T	52.2/7.7
D39	1790000981	S.DIO MA3J7420GL	B	22/72.2
D41	1750001610	S.VAR HVC365TRF-E	T	49.6/27.2
D42	1790000981	S.DIO MA3J7420GL	B	42.7/38.1
D44	1750001610	S.VAR HVC365TRF-E	T	46.7/27.2
D45	1750001750	S.VAR EC2C01C-TR	T	45.1/13
D47	1790000981	S.DIO MA3J7420GL	B	16.8/68.2
D49	1790001251	S.DIO MA2S1110GL	T	21.8/24.5
D51	1750001750	S.VAR EC2C01C-TR	T	41.4/14.9
D52	1790000981	S.DIO MA3J7420GL	B	22.9/27.6
D53	1790001621	S.DIO 1SV308(TPL3,F)	T	20.5/24.6
D56	1790001621	S.DIO 1SV308(TPL3,F)	T	27.3/17.9
D57	1750001750	S.VAR EC2C01C-TR	T	35.2/14.4
D58	1750000711	S.VAR HVC350BTRF-E	T	32/17.9
D59	1750001360	S.DIO L709CER (9401)	B	4.2/71.8
D60	1750001610	S.VAR HVC365TRF-E	T	43/28
D61	1790001621	S.DIO 1SV308(TPL3,F)	B	13.7/30.7
D62	1750001360	S.DIO L709CER (9401)	B	18.5/40
D68	1710000871	S.DIO HVU131TRF-E	B	15.2/62.4
D75	1710000871	S.DIO HVU131TRF-E	B	11.9/62.4
D77	1750001700	S.DIO HSC277TRF-E	T	19.1/54.2
D78	1790001251	S.DIO MA2S1110GL	T	19.9/52
D79	1790001251	S.DIO MA2S1110GL	T	25.4/37.3
D81	1790001251	S.DIO MA2S1110GL	B	100.1/49.1
D82	1790001251	S.DIO MA2S1110GL	B	63.7/80.6
D83	1790001251	S.DIO MA2S1110GL	B	63.3/87.5
D84	1790001251	S.DIO MA2S1110GL	B	59.9/81.2
D85	1790001251	S.DIO MA2S1110GL	B	60.7/87.4
D86	1750000370	S.DIO DA221 TL	B	103/57.2
D87	1750001740	S.VAR HVC327CTRU-E	T	100.1/64.8
D88	1750000370	S.DIO DA221 TL	T	64.3/59.3
D91	1750000721	S.VAR HVC375BTRF-E	T	100.2/69
D92	1750000711	S.VAR HVC350BTRF-E	T	100.2/70.2
D95	1750001700	S.DIO HSC277TRF-E	T	59.3/17.3
D97	1790001251	S.DIO MA2S1110GL	T	94.4/63.5
D101	1750001700	S.DIO HSC277TRF-E	T	78.6/53.6
D102	1750001700	S.DIO HSC277TRF-E	B	96.6/53.7
D103	1790001621	S.DIO 1SV308(TPL3,F)	B	92.3/49.7
D104	1750001700	S.DIO HSC277TRF-E	T	76.9/52.8
D110	1790001251	S.DIO MA2S1110GL	T	75/102
D111	1790001251	S.DIO MA2S1110GL	T	76.3/102
D117	1730002780	ZEN MTZJT-77 18B		
D118	1790000700	DIO DSA3A1		
D119	1790001251	S.DIO MA2S1110GL	T	32/101.6
D120	1790001251	S.DIO MA2S1110GL	T	37.7/100
D121	1790001251	S.DIO MA2S1110GL	B	107.9/9.9
D122	1730002341	S.ZEN MAZ8047GML	T	77.3/128.1
D124	1790001251	S.DIO MA2S1110GL [EUR]	T	67.1/97
	1790001251	S.DIO MA2S1110GL [TPE]		
	1790001251	S.DIO MA2S1110GL [CHN]		
	1790001251	S.DIO MA2S1110GL [EXP]		
	1790001251	S.DIO MA2S1110GL [EUR-01]		
D125	1790001251	S.DIO MA2S1110GL [TPE]	T	65.9/97
	1790001251	S.DIO MA2S1110GL [KOR]		
	1790001251	S.DIO MA2S1110GL [AUS]		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D126	1790001251	S.DIO MA2S1110GL [EUR]	T	64.7/97
	1790001251	S.DIO MA2S1110GL [ITR]		
	1790001251	S.DIO MA2S1110GL [EUR-01]		
D127	1790001251	S.DIO MA2S1110GL [ITR]	T	63.5/97
	1790001251	S.DIO MA2S1110GL [TPE]		
	1790001251	S.DIO MA2S1110GL [KOR]		
D128	1790001251	S.DIO MA2S1110GL [TPE]	T	68.2/100.7
	1790001251	S.DIO MA2S1110GL [KOR]		
	1790001251	S.DIO MA2S1110GL [AUS]		
	1790001251	S.DIO MA2S1110GL [EUR-01]		
D134	1790001251	S.DIO MA2S1110GL [EUR]	T	70.6/97
	1790001251	S.DIO MA2S1110GL [ITR]		
	1790001251	S.DIO MA2S1110GL [TPE]		
	1790001251	S.DIO MA2S1110GL [USA]		
	1790001251	S.DIO MA2S1110GL [KOR]		
	1790001251	S.DIO MA2S1110GL [AUS]		
	1790001251	S.DIO MA2S1110GL [EUR-01]		
D135	1790001251	S.DIO MA2S1110GL [EUR]	T	69.4/97
	1790001251	S.DIO MA2S1110GL [ITR]		
	1790001251	S.DIO MA2S1110GL [TPE]		
	1790001251	S.DIO MA2S1110GL [USA]		
	1790001251	S.DIO MA2S1110GL [KOR]		
	1790001251	S.DIO MA2S1110GL [AUS]		
	1790001251	S.DIO MA2S1110GL [EUR-01]		
D140	1750000370	S.DIO DA221 TL	T	14.6/108.5
D141	1790001251	S.DIO MA2S1110GL	T	90/115.8
D145	1750001740	S.VAR HVC327CTRU-E	T	103.4/24.6
D146	1750001740	S.VAR HVC327CTRU-E	T	103.1/29.4
D147	1750001740	S.VAR HVC327CTRU-E	T	99.7/25.8
D148	1750001700	S.DIO HSC277TRF-E	T	106.5/26.9
D155	1790001621	S.DIO 1SV308(TPL3,F)	B	92.2/53.4
D160	1750001700	S.DIO HSC277TRF-E	T	93.9/36.1
D161	1750000771	S.VAR HVC376BTRF-E	B	57.9/125.8
D162	1750001250	S.VAR SVC383-TL-E	T	53.3/112.4
D163	1790001251	S.DIO MA2S1110GL	B	57.8/108.5
D164	1790001251	S.DIO MA2S1110GL	B	59/115.7
D165	1790001251	S.DIO MA2S1110GL	T	107.1/127.8
D166	1790001251	S.DIO MA2S1110GL	T	109.2/130.4
D167	1790001251	S.DIO MA2S1110GL	T	108/126.5
D168	1790001251	S.DIO MA2S1110GL	T	107.1/124.4
D169	1790001521	S.ZEN MAZ8075GLL	T	31.4/44.7
D170	1750001700	S.DIO HSC277TRF-E	T	72.8/53.5
D172	1750000520	S.DIO DAN222TL	T	57.7/17.3
D173	1790001241	S.DIO MA2S7280GL	T	62.6/51.3
D175	1750001700	S.DIO HSC277TRF-E	T	95.2/36.1
D176	1750001700	S.DIO HSC277TRF-E	B	98/53.7
D177	1790001621	S.DIO 1SV308(TPL3,F)	B	16.3/30.5
D178	1790001241	S.DIO MA2S7280GL	T	47.2/15.8
D179	1790001621	S.DIO 1SV308(TPL3,F)	T	75.6/52.8
D180	1790001621	S.DIO 1SV308(TPL3,F)	T	80.4/42.6
D181	1750001700	S.DIO HSC277TRF-E	T	82.2/42.6
D185	1790001251	S.DIO MA2S1110GL	T	75/104.7
D186	1790001251	S.DIO MA2S1110GL	T	73.8/106.3
D187	1790001251	S.DIO MA2S1110GL	T	68.8/106.2
D188	1790001251	S.DIO MA2S1110GL	T	67.2/107.5
D1000	1790001241	S.DIO MA2S7280GL	B	109.4/109.9
D1002	1790001251	S.DIO MA2S1110GL	B	51.2/117.4
D1003	1790001251	S.DIO MA2S1110GL	B	29.7/100.7
D1004	1730002431	S.ZEN MAZ8150GML	T	112.9/130
D1005	1790000981	S.DIO MA3J7420GL	T	31.2/69.7
D1006	1790000981	S.DIO MA3J7420GL	T	35.7/35.9
D1007	1790001251	S.DIO MA2S1110GL	T	115.7/115.4
D1008	1790001830	S.VAR AVR-M1005C270MTAAB	T	30.8/117.6
D1009	1790000981	S.DIO MA3J7420GL	T	66.7/49.1
F11	2020002390	CER LT450HW <JJE>		
F12	2020002250	CER LT450EW <JJE>		
F16	2030000600	S.MON MFT46.3P2 46.350 MHz (FL-409)	T	61.3/34.8
X2	6070000300	S.DIS JTBM450CX24 <JJE>	T	77/72.2
X4	6050012530	S.XTA CR-841(SMD49/19.6608 MHz) <JJE>	B	60.5/129.1
X5	6050012830	S.XTA CR-875 TTS14VSB-A4 15.3 MHz	B	105.2/41
X1000	6050012840	S.XTA CR-876 TTS18NSE-A11 16.384 MHz	B	101.7/118.5
X1001	6050012850	S.XTA CR-877 TTS18NSE-A11 9.8304 MHz	B	119.3/106.5
L1	6200005621	S.COI ELJRE 4N7ZFA	T	39.7/6.7
L3	6200005701	S.COI ELJRE 22NGFA	T	50.7/15.4
L4	6200012400	S.COI 0.30-0.91-4TL 8.6N <COMO>	T	50.6/19.9
L10	6200012400	S.COI 0.30-0.91-4TL 8.6N <COMO>	T	45.4/20
L19	6200005731	S.COI ELJRE 39NGFA	B	85.6/45.5
L22	6200005721	S.COI ELJRE 33NGFA	B	81.6/43.6
L25	6200005691	S.COI ELJRE 18NGFA	B	86.2/77.5
L26	6200005691	S.COI ELJRE 18NGFA	B	85.6/39.7
L29	6200005661	S.COI ELJRE 10NGFA	B	80.4/40.1
L31	6200012400	S.COI 0.30-0.91-4TL 8.6N <COMO>	T	42.1/21.4
L32	6200005741	S.COI ELJRE 47NGFA	T	52.3/11.9
L35	6200005701	S.COI ELJRE 22NGFA	B	75.9/38.3
L36	6200005681	S.COI ELJRE 15NGFA	B	70.9/40.5
L37	6200005731	S.COI ELJRE 39NGFA	B	81/77.9
L38	6200011580	S.COI LQW18AN33NG00D	T	38.6/22.5
L40	6200005661	S.COI ELJRE 10NGFA	T	36.1/7
L42	6200011590	S.COI LQW18AN39NG00D	T	33.3/22.8
L43	6200012400	S.COI 0.30-0.91-4TL 8.6N <COMO>	T	30/24.7
L45	6200010210	S.COI C2012C-22NG-A	T	27.8/24.8
L46	6200010060	S.COI AS080647-56N	B	32.9/82.8
L48	6200005601	S.COI ELJRE 3N3ZFA	T	47.2/7
L49	6200005611	S.COI ELJRE 3N9ZFA	T	44/6.2
L50	6200010040	S.COI AS100340-10N	B	31.6/37.8

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
L51	6200011660	S.COI LQW18ANR15G00D	T	26.3/35.5
L54	6200011670	S.COI LQW18AN82NG00D	T	45.3/27.1
L55	6200011670	S.COI LQW18AN82NG00D	T	51.9/27.3
L56	6200010060	S.COI AS080647-56N	B	20.9/82.9
L57	6200011780	S.COI LQW18ANR18G00D	T	43.3/12.6
L58	6200009220	S.COI LQW18AN15NG00D (LQW1608A15NG00)	T	43.9/14.5
L59	6200001981	S.COI NLV25T-1R0J	T	37.2/29.6
L61	6200010150	S.COI AS080340-15N	B	26.3/38.3
L62	6200010420	S.COI FHW1210HC 1R0JGT <JJE>	B	3.8/76.4
L63	6200010010	S.COI C2012C-39NG-A	T	28.5/15.5
L64	6200012980	S.COI 0.40-1.4-5TR 18.3N <COMO>	T	28.8/12.9
L65	6200012660	S.COI 0.30-1.0-4TR 9.1N <COMO>	T	31.7/14
L66	6200011650	S.COI LQW18AN68NG00D	T	24.4/38.9
L67	6200011860	S.COI LQW18ANR47G00D	T	29.8/20.2
L68	6200009220	S.COI LQW18AN15NG00D (LQW1608A15NG00)	T	40.4/13.3
L69	6200012960	S.COI 0.45-1.4-4TL 12.1N <COMO>	T	18/23.8
L70	6200010420	S.COI FHW1210HC 1R0JGT <JJE>	B	23.6/42.7
L71	6200011670	S.COI LQW18AN82NG00D	T	41.8/28
L73	6200010160	S.COI AS080440-22N	B	16.8/33.9
L77	6200010160	S.COI AS080440-22N	B	11.4/36.3
L80	6200010160	S.COI AS080440-22N	B	6/36.4
L88	6200010050	S.COI AS080547-47N	B	5/59.2
L89	6200010070	S.COI AS080747-68N	B	11.3/66.4
L92	6200010060	S.COI AS080647-56N	B	7.1/52.9
L94	6200012910	S.COI 0.35-1.6-8TL 45.5N <COMO>	T	16.8/58.8
L96	6200010050	S.COI AS080547-47N	B	3.8/44.3
L97	6200009220	S.COI LQW18AN15NG00D (LQW1608A15NG00)	T	34/14.6
L101	6200010040	S.COI AS100340-10N	B	7/27.7
L102	6200009220	S.COI LQW18AN15NG00D (LQW1608A15NG00)	T	24.2/7
L104	6200010160	S.COI AS080440-22N	B	10/22.7
L105	6200010630	S.COI LQW18AN8N2D00D	T	22.6/7.4
L107	6200010120	S.COI LQW18AN5N6C00D	T	20.9/7.8
L108	6200010150	S.COI AS080340-15N	B	10.4/15.5
L110	6200012390	S.COI 0.30-0.92-3TR 5.8N <COMO>	T	15.5/13.7
L111	6200004480	S.COI MLF1608D R82K-T	B	95.7/41.8
L112	6200003540	S.COI MLF1608D R22K-T	B	98/43.5
L116	6200002651	S.COI NLV25T-R18J	T	102.7/68.9
L118	6200010030	S.COI C2012C-15NG-A	T	97.8/69.1
L121	6200005701	S.COI ELJRE 22NGFA	T	92.4/62.9
L124	6200005691	S.COI ELJRE 18NGFA	B	91.5/46.1
L128	6200010850	S.COI LQW18AN22NG00D (LQW1608A22NG00)	T	61.8/22.9
L130	6200005661	S.COI ELJRE 10NGFA	T	83.1/49.9
L131	6200005701	S.COI ELJRE 22NGFA	T	79/47.7
L133	6200005661	S.COI ELJRE 10NGFA	T	83.7/48
L134	6200005701	S.COI ELJRE 22NGFA	T	78.6/43.2
L135	6200005641	S.COI ELJRE 6N8ZFA	T	82.2/45.4
L144	6200002611	S.COI NLV25T-R47J	T	104.2/27
L145	6200010310	S.COI C2012C-27NG-A	T	101.6/23.8
L146	6200010310	S.COI C2012C-27NG-A	T	101.5/27.1
L150	6200006981	S.COI ELJRE R10GFA	T	95.3/31.9
L157	6200006991	S.COI ELJRE 56NGFA	B	91.6/57.7
L161	6200003960	S.COI MLF1608A 1R0K-T	B	93.8/50.4
L162	6200010700	S.COI LQW18AN12NG00D	T	83.1/51.1
L163	6200005011	S.COI NLV25T-100J	T	25.2/91
L166	6200005731	S.COI ELJRE 39NGFA	T	72/47.4
L167	6200005731	S.COI ELJRE 39NGFA	T	72/44.8
L168	6200005140	S.COI MLF1608D R33K-T	T	60.4/15
L169	6200009851	S.COI NLV25T-R39J	T	58.7/22.4
L170	6200010540	S.COI C2012C-47NG-A	T	66.6/14.9
L172	6200010030	S.COI C2012C-15NG-A	T	63.8/11.7
L173	6200005140	S.COI MLF1608D R33K-T	T	61.6/53.6
L174	6200003960	S.COI MLF1608A 1R0K-T	B	101.7/42.3
L175	6200005691	S.COI ELJRE 18NGFA	T	76/43.6
L176	6200009070	S.COI LQW18AN18NG00D (LQW1608A18NG00)	T	27/8
L177	6200011670	S.COI LQW18AN82NG00D	T	33.1/31.2
L178	6200009220	S.COI LQW18AN15NG00D (LQW1608A15NG00)	T	35.6/63.7
R8	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	81.2/84.7
R9	7030004980	S.RES ERJ2GEJ 101 X (100)	T	36.1/9.1
R11	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	49/7.1
R12	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	86/26.6
R16	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	25.9/55.6
R17	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	79.3/87
R20	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	84.7/27.1
R22	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	85/69.1
R23	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	49.2/22.6
R27	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	46.6/22.6
R29	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	15.1/28.3
R33	7030010430	S.RES ERJ2GEJ 120 X (12)	B	86.2/70.5
R35	7030004970	S.RES ERJ2GEJ 470 X (47)	T	39.6/24.2
R37	7030004980	S.RES ERJ2GEJ 101 X (100)	B	85.8/71.7
R41	7030004980	S.RES ERJ2GEJ 101 X (100)	T	36.3/25.2
R43	7030007280	S.RES ERJ2GEJ 331 X (330)	B	87.3/42.9
R44	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	35.1/43.5
R45	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	31.5/20.7
R46	7030010430	S.RES ERJ2GEJ 120 X (12)	B	86.2/73
R47	7030005300	S.RES ERJ2GEJ 150 X (15)	B	86.8/44.1
R48	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	33.1/23.9
R52	7030010040	S.RES ERJ2GEJ-JPW	T	35.2/20
R53	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	36.4/20.4
R56	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	28.4/17.5
R57	7030007280	S.RES ERJ2GEJ 331 X (330)	B	86.4/42
R58	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	34.2/20.5
R59	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	41.6/36.1
R63	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	83.9/44.2
R64	7030005010	S.RES ERJ2GEJ 681 X (680)	B	85.5/42

