

MONITOR WITH DVD RECEIVER

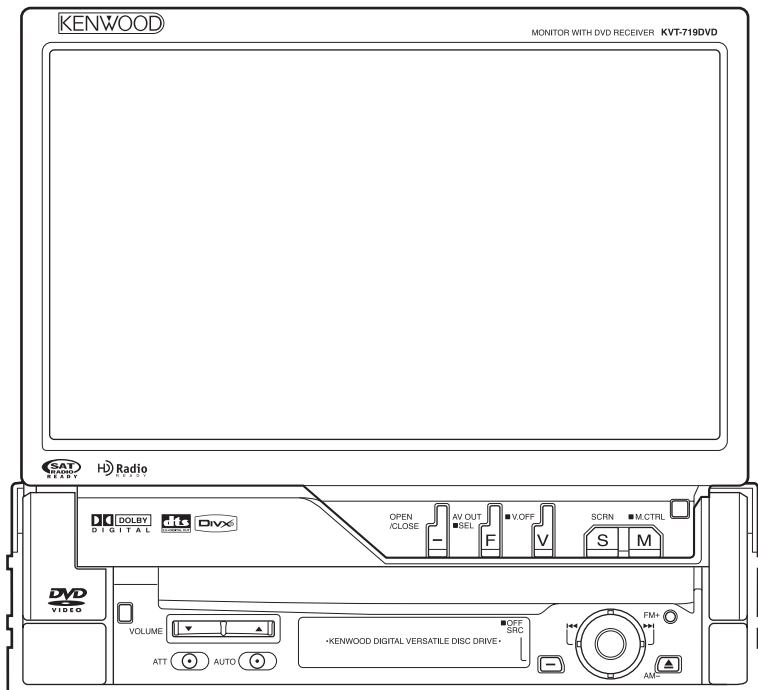
KVT-719DVD/729DVD /729DVDY/739DVD

SERVICE MANUAL

KENWOOD

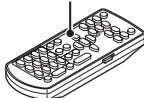
Kenwood Corporation

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B53-0507-00 (N) 552



Illustrations is KVT-719DVD

Remote controller
(A70-2082-15 : RC-DV330) M,X type
(A70-2083-15 : RC-DV340) E,K,R type

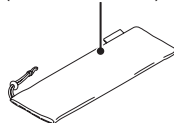


Illustrations is RC-DV340

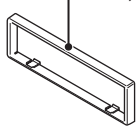
SIZE AAA BATTERY
(NOT SUPPLIED)



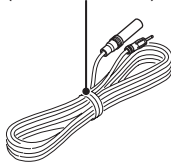
Carrying case
(W01-1661-05)



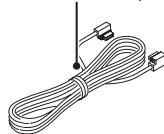
Escutcheon
(B07-3159-02)



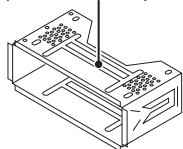
Cord with plug (6m)
(E30-6483-05)



Cord with plug (6m)
(E30-6688-05)



Mounting hardware assy
(J21-9823-03)



Lever
(D10-4674-04) x2



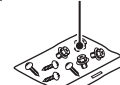
Wire band
(J61-0620-05) x2



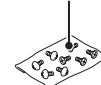
Mounting hardware
(J22-0054-14) x2



Screw set
(N99-1753-05)

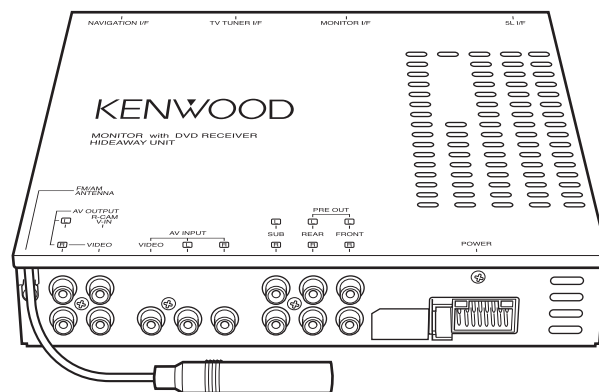


Screw set
(N99-1775-05)



TDF SPARE-PANEL

MODEL	TDF PANEL No.	TDF NAME
KVT-719DVD/729DVD /729DVDY/739DVD	Y33-2760-60	TDF-719DVD

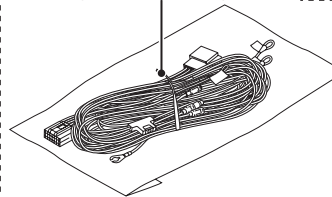


E type

Antenna adaptor
(T90-0552-05)

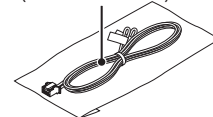


DC cord (6m)
(E30-6681-15)

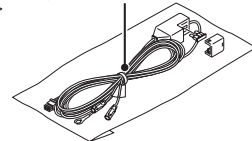


M,X type

Cord with plug (1m)
(E30-6693-05)

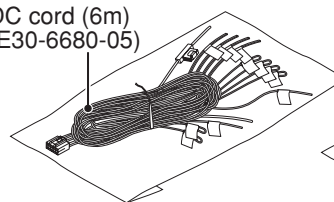


DC cord (35cm)
(E30-6676-15)

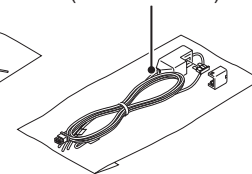


K,M,R,X type

DC cord (6m)
(E30-6680-05)



DC cord (35cm)
(E30-6675-05)



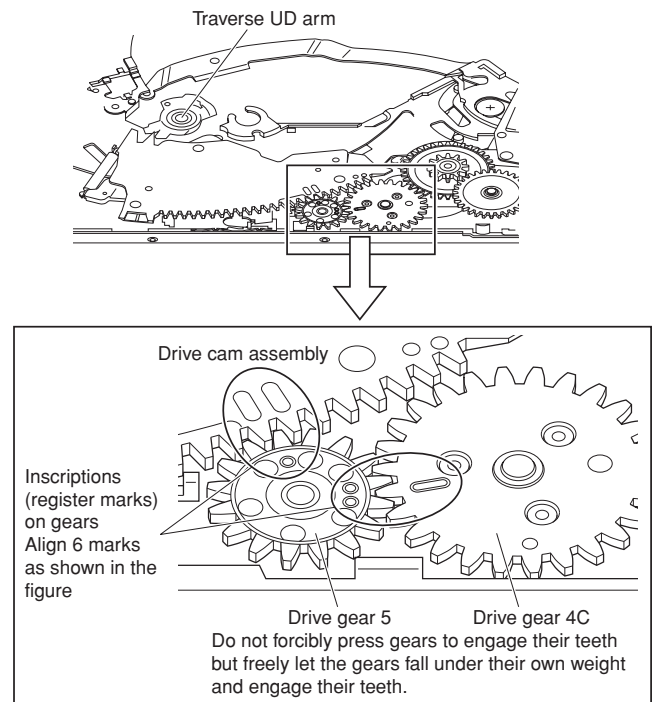
This product uses Lead Free solder.

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

- The IC106 in the DIGITAL I/O UNIT (X88-2020-11) is not a replaceable component.
In case of defective of this IC, replace the entire unit (X88-2020-11).
- The IC5, IC21, and IC60 in the DVD unit (X37-1120-03) are not replaceable components.
In case of defective of any of these ICs, replace the DVD mechanism assembly. (The IC5 has a device key, which shall be made consistent with the S/No. of the mechanism assembly after replacement. Thus you cannot replace only the board.)

GEAR POSITION IN A DVD MECHANISM

In assembling the Traverse UD arm, Drive cam assembly, Drive gear 5 and Drive gear 4C, align register marks on these components.

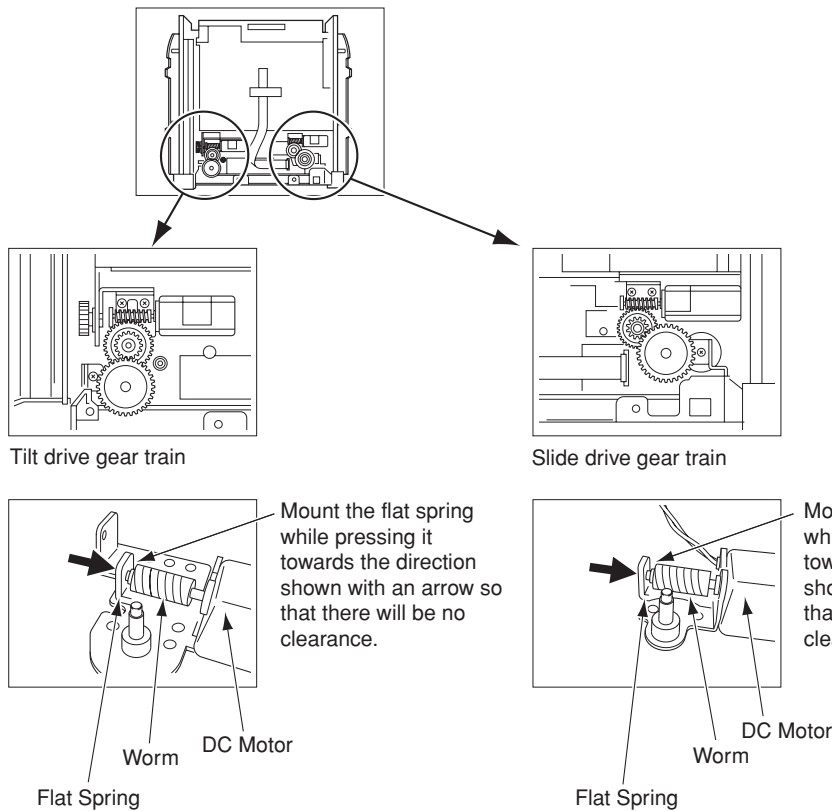


CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

Observe the instructions described in this document when you are going to replace the parts or components that are shown in this document.

1. Replacement of motor flat spring

- When mounting the flat spring that shall be in contact with the worm gear, press the spring toward the direction shown with an arrow so that there will be no gap between the tip of the gear and the spring and then mount the spring. The gear shall be pressure-inserted into the motor.
- Note that there are two motors. Above operation of mounting the flat spring is required on both of them.

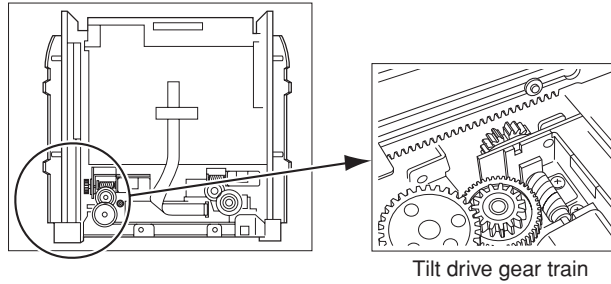


CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

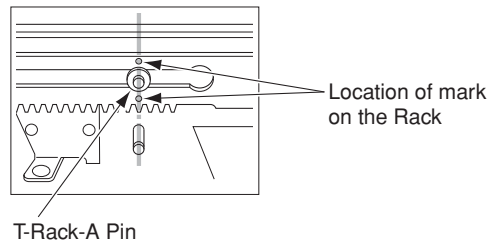
2. Phase matching among gears

- Monitor tilt is driven under the control of the rotary sensor and the phase matching among gears and sensor is required.

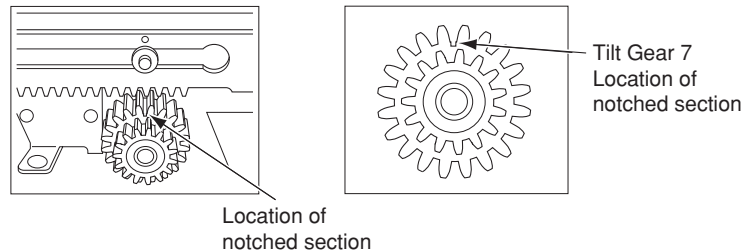
The procedure for the phase matching is described in the rest of this subsection.



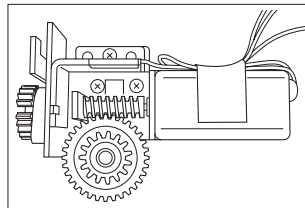
- 1) Align the mark on the rack with the pin. (When the monitor is folded down at 0 degree, the rack is located at the position where the mark and pin are aligned.)



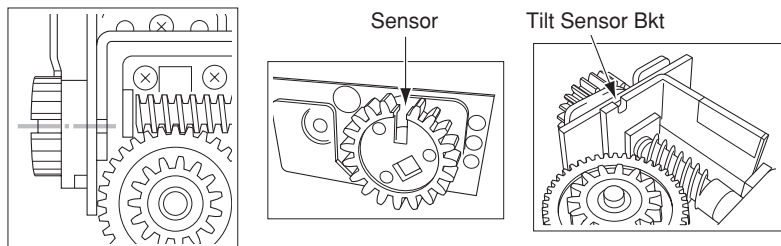
- 2) Insert the gear while keeping aligning the rack pin with the notched section on the tilt gear 7.



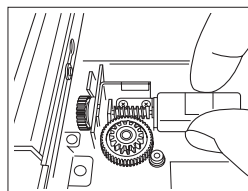
- 3) Pre-assemble the tilt motor bracket assembly (BKT Assy).



- 4) Align the notch on the sensor BKT with the concave section of the sensor in the Assy.



- 5) While keeping the conditions stated in 3) and 4), insert the tilt motor BKT Assy transversally, and fix the motor.



CAUTIONS IN ASSEMBLING PANEL DRIVE MECHANISM (A10-5171)

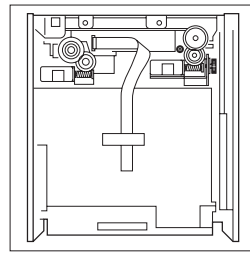
3. Insertion of slider

- This subsection describes cautions for inserting the slider (slide section inside of the unit) into the outer chassis.

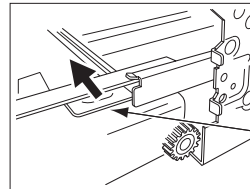
- 1) On the rail at the left side of the slider, there is a part called a stabilizer that is used to minimize play in right and left sides.

The slide is made of resin. (Note that the rail is shown at the right side of the slider in the picture.)

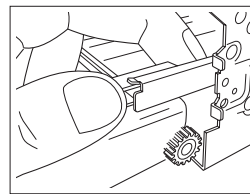
When inserting the slider, press the stabilizer towards the direction shown with a blue arrow and insert it into the groove on the rail.



(Slider -Slide section inside of the unit)

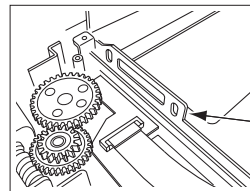


Stabilizer

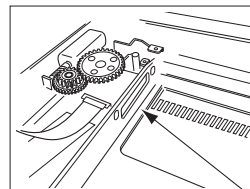


- 2) PCB holder is pushed out towards the downside of the picture due to the spring force and thus the chassis and photo reflection sheet may be get caught by the holder during the assembly.

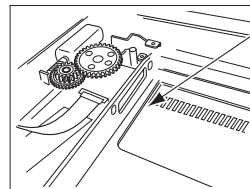
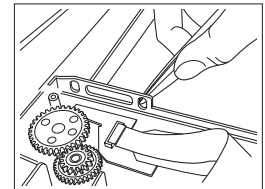
Insert the slider while slightly lifting up the holder with a pair of tweezers or any other similar device.



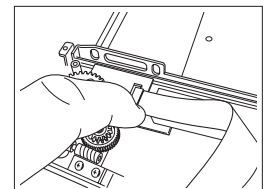
PCB Holder



Hold and lift up the holder with a pair of tweezers.



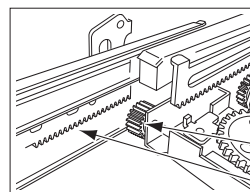
These portions tend to be get caught.



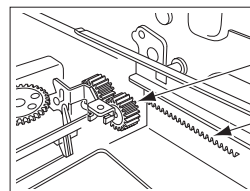
Push the opposite side of the PCB holder towards the downside of the picture and lift up the portions that may get caught.

- 3) Insert the gear after confirming that the both of D shaft gears at the right and left sides of the slider are aligned with the tip of the right and left racks on the chassis.

(Otherwise the slider will be inserted sidelong.)

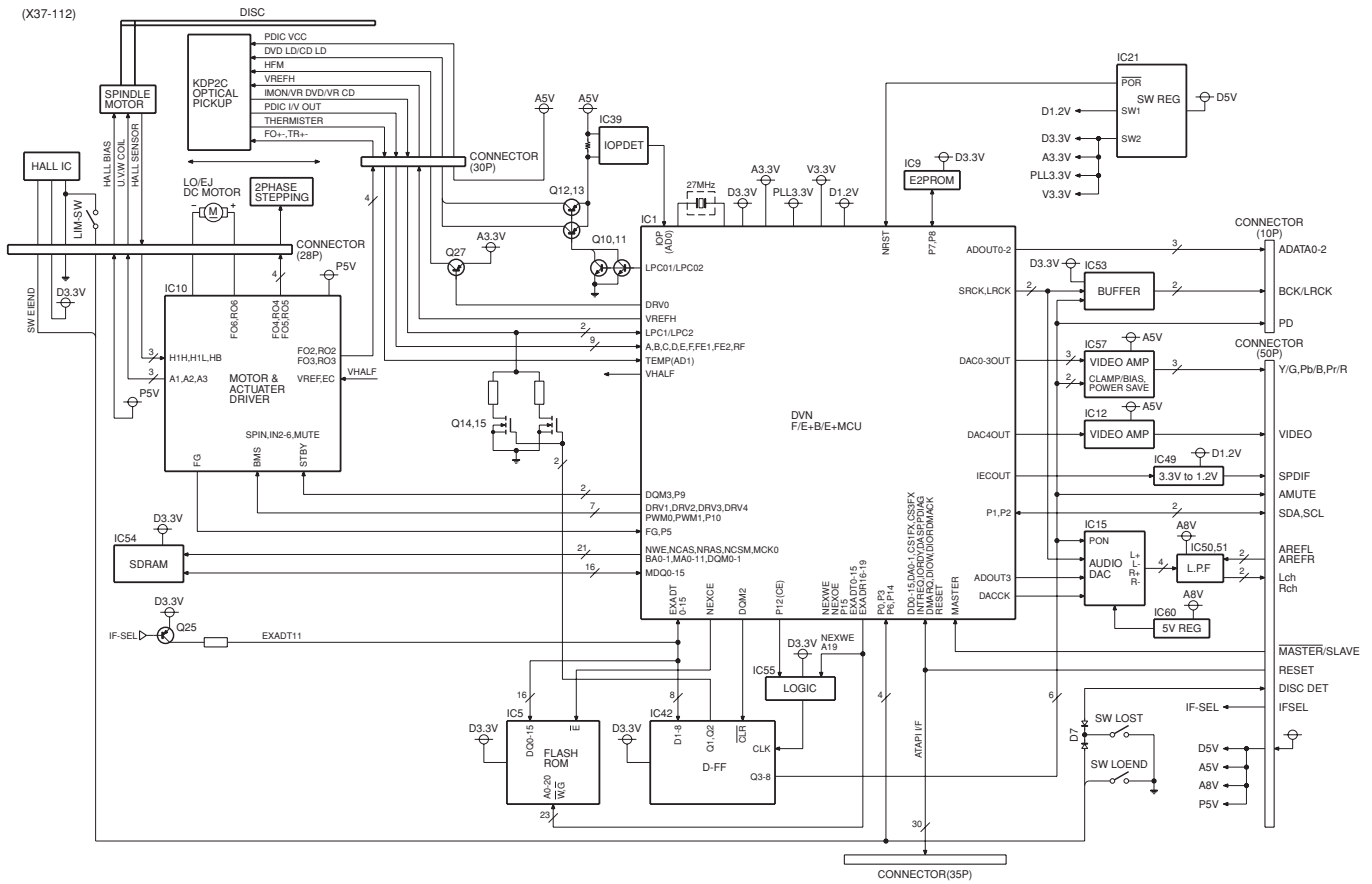


D shaft gear
Rack gear



D shaft gear
Rack gear

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	3.3V regulator	BU_3.3V
IC2	3.3V regulator	TC3.3V
IC10	OP AMP	AREF power supply (4V)
IC101	DC-DC control IC	DC-DC control (Mechanism 7.5V, V5V)
IC102	DC-DC control IC	DC-DC control (SW3.3V, D5V)
IC201	MPU	System μ -com
IC202	Reset IC	Reset IC
IC203	E2MROM	Save settings
IC205	AND	Inverter PWM buffer
IC301	Chroma gamma	Chroma gamma
IC302	NOT	HSY reverse buffer
IC303	Monostable multivibrator	HSYNC delay
IC304	NOT	HSYNC delay
IC400	VIDEO ISO AMP	iPod video signal
IC401	AUDIO ISO AMP	iPod audio signal
IC402	Serial/parallel conversion	Extension of μ -com port
IC403	Video switch	X34 RGB or Graphic RGB
IC404	Video switch	IC403 RGB or DVD RGB
IC405	Video switch	iPod or DVD or Graphic or X34 Composite signal
IC406	Video switch	For AVOUT (To X34)
IC407	Audio selector	MAIN
IC408	Audio selector	SUB
IC501	Motor driver	Tilt
IC502	Motor driver	Slide
IC503	NOT	Remote controller signal waveform shaping
Q1	SW	ACC_DET detection circuit
Q2~10	SW	BU_DET detection circuit
Q13	Short protection	BU power supply regulator (8.5V)
Q14	8.5V regulator	BU power supply regulator (8.5V)
Q15~17	8.5V regulator control	BU power supply regulator (8.5V)
Q19~21	SW	P-ON 14V control
Q22	SW FET	P-ON 14V ON/OFF
Q23,24	Emitter follower	Analogue power supply reference circuit
Q25,26	SW	T_P3.3V switch
Q31	8V regulator	DVD A8V regulator
Q32~34	8V regulator control	DVD A8V regulator
Q35	8V regulator	A8V regulator
Q36~38	8V regulator control	A8V regulator
Q43	9V regulator	LED9V regulator
Q44~46	9V regulator control	LED9V regulator

