

VR-505/506/507/ 509/510/517

SERVICE MANUAL

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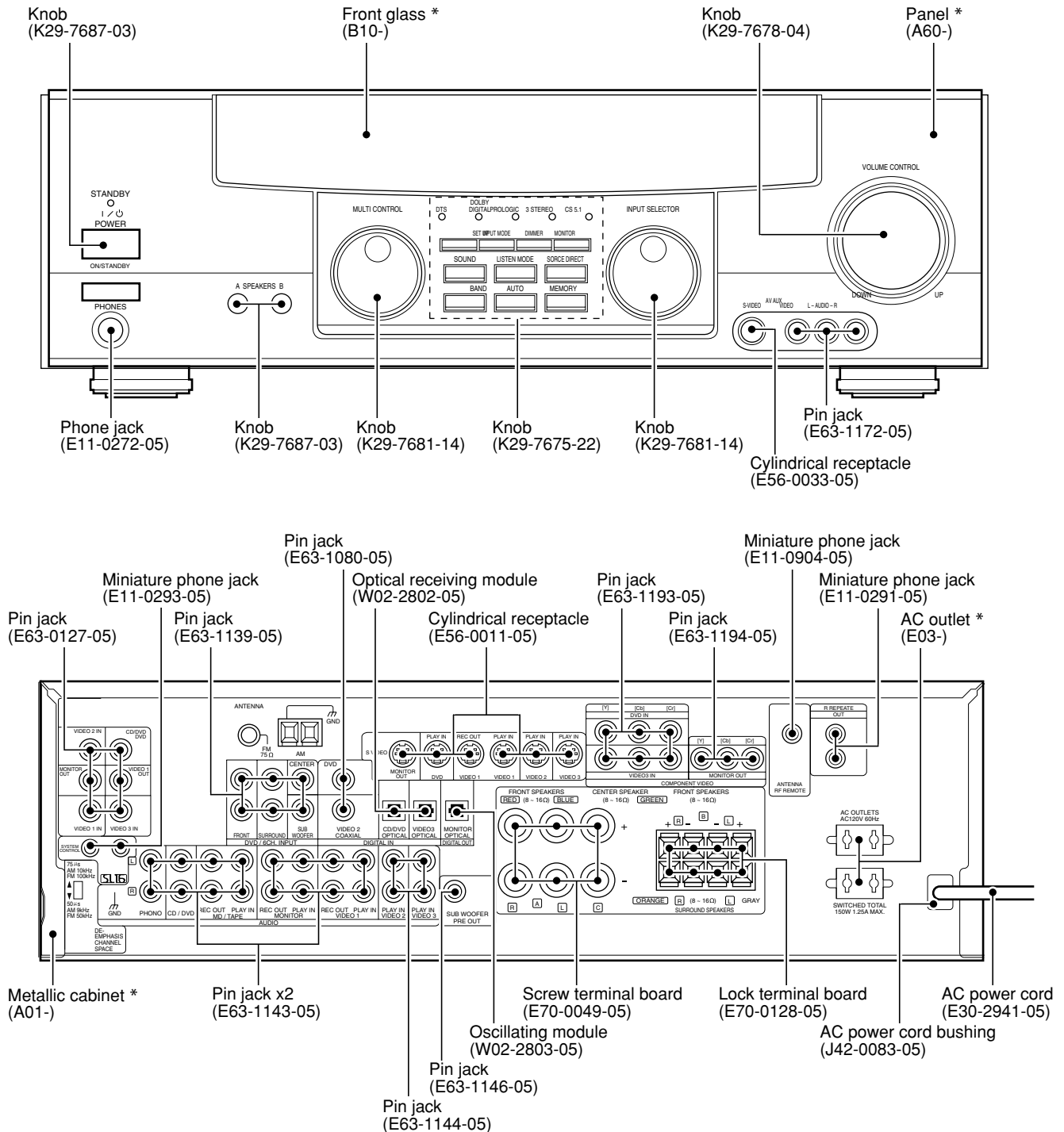


Illustration is VR-509.

* Refer to parts list on page 36 .



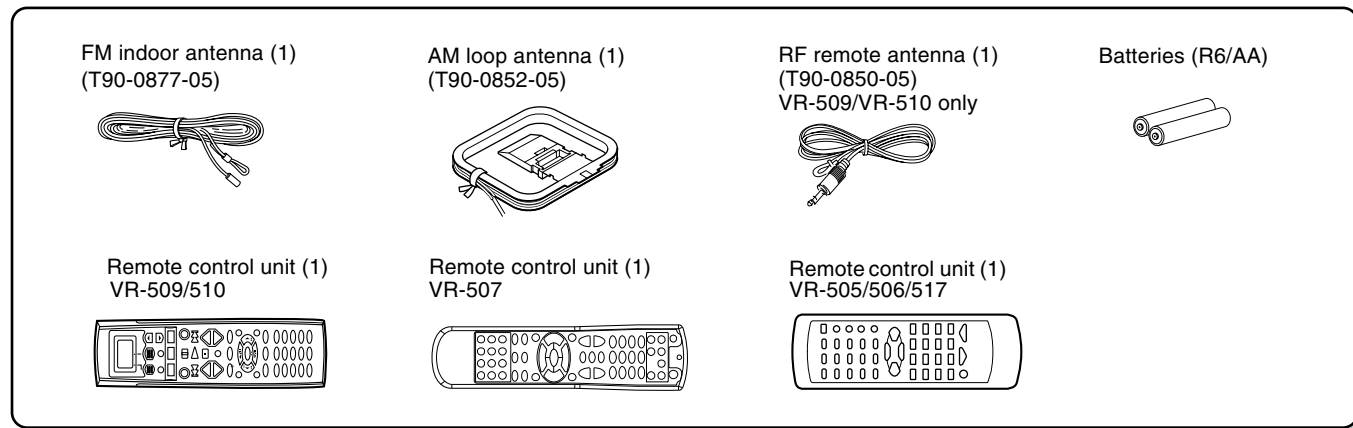
VR-505/506/507/509/510/517

CONTENTS / ACCESSORIES / CAUTIONS

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Accessories



Remote Controller vs Parts Number

| Model | Remote Controller | Parts # | Battery Cover Parts # |
|--------|-------------------|-------------|-----------------------|
| VR-505 | RC-R0511 | A70-1468-15 | A09-1178-08 |
| VR-506 | RC-R0615 | A70-1466-15 | A09-1178-08 |
| VR-507 | RC-R0720 | A70-1505-05 | A09-1218-08 |
| VR-509 | RC-R0811 | A70-1485-05 | A09-1166-08 |
| VR-510 | RC-R0812 | A70-1484-05 | A09-1166-08 |
| VR-517 | RC-R0617 | A70-1507-05 | A09-1178-08 |

Cautions

Resetting the Microcomputer

The microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

- Please note that resetting the microcomputer will clear the contents of the memory and returns the unit to the state it was in when it left the factory.

Unplug the power cord from the wall outlet, then plug it back in while holding down the STANDBY key.

Memory back up function

Please note that the following items will be deleted from the unit's memory if the power cord is disconnected from the AC outlet for approximately 2 days.

- Power mode.
- Input selector settings.
- Device preset.
- Picture output.
- Speaker ON/OFF
- Volume level.
- BASS, TREBLE, INPUT level.
- Subwoofer ON/OFF.
- Dimmer level.
- Monitor ON/OFF.
- MD/TAPE settings.
- 6ch/2ch input setting.
- Listen mode setting.
- Speaker settings.
- Input mode setting.
- Midnight mode setting.
- Broadcast band.
- Frequency setting.
- Preset stations.
- Tuning mode.
- Source Direct.
- RF Band.(VR-509/510)
- THX.(VR-510)
- SW RE-MIX.(VR-510)
- CINEMA EQ.(VR-505/506/507/509/517)

CIRCUIT DESCRIPTION

1. Initial and Backup Function

1-1 Initial State

Below are set value if the microcomputer is initialized when reset:

(1) AMP function initialization

| | |
|-------------------|---------------------|
| • POWER | POWER OFF (STANDBY) |
| • Input Selector | TUNER |
| • Preset device | None |
| • Visual output | VIDEO1 |
| • Speaker A relay | ON |
| • Speaker B relay | OFF |
| • Volume | -66dB |
| • BASS | 0dB |
| • TREBLE | 0dB |
| • INPUT LEVEL | 0dB |
| • SOURCE DIRECT | 0dB |
| • MONITOR | 0dB |
| • VIDEO2/MONITOR | VIDEO2 |
| • MD/TAPE | TAPE |
| • RF BAND | BAND 1 |

(2) SURROUND function initialization

| | |
|---------------|--------------|
| • LISTEN MODE | STEREO |
| • INPUT MODE | |
| CD/DVD | DIGITAL AUTO |
| VIDEO2 | ANALOG |
| VIDEO3 | ANALOG |
| DVD/6ch | DIGITAL AUTO |
| • SUBWOOFER | ON |

| | |
|-------------------------|-----------------|
| • FRONT speaker size | LARGE |
| • CENTER speaker size | NORMAL |
| • SURROUND speaker size | NORMAL |
| • DISTANCE | Fch 3.0m / 10ft |
| Cch | 3.0m / 10ft |
| Sch | 1.5m / 5ft |
| • LEFT level | 0dB |
| • RIGHT level | 0dB |
| • CENTER level | 0dB |
| • REAR (SL,SR) level | 0dB |
| • SUBWOOFER level | 0dB |
| • MIDNIGHT | OFF |
| • CINEMA EQ | OFF |

(3) TUNER function initialization

| | |
|---------------------|--------------------------------|
| • BAND | FM |
| • PRESET CHANNEL | " - - " |
| • Frequency receive | Each destination minimum value |
| K1/K2 | FM : 87.50 MHz |
| E1 | AM : 530 kHz |
| E1 | FM : 87.50 MHz |
| E1 | AM : 531 kHz |
| • AUTO MANUAL | AUTO |

1-2 Backup Function

When the AC power supply is turned off, the receiver micro-computer enters the backup mode. As a result, it will return to the last state before the AC OFF when the AC power supply is turned ON again

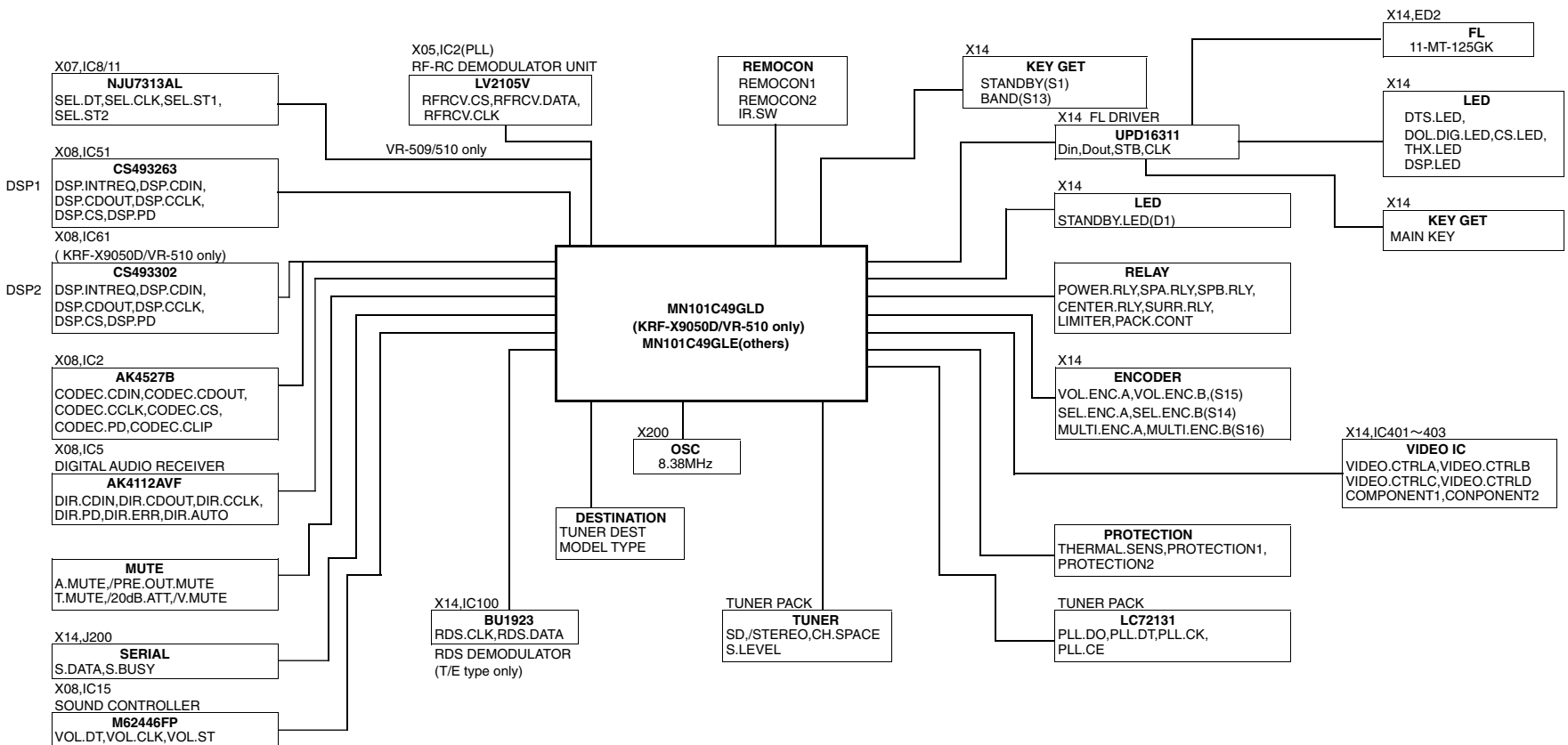
2. Destination List of Tuner

0 : Pull down,1:Pull up

| SET TYPE | TYPE | BAND | RECEIVING FREQUENCY RANGE | CHANNEL SPACE | IF | PLL | Tuner Destination Port | | | |
|------------------------------|--------------------|---|---------------------------|---------------|----------|-------|-------------------------|------------------------|------------------------|------------------------|
| | | | | | | | PORT3(68PIN) (CP205) | PORT2(67PIN) (W109) | PORT1(66PIN) (W105) | PORT0(65PIN) (W106) |
| K, P, R | K1 1700 | FM | 87.5MHz-108.0MHz | 100kHz | +10.7MHz | 25kHz | 0 | 0 | 0 | 0 |
| | | AM | 530kHz-1700kHz | 10kHz | +450kHz | 10kHz | | | | |
| Y, M, I, C, V | K2 1610 | FM | 87.5MHz-108.0MHz | 100kHz | +10.7MHz | 25kHz | 0 | 0 | 0 | 1 |
| | | AM | 530kHz-1610kHz | 10kHz | +450kHz | 10kHz | | | | |
| Y | K3 1610 RBDS | FM | 87.5MHz-108.0MHz | 100kHz | +10.7MHz | 25kHz | 0 | 0 | 1 | 0 |
| | | AM | 530kHz-1610kHz | 10kHz | +450kHz | 10kHz | | | | |
| K, P | K4 1700 RBDS | FM | 87.5MHz-108.0MHz | 100kHz | +10.7MHz | 25kHz | 1 | 0 | 1 | 0 |
| | | AM | 530kHz-1700kHz | 10kHz | +450kHz | 10kHz | | | | |
| Y, M, I, C, V, E, X, H | E1 | FM | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 25kHz | 0 | 0 | 1 | 1 |
| | | AM | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| T | E2 LW | FM | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 25kHz | 0 | 1 | 0 | 0 |
| | | MW | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| | | LW | 153kHz-279kHz | 9kHz | +450kHz | 9kHz | | | | |
| E, T | E3 RDS | FM | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 25kHz | 0 | 1 | 0 | 1 |
| | | AM | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| T | E4 LW RDS | FM | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 25kHz | 0 | 1 | 1 | 0 |
| | | MW | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| | | LW | 153kHz-279kHz | 9kHz | +450kHz | 9kHz | | | | |
| Q | Q1 RDS | FM L | 65.0MHz-74.0MHz | 10kHz | +10.7MHz | 5kHz | 1 | 0 | 1 | 1 |
| | | FM H | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 5kHz | | | | |
| | | AM | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| Q | Q2 RDS | FM L | 65.0MHz-74.0MHz | 10kHz | +10.7MHz | 5kHz | 1 | 1 | 0 | 0 |
| | | FM H | 87.5MHz-108.0MHz | 50kHz | +10.7MHz | 5kHz | | | | |
| | | MW | 531kHz-1602kHz | 9kHz | +450kHz | 9kHz | | | | |
| | | LW | 153kHz-279kHz | 9kHz | +450kHz | 9kHz | | | | |
| Y, M, I, C, V | M | K2/E1 are decided by Tuner Destination Port 1 input. (0=K2 type 1=E1 type) | | | | 0 | 0 | X | 1 | |
| Y | Y RBDS | K3/E1 are decided by Tuner Destination Port 0 input. (0=K3 type 1=E1 type) | | | | 0 | 0 | 1 | X | |

CIRCUIT DESCRIPTION

3. Microprocessor: MN101C49GLE or MN101C49GLD(X14,IC200) 3-1 Microprocessor Periphery block diagram



CIRCUIT DESCRIPTION

3-2 Pin Description of Microprocessor

| Pin No. | Pin Name | I/O | Description |
|---------|----------------|-----|--|
| 1 | VREF | - | Connected to ground. |
| 2 | TH SENS | I | Protection signal detection port for thermal sensor. |
| 3 | PROT1 | I | Protection signal detection port for over current. |
| 4 | PROT2 | I | Protection signal detection port for over voltage. |
| 5 | S LEVEL | - | Detection port of RDS signal level. |
| 6 | KEY GET | I | A/D key input for band and standby. |
| 7 | CE2 | I | Detection port of chip enable 2 for microprocessor. |
| 8 | CE1 | I | Detection port of chip enable 1 for microprocessor. |
| 9 | DIG DET | I | Detection port of digital signal for DTS. |
| 10 | VREF | - | A/D reference voltage. |
| 11 | VDD | - | Power supply(+5v) for microprocessor. |
| 12 | OSC2 | O | Main clock output(8.38MHz). |
| 13 | OSC1 | I | Main clock input(8.38MHz). |
| 14 | VSS | - | Connected to ground. |
| 15 | XI | - | Connected to ground. |
| 16 | XO | - | Unused. |
| 17 | MMCD | - | Connected to ground. |
| 18 | DIR/CODEC DIN | O | Data output to DIR/CODEC. |
| 19 | DIR/CODEC DOUT | I | Data input port from DIR/CODEC. |
| 20 | DIR/CODEC CLK | O | Clock output to DIR/CODEC. |
| 21 | DSP DIN | O | Data output port to DSP. |
| 22 | DSP DOUT | I | Data input port from DSP. |
| 23 | DSP CLK | O | Clock output port to DSP. |
| 24 | DSP CE1 | O | Chip enable 1 output to DSP. |
| 25 | DSP CE2 | O | Chip enable 2 output to DSP. |
| 26 | REM I | I | Remote control signal input 1(Front panel). |
| 27 | REM 0 | I | Remote control signal input 1(Rear panel). |
| 28 | DIR ERR | I | Detection port for DIR ERROR signal. |
| 29 | RDS CLK | I | Clock input of RDS demodulator IC. |
| 30 | DPS IRQ1 | I | Detection port 1for DSP INTREQ. |
| 31 | DPS IRQ2 | I | Detection port 2 for DSP INTREQ. |
| 32 | NC | - | Unused. |
| 33 | RESET | I | Reset signal input for microprocessor. |
| 34 | DSP PD1 | O | PD output port 1for DSP. |
| 35 | DSP PD2 | O | PD output port 2 for DSP. |
| 36 | DIR PD | O | Power down mode port for DIR. |
| 37 | CODEC PD | O | Power down mode port for CDDEC. |
| 38 | CODEC CLIP | I | Overflow detection port for CODEC analog signal. |
| 39 | CODEC CE | O | Chip select for CODEC. |
| 40 | RDS DIN | I | Data input of RDS demodulator IC. |
| 41 | NC | - | Unused. |
| 42 | FL DIN | O | Data output to FL driver. |
| 43 | FL DOUT | I | Data input from FL driver. |
| 44 | FL CLK | O | Clock output to FL driver. |
| 45 | FL CE | O | CE output to FL driver. |

VR-505/506/507/509/510/517

CIRCUIT DESCRIPTION

| Pin No. | Pin Name | I/O | Description |
|---------|-----------------|-----|---|
| 46 | TUNER DIN | O | Data output to PLL IC. |
| 47 | TUNER CLK | O | Clock output to PLL IC. |
| 48 | TUNER CE | O | Chip enable output to PLL IC. |
| 49 | TUNER DOUT | I | Data input from PLL IC. |
| 50 | TUNER MUTE | O | Mute signal output to PLL IC. |
| 51 | TUNER STEREO | I | Stereo signal input from PLL IC. |
| 52 | TUNER SD | I | SD signal input from PLL IC. |
| 53 | RFRCV CE | O | Chip select output to RF remote control receiving IC. |
| 54 | RFRCV DIN | O | Data output to RF remote control receiving IC. |
| 55 | RFRCV CLK | O | Clock output to RF remote control receiving IC. |
| 56 | S BUSY | I/O | Serial busy signal input/output. |
| 57 | S DATA | I/O | Serial data signal input/output. |
| 58 | LIMITER | O | Power control for A class. |
| 59 | IR SW | O | Switching port of remote control signal. |
| 60 | DIR AUTO | I | Non PCM detect port. |
| 61~63 | MODEL T0~T3 | I | Discrimination port for model type. |
| 64 | CH SPACE | I | Discrimination port for channel space. |
| 65~68 | TUNER DO~D3 | I | Discrimination port(D0~D3) for tuner destination. |
| 69 | MULTI CW | I | Encoder (Multi control) upward detection. |
| 70 | MULTI CCW | I | Encoder (Multi control) downward detection. |
| 71 | SEL CW | I | Encoder (Selector)clockwise detection. |
| 72 | SEL CCW | I | Encoder (Selector)) counterclockwise detection. |
| 73 | VOL. CW | I | Encoder (Vol.)clockwise detection. |
| 74 | VOL.CCW | I | Encoder (Vol.) counterclockwise detection. |
| 75 | SP. A RLY | O | Relay control for A speaker. |
| 76 | CNT/SUB W RELAY | O | Relay control for center and sub speakers. |
| 77 | SP. B RLY | O | Relay control for B speaker. |
| 78 | SUB W | - | Unused. |
| 79 | SURR.RLY | O | Relay control for surround speaker. |
| 80 | PWR RLY | O | Control port of power relay. |
| 81 | PACK CONT. | O | Power pack control. |
| 82 | STANDBY RLY | O | Standby relay control. |
| 83 | SURR.MUTE | I | Mute control for surround. |
| 84 | 20dB ATT. | O | 20dB attenuater control. |
| 85 | A. MUTE | O | Audio mute control. |
| 86 | COMP 1 | O | Video component switch control. |
| 87 | SEL DIN | O | Data output to selector IC(X08,IC12/14). |
| 88~91 | V. CTL A~D | O | Video switch control. |
| 92 | SEL. DIN | O | Data output to selector IC(X07,IC8/11). |
| 93 | SEL. CLK | O | Clock output to selector IC(X07,IC8/11). |
| 94 | SEL. ST1 | O | Strobe 1 output to selector IC(X07,IC8). |
| 95 | DAVSS | - | Connected to ground. |
| 96 | SEL. ST 2 | O | Strobe 2 output to selector IC(X07,IC11). |
| 97 | VOL. CE | O | Chip enable output to vol. IC (X08,IC15). |
| 98 | VOL. CLK | O | Clock output to vol. IC (X08,IC15). |
| 99 | V. MUTE | O | Mute control to video selector IC (X14,IC401/402). |
| 100 | DAVDD | - | +5V power supply. |

CIRCUIT DESCRIPTION

4. AK4112AVF u-com interface port

| Pin Name | Pin No. | I/O | Function |
|----------|---------|-----|---|
| PD | 7 | I | Power Down Mode Pin When "L", the AK4112AVF is power down and reset. |
| AUTO | 5 | O | Non PCM Detect Pin "L":No detect, "H":Detect |
| FS96 | 17 | O | 96kHz Sampling Detect Pin "H":fs=88.2kHz or more, "L":fs=54kHz or less. |
| ERF | 18 | O | Unlock & Parity Error Output Pin "L":No Error, "H":Error |
| CSN | 25 | I | Chip Select pin in Serial Mode |
| CCLK | 26 | I | Control Data Clock Pin in Serial Mode |
| CDTI | 27 | I | Control Data Input Pin in Serial Mode |
| CDTO | 28 | O | Control Data Output Pin in Serial |

5. AK4527B u-com interface port

| Pin Name | Pin No. | I/O | Function |
|----------|---------|-----|----------------------------|
| PDN | 17 | I | Power Down & Reset Pin |
| OVF | 33 | O | Analog Overflow Detect Pin |
| CSN | 41 | I | Chip Select Pin |
| CCLK | 42 | I | Control Data Clock Pin |
| CDTI | 43 | I | Control Data Input Pin |

6. Test Mode

6-1 Entering the Test Mode

- While pressing the "BAND" key, plug the power cord into AC wall outlet.