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R66	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	23.4/30.4
R68	7030007270	S.RES ERJ2GEJ 151 X (150)	B	81.6/45.7
R72	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	42.4/9.1
R77	7030007250	S.RES ERJ2GEJ 220 X (22)	B	82.5/39.9
R78	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	45.7/9.9
R79	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	43.8/24.4
R88	7030000180	S.RES MCR10EZHJ 22 (220)	B	78.7/34.7
R89	7030005530	S.RES ERJ2GEJ 100 X (10)	B	85.1/59.3
R90	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	77.3/37.5
R91	7030005010	S.RES ERJ2GEJ 681 X (680)	B	78.7/37.4
R92	7030000180	S.RES MCR10EZHJ 22 (220)	B	78.7/32.9
R95	7030000180	S.RES MCR10EZHJ 22 (220)	B	84/75.3
R96	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	82.5/50.4
R97	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	83.7/79.6
R98	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	38.9/14.6
R100	7030000180	S.RES MCR10EZHJ 22 (220)	B	82.3/75.3
R103	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	37.3/14.4
R104	7030004990	S.RES ERJ2GEJ 221 X (220)	B	71.9/37.7
R105	7030003200	S.RES ERJ3GEYJ 100 V (10)	B	75.7/82.8
R106	7030001090	S.RES ERJ2GEJ 180 X (18)	B	71.8/36.5
R107	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	39.6/21.8
R108	7030004970	S.RES ERJ2GEJ 470 X (47)	T	32.1/10.5
R111	7030004990	S.RES ERJ2GEJ 221 X (220)	B	73/36
R112	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	29.2/6.9
R113	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	28.5/7.5
R116	7030005300	S.RES ERJ2GEJ 150 X (15)	B	73.6/82.7
R117	7030004980	S.RES ERJ2GEJ 101 X (100)	B	75.8/81.3
R118	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	28.8/8.2
R120	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	27.8/7.4
R125	7030010040	S.RES ERJ2GEJ-JPW	B	66.5/42
R128	7030007270	S.RES ERJ2GEJ 151 X (150)	B	66.1/40.8
R129	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	66.5/42.9
R133	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	53.9/38.6
R135	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	52.6/11.2
R137	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	25.1/22.5
R138	7030010040	S.RES ERJ2GEJ-JPW	B	69.9/82.2
R139	7030007280	S.RES ERJ2GEJ 331 X (330)	T	29.7/8.5
R140	7030004990	S.RES ERJ2GEJ 221 X (220)	B	71.8/82.8
R141	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	70.8/82.2
R144	7030005530	S.RES ERJ2GEJ 100 X (10)	T	33.7/6.5
R147	7030005530	S.RES ERJ2GEJ 100 X (10)	T	39.3/16.3
R148	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	52.2/35.7
R149	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	48.6/29.2
R152	7030004980	S.RES ERJ2GEJ 101 X (100)	B	52.1/32.1
R154	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	21.3/69.9
R155	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	47.7/29.2
R156	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	46.1/14.6
R157	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	52.1/31.2
R158	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	49.3/32.5
R160	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	30.3/18.3
R161	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	36.2/15.6
R162	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	50.5/32.1
R163	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	48.1/31.2
R164	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	43.9/30.1
R166	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	45.5/36.5
R167	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	46.9/36
R169	7030004970	S.RES ERJ2GEJ 470 X (47)	T	37.6/32.6
R170	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	34.9/6.7
R174	7030007270	S.RES ERJ2GEJ 151 X (150)	T	35.2/32.7
R176	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	46.9/37.7
R178	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	21.1/27.2
R179	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	29.7/28.7
R181	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	30/30.2
R182	7030005720	S.RES ERJ2GEJ 563 X (56K)	T	47.1/13.8
R183	7030004990	S.RES ERJ2GEJ 221 X (220)	T	48/11.5
R185	7030010040	S.RES ERJ2GEJ-JPW	T	32.3/27.6
R187	7030004990	S.RES ERJ2GEJ 221 X (220)	T	35.6/12.1
R188	7030007990	S.RES ERJ12YJ820U (82)	T	5.5/81.5
R189	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	33.9/26.5
R190	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	32.3/28.5
R192	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	42.6/14.7
R193	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	45.3/40
R194	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	49.3/42.4
R195	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	69.9/35.5
R196	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	45.6/41.3
R197	7030004980	S.RES ERJ2GEJ 101 X (100)	B	51/43.1
R198	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	49.4/43.6
R199	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	39.3/13.3
R201	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	16.5/65.4
R202	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	22.4/68
R203	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	23.7/72.6
R204	7030004970	S.RES ERJ2GEJ 470 X (47)	T	16.2/26.6
R205	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	52.4/39.2
R208	7030005010	S.RES ERJ2GEJ 681 X (680)	T	39.8/28.6
R209	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	22.5/69.4
R210	7030007990	S.RES ERJ12YJ820U (82)	B	29.6/42.9
R211	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	52.8/42.3
R215	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	20/57.2
R				

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R272	7030007280	S.RES ERJ2GEJ 331 X (330)	T	57.2/104.6
R276	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	63.7/111.5
R277	7030007350	S.RES ERJ2GEJ 393 X (39K)	T	60.5/100.6
R278	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	64.4/109.9
R283	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	61.6/101.6
R285	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	64.4/107.5
R287	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	98.4/36.8
R288	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	61.9/100.4
R292	7030010040	S.RES ERJ2GEJ-JPW	B	102.8/38.6
R293	7030010040	S.RES ERJ2GEJ-JPW	T	50.7/71
R299	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	98.7/38.4
R301	7030004980	S.RES ERJ2GEJ 101 X (100)	T	62.3/65.4
R302	7030010040	S.RES ERJ2GEJ-JPW	T	59.8/68.8
R303	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	61/63.5
R304	7030007060	S.RES ERJ2GEJ 684X (680K)	B	100.8/43.6
R305	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	56.9/72.2
R307	7030010040	S.RES ERJ2GEJ-JPW	T	57/69
R308	7030005000	S.RES ERJ2GEJ 471 X (470)	T	61.4/68.8
R309	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	99.8/52.8
R312	7030007250	S.RES ERJ2GEJ 220 X (22)	B	103.5/45.4
R313	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	104.6/44.7
R316	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	64.9/79.5
R317	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	59.6/67.6
R318	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	99.7/51
R320	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	106.4/46.4
R321	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	59.5/66.3
R322	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	62/81
R323	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	62.9/89.2
R324	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	62.7/67.6
R325	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	101.8/46.7
R330	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	61.2/82.5
R331	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	61.1/89.1
R333	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	101/54.5
R334	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	60.7/79.6
R336	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	101.2/55.8
R337	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	101.4/57.3
R338	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	102.8/55.6
R339	7030005530	S.RES ERJ2GEJ 100 X (10)	T	87.4/79.2
R340	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	106.3/59.3
R342	7030004970	S.RES ERJ2GEJ 470 X (47)	T	62.5/71.3
R343	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	100.5/57.3
R344	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	106.3/60.5
R345	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	71/69.5
R346	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	73.1/68
R347	7030004980	S.RES ERJ2GEJ 101 X (100)	B	99.2/57.8
R348	7030004990	S.RES ERJ2GEJ 221 X (220)	T	95.3/34
R350	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	98.5/46.7
R351	7030004980	S.RES ERJ2GEJ 101 X (100)	T	74.4/66.1
R352	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	62.3/63.3
R354	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	93.8/79.6
R355	7030010040	S.RES ERJ2GEJ-JPW	B	100.5/60.9
R356	7030008270	S.RES RR0510P-104-D (100K)	T	45.5/117.3
R357	7030008270	S.RES RR0510P-104-D (100K)	T	47.3/116.2
R358	7030008270	S.RES RR0510P-104-D (100K)	T	47.2/119
R359	7030008270	S.RES RR0510P-104-D (100K)	T	47.2/118.1
R360	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	95.8/77.5
R361	7030008270	S.RES RR0510P-104-D (100K)	T	47.2/117.2
R362	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	102/60
R363	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	T	86.8/74.7
R364	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	88/74.3
R365	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	100.4/60.5
R368	7030010040	S.RES ERJ2GEJ-JPW	T	98.5/78.5
R369	7030007280	S.RES ERJ2GEJ 331 X (330)	T	98.8/60.5
R370	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	94.4/76.3
R373	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	T	89.4/79.6
R377	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	89.8/78.7
R378	7030010040	S.RES ERJ2GEJ-JPW	T	101.3/62.7
R379	7030005000	S.RES ERJ2GEJ 471 X (470)	T	62.1/50.7
R380	7030005000	S.RES ERJ2GEJ 471 X (470)	T	60.6/53.7
R381	7030005530	S.RES ERJ2GEJ 100 X (10)	T	65.6/56.8
R382	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	T	100.9/67.3
R383	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	58.1/18.8
R384	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	65.4/51.5
R386	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	87.4/76.2
R387	7030005100	S.RES ERJ2GEJ 154 X (150K)	T	63.8/50.3
R390	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	T	102.5/66.7
R394	7030008270	S.RES RR0510P-104-D (100K)	T	100/66.8
R396	7030005590	S.RES ERJ2GEJ 680 X (68)	T	64.1/57.6
R404	7030005820	S.RES RR0510P-103-D (10K)	T	94.9/69.8
R411	7030005820	S.RES RR0510P-103-D (10K)	T	94.9/67.1
R412	7030005750	S.RES RR0510P-470-D (47)	T	93.7/65.7
R413	7030008280	S.RES ERJ2GEJ 271 X (270)	T	91.4/70
R426	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	93.3/64.2
R427	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	91.7/66.1
R428	7030005710	S.RES ERJ2GEJ 121 X (120)	T	73.2/50.7
R432	7030005590	S.RES ERJ2GEJ 680 X (68)	T	94/61.4
R433	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	94.1/59.7
R435	7030005710	S.RES ERJ2GEJ 121 X (120)	T	73.5/47.2
R436	7030004970	S.RES ERJ2GEJ 470 X (47)	T	72/49.5
R439	7030004990	S.RES ERJ2GEJ 221 X (220)	T	64.5/39.9
R440	7030005530	S.RES ERJ2GEJ 100 X (10)	T	58.4/56
R441	7030010090	S.RES ERJ2GEJ 180 X (18)	T	82.8/53.3
R445	7030010040	S.RES ERJ2GEJ-JPW	B	92.2/41.7
R446	7030010040	S.RES ERJ2GEJ-JPW	B	92.7/44.2
R448	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	97.1/47.4
R449	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	79.7/52.3
R450	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	77.1/50.7
R452	7030004990	S.RES ERJ2GEJ 221 X (220)	T	60/28.6
R455	7030009200	S.RES ERJ2GEJ 390 X (39)	T	78.4/52
R459	7030005300	S.RES ERJ2GEJ 150 X (15)	T	78.4/51.1
R460	7030009200	S.RES ERJ2GEJ 390 X (39)	T	79/49.8
R461	7030005530	S.RES ERJ2GEJ 100 X (10)	T	57.5/54.3
R462	7030008280	S.RES ERJ2GEJ 271 X (270)	T	81.9/53.3
R463	7030008280	S.RES ERJ2GEJ 271 X (270)	T	82.7/52.1

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R465	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	83.5/44.1
R473	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	110.8/125.4
R476	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	69.7/125.3
R477	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	28.7/95.2
R478	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	56.3/124.6
R479	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	68.7/111.5
R480	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	60/119.5
R481	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	65.3/125.7
R482	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	60.4/121.1
R483	7030007250	S.RES ERJ2GEJ 220 X (22)	B	44.1/119.6
R484	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	77.2/118.7
R485	7030000400	S.RES MCR10EZJH 1.5K (152)	B	38.4/93.3
R486	7030004980	S.RES ERJ2GEJ 101 X (100)	T	81.1/110.1
R489	7030004980	S.RES ERJ2GEJ 101 X (100)	B	70/128.9
R490	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	109.8/127.4
R491	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	119.3/78.5
R492	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	119.7/80.6
R493	7030004980	S.RES ERJ2GEJ 101 X (100)	B	85.6/122.3
R494	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	103/9.6
R495	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	102.6/77.9
R497	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	110.8/127
R498	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	32.2/98.8
R499	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	31.2/99.7
R500	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	35.7/98.8
R501	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	36.6/98.8
R504	7030004980	S.RES ERJ2GEJ 101 X (100)	T	110.4/129.6
R506	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	111.4/129.7
R508	7030004980	S.RES ERJ2GEJ 101 X (100)	B	76.8/130.5
R509	7510001770	S.THE NTCG10 4LH 473JT	B	56.7/112.8
R510	7030008260	S.RES RR0510P-393-D (39K)	B	54.8/111.9
R511	7030004980	S.RES ERJ2GEJ 101 X (100)	B	58.5/117.4
R512	7030004980	S.RES ERJ2GEJ 101 X (100)	B	58.5/118.3
R514	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	106.9/8.6
R515	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	108.1/8.6
R516	7410001230	S.ARR EXB28V101JX	B	80.4/129.7
R517	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	105.8/10
R518	7030004980	S.RES ERJ2GEJ 101 X (100)	B	64/107.8
R519	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	103.9/9.6
R520	7410001230	S.ARR EXB28V101JX	B	62.3/109
R521	7030005521	S.RES ERA3YKD 334V (330K)	T	73.8/131.1
R522	7030005501	S.RES ERA3YKD 124V (120K)	T	76.7/130.6
R523	7030005691	S.RES ERA3YED 123V (12K)	T	79.3/130.6
R524	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	75.8/128.8
R525	7410001230	S.ARR EXB28V101JX	B	60.2/111.2
R527	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	113.3/14.8
R529	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	113.7/11.9
R530	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	71.8/128.9
R532	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	111.7/12.8
R533	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	113.3/12.8
R534	7030004980	S.RES ERJ2GEJ 101 X (100)	T	81.3/107.7
R536	7030004980	S.RES ERJ2GEJ 101 X (100)	T	82.7/111.5
R537	7030004980	S.RES ERJ2GEJ 101 X (100)	T	108.7/14.2
R538	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	113.3/15.7
R539	7030004980	S.RES ERJ2GEJ 101 X (100)	T	79.6/121.5
R540	7030004980	S.RES ERJ2GEJ 101 X (100)	T	79.4/123.4
R541	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	113.3/16.6
R545	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	106.5/15.5
R547	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	108/11.9
R549	7030010040	S.RES ERJ2GEJ-JPW	T	107.1/11.9
R550	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	99.4/66.1
R552	7030004980	S.RES ERJ2GEJ 101 X (100)	B	73.2/99.9
R553	7030004980	S.RES ERJ2GEJ 101 X (100)	T	83.1/118.2
R554	7410001230	S.ARR EXB28V101JX	B	86.8/120.9
R556	7410001230	S.ARR EXB28V101JX	B	80.9/103.5
R557	7030004980	S.RES ERJ2GEJ 101 X (100)	T	76.6/109.6
R558	7410001230	S.ARR EXB28V101JX	B	77.6/99.7
R559	7410001230	S.ARR EXB28V101JX	B	88.6/111.3
R560	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	101/11.7
R561	7410001230	S.ARR EXB28V101JX	B	85/106.4
R562	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	104.7/17.7
R563	7410001230	S.ARR EXB28V101JX	B	79.1/101.7
R564	7410001230	S.ARR EXB28V101JX	B	82.6/105.3
R566	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	T	101.2/16.1
R567	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	70.8/110.1
R568	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	72/110.6
R570	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	88.3/12.4
R571	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	4.3/116.1
R572	7030005090	S.RES ERJ		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R619	7030005000	S.RES ERJ2GGEJ 471 X (470)	T	97.8/114.5
R620	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	93.5/115.8
R621	7030005160	S.RES ERJ2GGEJ 105 X (1M)	T	94.7/115
R624	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	115.5/40.9
R626	7030005220	S.RES ERJ2GGEJ 223 X (22K)	T	51.9/125.5
R627	7030008410	S.RES ERJ2GGEJ 392 X (3.9K)	T	76/113.5
R628	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	114.8/47.7
R631	7030005230	S.RES ERJ2GGEJ 334 X (330K)	T	49.6/125.6
R632	7030007350	S.RES ERJ2GGEJ 393 X (39K)	T	77.2/114
R637	7030007340	S.RES ERJ2GGEJ 153 X (15K)	B	114.6/42.9
R639	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	53.1/126.8
R640	7030009290	S.RES ERJ2GGEJ 562 X (5.6K)	B	119.1/45.3
R642	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	49.2/127.7
R643	7030007340	S.RES ERJ2GGEJ 153 X (15K)	B	113.7/42.9
R644	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	78.5/114.4
R645	7030007350	S.RES ERJ2GGEJ 393 X (39K)	T	77.2/114.9
R659	7030000100	S.RES MCR10EZJH 4.7 (4R7)	T	13.9/127.3
R660	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	114.7/57.6
R664	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	115.6/57.6
R694	7030005030	S.RES ERJ2GGEJ 152 X (1.5K)	T	106.4/36.1
R695	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	106.4/35.2
R696	7030007570	S.RES ERJ2GGEJ 122 X (1.2K)	T	104.7/35.1
R697	7030007570	S.RES ERJ2GGEJ 122 X (1.2K)	T	103.6/33.2
R698	7030007570	S.RES ERJ2GGEJ 122 X (1.2K)	T	103.1/34.1
R699	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	105.2/22.5
R700	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	106.9/24.3
R701	7030007320	S.RES ERJ2GGEJ 225 X (2.2M)	T	107/21.9
R702	7030008270	S.RES RR0510P-104-D (100K)	T	98.5/23.6
R703	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	107.9/27.8
R704	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	107.5/26.6
R705	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	T	104.8/25.3
R708	7030005820	S.RES RR0510P-103-D (10K)	T	96.9/24.1
R712	7030004970	S.RES ERJ2GGEJ 470 X (47)	T	93.3/27.1
R713	7030005820	S.RES RR0510P-103-D (10K)	T	94.2/23
R714	7030009270	S.RES ERJ2GGEJ 821 X (820)	T	97.5/26.1
R717	7030005710	S.RES ERJ2GGEJ 121 X (120)	T	95.4/27.3
R723	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	95.3/29.7
R724	7030009140	S.RES ERJ2GGEJ 272 X (2.7K)	T	96/28.6
R727	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	93.7/29.7
R747	7030007290	S.RES ERJ2GGEJ 222 X (2.2K)	B	93.6/52.4
R748	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	T	93.4/34
R752	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	B	91.5/47.9
R754	7030005530	S.RES ERJ2GGEJ 100 X (10)	T	38/20.6
R756	7030004970	S.RES ERJ2GGEJ 470 X (47)	T	36.3/27.5
R758	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	17/84.1
R759	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	16/92.6
R762	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	117.5/57.4
R763	7030005220	S.RES ERJ2GGEJ 223 X (22K)	T	114.3/59.2
R764	7030005070	S.RES ERJ2GGEJ 683 X (68K)	T	113.4/59.3
R765	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	112.1/57.9
R766	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	112.7/48.1
R767	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	119.6/57.2
R768	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	119.6/58.8
R769	7030005230	S.RES ERJ2GGEJ 334 X (330K)	T	117.5/59
R770	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	85.8/113.5
R771	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	116.9/48.1
R772	7030005000	S.RES ERJ2GGEJ 471 X (470)	T	117.4/44.3
R773	7030009140	S.RES ERJ2GGEJ 272 X (2.7K)	T	117.4/45.2
R774	7030007340	S.RES ERJ2GGEJ 153 X (15K)	T	115.8/45.4
R775	7030005170	S.RES ERJ2GGEJ 474 X (470K)	T	117/46.2
R777	7030005310	S.RES ERJ2GGEJ 124 X (12K)	T	54.9/107.4
R778	7030005310	S.RES ERJ2GGEJ 124 X (12K)	T	55.8/107.4
R779	7030008310	S.RES ERJ2GGEJ 564 X (560K)	T	52.4/101.8
R780	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	50.8/101.8
R781	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	49.6/101.3
R782	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	50.1/105.5
R783	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	50.1/103.9
R784	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	113.9/47.7
R785	7030007290	S.RES ERJ2GGEJ 222 X (2.2K)	T	120.7/57.2
R786	7030007320	S.RES ERJ2GGEJ 225 X (2.2M)	T	50.7/111.5
R787	7030007340	S.RES ERJ2GGEJ 153 X (15K)	T	54.8/104.3
R788	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	48.9/104.3
R789	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	14.2/122.2
R796	7030007320	S.RES ERJ2GGEJ 225 X (2.2M)	T	92.3/108.2
R800	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	91.9/106.9
R801	7030005530	S.RES ERJ2GGEJ 100 X (10)	B	94.1/15.7
R802	7030007290	S.RES ERJ2GGEJ 222 X (2.2K)	B	91.4/62.2
R804	7030008290	S.RES ERJ2GGEJ 183 X (18K)	T	114/45.4
R805	7030008290	S.RES ERJ2GGEJ 183 X (18K)	T	112.3/69.8
R806	7030005220	S.RES ERJ2GGEJ 223 X (22K)	T	112.3/68.9
R807	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	116.2/69.1
R808	7030005070	S.RES ERJ2GGEJ 683 X (68K)	T	116.2/67.3
R809	7030005110	S.RES ERJ2GGEJ 224 X (220K)	T	101/85.4
R810	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	112.3/68
R812	7410001230	S.ARR EXB28V101JX	B	69.1/102.4
R813	7410001230	S.ARR EXB28V101JX	B	86.9/109.4
R814	7410001230	S.ARR EXB28V101JX	B	70.9/100.6
R815	7030005090	S.RES ERJ2GGEJ 104 X (100K)	B	60.9/125.8
R817	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	67.6/122.7
R818	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	68.9/123.5
R819	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	69.4/124.4
R825	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	82.2/118.2
R830	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	77.4/129.8
R831	7410001230	S.ARR EXB28V101JX	B	60.8/119.9
R832	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	62.2/121
R835	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	70/130.7
R836	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	70/129.8
R839	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	89.8/117.2
R848	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	107.8/33.1
R849	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	97.4/62.7
R850	7030005070	S.RES ERJ2GGEJ 683 X (68K)	T	47/113.6
R851	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	66.9/121.7
R852	7520000250	S.POS PRF18BE471QB1RB	T	4.2/71.8
R853	7520000250	S.POS PRF18BE471QB1RB	T	18.6/40