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q101	SW	DC-DC output voltage switching
Q103,106 Q108,111	SW	DC-DC protection control
Q104	SW	DC-DC SW FET (5V or 8V)
Q105	SW	DC-DC SW FET (5V)
Q109	SW	DC-DC SW FET (3.3V)
Q110	SW	DC-DC SW FET (5V)
Q201	SW	μ-com reset SW
Q203	SW	KEY RESET
Q204,205	SW	LED SW (Red)
Q206,207	SW	LED SW (Green)
Q208~210	SW	TDF power supply SW
Q301	Buffer	Composite signal
Q304	Buffer	VCOM
Q305	MUTE	IC301 SYNC OUT MUTE
Q306	Buffer	RGB Signal_R
Q307	Buffer	RGB Signal_G
Q308	Buffer	RGB Signal_B
Q309	Buffer	HSY SYNC
Q401	Buffer	Graphic SYNC
Q501	MUTE	DVD MUTE (Lch)
Q502	MUTE	DVD MUTE (Rch)
Q503	SW	DVD MUTE control
Q504	Buffer	SPDIF signal
Q508	Buffer	Remote control signal

● SWITCH UNIT (X16-3920-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC201	Remote controller photoreceptor	Remote controller photoreceptor
Q101	For switching DSI signal	DSI signal control
Q206	For switching LED	Switch LED_Red or LED_Green

● ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC61	3 terminal regulator	V5V generation
IC71	3 terminal regulator	Audio8V and Tuner8V generation
IC101	Pin 100 μ-com	Primarily, audio board control
IC102	Voltage detection IC	μ-com reset voltage (4.2V) monitoring
IC104	Logic IC (AND)	Remote controller data switching (REMO/WREMO)
IC105	Serial and parallel conversion IC	Audio/Video selector control data output from μ-com
IC106	Logic IC (AND x 4)	5V step-up for the signal data between the unit and BOX

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC201	Electronic volume IC	Audio volume control and audio signal selection
IC202	Logic IC (multi plexer)	Audio signal selection (Main)
IC203	Logic IC (multi plexer)	Audio signal selection (Sub)
IC251	RDS decoder IC	RDS signal processing and demodulation
IC301	Power IC	Power amplifier for speaker output
IC501	Isolation amplifier IC	Audio signal GND isolation (X14 source_MAIN)
IC502	Isolation amplifier IC	Audio signal GND isolation (X14 source_SUB)
IC701	Isolation amplifier IC	Audio signal GND isolation (TV-CH)
IC702	Logic IC (AND)	NAVI remote controller data switching
IC723	Isolation amplifier IC	Audio signal GND isolation (AV-IN)
IC802	Video switch	Video signal output switching (for monitoring the unit)
IC803,804	Video switch	Video signal output switching (AV-OUT)
IC805	Video switch	Video signal detection SW
IC806	Video switch	Video signal output switching (for monitoring the unit)
IC807	Video switch	Video signal selection (R)
IC808	Video switch	Video signal selection (G)
IC809	Video switch	Video signal selection (B)
IC810	Video switch	Video signal output switching (for monitoring the unit)
Q1	Transistor	REVERSE detection circuit
Q2	Transistor	PARKING detection circuit
Q3	Transistor	ILLUMI detection circuit
Q4	Transistor	BU detection circuit
Q6	Transistor	BU detection circuit
Q7~10	Transistor	P_CON output circuit
Q11,12	Transistor	ANT_CON output circuit
Q13	Transistor	EXT_CONT output circuit
Q14,15	Transistor	RELAY control circuit
Q51	Transistor	BU5V generation
Q52~54	Transistor	BU5V circuit
Q61	Transistor	V5V generation
Q62	Transistor	V5V circuit
Q70	Transistor	P-ON circuit
Q71	Transistor	Audio8V and Tuner8V generation
Q72	Transistor	Audio8V and Tuner8V circuit
Q81~85	Transistor	RELAY control circuit
Q91~95	Transistor	RELAY control circuit
Q101,102	Transistor	RESET detection circuit
Q103	Transistor	RESET detection circuit (TV)
Q104,105	Transistor	MUTE circuit (RESET)
Q107	Transistor	MUTE circuit (DVD)
Q251,252	Transistor	On when AM (Tuner8V)

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q351	Transistor	Pre-OutMute Mute transistor (FL)
Q352	Transistor	Pre-OutMute circuit (Front, Rear)
Q353	Transistor	Pre-OutMute Mute transistor (FR)
Q354	Transistor	Pre-OutMute Mute transistor (RL)
Q355	Transistor	Pre-OutMute Mute transistor (RR)
Q356	Transistor	Pre-OutMute Mute transistor (SUB L)
Q357	Transistor	Pre-OutMute circuit (SUB)
Q358	Transistor	Pre-OutMute Mute transistor (SUB R)
Q359	Transistor	Pre-OutMute Mute transistor (AV-OUT L)
Q360	Transistor	Pre-OutMute circuit (AV-OUT)
Q361	Transistor	Pre-OutMute Mute transistor (AV-OUT R)
Q802~808	Transistor	Synchronizing separator circuit
Q809	Transistor	TV_MUTE circuit (R)
Q810	Transistor	TV_MUTE circuit (G)
Q811	Transistor	TV_MUTE circuit (B)
Q813	Transistor	TV_MUTE circuit (R)
Q814	Transistor	TV_MUTE circuit (G)
Q815	Transistor	TV_MUTE circuit (B)

● VIDEO UNIT (X35-4710-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Inverter control IC	Control and drive of the inverter circuit for the back light
IC101	DC/DC converter IC	+12.5V power supply for VCOM amplifier (Gamma IC) and -12.0V/+18.5V power supply for LCD
IC102	Mono-multi	Delay 5V power supply for DC/DC IC
IC103	NOT	Reverse
IC301	Serial/parallel conversion	Extension of μ -com port
IC302	AND	Buffer to delay V.SYNC
IC303	PLL LPF	LPF for PLL control (VT voltage control)
IC304	Timing controller IC	Control of LCD module
IC401	Dimmer sensor	Detection for auto-dimmer
Q1	Dimmer SW	Turn on or off in response to the PWM control signal to dimmer the back light
Q2,3	Inverter driver	Drive the inverter circuit
Q4	Switch	SW to change the free run frequency for inverter control IC
Q5	5V constant voltage	5V power supply for inverter control IC
Q301	VCO	For PLL oscillation
Q303	Buffer	For PLL clock
Q501	Touch panel Y1 SW	Y0 (X0) SW: On in response to Y (X) axis input and off in response to X (Y) axis input
Q502	Touch panel X1/Y0 SW	X1 SW: Turn on in response to sensing of the touch on the panel or X axis input and apply voltage
Q503	Touch panel Y1 SW	Y1 SW: Turn on in response to Y axis input and apply voltage

COMPONENTS DESCRIPTION

● DIGITAL I/O UNIT (X88-2020-11)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC100	Fixed Current Limit Power Distribution Switch	Large current distribution switch for USB1
IC104	Exclusive OR Gate	EP_SYNC (composite sync) output
IC105	Low Dropout Voltage Linear Regulator	SW3.3V → 1.8V (for EP9307IRZ)
IC106	System-On-Chip Processor	Media Processor
IC108	Inverter	E_HSYNC Buffer
IC200	Triple Inverter	Sub Clock Buffer
IC201	Octal Bus Transceiver	Flash Memory data line switching (DA0~7)
IC202,203	SDRAM 256Mbit	SDRAM for work memory
IC205	Octal Bus Transceiver	Flash Memory data line switching (DA8~15)
IC207	iPod Authentication Coprocessor	iPod Authentication
IC211	NOR Flash Memory 128Mbit	Flash Memory for program data and graphic data
IC301	Stereo DAC	Audio signal digital/analog converter
IC302	Color TV signal encoder	Graphic signal digital/analog converter
IC305	Dual OP-Amp.(LPF)	Stereo DAC Output LPF
IC309	On-Screen Display Controller	On-Screen Display analog signal output
IC316	Triple Inverter	Dot Clock(14.4MHz) Buffer
IC322	CPLD	2/3 frequency dividing and PAL thinning control (compression processing circuit)
IC332	Low Dropout Voltage Regulator	A8V → A5V(for Stereo DAC and LPF)
IC336	Triple Schmitt Inverter	VSY, HSY Buffer
IC337	Triple Schmitt Inverter	CPV, STH Buffer
Q302	General Purpose Transistor	OSD ROUT Current Amplifier
Q303	General Purpose Transistor	OSD GOUT Current Amplifier
Q304	General Purpose Transistor	OSD BOUT Current Amplifier

● DVD UNIT (X37-1120-03)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	One chip LSI for DVD player	RF signal processing / Servo processing / Decoding processing / AV decoding processing
IC5	FLASH ROM	To retain F/W for one chip LSI (Nonvolatile memory)
IC9	EEP ROM	To retain data for one chip LSI (Nonvolatile memory)
IC10	Driver IC	Fo coil / Tr coil / SP motor / SLD motor / LO-EJ motor drive
IC12	1ch video AMP	+6dB amplifier with internal composite video output filter
IC15	Audio DAC	DA converter for 2ch analogue audio output
IC21	2-output switching REG	5V → 3.3V/1.2V
IC39	OP-AMP for lop measurement	For lop measurement
IC42	Logic IC for port extension	For port extension
IC49	Low voltage logic	For S/PDIF signal amplitude conversion (3.3V → 1.2V)
IC50	OP-AMP for audio LPF	LPF for 2ch analogue audio output (Rch)
IC51	OP-AMP for audio LPF	LPF for 3ch analogue audio output (Lch)

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC54	SDRAM	To retain data for one chip LSI (Nonvolatile memory)
IC55,56	Logic IC for port extension	For port extension
IC57	3ch video amplifier	With built-in filter +6dB amplifier for component/RGB video output
IC60	Power supply for 5.0V	8V → 5V (Exclusively for audio DAC)
Q1	Transistor with internal resistor	LO_MUTE control
Q2	Transistor with internal resistor	For FG signal
Q3	Transistor with internal resistor	For BMS
Q4	Transistor with internal resistor	DRMUTE control
Q10	Front end transistor for APC	Control of CD laser diode emission
Q11	Front end transistor for APC	Control of DVD laser diode emission
Q12	Rear end transistor for APC	Control of CD laser diode emission
Q13	Rear end transistor for APC	Control of DVD laser diode emission
Q14	MOS-FET	ON/OFF control of CD laser diode
Q15	MOS-FET	ON/OFF control of DVD laser diode
Q20	MOS-FET for level shifter	Level shifter for I2C clock
Q21	MOS-FET for level shifter	Level shifter for I2C data
Q24	MOS-FET	For Iop measurement
Q25	Transistor with internal resistor	IFSEL control
Q27	Transistor with internal resistor	HFM ON/OFF control
Q28	Transistor for APC	For CD laser diode protection (Current limiter)
Q29	Transistor for APC	For DVD laser diode protection (Current limiter)

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM μ -COM: 703261YGC315A (X14: IC201)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	AVREF0				
2	AVSS				
3	V_MUTE	O	For video mute		H: ON, L: OFF
4	HSY_ADJ/HSY_ADJ	O	Free run adjustment		HSY frequency control
4	HSY_ADJ/NC	O	(KOS)		
5	AVREF1				
6	DSI/SI	O	DSI control (KVT)		
6	DSI/SI	O	SI control (DDX)		
6	NC	O	(KOS)		
7	CIR_BU_DET/CIR_BU_DET	O	When BU_DET has been detected, make the core recognize the detection.		
7	CIR_BU_DET/STATUS0	O	Cope with the special only when the mechanism endurance jig (KVT).		
8	FLMD0	I	Used when writing μ -com		
9	VDD				
10	REGC				
11	VSS				
12	X1		4.953MHz		
13	X2				
14	RESET				
15	XT1		32.768kHz		
16	XT2				
17	PANEL_DET/PANEL_DET	I	Front panel mounting/dismounting detection (KVT/KOS).		H: Panel dismantled L: Panel mounted
17	PANEL_DET/NC	O	(DDX)		
18	VSY (VD)	I	V-SYNC input		
19	BU_DET	I	Backup detection		H: Reduced voltage detection
20	OSD_MODE/OSD_MODE	O	Output when the screen mode is cinema/zoom		Refer to "NTSC_PAL"
20	OSD_MODE/NC	O	(KOS)		
21	ACC_DET	I	ACC detection		H: ACC reduced voltage detection
22	γ _CS	O	Communication CS with Chroma γ -IC		
23	γ _DATA	O	Communication data with Chroma γ -IC		
24	γ _CLK	O	Communication clock with Chroma γ -IC		
25	CIR_MDATA	O	Communication with media processor		
26	CIR_SDATA	I	Communication with media processor		
27	CIR_INI	O	Media processor initial		Normally fixed to "L" and output "H" only in the case of reset recovery
28	CIR_RESET	O	Reset of media processor		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
29	CIR_STB	I	Standby of media processor		
30	CIR_MREQ	O	Request to media processor		
31	CIR_SREQ	I	Request from media processor		
32	CIR_CON	O	Permission to operate media processor		
33	EVSS				
34	EVDD				
35	SDA	I/O	Communication data with E2P		
36	SCL	O	Communication clock with E2P		
37	SIPA_CLK1/SIPA_CLK1	O	Serial/parallel IC communication clock (KVT/DDX)		
37	SIPA_CLK1/NC	O	(KOS)		
38	SIPA_DATA1/PLL_EN	O	Enable PLL_IC (KOS)		
38	SIPA_DATA1/SIPA_DATA1	O	Serial/parallel IC communication data (KVT/DDX)		
39	PGOOD	I	DC-DC_IC error detection		
40	NC	O	Cope with the special only when the mechanism endurance jig (KVT)		
40	STATUS1/SYNC_DET	I	Detection of composite signal in the monitor output (KOS)		
40	STATUS1/NC	O			
41	DISC_DET/DISC_DET	I	Detection of disc (KVT/DDX)		L: Detected (Disc is found)
41	DISC_DET/NC	O	(KOS)		
42	DVD_RESET/DVD_RESET	O	DVD mechanism resetting (KVT/DDX)		
42	DVD_RESET/MON_SYS_ON	O	Monitor μ -com ON/OFF control (KOS)		
43	DVD_SDA/DVD_SDA	I/O	Communication data with DVD mechanism (KVT/DDX)		
43	DVD_SDA/MON_S_DATA	O	Communication data with monitor μ -com (KOS)		
44	DVD_SCL/DVD_SCL	O	Communication clock with DVD mechanism (KVT/DDX)		
44	DVD_SCL/MON_M_DATA	I	Communication with monitor μ -com (KOS)		
45	INV_PWM/INV_PWM	O	Inverter frequency control (KVT/DDX)		PWM output
45	INV_PWM/MON_RESET	O	Reset of monitor μ -com (KOS)		
46	POWER_START	O	DC-DC_IC soft start		L: Start, H: Stop
47	POWER_PWM	O	Oscillation frequency control of DC-DC_IC		PWM output
48	PON	O	Power ON/OFF control		H: ON, L: OFF
49	PWM/REMO_PWM	O	Convert the touch on the screen into the remote controller code (KOS)		PWM output
49	PWM/PWM	O	LCD brightness control (KVT/DDX)		PWM output
50	HSY (HD)	I	H-SYNC input		Count H
51	MCNT/PLL_MDATA	O	Data output to PLL_IC (KOS/X88FCT special)		
51	MCNT/MCNT	O	P-MECHA power supply voltage switching (KVT)		H: 7.5V, L: 5V (KVT)
51	MCNT/MCNT	O	T-MECHA power supply voltage switching (DDX)		H: 8V, L: 5V (DDX)
52	INV_SW/PLL_CLK	O	Communication clock with PLL_IC (KOS/X88FCT special)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
52	INV_SW/INV_SW	O	Inverter free run frequency switching (KVT/DDX)		
53	SYS_SDATA	I	Data input from AUDIO μ -com		
54	SYS_MDATA	O	Data output to AUDIO μ -com		
55	SYS_CLK	O	Communication clock with AUDIO μ -com		
56	SYS_SREQ	I	Request from AUDIO μ -com		
57	TYPE3/STATUS2	O	Cope with the special only when the mechanism endurance jig (KVT)		
57	TYPE3	O	Setup of destination	①	
58	SRC/MON_POWER	I	Monitor power ON/OFF input (KOS)		
58	SRC/SRC	I	Source key (KVT/DDX)		
59	SYS_MREQ	O	Request to AUDIO μ -com		
60	SYS_ON	O	AUDIO μ -com ON/OFF control		
61	OPEN_CLOSE/OPEN_CLOSE	I	OPEN/CLOSE key on P-MECHA (KVT)		
61	OPEN_CLOSE/OPEN_CLOSE	I	Eject key (DDX)		
61	OPEN_CLOSE/NC	O	(KOS)		
62	TYPE1	I	Setup of destination	①	
63	TYPE2	I	Setup of destination	①	
64	NTSC_PAL/NTSC_PAL	I	NTSC/PAL determination input		H: NTSC, L: PAL
65	TMOTOR_M/PLL_EN	O	Enable PLL_IC (X88FCT jig special)		
65	TMOTOR_M/TMOTOR_M	O	Panel mechanism tilt control (KVT)		
65	TMOTOR_M/TILT_M-	O	Tilt mechanism tilt control (DDX)		
65	TMOTOR_M/NC	O	(KOS)		
66	TMOTOR_P/PMOTOR_P	O	Panel mechanism tilt control (KVT)		
66	TMOTOR_P/TILT_M+	O	Tilt mechanism tilt control (DDX)		
66	TMOTOR_P/NC	O	(KOS)		
67	SMOTOR_M/SD_DET1	I	SD card detection (DDX)		
67	SMOTOR_M/SMOTOR_M	O	Panel mechanism slide control (KVT)		
67	SMOTOR_M/NC	O	(KOS)		
68	SMOTOR_P/SD_DET2	I	SD card detection (DDX)		
68	SMOTOR_P/SMOTOR_P	O	Panel mechanism slide control (KVT)		
68	SMOTOR_P/SP_ACC_DET	I	Speaker input detection \rightarrow "H" when the speaker input is found (KOS)		L: Speaker input is not found
69	BVSS				
70	BVDD				
71	WRT_E2P	I	Used when writing E2P		
72	MINI_CLK/MINI_CLK	O	Mini liquid crystal control clock (Mid at KVT)		
72	MINI_CLK/RGBOUT_MUTE	O	Mute RGB output when the connected monitor is other than the special monitor (KOS)		
72	MINI_CLK/NC	O	Lo/DDX at KVT		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
73	ILL_R/ILL_R	O	Key illumi red ON/OFF (Lo at KVT)		H: ON, L: OFF
73	ILL_R/KEY_ILL	O	Key illumination ON/OFF (DDX)		H: ON, L: OFF
73	ILL_R/MINI_DATA	O	Mini liquid crystal control data (Mid at KVT)		
73	ILL_R/NC	O	KOS		
74	ILL_G/JIG_EJ	I	Can operate without tilt mechanism (DDX)		L: Normal
74	ILL_G/ILL_G	O	Key illumi green ON/OFF (Lo at KVT)		H: ON, L: OFF
74	ILL_G/MINI_CS	O	Mini liquid crystal control chip select (Mid at KVT)		
74	ILL_G/NC	O	KOS		
75	FIELD_DET/FIELD_DET	I	Determination of video signal field (KVT/DDX)		
75	FIELD_DET/SYNC_SEL	O	Switching of composite signal in the monitor output (KOS)		
76	FLMD1	I	Used when writing μ -com		
77	ENABLE/ENABLE	O	Backlight ON/OFF (KVT/DDX)		H: ON, L: OFF
77	ENABLE/REMO_SEL	O	Remote controller output switching (KOS)		H: DVD player operation with the accessory remote controller L: DVD player operation with the other controller than accessory remote controller
78	Y0/OEM_SW	O	Is the connected monitor the special (dedicated) monitor or not? (KOS)		H: Special (Dedicated) L: OEM (Default)
78	Y0/Y0	O	Touch panel control (KVT/DDX)		
79	X1/ γ _VIN_SW2	O	Chroma γ COMP/RGB input switching (KOS)		
79	X1/X1	O	Touch panel control (KVT/DDX)		
80	X0/ γ _SYNC_SW2	O	Chroma γ SYNC input switching (KOS)		
80	X0/X0	O	Touch panel control (KVT/DDX)		
81	SW_A/SW_A	I	Detection of panel mechanism (KVT)		
81	SW_A/HPOS1	O	Display "H" position adjustment (DDX)		
81	SW_A/RGB_SW3	O	RGB switching control (KOS)		
82	SW_B/SW_B	I	Detection of panel mechanism (KVT)		
82	SW_B/HPOS2	O	Display "H" position adjustment (DDX)		
82	SW_B/VIN_SW4	O	RGB switching control (KOS)		
83	SW_C/SW_C	I	Detection of panel mechanism (KVT)		
83	SW_C/HPOS3	O	Display "H" position adjustment (DDX)		
83	SW_C/VIN_SW5	O	COMP switching control (KOS)		
84	ZACT_SW/ZACT_SW	I	Detection of panel mechanism (KVT)		
84	ZACT_SW/HPOS4	O	Display "H" position adjustment (DDX)		
84	ZACT_SW/COMP_MUTE	O	COMP mute control (KOS)		H: When OEM_SW is "L" and at full graphic
85	SIPA_CLK2/SIPA_CLD2	O	Serial/parallel IC communication clock (KVT)		
85	SIPA_CLK2/MODE1	O	Screen mode switching (DDX)		
85	SIPA_CLK2/RGB_MUTE	O	RGB mute control (KOS)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
86	SIPA_DATA2/AOUT_SW5	O	Audio out switching (KOS)		
86	SIPA_DATA2/SIPA_DATA2	O	Serial/parallel IC communication data (KVT)		
86	SIPA_DATA2/MODE2	O	Screen mode switching (DDX)		
87	LED_SW/AOUT_SW6	O	Audio out switching (KOS)		
87	LED_SW/LED_SW	O	LED goes on or off in conjunction with OPEN/CLOSE (KVT)		H: ON, L: OFF
87	LED_SW/MODE3	O	Screen mode switching (DDX)		
88	MIRROR/EJECT	I	Eject key (KVT)		
88	MIRROR/MIRROR	O	Reverse control of back monitor mirror (DDX)		
88	MIRROR/NC	O	(KOS)		
89	VCOM/VCOM	I	For γ curve automatic adjustment (KVT/DDX)		
89	VCOM/NC	O	(KOS)		
90	VR/VR	I	For γ curve and PHASE/TINT automatic adjustment (KVT/DDX) For PHASE/TINT automatic adjustment (KOS)		
91	VG/VG	I	For γ automatic adjustment (KVT/DDX) For RGB level automatic adjustment (KOS)		
92	VB/VB	I	For γ curve and PHASE/TINT automatic adjustment (KVT/DDX) For PHASE/TINT automatic adjustment (KOS)		
93	KEY1/KEY1	I	(KVT)		
93	KEY1/KEY3	I	(DDX)		
93	KEY1/NC	O	(KOS)		
94	KEY2/KEY2	I	(KVT)		
94	KEY2/NT_PAL	O	NTSC/PAL output for X35 (DDX/KOS)		NTSC: L, PAL: H
95	R_SENS/R_SENS	I	Detection of panel mechanism tilt (KVT)		
95	R_SENS/R_SENS	I	Detection of tilt mechanism tilt (DDX)		
95	R_SENS/NC	O	(KOS)		
96	ZACT_CONT/LEN_ON	O	Disc LED ON/OFF (Mid at DDX)		H: ON, L: OFF
96	ZACT_CONT/ZACT_CONT	I	Panel mechanism slide position detection (KVT)		
96	ZACT_CONT/NC	O	Lo/KOS at DDX		
97	AUTO_DIM/AUTO_DIM	I	Auto dimmer input (KVT)		
97	AUTO_DIM/NC	O	DDX/KOS		
98	YDATA/YDATA	I	Touch data input (KVT/DDX)		
98	YDATA/NC	O	(KOS)		
99	XDATA/XDATA	I	Touch data input (KVT/DDX)		
99	XDATA/NC	O	(KOS)		
100	TYPE0	I	Setup of destination	①	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth Value Table