6-2 Cancelling the Test Mode

- Initialized and cancel the test mode if pulling out the power code.

6-3 Contents of the Test Mode

6-3-1 Pch CALL UP/DOWN

| Key | Function |
|------------|-------------------|
| DIMMER | Pch CALL UP |
| INPUT MODE | Pch CALL DOWN |

6-3-2 10 Steps Switching of P ch Call

| Key | Function |
|--------|------------------|
| SET UP | Preset Operation |

6-3-3 TUNER mute on/off

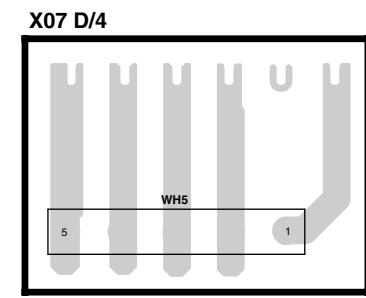
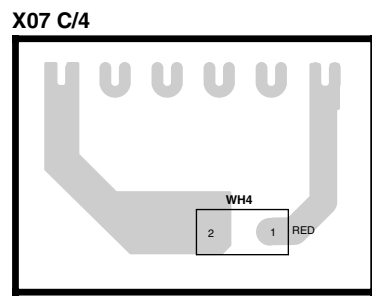
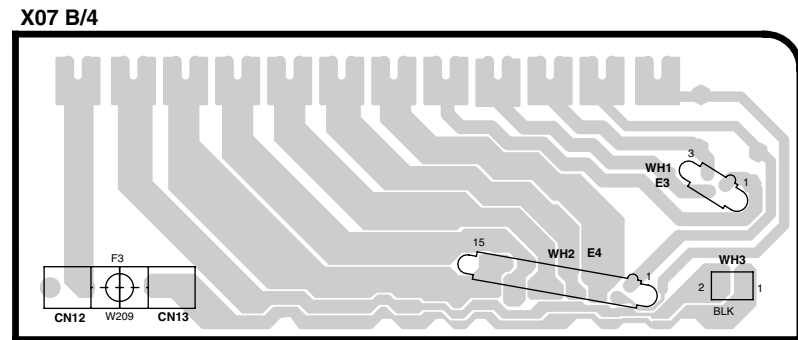
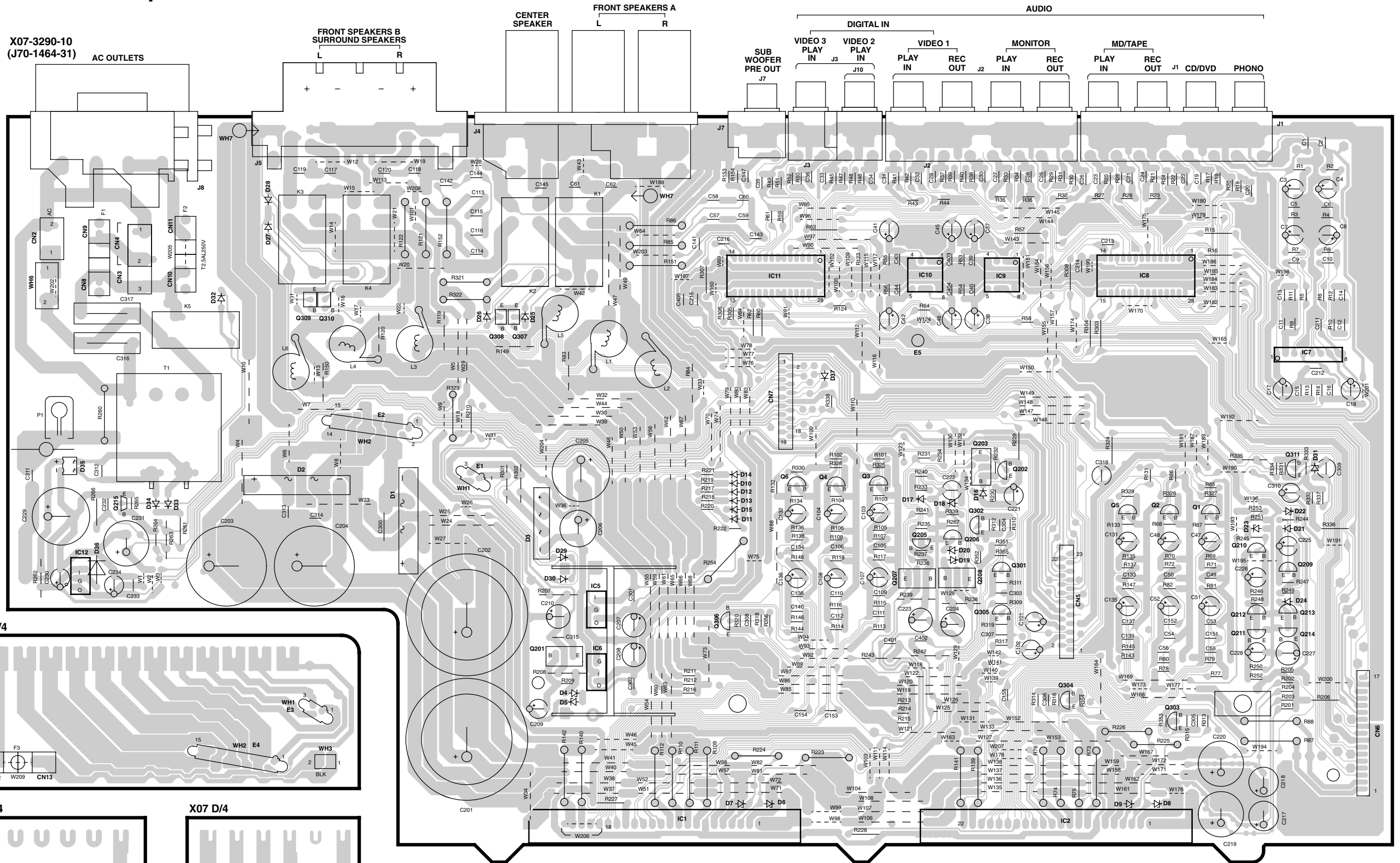
| Key | Function |
|-------------|-------------------|
| LISTEN MODE | TUNER mute on/off |

6-3-4 Key Operation

- The following operation is available during the all FL lighting up mode only.(only VR-507/509/510)

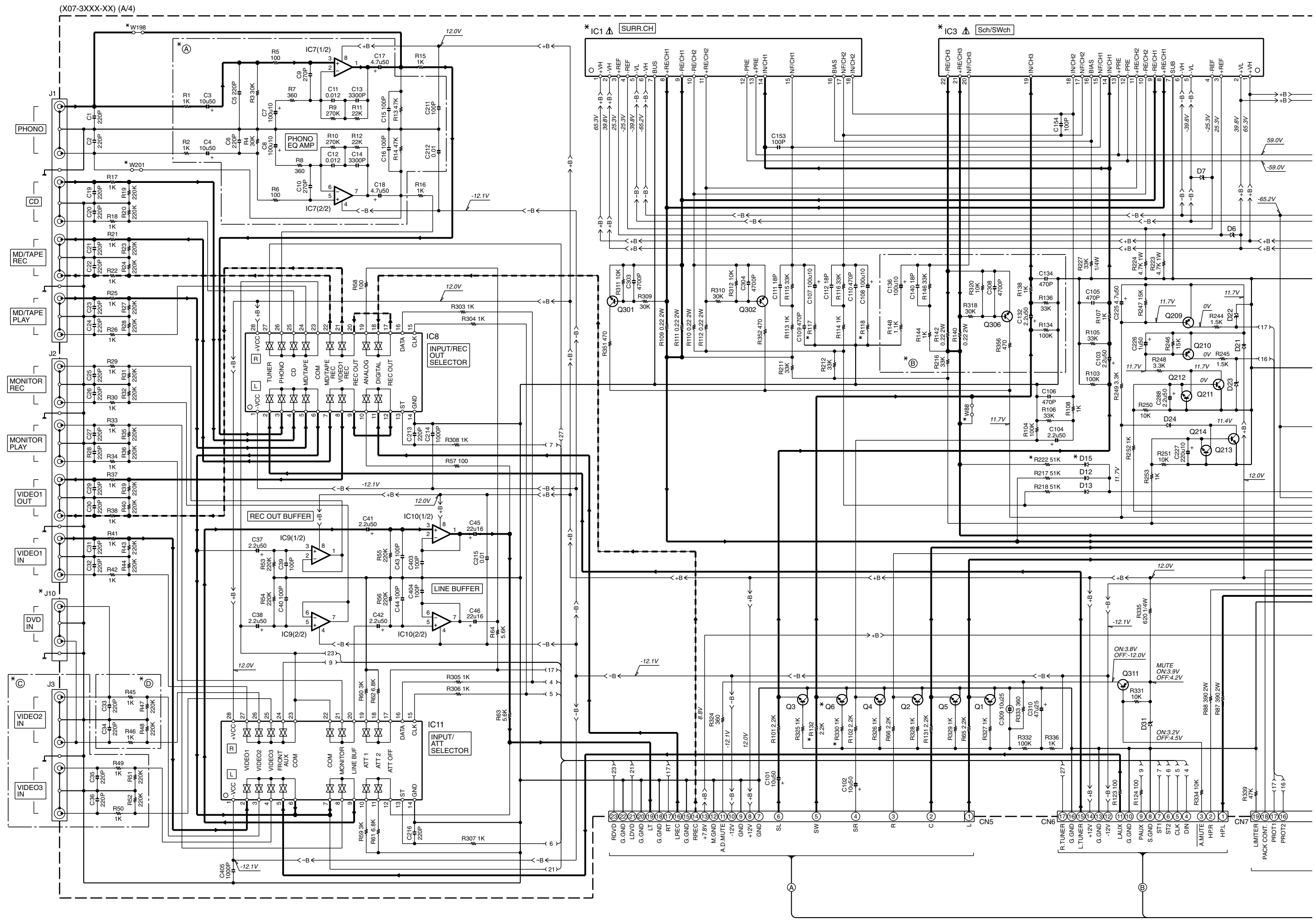
| Operation Keys | Display | Function |
|----------------|-------------------|---|
| SOUND | Normal Indication | RF receiving frequency is made 422MHz for VR-509/510 and 418MHz for VR-507. |
| LISTEN MODE | FRONT IR | FRONT IR is enabled and remote control is disabled. |
| SOURCE DIRECT | RF BAND 2 | RF receiving frequency is made 428MHz for VR-509/510. |

PC BOARD(Component side view)



Note: There is a different from X07-3290, X07-3300, X07-3310 on PCB layout.

Refer to the schematic diagram for the value of resistors and capacitors.



(X07-3XXX-XX) (A/4)

* IC1 Δ SURR.CH

* IC3 Δ Sch/SWch

PHONO IEO AMP

INPUT/REC OUT SELECTOR

REC OUT BUFFER

LINE BUFFER

INPUT/ATT SELECTOR

SURR.CH

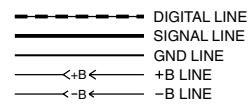
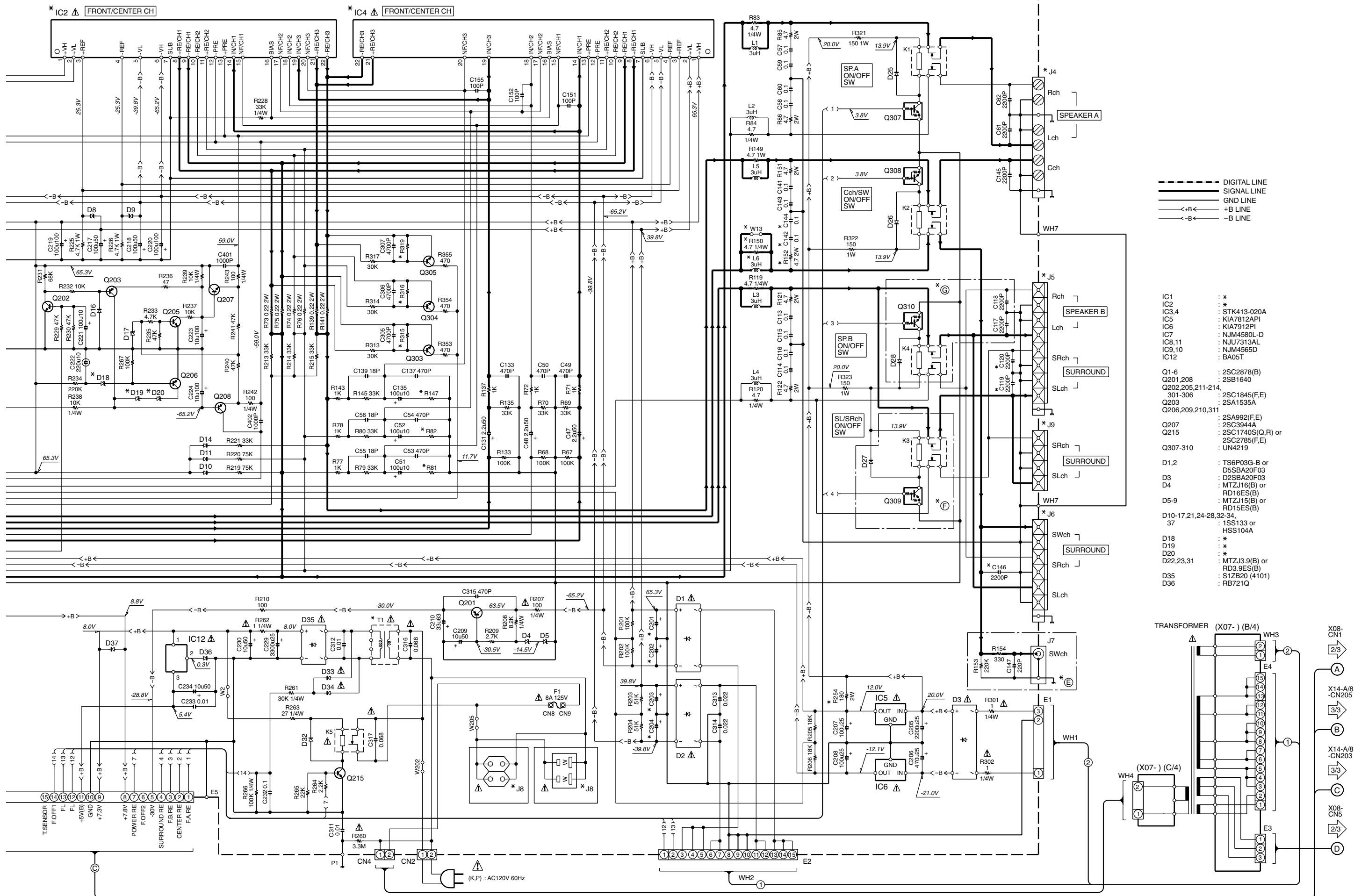
Sch/SWch

ON:3.8V
OFF:-12.0V

MUTE
ON:3.9V
OFF:4.2V

ON:3.2V
OFF:4.5V

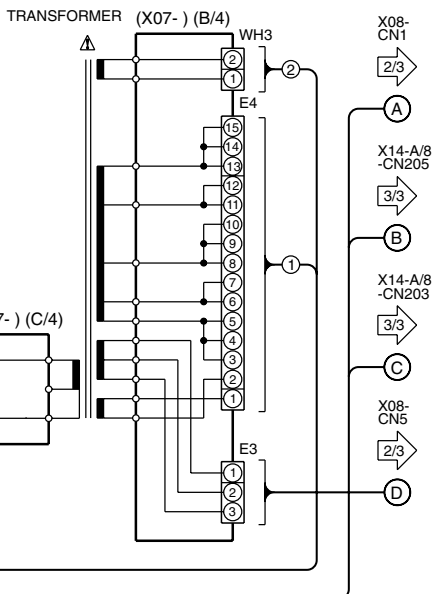
LIMITER
PACK CONT.
PROT1
PROT2



- IC1 : *
- IC2 : *
- IC3,4 : STK413-020A
- IC5 : KIA7812API
- IC6 : KIA7912PI
- IC7 : NUM4580L-D
- IC8,11 : NUJ7313AL
- IC9,10 : NUM4565D
- IC12 : BA05T

- Q1-6 : 2SC2878(B)
- Q201,208 : 2SB1640
- Q202,205,211-214,301-306 : 2SC1845(F,E)
- Q203 : 2SA1535A
- Q206,209,210,311 : 2SA992(F,E)
- Q207 : 2SC3944A
- Q215 : 2SC1740S(Q,R) or 2SC2785(F,E)
- Q307-310 : UN4219

- D1,2 : TS6P03G-B or D5BA20F03
- D3 : D2SBA20F03
- D4 : MTZJ16(B) or RD16ES(B)
- D5-9 : MTZJ15(B) or RD15ES(B)
- D10-17,21,24-28,32-34,37 : 1SS133 or HSS104A
- D18 : *
- D19 : *
- D20 : *
- D22,23,31 : MTZJ3.9(B) or RD3.9ES(B)
- D35 : S1ZB20 (4101)
- D36 : RB721Q



(X07-) (A/3)

VR-510 (X07-3290-10)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82, 117,118,147 | R132,150, 152,222,330 | R254 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5 | J6,9, 10 | J8 | Q6 | W13,88, 198,201 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|-----------------------|------|---------------|-----|-----|-----|-----|----|----|----------|----|----|----------------------------|-------------|-----|-------|-------------|----|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 0-10 | YES | | | | | NO | NO | C90-3945-05 | C90-3946-05 | 1.2K | NO | YES | 9.1K | NO | | | | | | | | NO | NO | STK412-040T STK412-040N | STK413-040T | NO | NO | L07-2809-05 | |
| CANADA | P | | | | | | | YES | NO | | | | | | | | | | | | | | | | | | | | | | |

VR-509 (X07-33XX-XX)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82, 117,118,147 | R132, 254,330 | R150, 152,222 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5 | J6,9, 10 | J8 | Q6 | W198, 201 | W13, 88 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|---------------|---------------|---------------|-----|-----|-----|-----|----|----|----------|----|----|-----------|-------------|-------------|-----|-------|-------------|----|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 290-11 | YES | | | | | NO | NO | C90-3982-05 | C90-3983-05 | 1.1K | YES | NO | 10K | NO | | | | | | | | | NO | YES | STK412-020N | STK413-020N | NO | NO | L07-2809-05 | |
| CANADA | P | 380-10 | | | | | | YES | NO | | | | | | | | | | | | | | | | | | | | | | | |

VR-506 (X07-33XX-XX)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82, 117,118,147 | R132, 330 | R150,152, 222,254 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5 | J6,9, 10 | J8 | Q6 | W198, 201 | W13, 88 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|-----------|-------------------|---------------|-----|-----|-----|-----|----|----|----------|----|----|-----------|-------------|-------------|-----|-------|-------------|----|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 300-11 | YES | | | | | NO | NO | C90-3982-05 | C90-3983-05 | 1.1K | YES | NO | 10K | NO | | | | | | | | | NO | YES | STK412-020N | STK413-020N | NO | NO | L07-2758-05 | |
| CANADA | P | 380-12 | | | | | | YES | NO | | | | | | | | | | | | | | | | | | | | | | | |

VR-507 (X07-33XX-XX)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82, 117,118,147 | R132, 330 | R150,152, 222,254 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5 | J6,9, 10 | J8 | Q6 | W198, 201 | W13, 88 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|-----------|-------------------|---------------|-----|-----|-----|-----|----|----|----------|----|----|-----------|-------------|-------------|-----|-------|-------------|----|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 300-10 | YES | | | | | NO | NO | C90-3982-05 | C90-3983-05 | 1.1K | YES | NO | 10K | NO | | | | | | | | | NO | YES | STK412-020N | STK413-020N | NO | NO | L07-2809-05 | |
| CANADA | P | 380-11 | | | | | | YES | NO | | | | | | | | | | | | | | | | | | | | | | | |

VR-505 (X07-33XX-XX)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82, 117,118,147 | R132, 330 | R150,152, 222,254 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5,6 | J8 | J9,10 | Q6 | W13,88, 198,201 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|-----------|-------------------|---------------|-----|-----|-----|-----|----|------|----|-------|----|-----------------|-------------|-------------|-------|----|-------------|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 310-10 | NO | | | | | YES | NO | C90-3982-05 | C90-3983-05 | 1.1K | YES | NO | 10K | NO | | | | | | | | | NO | YES | STK412-020N | STK413-020N | NO | NO | L07-2761-05 |
| CANADA | P | 380-13 | | | | | | YES | NO | | | | | | | | | | | | | | | | | | | | | | |

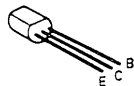
VR-517 (X07-333X-XX)

| DESTINATION | | UNIT No. | A | | | B | | | C119, 120 | C142, 144, 146 | C201,202 | C203,204 | R81,82,117, 118,147 | R132,150, 152,222,330 | R254 | R315, 316,319 | D15 | D18 | D19 | D20 | J4 | J5,9, 10 | J6 | J8 | Q6 | W13, 88 | W198, 201 | IC1 | IC2 | IC3,4 | L6 | T1 |
|-------------|------|----------|-----|-----|-----|-----|-----|-----|-----------|----------------|-------------|----------|---------------------|-----------------------|------|---------------|-----|-----|-----|-----|----|----------|----|----|----|---------|-----------|-----|-------------|-------|-------------|----|
| COUNTRY | ABB. | | (A) | (C) | (D) | (E) | (F) | (G) | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 30-10 | NO | | | | | NO | YES | C90-3982-05 | C90-3983-05 | 1.1K | YES | NO | 10K | YES | | | | | | | | | NO | YES | NO | NO | STK413-020A | YES | L07-2761-05 | |
| | | 80-14 | | | | | | NO | YES | | | | | | | | | | | | | | | | | | | | | | | |

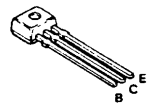
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

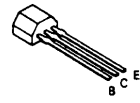
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2SA992
2SC1845
2SC2878



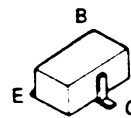
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2SC2785



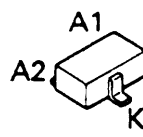
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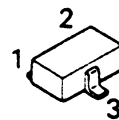
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2SB1218A
2SD1819A



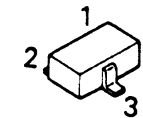
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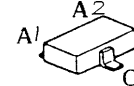
DAP202U



MA142WA
MA142WK
UN5212



1SS301



2SB1132



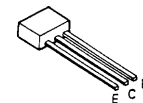
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2SC3944A



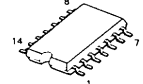
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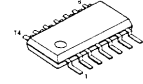
UN4212
UN4219



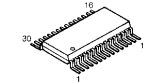
TC74HCT7007AF



NJM2279M



NJU7311AM



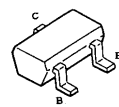
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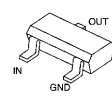
2SB1375



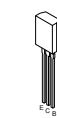
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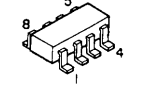
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DTC124EUA



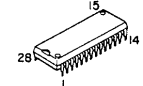
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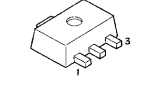
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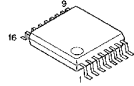
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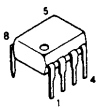
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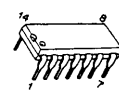
LV2105V



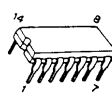
NJM4565D



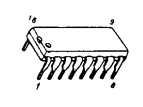
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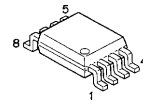
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TC74HC07AF



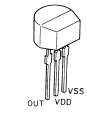
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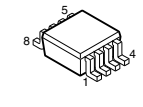
TC7WH123FU



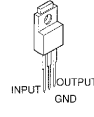
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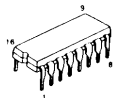
TC7WU04FU



BA05T



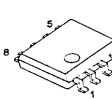
TC74HC4052AP



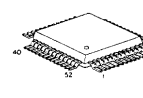
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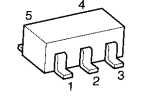
NJM4565M
NJM4565MD



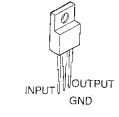
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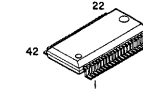
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KIA7812API