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R854	7030005110	S.RES ERJ2GGEJ 224 X (220K)	B	56.5/39.6
R855	7030005310	S.RES ERJ2GGEJ 124 X (120K)	B	43.5/41
R858	7030005170	S.RES ERJ2GGEJ 474 X (470K)	T	108.7/128.2
R859	7030005170	S.RES ERJ2GGEJ 474 X (470K)	T	108.3/125.4
R860	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	68.6/102.5
R861	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	74.2/97.1
R863	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	70.8/108.5
R865	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	84.3/124
R866	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	85.8/123
R867	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	87.1/123.4
R870	7030010040	S.RES ERJ2GGEJ-JPW	B	105.2/46.7
R875	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	29.8/44
R876	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	38.2/47
R883	7030010040	S.RES ERJ2GGEJ-JPW	T	90.7/131
R887	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	108/23
R888	7030010040	S.RES ERJ2GGEJ-JPW	T	89.6/74.3
R891	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	T	72.4/52.4
R893	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	64.8/130.7
R894	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	58.4/15.3
R895	7030004970	S.RES ERJ2GGEJ 470 X (47)	T	56.6/12.5
R896	7030007280	S.RES ERJ2GGEJ 331 X (330)	T	58.5/19.7
R897	7030004980	S.RES ERJ2GGEJ 101 X (100)	T	56.4/21.8
R899	7030004990	S.RES ERJ2GGEJ 221 X (220)	T	60/20.2
R900	7030004990	S.RES ERJ2GGEJ 221 X (220)	T	64.5/20.9
R901	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	65.8/19.1
R902	7030007570	S.RES ERJ2GGEJ 122 X (1.2K)	T	67.9/19.1
R903	7030005310	S.RES ERJ2GGEJ 124 X (120K)	T	65.6/17.9
R904	7030008400	S.RES ERJ2GGEJ 182 X (1.8K)	T	68.2/20.5
R906	7030005170	S.RES ERJ2GGEJ 474 X (470K)	T	64.5/126.7
R907	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	66.6/128.2
R908	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	66.4/125.2
R909	7030004990	S.RES ERJ2GGEJ 221 X (220)	T	62.7/21.3
R910	7030007570	S.RES ERJ2GGEJ 122 X (1.2K)	T	63.9/15.9
R911	7030008400	S.RES ERJ2GGEJ 182 X (1.8K)	T	64.1/17.2
R912	7030005090	S.RES ERJ2GGEJ 104 X (100K)	T	62.3/15.9
R913	7030005310	S.RES ERJ2GGEJ 124 X (120K)	T	61.9/17.1
R914	7030005000	S.RES ERJ2GGEJ 471 X (470)	B	105.9/34.2
R915	7030009160	S.RES ERJ2GGEJ 181 X (180)	B	103.2/36.5
R916	7030007250	S.RES ERJ2GGEJ 220 X (22)	B	101.6/36.4
R917	7030012160	S.RES ERJM1WSF6MOU	T	37.2/112
R918	7030012160	S.RES ERJM1WSF6MOU	T	41/112
R919	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	62.1/126.1
R920	7030005120	S.RES ERJ2GGEJ 102 X (1K)	T	66.4/127
R921	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	T	60.8/12.2
R922	7030005080	S.RES ERJ2GGEJ 823 X (82K)	B	103.4/37.4
R923	7030005170	S.RES ERJ2GGEJ 474 X (470K)	B	101.8/37.4
R924	7030005170	S.RES ERJ2GGEJ 474 X (470K)	B	99.6/37.6
R925	7030007160	S.RES ERJ12YJ3R3U (3.3)	B	33.4/101.8
R926	7030005240	S.RES ERJ2GGEJ 473 X (47K)	B	36.6/98.7
R927	7030000400	S.RES MCR10EZJH 1.5K (152)	B	37.6/97
R928	7030000020	S.RES MCR10EZJH 1 (010)	B	39.7/95.2
R929	7030004980	S.RES ERJ2GGEJ 101 X (100)	B	99.5/44.7
R930	7030005040	S.RES ERJ2GGEJ 472 X (4.7K)	T	75.6/51.1
R931	7030005710	S.RES ERJ2GGEJ 121 X (120)	T	75.1/48.7
R932	7030005710	S.RES ERJ2GGEJ 121 X (120)	T	75.3/45.3
R933	7030004970	S.RES ERJ2GGEJ 470 X (47)	T	75.4/47.5
R935	7030007290	S.RES ERJ2GGEJ 222 X (2.2K)	T	83.5/41.7
R1001	7030005160	S.RES ERJ2GGEJ 105 X (1M)	B	90.5/127
R1002	7030005160	S.RES ERJ2GGEJ 105 X (1M)	B	84.3/127
R1003	7030005160	S.RES ERJ2GGEJ 105 X (1M)	B	84.3/129.4
R1004	7030008290	S.RES ERJ2GGEJ 183 X (18K)	B	111.2/112.2
R1005	7030005050	S.RES ERJ2GGEJ 103 X (10K)	B	110.7/113.4
R1006	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	92.8/124.4
R1007	7030005220	S.RES ERJ2GGEJ 223 X (22K)	T	112.2/103.4
R1008	7030005060	S.RES ERJ2GGEJ 333 X (33K)	T	114.7/103.1
R1009	7030005160	S.RES ERJ2GGEJ 105 X (1M)	B	90.5/129
R1010	7030005050	S.RES ERJ2GGEJ 103 X (10K)	T	104.2/109.9
R1011	7030005530	S.RES ERJ2GGEJ 100 X (10)	T	106.1/117.6
R1012	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	112/111.3
R1014	7030005240	S.RES ERJ2GGEJ 473 X (47K)	T	110/104.1
R1015	7030006610	S.RES ERJ2GGEJ 394 X (390K)	T	104.8/101.5
R1016	7030005060	S.RES ERJ2GGEJ 333 X (33K)	T	102.6/99.6
R1017	7030005240	S.RES ERJ2GGEJ 473 X (47K)	B	111.5/109.8
R1018	7030005090	S.RES ERJ2		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R1052	7030007250	S.RES ERJ2GEJ 220 X (22)	B	43.2/119.6
R1053	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	52.7/116.8
R1054	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	51.8/115.6
R1055	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	55.4/114.7
R1056	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	53.8/121
R1058	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	53.1/118.7
R1059	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	58.8/51.9
R1060	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	60.3/17.1
R1061	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	117.1/24.9
R1066	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	54.4/35.2
R1067	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	47.4/44
R1068	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	38.3/34.5
R1069	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	37.7/36.8
R1070	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	30.1/67.8
R1071	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	36.1/72.5
R1072	7030010040	S.RES ERJ2GEJ-JPW	T	102.3/12.3
R1073	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	33.2/25
R1074	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	116.3/118.2
R1075	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	119.6/84.9
R1076	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	114.9/116.7
R1077	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	79.1/125.6
R1078	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80/125.6
R1081	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	T	57.5/50.7
R1082	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.4/121
R1083	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	48.3/113.2
R1084	7030007320	S.RES ERJ2GEJ 225 X (2.2M)	B	62.2/105.8
R1085	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	54/126
R1086	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	56.8/67.2
R1087	7030010040	S.RES ERJ2GEJ-JPW	T	31.2/29.8
R1088	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	108.1/71.6
R1089	7030003860	S.RES ERJ3GE JPW V	T	39.1/19.5
R1090	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	97.5/58.2
R1091	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	95.4/55.5
R1092	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	96.3/82.4
R1093	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	98.5/80.3
R1095	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	60.4/64.4
R1096	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	66/124
R1097	7030007260	S.RES ERJ2GEJ 330 X (33)	T	51.2/10.7
R1098	7030005300	S.RES ERJ2GEJ 150 X (15)	T	50.8/8.5
R1099	7030007260	S.RES ERJ2GEJ 330 X (33)	T	51.8/9.4
R1101	7030010040	S.RES ERJ2GEJ-JPW	T	56.1/58.7
R1102	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	96.9/79.5
R1103	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	95.4/82.4
R1104	7030004980	S.RES ERJ2GEJ 101 X (100)	T	107.6/57.7
R1105	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	108.1/59
C4	4030016930	S.CER ECJ0EB1A104K	T	73.1/88.3
C6	4030017460	S.CER ECJ0EB1E102K	T	51.9/50.8
C7	4030017460	S.CER ECJ0EB1E102K	T	47.4/54.6
C8	4030017460	S.CER ECJ0EB1E102K	T	84.1/84.8
C9	4030017460	S.CER ECJ0EB1E102K	T	87.4/29.9
C10	4030017460	S.CER ECJ0EB1E102K	T	34.9/8.3
C12	4030017460	S.CER ECJ0EB1E102K	T	49/9.3
C13	4030017640	S.CER ECJ0EC1H150J	T	52.6/19.1
C15	4030017360	S.CER ECJ0EC1H030B	T	48.2/5.9
C16	4030017460	S.CER ECJ0EB1E102K	T	76.8/85.4
C18	4030016930	S.CER ECJ0EB1A104K	T	24.7/54.9
C19	4030017460	S.CER ECJ0EB1E102K	T	84.7/28.9
C25	4030017340	S.CER ECJ0EC1H010B	T	37.4/6.2
C28	4030017460	S.CER ECJ0EB1E102K	T	49.2/23.5
C29	4030017340	S.CER ECJ0EC1H010B	T	47.5/19.2
C30	4030017460	S.CER ECJ0EB1E102K	T	27.3/51.5
C32	4030017530	S.CER ECJ0EC1H0R5B	T	48.4/18.3
C33	4030018070	S.CER ECJ0EC1H300J	T	50.1/21.7
C34	4030017340	S.CER ECJ0EC1H010B	T	48.4/21.6
C35	4030017340	S.CER ECJ0EC1H010B	T	45.1/23.2
C37	4030017660	S.CER ECJ0EC1H330J	T	45.7/21.7
C40	4030017460	S.CER ECJ0EB1E102K	T	47.5/23.5
C44	4030016930	S.CER ECJ0EB1A104K	T	82/29.9
C46	4030017530	S.CER ECJ0EC1H0R5B	T	44.4/18.3
C47	4030017460	S.CER ECJ0EB1E102K	T	42.8/24.4
C48	4030017340	S.CER ECJ0EC1H010B	T	43.6/19.5
C58	4030017460	S.CER ECJ0EB1E102K	T	40.1/23
C59	4030017460	S.CER ECJ0EB1E102K	B	84.6/72.2
C60	4030017640	S.CER ECJ0EC1H150J	B	87.7/45
C61	4030017460	S.CER ECJ0EB1E102K	T	37.5/24.6
C65	4030017460	S.CER ECJ0EB1E102K	T	29/18.7
C66	4030017460	S.CER ECJ0EB1E102K	T	34.2/21.7
C68	4030017460	S.CER ECJ0EB1E102K	B	82.6/44.7
C69	4030017460	S.CER ECJ0EB1E102K	B	82.3/72.3
C70	4030017620	S.CER ECJ0EC1H100C	B	85.9/43.2
C74	4030017460	S.CER ECJ0EB1E102K	T	33.3/20.5
C77	4030017350	S.CER ECJ0EC1H020B	T	45/5.7
C79	4030017460	S.CER ECJ0EB1E102K	B	82.3/73.2
C80	4510008130	S.ELE 16 CE 220 BS	T	32.5/54.5
C81	4030017460	S.CER ECJ0EB1E102K	B	86.2/74.6
C84	4030017350	S.CER ECJ0EC1H020B	B	85.8/75.8
C86	4030017460	S.CER ECJ0EB1E102K	B	82/46.9
C87	4030017360	S.CER ECJ0EC1H030B	B	83.9/40.2
C88	4030017460	S.CER ECJ0EB1E102K	T	38.3/49.7
C91	4030017620	S.CER ECJ0EC1H100C	T	45.7/7.2
C92	4030017460	S.CER ECJ0EB1E102K	T	37.3/11.4
C93	4030017360	S.CER ECJ0EC1H030B	B	83.4/39
C94	4030016790	S.CER ECJ0EB1C103K	T	35.6/61.5
C97	4030017460	S.CER ECJ0EB1E102K	T	47.3/9.9
C102	4030017650	S.CER ECJ0EC1H270J	T	43.3/23.2
C103	4030017420	S.CER ECJ0EC1H470J	T	32.1/9.5
C104	4030017350	S.CER ECJ0EC1H020B	B	81.3/38.7
C111	4030017460	S.CER ECJ0EB1E102K	B	77/36
C112	4030017530	S.CER ECJ0EC1H0R5B	T	40.6/21.8
C114	4030017510	S.CER ECJ0EC1H680J	T	40.1/20.6
C121	4030017460	S.CER ECJ0EB1E102K	B	80.6/76.2
C122	4030017460	S.CER ECJ0EB1E102K	B	77.7/31.3