① KVT/DDX/KOS Setup of destination

MODEL	Category	Destination	TYPE3	TYPE2	TYPE1	TYPE0
Lo	KVT	K	0	0	0	*
		E	0	0	0	*
		M	0	0	0	*
		V/X	0	0	0	*
		R	0	0	0	*
	DDX	K	0	0	1	*
		E	0	0	1	*
		M	0	0	1	*
		V/X	0	0	1	*
		R	0	0	1	*
	KOS	K	0	1	0	*
		E	0	1	0	*
		M	0	1	0	*
		V/X	0	1	0	*
		R	0	1	0	*
	AVN	K	0	1	1	*
		E	0	1	1	*
		M	0	1	1	*
		V/X	0	1	1	*
		R	0	1	1	*
Mid	KVT	K	1	0	0	*
		E	1	0	0	*
		M	1	0	0	*
		V/X	1	0	0	*
		R	1	0	0	*
	DDX	K	1	0	1	*
		E	1	0	1	*
		M	1	0	1	*
		V/X	1	0	1	*
		R	1	0	1	*
	KOS	K	1	1	0	*
		E	1	1	0	*
		M	1	1	0	*
		V/X	1	1	0	*
		R	1	1	0	*

TYPE0 is AD input. Refer to the next table (TYPE0 Setup Voltage) for the "*".

TYPE0 Setup Voltage

Destination	μ-com setup value		
	min	Mid point voltage	max
K	0.00	0.00	0.41
E	0.42	0.83	1.23
M	1.24	1.65	2.06
V/X	2.07	2.48	2.88
R	2.89		3.30

MICROCOMPUTER'S TERMINAL DESCRIPTION

NTSC_PAL Setup

		Audio		γ			T/C
		VSYNC_DET	D8	D15	D9 0: NTSC, 1: PAL	SYNC_SW	NT_PAL
NTSC	GRA	-	1	0	1	Hi: IN2	Lo
	DVD	-	1		1	Lo: IN1	
	VD	Yes	0		-	Lo: IN1	
	None	None	0		-	Hi: IN2	
	iPod	-	1		0	Lo: IN1	
	None	-	1		0	Hi: IN2	
	TV	-	0		-	Lo: IN1	
	NAVI	-	1		1	Lo: IN1	
PAL	DVD	-	1	1	Lo: IN1	Hi	
	VD	Yes	0	-	Lo: IN1		
	None	None	0	-	Hi: IN2		
	iPod	-	1	1	Lo: IN1		
	None	-	1	1	Hi: IN2		
	TV	-	0	-	Lo: IN1		

OSD_MODE (Thinning measure between CPLD OFF/ON control)

	NTSC	PAL (NT_PAL: Hi)
FULL	Lo	Hi
NORMAL		
JUST		Lo
ZOOM		
CINEMA (ZOOM2)		

MICROCOMPUTER'S TERMINAL DESCRIPTION

● AUDIO μ -COM: 703030BYGCJ30 (X34: IC101)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	TV_JUDGE	I	TV-BOX new/old detection		
2	TUN_SCL	O	F/E I2C clock output terminal		
3	NAVI_RX	I	Navi control data input		
4	NAVI_TX	O	Navi control data output		
5	TV_MC_REQ	O	Communication request to TV_COM		
6	EVDD				
7	EVSS				
8	TV_SC_CON	O	Start-up request to TV_COM		
9	BEEP	O	BEEP		When BEEP: Pulse output
10	MIX_REMO	I	Remote controller input		
11	SYS_SREQ	O	Communication request to SYS_COM		
12	SYS_MDATA	I	SYS_COM communication data input		
13	SYS_SDATA	O	SYS_COM communication data output		
14	SYS_MCLK	I	SYS_COM communication clock		
15	SYS_MREQ	I	SYS_COM communication request input		
16	EXT_CON	O	EXT-CONT output		
17	VSYNC_DET	I	Video detection		
18	VPP				
19	RGB_MUTE	O	MUTE RGB except when NAVI or SECAM		
20	RGB_SW	O	NAVI/SECAM switching		
21	AIN_SEL5	O	Audio in switching (KOS)		
21	NC	O	KVT/DDX Only		
22	AIN_SEL6	O	Audio in switching (KOS)		
22	NC	O	KVT/DDX Only		
23	R_QUAL	I	RDS decoder QUAL input terminal		
24	R_DATA	I	RDS decoder DATA input terminal		
25	R_AFS_H	I/O	Constant number switching when noise detected		
26	AM+B	O	AM power supply ON		H: When AM, L: EXCEPT
27	AUTO_SW_1	O	SW for video detection		H: AVIN1, AVIN2, L: BACK CAMERA
28	AUTO_SW_2	O	Video detection, NTSC/PAL determination		H: AVIN2, L: AVIN1, BACK CAMERA
29	SEL_CLK	O	CLK for Audio and Video selector		
30	SEL_DATA	O	DATA for Audio and Video selector		
31	RESET				
32	XT1				
33	XT2				
34	REGC				
35	X2				
36	X1				
37	VSS				

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
38	VDD				
39	CLKOUT				
40	PRE_MUTESW	O	PREout sub woofer MUTE		H: MUTE OFF, L: MUTE ON
41	PRE_MUTER	O	PREout rear MUTE		H: MUTE OFF, L: MUTE ON
42	PRE_MUTEF	O	PREout front MUTE		H: MUTE OFF, L: MUTE ON
43	RELAY_SW1	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
44	RELAY_SW2	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
45	RELAY_SW3	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
45	NC	O	Low Only		L fixed
46	RELAY_SW4	O	ON/OFF of external equipment relay control		H: Relay ON, L: Relay OFF
46	NC	O	Low Only		L fixed
47	RELAY_DET1	I	Detection of external equipment relay control		When RELAY_SW1 is Hi, L: Normal, H: Error (Hi when SW1 is Low)
48	RELAY_DET2	I	Detection of external equipment relay control		When RELAY_SW2 is Hi, L: Normal, H: Error (Hi when SW2 is Low)
49	RELAY_DET3	I	Detection of external equipment relay control		When RELAY_SW3 is Hi, L: Normal, H: Error (Hi when SW3 is Low)
49	NC	O	Low Only		L fixed
50	RELAY_DET4	I	Detection of external equipment relay control		When RELAY_SW4 is Hi, L: Normal, H: Error (Hi when SW4 is Low)
50	NC	O	Low Only		L fixed
51	ILL_DET	I	ILL detection		L: Illumi ON
52	PAK_DET	I	Parking detection		H: Parking ON
53	REV_DET	I	Reverse detection		L: Reverse ON
54	P_CON	O	P-CON control output		L: When STANDBY or POWER OFF EXCEPT: H
55	BVDD				
56	BVSS				
57	ANT_CON	O	P-ANT control output		H: ANT UP, L: ANT DOWN
58	NC	O			
59	PWIC_STBY	O	PWIC standby		H: POWER ON, L: POWER OFF
60	PWIC_MUTE	O	PWIC_FR MUTE		L: MUTE ON
61	AUD_MUTE_C	O	E-VOL inputSEL_C MUTE		L: MUTE ON, H: MUTE OFF
62	AUD_MUTE_B	O	E-VOL inputSEL_B MUTE		L: MUTE ON, H: MUTE OFF
63	AUD_MUTE_A	O	E-VOL inputSEL_A MUTE		L: MUTE ON, H: MUTE OFF
64	AUD_MUTE2	O	E-VOL center, SWMUTE		L: MUTE ON, H: MUTE OFF
65	AUD_MUTE1	O	E-VOL rear MUTE		L: MUTE ON, H: MUTE OFF
66	AUD_MUTE0	O	E-VOL front MUTE		L: MUTE ON, H: MUTE OFF
67	AUD_SDA	I/O	E-VOL data output		
67	AUD_SDA	I/O	ROM correction E2PROM communication data input/output		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
68	AUD_SCL	O	E-VOL clock output		
68	AUD_SCL	O	ROM correction E2PROM communication clock output		
69	PON	O	A8V,V5V,SW5V ON/OFF		H: Only when in RESET sequence L: Other output
70	LX_RST	O	Hardware-reset to slave unit		
71	AVDD				
72	AVSS				
73	AVREF				
74	PWIC_DCDET	I	SP_FR output DC offset detection		L: When detected
75	LINE_MUTE	I	LINE-MUTE input detection		Normal: 1.6V, TEL MUTE: 1V or lower NAVI MUTE: 2.5V or higher
76	NC				
77	A_WRT_E2P	I	Used when writing E2PROM		H: When writing E2PROM
78	LX_MUTE	I	MUTE request from slave unit		
79	A_TYPE0	I	Destination (Voltage reading)	②	Refer to the truth value table
80	A_TYPE1	I	KVT or DDX	①	Refer to the truth value table
81	A_TYPE2	I	OEM or Other	①	Refer to the truth value table
82	A_TYPE3	I	Hi or Low	①	Refer to the truth value table
83	TUN_IFC	I	F/E IFC OUT input terminal		H: Station found, L: Station not found
84	TUN_SMET	I	S meter input		
85	R_NOISE	I	FM noise detection terminal		
86	RIP_MUTE	O	Power IC inside		H: MUTE OFF, L: MUTE ON
87	BU_DET	I	BU reduced voltage detection		H: Reduced voltage detection
88	TV_SC_REQ	I	Communication request from TV_COM		
89	SYS_ON	I	SYS_COM communication control input		H: Start up request from AUDIO_μ-com
90	R_CLK	I	RDS decoder CLK input terminal		
91	LX_REQ_S	I	Communication request from slave unit		
92	LX_REQ_M	O	Communication request to slave unit		
93	LX_CON	O	Start-up request to slave unit		
94	A_FLASH_MDATA	I	Data from Flash re-write terminal writer		
94	LX_DATA_S	I	Data from slave unit		
95	A_FLASH_SDATA	O	Data to Flash re-write terminal writer		
95	LX_DATA_M	O	Data to slave unit		
96	A_FLASH_SCK	I	Clock from Flash re-write terminal writer		
96	LX_CLK	O	LX BUS clock		
97	TV_SC_DATA	I	DATA input from TV_COM		
98	TV_MC_DATA	O	DATA output to TV_COM		
99	TV_BP_CLK	O	CLK output to TV_COM		
100	TUN_SDA	I/O	F/E I2C data input/output terminal		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth Value Table

① TYPE1, 2 and 3 Truth Value Table

Category	TYPE3	TYPE2	TYPE1	TYPE0
KVT Hi MODEL	1	0	0	*1
KVT Low MODEL	0	0	0	*1
DDX Hi MODEL	1	0	1	*1
DDX Low MODEL	0	0	1	*1
KOS Hi MODEL	1	1	0	*1
KOS Low MODEL	0	1	0	*1
AVN MODEL	0	1	1	*1

TYPE0 is AD input.

Refer to the next table (TYPE0 Setup Voltage) for the "*1".

② TYPE0 Setup Voltage

Destination	μ-com setup value		
	min	Mid point voltage	max
K	0.00	0.00	0.62
E	0.63	1.25	1.87
M	1.88	2.50	3.12
V/X	3.13	3.75	4.37
R	4.38		5.00

Detection of interrupt signal (if there is a signal or not)

Decide if there is a signal or not based on the number of pulses that is coming in the VSYNC_DET terminal (Pin 17) within 100ms.

	Name of control line	VSYNC_DET
		μ-com terminal number
Is there a signal or not?	No	3 or less
	Yes.	4~7
	No	8~

MICROCOMPUTER'S TERMINAL DESCRIPTION

● MEDIA MICROPROCESSOR: EP9307IRZ (X88: IC106)

Pin No.	Pin Name	I/O	Application	Processing Operation Description
A1	#CS1	I	Watchdog startup	
A10	RXDVAL	I	(ETHER I/F for design)	
A11	MIITXD1	O	(ETHER I/F for design)	
A12	CRS	I	(ETHER I/F for design)	
A13	MIN_CE	O	Not used (For High model Mini liquid crystal chip enable)	
A14	NC			
A17	NC	I		
A2	#CS7	I	BOOT bus width select	
A3	SDCLKEN	O	SDRAM clock enable	
A4	DA31	I/O	Data bus	
A5	DA29	I/O	Data bus	
A6	DA27	I/O	Data bus	
A7	NC			
A8	#RD	O	Memory read	
A9	MIIRXD3	I	(ETHER I/F for design)	
B1	AD25	O	Address bus	
B10	MIIRXD1	I	(ETHER I/F for design)	
B11	MIITXD2	O	(ETHER I/F for design)	
B12	TXEN	O	(ETHER I/F for design)	
B13	MIN_D_CONT	O	Not used (For High model Mini liquid crystal data buffer control)	L: Data output to mini liquid crystal H: Data input from mini liquid crystal
B14	NAND_R_#B	O	Not used (NAND Flash READY/BUSY)	L: BUSY, H: READY
B15	NC			
B16	DA_MCLK	O	AUDIO DAC Master clock	I2S
B17	3.3V			
B2	#CS2	I	Watchdog startup	
B2	#CS2	O	SRAM chip select	
B3	#CS6	I	BOOT bus width select	
B3	#CS6	O	Nor Flash chip select	
B4	AD20	O	Address bus	
B5	DA30	I/O	Data bus	
B6	AD18	O	Address bus	
B7	EP_STBY	O	Permission to turn OFF the mother power supply	
B8	AD17	O	Address bus	
B9	RXCLK	I	(ETHER I/F for design)	
C1	AD23	O	Address bus	
C10	MIIRXD2	I	(ETHER I/F for design)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
C11	TXCLK	I	(ETHER I/F for design)	
C12	MIITXD0	O	(ETHER I/F for design)	
C13	CLD	I	(ETHER I/F for design)	
C14	OSD_CE	O	OSD communication chip enable	SPI
C15	TRSTN	I	(JTAG I/F for design)	
C16,C17	NC			
C2	DA26	I/O	Data bus	
C3	#CS3	O	SRAM chip select	
C5	AD24	O	Address bus	
C6	AD19	O	Address bus	
C7	EP_SREQ	O	EP9307 communication request	
C8	#WR	O	Memory write	
C9	MDIO	I/O	(ETHER I/F for design)	
D1	#SDCS3	O	SDRAM chip select	
D10	MDC	O	(ETHER I/F for design)	
D11	RXERR	I	(ETHER I/F for design)	
D12	MIITXD3	O	(ETHER I/F for design)	
D13	IPOD_BSY	I	iPod READY/BUSY	L: BUSY, H: READY
D14	LOW_#MID	I	Setup of destination	H: LOW model, L: MID model
D15~D17	NC			
D2	DA23	I/O	Data bus	
D3	SDCLK	O	SDRAM clock	Commercial product: 100MHz Thermal expansion product: 92MHz
D4	DA24	I/O	Data bus	
D5	MIN_CLK	O	Not used (For High model Mini liquid crystal communication clock)	
D6	EP_MREQ	I	SysCom communication request	
D7	DA28	I/O	Data bus	
D8	#EP_INI	I	Reset start notification	
D9	AD16	O	Address bus	
E1	#SDCS2	O	SDRAM chip select	
E10	vddr			
E11	MIIRXD0	I	(ETHER I/F for design)	
E12	TXERR	O	(ETHER I/F for design)	
E13	EP_CON	I	Permission to operate PE9307	
E14	USB1_ERR	I	5V over current detection in USB1	L: Over current is detected.
E15	USB1_EN	O	Control of USB1 5V over current detection IC	L: USB5V OFF, H: USB5V ON
E16	NC			