M62446FP



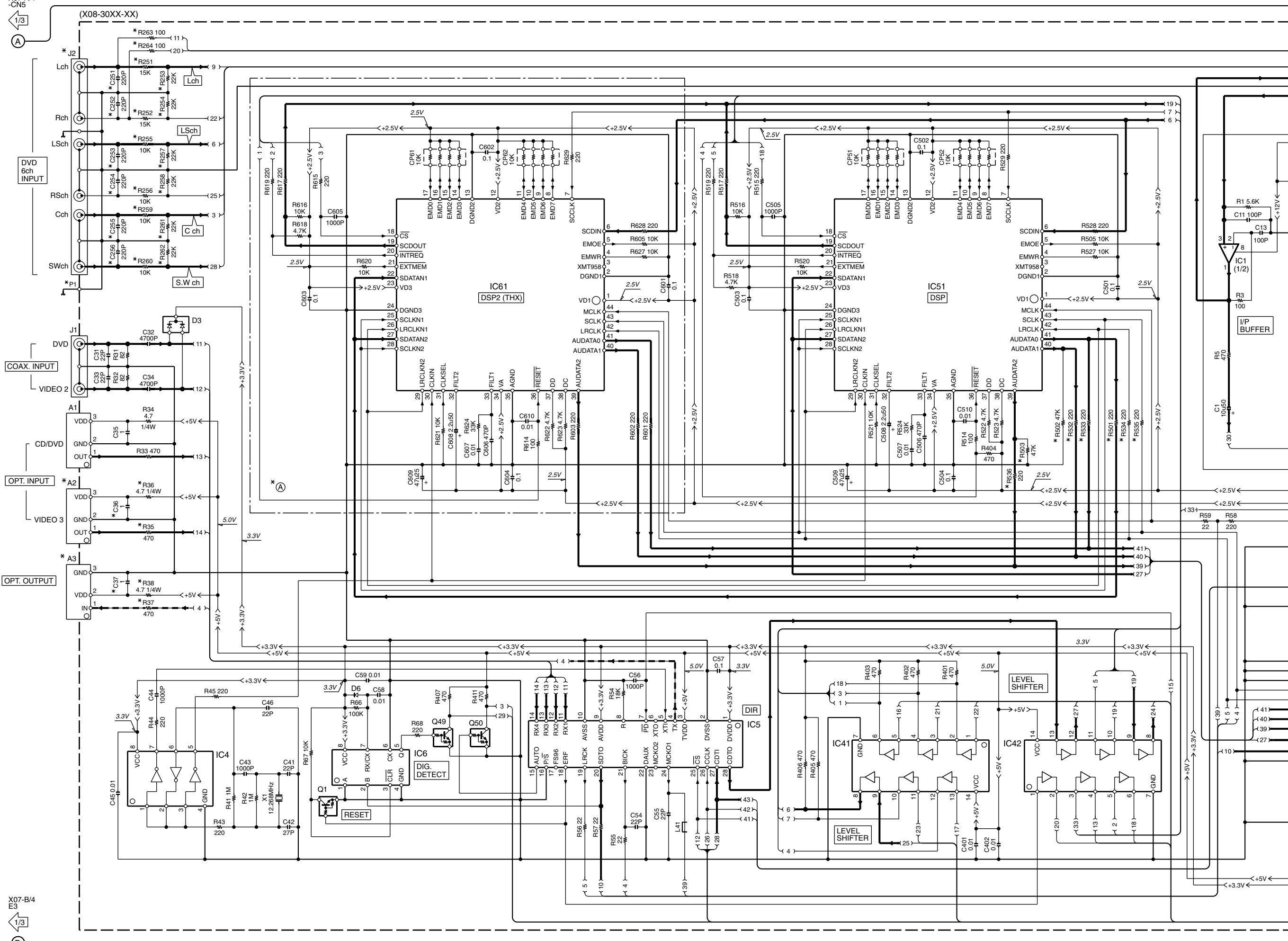
VR-505/506/507/509/510/517

Y05-4150-10

KENWOOD

X07-A/4
-CN5
1/3
A

X07-B/4
E3
1/3
D



2

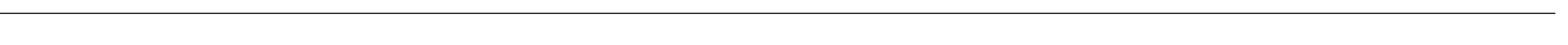
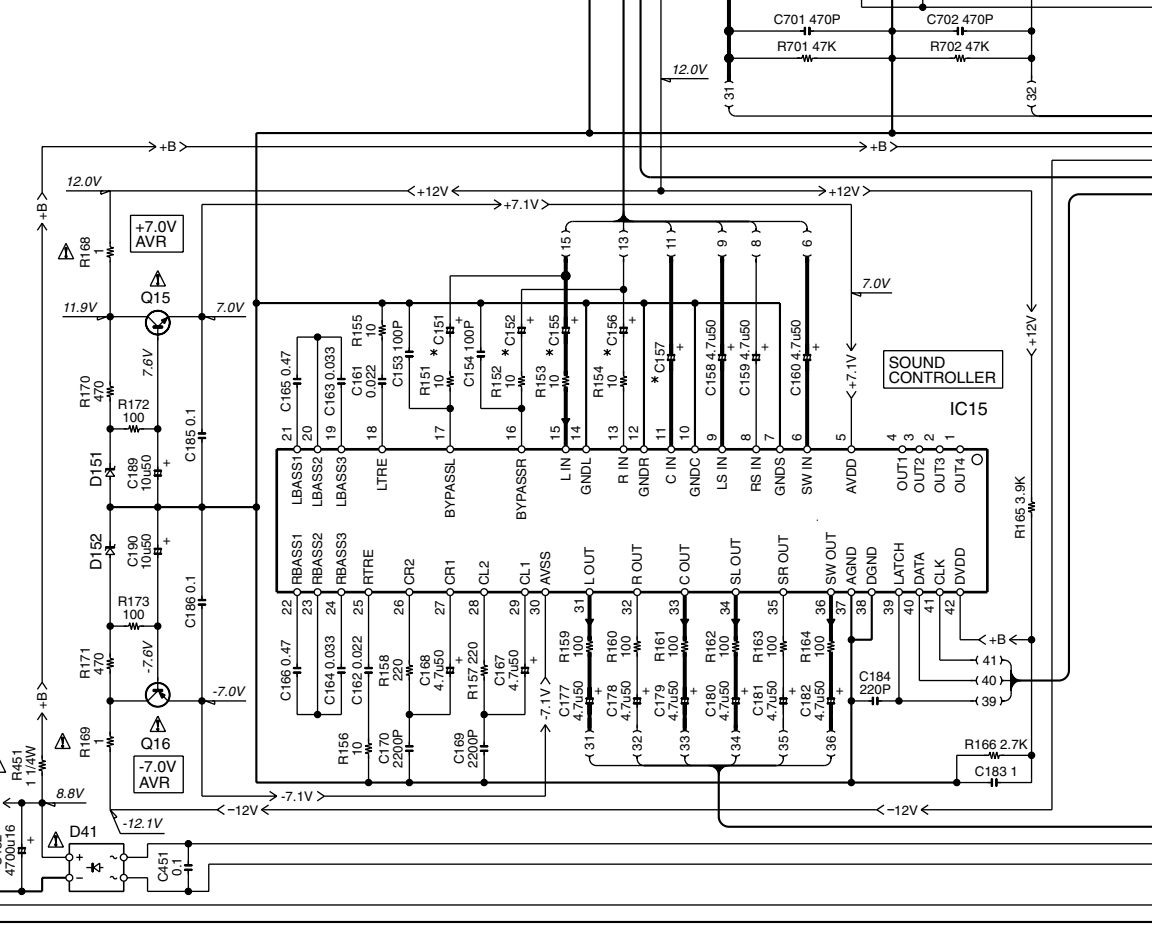
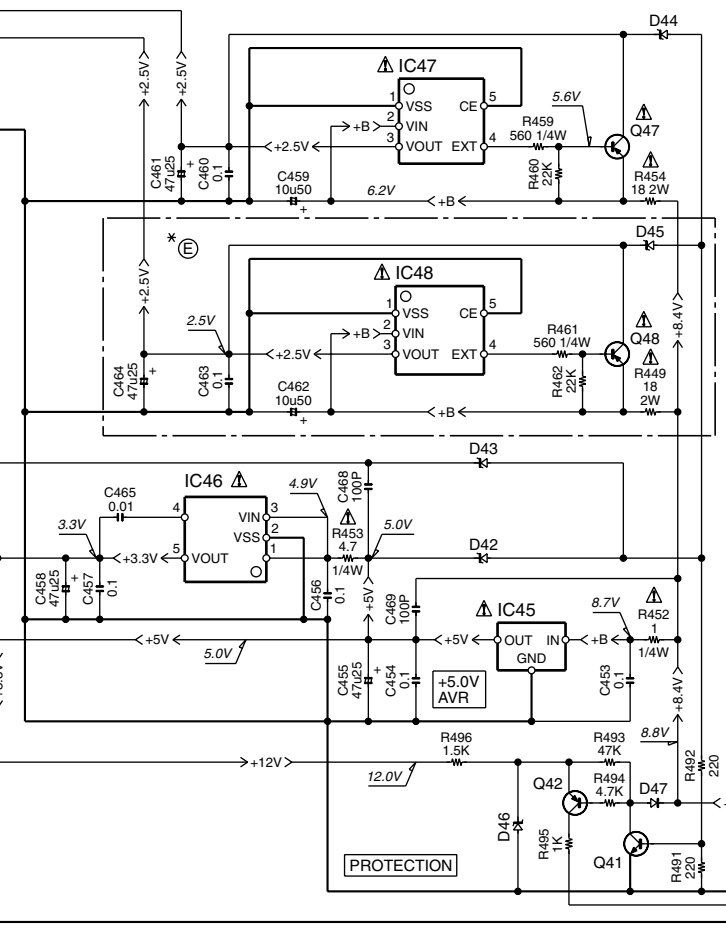
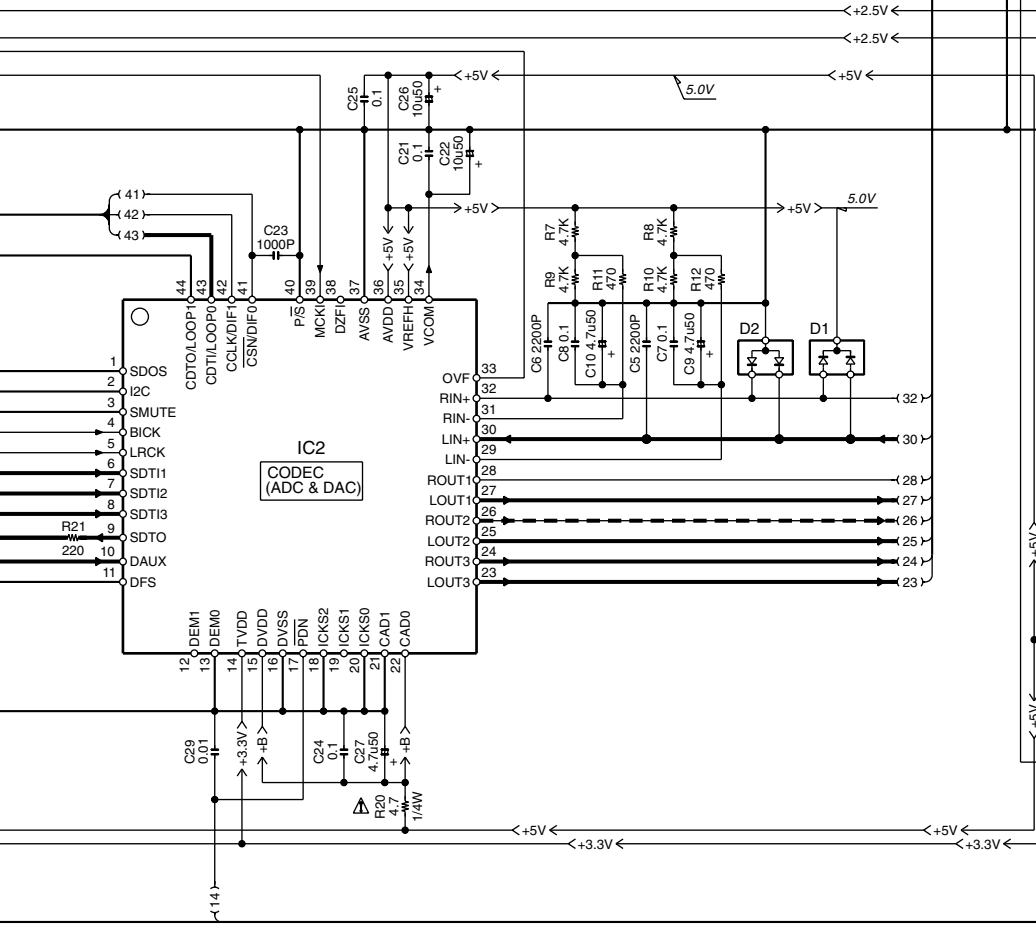
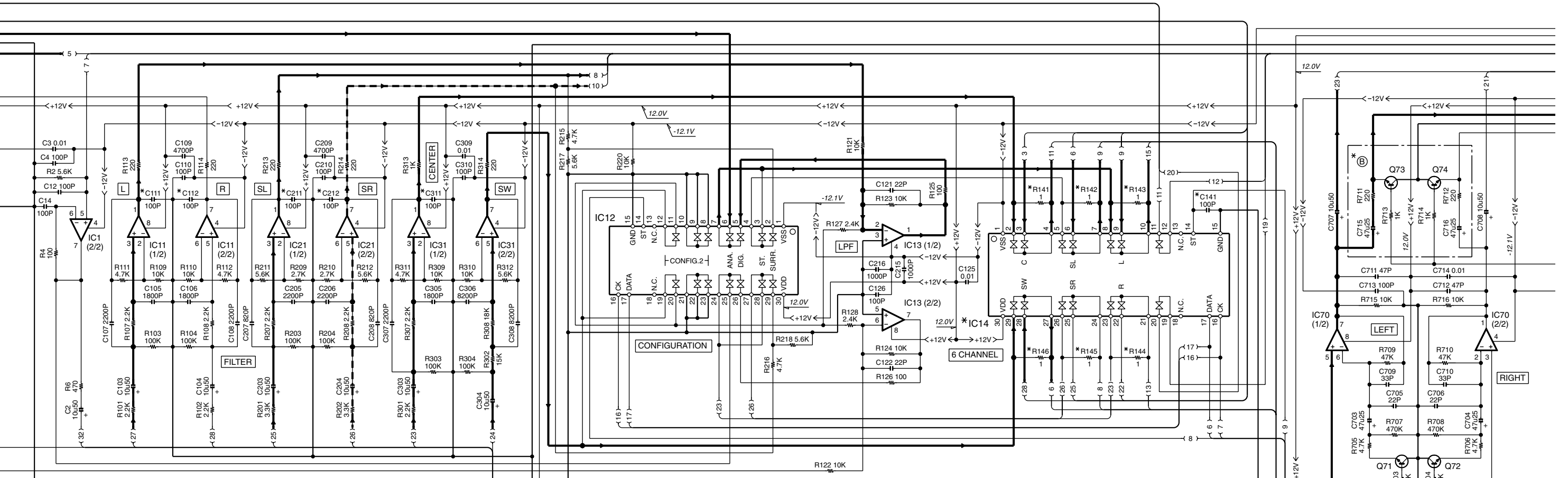
3

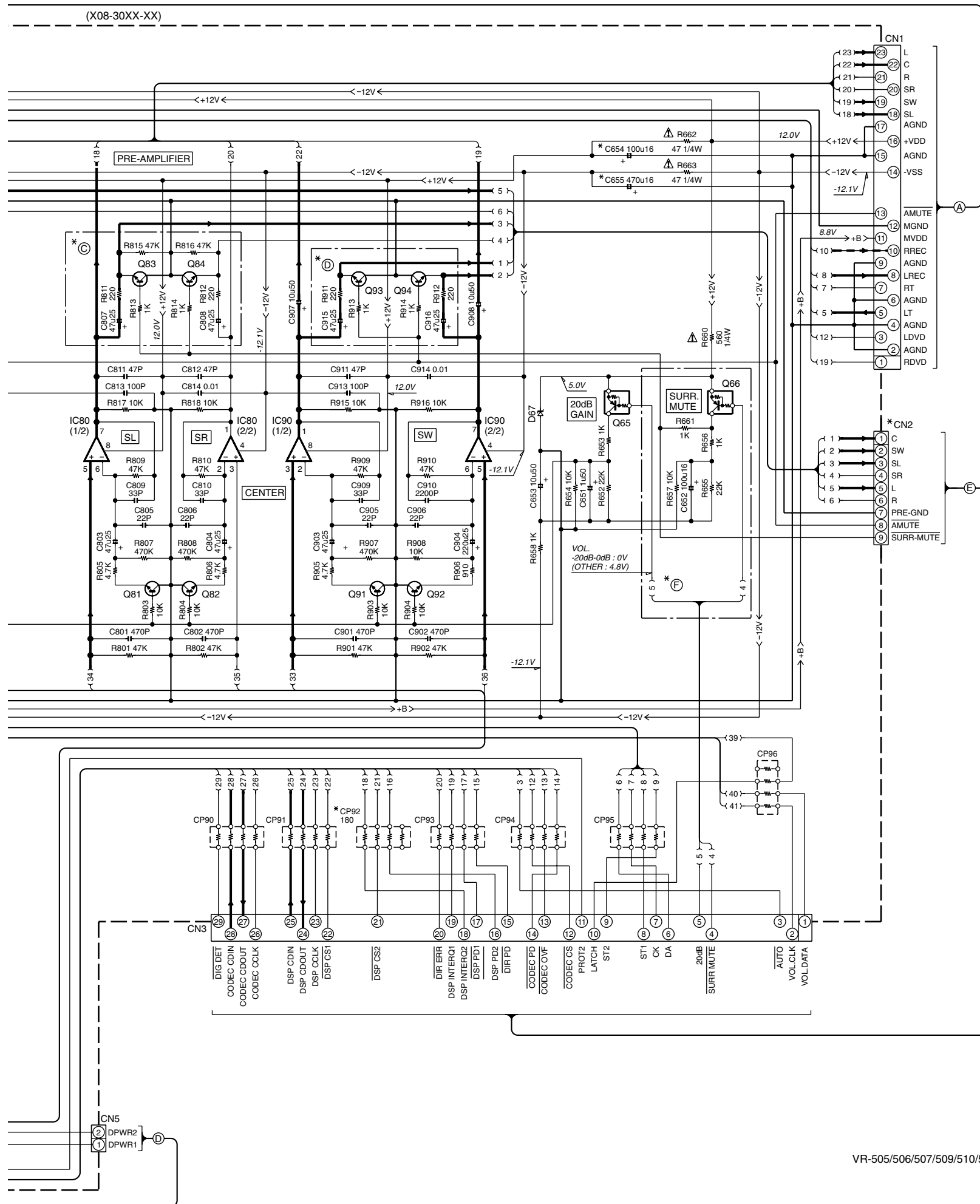
4

5

6

7





VR-505 (X08-30XX-XX)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,37,111,112,141,211, 212,251-256,311,654,655 | C151,152, 155-157 | R35-38, 251-264,501-503 | R141-146, 532-536 | IC14 | J2 | CP92 | CN2 | P1 | |
|-------------|----------|-------|---|---|---|---|---|-------|---|-------------------|-------------------------|-------------------|------|----|------|-----|----|----|
| U.S.A. | K | 60-10 | | | | | | | NO | NO | 4.7u50 | NO | YES | NO | NO | NO | NO | NO |
| CANADA | P | 70-10 | | | | | | | NO | NO | 4.7u50 | NO | YES | NO | NO | NO | NO | NO |

VR-506 (X08-30XX-XX)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,37,111,112, 211,212,311,654,655 | C141, 251-256 | C151,152, 155-157 | R35-38, 141-146,501-503 | R251-264, 532-536 | IC14 | J2 | CP92 | CN2 | P1 | |
|-------------|----------|-------|---|---|---|---|---|-------|-------------------------------------|---------------|-------------------|-------------------------|-------------------|------|-----|------|-----|----|----|
| U.S.A. | K | 60-11 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | YES | YES | NO | NO | NO |
| CANADA | P | 70-11 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | YES | YES | NO | NO | NO |

VR-507 (X08-30XX-XX)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,111,112,141, 211,212,311,251-256 | C151,152, 155-157 | C37, 654,655 | R35,36,251-264, 532-536 | R37,38, 141-146,501-503 | IC14 | J2 | CP92 | CN2 | P1 | |
|-------------|----------|-------|---|---|---|---|---|-------|--------------------------------------|-------------------|--------------|-------------------------|-------------------------|------|-----|------|-----|----|----|
| U.S.A. | K | 60-12 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | NO | YES | YES | NO | NO |
| CANADA | P | 70-12 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | YES | YES | NO | NO | NO |

VR-517 (X08-30XX-XX)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,37,111,112, 211,212,311,654,655 | C141, 251-256 | C151,152, 155-157 | R35-38, 141-146,501-503 | R251-264, 532-536 | IC14 | J2 | CP92 | CN2 | P1 | |
|-------------|----------|-------|---|---|---|---|---|-------|-------------------------------------|---------------|-------------------|-------------------------|-------------------|------|-----|------|-----|----|----|
| U.S.A. | K | 60-11 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | YES | NO | NO | NO | NO |
| CANADA | P | 70-11 | | | | | | | NO | NO | YES | 4.7u50 | NO | YES | YES | NO | NO | NO | NO |

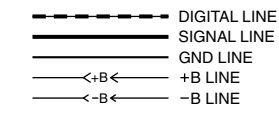
VR-509 (X08-30XX-XX)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,37,111,112,141, 212,251-256,311,654,655 | C151,152, 155-157 | C654, 655 | R35-38, 251-264,532-536 | R141-146, 501-503 | IC14 | J2 | CP92 | CN2 | P1 | |
|-------------|----------|-------|---|---|---|---|---|-------|---|-------------------|-----------|-------------------------|-------------------|------|-----|------|-----|----|----|
| U.S.A. | K | 60-13 | | | | | | | NO | YES | YES | 4.7u50 | NO | YES | NO | YES | YES | NO | NO |
| CANADA | P | 70-13 | | | | | | | NO | YES | YES | 4.7u50 | NO | YES | YES | NO | NO | NO | NO |

VR-510 (X08-3060-14)

| DESTINATION | UNIT No. | A | B | C | D | E | F | A2 A3 | C36,37,111,112,141,211, 212,251-256,311,654,655 | C151,152, 155-157 | R35-38, 251-264,501-503 | R141-146, 532-536 | IC14 | J2 | CP92 | CN2 | P1 | | |
|-------------|----------|------|---|---|---|---|---|-------|---|-------------------|-------------------------|-------------------|------|----|------|-----|-----|-----|-----|
| U.S.A. | K | 0-14 | | | | | | | YES | YES | YES | 4.7u100 | YES | NO | YES | YES | YES | YES | YES |
| CANADA | P | 0-14 | | | | | | | YES | YES | YES | 4.7u100 | YES | NO | YES | YES | YES | YES | YES |

- IC1,11,13,21,31,70,80,90 : NJM4565M or DTC124EUA
- IC2 : NJM4565MD
- IC4 : AK4527B-VQ
- IC5 : TC7WU04FU
- IC6 : AK4112AVF
- IC12,14 : TC7WH123FU
- IC15 : NJU7311AM
- IC41 : M62446FP
- IC42 : TC74HC07AF
- IC45 : M62446FP
- IC46 : TC74HCT7007AF
- IC47,48 : UN5112 or DTA124EUA
- IC51 : BA05T
- IC61 : BA033LBSG
- IC62 : XC62EP2502MR
- IC63 : CS493263-CLR
- IC64 : CS493302-CLR
- Q1,49,50 : UN5212 or DTC124EUA
- Q15 : 2SD1664(Q,R)
- Q16 : 2SB1132(Q,R)
- Q41 : TC7WU04FU
- Q42 : 2SC4081(R,S) or 2SD1819A(Q,R)
- Q47,48 : 2SA1576A(R,S) or 2SB1218A(Q,R)
- Q65,66 : 2SB1375
- Q71-74,81-84,91-94 : UN5112 or DTA124EUA
- Q71-74,81-84,91-94 : 2SC4213 (B)
- D1,3 : 1SS301 or DAN202U or MA142WK
- D2 : 1SS300 or DAP202U or MA142WA
- D6,47 : MA111
- D41 : D2SBA20F03
- D42,43 : UDZ5.6B or HZU5.6 (B2)
- D44,45 : UDZ3.9B or HZU3.9 (B2)
- D46,67 : UDZ5.1B or HZU5.1 (B2)
- D151,152 : UDZ7.5B or HZU7.5 (B2)



X14-F/8 -CN100



X14-A/8 -CN202



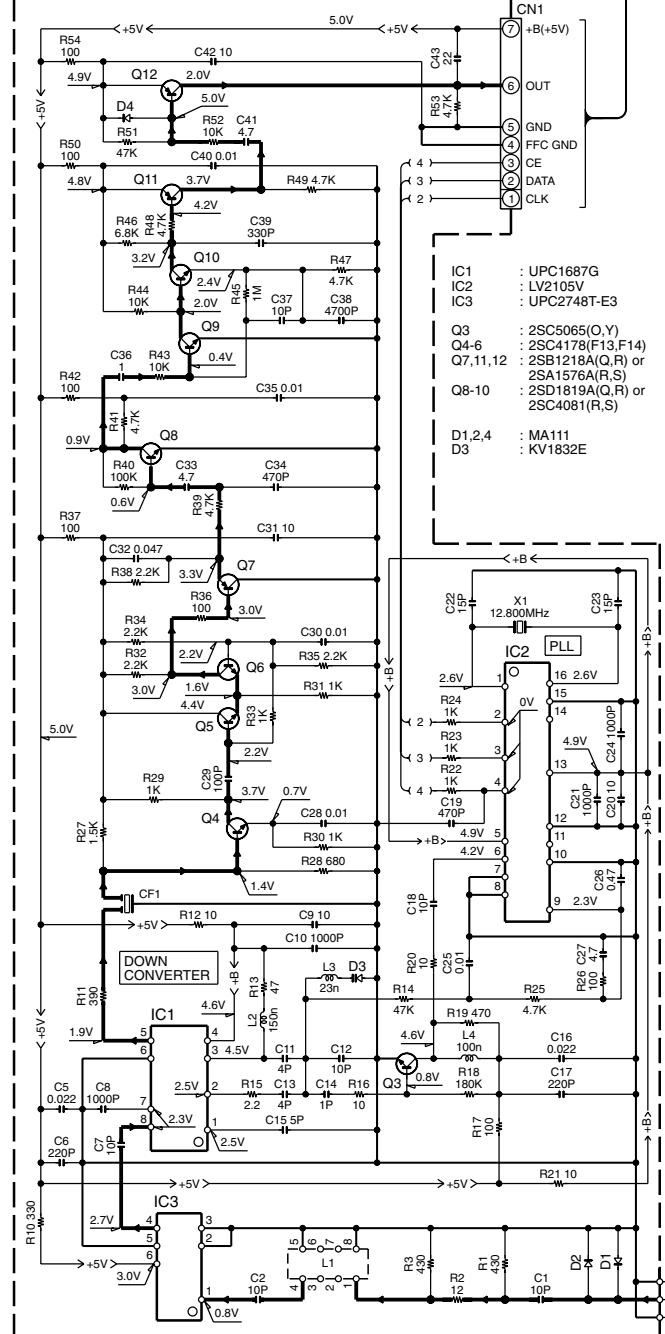
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.