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C123	4030017590	S.CER ECJ0EC1H070C	B	71.4/43.6
C124	4030017350	S.CER ECJ0EC1H020B	B	71.4/42.7
C125	4030017350	S.CER ECJ0EC1H020B	B	71.9/38.6
C127	4030017460	S.CER ECJ0EB1E102K	T	33.5/9
C129	4030017460	S.CER ECJ0EB1E102K	T	82.3/72.3
C130	4030017460	S.CER ECJ0EB1E102K	B	79.6/77.1
C131	4030017660	S.CER ECJ0EC1H330J	B	77.8/82.8
C132	4030017620	S.CER ECJ0EC1H100C	B	77.3/81.6
C133	4030017400	S.CER ECJ0EC1H220J	T	35.6/13
C134	4030019560	S.CER GRM21BB31C106KE15L	T	79.8/78.1
C135	4030017380	S.CER ECJ0EC1H050B	T	33.5/12.9
C136	4030017460	S.CER ECJ0EB1E102K	T	28.8/5.7
C137	4030017460	S.CER ECJ0EB1E102K	T	30.7/5.7
C138	4030017530	S.CER ECJ0EC1H0R5B	T	31.2/16.6
C139	4030017370	S.CER ECJ0EC1H3R5B	T	30/17.1
C140	4030017380	S.CER ECJ0EC1H050B	T	32.1/16.2
C141	4030017390	S.CER ECJ0EC1H180J	B	74.9/81.3
C142	4030017460	S.CER ECJ0EB1E102K	T	38/15.5
C143	4030017460	S.CER ECJ0EB1E102K	B	69.9/37.6
C144	4030017460	S.CER ECJ0EB1E102K	B	67.3/36.5
C145	4030017460	S.CER ECJ0EB1E102K	B	69/41.4
C146	4030017430	S.CER ECJ0EC1H101J	T	29.4/21.9
C147	4030017420	S.CER ECJ0EC1H470J	T	30.5/22.8
C148	4030017430	S.CER ECJ0EC1H101J	T	31/21.9
C150	4030017460	S.CER ECJ0EB1E102K	B	69.9/36.4
C151	4030017460	S.CER ECJ0EB1E102K	B	38.2/41
C152	4030017460	S.CER ECJ0EB1E102K	T	48.2/13.1
C153	4030017460	S.CER ECJ0EB1E102K	T	41.7/45.6
C154	4030017460	S.CER ECJ0EB1E102K	B	40.4/83.6
C155	4030011090	S.CER GRM31M2C2H7R0DV01L (GRM42-6 CH)	B	36.8/78.2
C156	4030017460	S.CER ECJ0EB1E102K	B	53.3/43.5
C157	4030011200	S.CER GRM31M2C2H300JV01L (GRM42-6 CH)	B	27.3/84.1
C161	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	23.8/78.8
C162	4030011100	S.CER GRM31M2C2H8R0DV01L (GRM42-6 CH)	B	21.7/74.6
C165	4030017460	S.CER ECJ0EB1E102K	B	70.4/81
C167	4030017620	S.CER ECJ0EC1H100C	T	51.4/13.7
C169	4030017620	S.CER ECJ0EC1H100C	T	52.2/25.2
C170	4030017460	S.CER ECJ0EB1E102K	T	51.9/16.2
C171	4030017600	S.CER ECJ0EC1H080C	T	42.4/6.4
C173	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	38.4/37.9
C174	4030011150	S.CER GRM31M2C2H130JV01L (GRM42-6 CH)	B	40/34.5
C177	4030017340	S.CER ECJ0EC1H010B	T	50.7/26.8
C178	4550002980	S.TAN TEESVA 1C 225M8R	B	55/33.6
C181	4030017420	S.CER ECJ0EC1H470J	T	50.5/28.8
C183	4030017460	S.CER ECJ0EB1E102K	B	53.4/31.6
C184	4030017460	S.CER ECJ0EB1E102K	T	50.6/29.9
C186	4030017460	S.CER ECJ0EB1E102K	B	22.5/70.3
C187	4030017530	S.CER ECJ0EC1H0R5B	T	48.2/26.4
C188	4030017600	S.CER ECJ0EC1H080C	T	48.2/28
C190	4030017460	S.CER ECJ0EB1E102K	B	50.5/31.2
C192	4550002980	S.TAN TEESVA 1C 225M8R	B	68.7/84
C193	4030017460	S.CER ECJ0EB1E102K	T	47.3/31
C194	4030017460	S.CER ECJ0EB1E102K	T	45.7/16.7
C195	4030017420	S.CER ECJ0EC1H470J	T	46.3/28.9
C196	4030017570	S.CER ECJ0EC1H040B	T	46.6/12.6
C198	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	17.7/77
C199	4030017460	S.CER ECJ0EB1E102K	B	45.1/37.8
C202	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	17.5/71.4
C203	4030011170	S.CER GRM31M2C2H180JV01L (GRM42-6 CH)	B	19.1/68
C204	4030017350	S.CER ECJ0EC1H020B	T	44.2/27.6
C205	4030017440	S.CER ECJ0EC1H221J	T	45.1/14.6
C206	4030017340	S.CER ECJ0EC1H010B	T	43.7/26.4
C209	4030016950	S.CER ECJ0EB1A473K	B	50.5/33
C210	4030017460	S.CER ECJ0EB1E102K	B	48.1/32.1
C213	4030017460	S.CER ECJ0EB1E102K	T	42.2/30.6
C214	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	B	35/37.8
C215	4030017460	S.CER ECJ0EB1E102K	T	36.8/31.7
C216	4030016930	S.CER ECJ0EB1A104K	B	48.1/33
C217	4030017460	S.CER ECJ0EB1E102K	T	44/9.1
C219	4030017460	S.CER ECJ0EB1E102K	T	35.2/30.9
C220	4030017460	S.CER ECJ0EB1E102K	T	2.9/84.1
C221	4030017460	S.CER ECJ0EB1E102K	B	46/37.7
C222	4030017550	S.CER ECJ0EC1H1R5B	T	41.1/5.9
C223	4030017460	S.CER ECJ0EB1E102K	T	36.3/24.2
C224	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	B	25.6/34.9
C225	4510008110	S.ELE 16 CE 22 BS	T	40.9/91
C226	4030017460	S.CER ECJ0EB1E102K	B	16.5/66.3
C227	4030017200	S.CER GRM31BR32J102KY01L (GHM1030 R)	B	12.4/72.8
C228	4030016790	S.CER ECJ0EB1C103K	B	54.7/40.8
C230	4030017460	S.CER ECJ0EB1E102K	B	33.4/41.5
C231	4030017460	S.CER ECJ0EB1E102K	B	19.9/26.7
C232	4030017460	S.CER ECJ0EB1E102K	B	46.2/40
C234	4030017460	S.CER ECJ0EB1E102K	T	42.1/11.5
C235	4030017460	S.CER ECJ0EB1E102K	T	33.9/27.4

[MAIN UNIT]

REF NO.	PARTS NO.		DESCRIPTION	M.	H/V LOCATION
C251	4030017460	S.CER	ECJ0EB1E102K	T	16.2/25.7
C254	4030017460	S.CER	ECJ0EB1E102K	B	47.8/42.8
C255	4030017460	S.CER	ECJ0EB1E102K	T	36.7/16.8
C260	4030017560	S.CER	ECJ0EC1H2R5B	T	32.4/29.9
C261	4030017600	S.CER	ECJ0EC1H080C	T	46.3/29.8
C263	4030017460	S.CER	ECJ0EB1E102K	B	20.9/68.7
C265	4030017410	S.CER	ECJ0EC1H240J	T	28.2/22.3
C266	4030011140	S.CER	GRM31M2C2H120JV01L (GRM42-6 CH)	B	8.6/71.7
C267	4030017340	S.CER	ECJ0EC1H010B	T	38.9/28.6
C270	4510008110	S.ELE	16 CE 22 BS	T	26.1/44.6
C271	4030017420	S.CER	ECJ0EC1H470J	T	42.6/29.7
C272	4030011020	S.CER	GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	22.2/33.6
C273	4030011140	S.CER	GRM31M2C2H120JV01L (GRM42-6 CH)	B	20.2/30.1
C274	4030017460	S.CER	ECJ0EB1E102K	B	26.2/43.7
C276	4030017340	S.CER	ECJ0EC1H010B	T	40.8/28.4
C278	4030017460	S.CER	ECJ0EB1E102K	B	52.4/43.5
C281	4030006940	S.CER	C1608 CH 1H 030C-T	B	13.8/28.3
C283	4030017600	S.CER	ECJ0EC1H080C	T	40.3/27.2
C284	4030017460	S.CER	ECJ0EB1E102K	T	16.4/29
C286	4030011040	S.CER	GRM31M4C2H2R0CY21L (GRM42-6 CK)	B	18.6/37.6
C289	4030017460	S.CER	ECJ0EB1E102K	T	21.3/56.2
C296	4030011080	S.CER	GRM31M2C2H6R0DV01L (GRM42-6 CH)	B	13.5/40
C297	4030011730	S.CER	GRM31M2C2H101JV01L (GRM42-6 CH)	B	11.8/32.4
C303	4030011070	S.CER	GRM31M2C2H5R0CY21L (GRM42-6 CH)	B	8.4/40
C306	4030017460	S.CER	ECJ0EB1E102K	T	35.2/31.8
C308	4030011080	S.CER	GRM31M2C2H6R0DV01L (GRM42-6 CH)	B	3.1/32.9
C310	4030011160	S.CER	GRM31M2C2H150JV01L (GRM42-6 CH)	B	4.6/66.9
C314	4030017200	S.CER	GRM31BR32J102KY01L (GHM1030 R)	B	2.2/66.8
C315	4030017460	S.CER	ECJ0EB1E102K	T	32.4/20.7
C318	4030011170	S.CER	GRM31M2C2H180JV01L (GRM42-6 CH)	B	4.4/63.1
C320	4030007060	S.CER	C1608 CH 1H 270J-T	B	12.2/60.7
C326	4030011220	S.CER	GRM31M2C2H360JV01L (GRM42-6 CH)	B	11.8/57.8
C330	4030011190	S.CER	GRM31M2C2H270JV01L (GRM42-6 CH)	B	7.3/48
C331	4030017420	S.CER	ECJ0EC1H470J	T	34.7/16.3
C334	4030017580	S.CER	ECJ0EC1H060C	T	17.2/55.2
C337	4030017570	S.CER	ECJ0EC1H040B	T	24.9/8.7
C339	4030017610	S.CER	ECJ0EC1H090C	T	23.8/5.3
C340	4030017360	S.CER	ECJ0EC1H030B	T	23.3/9.1
C341	4030017460	S.CER	ECJ0EB1E102K	T	18.4/55.7
C342	4030011070	S.CER	GRM31M2C2H5R0CY21L (GRM42-6 CH)	B	6.1/21.1
C343	4030017360	S.CER	ECJ0EC1H030B	T	21.7/9.6
C345	4030017430	S.CER	ECJ0EC1H101J	T	20.7/53.6
C346	4030011090	S.CER	GRM31M2C2H7R0DV01L (GRM42-6 CH)	B	10.2/19.2
C347	4030011050	S.CER	GRM31M3C2H3R0CY21L (GRM42-6 CJ)	T	18.9/11.4
C349	4030011040	S.CER	GRM31M4C2H2R0CY21L (GRM42-6 CK)	T	11.8/14.1
C350	4030018860	S.CER	ECJ0EB0J105K	T	47.8/119.9
C351	4030017760	S.CER	ECJ0EB1H222K	B	58/111.1
C352	4030017460	S.CER	ECJ0EB1E102K	T	60/106.4
C355	4030018920	S.CER	ECJ0EB1H392K	T	61.3/104.2
C358	4030018080	S.CER	ECJ0EB1H182K	T	59.6/102.2
C360	4030016780	S.CER	ECJ0EB1C153K	T	60.5/102.3
C361	4030016970	S.CER	ECJ0EB1C223K	T	61/113.1
C363	4030017460	S.CER	ECJ0EB1E102K	T	110.1/75.7
C364	4030016790	S.CER	ECJ0EB1C103K	T	66.5/109.2
C365	4030018080	S.CER	ECJ0EB1H182K	T	63.5/113.1
C366	4030017460	S.CER	ECJ0EB1E102K	T	96.4/85.7
C367	4030017040	S.CER	ECJ0EB1A333K	T	58.4/100.9
C369	4030017460	S.CER	ECJ0EB1E102K	T	58.4/100
C370	4030017040	S.CER	ECJ0EB1A333K	T	62.8/111.5
C375	4030016780	S.CER	ECJ0EB1C153K	T	62.9/102.8
C378	4030017790	S.CER	ECJ0EB1E682K	T	64.8/108.7
C380	4030016790	S.CER	ECJ0EB1C103K	T	62.5/101.6
C384	4030017460	S.CER	ECJ0EB1E102K	T	60/98.8
C385	4030017460	S.CER	ECJ0EB1E102K	B	100.6/37.6
C387	4030017360	S.CER	ECJ0EC1H030B	B	96.2/43.9
C389	4030017460	S.CER	ECJ0EB1E102K	T	58.6/94.2
C392	4030018860	S.CER	ECJ0EB0J105K	B	97.6/38.4
C393	4030017590	S.CER	ECJ0EC1H070C	B	94.6/42.1
C394	4550007260	S.TAN	F931C475MAABMA	T	60/57.3
C395	4030018860	S.CER	ECJ0EB0J105K	B	96.7/38.4
C396	4030017570	S.CER	ECJ0EC1H040B	B	97/42.5
C397	4030016790	S.CER	ECJ0EB1C103K	B	99.9/43.5
C398	4030017500	S.CER	ECJ0EC1H560J	B	97.3/41.3
C399	4030016790	S.CER	ECJ0EB1C103K	T	62.9/93.3
C400	4030016930	S.CER	ECJ0EB1A104K	T	56/70.9
C401	4030016790	S.CER	ECJ0EB1C103K	B	104.8/37.2
C402	4030016790	S.CER	ECJ0EB1C103K	T	59.8/69.7
C403	4030016790	S.CER	ECJ0EB1C103K	T	67.1/72.1
C404	4030017460	S.CER	ECJ0EB1E102K	T	61/70.2
C405	4030017460	S.CER	ECJ0EB1E102K	B	100.9/45.4
C406	4030017620	S.CER	ECJ0EC1H100C	B	102.7/44.2
C408	4030017620	S.CER	ECJ0EC1H100C	B	105.5/44.2
C410	4030016930	S.CER	ECJ0EB1A104K	B	101.8/45.4
C411	4030017460	S.CER	ECJ0EB1E102K	B	106.4/44.8
C412	4030017460	S.CER	ECJ0EB1E102K	T	60.5/51.3
C413	4030016930	S.CER	ECJ0EB1A104K	B	100/48
C414	4030017420	S.CER	ECJ0EC1H470J	B	99.7/50.1

[MAIN UNIT]

REF NO.	PARTS NO.		DESCRIPTION	M.	H/V LOCATION
C415	4030017730	S.CER	ECJ0EB1E471K	B	103.6/46.7
C416	4030017460	S.CER	ECJ0EB1E102K	T	62.6/69.3
C418	4030017730	S.CER	ECJ0EB1E471K	T	61.2/66.3
C419	4030017730	S.CER	ECJ0EB1E471K	T	60.5/67.6
C420	4030018890	S.CER	ECJ0EB0J224K	B	100.5/51.9
C421	4030017730	S.CER	ECJ0EB1E471K	B	100.9/50.7
C422	4030017620	S.CER	ECJ0EC1H100C	T	61.8/67.6
C424	4030019560	S.CER	GRM21BB31C106KE15L	T	61.3/61.6
C426	4030016930	S.CER	ECJ0EB1A104K	T	66.4/61.5
C428	4030016930	S.CER	ECJ0EB1A104K	B	65.7/82
C432	4030016930	S.CER	ECJ0EB1A104K	T	63.8/70.8
C433	4030017040	S.CER	ECJ0EB1A333K	T	62.3/64.5
C435	4030017670	S.CER	ECJ0EC1H390J	T	71.3/68
C436	4030019560	S.CER	GRM21BB31C106KE15L	T	74.4/63.6
C437	4030016930	S.CER	ECJ0EB1A104K	B	59.1/79.6
C439	4030019560	S.CER	GRM21BB31C106KE15L	B	89.7/77.7
C440	4030019560	S.CER	GRM21BB31C106KE15L	T	86.5/68.5
C442	4030016930	S.CER	ECJ0EB1A104K	T	72.7/69.5
C443	4030017460	S.CER	ECJ0EB1E102K	T	87.3/78
C444	4030017460	S.CER	ECJ0EB1E102K	T	87.1/65.6
C445	4030017460	S.CER	ECJ0EB1E102K	T	60.5/50.3
C446	4030017460	S.CER	ECJ0EB1E102K	B	100.2/46.7
C447	4030016950	S.CER	ECJ0EB1A473K	B	99.2/56.9
C451	4550000530	S.TAN	TEESVA 1V 104M8R	B	97.9/59.8
C452	4030017460	S.CER	ECJ0EB1E102K	T	97.2/61.5
C456	4550006250	S.TAN	TEESVA 1A 106M8R	T	100.8/58.9
C457	4030016930	S.CER	ECJ0EB1A104K	T	95.8/75.9
C461	4030016790	S.CER	ECJ0EB1C103K	T	65.2/55.9
C462	4030016790	S.CER	ECJ0EB1C103K	T	63/52.4
C464	4030017460	S.CER	ECJ0EB1E102K	T	101.2/65.1
C466	4550002980	S.TAN	TEESVA 1C 225M8R	T	94/85.5
C467	4030017460	S.CER	ECJ0EB1E102K	T	63.6/56.3
C468	4030017460	S.CER	ECJ0EB1E102K	T	66.5/17.9
C469	4030017420	S.CER	ECJ0EC1H470J	T	95.5/80.8
C470	4030017460	S.CER	ECJ0EB1E102K	T	64.1/61.3
C473	4550000560	S.TAN	TEESVA 1V 334M8R	T	102.9/63.7
C474	4550007260	S.TAN	F931C475MAABMA	T	92.1/76.6
C476	4030016790	S.CER	ECJ0EB1C103K	T	57.2/15.8
C477	4030017460	S.CER	ECJ0EB1E102K	T	62.8/14.2
C478	4030017770	S.CER	ECJ0EB1E332K	T	59.4/63.5
C479	4030017520	S.CER	ECJ0EC1H0R3B	T	97.9/67.1
C482	4030017460	S.CER	ECJ0EB1E102K	T	95.5/63.3
C484	4030009350	S.CER	C1608 CH 1H 3R5B-T	T	95.7/68.4
C486	4030016930	S.CER	ECJ0EB1A104K	B	65.7/81
C487	4030016930	S.CER	ECJ0EB1A104K	T	71.9/66.5
C491	4030017600	S.CER	ECJ0EC1H080C	T	72.2/68
C492	4030006990	S.CER	C1608 CH 1H 080D-T	T	93.1/69
C493	4030007030	S.CER	C1608 CH 1H 150J-T	T	93.1/70.2
C495	4030016930	S.CER	ECJ0EB1A104K	T	71.9/65.2
C500	4030016930	S.CER	ECJ0EB1A104K	T	77.3/122.9
C502	4030017460	S.CER	ECJ0EB1E102K	T	91.7/67
C503	4030016930	S.CER	ECJ0EB1A104K	T	73.4/66.1
C508	4030017420	S.CER	ECJ0EC1H470J	T	95.3/65.7
C509	4030017530	S.CER	ECJ0EC1H0R5B	T	91.4/68.3
C511	4030017460	S.CER	ECJ0EB1E102K	T	95.2/61.8
C516	4030017460	S.CER	ECJ0EB1E102K	T	95.2/60.8
C520	4030017460	S.CER	ECJ0EB1E102K	T	72/51.2
C521	4030017370	S.CER	ECJ0EC1H3R5B	[EUR] T	92.8/61.8
	4030017370	S.CER	ECJ0EC1H3R5B	[ITR] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[TPE] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[KOR] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[AUS] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[CHN] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[EXP] T	
	4030017370	S.CER	ECJ0EC1H3R5B	[EUR-01] T	
C522	4030017420	S.CER	ECJ0EC1H470J	T	92.4/60.9
C523	4030016790	S.CER	ECJ0EB1C103K	T	66.8/51.2
C524	4030017400	S.CER	ECJ0EC1H220J	T	93.2/59.7
C525	4030017460	S.CER	ECJ0EB1E102K	T	74.5/49.8
C527	4030017590	S.CER	ECJ0EC1H070C	B	92.7/47.5
C529	4030017640	S.CER	ECJ0EC1H150J	T	73.5/48.1
C531	4030017360	S.CER	ECJ0EC1H030B	T	65/38.7
C532	4030017590	S.CER	ECJ0EC1H070C	B	92.7/45.8
C534	4030017650	S.CER	ECJ0EC1H270J	T	73.4/45.5
C536	4030017420	S.CER	ECJ0EC1H470J	T	80.7/53.6
C537	4030017580	S.CER	ECJ0EC1H060C	T	67.9/22.7
C538	4030017460	S.CER	ECJ0EB1E102K	T	72.6/42.7
C539	4030017640	S.CER	ECJ0EC1H150J	T	73.4/44
C540	4030017390	S.CER	ECJ0EC1H180J	T	65.1/34.4
C541	4030017590	S.CER	ECJ0EC1H070C	T	66.2/16.5
C543	4030017360	S.CER	ECJ0EC1H030B	T	60.5/29.9
C544	4030017350	S.CER	ECJ0EC1H020B	T	76.9/49.5
C547	4030017460	S.CER	ECJ0EB1E102K	T	69/28.5
C548	4030017570	S.CER	ECJ0EC1H040B	T	63.5/19.5
C551	4030017460	S.CER	ECJ0EB1E102K	T	78.1/49.9
C554	4030017350				