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
E17	NC			
E2	#SDWE	O	SDRAM write enable	
E3	DA22	I/O	Data bus	
E4	AD3	O	Address bus	
E5	DA15	I/O	Data bus	
E6	AD21	O	Address bus	
E7	DA17	I/O	Data bus	
E8,E9	vddr			
F1	#RAS	O	SDRAM RAS	
F10	vddc			
F11	gndr			
F12	EP_BUDET	I	Momentary power down notification	L: Normal operation H: Momentary power down detection
F13	NC			
F14	ADC_GND			
F15~F17	NC			
F2	#SDCS1	O	SDRAM chip select	
F3	#SDCS0	O	SDRAM chip select	
F4	#DQM3	O	Memory data mask	
F5	AD5	O	Address bus	
F6~F8	gndr			
F9	vddc			
G1	#DQM0	O	Memory data mask	
G12	gndr			
G13	USB0_ERR	I	5V over current detection in USB0	L: Over current is detected
G14	EGPIO10/DREQ1			L: Over current is detected
G15~G17	NC			
G2	#CAS	O	SDRAM CAS	
G3	DA21	I/O	Data bus	
G4	AD22	O	Address bus	
G5	vddr			
G6	gndr			
H1	DA18	I/O	Data bus	
H10	gndc			
H12	gndr			
H13	vddr			
H14	USB0_EN	O	Control of USB0 5V over current detection IC	L: USB5V OFF, H: USB5V ON
H15	#EP_RST0	I	Power on reset	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
H16	MIN_DO	O	Not used (For High model Mini liquid crystal data output)	
H17	NC			
H2	DA20	I/O	Data bus	
H3	DA19	I/O	Data bus	
H4	DA16	I/O	Data bus	
H5	vddr			
H6	vddc			
H8,H9	gndc			
J1	AD6	O	Address bus	
J10	gndc			
J12	vddc			
J13	vddr			
J14	OSD_ROMSEL	I	OSD ROM select	L: Built-in, H: External
J15	MIN_DI	O	Not used (For High model Mini liquid crystal data input)	
J16	#CS0	O	Nor Flash chip select	
J17	NAND_CLE	O	Not used (NAND Flash Command latch enable)	
J2	DA14	I/O	Data bus	
J3	AD7	O	Address bus	
J4	DA13	I/O	Data bus	
J5	vddr			
J6	vddc			
J8	gndc			
K1	AD4	O	Address bus	
K10	gndc			
K12	vddc			
K13	NAND_#CE	O	Not used (NAND Flash Chip enable)	
K14	PLL_VDD		Main oscillator power supply 1.8V	
K15	NAND_ALE	O	Not used (NAND Flash Address latch enable)	
K16	NAND_#RE	O	Not used (NAND Flash Read enable)	
K17	NAND_#WE	O	Not used (NAND Flash Write enable)	
K2	DA12	I/O	Data bus	
K3	DA10	I/O	Data bus	
K4	DA11	I/O	Data bus	
K5	vddr			
K6	gndr			
K8,K9	gndc			
L1	DA9	I/O	Data bus	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
L12	gndr			
L13	NAND_D7	O	Not used (NAND Flash Data bus)	
L14	NAND_D5	O	Not used (NAND Flash Data bus)	
L15	PLL_GND		Main oscillator GND	
L17	XTALO		Main clock	14.7456MHz
L2	AD2	O	Address bus	
L3	AD1	O	Address bus	
L4	DA8	I/O	Data bus	
L5	NC			
L6	gndr			
M1	NC			
M10,M11	gndr			
M12	NAND_D6	O	Not used (NAND Flash Data bus)	
M13	NAND_D4	O	Not used (NAND Flash Data bus)	
M14	NAND_D1	O	Not used (NAND Flash Data bus)	
M15	NAND_D0	O	Not used (NAND Flash Data bus)	
M16	NAND_D3	O	Not used (NAND Flash Data bus)	
M17	NAND_D2	O	Not used (NAND Flash Data bus)	
M2	AD0	O	Address bus	
M3	#DQM1	O	Memory data mask	
M4	#DQM2	O	Memory data mask	
M5	E_R5	O	Video data bus (Red)	
M6,M7	gndr			
M8	vddc			
M9	vddc			
N1	E_R2	O	Video data bus (Red)	
N10	vddr			
N11	I2C_SCL	O	Communication clock (I2C)	
N11	I2C_SCL	I	BOOT mode	L: External BOOT, H: Internal BOOT
N12	DA_SDO0	O	AUDIO DAC data	I2S
N12	DA_SDO0	I	BOOT bus width select	
N13	CTS	I	(UART I/F for design)	
N14	RXD0	I	(UART I/F for design)	
N15	TXD0	O	(UART I/F for design)	
N16	UART_TXD1	O	(UART I/F for design)	
N17	UART_TXD2	O	EP9307 communication data	
N2	E_R4	O	Video data bus (Red)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
N3	E_R3	O	Video data bus (Red)	
N4	E_R1	O	Video data bus (Red)	
N5	E_R0	O	Video data bus (Red)	
N6	DA5	I/O	Data bus	
N7~N9	vddr			
P1	SPCLK	O	Video dot clock	
P10	TCK	I	(JTAG I/F for design)	
P11	BOOT1	I	Test mode select	
P12	I2C_SDA	I/O	Communication data (I2C)	
P12	I2C_SDA	I	Test mode select	
P13	G_LED	O	Green LED	
P14	R_LED	O	Red LED	
P15	NC			
P16	UART_RDX1	I	(UART I/F for design)	
P17	UART_RDX2	I	System μ -com communication data	
P2	E_G4	O	Video data bus (Green)	
P3	E_G5	O	Video data bus (Green)	
P4	E_B3	O	Video data bus (Blue)	
P5	AD15	O	Address bus	
P6	AD13	O	Address bus	
P7	AD12	O	Address bus	
P8	DA2	I/O	Data bus	
P9	AD8	O	Address bus	
R1	E_G3	O	Video data bus (Green)	
R10	TDI	I	(JTAG I/F for design)	
R11	BOOT0	I	Test mode select	
R12	DA_LRCLK	O	AUDIO DAC Sample rate clock	I2S
R13	OSD_DATA	O	OSD communication data	SPI
R14	NC			
R15	USB0_NEG	I/O	USB0 data	
R16	DA_SCLK	O	AUDIO DAC Data bit clock	I2S
R17	USB0_POS	I/O	USB0 data	
R2	E_HSYNC	O	Video H-SYNC	
R3	E_G0	O	Video data bus (Green)	
R4	E_B5	O	Video data bus (Blue)	
R5	E_B0	O	Video data bus (Blue)	
R6	AD14	O	Address bus	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
R7	DA4	I/O	Data bus	
R8	DA1	I/O	Data bus	
R9	NC			
T1	NC			
T10	TMS	I	(JTAG I/F for design)	
T11	gndr			
T12	NC			
T13	INT2	I	(ETHER I/F for design)	
T14	NC			
T15	USB1_POS	I/O	USB1 data	
T16,T17	NC			
T2	NC			
T3	E_VSYNC	O	Video V-SYNC	
T4	E_G1	O	Video data bus (Green)	
T5	E_B2	O	Video data bus (Blue)	
T6	DA7	I/O	Data bus	
T7	AD11	O	Address bus	
T8	AD9	O	Address bus	
T9	NC			
U1	NC			
U10	TDO	O	(JTAG I/F for design)	
U11	NC			
U12	OSD_CLK	O	OSD communication clock	SPI
U13,U14	NC			
U15	RTS	O	(JTAG I/F for design)	
U16	USB1_NEG	I/O	USB1 data	
U17	NC			
U2	NC			
U3	E_G2	O	Video data bus (Green)	
U4	E_B4	O	Video data bus (Blue)	
U5	E_B1	O	Video data bus (Blue)	
U6	DA6	I/O	Data bus	
U7	DA3	I/O	Data bus	
U8	AD10	O	Address bus	
U9	DA0	I/O	Data bus	

TEST MODE

1. Generals

1-1. Purpose

This document has been prepared to identify the items required in the test mode used in the 07Visual Product production process.

1-2. Scope of applications

This document is applicable to models that are listed in Table 1-2-1.

Class	Series	Model Name	Destination
MID	KVT	KVT-819DVD	K
		KVT-829DVD	E
		KVT-839DVD	M/V/X/R
	DDX	DDX8019	K
		DDX8029	E
		DDX8039	M/V/X/R
KOS	KOS-V1000	K/E/M	
LOW	KVT	KVT-719DVD	K
		KVT-729DVD	E
		KVT-739DVD	M/V/X/R
	DDX	DDX7019	K
		DDX7029	E
		DDX7039	M/V/X/R
	KOS	KOS-V500	K/E/M
	DNX	DNX7100	K
		DNX7200	E
	-	F-MONITOR	KOS-L702

Table 1-2-1 List of Models in 07Visual Product

1-3. Overview

The following sections describe display specifications, control specification of key/remote controller, operations of components, etc. in the test mode of 07Visual Product.

2. Test mode specification

2-1. Operations

Product can be transferred into the test mode using the following three approaches:

- ① While pressing [SRC] and [ATT] keys at the same time (SRC+ATT), press Reset key to start the system. (In the KOS series, press [MODE] and [VOL.UP] keys)
- ② Connect the region-writing jig to Lx connector and press [Reset] key to start the system.
- ③ Connect unit/BOX designed for use exclusively in the test mode and press [Reset] key to start the system.
- ④ Connect BOX/Monitor designed for use exclusively in the test mode and press [Reset] key to start the system.
- ⑤ When in standby source, use "AUD SW" on the remote controller to enter Tenkey1→6→3→4→2 in order to transfer to the test mode.

- Step ③ is only applicable to KVT series.
- Step ④ is only applicable to KOS series (including KOS Monitor). [Reset] key can be used for both Monitor and Box.
- In addition to unit/BOX (③/④), X14 (System μ-com: Special μ-com) is also designed exclusively for X88 FCT.

2-2. Screen transition

During the test mode, selecting Graphic screen transfers the screen to Test Mode Main screen.

A variety of screens that can be transferred from Test Mode Main screen is shown in Figure 2-2-1.

Refer to Section 2-3 for functions in each screen. (Note that screens that can be transferred from Test Mode Main screen vary depending on the model.)

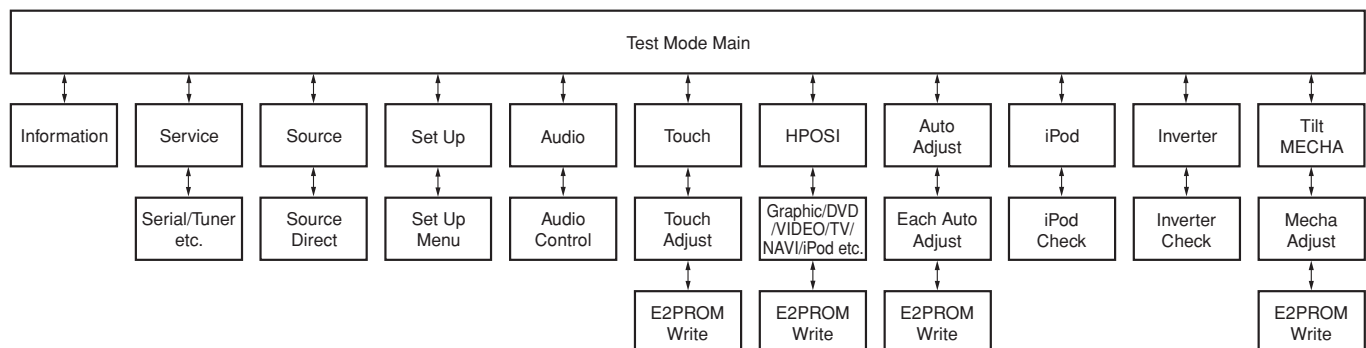


Figure 2-2-1 Screens transferred from Test Mode Main screen

TEST MODE

2-3. Specification of screens

This section describes the test mode functions available in each screen.

2-3-1. Test Mode Main screen

This section describes the keys for transferring to each screen from Test Mode Main screen.

The variety of screens displayed on Test Mode Main screen is shown in Figure 2-3-1.

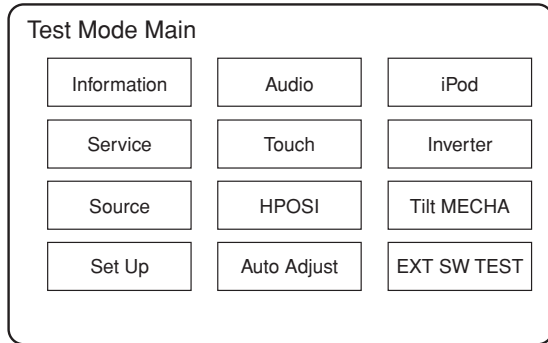


Figure 2-3-1 Test Mode Main screen

[Key specification]

- Information: Move on to Information screen.
- Service: Move on to Service screen.
- Source: Move on to Source Direct screen.
- Set Up: Move on to Set Up Menu screen.
- Audio: Move on to Audio Control Menu screen.
- Touch: Move on to Touch Adjust screen.
- HPOSI: Move on to HPOSI Adjust screen.
- Auto Adjust: Move on to Auto Adjust Menu screen.
- iPod: Move on to iPod Authentication Confirmation screen.
- Inverter: Move on to Inverter Confirmation screen.
- Tilt MECHA: Move on to Tilt MECHA Position Adjustment screen. Only in “DDX” and “DNX” series
- ExtSw Test: Ext-Sw waveform output (Output is “400ms ON/OFF” using operations, SW1→SW2→SW3→SW4.) Operation SW3/4 for “MID KOS”.

2-3-2. Information screen

This screen shows such data as Serial No., Version information of each μ -com, Region code, Status, etc. The contents displayed on the Information screen are shown in Figure 2-3-2.

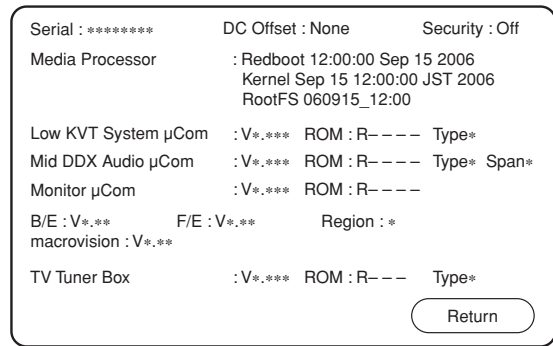


Figure 2-3-2 Information screen

- Monitor μ Com information is shown only when the “KOS Monitor” is connected.
- B/E, F/E, Region, and macrovision information are shown only for the “KVT/DDX/DNX” series.
- TV Tuner Box is shown only when the “TV” is connected (“V500” is “V----”).
- Version information of the “OSD-ROM” is shown at the left of the OSD display of the iPod image.
- Display shown before System/Audio is Model: Mid/Low and Type: KVT/DDX/DNX/KOS.

[Key specification]

Return: Move on to Test Mode Main screen.

2-3-3. Service screen

This screen is used to display or clear service information. Chroma data in the E2PROM is cleared. DC Offset detection information is displayed or cleared.

The contents displayed on the Service screen are shown in Figure 2-3-3.

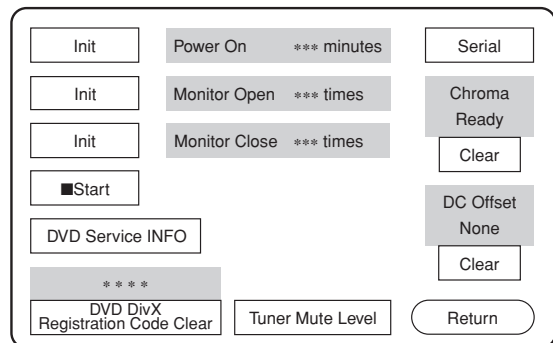


Figure 2-3-3 Service screen

- “DVD Service INFO” and “DVD DivX Registration Code Clear” are shown only for the “KVT/DDX/DNX” series.

TEST MODE

[Key specification]

Init: Select the item to be initialized.

■Start: Pressing and holding (for 2 seconds or longer) initializes the selected item's information.

Serial: Move on to Serial No. Manual Input screen.

Clear: Clear Chroma data or DC Offset information in the E2PROM.

DVD Service INFO: Switch DVD video and display DVD service information using "B/E OSD".

Tuner Mute Level: Move on to the Tuner Mute Level Adjustment screen.

DVD DivX Registration Clear: Clear DVD DivX Registration Code.

Return: Move on to Test Mode Main screen.

● Service Information

Select the item to be initialized by pressing the [Init] key (multiple items can be selected/selected items are highlighted).

After selection is completed, press and hold the [Start] key for 1 second or longer to initialize the displayed service information.

● Chroma

Chroma information is normally displayed as "Ready" and "CLR OK/NG" when E2PROM data is cleared.

When not completing Reset after Clear, setup data is not modified. After resetting, cleared data is reflected.

In case of "KOS" series, clear Chroma data; touch correction value and HPOSI correction value in E2PROM.

● DC Offset

When DC Offset detection information is shown as "None", offset is not detected. When it is shown as "Detect (x)", offset is detected. X=0~3: Number of capacitor leaks detected.

Clear the detection information with the [Clear] key.

● DVD DivX Registration Code

Display Registration Code of DivX and clear the Code with the [Clear] key.

After clearing the Code, "None" will be displayed.

* Clear the code only after ejecting the disc.

● DVD Service INFO

Switch DVD video and display DVD service information using "B/E OSD".

Use the [DISP] key and CURSOR (right or left) on the remote controller*1 to feed pages.

Press [VSEL] key or [FNC] key to return from DVD image to Service screen.

Once the DVD Image screen is shown by selecting the DVD Service INFO, the OSD is no more displayed on the DVD image screen. Re-start the set by recycling the ACC/Power (i.e., ACC/Power Off→On) to display the OSD on the DVD Image screen.

*1: RC-DV430 (DVD MODE)

2-3-4. Serial No. Entry screen

Enter the serial code of each set from this screen.

Serial No. Entry screen is shown in Figure 2-3-4.

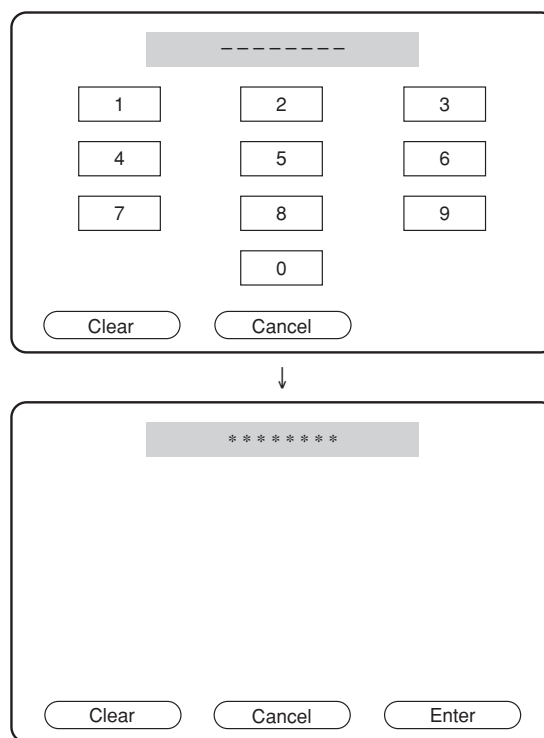


Figure 2-3-4 Serial No. Entry screen

[Key specification]

0~9: 10key for entering the serial No.

Clear: Clear the serial No. which is being input.

Cancel: Move on to Service screen.

Enter: Start entering the serial No.

(When entry is successfully completed, "Write OK" is displayed. When entry is not successful, "Write NG" is displayed)

When "Write OK" is displayed, use this key to move on to the Service screen.

If "Write NG" is displayed, transfer to the test mode again and repeat entry from the first step.

TEST MODE

2-3-5. Tuner Mute Level screen

Adjust the Mute Level stored in the E2PROM of the Tuner F/E. Tuner Mute Level Setup screen is shown in Figure 2-3-5.