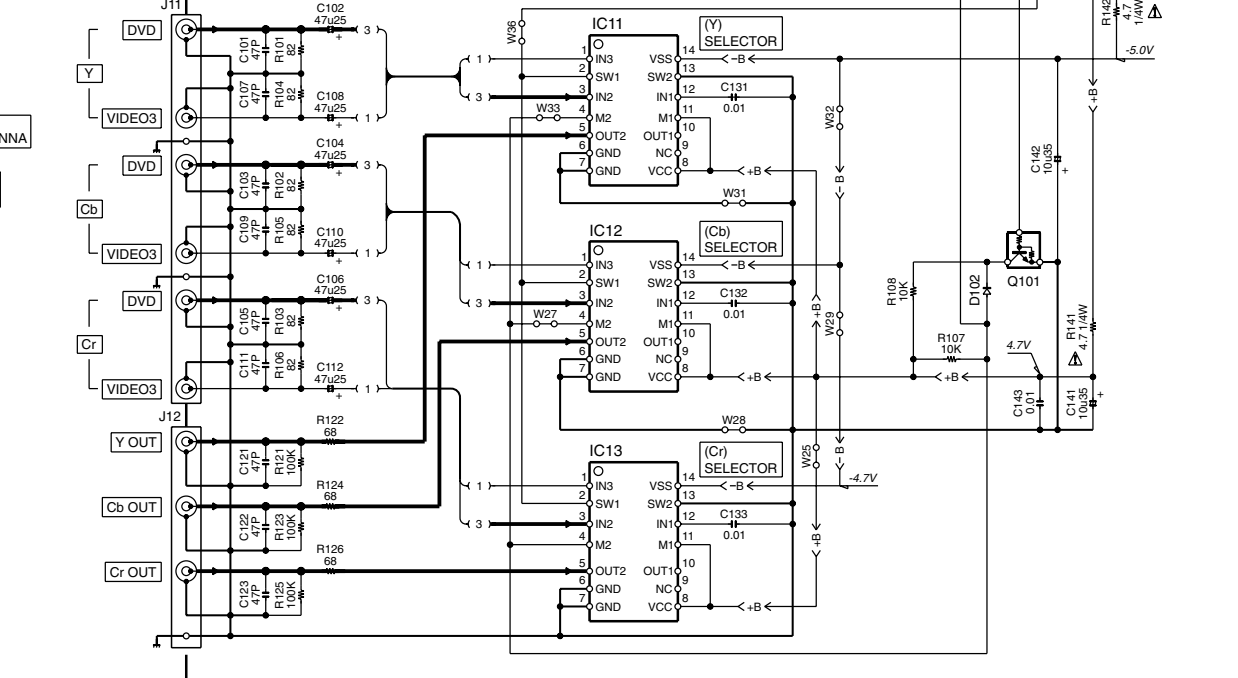
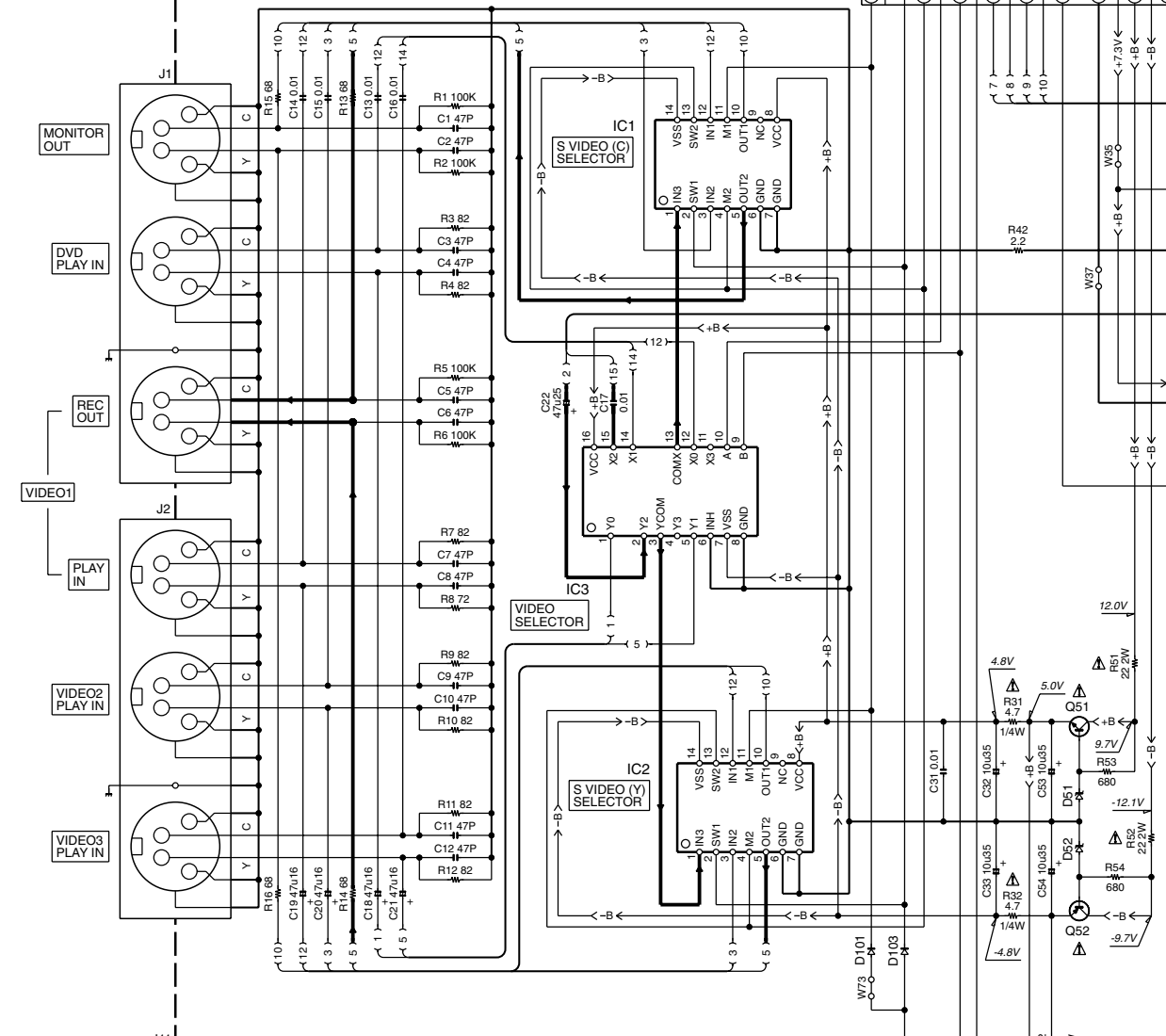
X07-A/4 -CN6
1/3
B
X07-A/4 -CN7
1/3
C

(X05-5150-11)



| CHANNEL FREQUENCY (MHz) | | | | VT VOLTAGE | | | |
|-------------------------|-------|-------|-------|------------|------------|------------|------------|
| CHANNEL | 1 | 2 | 3 | CHANNEL | 1 | 2 | 3 |
| OSC FREQUENCY | 417.3 | 414.3 | 411.3 | VT VOLTAGE | 2.40 ± 0.5 | 2.35 ± 0.5 | 2.30 ± 0.5 |

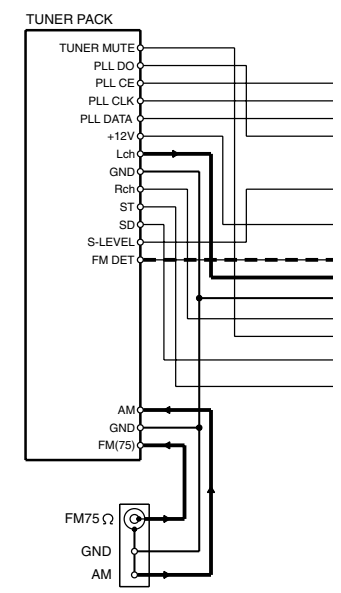
(X35-22XX-XX)



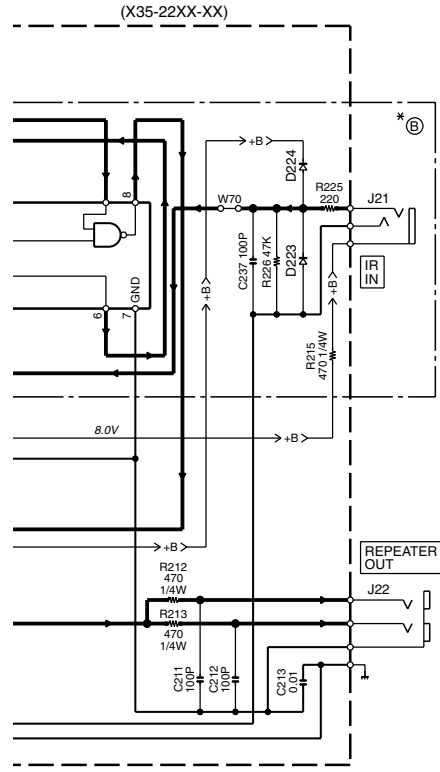
(X35-22XX-XX)

| | | | | | |
|-------------|-----------------------------|----------|-----------|----------|---|
| IC1,2,11-13 | : NJM2279D | Q51 | : 2SD2525 | D51,52 | : MTZJ5.6 or MTZJ5.6 (B) or HZS5.6N (B2) or RD5.6ES (B) or RD5.6ES (B2) |
| IC3 | : TC74HC4052AP or NJU4052BD | Q52 | : 2SB1640 | Q201,203 | : KTC3199 (Y,GR) or 2SC2785 (F,E) or 2SC1740S (Q,R) |
| IC21 | : BA65T | Q202,203 | : BA65T | Q204 | : KTA1267 (Y,GR) or 2SA1175 (F,E) or 2SA933AS (Q,R) |
| IC22 | : TC74HC00AP | | | | |

--- DIGITAL LINE
— SIGNAL LINE
— GND LINE
←+B← +B LINE
←-B← -B LINE

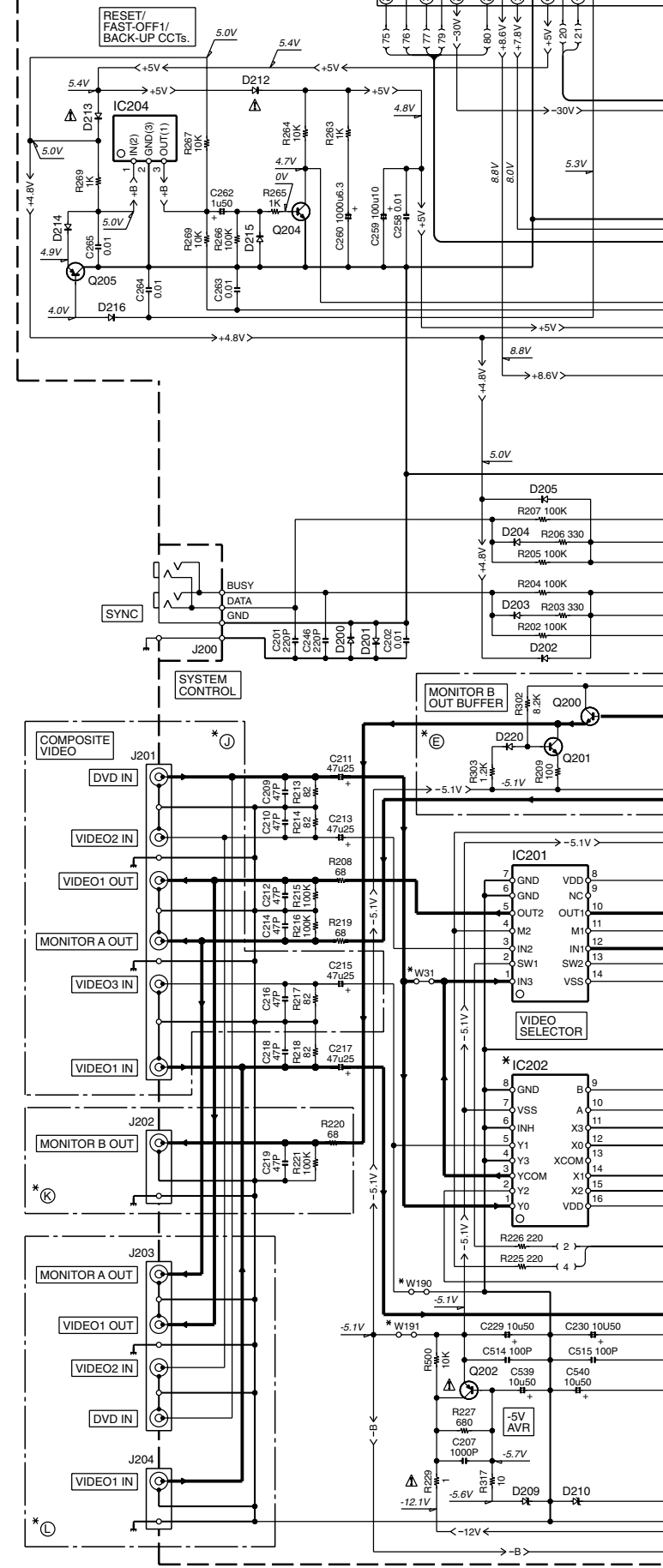
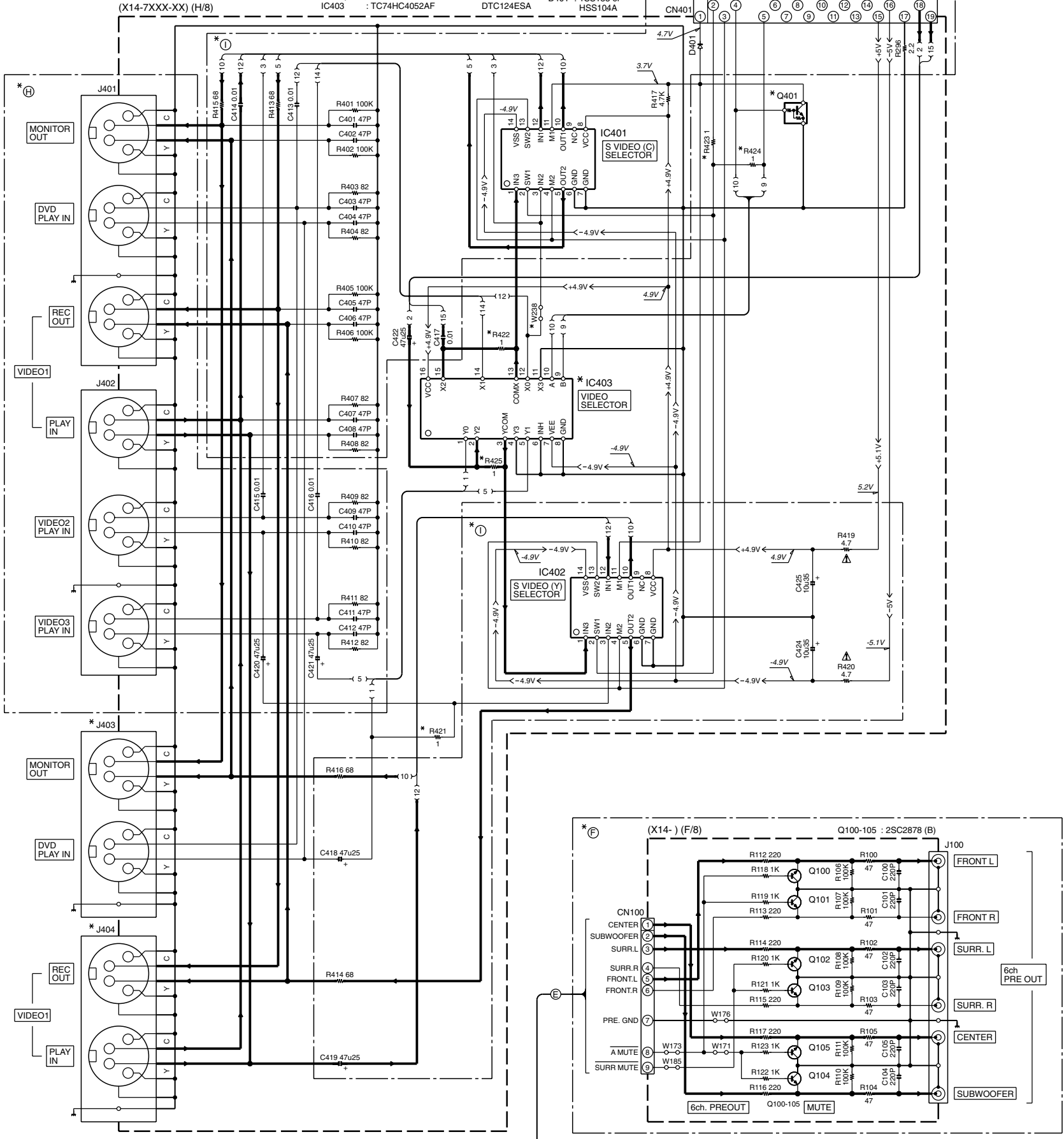
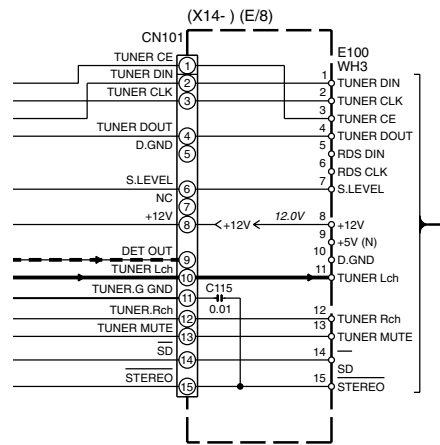


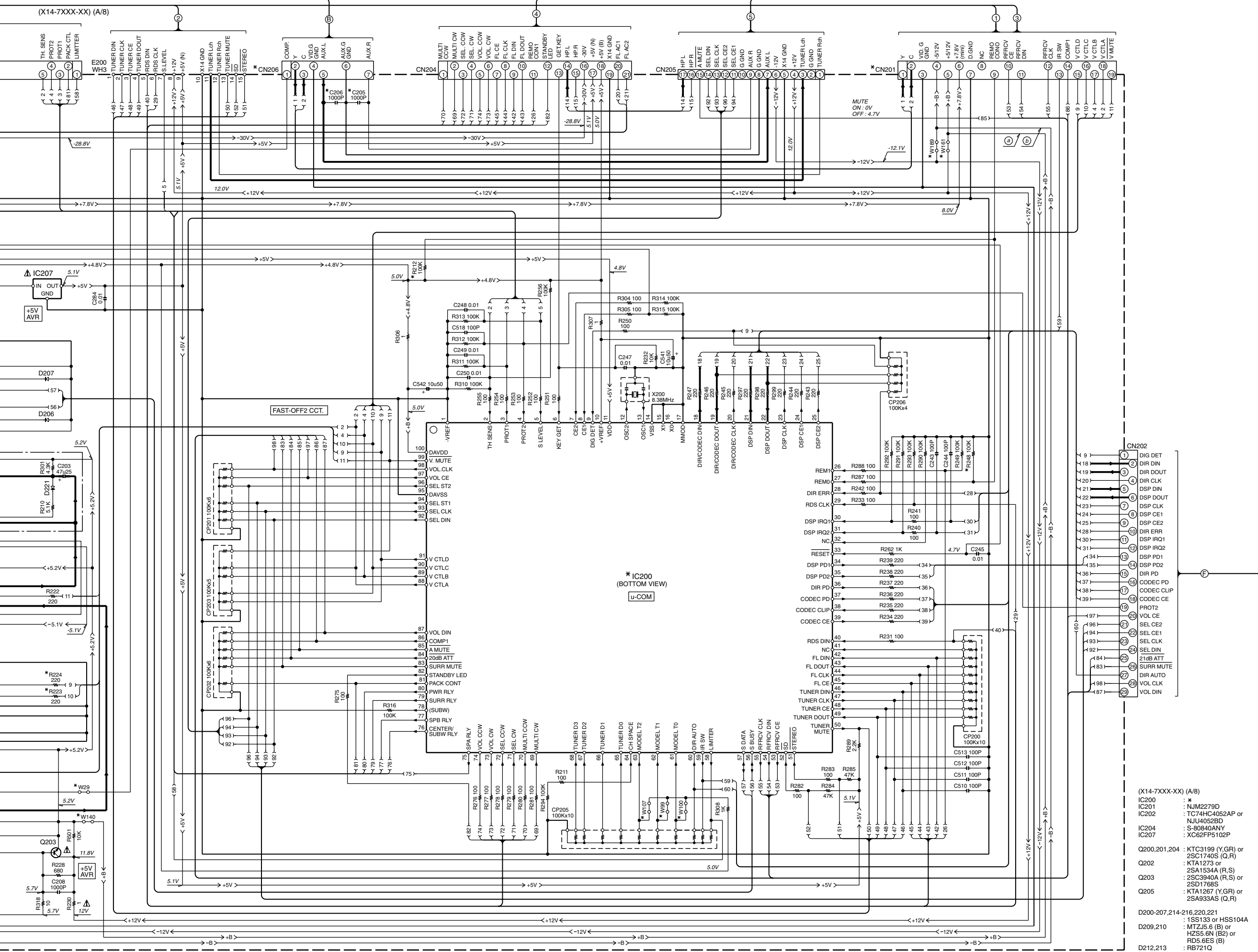
X08-CN2
2/3
E
X08-CN3
2/3
F



| VR-509 (X35-22XX-XX) | | | | |
|----------------------|------|----------|-----|-----|
| DESTINATION | ABB. | UNIT No. | (E) | W74 |
| U.S.A. | K | 70-11 | NO | YES |
| CANADA | P | 50-11 | NO | YES |