# SECTION 7

# MECHANICAL PARTS

## [CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510004880	MR-DSE-01	1
P1	8600036881	ZHR-2 (Incl. W1, 2)	1
SP1	2510001160	057P0802	1
MF1	2710000820	EFB0412VHD-6P38	1
W1	9016420021	23/04/140/B09/W02	1
W2	9016420011	23/00/140/B09/W02	1
MP1	8010021490	3167 CHASSIS	1
MP2	8210025490	3167 CHASSIS PANEL	1
MP3	8930078580	3167 RELEASE BUTTON	1
MP4	8930078640	3167 MAGNET PLATE	1
MP5	8510019460	3167 L-COVER (Incl. MP10)	1
MP6	8510019450	3167 U-COVER (Incl. MP11)	1
MP7	8930078590	3167 SP RUBBER	1
MP8	8110009020	2969 FAN COVER	1
MP9	8930048550	2177 CLIP	1
MP10	8930072260	2969 NET	1
MP11	8930014980	59 SARAN NET	1
MP12	8930071590	THERMALLY SHEET (BI)	1
MP13	8810008661	SCREW BT B0 3X8 NI-ZC3 (BT)	10
MP14	8810008661	SCREW BT B0 3X8 NI-ZC3 (BT)	2
MP15	8810009611	SCREW M2.6X6 ZK3	16
MP16	8810010141	SCREW PH M3X30 ZK3	4
MP19	8930079150	COIL SPRING (AL)	2
MP20	8930055551	THERMALLY SHEET (W)-1	1
MP21	8930029050	THERMAL SHEET (AL)	1
MP22	8810008661	SCREW BT B0 3X8 NI-ZC3 (BT)	4

## [CONTROL UNIT]

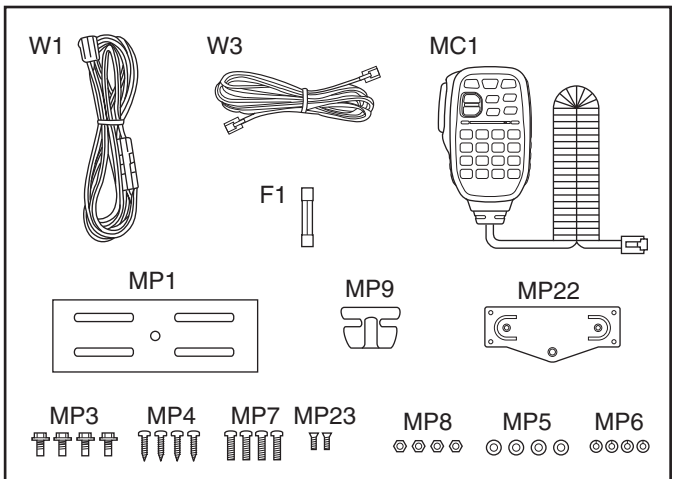
REF NO.	ORDER NO.	DESCRIPTION	QTY.
S3	2260003190	SKQYPAE010	1
S4	2260003190	SKQYPAE010	1
S5	2260003190	SKQYPAE010	1
S6	2260003190	SKQYPAE010	1
S7	2260003190	SKQYPAE010	1
S8	2260003190	SKQYPAE010	1
S9	2260003190	SKQYPAE010	1
S10	2260003190	SKQYPAE010	1
S11	2260003190	SKQYPAE010	1
S14	2250000660	SW-170	1
EP2	8930079110	SRCN-3167-SP-N-W	1
MP2	8210025640	3167 REAR PANEL (Incl. MP16)	1
MP4	8930078540	3167 POWER BUTTON	1
MP5	8210025480	3167 REFLECTOR	1
MP6	8930078550	3167 2-KEY	1
MP7	8930078941	3167 6-KEY-1 (Incl. MP8)	1
MP8	8930078570	3167 LENS	6
MP9	8610013980	KNOB N-383 (Incl. MP14)	1
MP10	8310073240	3167 KNOB PLATE	1
MP11	8610013990	KNOB N-384 (Incl. MP14)	1
MP12	8610014000	KNOB N-385 (Incl. MP14)	1
MP13	8930078651	3167 LCD PLATE-1	1
MP14	8610007420	KNOB SPRING NO.6601	3
MP15	6910018710	NDRDY-15060304	2
MP16	8830003020	BIT INSERT SB-264540-CD	2
MP17	8810009611	SCREW M2.6X6 ZK3	2
MP18	8810008991	SCREW BT B0 2X10NI-ZK3 (BT)	4
MP20	8310073400	3167 WINDOW PLATE (A) [EUR], [ITR], [EUR-01]	1
	8310073230	3167 WINDOW PLATE [TPE], [USA], [KOR], [AUS], [CHN], [EXP]	1
MP21	8210025631	3167 FRONT PANEL (B)-1 [EUR], [ITR], [EUR-01]	1
	8210025621	3167 FRONT PANEL (A)-1 [TPE], [USA], [KOR], [AUS], [CHN], [EXP]	1
MP23	8930079170	3167 MODULER CAP	1
MP24	8930079120	3167 WINDOW SHEET	1
MP25	8930079130	3167 LCD FILTER	1
MP26	8930079260	SPONGE (KN)	2
MP27	8930079270	SPONGE (KO)	6

## [MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6510014961	B2B-ZR-SM4-TF (LF) (SN)	1
J2	6510023110	3008L-8P8C	1
J3	6510025950	PCB-606 (6P6C)	1
J4	6510023161	DN-508B-6-L	1
J5	6450001430	HSJ1462-01-010	1
J7*	6510014961	B2B-ZR-SM4-TF (LF) (SN)	1
J8	6510025940	PJ-3047S	1
J24*	6510016381	52465-1071	1
J25	6510027260	3167 REAR CONNECTOR	1
W5*	7120000470	ERDS2T0	1
W7*	8900016020	OPC-1671	1
MP4*	8510018150	2969 B-VCO CASE	1
MP5*	8510016470	2775 VCO CASE	1
MP6*	8510016470	2775 VCO CASE	1
MP9*	8510019340	3179 VCO CASE	1
MP10*	8510016470	2775 VCO CASE	1
MP11	8510018160	2969 B-VCO COVER	1
MP12	8510019350	3179 VCO COVER	1
MP13	8510016460	2775 VCO COVER	3
MP14	8930060270	2633 M-SHEET	2
MP15	8930059770	2633 M-HOLDER	2

## [ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
MC1	(Optional)	HM-133 (EX-2539 #24)	1
F1	5210000080	FGB 20A	1
W1	(Optional)	OPC-1132A	1
W3	8900011281	OPC-1154A	1
MP1	8010016730	150 MOBIL BRACKET (SI) (Incl. MP2)	1
MP2	8930041170	452 FELT (SI)	2
MP3	8820000530	FLANGE BOLT M4X8 NI	4
MP4	8810000951	SCREW BT A0 5X16 ZC3	4
MP5	8850000180	FLAT WASHER M5 SUS	4
MP6	8850000500	S-WASHER M5 SUS	4
MP7	8810000471	SCREW PH (+-) M5X12 ZC3	4
MP8	8830000250	NUT M5 SUS	4
MP9	8930007300	MICROPHONE HANGER	1
MP22	8010021511	3167 CONTROL BRACKET-1	1
MP23	8810010990	SCREW M2.6X8 ZK3	2

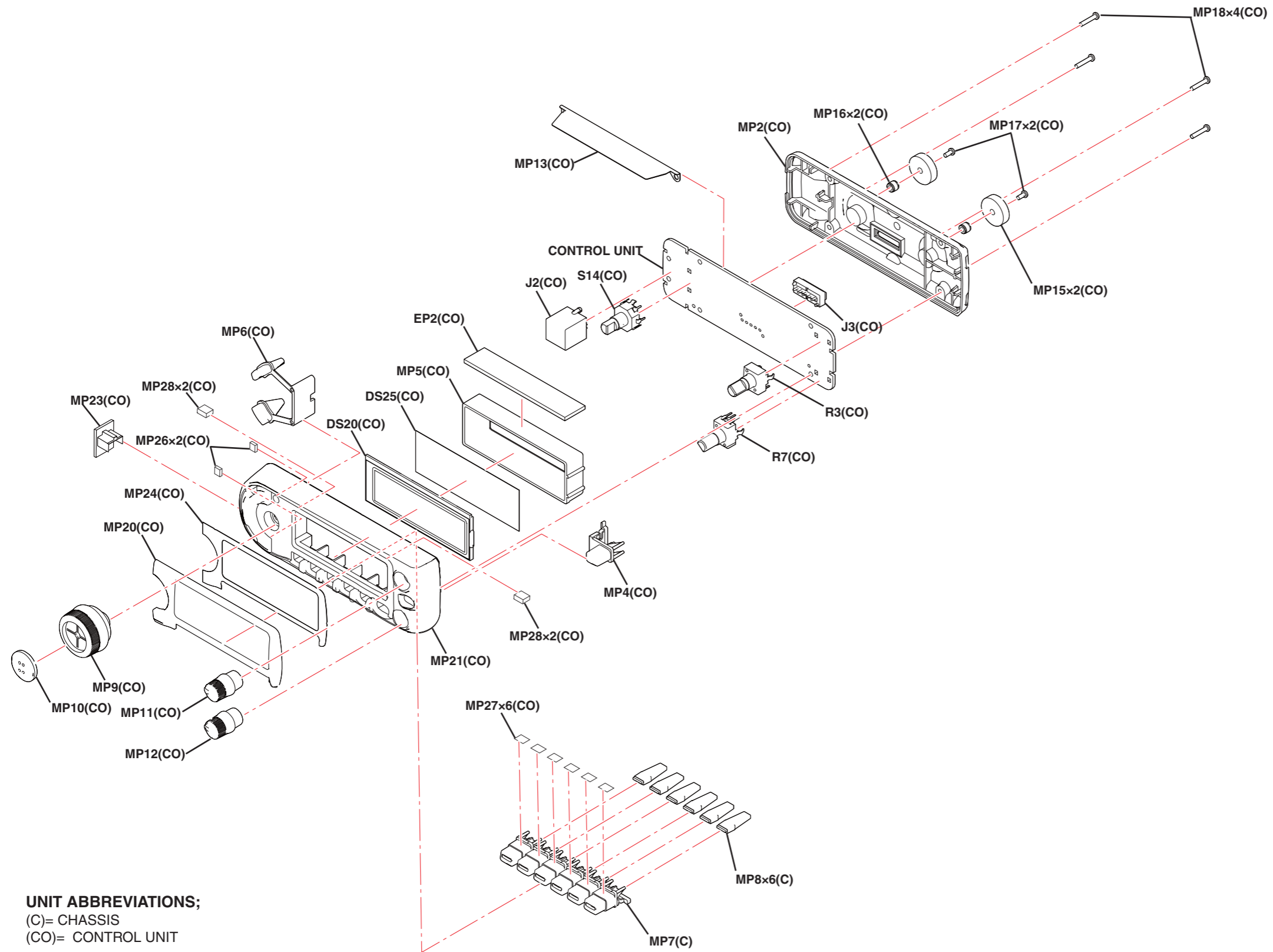


\*: Refer to "BOARD LAYOUTS" for the location.

\*\* : Refer to "GENERAL WIRING" for the connection

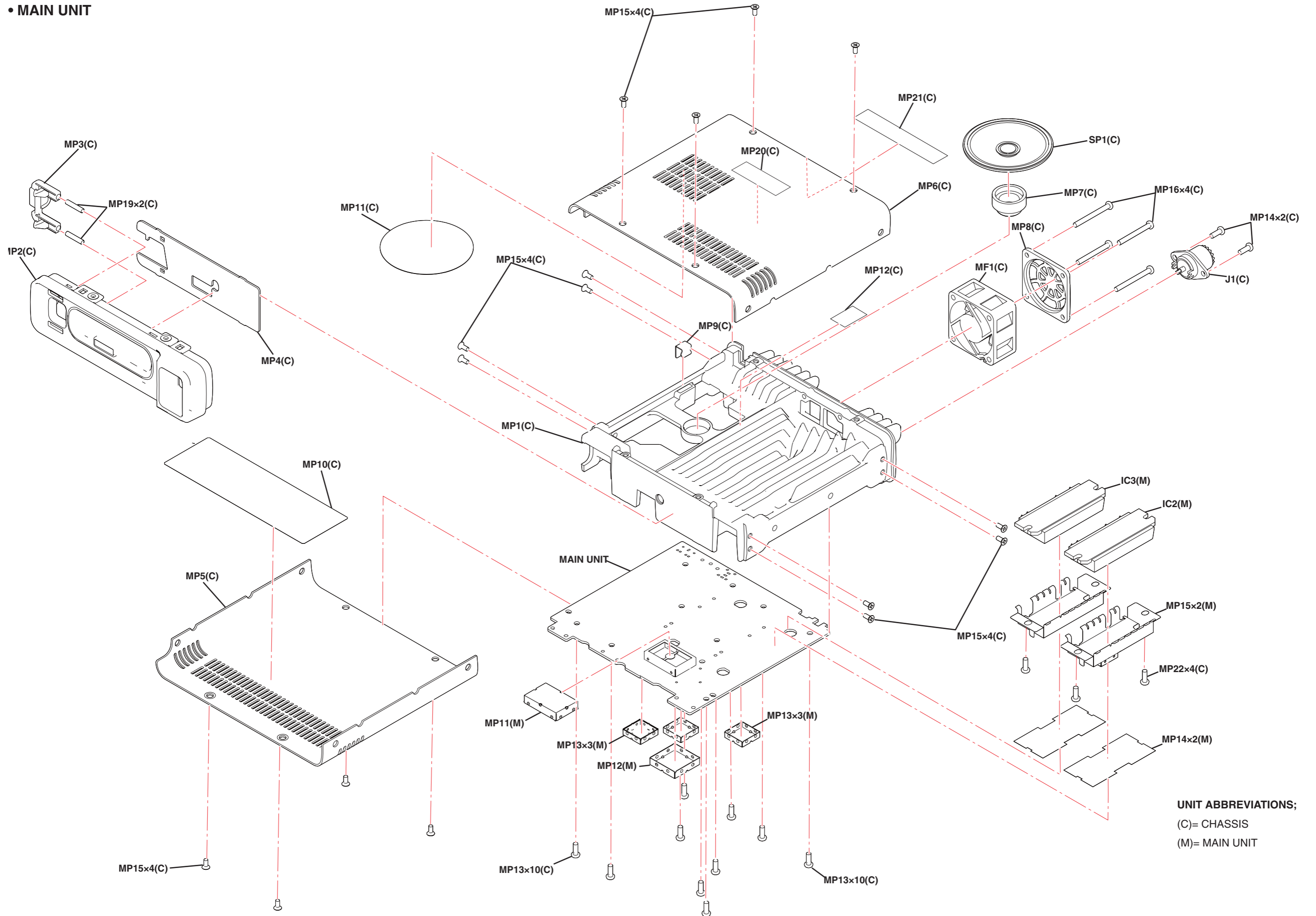
**Screw abbreviations** A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