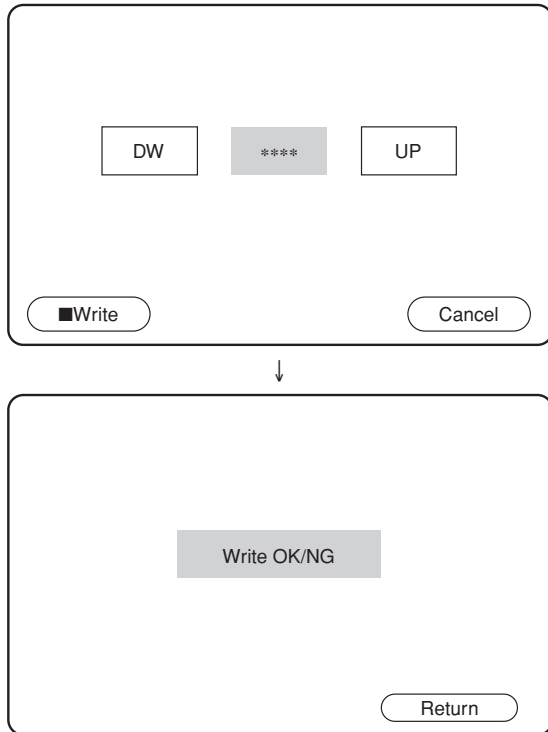


Figure 2-3-5 Tuner Mute Level Setup screen

[Key specification]

UP: Mute Level Up

DW: Mute Level Down

■Write: Press and hold (for 2 seconds or longer) to make an entry in E2PROM.

Return: Move on to Service screen.

- Adjust the Tuner Mute Level under the following conditions. Under conditions other than the followings, adjustment of the Tuner Mute Level is not possible if the Tuner Mute Level Setup screen is shown.
Frequency should be set before transferring to the Tuner Mute Level Setup screen.
Audio source: Tuner
LOUD: OFF
Volume: Step30
Frequency: Default value of the set
Note that frequency remains unchanged after completion of setup and after screen exits from the Tuner Mute Level Setup screen.

2-3-6. Source/Set Up/Audio screen

Source Direct, Set Up, and Audio Control screens can be transferred to in the same nominal manner as for other screens.

2-3-7. Touch screen

Fine-adjust fluctuation of Touch of each set.

Touch 4 markers one by one, and adjustment is complete when "Write OK" is displayed on the screen.

If "Write NG" is shown, go to the test mode again to start over the adjustment.

Touch Adjustment Service screen is shown in Figure 2-3-6.

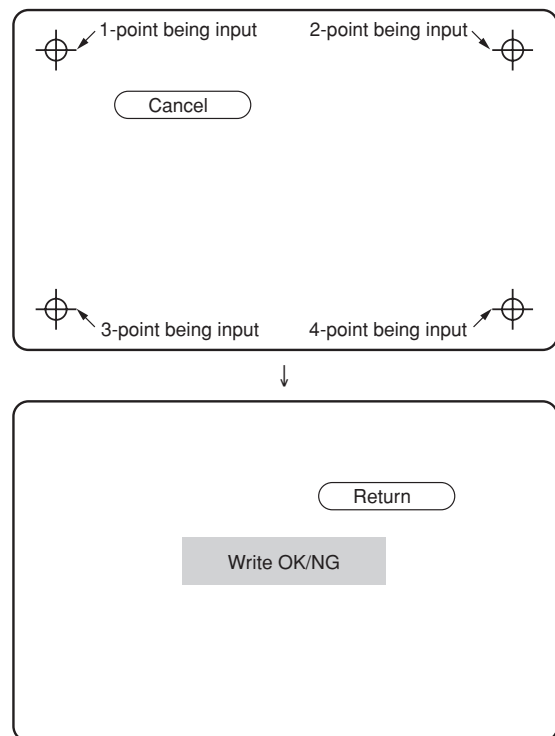


Figure 2-3-6 TOUCH screen

[Key specification]

Cancel: When the Cancel button is pressed while entering the 1-point, the screen returns to Test Mode Main screen.

When the Cancel button is pressed while entering a point other than the 2-point, the screen returns the status to enter the 1-point.

Return: When the "Return" button is pressed, the screen returns to Test Mode Main screen.

Note: If "NG" is shown, go to the test mode again to start over the adjustment.

TEST MODE

2-3-8. HPOSI screen

Adjust each screen's horizontal display position.

The screen shall be transferred like "Graphic→NAVI→".

(In case of "KOS" series, screen shall be changed as follows:
"Graphic→VIDEO (NT)→NAVI→VIDEO (PAL)")

HSY adjustment is applicable to "KVT/DDX Graphic" and
"DNX Graphic/NAVI". Adjustment screen is shown in Figure
2-3-7.

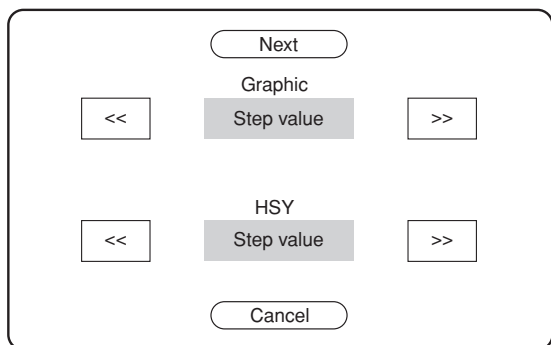


Figure 2-3-7 HPOSI screen

[Key specification]

Next: Move on to the next HPOSI screen. When the screen is the NAVI screen, start writing in the E2PROM.

<<: Screen moves toward the left.

>>: Screen moves toward the right.

Cancel: Move on to Test Mode Main screen.

Return: Move on to Test Mode Main screen.

If "HPOSI NG (E2PROM Write NG)" is shown, go to the test mode again to start over the adjustment.

DVD wallpaper should be fixed to NTSC. When adjusting DVD, TDV-540A (Title3-Chapter16) shall be played. After loading the DISC, use Ten-key 4 to transfer to "Title3-Chapter16". (KVT/DDX/DNX)

Note: If "NG" is shown, go to the test mode again to start over the adjustment.

2-3-9. Auto Adjust screen

This section displays the keys that are related to auto adjustment.

The contents displayed on the Auto Adjust screen are shown in Figure 2-3-8.

Note: Data related with Chroma auto adjustment can be cleared by the [Clear] key on the Service screen.

Refer to hardware service documents for equipment to connect to the set.

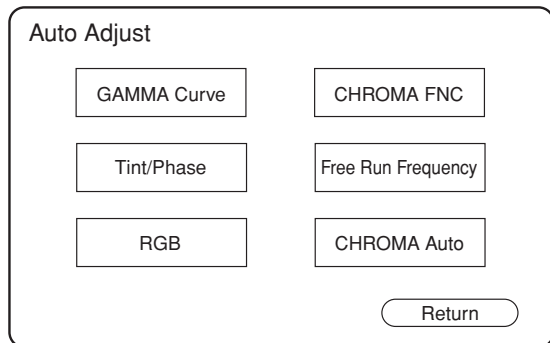


Figure 2-3-8 Auto Adjust screen

[Key specification]

GAMMA Curve: Move on to GAMMA Curve screen.

Tint/Phase: Move on to Tint/Phase screen.

RGB: Move on to RGB screen.

CHROMA FNC: Move on to CHROMA FNC screen.

Free Run Frequency: Move on to Free Run Frequency screen.

CHROMA Auto: Collectively adjust the following: "Free Run Frequency→Tint/Phase→GAMMA".

Return: Move on to Test Mode Main screen.

2-3-9-1. GAMMA Curve screen

Auto adjust the γ curve of the Chroma γ IC and save it in E2PROM.

The screen after the completion of GAMMA Curve auto adjustment is shown in Figure 2-3-9.

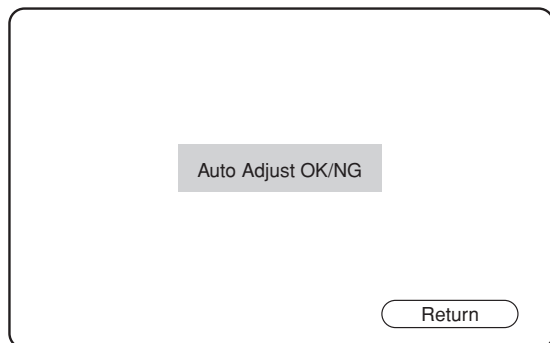


Figure 2-3-9 GAMMA Curve screen

TEST MODE

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-2. Tint/Phase screen

Auto adjust the Tint/Phase of the Chroma γ IC and save them in E2PROM.

The screen after the completion of Tint/Phase auto adjustment is shown in Figure 2-3+10.

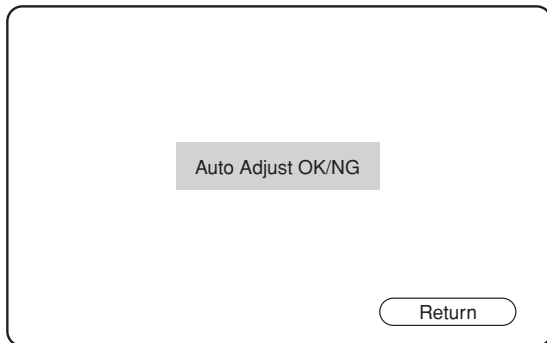


Figure 2-3-10 Tint/Phase screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-3. RGB screen

After auto adjustment of RGB, save it in E2PROM. (This is applicable only to "KOS" series.)

The screen after the completion of RGB auto adjustment is shown in Figure 2-3-11.

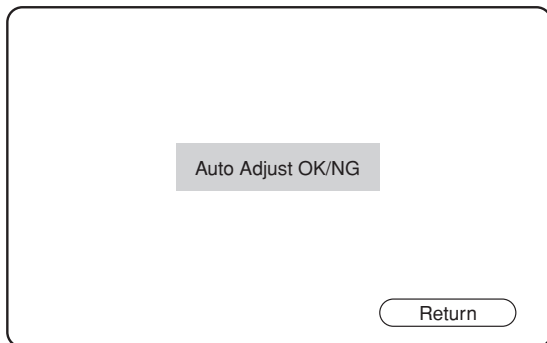


Figure 2-3-11 RGB screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-4. CHROMA FNC screen

Manually adjust the Chroma γ IC, and save it in E2PROM. This adjustment should be made from the remote controller.

The CHROMA FNC screen is shown in Figure 2-3-12.

The Chroma data in the E2PROM can be erased by the [CHROMA Clear] key on the Service screen.

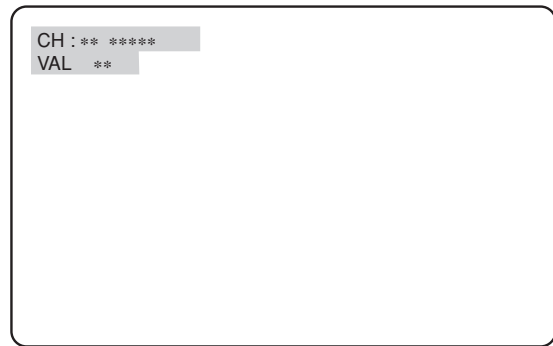


Figure 2-3-12 CHROMA FNC screen

[Key specification (Remote controller)]

Direct: Chroma adjustment mode ON/OFF (Writing in the E2PROM)

Play/Pause: Setup/Clear Chroma setup value

Tenkey7: To the items before Chroma adjustment

Tenkey8: Chroma adjustment setup value UP

Tenkey9: To the next item in the Chroma adjustment

Tenkey0: Chroma adjustment setup value DW

2-3-9-5. Free Run Frequency screen

After auto adjustment of Free Run Frequency, save it in the E2PROM. (This is applicable only to "KVT/DDX/DNX" series.)

The screen after completion of Free Run Frequency auto adjustment is shown in Figure 2-3-13.

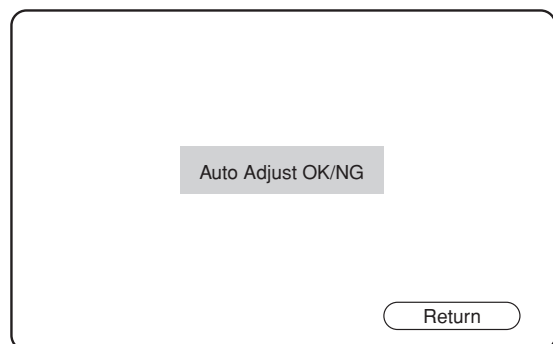


Figure 2-3-13 Free Run Frequency screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-9-6. CHROMA Auto screen

Successively perform adjustments in 2-3-9-5 Free Run Frequency auto adjustment, 2-3-9-2 Tint/Phase auto adjustment, and 2-3-9-1 GAMMA Curve auto adjustment, and save them in the E2PROM.

The screen shown after completion of auto adjustment is shown in Figure 2-3-14.

TEST MODE

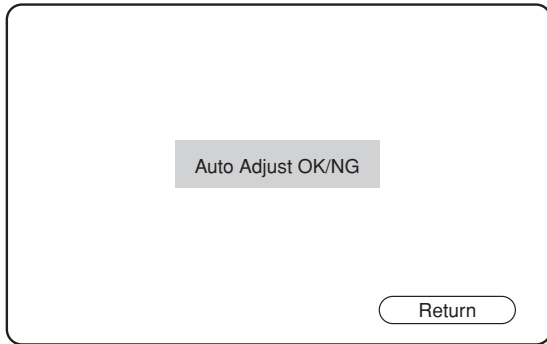


Figure 2-3-14 CHROMA Auto screen

[Key specification]

Return: Move on to Auto Adjust screen.

2-3-10. iPod screen

Check communication for iPod authentication.

The iPod screen is shown in Figure 2-3-15.

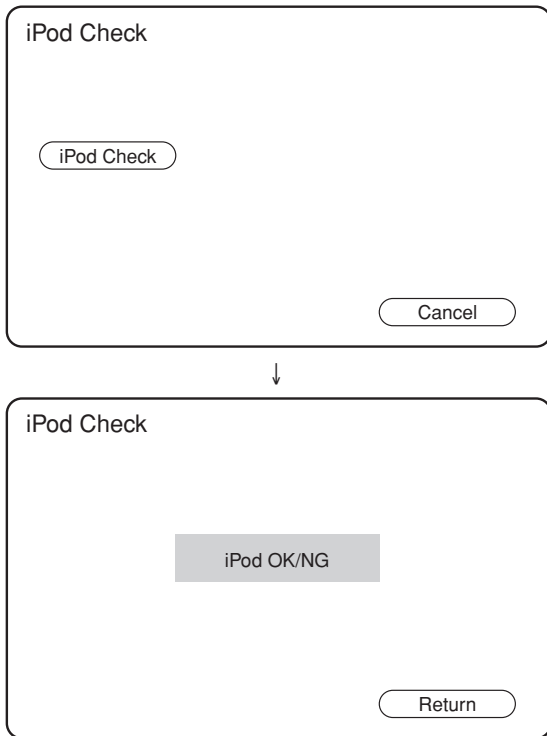


Figure 2-3-15 iPod screen

[Key specification]

iPod Check: Start checking communication for iPod authentication.

Cancel, Return: Move on to Test Mode Main screen.

2-3-11. Inverter screen

Change inverter frequency.

Inverter screen is shown in Figure 2-3-16.

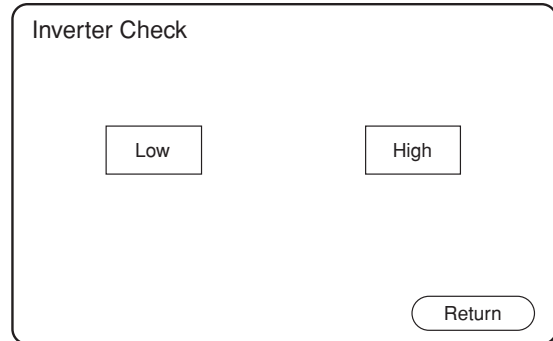


Figure 2-3-16 Inverter screen

[Key specification]

Low: Set inverter frequency to Low level.

High: Set inverter frequency to High level.

Cancel, Return: Move on to Test Mode Main screen.

2-3-12. Tilt MECHA screen

Adjust the panel mechanism position. (DDX/DNX)

The Tilt MECHA screen is shown in Figure 2-3-17.

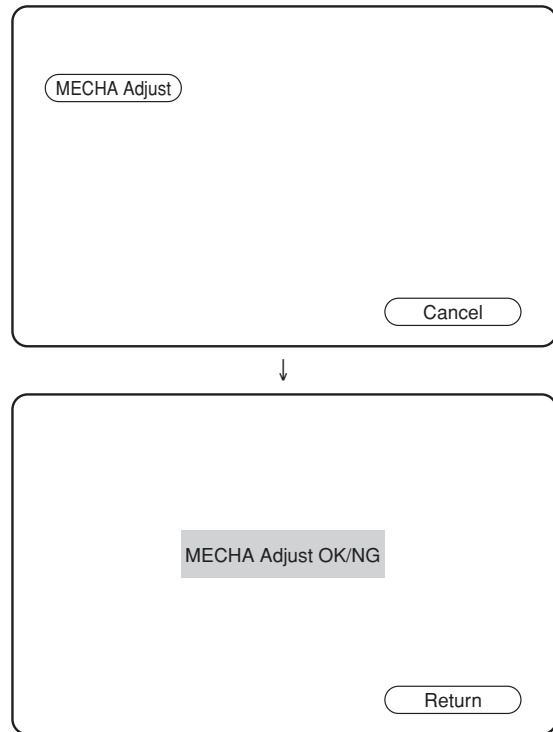


Figure 2-3-17 Tilt MECHA screen

[Key specification]

MECHA Adjust: Start mechanism position adjustment.

Cancel, Return: Move on to Test Mode Main screen.

TEST MODE

If “MECHA Adjust (E2PROM Write NG)” is displayed, go to the test mode again to start over the adjustment.

The “NG” is shown under any one of the following conditions: (When “NG” is shown, position is not written in the E2PROM.)

E2PROM writing error

NG when voltage acquired is 0.177V or higher in the Open.

NG when voltage acquired is lower than 2.746V or higher than 2.888V in the Close.

Note: If “NG” is displayed, check if the mechanism position adjustment jig is properly installed and then go to the test mode again to start over the adjustment.

2-4. Functional specification

This section describes the test mode specification for each function.

2-4-1. Display

Basically, specialized screen when in the Test Mode.

Display Touch position (+). However, shall not be displayed in Touch Adjust screen (under adjustment).

2-4-2. Key

Hard key specification is listed in Table 2-4-1. (Note that the keys that are not listed in the table have conventional functions.)

Key	KVT (Internal SP)	KVT (BOX SP)	DDX/DNX	KOS (Monitor)
AUTO MID	Normal	Short: Invalid Long: Flicker	-	-
AUTO LOW	Normal	Short: Invalid Long: Flicker	-	-
ATT	Motor driver	Motor driver	Motor driver	-
V.SEL	V.SEL+ AV-OUT	V.SEL+ AV-OUT	V.SEL+ AV-OUT	V.SEL+ AV-OUT
FNC	No “Easy” mode	No “Easy” mode	No “Easy” mode	No “Easy” mode

(Reference)

Mode Description	KVT	DDX/DNX	KOS
The Test Mode	SRC + ATT + Reset	SRC + ATT + Reset	MODE + VOLUP + Reset
Span switching	SRC + VOL. DW + Reset	SRC + VOL. DW + Reset	VSEL + VOL. DW + Reset

Mode Description	KVT	DDX/DNX	KOS
Clear DC Offset/ Service/Memory, etc.	SRC + AUTO (TI) + Reset	SRC + FUNC + Reset	VSEL + FUNC + Reset
Retailer mode On	EJECT + VOL. DW + Reset	EJECT + VOL. DW + Reset	×
Retailer mode Off	SRC + Reset	SRC + Reset	×
RDS test drive mode	EJECT + ATT + Reset	EJECT + ATT + Reset	FUNC + VOLUP + Reset

Table 2.4.1 Hard Key

2-4-3. Remote controller

Remote controller specifications are listed in Table 2-4-2. (Note that the keys that are not listed in the table have conventional functions.)

Mode of the remote controller shall be “AUDIO”.

Key	Function
Band (FM+)	Video mode selection (NAVI/VIDEO/iPod/DVD)
M/S (AM-)	DVD audio/image switching (Other than “KOS”)
Tenkey1	Tilt mechanism position adjustment (Only in “DDX/DNX”), Illumination switching (KVT)
Tenkey2	DC Offset detection direct switching (Only for “CD-CH” source)
Tenkey3	The V-IN (R-CAM) mirror mode switching
Tenkey4	HPOSI DVD confirmation direct switching (Other than “KOS”)
Tenkey5	NAVI forced interruption
Tenkey6	Call Screen Adjustment screen
Tenkey7	To the items before Chroma adjustment
Tenkey8	Chroma adjustment setup value UP
Tenkey9	To the next item in the Chroma adjustment
Tenkey0	Chroma adjustment setup value DW
Direct	Chroma adjustment mode ON/OFF (Writing in the E2PROM)
Play/Pause	Setup/Clear Chroma setup value

Table 2-4-2 Keys on Remote controller

2-4-4. Video control

- When in the test mode, unit boots up in the VIDEO mode. Use [FNC] key to move on to Test Mode Main screen.
- In conjunction with V.SEL, AV-OUT is also switched (Any AV-OUT can be accepted in Graphic and NAVI). AVIN→iPod→R_CAM→NAVI→(DVD)→(TV)→AVIN . . .
- Skip Easy Control screen with the [FNC] key.
- OSD is not displayed when input is VIDEO image. (OSD is displayed when the V.SEL is switched. However, OSD is not displayed in VIDEO mode.)