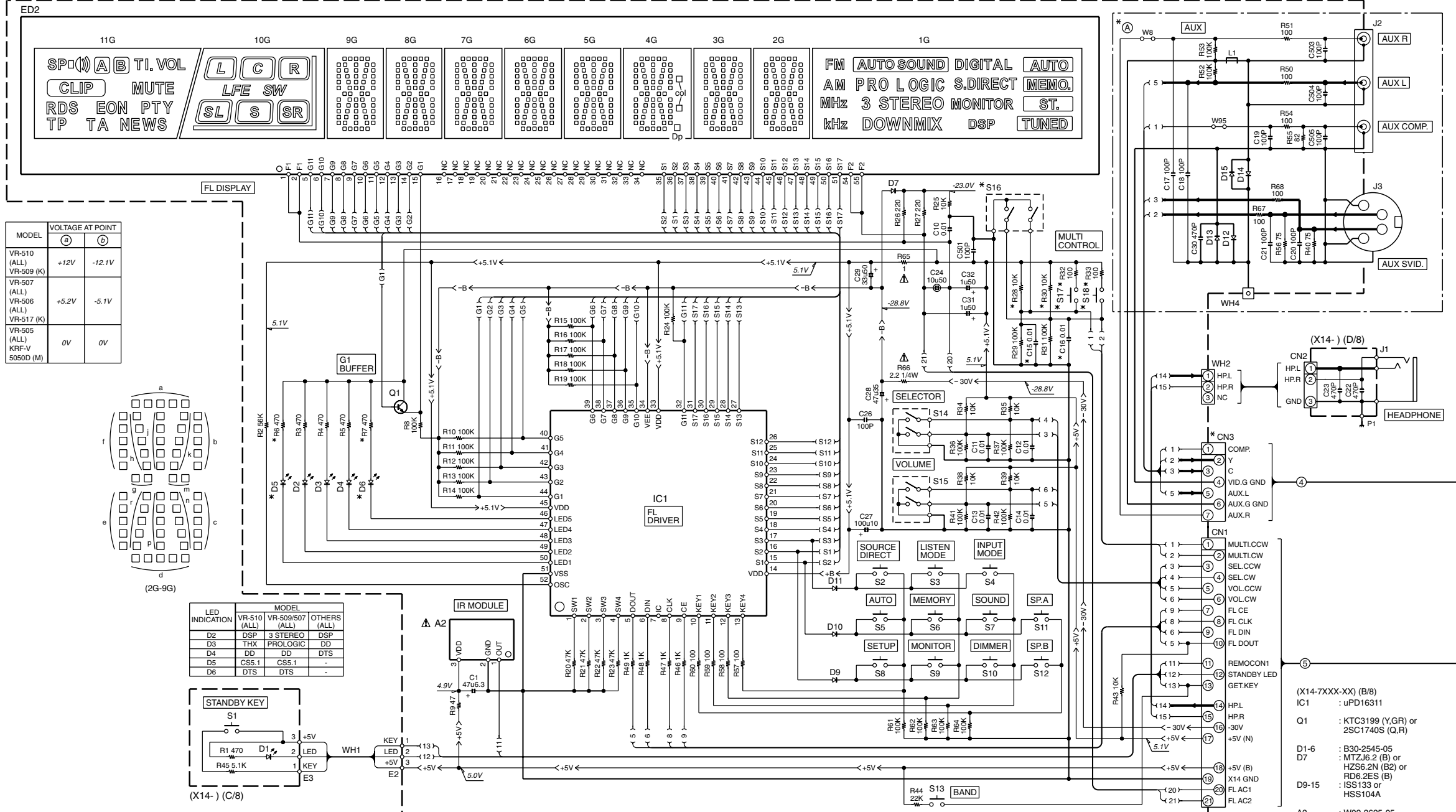
| VR-510 (X35-2250-12) | | | | |
|----------------------|------|----------|-----|-----|
| DESTINATION | ABB. | UNIT No. | (E) | W74 |
| U.S.A. | K | 0-12 | YES | NO |
| CANADA | P | | | |



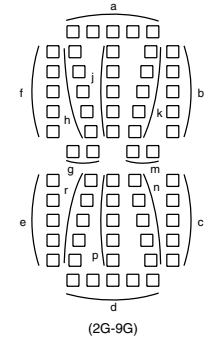


- (X14-7XXX-XX) (A/8)
- IC200 : *
 - IC201 : NJM2279D
 - IC202 : TC74HC4052AP or NJU4052BD
 - IC204 : S-80840ANY
 - IC207 : XC62FP5102P
 - Q200,201,204 : KTC3199 (Y,GR) or 2SC1740S (Q,R)
 - Q202 : KTA1273 or 2SA1534A (R,S)
 - Q203 : 2SC3940A (R,S) or 2SD1768S
 - Q205 : KTA1267 (Y,GR) or 2SA933AS (Q,R)
 - D200-207,214-216,220,221 : 1SS133 or HSS104A
 - D209,210 : MTZJ5.6 (B) or HZS5.6N (B2) or RDS.6E3 (B)
 - D212,213 : RB721Q

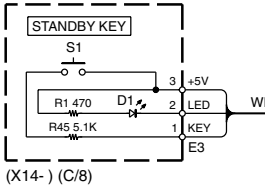
(X14-7XXX-XX) (B/B)



| MODEL | VOLTAGE AT POINT | |
|--|------------------|--------|
| | (A) | (D) |
| VR-510 (ALL) VR-509 (K) | +12V | -12.1V |
| VR-507 (ALL) VR-506 (ALL) VR-517 (K) | +5.2V | -5.1V |
| VR-505 (ALL) KRF-V 5050D (M) | 0V | 0V |



| LED INDICATION | VR-510 (ALL) | VR-509/507 (ALL) | OTHERS (ALL) |
|----------------|--------------|------------------|--------------|
| D2 | DSP | 3 STEREO | DSP |
| D3 | THX | PROLOGIC | DD |
| D4 | DD | DD | DTS |
| D5 | CS5.1 | CS5.1 | - |
| D6 | DTS | DTS | - |



| VR-505 (X14-7XXX-XX) | | UNIT No. | | A E F H I J K L | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 223, 224, 248, 421-425 | | R32, 33, 212 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W29, 99, 100, 140, 190, 191, 238 | | W31, 107, 190 | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|---------------------------------------|--|--------------|--|-------------------|--|-----|--|---------|--|----------------------------------|--|---------------|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 250-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 310-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| VR-506 (X14-7XXX-XX) | | UNIT No. | | A I L E F H J K | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 212, 248, 423 | | R32, 33, 212, 223, 224, 421, 422, 424, 425 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W31, 107, 140, 190, 191, 238 | | W29, 99, 100, 140 | | | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|------------------------------|--|--|--|-------------------|--|-----|--|---------|--|------------------------------|--|-------------------|--|--|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 250-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 310-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| VR-507 (X14-7XXX-XX) | | UNIT No. | | A H I J E F R L | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 212, 223, 224, 423 | | R32, 33, 248, 421, 422, 424, 425 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W31, 100, 107, 140, 190, 191, 238 | | W29, 99, 100, 140, 191 | | | | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|-----------------------------------|--|----------------------------------|--|-------------------|--|-----|--|---------|--|-----------------------------------|--|------------------------|--|--|--|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 310-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 260-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| VR-517 (X14-7XXX-XX) | | UNIT No. | | A I L E F H J K | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 248, 423 | | R32, 33, 212, 223, 224, 421, 422, 424, 425 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W31, 99, 100, 140, 190, 191, 238 | | W29, 99, 100, 140, 191, 238 | | | | | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|-------------------------|--|--|--|-------------------|--|-----|--|---------|--|----------------------------------|--|-----------------------------|--|--|--|--|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 310-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 250-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| VR-509 (X14-7XXX-XX) | | UNIT No. | | A J E F H I K L | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 223, 224, 248 | | R32, 33, 212, 421-425 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W29, 100, 140, 190, 191, 238 | | W31, 99, 100, 140, 190, 191, 238 | | | | | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|------------------------------|--|-----------------------|--|-------------------|--|-----|--|---------|--|------------------------------|--|----------------------------------|--|--|--|--|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 310-13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 260-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| VR-510 (X14-7260-12) | | UNIT No. | | A E F J K H I L | | CN3,201, 206 | | J403, 404 | | IC200 | | IC202, 403 | | Q401 | | D5, 6 | | R6, 7, 28, 30, 223, 224, 248 | | R32, 33, 212, 421-425 | | C15, 16, 205, 206 | | S16 | | S17, 18 | | W29, 99, 100, 140, 190, 191, 238 | | W31, 99, 100, 140, 190, 191, 238 | | | | | | | |
|----------------------|----------|----------|--|-----------------|--|--------------|--|-----------|--|-------|--|------------|--|------|--|-------|--|------------------------------|--|-----------------------|--|-------------------|--|-----|--|---------|--|----------------------------------|--|----------------------------------|--|--|--|--|--|--|--|
| DESTINATION | UNIT No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COUNTRY | ABB. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U.S.A. | K | 0-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CANADA | P | 260-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | 11G | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|--------|------|----|----|----|----|----|----|----|----|-------------|
| P1 | SP | L | a | a | a | a | a | a | a | a | FM |
| P2 | A | C | J | J | J | J | J | J | J | J | AM |
| P3 | B | R | h | h | h | h | h | h | h | h | MHz |
| P4 | TI.VOL | SL | k | k | k | k | k | k | k | k | kHz |
| P5 | CLIP | S | b | b | b | b | b | b | b | b | AUTO |
| P6 | - | SR | f | f | f | f | f | f | f | f | MEMO. |
| P7 | - | LFE | g | g | g | g | g | g | g | g | ST. |
| P8 | MUTE | SW | m | m | m | m | m | m | m | m | TUNED |
| P9 | RDS | (L) | c | c | c | c | c | c | c | c | AUDIO SOUND |
| P10 | EON | (C) | e | e | e | e | e | e | e | e | PRO LOGIC |
| P11 | PTY | (R) | r | r | r | r | r | r | r | r | 3 |
| P12 | TP | (SL) | n | n | n | n | n | n | n | n | STEREO |
| P13 | TA | (S) | p | p | p | p | p | p | p | p | DOWNMIX |
| P14 | NEWS | (SR) | d | d | d | d | d | d | d | d | DIGITAL |
| P15 | - | - | - | - | - | - | - | - | - | - | S.DIRECT |
| P16 | - | - | - | - | - | - | - | - | - | - | MONITOR |
| P17 | - | - | - | - | - | - | - | - | - | - | DSP |

- (X14-7XXX-XX) (B/B)
- IC1 : uPD16311
- Q1 : KTC3199 (YGR) or 2SC1740S (Q,R)
- D1-6 : B30-2545-05
- D7 : MTZJ6.2 (B) or HZS6.2N (B2) or RD6.2ES (B)
- D9-15 : ISS133 or HSS104A
- A2 : W02-2625-05
- ED2 : HNA-11MS24 or 11-MT-125GK

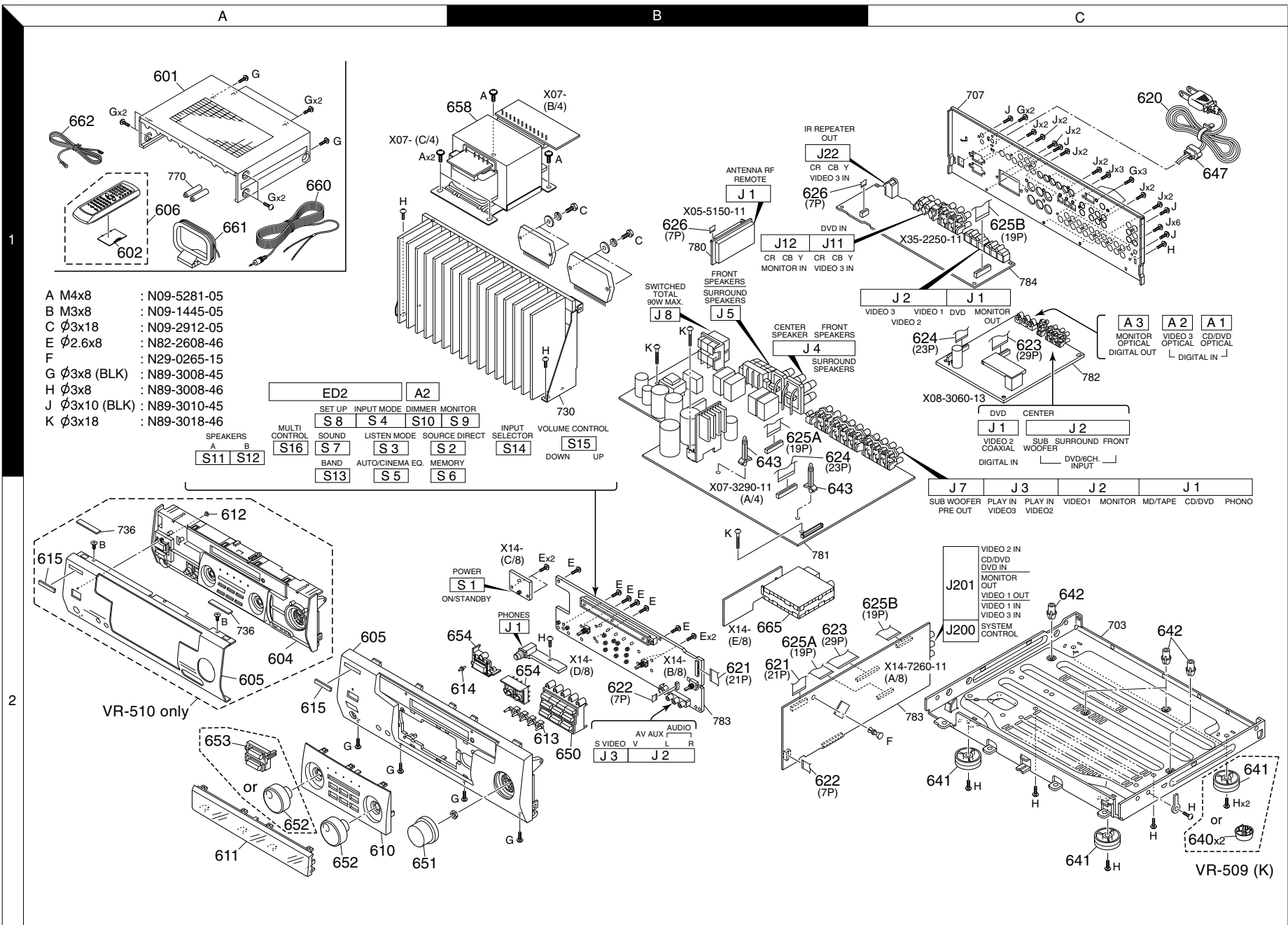
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

VR-505/506/507/509/510/517

EXPLODED VIEW (UNIT)

VR-505/506/507/509/510/517



Parts with exploded numbers larger than 700 are not supplied.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

①

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-----------------------------------|----------|-----------|-------------|----------------------------|--------------|----------|
| VR-505/506/507/509/510/517 | | | | | | |
| 601 | 1A | * | A01-3793-01 | METALLIC CABINET | 0 | |
| 601 | 1A | * | A01-3795-01 | METALLIC CABINET | 56719 | |
| 602 | 1A | * | A09-1166-08 | BATTERY COVER | 90 | |
| 602 | 1A | * | A09-1178-08 | BATTERY COVER | 561 | |
| 602 | 1A | * | A09-1218-08 | BATTERY COVER | 7 | |
| 604 | 2A | * | A22-1851-01 | SUB PANEL | 0 | |
| 605 | 2A | * | A60-1928-01 | PANEL | 9 | |
| 605 | 2A | * | A60-1931-01 | PANEL | 67 | |
| 605 | 2A | * | A60-1932-01 | PANEL | 5 | |
| 605 | 2A | * | A60-1935-01 | PANEL | 1 | |
| 605 | 2A | * | A60-1936-02 | PANEL | 0 | |
| 606 | 1A | * | A70-1466-15 | REMOTE CONTROLLER ASSY | 9 | |
| 606 | 1A | * | A70-1468-15 | REMOTE CONTROLLER ASSY | 6 | |
| 606 | 1A | * | A70-1484-05 | REMOTE CONTROLLER ASSY | 5 | |
| 606 | 1A | * | A70-1485-05 | REMOTE CONTROLLER ASSY | 9 | |
| 606 | 1A | * | A70-1505-05 | REMOTE CONTROLLER ASSY | 7 | |
| 606 | 1A | * | A70-1507-05 | REMOTE CONTROLLER ASSY | 1 | |
| 610 | 2A | * | B07-2550-02 | ESCUTCHEON | 561 | |
| 610 | 2A | * | B07-2554-02 | ESCUTCHEON | 79 | |
| 611 | 2A | * | B10-3644-12 | FRONT GLASS | 0 | |
| 611 | 2A | * | B10-3648-12 | FRONT GLASS | 9 | |
| 611 | 2A | * | B10-3649-12 | FRONT GLASS | 7 | |
| 611 | 2A | * | B10-3654-02 | FRONT GLASS | 6 | |
| 611 | 2A | * | B10-3657-02 | FRONT GLASS | 5 | |
| 611 | 2A | * | B10-3677-02 | FRONT GLASS | 1 | |
| 612 | 2A | * | B12-0341-04 | INDICATOR | 0 | |
| 613 | 2B | * | B12-0383-04 | INDICATOR | 790 | |
| 613 | 2B | * | B12-0384-04 | INDICATOR | 561 | |
| 614 | 2B | * | B12-0385-04 | INDICATOR | 56719 | |
| 615 | 2B | * | B43-0314-04 | KENWOOD BADGE | | |
| - | - | - | B46-0330-03 | WARRANTY CARD | K | |
| - | - | - | B46-0347-03 | WARRANTY CARD | P | |
| - | - | - | B46-0352-00 | QUESTIONNAIRE CARD | K9K0 | |
| - | - | - | B58-0964-13 | CAUTION CARD (UL) | K | |
| - | - | - | B58-0967-03 | CAUTION CARD (PL) | P | |
| - | - | - | B58-1674-03 | CAUTION CARD (P1,PRA,A4,1) | K | |
| - | - | * | B60-4942-00 | INSTRUCTION MANUAL(EN) | 5671 | |
| - | - | * | B60-4943-00 | INSTRUCTION MANUAL(FR) | P5P6P7 | |
| - | - | * | B60-4954-00 | INSTRUCTION MANUAL(FR) | P9 | |
| - | - | * | B60-4955-00 | INSTRUCTION MANUAL(EN) | 9 | |
| - | - | * | B60-4956-00 | INSTRUCTION MANUAL(FR) | P0 | |
| - | - | * | B60-4957-00 | INSTRUCTION MANUAL(EN) | 0 | |
| △ 620 | 1C | * | E30-2941-05 | AC POWER CORD | | |
| 621 | 2B | * | E35-2774-15 | FLAT CABLE 21P | | |
| 622 | 2B | * | E35-2775-15 | FLAT CABLE 7P | 67190 | |
| 623 | 2B,1C | * | E35-2776-05 | FLAT CABLE 29P | | |
| 624 | 1B,1C | * | E35-2777-05 | FLAT CABLE 23P | | |
| 625 | 1B,2B | * | E35-2841-05 | FLAT CABLE 19P | | |
| 626 | 1B | * | E35-2873-05 | FLAT CABLE 7P | 90 | |
| - | - | * | H10-7763-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H10-7764-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H12-3503-04 | PACKING FIXTURE | | |

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia
Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai)
Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas △ indicates safety critical components .

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

②

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------------------------|----------|-----------|---------------|-------------------------------|--------------|----------|
| - | - | - | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| - | - | - | H25-0391-04 | PROTECTION BAG | | |
| - | - | * | H50-4099-04 | ITEM CARTON CASE | 0 | |
| - | - | * | H50-4100-04 | ITEM CARTON CASE | 9 | |
| - | - | * | H50-4101-04 | ITEM CARTON CASE | 7 | |
| - | - | * | H50-4102-04 | ITEM CARTON CASE | 6 | |
| - | - | * | H50-4103-04 | ITEM CARTON CASE | 5 | |
| - | - | * | H50-4104-04 | ITEM CARTON CASE | 1 | |
| 640 | 2C | - | J02-1013-05 | FOOT REAR | 56 | |
| 641 | 2C | - | J02-1464-03 | FOOT | | |
| 642 | 2C | - | J19-3751-04 | UNIT HOLDER | | |
| 643 | 1B,2B | - | J19-6078-05 | UNIT HOLDER | | |
| △ 647 | 1C | - | J42-0083-05 | POWER CORD BUSHING | | |
| - | - | - | J61-0307-05 | WIRE BAND | | |
| 650 | 2B | - | K29-7675-22 | KNOB | | |
| 651 | 2A | - | K29-7678-04 | KNOB | | |
| 652 | 2A | - | K29-7681-14 | KNOB | | |
| 653 | 2A | - | K29-7684-03 | KNOB | 561 | |
| 654 | 2B | - | K29-7687-03 | KNOB | 56719 | |
| △ 658 | 1B | * | L07-2916-05 | POWER TRANSFORMER | 0 | |
| △ 658 | 1B | * | L07-2922-05 | POWER TRANSFORMER | 56719 | |
| 660 | 1A | - | T90-0850-05 | ANTENNA ASSY | 90 | |
| 661 | 1A | - | T90-0852-05 | LOOP ANTENNA | | |
| 662 | 1A | * | T90-0877-05 | LEAD WIRE ANTENNA | | |
| 665 | 2B | * | W02-2771-05 | TUNER ASSY | 56719 | |
| 665 | 2B | * | W02-2775-05 | TUNER ASSY | | |
| RF-RC (X05-5150-11) | | | | | | |
| C1 ,2 | - | - | CC73GCH1H100D | CHIP C | 10PF | D |
| C5 | - | - | CK73GB1E223K | CHIP C | 0.022UF | K |
| C6 | - | - | CC73GCH1H221J | CHIP C | 220PF | J |
| C7 | - | - | CC73GCH1H100D | CHIP C | 10PF | D |
| C8 | - | - | CK73GB1H102K | CHIP C | 1000PF | K |
| C9 | - | - | C93-0037-05 | CERAMIC | 10UF | 10WV |
| C10 | - | - | CK73GB1H102K | CHIP C | 1000PF | K |
| C11 | - | - | CC73GCH1H040C | CHIP C | 4.0PF | C |
| C12 | - | - | CC73GCH1H100D | CHIP C | 10PF | D |
| C13 | - | - | CC73GCH1H040C | CHIP C | 4.0PF | C |
| C14 | - | - | CC73GCH1H010C | CHIP C | 1.0PF | C |
| C15 | - | - | CC73GCH1H050C | CHIP C | 5.0PF | C |
| C16 | - | - | CK73GB1E223K | CHIP C | 0.022UF | K |
| C17 | - | - | CC73GCH1H221J | CHIP C | 220PF | J |
| C18 | - | - | CC73GCH1H100D | CHIP C | 10PF | D |
| C19 | - | - | CC73GCH1H471J | CHIP C | 470PF | J |
| C20 | - | - | C93-0037-05 | CERAMIC | 10UF | 10WV |
| C21 | - | - | CK73GB1H102K | CHIP C | 1000PF | K |
| C22 ,23 | - | - | CC73GCH1H150J | CHIP C | 15PF | J |
| C24 | - | - | CK73GB1H102K | CHIP C | 1000PF | K |
| C25 | - | - | CK73GB1E103K | CHIP C | 0.010UF | K |
| C26 | - | - | CK73GF1A474Z | CHIP C | 0.47UF | Z |
| C27 | - | - | C93-0036-05 | CHIP C | 4.7UF | Z |
| C28 | - | - | CK73GB1E103K | CHIP C | 0.010UF | K |
| C29 | - | - | CC73GCH1H101J | CHIP C | 100PF | J |