• CONTROL UNIT



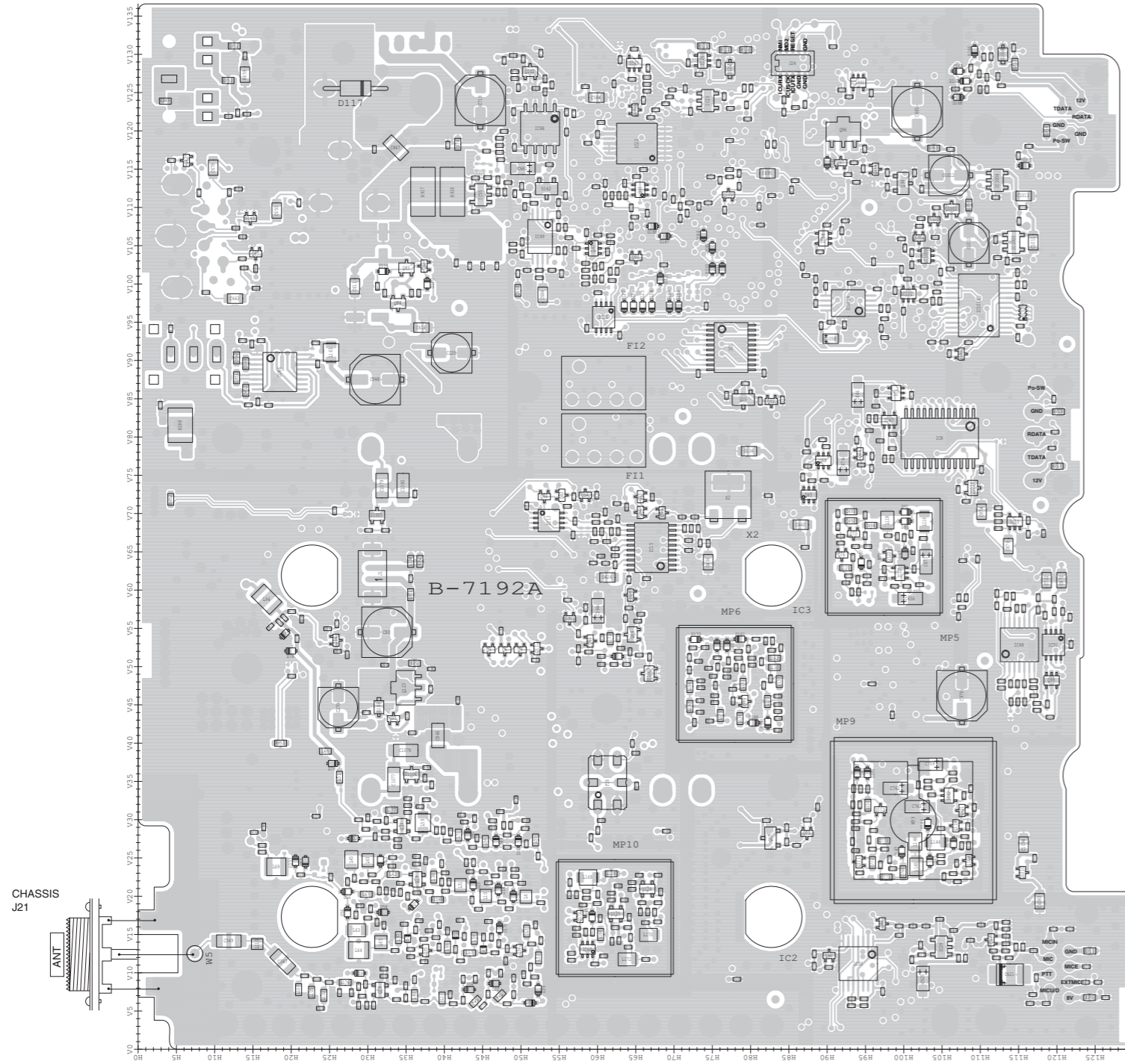
**UNIT ABBREVIATIONS;**  
 (C)= CHASSIS  
 (CO)= CONTROL UNIT

• MAIN UNIT

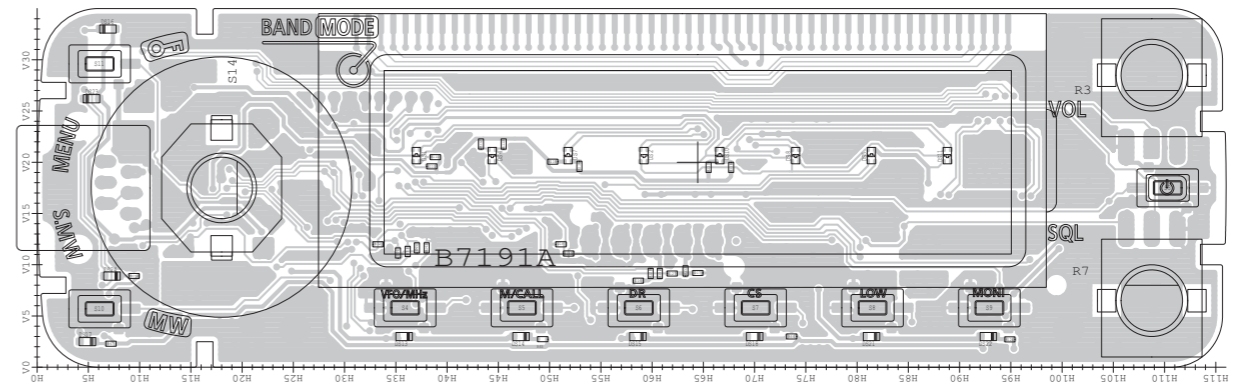


UNIT ABBREVIATIONS;  
 (C)= CHASSIS  
 (M)= MAIN UNIT

• MAIN UNIT  
(TOP VIEW)

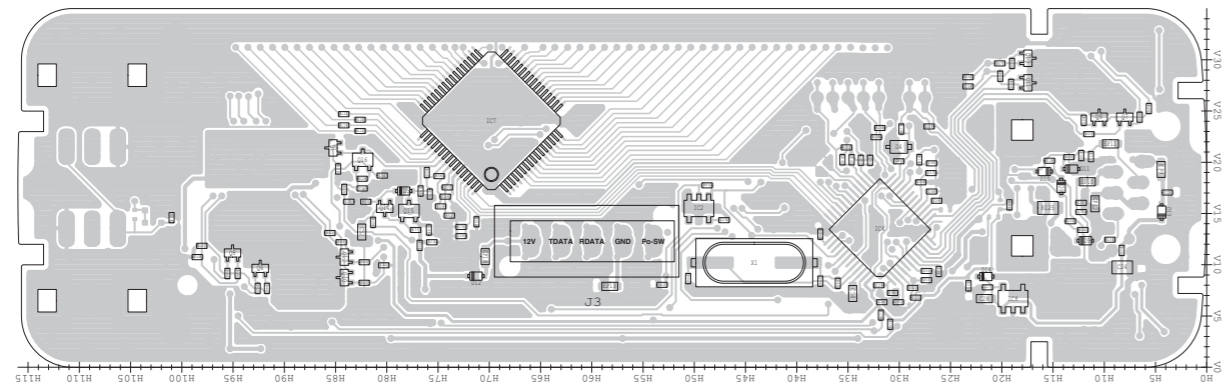


• CONTROL UNIT  
(TOP VIEW)

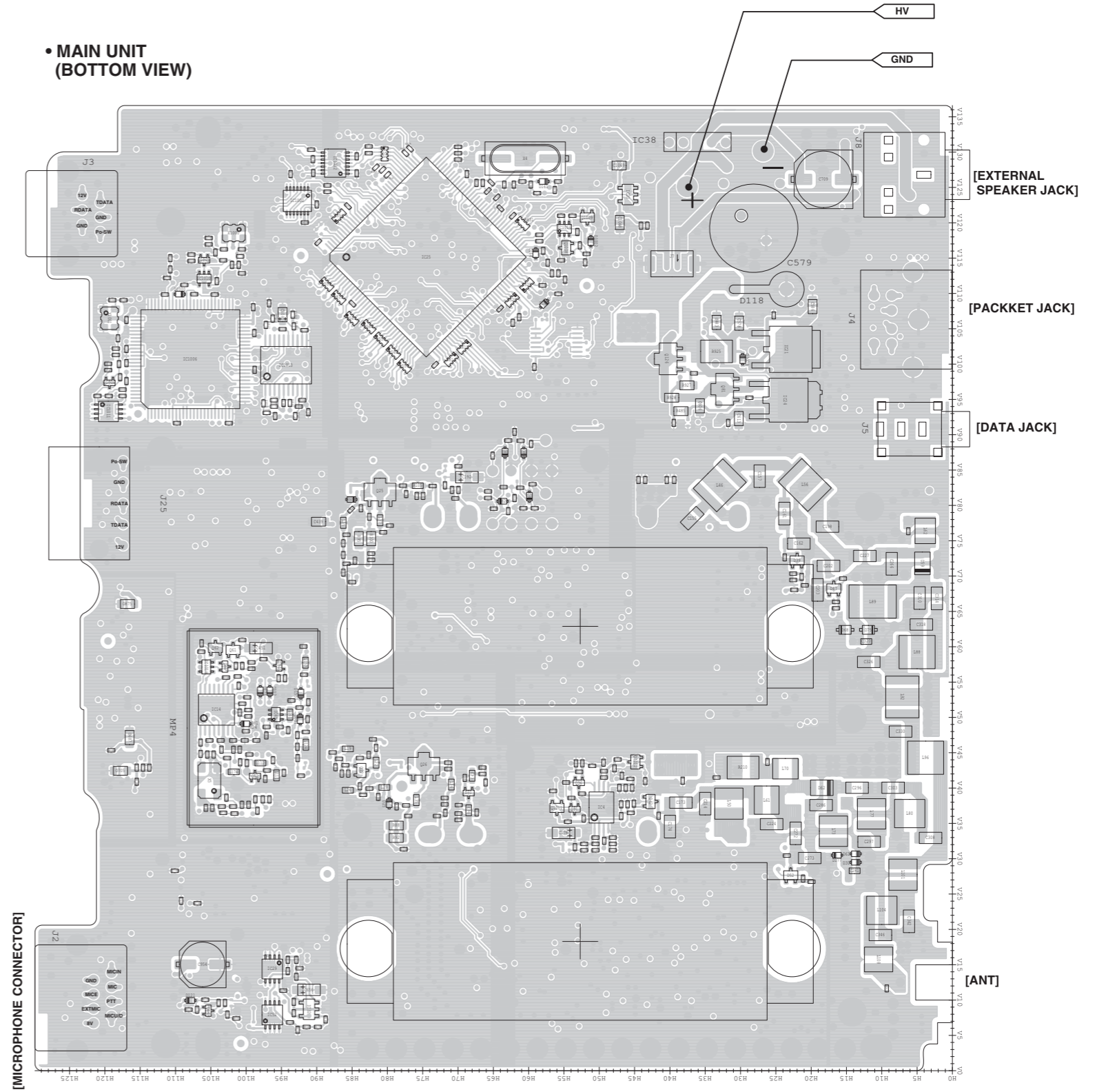


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• CONTROL UNIT  
(BOTTOM VIEW)

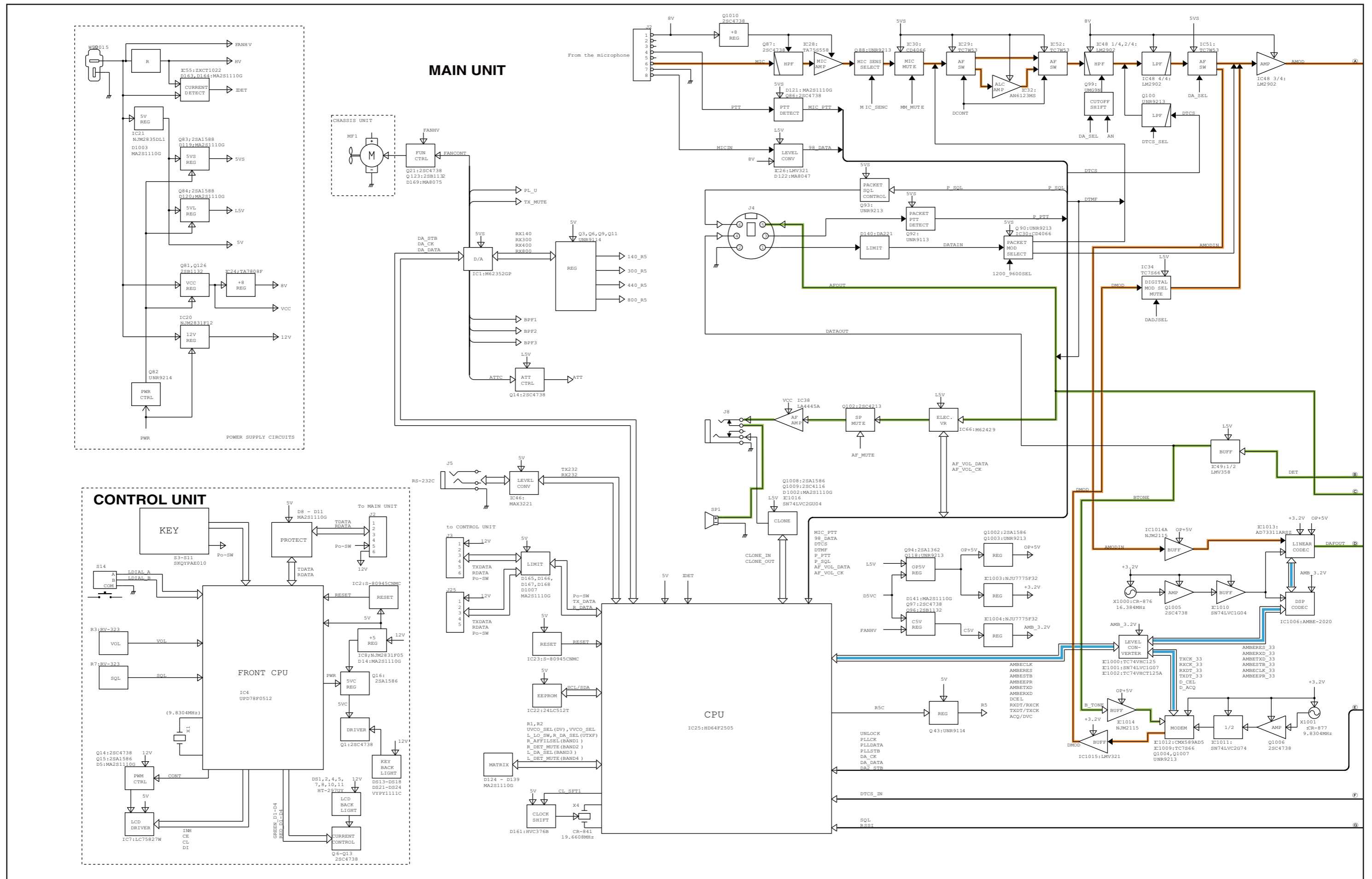


• MAIN UNIT  
(BOTTOM VIEW)