TEST MODE

2-4-5. Tuner

- When unable to access E2PROM, display Error (Tuner screen).
- K3I forced switching
Force to narrow by pressing and holding Preset4.
: xxx.x1MHz
Force to middle by pressing and holding Preset5.
: xxx.x2MHz
Force to wide by pressing and holding Preset6.
: xxx.x3MHz
- Switch Span (K↔M) with [SRC] key + [VOL.DW] key + [Reset] key. (In the KOS series, use [VSEL] key + [VOL.DW] key + [Reset] key)
Span information is displayed on the Information screen.
- In the Tuner source, P-CON is turned OFF when “RDS PS” is “RDS_TEST”.

2-4-6. TV Tuner

- If destination is E, set the TV2 default value to “Area 5 (Russia), 8ch (191.25MHz)” (when KTC-V500 is connected).
- If destination is E, set the TV2 default value to “Area 4 (Russia), 8ch (191.25MHz)” (when KTC-V300 is connected).
- HPOSI adjustment mode shall be TV1.

If started up as above, even if the test mode is cleared by ACC, Power OFF→ON, setting values are retained. (Default value is resumed by Reset.)

2-4-7. DVD

- Use CD media KTD-02A and DVD media TDV-540A/TTD-100 and play back in the order of sequence shown in the following Table.
- When Loading, set to Title1-Chapter1.
- Set region code at the position for the time code.
- Title3-Chapter16 (Monoscope) is directly selected by pressing Tenkey4 while adjusting HPOSI.
- CDDA checking (KTD-02A)
Use “Track UP/DW” to play back in the order of sequence as shown: 1↔9↔15↔10↔11↔12↔13↔14↔9↔1 ···
Track 28 is directly selected by pressing [RDM] key.
- DVD audio/video checking (TDV-540A)
Use “Chapter UP/DW” to play back in the order of sequence as shown in Tables 2-4-3 and 2-4-4.
Use M/S (AM-) on the remote controller to switch Video/Audio.

For DVD video checking				
Title	Chapter			Audiostream1
1	1			Audiostream1
3	6	Level		Audiostream1
3	7	S/N		Audiostream1
3	17	AM/PM noise		Audiostream1
3	8	Frequency characteristics		Audiostream1
3	12	Color measurement		Audiostream1
4	1	1kHz, 0dB	PCM96k/24bit	Audiostream3
4	6	17Hz	PCM96k/24bit	Audiostream3

Table 2-4-3 DVD Video checking

For DVD audio checking				
Title	Chapter			Audiostream1
1	1			Audiostream3
4	1	1kHz, 0dB	PCM96k/24bit	Audiostream3
4	6	17Hz	PCM96k/24bit	Audiostream3
4	16	44kHz	PCM96k/24bit	Audiostream3
4	2	Infinity	PCM96k/24bit	Audiostream3
4	3	L	PCM96k/24bit	Audiostream3
4	4	R	PCM96k/24bit	Audiostream3
4	1	1kHz, 0dB	Dolby	Audiostream1
4	2	Infinity	Dolby	Audiostream1

Table 2-4-4 DVD Audio checking

2-4-8. Audio

- Default setting of Volume should be Step30.
- BAL/FAD setting is changed among MIN↔CENT↔MAX by 1 click.
- Xover setting is changed between MIN↔MAX by 1 click.
- Tone setting is changed among MIN↔CENT↔MAX by 1 click.
- The default setting of Tone (EQ) should be Flat.
- The default setting of System Q should be Off.
- When there is Digital Out terminal, setting should always be the output On setting.
- Default setting of Line Mute should be On.

2-4-9. AVIF

- Default setting of Interruption of AVIN should be On.
- Default setting of R-CAM Interruption should be On.
- Normally an interruption occurs when the R-CAM is detected.
- The Reverse condition is always set at On (R-CAM is available in V.SEL).

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- Default setting of NAVI interruption SP should be Front ALL.
- V-IN mirror mode switching is done by Tenkey3 on the remote controller.

2-4-10. Screen adjustment

- By pressing the remote control Tenkey6 on each video screen, each video screen's Screen adjustment items are displayed.
- Default value is Center. Click once to change between Full Down↔Center↔Full Up.
- Default value of Bright during illumination Off should be MAX. (Bright should be Center when illumination is On.)

2-4-11. BEEP

- BEEP regardless of any destination. But do not output BEEP during screen selection and iPod/USB operation. (While in Standby source, BEEP cannot be output because of PWIC restriction.)

2-4-12. DC Offset

- DC Offset detection status (normal/error) clear
By the Service information screen's DC Offset information [Clear] key, clear E2PROM's DC Offset detection information.
- DC Offset detection information is displayed on the Information screen/Service information screen.
- While in the test mode, even if DC Offset is detected, it is not written into E2PROM.

However, a detection operation shall be carried out and when the DC Offset is detected, Protect shall be displayed and it will become an all CH Mute operation.

- Volume setting is changed to the setting values below by pressing the remote control Tenkey2.

Source: CD-CH

Assigned DISC: KTD-02A

Assigned Track: 15 (20Hz, 0dB)

Specified VOL: 28 Step (Mid), 26 Step (Low)

2-4-13. Flicker adjustment

- KVT
 - ① Connect Special Box to enter the test mode.
 - ② Press [AUTO] key to turn flicker adjustment On.
 - ③ Slide the monitor in the foreground, set screen mode to ZOOM and set image mode to VIDEO.
 - ④ Press [AUTO] key to turn flicker adjustment Off.
 - ⑤ Slide the monitor innermost (Test mode default value), set screen mode to FULL, and set image as it is changed during the adjustment.

- DDX/DNX/KOS

- ① Connect the region writing jig to Lx, and turn on the power to turn flicker adjustment On.
- ② Screen mode should be set to ZOOM and image should be set to VIDEO.
- ③ By turning the power Off, flicker adjustment is set to Off.

2-4-14. Panel mechanism

- Touch operations shall be available even when the Tilt mechanism is in the Full Open condition. (Only in "DDX/DNX" series)
- When the ZAC mechanism is set to Open, make the Angle vertical and place Slide to the hindmost. (This is applicable only to "KVT" series.)
- The Slide and Angle settings in the ZAC mechanism are changed among MIN↔CENT↔MAX by 1 click. (This is applicable only to "KVT" series.)

2-4-15. Driver for Panel mechanism motor

- When the [ATT] key is pressed and held, driver port for motor shall be On.
When the [ATT] key is pressed and held, and with the ON key pressed once, the motor is On in the reverse direction, and stopped by the Off key.
When the On key is pressed for the second time, the motor is On in the normal direction, and stopped by the Off key. Subsequently repeat the same steps.

2-4-16. E2PROM Contents clear

- Clear the E2PROM contents which should not remain when shipping the unit.
KVT: Clear the contents of E2PROM with "[SRC] key + AUTO (TI) + [Reset] key".
DDX/DNX: Clear the contents of E2PROM with "[SRC] key + [FNC] key + [Reset] key".
KOS: Clear the contents of E2PROM with "[VSEL] key + [FNC] key + [Reset] key".
Clear OK: Boot up normally.
Clear NG: Error display (at all the models). In "DDX/DNX" series, the SI will not be lit.
Contents of display "E2PROM Clear NG"
The following information is cleared: DC Offset information / Memory information / Retailer mode information / Service information
- If a jig is connected and the region is written in, the following information shall be cleared.
Serial No. / Security code / Touch correction / HPOSI

TEST MODE

correction / Mechanism position adjustment / DC Offset information / Memory information / Retailer mode information / Service information

Note: Since the above data is cleared (not defined) when the E2PROM has been replaced during the service, it is required to re-adjust the data in the test mode.

2-4-17. Security Code writing-in

- To write-in the Security Code (for other destinations than K/R) maintained in pair with the serial number, call out the Security screen from the Setup screen with the [Security Set Up] key.
- When E2PROM's Security Code is blank in other destinations than K/R, Set key is displayed. Press the Set key.
- In the Security Code writing-in screen, run the same operation as when registering Security Code in normal mode, and press [Enter] key to start writing.

Note: The Security Code to be entered here is a set-specific code linked to the serial No.

- If "Complete" is displayed, operation was completed normally, and if "NG" is displayed, operation was completed with errors.

Note: If NG, go to the test mode again and repeat from the 1st step.

● Procedure to clear Security Code

- If the unit is started with the Security ON condition when the destination is K/R, use the following procedure to clear the Security Code (in the mode other than the test mode).

- ① When unit is Reset or is switched on after backup is OFF, with the condition that Security is ON, unit boots up from the Security Code Entry screen.
- ② Manually enter the code from the remote controller following the next procedure where the AudioSW mode has to be selected on the accessory (remote controller).

Step 1: "K" input (Press Tenkey5 2 times)

Step 2: "C" input (Press Tenkey2 3 times)

Step 3: "A" input (Press Tenkey2 once)

Step 4: "Q" input (Press Tenkey7 2 times)

Note: On the other remote controller than that provided as an accessory, pressing Tenkey7 2 times enters "R" in the unit.

When entry is made improperly during the Steps 1~4, repeat code entry from Step 1 after entering another remote controller Key.

- ② When the Security Code input screen is cleared, clearing of the SecurityCode is complete.

2-4-18. Other

- Do not operate the Back Up Memory function in the test mode.

ADJUSTMENT

1. Flicker adjustment

● Condition (As in the previous models)

Video source: VIDEO

Video: Luster white 30%~50%

BRIGHT: MAX

MODEL: ZOOM

● Adjustment procedure

- ① Display luster white 30%~50%
- ② Place a flicker adjustment jig to the monitor and observe the waveform with an oscilloscope.
- ③ Turn VR*** and adjust to make the amplitude of the waveform to minimum.

KVT: VR203, DDX: VR100



Oscilloscope range: 20mV, 0.5mS
(setting at the time of 04 commercial production)

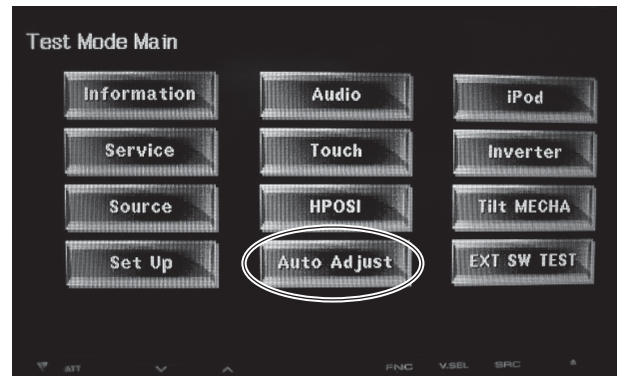
● Note

- ① In checking the screen after the adjustment, move the monitor up and down in order to confirm that the screen does not flicker. (This check is also carried out on the 06 model.)
- ② Noise due to AC200V can be observed in the flicker adjustment jig and oscilloscope and thus carefully set up the power supply and GND of the jig and oscilloscope. In 06 model, GND of the measurement equipment has been floated.

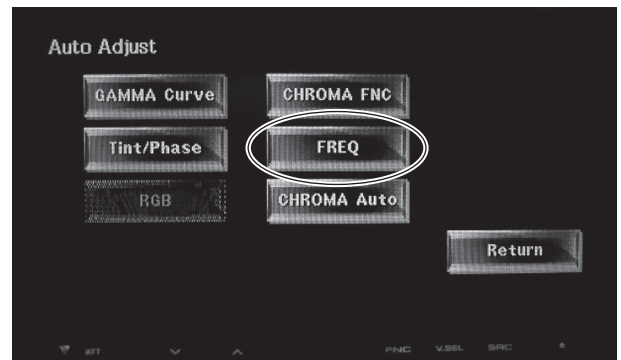
2. Free-run frequency adjustment

● Adjustment procedure

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press FREQ on the Auto Adjust screen.



Completion of the procedure with "Auto Adjust OK"

DVD video signal is used as the reference signal for the adjustment (15.734kHz).

DVD wall paper that is shown at the start of the TEST mode is fixed to the NTSC display regardless of its destination. Once a DISC is played, the wall paper turns into the display mode of the destination.

(When the DVD video signal is in PAL mode, the adjustment becomes NG.)

ADJUSTMENT

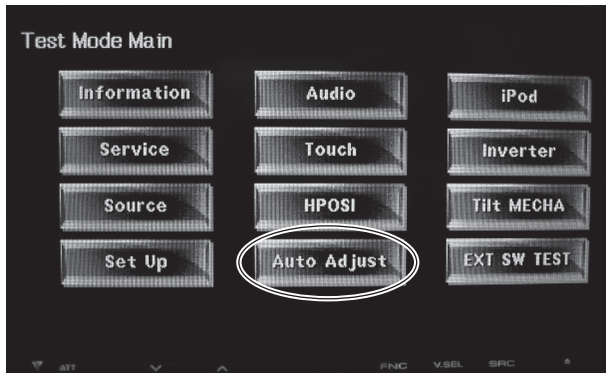
3. TINT/PHASE Adjustment (Auto)

● Adjustment requirement

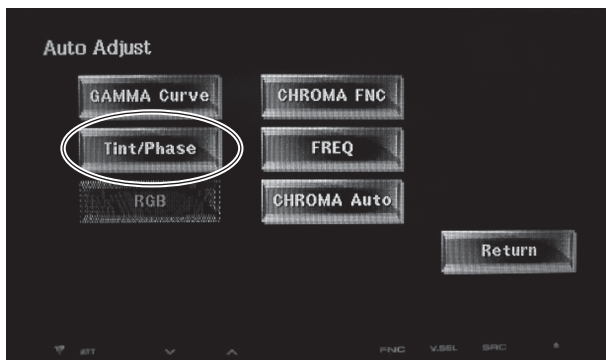
Input signal: Input magenta (PAL) in VIDEO 1.

● Adjustment Method

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press Tint/Phase on the Auto Adjust screen.

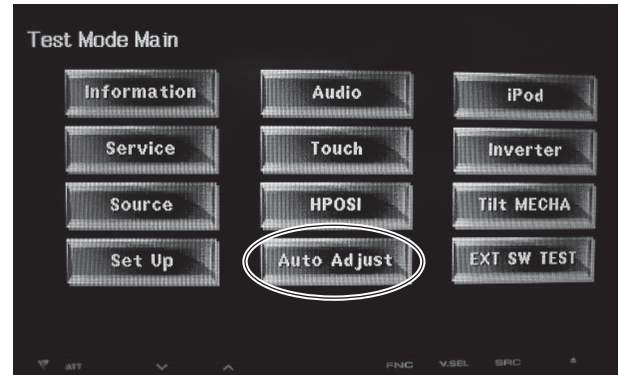


- ③ Confirm that "Auto Set OK" is displayed after the auto adjustment and that no flickering or horizontal stripes is observed on the magenta to complete the adjustment.

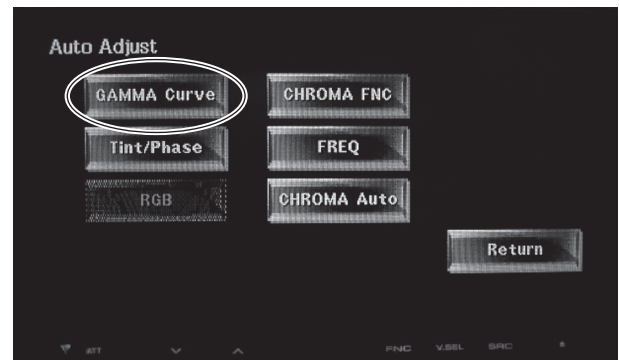
4. Gamma adjustment

● Adjustment method

- ① Press Auto Adjust on the Test Mode Main screen.



- ② Press GAMMA Curve on the Auto Adjust screen.



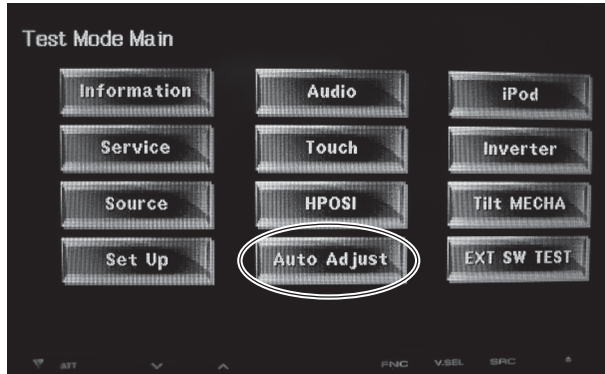
- ③ Confirm that "Auto Set OK" is displayed after the auto adjustment and that lower 8 steps are being brighten gradually from the left side to complete the adjustment.

ADJUSTMENT

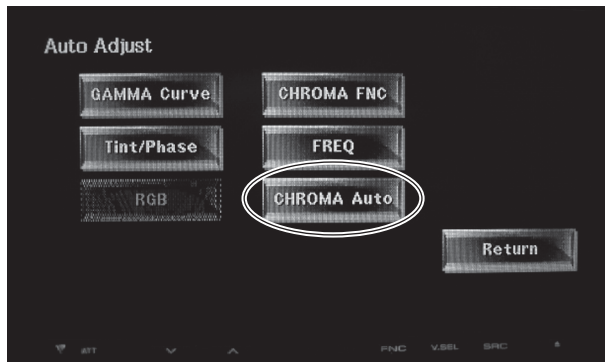
5. Free-run, TINT PHASE and Gamma adjustments

● Adjustment method

① Press Auto Adjust on the Test Mode Main screen.



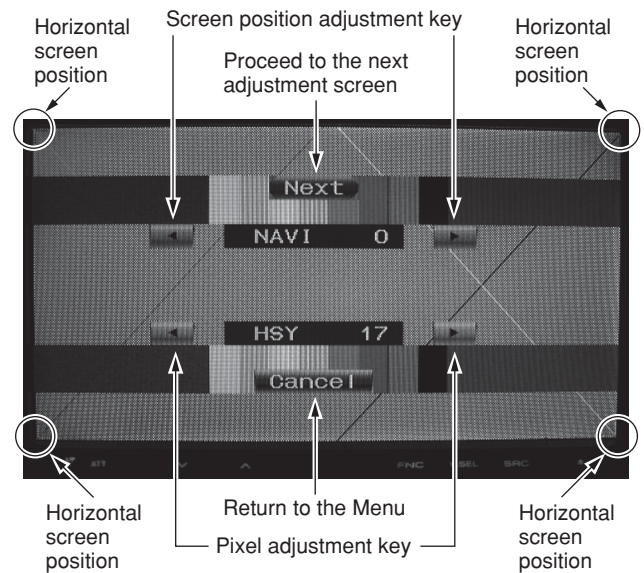
② Press CHROMA Auto on the Auto Adjust screen.



③ Make the following adjustments at the same time in the order of sequence as shown: Free-run adjustment→TINT PHASE adjustment→Gamma adjustment

6. Adjustment of Horizontal display start position, pixel

Display position should be adjusted after the completion of the free-run adjustment.



Screen position adjustment key (HPOSI): The whole screen's horizontal display starting position adjustment

Pixel adjustment key (HSY): Adjustment of horizontal display position of pixel.

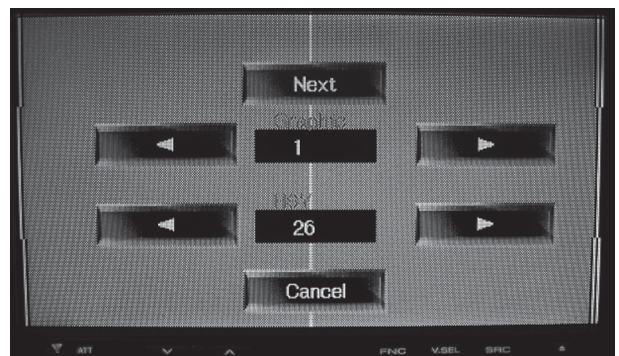
● Image on the adjustment screen

GRAPHIC: Special screen used only for adjustment (See below)

DNX_NAVI: Special screen used only for adjustment of GARMIN (See below)

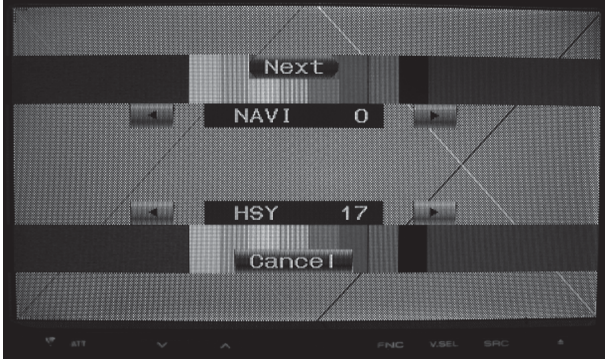
DDX_NAVI: Input KNA-DV3200.