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|---------|----------|-----------|---------------|--------------------------------|--------------|----------|
| C30 | | | CK73GB1E103K | CHIP C 0.010UF | K | |
| C31 | | | C93-0037-05 | CERAMIC 10UF | 10WV | |
| C32 | | | CK73GB1C473K | CHIP C 0.047UF | K | |
| C33 | | | C93-0036-05 | CHIP-C 4.7UF | Z | |
| C34 | | | CC73GCH1H471J | CHIP C 470PF | J | |
| C35 | | | CK73GB1E103K | CHIP C 0.010UF | K | |
| C36 | | | CK73GF1C224Z | CHIP C 0.22UF | Z | |
| C37 | | | CC73GCH1H100D | CHIP C 10PF | D | |
| C38 | | | CK73GB1H472K | CHIP C 4700PF | K | |
| C39 | | | CC73GCH1H331J | CHIP C 330PF | J | |
| C40 | | | CK73GB1E103K | CHIP C 0.010UF | K | |
| C41 | | | C93-0036-05 | CHIP-C 4.7UF | Z | |
| C42 | | | C93-0037-05 | CERAMIC 10UF | 10WV | |
| C43 | | | C93-0039-05 | CERAMIC 22UF | 10WV | |
| CN1 | | | E40-8530-05 | FLAT CABLE CONNECTOR | | |
| J1 | | | E11-0904-05 | MINIATURE PHONE JACK(STEREO MI | | |
| CF1 | | * | L72-0626-05 | CERAMIC FILTER | | |
| L1 | | | L79-1269-05 | LC FILTER | | |
| L2 | | | L40-1585-67 | SMALL FIXED INDUCTOR(150N,J,20 | | |
| L3 | | | L32-1021-05 | FM OSCILLATING COIL | | |
| L4 | | | L40-1085-67 | SMALL FIXED INDUCTOR(100N,J,20 | | |
| X1 | | | L77-2274-05 | CRYSTAL RESONATOR | | |
| R1 | | | RK73GB1J431J | CHIP R 430 | J 1/16W | |
| R2 | | | RK73GB1J120J | CHIP R 12 | J 1/16W | |
| R3 | | | RK73GB1J431J | CHIP R 430 | J 1/16W | |
| R10 | | | RK73GB1J331J | CHIP R 330 | J 1/16W | |
| R11 | | | RK73GB1J391J | CHIP R 390 | J 1/16W | |
| R12 | | | RK73GB1J100J | CHIP R 10 | J 1/16W | |
| R13 | | | RK73GB1J470J | CHIP R 47 | J 1/16W | |
| R14 | | | RK73GB1J473J | CHIP R 47K | J 1/16W | |
| R15 | | | RK73GB1J2R2J | CHIP R 2.2 | J 1/16W | |
| R16 | | | RK73GB1J100J | CHIP R 10 | J 1/16W | |
| R17 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R18 | | | RK73GB1J184J | CHIP R 180K | J 1/16W | |
| R19 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R20 ,21 | | | RK73GB1J100J | CHIP R 10 | J 1/16W | |
| R22 -24 | | | RK73GB1J102J | CHIP R 1.0K | J 1/16W | |
| R25 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R26 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R27 | | | RK73GB1J152J | CHIP R 1.5K | J 1/16W | |
| R28 | | | RK73GB1J681J | CHIP R 680 | J 1/16W | |
| R29 -31 | | | RK73GB1J102J | CHIP R 1.0K | J 1/16W | |
| R32 | | | RK73GB1J152J | CHIP R 1.5K | J 1/16W | |
| R33 | | | RK73GB1J102J | CHIP R 1.0K | J 1/16W | |
| R34 ,35 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R36 ,37 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R38 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R39 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R40 | | | RK73GB1J104J | CHIP R 100K | J 1/16W | |
| R41 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R42 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R43 ,44 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R45 | | | RK73GB1J105J | CHIP R 1.0M | J 1/16W | |

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|--|----------|-----------|-----------------|----------------------------|--------------|----------|
| R46 | | | RK73GB1J562J | CHIP R 5.6K | J 1/16W | |
| R47 -49 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R50 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R51 | | | RK73GB1J473J | CHIP R 47K | J 1/16W | |
| R52 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R53 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R54 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| D1 ,2 | | | MA111 | DIODE | | |
| D3 | | | KV1832E | VARIABLE CAPACITANCE DIODE | | |
| D4 | | | MA111 | DIODE | | |
| IC1 | | | UPC1687G | ANALOGUE IC | | |
| IC2 | | | LV2105V | MOS-IC | | |
| IC3 | | | UPC2748T-E3 | ANALOGUE IC | | |
| Q3 | | | 2SC5065(O,Y) | TRANSISTOR | | |
| Q4 -6 | | | 2SC4178(F13,14) | TRANSISTOR | | |
| Q7 | | | 2SA1576A(R,S) | TRANSISTOR | | |
| Q7 | | | 2SB1218A(Q,R) | TRANSISTOR | | |
| Q8 -10 | | | 2SC4081(R,S) | TRANSISTOR | | |
| Q8 -10 | | | 2SD1819A(Q,R) | TRANSISTOR | | |
| Q11 ,12 | | | 2SA1576A(R,S) | TRANSISTOR | | |
| Q11 ,12 | | | 2SB1218A(Q,R) | TRANSISTOR | | |
| POWER (X07-3290-11,X07-3300-10,X07-3310-10) | | | | | | |
| C1 ,2 | | | CC45FSL1H221J | CERAMIC 220PF | J | |
| C3 ,4 | | | CE04KW1H100M | ELECTRO 10UF | 50WV | 6790 |
| C5 ,6 | | | CC45FSL1H221J | CERAMIC 220PF | J | 6790 |
| C7 ,8 | | | CE04KW1A101M | ELECTRO 100UF | 10WV | 6790 |
| C9 ,10 | | | CC45FSL1H271J | CERAMIC 270PF | J | 6790 |
| C11 ,12 | | | CQ93FMG1H123J | MYLAR 0.012UF | J | 6790 |
| C13 ,14 | | | CK45FB1H332K | CERAMIC 3300PF | K | 6790 |
| C15 ,16 | | | CC45FSL1H101J | CERAMIC 100PF | J | 6790 |
| C17 ,18 | | | CE04KW1H4R7M | ELECTRO 4.7UF | 50WV | 6790 |
| C19 -32 | | | CC45FSL1H221J | CERAMIC 220PF | J | |
| C33 ,34 | | | CC45FSL1H221J | CERAMIC 220PF | J | 5790 |
| C35 ,36 | | | CC45FSL1H221J | CERAMIC 220PF | J | 790 |
| C37 ,38 | | | CE04PW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C39 ,40 | | | CC45FSL1H101J | CERAMIC 100PF | J | |
| C41 ,42 | | | CE04KW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C43 ,44 | | | CC45FSL1H101J | CERAMIC 100PF | J | |
| C45 ,46 | | * | CE04PW1C220M | ELECTRO 22UF | 16WV | |
| C47 ,48 | | | CE04KW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C49 ,50 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C51 ,52 | | | CE04KW1A101M | ELECTRO 100UF | 10WV | |
| C53 ,54 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C55 ,56 | | | CC45FCH1H180J | CERAMIC 18PF | J | |
| C57 -60 | | | C91-1573-05 | MP-C 0.10UF | J | |
| C61 ,62 | | | CK45FB1H222K | CERAMIC 2200PF | K | |
| C101,102 | | | CE04KW1H100M | ELECTRO 10UF | 50WV | |
| C103,104 | | | CE04KW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C105,106 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C107,108 | | | CE04KW1A101M | ELECTRO 100UF | 10WV | |
| C109,110 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C111,112 | | | CC45FCH1H180J | CERAMIC 18PF | J | |
| C113-116 | | | C91-1573-05 | MP-C 0.10UF | J | |
| C117,118 | | | CK45FB1H222K | CERAMIC 2200PF | K | 16790 |

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PARTS LIST

VR-505/506/507/509/510/517

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|----------|----------|-----------|---------------|-----------------|--------------|----------|
| C119,120 | | | CK45FB1H222K | CERAMIC 2200PF | K | 56790 |
| C131 | | | CE04KW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C132 | | | CE04KW1H2R2M | ELECTRO 2.2UF | 50WV | 1 |
| C133 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C134 | | | CK45FB1H471K | CERAMIC 470PF | K | 1 |
| C135 | | | CE04KW1A101M | ELECTRO 100UF | 10WV | |
| C136 | | | CE04KW1A101M | ELECTRO 100UF | 10WV | 1 |
| C137 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C139 | | | CC45FCH1H180J | CERAMIC 18PF | J | |
| C140 | | | CC45FCH1H180J | CERAMIC 18PF | J | 1 |
| C141 | | | C91-1573-05 | MP-C 0.10UF | J | |
| C142 | | | C91-1573-05 | MP-C 0.10UF | J | 1 |
| C143 | | | C91-1573-05 | MP-C 0.10UF | J | |
| C144 | | | C91-1573-05 | MP-C 0.10UF | J | 1 |
| C145 | | | CK45FB1H222K | CERAMIC 2200PF | K | |
| C146 | | | CK45FB1H222K | CERAMIC 2200PF | K | 1 |
| C147 | | * | CC45FSH1H221J | CERAMIC 220PF | J | 5679 |
| C151-155 | | | CC45FSL1H101J | CERAMIC 100PF | J | |
| C201,202 | | * | C90-3945-05 | ELECTRO 10000UF | 80WV | 0 |
| C201,202 | | * | C90-3982-05 | ELECTRO 4700UF | 75WV | 15679 |
| C203,204 | | * | C90-3946-05 | ELECTRO 3300UF | 50WV | 0 |
| C203,204 | | * | C90-3983-05 | ELECTRO 3300UF | 50WV | 15679 |
| C205 | | | CE04KW1E222M | ELECTRO 2200UF | 25WV | |
| C206 | | | CE04LW1E471M | ELECTRO 470UF | 25WV | |
| C207,208 | | | CE04KW1E101M | ELECTRO 100UF | 25WV | |
| C209 | | | CE04PW1H100M | ELECTRO 10UF | 50WV | |
| C210 | | * | CE04PW1J330M | ELECTRO 33UF | 63WV | |
| C211 | | | CC45FSL1H101J | CERAMIC 100PF | J | 6790 |
| C212 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | 6790 |
| C213 | | | CC45FSL1H221J | CERAMIC 220PF | J | |
| C214 | | | CK45FB1H102K | CERAMIC 1000PF | K | |
| C215 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C216 | | | CC45FSL1H221J | CERAMIC 220PF | J | |
| C217,218 | | | CE04KW1H101M | ELECTRO 100UF | 50WV | |
| C219,220 | | | CE04KW2A101M | ELECTRO 100UF | 100WV | |
| C221 | | | CE04PW1A101M | ELECTRO 100UF | 10WV | |
| C222 | | | CE04HW1A221M | NP-ELEC 220UF | 10WV | |
| C223,224 | | | CE04KW2A100M | ELECTRO 10UF | 100WV | |
| C225 | | | CE04PW1H4R7M | ELECTRO 4.7UF | 50WV | |
| C226 | | | CE04PW1H010M | ELECTRO 1UF | 50WV | |
| C227 | | * | CE04PW1A221M | ELECTRO 220UF | 10WV | |
| C228 | | | CE04PW1H2R2M | ELECTRO 2.2UF | 50WV | |
| C229 | | | CE04KW1E332M | ELECTRO 3300UF | 25WV | |
| C230 | | | CE04KW1H100M | ELECTRO 10UF | 50WV | |
| C232 | | | C91-1573-05 | MP-C 0.10UF | J | |
| C233 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C234 | | | CE04KW1H100M | ELECTRO 10UF | 50WV | |
| C303-307 | | | CK45FF1H472Z | CERAMIC 4700PF | Z | |
| C308 | | | CK45FF1H472Z | CERAMIC 4700PF | Z | 1 |
| C309 | | | CE04HW1E100M | NP-ELEC 10UF | 25WV | |
| C310 | | | CE04LW1E470M | ELECTRO 47UF | 25WV | |
| C311,312 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C313,314 | | | CK45FF1H223Z | CERAMIC 0.022UF | Z | |
| C315 | | | CK45FB1H471K | CERAMIC 470PF | K | |
| C316,317 | | * | C91-1635-05 | FILM 0.068UF | 275WV | |

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|----------|----------|-----------|---------------|-------------------------|--------------|----------|
| C401,402 | | | CK45FB1H102K | CERAMIC 1000PF | K | |
| C403,404 | | | CC45FSL1H101J | CERAMIC 100PF | J | |
| C405 | | | CK45FB1H102K | CERAMIC 1000PF | K | |
| CN2 | | | E40-4245-05 | PIN ASSY | | |
| CN4 | | | E40-4245-05 | PIN ASSY | | |
| CN5 | | | E40-8485-05 | FLAT CABLE CONNECTOR | | |
| CN6 | | | E40-9850-05 | PIN ASSY | | |
| CN7 | | | E40-8483-05 | FLAT CABLE CONNECTOR | | |
| J1,2 | | | E63-1143-05 | PIN JACK | | |
| J3 | | | E63-1144-05 | PIN JACK | | 790 |
| J4 | | | E70-0049-05 | SCREW TERMINAL BOARD | | 6790 |
| J4 | | | E70-0122-05 | LOCK TERMINAL BOARD | | 15 |
| J5 | | | E70-0128-05 | LOCK TERMINAL BOARD | | 6790 |
| J6 | | | E70-0122-05 | LOCK TERMINAL BOARD | | 1 |
| J7 | | | E63-1146-05 | PIN JACK | | 5679 |
| J8 | | | E03-0148-05 | AC OUTLET | | 16790 |
| J8 | | | E03-0316-05 | AC OUTLET | | 5 |
| J9 | | | E70-0057-05 | LOCK TERMINAL BOARD | | 5 |
| J10 | | * | E63-1138-05 | PIN JACK | | 5 |
| F1 | | | F50-0077-05 | FUSE(5X20) | | |
| CN8,9 | | | J13-0075-05 | FUSE CLIP | | |
| E5 | | | J11-0808-05 | WIRE CLAMPER | | |
| L1-5 | | | L39-1373-05 | PHASE COMPENSATION COIL | | |
| L6 | | | L39-1373-05 | PHASE COMPENSATION COIL | | 1 |
| T1 | | | L07-2758-05 | POWER TRANSFORMER | | 6 |
| T1 | | | L07-2761-05 | POWER TRANSFORMER | | 15 |
| T1 | | | L07-2809-05 | POWER TRANSFORMER | | 790 |
| R73-76 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R83,84 | | | RD14NB2E4R7J | RD | 4.7 | J 1/4W |
| R85,86 | | | RS14KB3D4R7J | FL-PROOF RS | 4.7 | J 2W |
| R87,88 | | | RS14KB3D391J | FL-PROOF RS | 390 | J 2W |
| R109-112 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R119,120 | | | RD14NB2E4R7J | RD | 4.7 | J 1/4W |
| R121,122 | | | RS14KB3D4R7J | FL-PROOF RS | 4.7 | J 2W |
| R139 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R140 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R141 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R142 | | | RS14KB3DR22J | FL-PROOF RS | 0.22 | J 2W |
| R149 | | | RD14NB2E4R7J | RD | 4.7 | J 1/4W |
| R150 | | | RD14NB2E4R7J | RD | 4.7 | J 1/4W |
| R151 | | | RS14KB3D4R7J | FL-PROOF RS | 4.7 | J 2W |
| R152 | | | RS14KB3D4R7J | FL-PROOF RS | 4.7 | J 2W |
| R207 | | | RD14NB2E101J | RD | 100 | J 1/4W |
| R208 | | | RD14NB2E822J | RD | 8.2K | J 1/4W |
| R223-226 | | | RS14KB3A472J | FL-PROOF RS | 4.7K | J 1W |
| R238,239 | | | RD14NB2E103J | RD | 10K | J 1/4W |
| R242,243 | | | RD14NB2E101J | RD | 100 | J 1/4W |
| R254 | | | RS14KB3D181J | FL-PROOF RS | 180 | J 2W |
| R260 | | | R92-1844-05 | CARBON | 3.3M | J 1/2W |
| R262 | | | RD14NB2E1R0J | RD | 1 | J 1/4W |
| R263 | | | RD14NB2E270J | RD | 27 | J 1/4W |
| R301,302 | | | RD14NB2E1R0J | RD | 1 | J 1/4W |

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|---|---------|-----------|---|--|--------------------------------|---------|
| R321-323 R335 R998,999 | | | RS14KB3A151J RD14NB2E821J RD14NB2E1R0J | FL-PROOF RS 150 J 1W RD 820 J 1/4W RD 1 J J 1/4W | | |
| K1 ,2 K1 ,2 K1 ,2 K3 K3 | | | S76-0042-05 S76-0097-05 * S76-0112-05 S76-0042-05 S76-0097-05 | MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY | 170 569 70 56790 | |
| K3 K4 K4 K4 K5 | | | * S76-0112-05 S76-0042-05 S76-0097-05 * S76-0112-05 S76-0099-05 | MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY | 569 170 16790 69 | |
| Δ D1 ,2 Δ D1 ,2 Δ D3 D4 D4 | | | * D5SBA20F03 TS6P03G-B D2SBA20F03 MTZJ16(B) RD16ES(B) | DIODE DIODE DIODE ZENER DIODE ZENER DIODE | | |
| D5 -9 D5 -9 D10 -14 D10 -14 D15 | | | MTZJ15(B) RD15ES(B) HSS104A 1SS133 HSS104A | ZENER DIODE ZENER DIODE DIODE DIODE DIODE | 1 | |
| D15 D16 ,17 D16 ,17 D18 D18 | | | 1SS133 HSS104A 1SS133 MTZJ6.8(B) MTZJ8.2(B) | DIODE DIODE DIODE ZENER DIODE ZENER DIODE | 1 56790 | |
| D18 D18 D19 D19 D19 | | | RD6.8ES(B) RD8.2ES(B) MTZJ15(B) MTZJ16(B) RD15ES(B) | ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE | 1 56790 10 5679 10 | |
| D19 D20 D20 D20 D20 | | | RD16ES(B) MTZJ13(B) MTZJ18(B) MTZJ20(B) RD13ES(B) | ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE | 5679 1 5679 0 1 | |
| D20 D20 D21 D21 D22 ,23 | | | RD18ES(B) RD20ES(B) HSS104A 1SS133 MTZJ3.9(B) | ZENER DIODE ZENER DIODE DIODE DIODE ZENER DIODE | 5679 0 | |
| D22 ,23 D24 -26 D24 -26 D27 D27 | | | RD3.9ES(B) HSS104A 1SS133 HSS104A 1SS133 | ZENER DIODE DIODE DIODE DIODE DIODE | 5679 56790 | |
| D28 D28 D31 D31 D32 -34 | | | HSS104A 1SS133 MTZJ3.9(B) RD3.9ES(B) HSS104A | DIODE DIODE ZENER DIODE ZENER DIODE DIODE | 16790 16790 | |
| Δ D32 -34 | | | 1SS133 | DIODE | | |

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| Δ D35 D36 D37 D37 Δ IC1 | | | S1ZB20(4101) RB721Q HSS104A 1SS133 * STK412-020N | DIODE DIODE DIODE DIODE HYBRID IC | | 5679 |
| Δ IC1 Δ IC1 Δ IC2 Δ IC2 Δ IC3 ,4 | | | * STK412-040N * STK412-040T * STK413-020T * STK413-040T * STK413-020A | HYBRID IC HYBRID IC HYBRID IC HYBRID IC HYBRID IC | | 0 0 5679 0 1 |
| Δ IC5 Δ IC6 IC7 IC8 IC9 ,10 | | | KIA7812API KIA7912PI NJM4580L-D NJU7313AL NJM4565D | ANALOGUE IC ANALOGUE IC ANALOGUE IC ANALOGUE IC ANALOGUE IC | | 6790 |
| IC11 Δ IC12 Q1 -5 Q6 Q201 | | | NJU7313AL BA05T 2SC2878(B) 2SC2878(B) 2SB1640 | ANALOGUE IC ANALOGUE IC TRANSISTOR TRANSISTOR TRANSISTOR | | 15679 |
| Q202 Q203 Q205 Q206 Q207 | | | 2SC1845(F,E) 2SA1535A 2SC1845(F,E) 2SA992(F,E) 2SC3944A | TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR | | |
| Q208 Q209,210 Q211-214 Q215 Q215 | | | 2SB1640 2SA992(F,E) 2SC1845(F,E) 2SC1740S(Q,R) 2SC2785(F,E) | TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR | | |
| Q301-305 Q306 Q307,308 Q309 Q310 | | | 2SC1845(F,E) 2SC1845(F,E) UN4219 UN4219 UN4219 | TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR | | 1 56790 16790 |
| Q311 | | | 2SA992(F,E) | TRANSISTOR | | |
| SURROUND (X08-3060-10, X08-3070-10) | | | | | | |
| C1 ,2 C3 C4 C5 ,6 C7 ,8 | | | CE04LW1H100M CK73GB1H103K CC73GCH1H101J CK73GB1H222K CK73FB1E104K | ELECTRO CHIP C CHIP C CHIP C CHIP C | 10UF 0.010UF 100PF 2200PF 0.10UF | 50WV K J K K |
| C9 ,10 C11 -14 C21 C22 C23 | | | CE04LW1H4R7M CC73GCH1H101J CK73FB1E104K CE04LW1H100M CK73GB1H102K | ELECTRO CHIP C CHIP C ELECTRO CHIP C | 4.7UF 100PF 0.10UF 10UF 1000PF | 50WV J K 50WV K |
| C24 ,25 C26 C27 C29 C31 | | | CK73FB1E104K CE04LW1H100M CE04LW1H4R7M CK73GB1H103K CC73GCH1H220J | CHIP C ELECTRO ELECTRO CHIP C CHIP C | 0.10UF 10UF 4.7UF 0.010UF 22PF | K 50WV 50WV K J |
| C32 C33 | | | CK73GB1H472K CC73GCH1H220J | CHIP C CHIP C | 4700PF 22PF | K J |

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VR-505/506/507/509/510/517

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-----------|----------|-----------|---------------|-------------|--------------|----------|
| C34 | | | CK73GB1H472K | CHIP C | 4700PF | K |
| C35 | | | CK73FF1C105Z | CHIP C | 1.0UF | Z |
| C36 | | | CK73FF1C105Z | CHIP C | 1.0UF | Z |
| C37 | | | CK73FF1C105Z | CHIP C | 1.0UF | Z |
| C41 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C42 | | | CC73GCH1H270J | CHIP C | 27PF | J |
| C43, 44 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C45 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C46 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C54, 55 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C56 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C57 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C58, 59 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C103,104 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C105,106 | | | CK73GB1H182K | CHIP C | 1800PF | K |
| C107,108 | | | CK73GB1H222K | CHIP C | 2200PF | K |
| C109 | | | CK73GB1H472K | CHIP C | 4700PF | K |
| C110 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C111, 112 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C121,122 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C125 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C126 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C141 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C151, 152 | | | CE04LW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C151, 152 | | * | CE04PW2A4R7M | ELECTRO | 4.7UF | 100WV |
| C153, 154 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C155-157 | | | CE04LW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C155-157 | | * | CE04PW2A4R7M | ELECTRO | 4.7UF | 100WV |
| C158-160 | | | CE04PW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C161, 162 | | | CK73GB1H223K | CHIP C | 0.022UF | K |
| C163, 164 | | | CK73GB1C333K | CHIP C | 0.033UF | K |
| C165, 166 | | | CK73FB1C474K | CHIP C | 0.47UF | K |
| C167, 168 | | | CE04LW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C169, 170 | | | CK73GB1H222K | CHIP C | 2200PF | K |
| C177-181 | | | CE04KW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C182 | | | CE04PW1H4R7M | ELECTRO | 4.7UF | 50WV |
| C183 | | | CK73FF1C105Z | CHIP C | 1.0UF | Z |
| C184 | | | CC73GCH1H221J | CHIP C | 220PF | J |
| C185, 186 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C189, 190 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C203, 204 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C205, 206 | | | CK73GB1H222K | CHIP C | 2200PF | K |
| C207, 208 | | | CK73GB1H821K | CHIP C | 820PF | K |
| C209 | | | CK73GB1H472K | CHIP C | 4700PF | K |
| C210 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C211, 212 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C215, 216 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C251-256 | | | CC73GCH1H221J | CHIP C | 220PF | J |
| C303, 304 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C305 | | | CK73GB1H182K | CHIP C | 1800PF | K |
| C306 | | | CK73GB1H822K | CHIP C | 8200PF | K |
| C307 | | | CK73GB1H222K | CHIP C | 2200PF | K |
| C308 | | | CK73GB1H822K | CHIP C | 8200PF | K |
| C309 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C310 | | | CC73GCH1H101J | CHIP C | 100PF | J |

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PARTS LIST

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-----------|----------|-----------|---------------|-------------|--------------|----------|
| C311 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C401, 402 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C451 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C452 | | | CE04KW1C472M | ELECTRO | 4700UF | 16WV |
| C453, 454 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C455 | | | CE04LW1E470M | ELECTRO | 47UF | 25WV |
| C456, 457 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C458 | | | CE04LW1E470M | ELECTRO | 47UF | 25WV |
| C459 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C460 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C461 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C462 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C463 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C464 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C465 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C468, 469 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C501-504 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C505 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C506 | | | CC73GCH1H471J | CHIP C | 470PF | J |
| C507 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C508 | | | CE04LW1H2R2M | ELECTRO | 2.2UF | 50WV |
| C509 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C510 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C601-604 | | | CK73FB1E104K | CHIP C | 0.10UF | K |
| C605 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C606 | | | CC73GCH1H471J | CHIP C | 470PF | J |
| C607 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C608 | | | CE04LW1H2R2M | ELECTRO | 2.2UF | 50WV |
| C609 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C610 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C651 | | | CE04PW1H010M | ELECTRO | 1UF | 50WV |
| C652 | | | CE04PW1C101M | ELECTRO | 100UF | 16WV |
| C653 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C654 | | | CE04LW1C101M | ELECTRO | 100UF | 16WV |
| C655 | | | CE04EW1C471M | ELECTRO | 470UF | 16WV |
| C701, 702 | | | CK73GB1H471K | CHIP C | 470PF | K |
| C703, 704 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C705, 706 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C707, 708 | | | CE04KW1H100M | ELECTRO | 10UF | 50WV |
| C709, 710 | | | CC73GCH1H330J | CHIP C | 33PF | J |
| C711, 712 | | | CC73GCH1H470J | CHIP C | 47PF | J |
| C713 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C714 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C715, 716 | | | CE04LW1E470M | ELECTRO | 47UF | 25WV |
| C801, 802 | | | CK73GB1H471K | CHIP C | 470PF | K |
| C803, 804 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C805, 806 | | | CC73GCH1H220J | CHIP C | 22PF | J |
| C807, 808 | | | CE04LW1E470M | ELECTRO | 47UF | 25WV |
| C809, 810 | | | CC73GCH1H330J | CHIP C | 33PF | J |
| C811, 812 | | | CC73GCH1H470J | CHIP C | 47PF | J |
| C813 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C814 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C901, 902 | | | CK73GB1H471K | CHIP C | 470PF | K |
| C903 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C904 | | | CE04KW1E221M | ELECTRO | 220UF | 25WV |