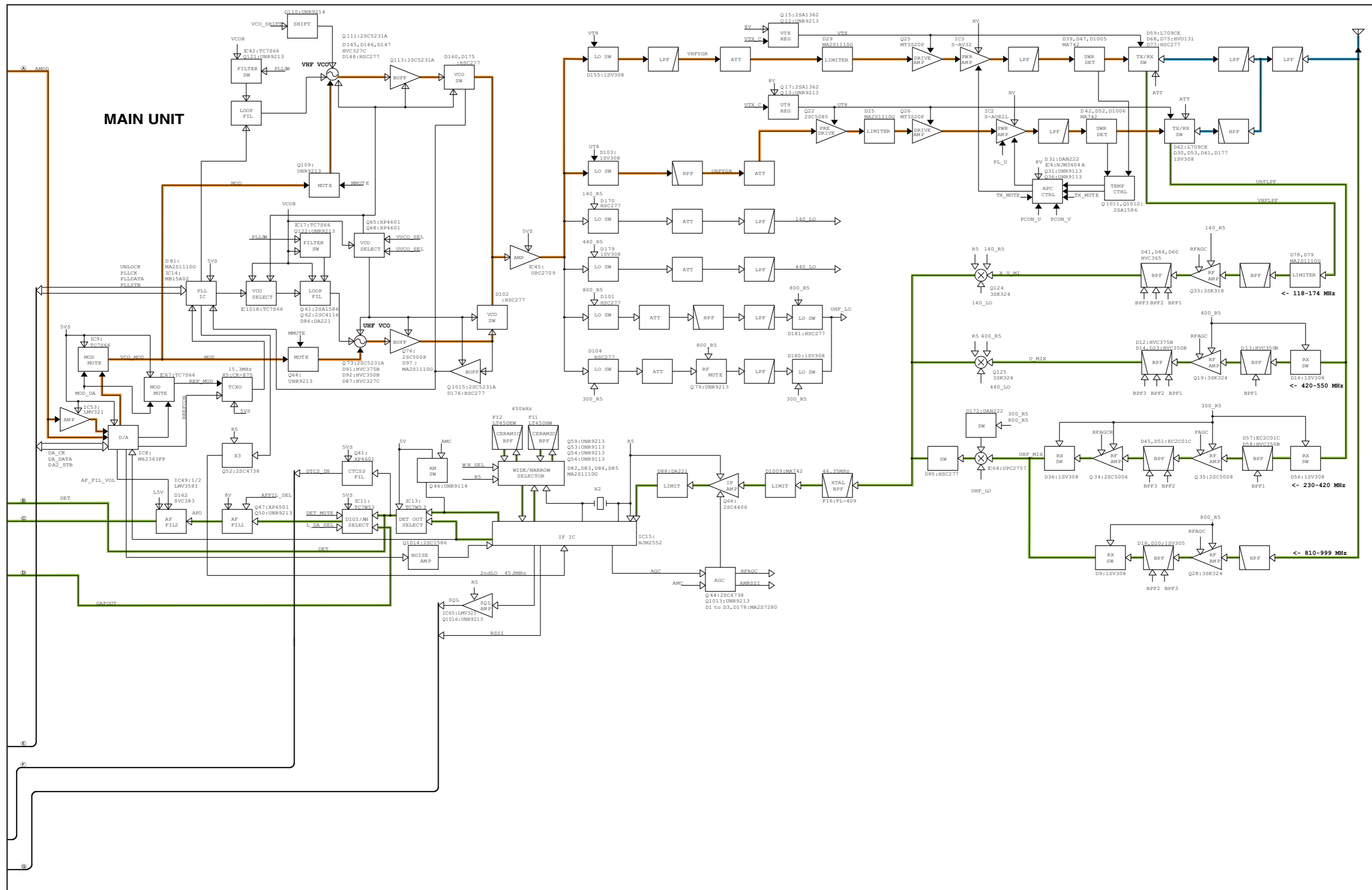


# SECTION 9

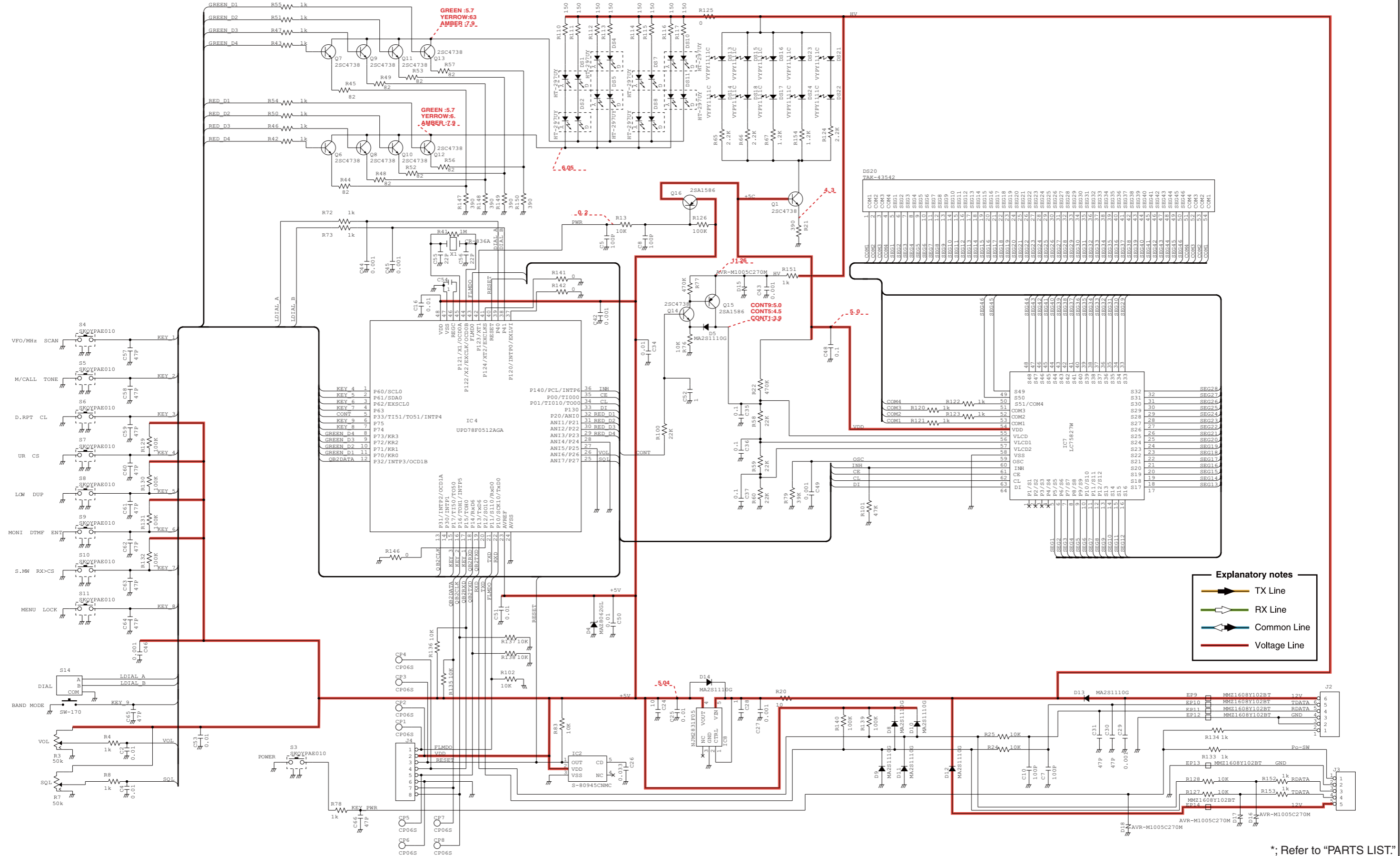
# BLOCK DIAGRAM







CONTROL UNIT

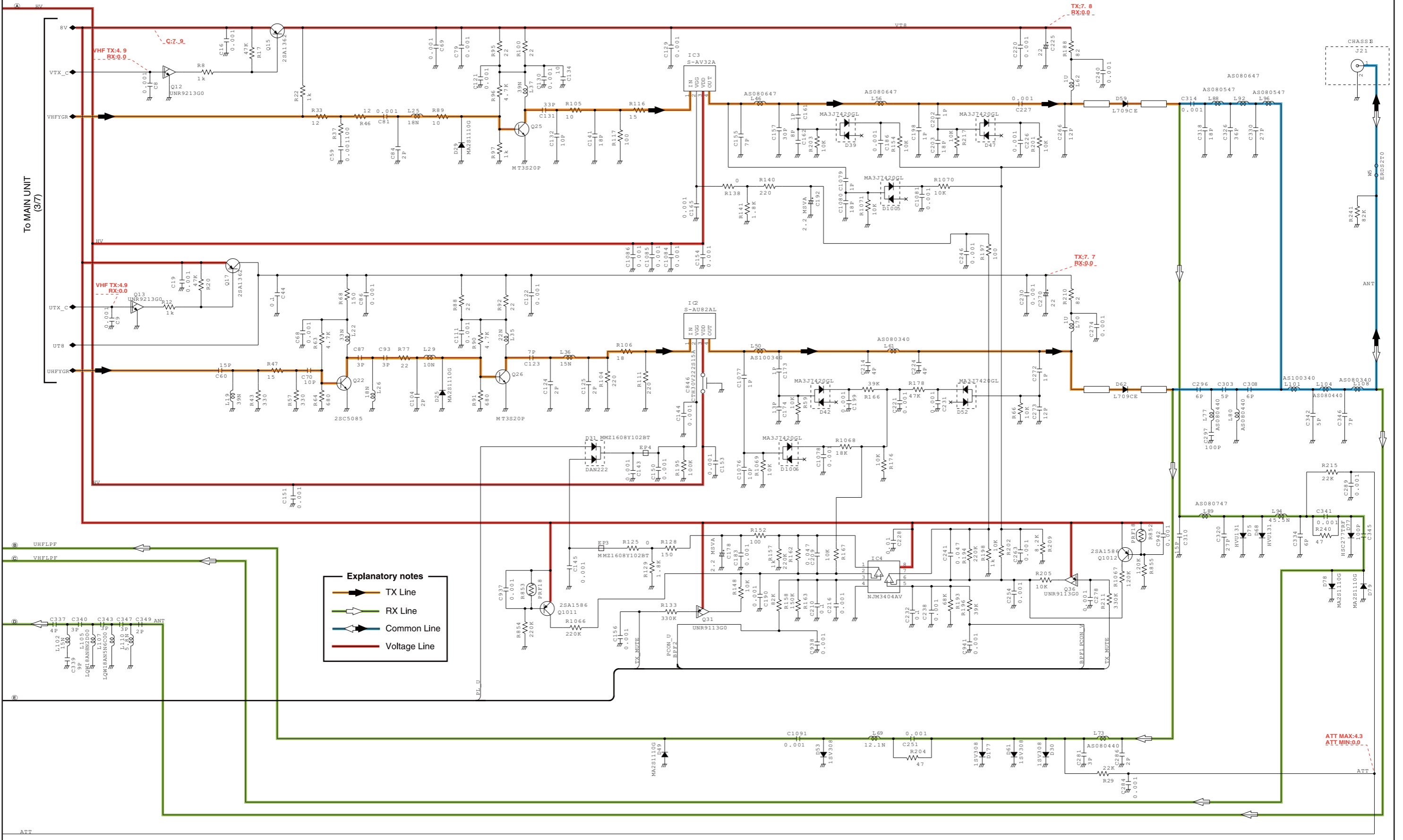


**Explanatory notes**

- TX Line
- RX Line
- Common Line
- Voltage Line

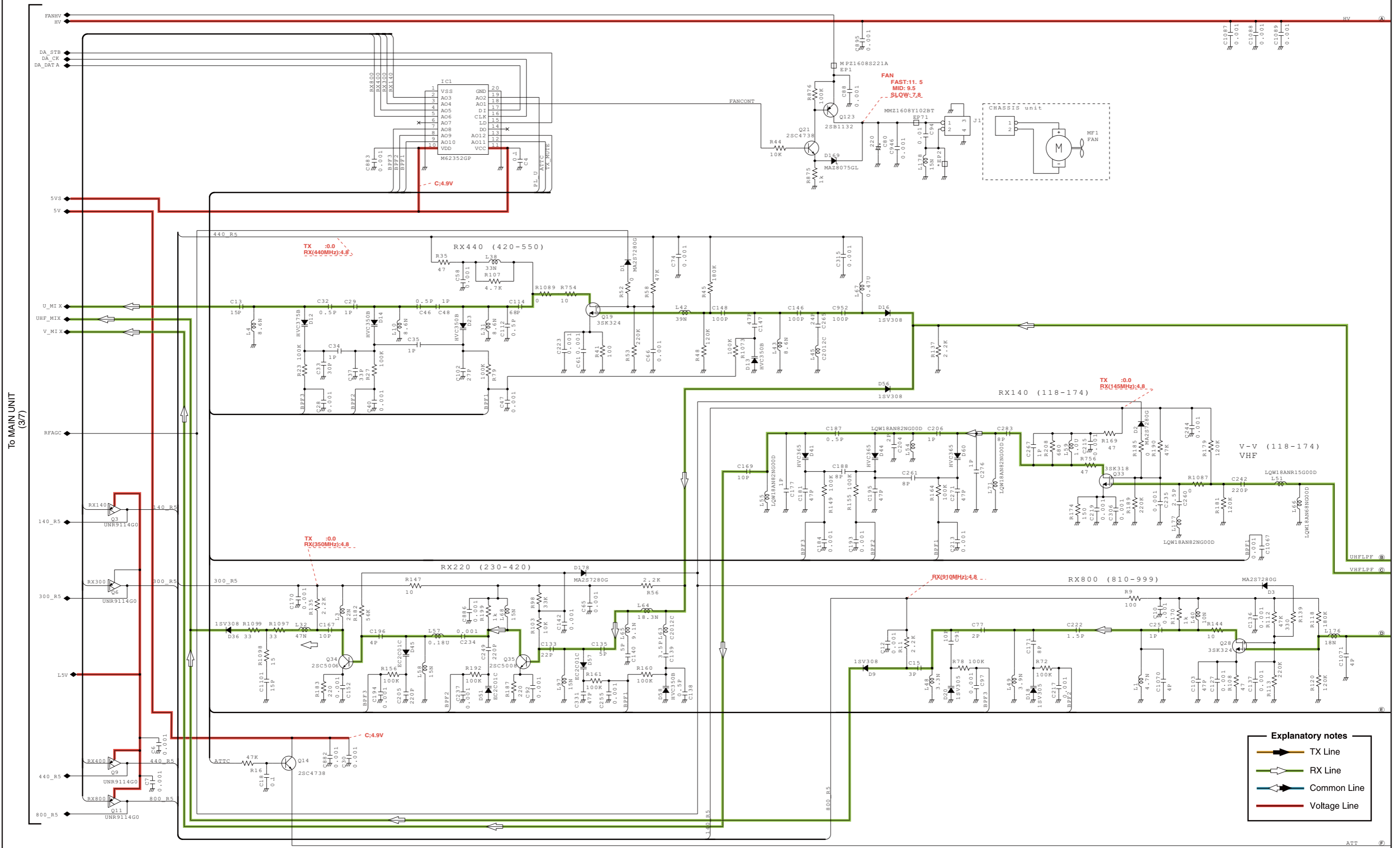
\*; Refer to "PARTS LIST."

# MAIN UNIT (1/7)



\*; Refer to "PARTS LIST."

MAIN UNIT (2/7)

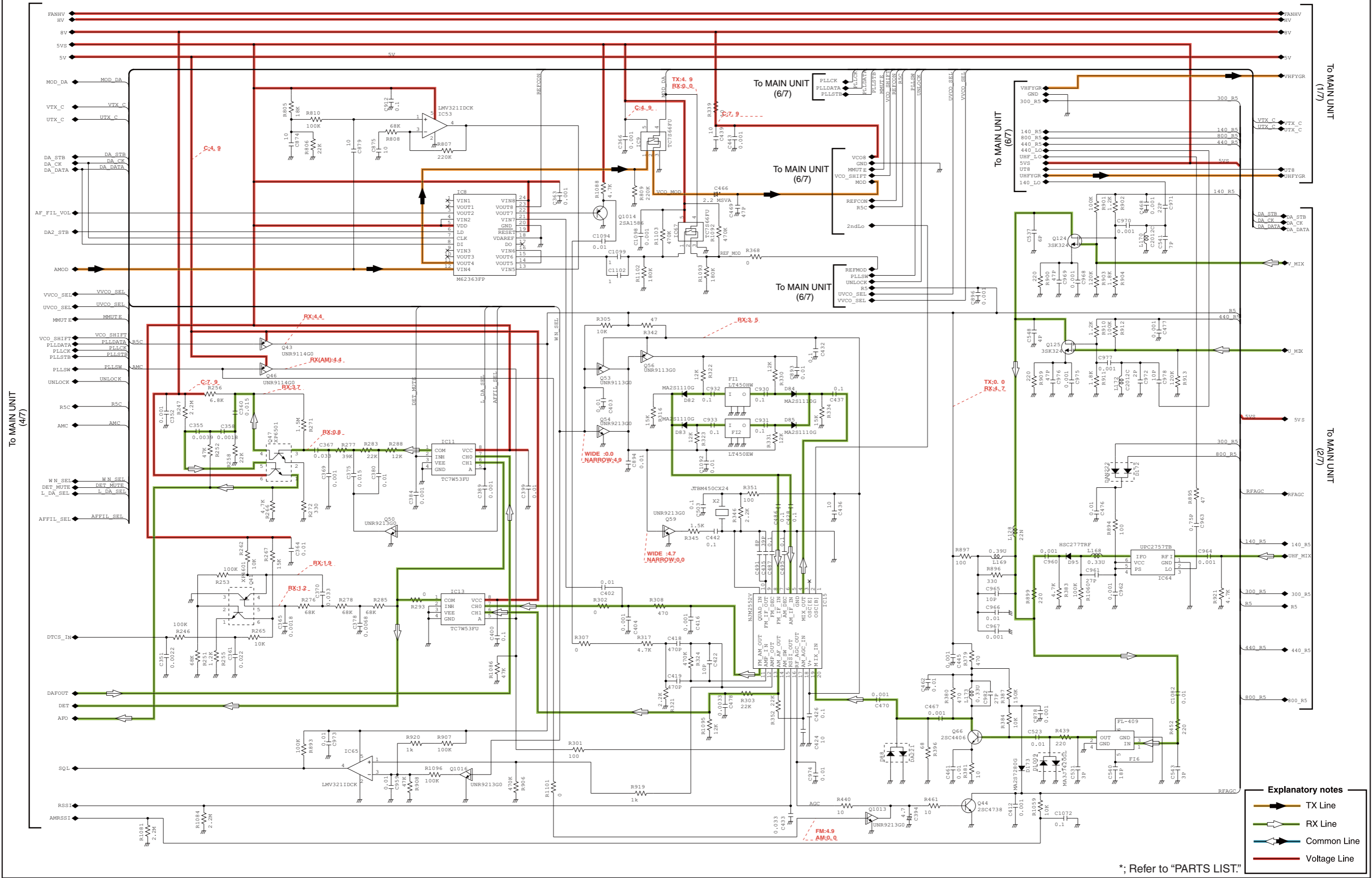


**Explanatory notes**

- TX Line
- RX Line
- Common Line
- Voltage Line

\*; Refer to "PARTS LIST."