• GRAPHIC adjustment screen



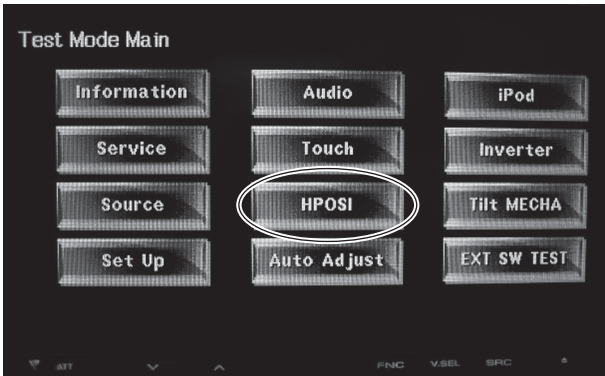
ADJUSTMENT

- DNX GARMIN adjustment screen
Procedure to display NAVI adjustment screen
 - ① Start the set.
 - ② Connect special jig on MINI_USB of NAVI.



● Adjustment procedure

- ① Press HPOSI on the Test Mode Main screen.



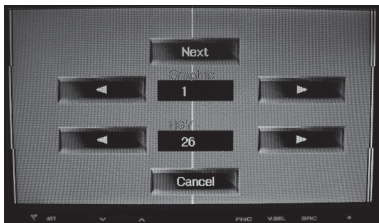
- ② Adjust the horizontal display start position for 2 types of the display, Graphic and NAVI.

- ②-1 Graphic: HSY default value: 20

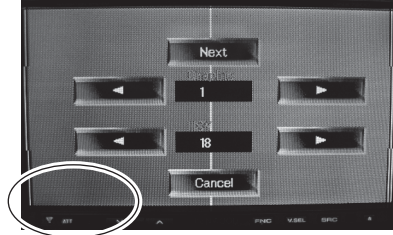
At first, use the pixel adjustment key to eliminate blur from the lower left and upper right corners on the screen. Then, use the screen adjustment key to make the Graphic screen symmetrical.

- Pixel adjustment

OK



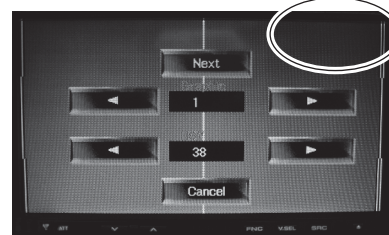
NG



Eliminate brown blur on this corner

NG

Eliminate black blur on this corner



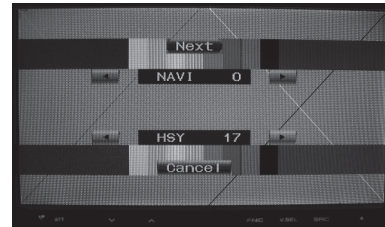
- ②-2-1 DNX_NAVI: HSY default value: 20

At first, use the pixel adjustment key to eliminate blur from the lower left and upper right corners on the screen.

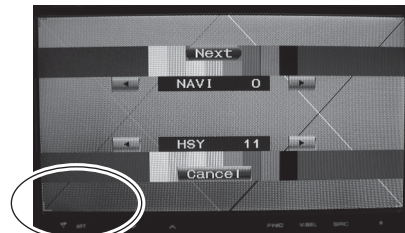
Then, use the screen position adjustment key to make the NAVI screen symmetrical.

- Pixel Adjustment

OK



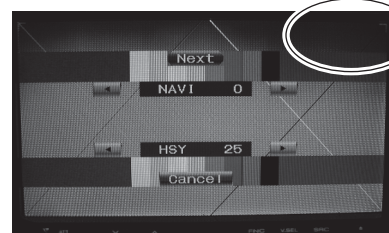
NG



Eliminate brown blur on this corner

NG

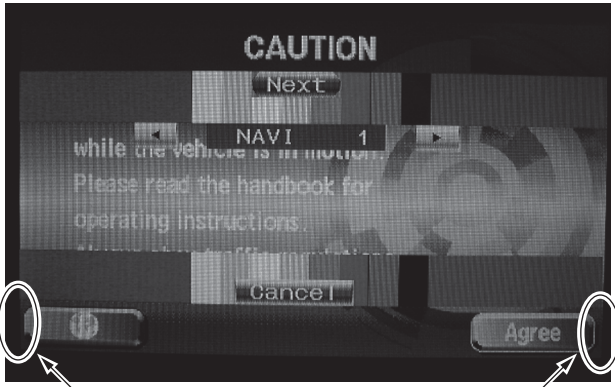
Eliminate black blur on this corner



ADJUSTMENT

②-2-2 DDX_NAVI:

Use the screen adjustment key to make the NAVI screen symmetrical.



Adjust the screen such that KEY (gap) at the right and left side becomes symmetrical

Note 1

If the center of the screen cannot be located right on the middle of the display, while adjusting the horizontal display start position, (i.e., when the display moves a bit too left when it is moved by 1 step toward left and it moves a bit too right when it is moved by 1 step toward right), press "NEXT" to finalize the adjustment when the display is located towards the left. (The screen is moved toward the left by 1 or 2 dots).

Note 2

Allowable limit of adjustment: 0~50 (Note that the screen can be adjusted between 0~100.)

Please make sure that the steps over 50 are not used in the adjustment.

Note 3

Changes in the adjustment procedure. Please make sure that the following changes are observed:

- If the blur is observed at the upper side of the entire screen when the Step is 20 (default); Decrease the step (use the left KEY) to make adjustment.
- If the blur is observed at the lower side of the entire screen when the Step is 20 (default); Increase the step (use the right KEY) to make adjustment.
- If the blur is observed on the entire screen when the Step is 20 (default) and it is difficult to tell if the bur is at the upper or lower side of the screen; Increase the step (use the right KEY) to make adjustment.
- If the blur is hardly observed on the entire screen when the Step is 20 (default) (and it is OK not to make the adjustment); Shift the step for the moment until the blur is observed and then re-adjust the screen.

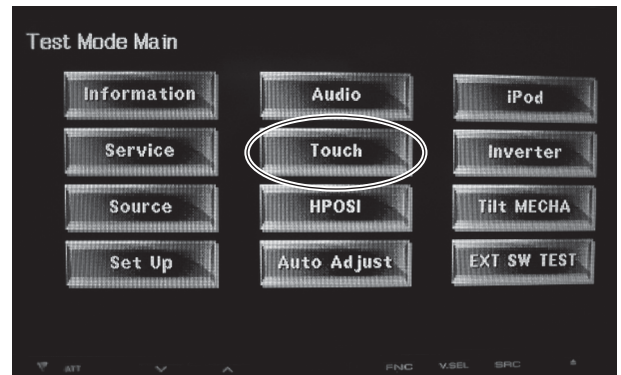
After adjustment, press the [Next] key, and if "Hposi OK" is displayed, adjustment is completed.

7. Touch panel adjustment

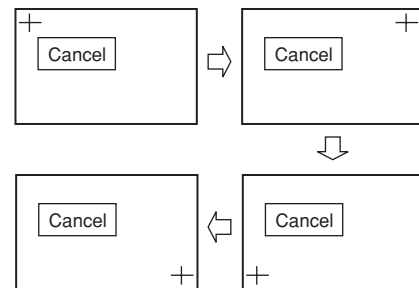
Touch panel should be adjusted after the free-run and screen position adjustments.

● Adjustment procedure

- ① Press the Touch Key on the Test Mode Menu screen to enter the Touch panel adjustment screen.



- ② Touch the center of "+" mark below in the following order. Upper left→Upper right→Lower left→Lower right
To touch, make sure to use the designated touch stick.
- ③ After adjustment is completed for 4 areas, if "Write OK" is displayed, the adjustment is completed.
Press Return to exit from the Touch screen.



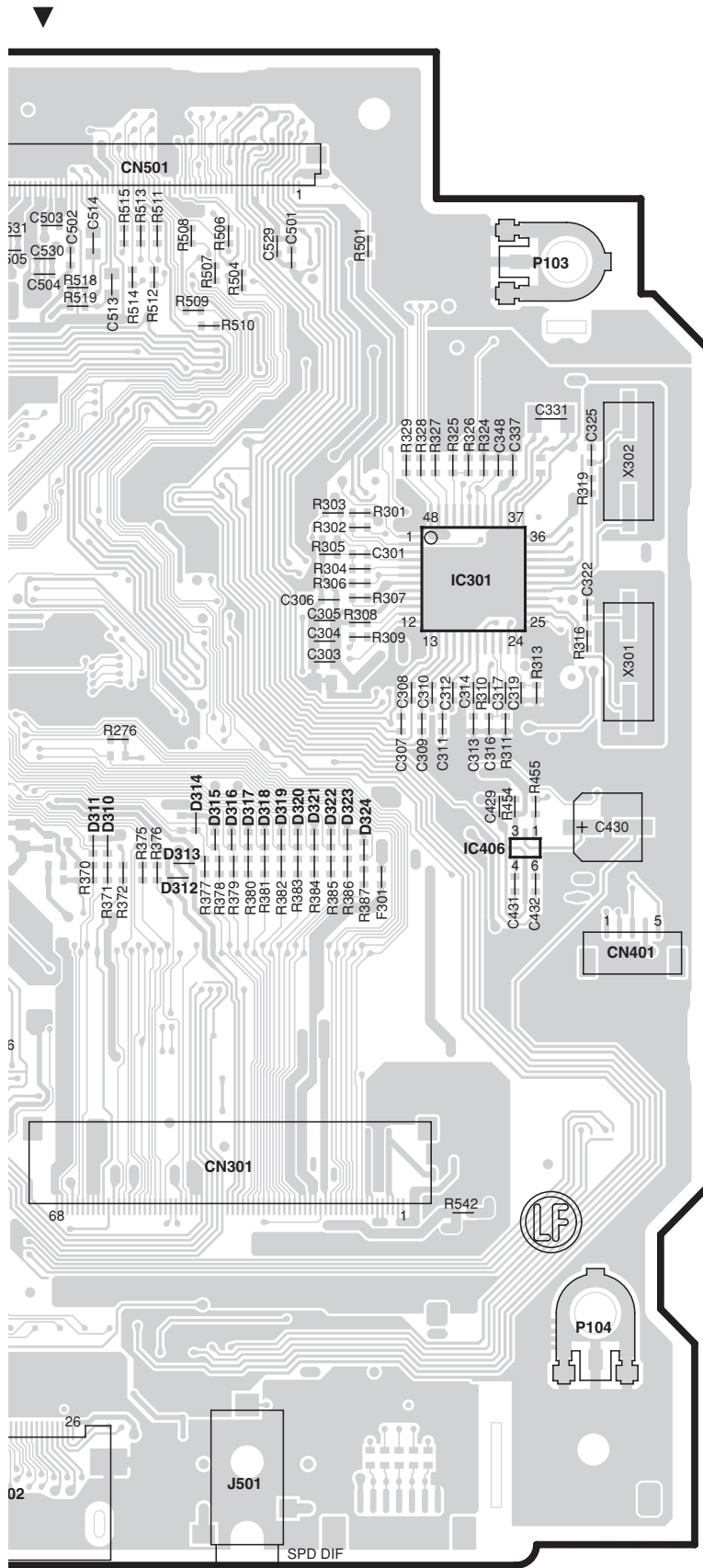
If the center of "+" mark wasn't pressed accurately, press Cancel to start over the adjustment.

Note

The touch panel adjustment data is finalized when the touch stick is released from the mark.

Therefore, the Knack for Adjustment is not to release the touch stick from the mark right after touching the center of the "+" mark, but to confirm that the stick is exactly on the center of the "+" mark while keeping touching the screen. (If the stick is not exactly on the center of the mark, move the stick onto the center of the mark while keeping touching the screen.)

Then, quickly and vertically release the stick from the screen.



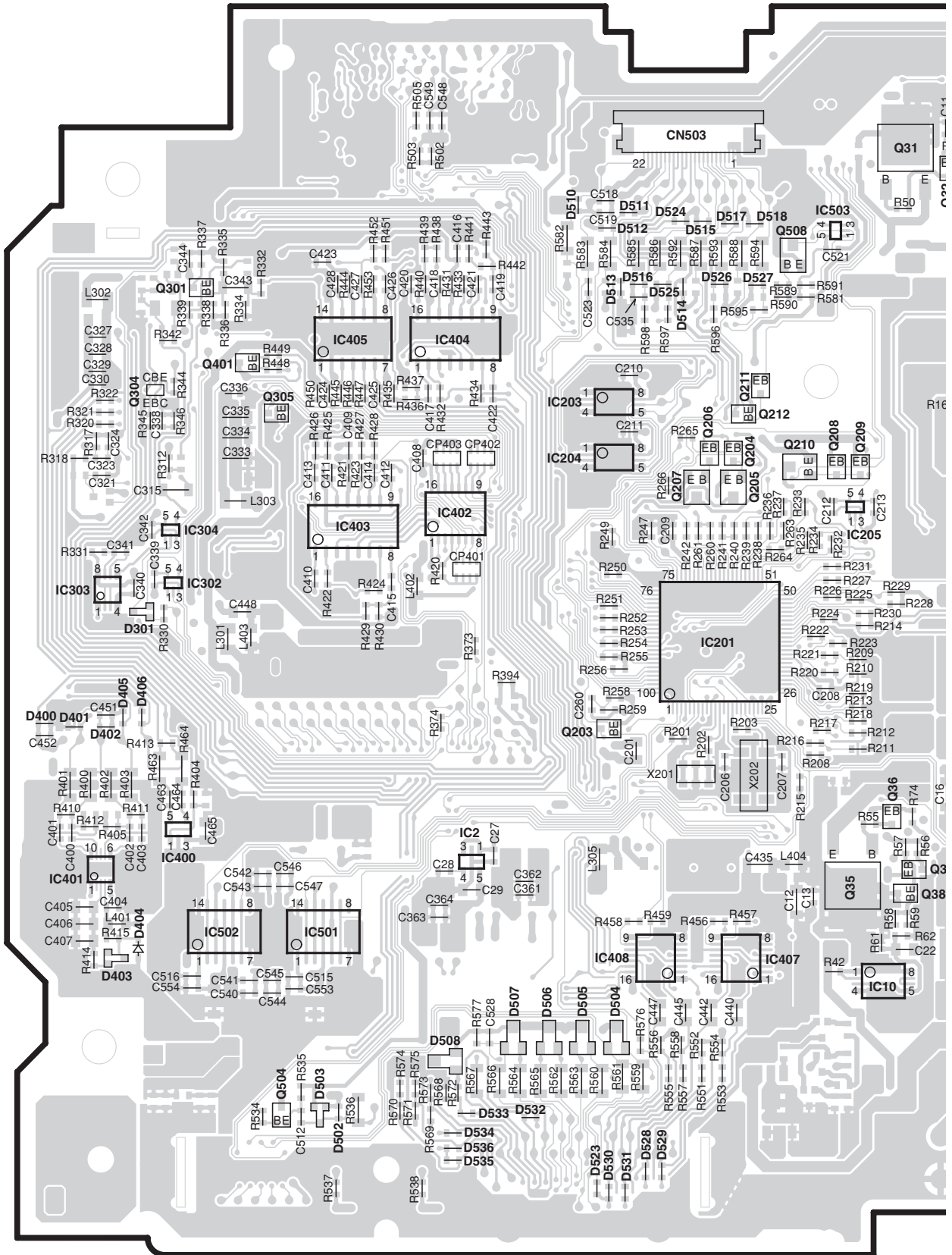
X14-983x-xx

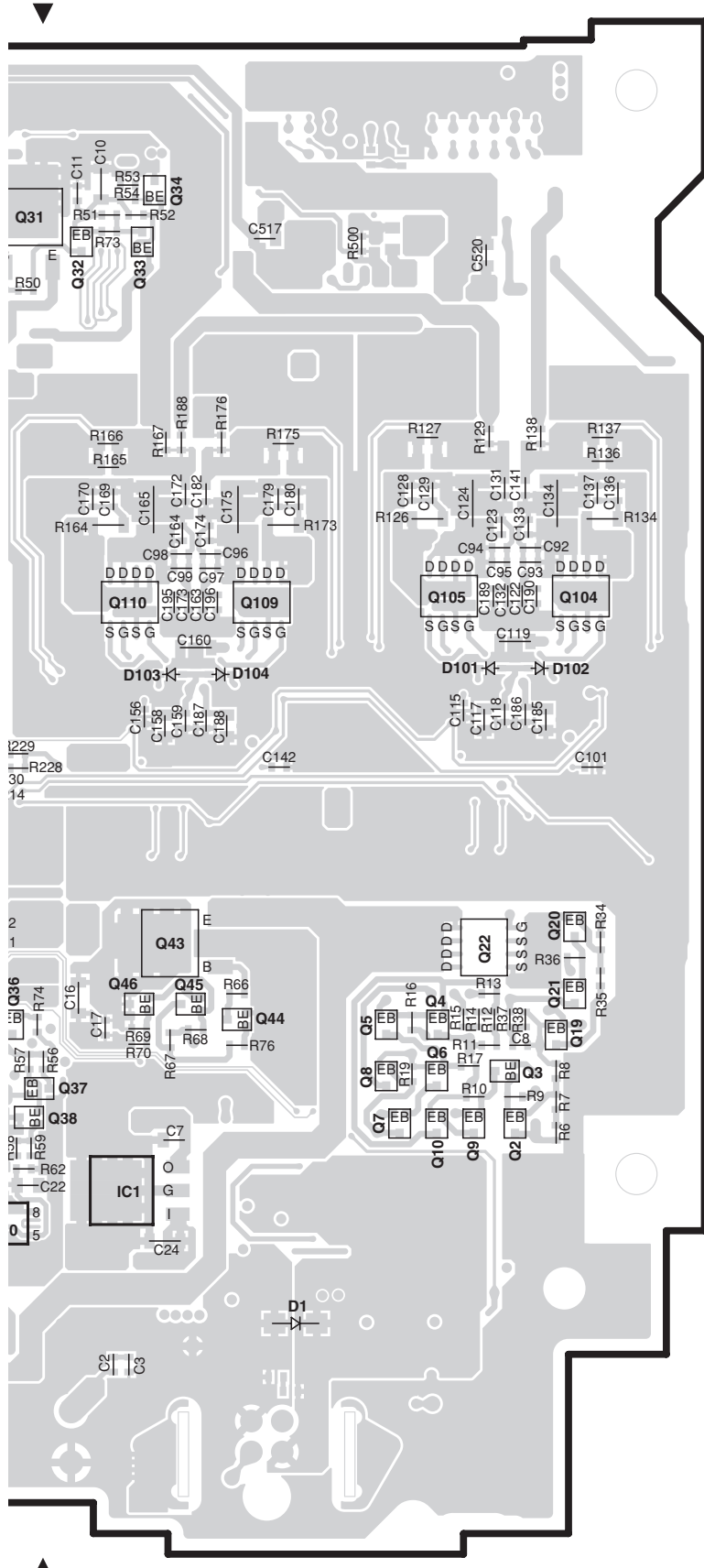
Ref. No.	Address
IC101	4B
IC102	4C
IC202	5E
IC301	3G
IC406	4G
Q1	6B
Q13	6C
Q14	5C
Q15	6C
Q16	6C
Q17	6C
Q23	5D
Q24	5D
Q25	5C
Q26	5D
Q101	4A
Q103	4B
Q106	4B
Q108	4C
Q111	4D
Q201	5E
Q306	5D
Q307	5D
Q308	5D
Q309	5E
Q501	2C
Q502	2D
Q503	2C

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

PC BOARD (FOIL SIDE VIEW)

VIDEO CONTROL UNIT X14-983x-xx (J76-0389-32)