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|----------|---------|-----------|---------------|------------------------------|-------------|---------|
| C905,906 | | | CC73GCH1H220J | CHIP C 22PF | J | |
| C907,908 | | | CE04KW1H100M | ELECTRO 10UF | 50WV | |
| C909 | | | CC73GCH1H330J | CHIP C 33PF | J | |
| C910 | | | CK73GB1H222K | CHIP C 2200PF | K | |
| C911 | | | CC73GCH1H470J | CHIP C 47PF | J | |
| C913 | | | CC73GCH1H101J | CHIP C 100PF | J | |
| C914 | | | CK73GB1H103K | CHIP C 0.010UF | K | |
| C915,916 | | | CE04LW1E470M | ELECTRO 47UF | 25WV | 0 |
| CN1 | | | E40-8485-05 | FLAT CABLE CONNECTOR | | |
| CN2 | | | E40-9842-05 | PIN ASSY | | 0 |
| CN3 | | | E40-8488-05 | FLAT CABLE CONNECTOR | | |
| CN5 | | | E40-3246-05 | PIN ASSY | | |
| J1 | | | E63-1080-05 | PIN JACK | | |
| J2 | | | E63-1139-05 | PIN JACK | | 16790 |
| E2 | | | F10-1197-04 | SHIELDING PLATE | | |
| E1 | | | J11-0808-05 | WIRE CLAMPER | | |
| L41 | | | L92-0510-05 | CHIP FERRITE | | |
| X1 | | | L77-2296-05 | CRYSTAL RESONATOR(12.288MHZ) | | |
| CP51,52 | | | R90-0714-05 | MULTI-COMP 10K X4 | | |
| CP61,62 | | | R90-0714-05 | MULTI-COMP 10K X4 | | 0 |
| CP90,91 | | | R90-0728-05 | MULTI-COMP 180 X4 | | |
| CP92 | | | R90-0728-05 | MULTI-COMP 180 X4 | | 0 |
| CP93-96 | | | R90-0728-05 | MULTI-COMP 180 X4 | | |
| R1,2 | | | RK73GB1J562J | CHIP R 5.6K | J 1/16W | |
| R3,4 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R5,6 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R7-10 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R11,12 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R20 | | | RD14NB2E4R7J | RD 4.7 | J 1/4W | |
| R21 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R31,32 | | | RK73GB1J820J | CHIP R 82 | J 1/16W | |
| R33 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R34 | | | RD14NB2E4R7J | RD 4.7 | J 1/4W | |
| R35 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | 790 |
| R36 | | | RD14NB2E4R7J | RD 4.7 | J 1/4W | 790 |
| R37 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | 90 |
| R38 | | | RD14NB2E4R7J | RD 4.7 | J 1/4W | 90 |
| R41,42 | | | RK73GB1J105J | CHIP R 1.0M | J 1/16W | |
| R43-45 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R54 | | | RK73GB1J183J | CHIP R 18K | J 1/16W | |
| R55-57 | | | RK73GB1J220J | CHIP R 22 | J 1/16W | |
| R58 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R59 | | | RK73GB1J220J | CHIP R 22 | J 1/16W | |
| R66 | | | RK73GB1J104J | CHIP R 100K | J 1/16W | |
| R67 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R68 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R101,102 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R103,104 | | | RK73GB1J104J | CHIP R 100K | J 1/16W | |
| R107,108 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R109,110 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R111,112 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R113,114 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |

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| R121-124 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R125,126 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R127,128 | | | RK73GB1J242J | CHIP R 2.4K | J 1/16W | |
| R141-146 | | | RK73GB1J1R0J | CHIP R 1 | J 1/16W | 5 |
| R151-156 | | | RK73GB1J100J | CHIP R 10 | J 1/16W | |
| R157,158 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R159-164 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R165 | | | RK73GB1J392J | CHIP R 3.9K | J 1/16W | |
| R166 | | | RK73GB1J272J | CHIP R 2.7K | J 1/16W | |
| R168,169 | | | RK73FB2A1R0J | CHIP R 1 | J 1/10W | |
| R170,171 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R172,173 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | |
| R201,202 | | | RK73GB1J332J | CHIP R 3.3K | J 1/16W | |
| R203,204 | | | RK73GB1J104J | CHIP R 100K | J 1/16W | |
| R207,208 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R209,210 | | | RK73GB1J272J | CHIP R 2.7K | J 1/16W | |
| R211,212 | | | RK73GB1J562J | CHIP R 5.6K | J 1/16W | |
| R213,214 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R215,216 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R217,218 | | | RK73GB1J562J | CHIP R 5.6K | J 1/16W | |
| R220 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R251,252 | | | RK73GB1J153J | CHIP R 15K | J 1/16W | 16790 |
| R253,254 | | | RK73GB1J223J | CHIP R 22K | J 1/16W | 16790 |
| R255,256 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | 16790 |
| R257,258 | | | RK73GB1J223J | CHIP R 22K | J 1/16W | 16790 |
| R259,260 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | 16790 |
| R261,262 | | | RK73GB1J223J | CHIP R 22K | J 1/16W | 16790 |
| R263,264 | | | RK73GB1J101J | CHIP R 100 | J 1/16W | 16790 |
| R301 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R302 | | | RK73GB1J153J | CHIP R 15K | J 1/16W | |
| R303,304 | | | RK73GB1J104J | CHIP R 100K | J 1/16W | |
| R307 | | | RK73GB1J222J | CHIP R 2.2K | J 1/16W | |
| R308 | | | RK73GB1J183J | CHIP R 18K | J 1/16W | |
| R309,310 | | | RK73GB1J103J | CHIP R 10K | J 1/16W | |
| R311 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R312 | | | RK73GB1J562J | CHIP R 5.6K | J 1/16W | |
| R313 | | | RK73GB1J102J | CHIP R 1.0K | J 1/16W | |
| R314 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R401-405 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R407,408 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R411 | | | RK73GB1J471J | CHIP R 470 | J 1/16W | |
| R449 | | | RS14KB3D180J | FL-PROOF RS 18 | J 2W | 0 |
| R451 | | | R92-1945-05 | METAL GLAZE 1 | J 1/4W | |
| R452 | | | RD14NB2E1R0J | RD 1 | J 1/4W | |
| R453 | | | RD14NB2E4R7J | RD 4.7 | J 1/4W | |
| R454 | | | RS14KB3D180J | FL-PROOF RS 18 | J 2W | |
| R459 | | * | R92-1993-05 | METAL GLAZE 560 | J 1/4W | |
| R460 | | * | RK73GB1J223J | CHIP R 22K | J 1/16W | |
| R461 | | * | R92-1993-05 | METAL GLAZE 560 | J 1/4W | |
| R462 | | * | RK73GB1J223J | CHIP R 22K | J 1/16W | 0 |
| R491,492 | | | RK73GB1J221J | CHIP R 220 | J 1/16W | |
| R493 | | | RK73GB1J473J | CHIP R 47K | J 1/16W | |
| R494 | | | RK73GB1J472J | CHIP R 4.7K | J 1/16W | |
| R495 | | | RK73GB1J102J | CHIP R 1.0K | J 1/16W | |
| R496 | | | RK73GB1J152J | CHIP R 1.5K | J 1/16W | |

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PARTS LIST

VR-505/506/507/509/510/517

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------|----------|-----------|--------------|-----------------------|--------------|----------|
| R501 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R502,503 | | | RK73GB1J473J | CHIP R 47K J 1/16W | 0 | |
| R505 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R514 | | | RK73GB1J101J | CHIP R 100 J 1/16W | | |
| R515 | | | RK73GB1J221J | CHIP R 220 J 1/16W | | |
| R516 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R517 | | | RK73GB1J221J | CHIP R 220 J 1/16W | | |
| R518 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | | |
| R519 | | | RK73GB1J221J | CHIP R 220 J 1/16W | | |
| R520,521 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R522,523 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | | |
| R524 | | | RK73GB1J333J | CHIP R 33K J 1/16W | | |
| R527 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R528,529 | | | RK73GB1J221J | CHIP R 220 J 1/16W | | |
| R532-536 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 15679 | |
| R601-603 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R605 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R614 | | | RK73GB1J101J | CHIP R 100 J 1/16W | 0 | |
| R615 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R616 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R617 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R618 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | 0 | |
| R619 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R620,621 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R622,623 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | 0 | |
| R624 | | | RK73GB1J333J | CHIP R 33K J 1/16W | 0 | |
| R627 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R628,629 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R652 | | | RK73GB1J223J | CHIP R 22K J 1/16W | 0 | |
| R653 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R654 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R655 | | | RK73GB1J223J | CHIP R 22K J 1/16W | 0 | |
| R656 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R657 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| R658 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R660 | | | RD14NB2E561J | RD 560 J 1/4W | 0 | |
| R661 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R662,663 | | * | R92-4558-05 | METAL GLAZE 47 J 1/4W | | |
| R701,702 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R703,704 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R705,706 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | | |
| R707,708 | | | RK73GB1J474J | CHIP R 470K J 1/16W | | |
| R709,710 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R711,712 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R713,714 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R715,716 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R801,802 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R803,804 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R805,806 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | | |
| R807,808 | | | RK73GB1J474J | CHIP R 470K J 1/16W | | |
| R809,810 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R811,812 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R813,814 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R815,816 | | | RK73GB1J473J | CHIP R 47K J 1/16W | 0 | |
| R817,818 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |

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PARTS LIST

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|---------------|----------|-----------|---------------|---------------------|--------------|----------|
| R901,902 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R903,904 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R905 | | | RK73GB1J472J | CHIP R 4.7K J 1/16W | | |
| R906 | | | RK73GB1J911J | CHIP R 910 J 1/16W | | |
| R907 | | | RK73GB1J474J | CHIP R 470K J 1/16W | | |
| R908 | | | RK73GB1J103J | CHIP R 10K J 1/16W | | |
| R909,910 | | | RK73GB1J473J | CHIP R 47K J 1/16W | | |
| R911,912 | | | RK73GB1J221J | CHIP R 220 J 1/16W | 0 | |
| R913,914 | | | RK73GB1J102J | CHIP R 1.0K J 1/16W | 0 | |
| R915,916 | | | RK73GB1J103J | CHIP R 10K J 1/16W | 0 | |
| D1 | | | DAN202U | DIODE | | |
| D1 | | | MA142WK | DIODE | | |
| D1 | | | 1SS301 | DIODE | | |
| D2 | | | DAP202U | DIODE | | |
| D2 | | | MA142WA | DIODE | | |
| D2 | | | 1SS300 | DIODE | | |
| D3 | | | DAN202U | DIODE | | |
| D3 | | | MA142WK | DIODE | | |
| D3 | | | 1SS301 | DIODE | | |
| D6 | | | MA111 | DIODE | | |
| Δ D41 | | | D2SBA20F03 | DIODE | | |
| D42,43 | | * | HZU5.6(B2) | ZENER DIODE | | |
| D42,43 | | | UDZ5.6B | ZENER DIODE | | |
| D44 | | * | HZU3.9(B2) | ZENER DIODE | | |
| D44 | | | UDZ3.9B | ZENER DIODE | | |
| D45 | | * | HZU3.9(B2) | ZENER DIODE | | |
| D45 | | | UDZ3.9B | ZENER DIODE | | |
| D46 | | * | HZU5.1(B2) | ZENER DIODE | | |
| D46 | | | UDZ5.1B | ZENER DIODE | | |
| D47 | | | MA111 | DIODE | | |
| D67 | | * | HZU5.1(B2) | ZENER DIODE | | |
| D67 | | | UDZ5.1B | ZENER DIODE | | |
| D151,152 | | * | HZU7.5(B2) | ZENER DIODE | | |
| D151,152 | | | UDZ7.5B | ZENER DIODE | | |
| IC1 | | | NJM4565M | ANALOGUE IC | | |
| IC1 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC2 | | * | AK4527B-VQ | MOS-IC | | |
| IC4 | | | TC7WU04FU | MOS-IC | | |
| IC5 | | * | AK4112AVF | MOS-IC | | |
| IC6 | | | TC7WH123FU | MOS-IC | | |
| IC11 | | | NJM4565M | ANALOGUE IC | | |
| IC11 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC12 | | | NJU7311AM | MOS-IC | | |
| IC13 | | | NJM4565M | ANALOGUE IC | | |
| IC13 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC14 | | | NJU7311AM | MOS-IC | | |
| IC15 | | | M62446FP | ANALOGUE IC | 16790 | |
| IC21 | | | NJM4565M | ANALOGUE IC | | |
| IC21 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC31 | | | NJM4565M | ANALOGUE IC | | |
| IC31 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC41 | | | TC74HC07AF | MOS-IC | | |
| IC42 | | | TC74HCT7007AF | MOS-IC | | |
| IC45 | | | BA05T | ANALOGUE IC | | |
| Δ IC46 | | | BA033LBSG | ANALOGUE IC | | |

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|--|---------|-----------|---------------|------------------------|-------------|---------|
| △ IC47 | | | XC62EP2502MR | ANALOGUE IC | | |
| △ IC48 | | | XC62EP2502MR | ANALOGUE IC | 0 | |
| IC51 | | | CS493263-CLR | MOS-IC | | |
| IC61 | | * | CS493302-CLR | MOS-IC | 0 | |
| IC70 | | | NJM4565M | ANALOGUE IC | | |
| IC70 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC80 | | | NJM4565M | ANALOGUE IC | | |
| IC80 | | | NJM4565MD | IC(OP AMP X2) | | |
| IC90 | | | NJM4565M | ANALOGUE IC | | |
| IC90 | | | NJM4565MD | IC(OP AMP X2) | | |
| Q1 | | | DTC124EUA | DIGITAL TRANSISTOR | | |
| Q1 | | | UN5212 | DIGITAL TRANSISTOR | | |
| △ Q15 | | | 2SD1664(Q,R) | TRANSISTOR | | |
| △ Q16 | | | 2SB1132(Q,R) | TRANSISTOR | | |
| Q41 | | | 2SC4081(R,S) | TRANSISTOR | | |
| Q41 | | | 2SD1819A(Q,R) | TRANSISTOR | | |
| Q42 | | | 2SA1576A(R,S) | TRANSISTOR | | |
| Q42 | | | 2SB1218A(Q,R) | TRANSISTOR | | |
| △ Q47 | | | 2SB1375 | TRANSISTOR | | |
| △ Q48 | | | 2SB1375 | TRANSISTOR | 0 | |
| Q49 ,50 | | | DTC124EUA | DIGITAL TRANSISTOR | | |
| Q49 ,50 | | | UN5212 | DIGITAL TRANSISTOR | | |
| Q65 | | | DTA124EUA | DIGITAL TRANSISTOR | | |
| Q65 | | | UN5112 | DIGITAL TRANSISTOR | | |
| Q66 | | | DTA124EUA | DIGITAL TRANSISTOR | 0 | |
| Q66 | | | UN5112 | DIGITAL TRANSISTOR | 0 | |
| Q71 ,72 | | | 2SC4213(B) | TRANSISTOR | | |
| Q73 ,74 | | | 2SC4213(B) | TRANSISTOR | 0 | |
| Q81 ,82 | | | 2SC4213(B) | TRANSISTOR | | |
| Q83 ,84 | | | 2SC4213(B) | TRANSISTOR | 0 | |
| Q91 ,92 | | | 2SC4213(B) | TRANSISTOR | | |
| Q93 ,94 | | | 2SC4213(B) | TRANSISTOR | 0 | |
| A1 | | * | W02-2802-05 | OPTIC RECEIVING MODULE | 790 | |
| A2 | | * | W02-2802-05 | OPTIC RECEIVING MODULE | | |
| A3 | | * | W02-2803-05 | OSCILLATING MODULE | 90 | |
| DISPLAY (X14-7250-10,X14-7260-10) | | | | | | |
| D1 -4 | | | B30-2545-05 | LED(RED3(160)) | 790 | |
| D5 ,6 | | | B30-2545-05 | LED(RED3(160)) | | |
| C1 | | | CE04RW0J470M | ELECTRO | 47UF | 6.3WV |
| C10 -12 | | | CK45FF1H103Z | CERAMIC | 0.010UF | Z |
| C13 ,14 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C15 ,16 | | | CK45FF1H103Z | CERAMIC | 0.010UF | Z |
| C17 -21 | | | CC45FSL1H101J | CERAMIC | 100PF | J |
| C22 ,23 | | | CQ93FMG1H471J | MYLAR | 470PF | J |
| C24 | | | CE04HW1H100M | NP-ELEC | 10UF | 50WV |
| C26 | | | CC45FSL1H101J | CERAMIC | 100PF | J |
| C27 | | | CE04RW1A101M | ELECTRO | 100UF | 10WV |
| C28 | | | CE04KW1V470M | ELECTRO | 47UF | 35WV |
| C29 | | | CE04RW1H330M | ELECTRO | 33UF | 50WV |
| C30 | | | CQ93FMG1H471J | MYLAR | 470PF | J |
| C31 ,32 | | | CE04RW1H010M | ELECTRO | 1.0UF | 50WV |
| C100-105 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C115 | | | CK73GB1H103K | CHIP C | 0.010UF | K |

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|----------|---------|-----------|---------------|----------------------|-------------|---------|
| C201 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C202 | | | CQ93FMG1H103J | MYLAR | 0.010UF | J |
| C203 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C205,206 | | | CQ93FMG1H102J | MYLAR | 1000PF | J |
| C207,208 | | | CK73GB1H102K | CHIP C | 1000PF | K |
| C209,210 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C211 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C212 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C213 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C214 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C215 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C216 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C217 | | | CE04PW1E470M | ELECTRO | 47UF | 25WV |
| C218 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C219 | | | CC45FSL1H470J | CERAMIC | 47PF | J |
| C229,230 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| C243,244 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C245 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C246 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C247,248 | | | CQ93FMG1H103J | MYLAR | 0.010UF | J |
| C249,250 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C258 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C259 | | | CE04PW1A101M | ELECTRO | 100UF | 10WV |
| C260 | | | CE04EW0J102M | ELECTRO | 1000UF | 6.3WV |
| C262 | | | CE04PW1H010M | ELECTRO | 1UF | 50WV |
| C263-265 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C284 | | | CQ93FMG1H103J | MYLAR | 0.010UF | J |
| C401-408 | | | CC73GCH1H470J | CHIP C | 47PF | J |
| C409-412 | | | CC73GCH1H470J | CHIP C | 47PF | J |
| C413,414 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C415 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C416 | | | CK45FF1H103Z | CERAMIC | 0.010UF | Z |
| C417 | | | CK73GB1H103K | CHIP C | 0.010UF | K |
| C418,419 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C420,421 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C422 | | | CE04KW1E470M | ELECTRO | 47UF | 25WV |
| C424,425 | | | CE04KW1V100M | ELECTRO | 10UF | 35WV |
| C501 | | | CC45FSL1H101J | CERAMIC | 100PF | J |
| C503-505 | | | CC45FSL1H101J | CERAMIC | 100PF | J |
| C510-515 | | | CC45FSL1H101J | CERAMIC | 100PF | J |
| C518 | | | CC73GCH1H101J | CHIP C | 100PF | J |
| C539-542 | | | CE04PW1H100M | ELECTRO | 10UF | 50WV |
| CN1 | | | E40-8504-05 | FLAT CABLE CONNECTOR | | |
| CN2 | | | E40-3247-05 | PIN ASSY | | |
| CN3 | | | E40-8477-05 | FLAT CABLE CONNECTOR | | 16790 |
| CN100 | | | E40-9825-05 | SOCKET FOR PIN ASSY | | 0 |
| CN101 | | | E40-8429-05 | SOCKET FOR PIN ASSY | | |
| CN201 | | | E40-8483-05 | FLAT CABLE CONNECTOR | | 16790 |
| CN202 | | | E40-8488-05 | FLAT CABLE CONNECTOR | | |
| CN203 | | | E40-8483-05 | FLAT CABLE CONNECTOR | | |
| CN204 | | | E40-8504-05 | FLAT CABLE CONNECTOR | | |
| CN205 | | | E40-9833-05 | SOCKET FOR PIN ASSY | | |
| CN206 | | | E40-4721-05 | FLAT CABLE CONNECTOR | | 16790 |
| CN401 | | | E40-8483-05 | FLAT CABLE CONNECTOR | | 167 |

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|-----------|----------|-----------|--------------|--------------------------|--------------|----------|
| J1 | | | E11-0272-05 | PHONE JACK | | |
| J2 | | * | E63-1172-05 | PIN JACK | 16790 | |
| J3 | | * | E56-0033-05 | CYLINDRICAL RECEPTACLE | 16790 | |
| J100 | | | E63-1139-05 | PIN JACK | 0 | |
| J200 | | | E11-0293-05 | MINIATURE PHONE JACK(2P) | | |
| J201 | | | E63-0127-05 | PIN JACK | 790 | |
| J202 | | | E63-0130-05 | PIN JACK | 0 | |
| J203 | | | E63-0069-05 | PIN JACK | 156 | |
| J204 | | | E63-0130-05 | PIN JACK | 156 | |
| J401,402 | | | E56-0011-05 | CYLINDRICAL RECEPTACLE | 7 | |
| J403,404 | | | E56-0023-05 | CYLINDRICAL RECEPTACLE | 16 | |
| E1 | | | J11-0808-05 | WIRE CLAMPER | | |
| E4 | | | J11-0808-05 | WIRE CLAMPER | 670 | |
| L1 | | | L92-0017-05 | FERRITE CORE | 16790 | |
| X200 | | | L78-0725-05 | RESONATOR (8.38MHZ) | | |
| CP200 | | | R90-0802-05 | MULTI-COMP | 100KX10 | J 1/4W |
| CP201,202 | | | R90-0500-05 | MULTI-COMP | 100KX6 | J 1/4W |
| CP203 | | | R90-0855-05 | MULTI-COMP | 100KX5 | J |
| CP205 | | | R90-0802-05 | MULTI-COMP | 100KX10 | J 1/4W |
| CP206 | | | R90-0482-05 | MULTI-COMP | 100KX4 | J 1/6W |
| R2 | | | RK73GB1J563J | CHIP R | 56K | J 1/16W |
| R66 | | | RD14NB2E2R2J | RD | 2.2 | J 1/4W |
| R231 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R232 | | | RK73GB1J103J | CHIP R | 10K | J 1/16W |
| R233 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R239 | | | RK73GB1J221J | CHIP R | 220 | J 1/16W |
| R240-242 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R243-247 | | | RK73GB1J221J | CHIP R | 220 | J 1/16W |
| R251-255 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R256 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R262,263 | | | RK73GB1J102J | CHIP R | 1.0K | J 1/16W |
| R264 | | | RK73GB1J103J | CHIP R | 10K | J 1/16W |
| R265 | | | RK73GB1J102J | CHIP R | 1.0K | J 1/16W |
| R266 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R267,268 | | | RK73GB1J103J | CHIP R | 10K | J 1/16W |
| R269 | | | RK73GB1J102J | CHIP R | 1.0K | J 1/16W |
| R288 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R297-299 | | | RK73GB1J221J | CHIP R | 220 | J 1/16W |
| R304,305 | | | RK73GB1J101J | CHIP R | 100 | J 1/16W |
| R310-312 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R315,316 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R401,402 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R403,404 | | | RK73GB1J820J | CHIP R | 82 | J 1/16W |
| R405,406 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R407,408 | | | RK73GB1J104J | CHIP R | 100K | J 1/16W |
| R409-412 | | | RK73GB1J820J | CHIP R | 82 | J 1/16W |
| R413 | | | RK73GB1J680J | CHIP R | 68 | J 1/16W |
| R415,416 | | | RK73GB1J680J | CHIP R | 68 | J 1/16W |
| R421,422 | | | RK73GB1J1R0J | CHIP R | 1 | J 1/16W |
| R423 | | | RK73GB1J1R0J | CHIP R | 1 | J 1/16W |
| R424,425 | | | RK73GB1J1R0J | CHIP R | 1 | J 1/16W |
| S1 -13 | | | S70-0031-05 | TACT SWITCH | | |