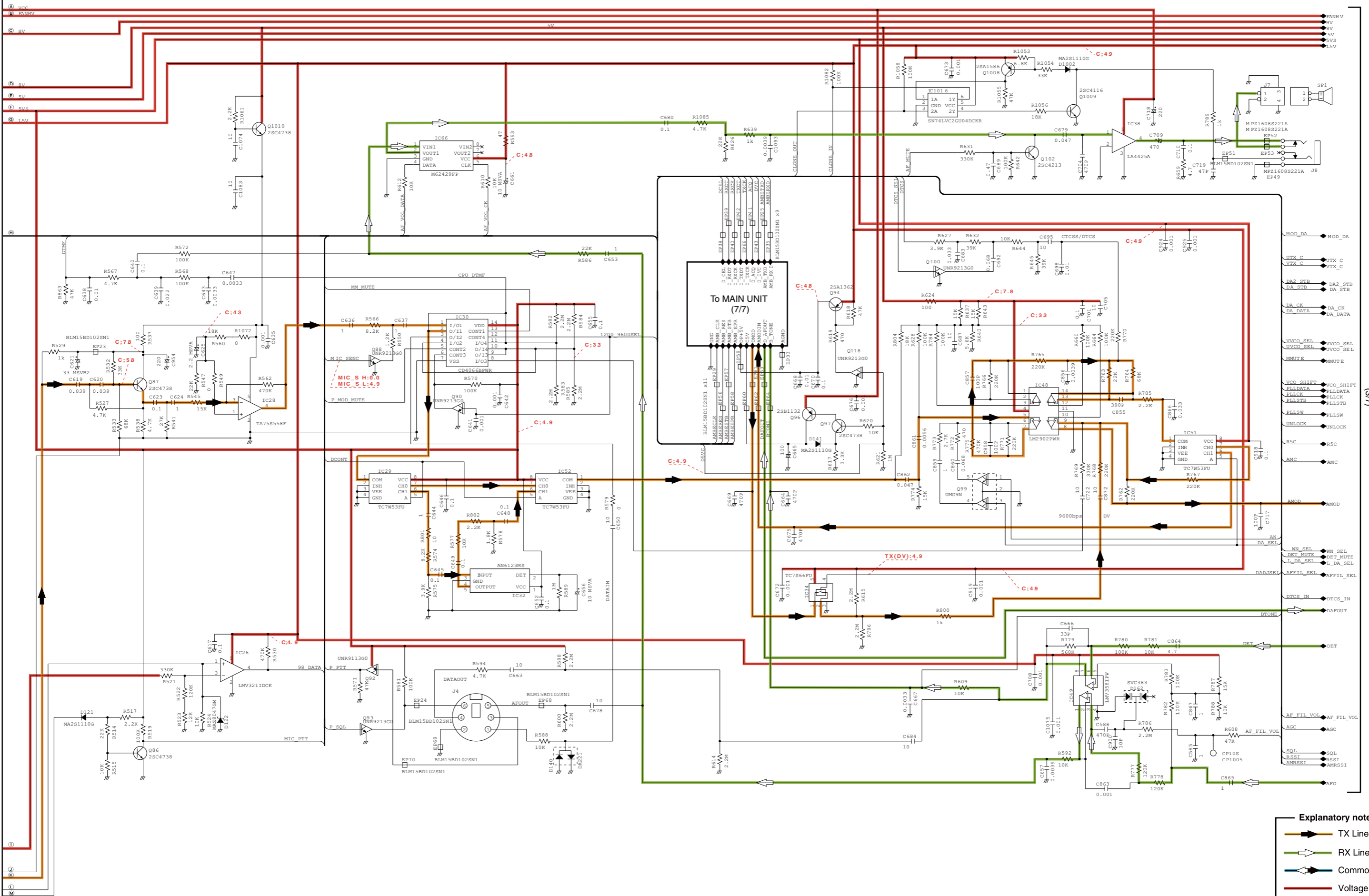
MAIN UNIT (3/7)



- Explanatory notes**
- TX Line
  - RX Line
  - Common Line
  - Voltage Line

\*; Refer to "PARTS LIST."

# MAIN UNIT (4/7)

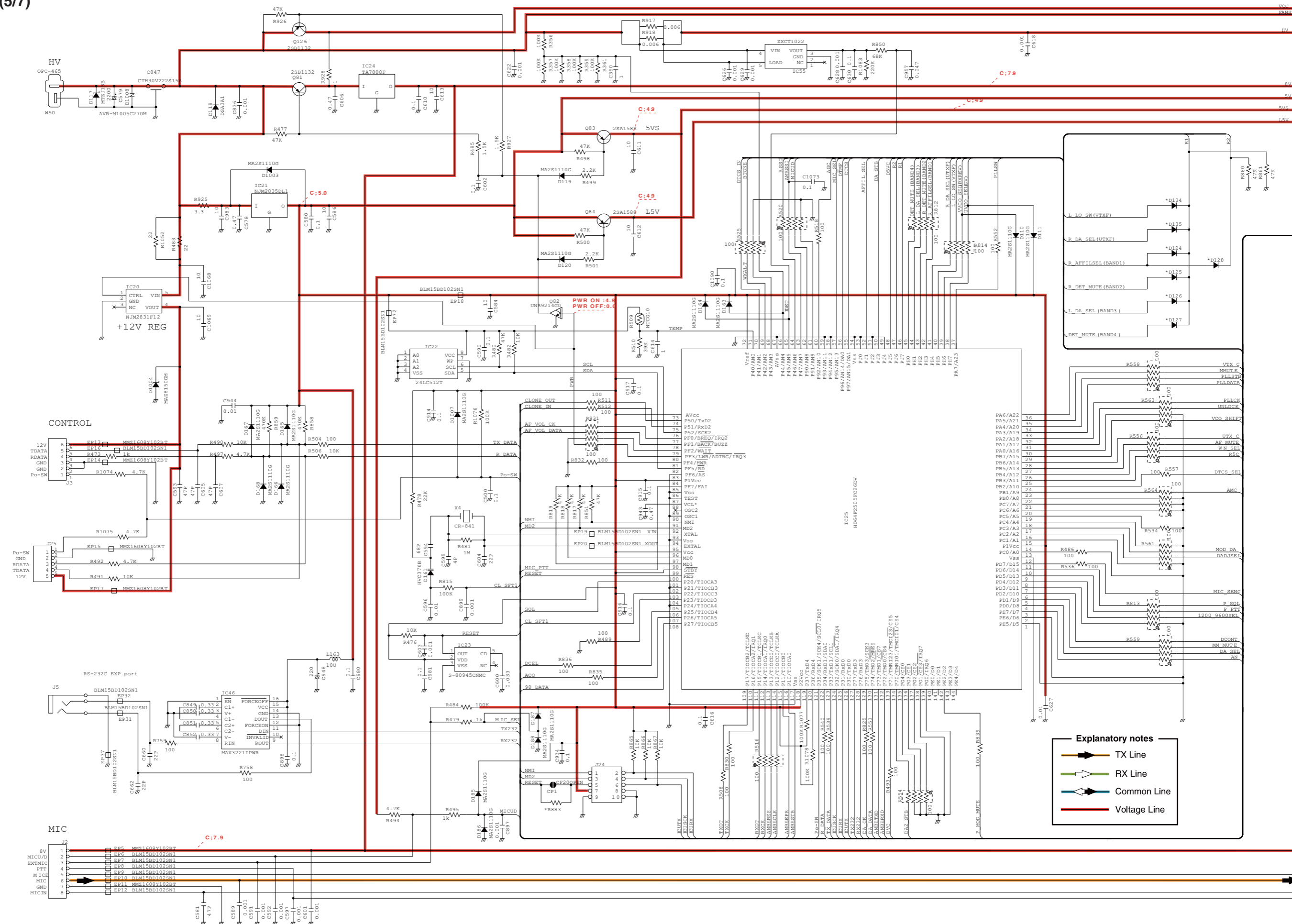


**Explanatory notes**

- ▶ TX Line
- ▶ RX Line
- ▶ Common Line
- ▶ Voltage Line

\*; Refer to "PARTS LIST."

# MAIN UNIT (5/7)

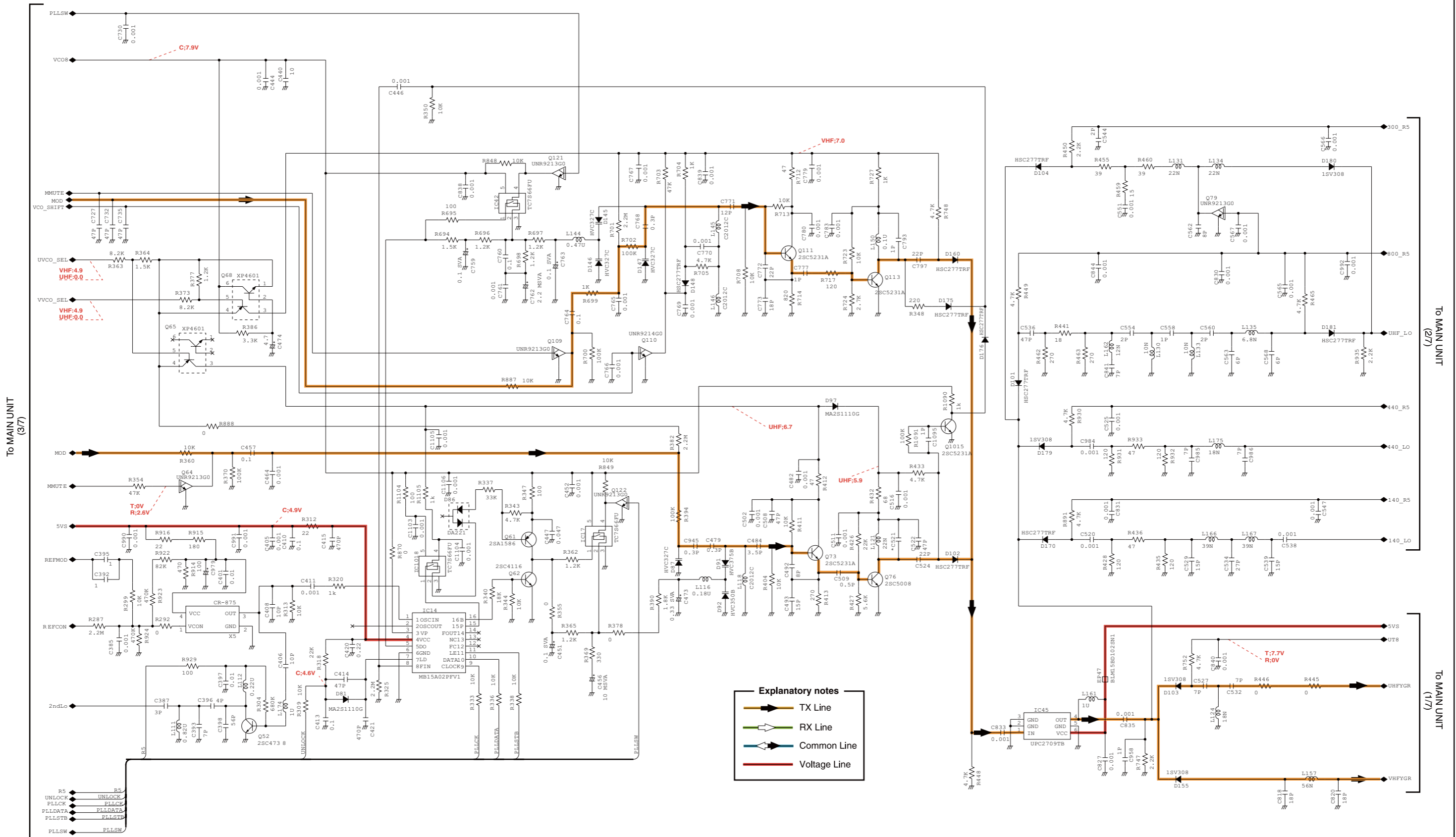


**Explanatory notes**

- TX Line
- RX Line
- Common Line
- Voltage Line

\*; Refer to "PARTS LIST."

MAIN UNIT (6/7)



**Explanatory notes**

- TX Line
- RX Line
- Common Line
- Voltage Line

To MAIN UNIT (3/7)

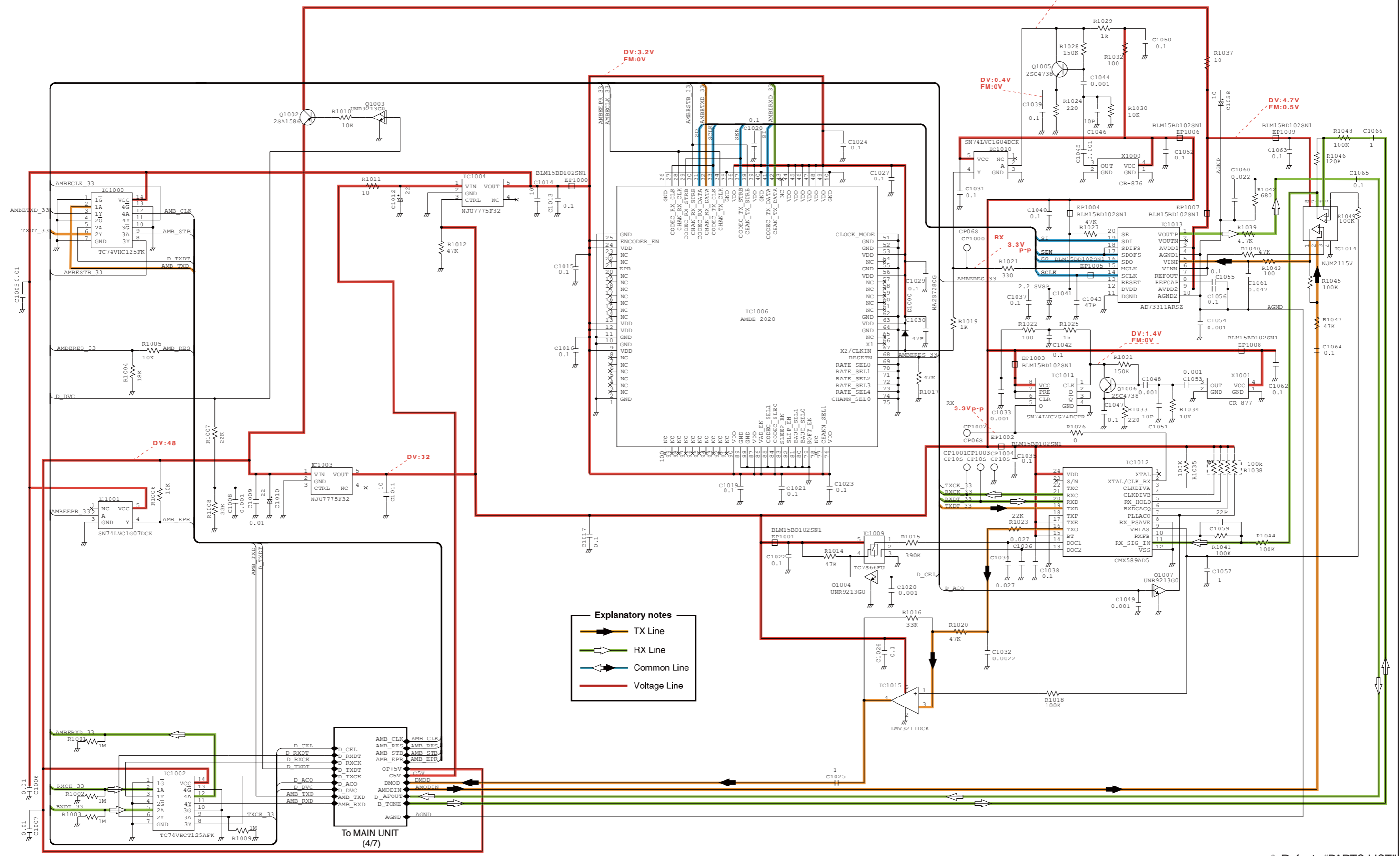
To MAIN UNIT (2/7)

To MAIN UNIT (1/7)

\*; Refer to "PARTS LIST."



MAIN UNIT (7/7)



## Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan  
Phone : +81 (06) 6793 5302  
Fax : +81 (06) 6793 0013  
URL : <http://www.icom.co.jp/world/index.html>

### Icom America Inc.

<Corporate Headquarters>  
2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.  
Phone : +1 (425) 454-8155 Fax : +1 (425) 454-1509  
URL : <http://www.icomamerica.com>  
E-mail : [sales@icomamerica.com](mailto:sales@icomamerica.com)  
<Customer Service>  
Phone : +1 (425) 454-7619

### Icom Canada

Glenwood Centre #150-6165  
Highway 17 Delta, B.C., V4K 5B8, Canada  
Phone : +1 (604) 952-4266 Fax : +1 (604) 952-0090  
URL : <http://www.icomcanada.com>  
E-mail : [info@icomcanada.com](mailto:info@icomcanada.com)

### Icom (Australia) Pty. Ltd.

Unit 1 / 103 Garden Road, Clayton VIC 3168 Australia  
Phone : +61 (03) 9549-7500 Fax : +61 (03) 9549-7505  
URL : <http://www.icom.net.au>  
E-mail : [sales@icom.net.au](mailto:sales@icom.net.au)

### Icom New Zealand

146A Harris Road, East Tamaki,  
Auckland, New Zealand  
Phone : +64 (09) 274 4062 Fax : +64 (09) 274 4708  
URL : <http://www.icom.co.nz>  
E-mail : [inquiries@icom.co.nz](mailto:inquiries@icom.co.nz)

### Beijing Icom Ltd.

10C07, Long silver Mansion, No.88, Yong Ding  
Road, Haidian District, Beijing, 100039, China  
Phone : +86 (010) 5889 5391/5392/5393  
Fax : +86 (010) 5889 5395  
E-mail : [bjicom@bjicom.com](mailto:bjicom@bjicom.com)  
URL : <http://www.bjicom.com>

### Icom (Europe) GmbH

Communication Equipment  
Auf der Krautweide 24  
65812 Bad Soden am Taunus, Germany  
Phone : +49 (6196) 76685-0 Fax : +49 (6196) 76685-50  
URL : <http://www.icomeurope.com>  
E-mail : [info@icomeurope.com](mailto:info@icomeurope.com)

### Icom Spain S.L

Ctra. Rubi, No. 88 Bajos A 08174, Sant Cugat del Valles, Barcelona, Spain  
Phone : +34 (93) 590 26 70 Fax : +34 (93) 589 04 46  
URL : <http://www.icomspain.com>  
E-mail : [icom@icomspain.com](mailto:icom@icomspain.com)

### Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K.  
Phone : +44 (01227) 741741 Fax : +44 (01227) 741742  
URL : <http://www.icomuk.co.uk>  
E-mail : [info@icomuk.co.uk](mailto:info@icomuk.co.uk)

### Icom France s.a.s.

Zac de la Plaine  
1 Rue Brindejonc des Moulinais BP 5804  
31505 Toulouse Cedex, France  
Phone : +33 (5) 61 36 03 03 Fax : +33 (5) 61 36 03 00  
URL : <http://www.icom-france.com>  
E-mail : [icom@icom-france.com](mailto:icom@icom-france.com)

### Asia Icom Inc.

6F No.68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C.  
Phone : +886 (02) 2559 1899 Fax : +886 (02) 2559 1874  
URL : <http://www.asia-icom.com>  
E-mail : [sales@asia-icom.com](mailto:sales@asia-icom.com)

### Icom Polska

81-850 Sopot, ul. 3 Maja 54, Poland  
Phone : +48 (58) 550 7135 Fax : +48 (58) 551 0484  
E-mail : [icompolska@icompolska.com.pl](mailto:icompolska@icompolska.com.pl)

**Count on us!**

**Icom Inc.**

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan

S-14529XZ-C1  
© 2009 Icom Inc.