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-----------|----------|-----------|---------------|----------------------------|--------------|----------|
| S1 -13 | | | S70-0086-05 | TACT SWITCH | | |
| S17 ,18 | | | S70-0031-05 | TACT SWITCH | 156 | |
| S17 ,18 | | | S70-0086-05 | TACT SWITCH | 156 | |
| S14 | | | T99-0630-05 | ROTARY ENCODER | | |
| S15 | | | T99-0602-05 | ROTARY ENCODER | 790 | |
| S16 | | | T99-0630-05 | ROTARY ENCODER | | |
| D7 | | | HZS6.2N(B2) | ZENER DIODE | | |
| D7 | | | MTZJ6.2(B) | ZENER DIODE | | |
| D7 | | | RD6.2ES(B) | ZENER DIODE | | |
| D9 -11 | | | HSS104A | DIODE | | |
| D9 -11 | | | 1SS133 | DIODE | | |
| D12 -15 | | | HSS104A | DIODE | 16790 | |
| D12 -15 | | | 1SS133 | DIODE | 16790 | |
| D200-207 | | | HSS104A | DIODE | | |
| D200-207 | | | 1SS133 | DIODE | | |
| D209,210 | | | HZS5.6N(B2) | ZENER DIODE | | |
| D209,210 | | | MTZJ5.6(B) | ZENER DIODE | | |
| D209,210 | | | RD5.6ES(B) | ZENER DIODE | | |
| D212,213 | | | RB721Q | DIODE | | |
| D214-216 | | | HSS104A | DIODE | | |
| D214-216 | | | 1SS133 | DIODE | | |
| D220,221 | | | HSS104A | DIODE | 0 | |
| D220,221 | | | 1SS133 | DIODE | 0 | |
| D401 | | | HSS104A | DIODE | 167 | |
| D401 | | | 1SS133 | DIODE | 167 | |
| ED2 | | * | HNA-11MS24 | FLUORESCENT INDICATOR TUBE | | |
| ED2 | | * | 11-MT-125GK | FLUORESCENT INDICATOR TUBE | | |
| IC1 | | | UPD16311 | MOS-IC | | |
| IC200 | | * | MN101C49GLE | MI-COM IC | 156 | |
| IC200 | | * | MN101C49HLD | MI-COM IC | 0 | |
| IC200 | | * | MN101C49HLF | MI-COM IC | 79 | |
| IC201 | | | NJM2279D | ANALOGUE IC | | |
| IC202 | | | NJU4052BD | IC(4CH MPX/DE-MPX) | 16790 | |
| IC202 | | | TC74HC4052AP | IC(ANALOG MULTIPLEXER) | 16790 | |
| IC204 | | | S-80840ANY | ANALOGUE IC | | |
| IC207 | | | XC62FP5102P | ANALOGUE IC | | |
| IC401,402 | | | NJM2279M | ANALOGUE IC | 167 | |
| IC403 | | | TC74HC4052AF | ANALOGUE IC | 7 | |
| Q1 | | | KTC3199(Y,GR) | TRANSISTOR | | |
| Q1 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q100-105 | | | 2SC2878(B) | TRANSISTOR | 0 | |
| Q200,201 | | | KTC3199(Y,GR) | TRANSISTOR | 0 | |
| Q200,201 | | | 2SC1740S(Q,R) | TRANSISTOR | 0 | |
| Q202 | | | KTA1273 | TRANSISTOR | | |
| Q202 | | | 2SA1534A(R,S) | TRANSISTOR | | |
| Q203 | | | 2SC3940A(R,S) | TRANSISTOR | | |
| Q203 | | * | 2SD1768S | TRANSISTOR | | |
| Q204 | | | KTC3199(Y,GR) | TRANSISTOR | | |
| Q204 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q205 | | | KTA1267(Y,GR) | TRANSISTOR | | |
| Q205 | | | 2SA933AS(Q,R) | TRANSISTOR | | |
| Q401 | | | DTC124ESA | TRANSISTOR | 16 | |
| Q401 | | | UN4212 | TRANSISTOR | 16 | |

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------------------------|----------|-----------|---------------|--------------------------------|--------------|----------|
| A2 | | | W02-2625-05 | OPTIC RECEIVING MODULE | | |
| VIDEO (X35-2250-11) | | | | | | |
| C1 -12 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C13 -17 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C18 -21 | | | CE04PW1C470M | ELECTRO 47UF | 16WV | |
| G22 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C31 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C32, 33 | | | CE04LW1V100M | ELECTRO 10UF | 35WV | |
| C53, 54 | | | CE04LW1V100M | ELECTRO 10UF | 35WV | |
| C101 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C102 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C103 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C104 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C105 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C106 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C107 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C108 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C109 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C110 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C111 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C112 | | | CE04PW1E470M | ELECTRO 47UF | 25WV | |
| C121-123 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C131-133 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C141,142 | | | CE04LW1V100M | ELECTRO 10UF | 35WV | |
| C143 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C201 | | | CC45FSL1H121J | CERAMIC 120PF | J | |
| C202 | | | CC45FSL1H470J | CERAMIC 47PF | J | |
| C203 | | | Q93FMG1H823J | MYLAR 0.082UF | J | |
| C211,212 | | | CC45FSL1H101J | CERAMIC 100PF | J | |
| C213 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C231 | | | CE04LW1V100M | ELECTRO 10UF | 35WV | |
| C232,233 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C234 | | | CE04LW0J222M | ELECTRO 2200UF | 6.3WV | |
| C235 | | | CE04LW0J331M | ELECTRO 330UF | 6.3WV | |
| C236 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | |
| C237 | | | CC45FSL1H101J | CERAMIC 100PF | J | 0 |
| C238 | | | CK45FF1H103Z | CERAMIC 0.010UF | Z | 0 |
| C239 | | | CE04LW0J221M | ELECTRO 220UF | 6.3WV | |
| CN1 | | | E40-8483-05 | FLAT CABLE CONNECTOR | | |
| CN2 | | | E40-8531-05 | FLAT CABLE CONNECTOR | | |
| J1, 2 | | | E56-0011-05 | CYLINDRICAL RECEPTACLE | | |
| J11 | | * | E63-1193-05 | PIN JACK | | |
| J11 | | * | E63-1195-05 | PIN JACK | | |
| J11 | | * | E63-1197-05 | PIN JACK | | |
| J12 | | * | E63-1194-05 | PIN JACK | | |
| J12 | | * | E63-1196-05 | PIN JACK | | |
| J12 | | * | E63-1198-05 | PIN JACK | | |
| J21 | | * | E11-0389-05 | MINIATURE PHONE JACK(3.5 STERE | | 0 |
| J22 | | | E11-0291-05 | MINIATURE PHONE JACK(2P) | | |
| E1 | | | J11-0809-05 | WIRE CLAMPER | | |
| L1 | | | L40-1011-58 | SMALL FIXED INDUCTOR(100UH,K) | | |

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| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------|----------|-----------|---------------|------------------------|--------------|----------|
| R31, 32 | | | RD14NB2E4R7J | RD 4.7 | J | 1/4W |
| R51, 52 | | | RS14KB3D220J | FL-PROOF RS 22 | J | 2W |
| R141,142 | | | RD14NB2E4R7J | RD 4.7 | J | 1/4W |
| R212,213 | | | RD14NB2E471J | RD 470 | J | 1/4W |
| R215 | | | RD14NB2E471J | RD 470 | J | 1/4W |
| D51, 52 | | | HZS5.6N(B2) | ZENER DIODE | | |
| D51, 52 | | | MTZJ5.6 | ZENER DIODE | | |
| D51, 52 | | | MTZJ5.6(B) | ZENER DIODE | | |
| D51, 52 | | | RD5.6ES(B) | ZENER DIODE | | |
| D51, 52 | | | RD5.6ES(B2) | ZENER DIODE | | |
| D101-103 | | | HSS104 | DIODE | | |
| D101-103 | | | HSS104A | DIODE | | |
| D101-103 | | | 1SS133 | DIODE | | |
| D201,202 | | | HSS104 | DIODE | | |
| D201,202 | | | HSS104A | DIODE | | |
| D201,202 | | | 1SS133 | DIODE | | |
| D223,224 | | | HSS104 | DIODE | | 0 |
| D223,224 | | | HSS104A | DIODE | | 0 |
| D223,224 | | | 1SS133 | DIODE | | 0 |
| IC1, 2 | | | NJM2279D | ANALOGUE IC | | |
| IC3 | | | NJU4052BD | IC(4CH MPX/DE-MPX) | | |
| IC3 | | | TC74HC4052AP | IC(ANALOG MULTIPLEXER) | | |
| IC11-13 | | | NJM2279D | ANALOGUE IC | | |
| IC21 | | | BA05T | ANALOGUE IC | | |
| IC22 | | | TC74HC00AP | IC(2INPUT NAND GATE) | | 0 |
| Q51 | | | 2SD2525 | TRANSISTOR | | |
| Q52 | | | 2SB1640 | TRANSISTOR | | |
| Q101 | | | DTC124ESA | DIGITAL TRANSISTOR | | |
| Q101 | | | UN4212 | DIGITAL TRANSISTOR | | |
| Q201 | | | KTC3199(Y,GR) | TRANSISTOR | | |
| Q201 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q201 | | | 2SC2785(F,E) | TRANSISTOR | | |
| Q202 | | | DTC124ESA | DIGITAL TRANSISTOR | | |
| Q202 | | | UN4212 | DIGITAL TRANSISTOR | | |
| Q203 | | | KTC3199(Y,GR) | TRANSISTOR | | |
| Q203 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q203 | | | 2SC2785(F,E) | TRANSISTOR | | |
| Q204 | | | KTA1267(Y,GR) | TRANSISTOR | | |
| Q204 | | | 2SA1175(F,E) | TRANSISTOR | | |
| Q204 | | | 2SA933AS(Q,R) | TRANSISTOR | | |

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HOW TO READ THE PARTS LIST

ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS

| COUNTRY ORIGIN | MODEL | ABB. | Canada | | USA | | | | | |
|----------------|--------|------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | P | K | P | K | | | | |
| MALAYSIA | VR-505 | 5 | P5 | K5 | - | - | X07-3310-10 | X08-3060-10 | X14-7250-10 | - |
| | VR-506 | 6 | P6 | K6 | - | - | X07-3310-11 | X08-3060-11 | X14-7250-11 | - |
| | VR-517 | 1 | P1 | K1 | - | - | X07-3330-10 | X08-3060-11 | X14-7250-12 | - |
| | VR-507 | 7 | P7 | K7 | - | - | X07-3300-10 | X08-3060-12 | X14-7260-10 | X35-2250-10 |
| | VR-509 | 9 | P9 | K9 | X05-5150-11 | X07-3290-11 | X08-3060-13 | X14-7260-11 | X35-2250-11 | |
| INDONESIA | VR-510 | 0 | P0 | K0 | X05-5150-11 | X07-3290-10 | X08-3060-14 | X14-7260-12 | X35-2250-12 | |
| | VR-505 | 5 | P5 | K5 | - | - | X07-3380-13 | X08-3070-10 | X14-7310-10 | - |
| | VR-506 | 6 | P6 | K6 | - | - | X07-3380-12 | X08-3070-11 | X14-7310-11 | - |
| | VR-517 | 1 | P1 | K1 | - | - | X07-3380-14 | X08-3070-11 | X14-7310-14 | - |
| | VR-507 | 7 | P7 | K7 | - | - | X07-3380-11 | X08-3070-02 | X14-7310-12 | - |
| VR-509 | 9 | P9 | K9 | X05-5520-10 | X07-3380-10 | X08-3070-13 | X14-7310-13 | X35-2270-11 | | |
| VR-510 | 0 | P0 | K0 | - | - | - | - | - | - | |

PARTS LIST

VR-505/506/507/509/510/517

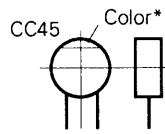
VR-505/506/507/509/510/517

PARTS DESCRIPTIONS

CAPACITORS

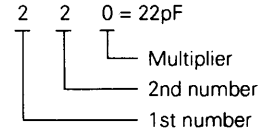
CC 45 TH 1H 220 J
 1 2 3 4 5 6

- 1 = Type ... ceramic, electrolytic, etc.
- 2 = Shape ... round, square, ect.
- 3 = Temp. coefficient
- 4 = Voltage rating
- 5 = Value
- 6 = Tolerance



Capacitor value

- 010 = 1pF
- 100 = 10pF
- 101 = 100pF
- 102 = 1000pF = 0.001μF
- 103 = 0.01μF



Temperature coefficient

| 1st Word | C | L | P | R | S | T | U |
|----------|-------|-----|--------|--------|-------|------|--------|
| Color* | Black | Red | Orange | Yellow | Green | Blue | Violet |
| ppm/°C | 0 | -80 | -150 | -220 | -330 | -470 | -750 |

| 2nd Word | G | H | J | K | L |
|----------|-----|-----|------|------|------|
| ppm/°C | ±30 | ±60 | ±120 | ±250 | ±500 |

Example : CC45TH = -470 ± 60ppm/°C

Tolerance (More than 10pF)

| Code | C | D | G | J | K | M | X | Z | P | No code |
|------|-------|------|----|----|-----|-----|------------|------------|------------|---|
| (%) | ±0.25 | ±0.5 | ±2 | ±5 | ±10 | ±20 | +40 -20 | +80 -20 | +100 -0 | More than 10μF -10 ~ +50 Less than 4.7μF -10 ~ +75 |

(Less than 10pF)

| Code | B | C | D | F | G |
|------|------|-------|------|----|----|
| (pF) | ±0.1 | ±0.25 | ±0.5 | ±1 | ±2 |

Voltage rating

| 2nd word \ 1st word | A | B | C | D | E | F | G | H | J | K | V |
|---------------------|------|------|------|------|------|------|------|------|------|------|----|
| 0 | 1.0 | 1.25 | 1.6 | 2.0 | 2.5 | 3.15 | 4.0 | 5.0 | 6.3 | 8.0 | - |
| 1 | 10 | 12.5 | 16 | 20 | 25 | 31.5 | 40 | 50 | 63 | 80 | 35 |
| 2 | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | - |
| 3 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | 6300 | 8000 | - |

Chip capacitors

(EX) C C 7 3 F S L 1 H 0 0 0 J
 1 2 3 4 5 6 7

(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z
 1 2 3 4 5 6 7

(Chip) (B, F)

Refer to the table above.

- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Voltage rating
- 6 = Value
- 7 = Tolerance

Dimension (Chip capacitors)

| Dimension code | L | W | T |
|----------------|-----------|------------|----------------|
| Empty | 5.6 ± 0.5 | 5.0 ± 0.5 | Less than 2.0 |
| A | 4.5 ± 0.5 | 3.2 ± 0.4 | Less than 2.0 |
| B | 4.5 ± 0.5 | 2.0 ± 0.3 | Less than 2.0 |
| C | 4.5 ± 0.5 | 1.25 ± 0.2 | Less than 1.25 |
| D | 3.2 ± 0.4 | 2.5 ± 0.3 | Less than 1.5 |
| E | 3.2 ± 0.2 | 1.6 ± 0.2 | Less than 1.25 |
| F | 2.0 ± 0.3 | 1.25 ± 0.2 | Less than 1.25 |
| G | 1.6 ± 0.2 | 0.8 ± 0.2 | Less than 1.0 |

RESISTORS

Chip resistor (Carbon)

(EX) R K 7 3 E B 2 B 0 0 0 J
 1 2 3 4 5 6 7

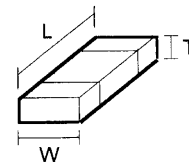
(Chip) (B, F)

Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J
 1 2 3 4 5 6 7

- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Rating wattage
- 6 = Value
- 7 = Tolerance

Dimension



Dimension (Chip resistor)

| Dimension code | L | W | T |
|----------------|-----------|------------|-----------|
| E | 3.2 ± 0.2 | 1.6 ± 0.2 | 1.0 |
| F | 2.0 ± 0.3 | 1.25 ± 0.2 | 1.0 |
| G | 1.6 ± 0.2 | 0.8 ± 0.2 | 0.5 ± 0.1 |

Rating wattage

| Code | Wattage | Code | Wattage | Code | Wattage |
|------|---------|------|---------|------|---------|
| 1J | 1/16W | 2C | 1/6W | 3A | 1W |
| 2A | 1/10W | 2E | 1/4W | 3D | 2W |
| 2B | 1/8W | 2H | 1/2W | | |

VR-505/506/507/509/510/517

SPECIFICATIONS

For U.S.A and Canada

AUDIO section (VR-506)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 40Hz to 20 kHz with no more than 0.7% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

| | |
|---|--|
| FRONT (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W + 100 W |
| CENTER (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W |
| SURROUND (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W + 100 W |
| Total harmonic distortion | 0.050% (1 kHz, 50W, 8 Ω) |
| Frequency response | CD 10 Hz ~ 60 kHz, +0 dB, -3.0 dB |
| Signal to noise ratio (IHF'66) | PHONO (MM) 74 dB |
| | CD 90 dB |
| Input sensitivity / impedance | PHONO (MM) 2.5 mV / 27 k Ω |
| | CD 200 mV / 47 k Ω |
| | MONITOR IN (VIDEO2/MONITOR) 200 mV / 47 k Ω |
| | DVD/6ch INPUT 200 mV / 47 k Ω |
| Output level / impedance | TAPE REC 200 mV / 1 k Ω |
| | MONITOR OUT (VIDEO2/MONITOR) 200 mV / 1 k Ω |
| | PRE OUT (SUBWOOFER) 1.5 V / 2.2 k Ω |
| Tone control | BASS ± 10 dB (at 70 Hz) |
| | TREBLE ± 10 dB (at 10 kHz) |

AUDIO section (VR-505/517)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 40 Hz to 20 kHz with no more than 0.7% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

| | |
|---|---|
| FRONT (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W + 100 W |
| CENTER (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W |
| SURROUND (40-20kHz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W + 100 W |
| SUBWOOFER (50Hz, 0.7% T.H.D. at 8 Ω one channel driven) | 100 W |
| Total harmonic distortion | 0.050% (1 kHz, 50W, 8 Ω) |
| Frequency response | CD 10 Hz ~ 60 kHz, +0 dB, -3.0 dB |
| Signal to noise ratio (IHF'66) | CD 90 dB |
| Input sensitivity / impedance | CD 200 mV / 47 k Ω |
| | MONITOR IN (VIDEO2/MONITOR) 200 mV / 47 k Ω |
| | DVD/6ch INPUT (VR-517) 200 mV / 47 k Ω |
| Output level / impedance | TAPE REC 200 mV / 1 k Ω |
| | MONITOR OUT (VIDEO2/MONITOR) 200 mV / 1 k Ω |
| | PRE OUT (SUBWOOFER) (VR-505) 1.5 V / 2.2 k Ω |
| Tone control | BASS ± 10 dB (at 70 Hz) |
| | TREBLE ± 10 dB (at 10 kHz) |

DIGITAL AUDIO section

| | |
|---------------------------------------|---|
| Sampling frequency | 32 kHz, 44.1 kHz, 48 kHz, 96kHz |
| Input level / impedance / wave length | Optical (-15 dBm ~ -21 dBm), 660 nm ± 30 nm |
| | Coaxial 0.5 Vp-p / 75 Ω |

VIDEO section

| | |
|---------------------------------------|---|
| VIDEO inputs / outputs | VIDEO (composite) 1 Vp-p / 75 Ω |
| S VIDEO inputs / outputs (VR-506/517) | S VIDEO (luminance signal) 1 Vp-p / 75 Ω |
| | S VIDEO (chrominance signal) 0.286 Vp-p / 75 Ω |

FM tuner section

| | |
|--|--|
| Tuning frequency range | 87.5 MHz ~ 108 MHz |
| Usable sensitivity (MONO) | 1.3 μ V (75 Ω) / 13.2 dBf (75 kHz DEV., SINAD 30 dB) |
| 50dB quieting sensitivity | STEREO 28 μ V (75 Ω) / 40.2 dBf |
| Total harmonic distortion (1 kHz) | MONO 0.5% (71.2 dBf input) |
| | STEREO 0.7% (71.2 dBf input) |
| Signal to noise ratio (1 kHz, 75 kHz DEV.) | MONO 75 dB (71.2 dBf input) |
| | STEREO 68 dB (71.2 dBf input) |
| Stereo separation (1 kHz) | 40 dB |
| Selectivity (± 400 kHz) | 70 dB |
| Frequency response | (30 Hz ~ 15kHz), +0.5 dB, -3.0 dB |

AM tuner section

| | |
|---|---------------------------------------|
| Tuning frequency range | 10 kHz step 530 kHz ~ 1,700 kHz |
| Usable sensitivity (30% mod., S/N 20 dB) | 16 μ V / (600 μ V/m) |
| Signal to noise ratio (30% mod. 1 mV input) | 50 dB |

GENERAL

| | |
|-------------------|---|
| Power consumption | 2.6 A |
| AC outlet | SWITCHED (total 150 W, 1.25 A max.) |
| Dimensions | W : 440 mm (17-5/16") |
| | H : 143 mm (5-11/16") |
| | D : 400 mm (15-3/8") |
| Weight (Net) | VR-506/517 8.8 kg (19.82 lb) |
| | VR-505 8.7 kg (18.89 lb) |

Notes

1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

VR-505/506/507/509/510/517

SPECIFICATIONS

AUDIO section (VR-507/509/510)

Rated power output during STEREO operation

100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.7% total harmonic distortion. (FTC)

Effective power output during SURROUND operation

FRONT (20-20kHz, 0.7% T.H.D. at 8 Ω one channel driven)
..... 100 W + 100 W
CENTER (20-20kHz, 0.7% T.H.D. at 8 Ω one channel driven)
..... 100 W
SURROUND (20-20kHz, 0.7% T.H.D. at 8 Ω one channel driven)
..... 100 W + 100 W

Total harmonic distortion 0.055% (1 kHz, 50W, 8 Ω)

Frequency response

CD 10 Hz ~ 53 kHz, +0 dB, -3.0 dB

Signal to noise ratio (IHF'66)

PHONO (MM) 75 dB

CD 91 dB

Input sensitivity / impedance

PHONO (MM) 2.5 mV / 27 kΩ

CD 200 mV / 47 kΩ

MONITOR IN 200 mV / 47 kΩ

DVD / 6ch / INPUT (VR-507)..... 200 mV / 47 kΩ

Output level / impedance

TAPE REC 200 mV / 1 kΩ

MONITOR OUT 200 mV / 1 kΩ

PRE OUT (SUBWOOFER) 2 V / 2.2 kΩ

Tone control

BASS ±10 dB (at 100 Hz)

TREBLE ±10 dB (at 10 kHz)

DIGITAL AUDIO section

Sampling frequency 32 kHz, 44.1 kHz, 48 kHz, 96 kHz

Input level / impedance / wave length

Optical (-15 dBm ~ -21 dBm), 660 nm ±30nm

Coaxial 0.5 Vp-p / 75 Ω

VIDEO section

VIDEO inputs / outputs

VIDEO (composite) 1 Vp-p / 75 Ω

S VIDEO (luminance signal) 1 Vp-p / 75 Ω

(chrominance signal) 0.286 Vp-p / 75 Ω

FM tuner section

Tuning frequency range 87.5 MHz ~ 108 MHz

Usable sensitivity (MONO)

..... 1.6 μV (75 Ω) / 15.2 dBf (75 kHz DEV., SINAD 30 dB)

50dB quieting sensitivity

STEREO 31.6 μV (75 Ω) / 41.2 dBf

Total harmonic distortion (1 kHz)

MONO 0.6% (65 dBf input)

STEREO 0.7% (65 dBf input)

Signal to noise ratio (1 kHz, 75 kHz DEV.)

MONO 75 dB (65 dBf input)

STEREO 68 dB (65 dBf input)

Stereo separation (1 kHz) 38 dB

Selectivity (±400 kHz) 70 dB

Frequency response (30 Hz ~ 15kHz), +0.5 dB, -3.0 dB

AM tuner section

Tuning frequency range

10 kHz step 530 kHz ~ 1,700 kHz

Usable sensitivity (30% mod., S/N 20 dB) 16 μV / (600 μV/m)

Signal to noise ratio (30% mod. 1 mV input) 50 dB

GENERAL

Power consumption 2.6 A

AC outlet

SWITCHED (total 150 W, 1.25 A max.)

Dimensions W : 440 mm (17-5/16")

H : 143 mm (5-5/8")

D : 400 mm (15-3/4")

Weight (Net) (VR-509/510)..... 7.2 kg (15.8 lb)

(VR-507)..... 8.8 kg (19.2 lb)

Notes

1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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