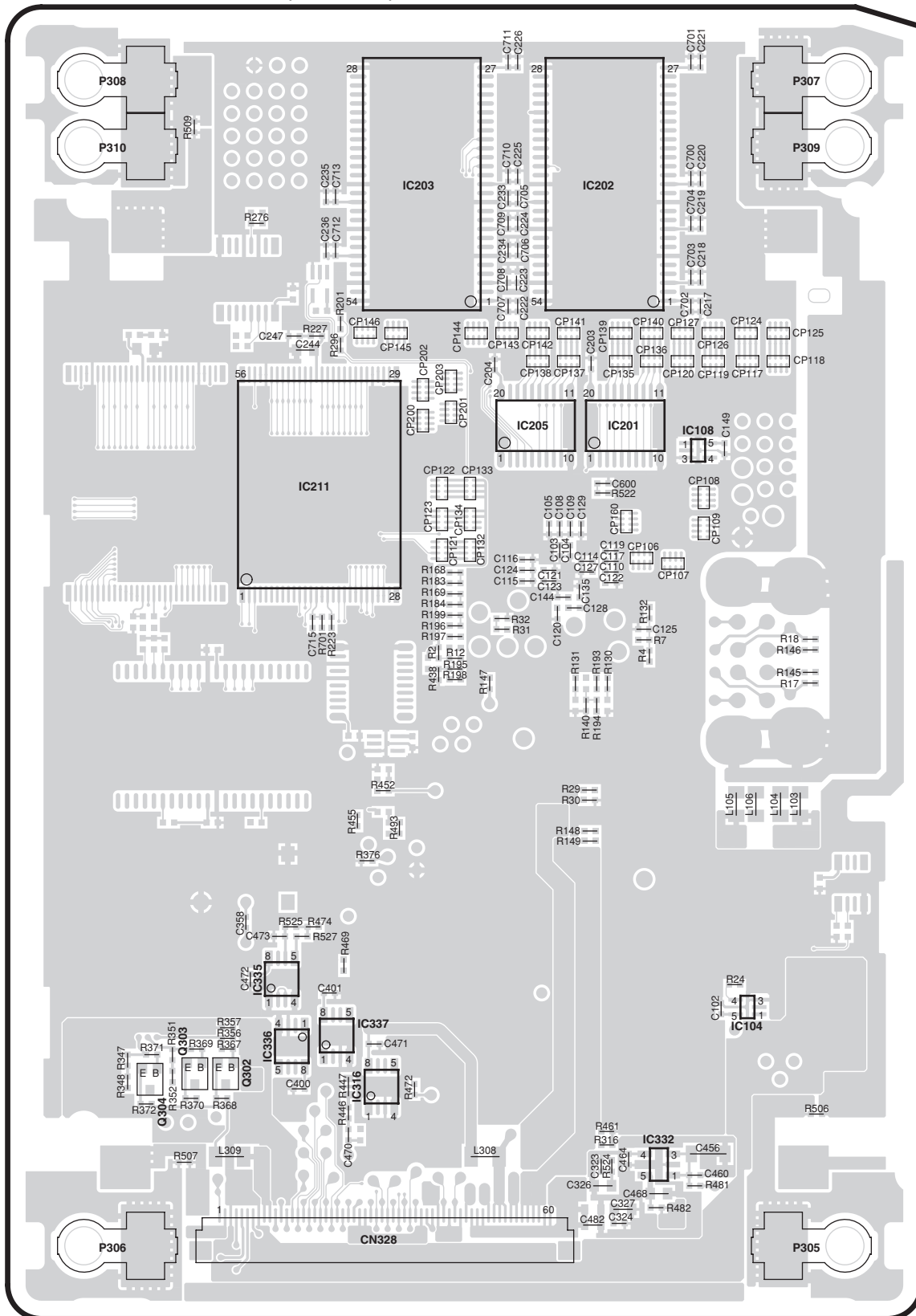
X14-983x-xx

Ref. No.	Address	Ref. No.	Address
IC1	6P	Q22	5Q
IC2	5M	Q31	2O
IC10	6O	Q32	2P
IC201	4N	Q33	2P
IC203	3N	Q34	2P
IC205	4O	Q35	5O
IC302	4L	Q36	5O
IC303	4L	Q37	5P
IC304	4L	Q38	5P
IC400	5L	Q43	5P
IC401	5L	Q44	5P
IC402	4M	Q45	5P
IC403	4M	Q46	5P
IC404	3M	Q104	3R
IC405	3M	Q105	3Q
IC407	6O	Q109	3P
IC408	6N	Q110	3P
IC501	6M	Q203	5N
IC502	6L	Q204	3O
IC503	2O	Q205	4O
Q2	5Q	Q206	3N
Q3	5Q	Q207	4N
Q4	5Q	Q208	3O
Q5	5Q	Q209	3O
Q6	5Q	Q210	3O
Q7	5Q	Q301	3L
Q8	5Q	Q304	3L
Q9	5Q	Q305	3M
Q10	5Q	Q401	3L
Q19	5R	Q504	6M
Q20	5R	Q508	2O
Q21	5R		

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

PC BOARD (FOIL SIDE VIEW)

DIGITAL I/O UNIT X88-2020-11 (J76-0394-42)



X88-2020-11

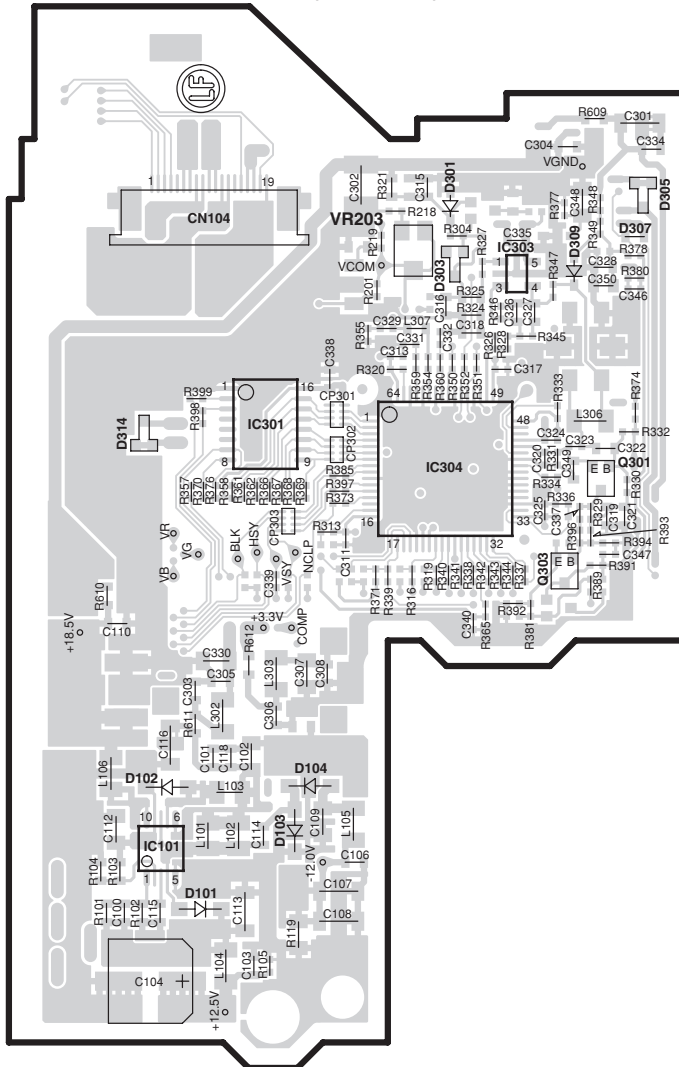
Ref. No	Address
IC104	6AC
IC108	3AC
IC201	3AC
IC202	2AC
IC203	2AB
IC205	3AB
IC211	3AB
IC316	6AB
IC332	6AC
IC336	6AA
IC337	6AB
Q302	6AA
Q303	6AA
Q304	6AA

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

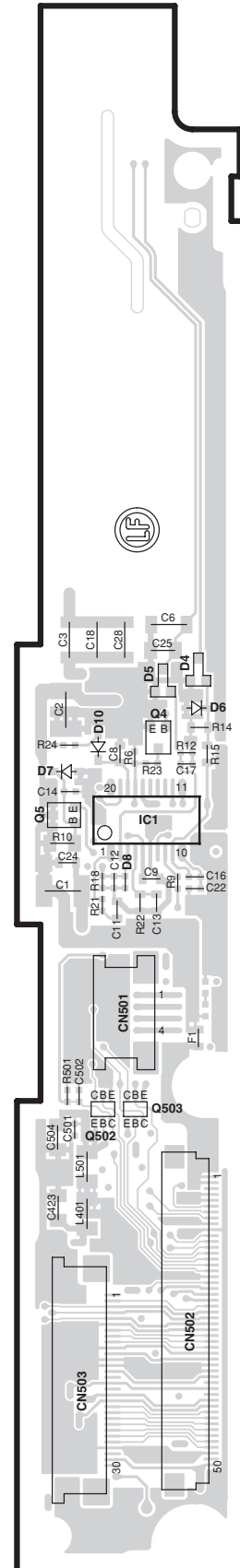
KVT-719DVD/729DVD
/729DVDY/739DVD

PC BOARD (COMPONENT SIDE VIEW)

VIDEO UNIT X35-4710-10 A/2 (J76-0385-22)



X35 B/2



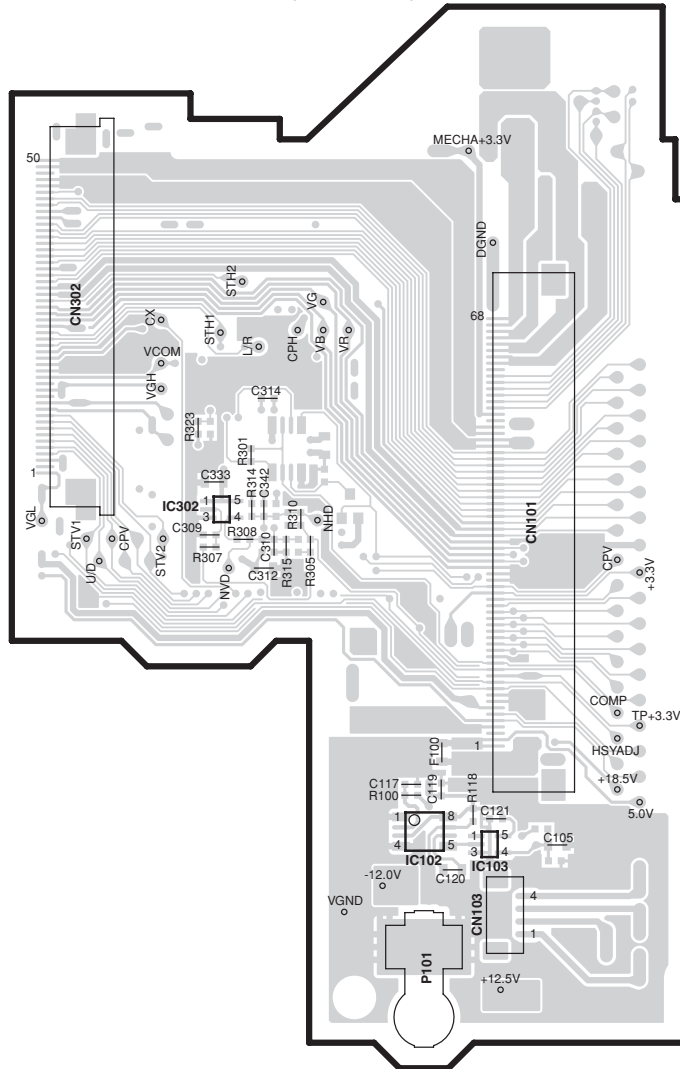
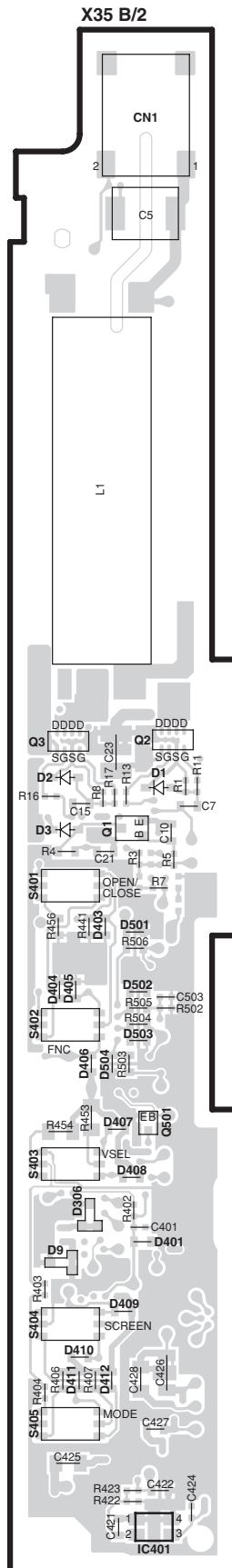
X35-4710-10

Ref. No	Address
IC1	4AH
IC101	4AF
IC301	3AF
IC303	2AG
IC304	3AG
Q4	4AH
Q5	4AH
Q301	3AH
Q303	3AG
Q502	6AH
Q503	5AH

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

PC BOARD (FOIL SIDE VIEW)

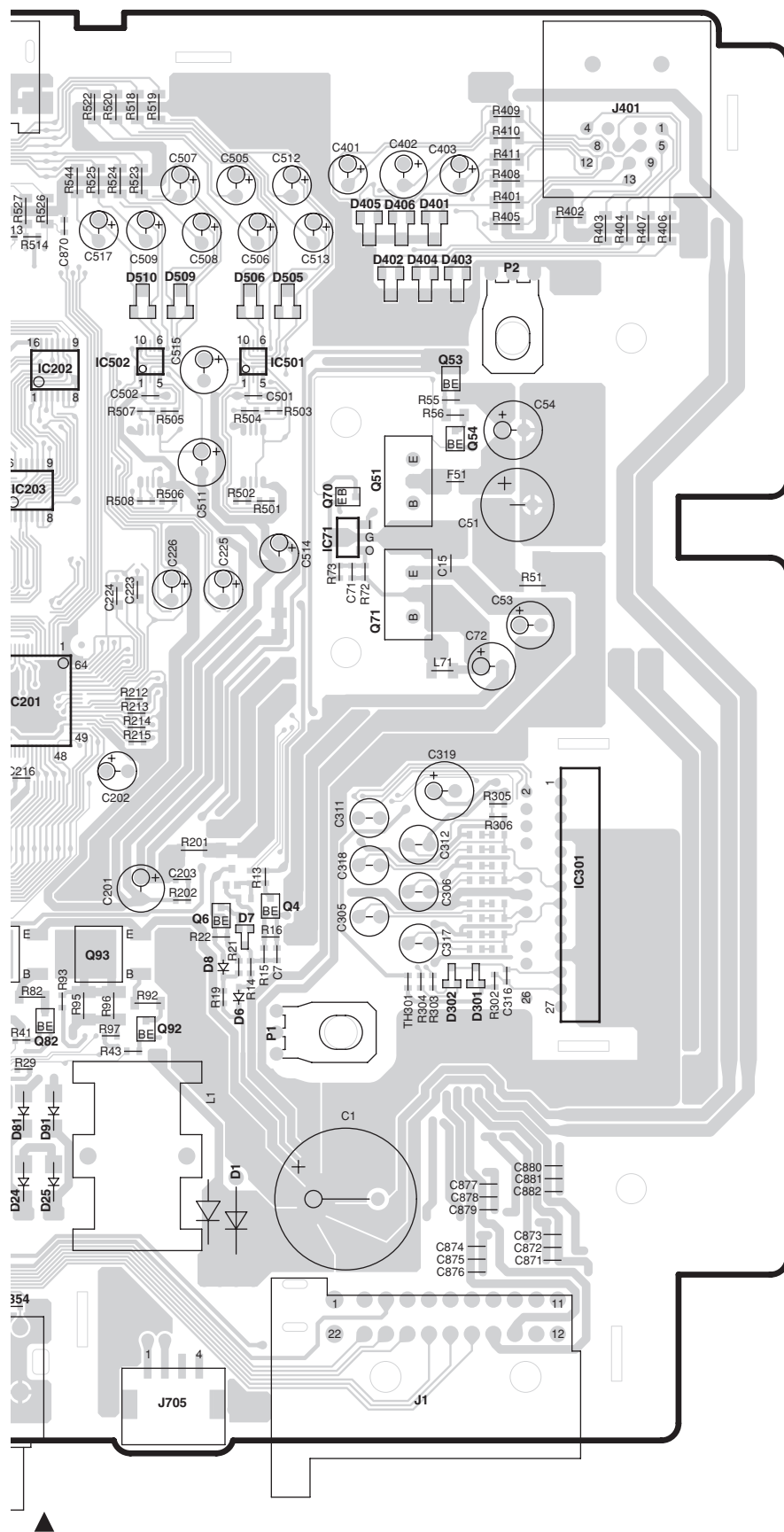
VIDEO UNIT X35-4710-10 A/2 (J76-0385-22)



X35-4710-10

Ref. No	Address
IC102	4AM
IC103	4AM
IC302	3AL
IC401	7AK
Q1	4AK
Q2	4AK
Q3	4AJ
Q501	5AK

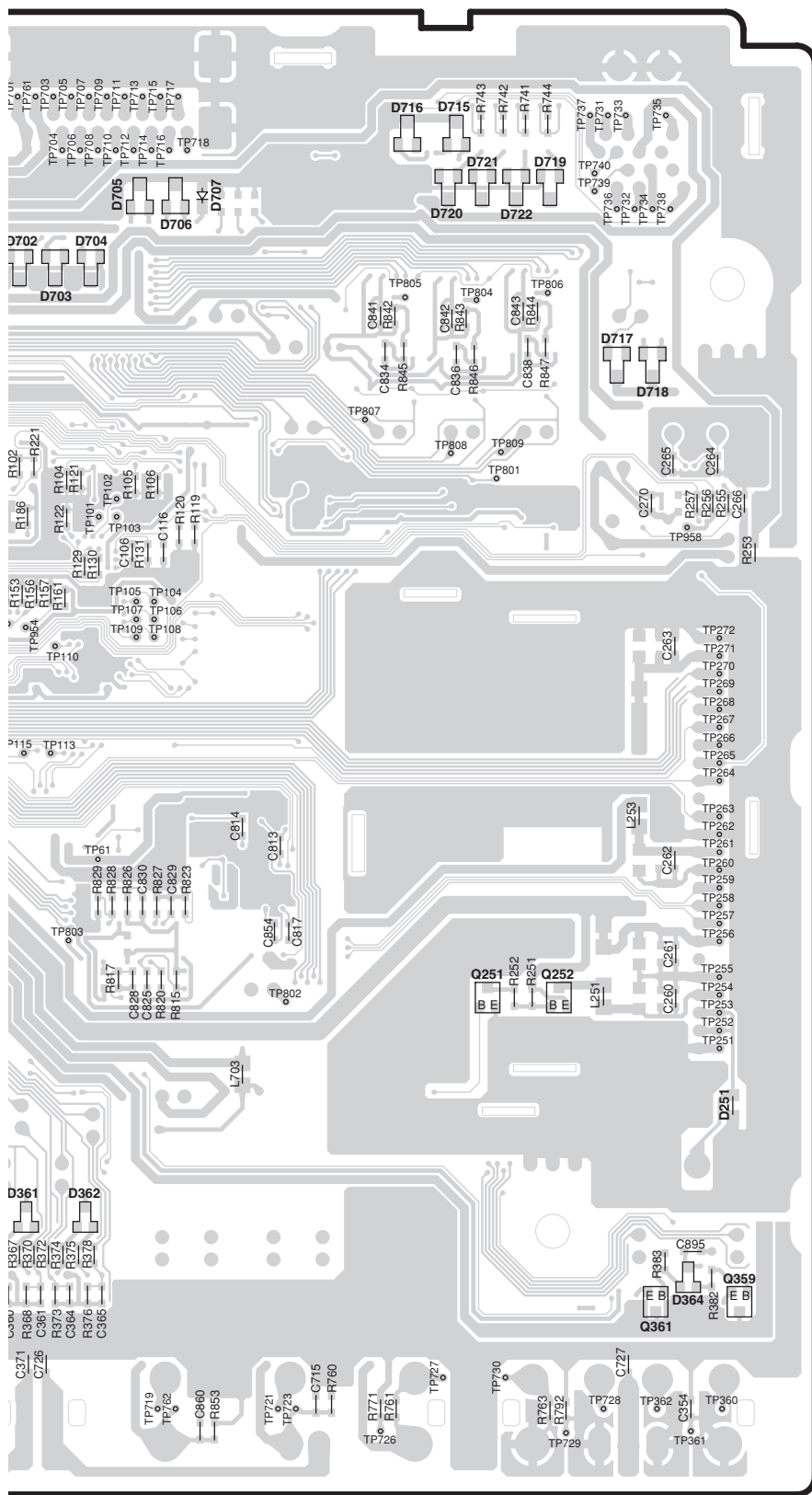
Refer to the schematic diagram for the values of resistors and capacitors.



X34-475x-xx

Ref. No.	Address	Ref. No.	Address
IC61	5AS	Q53	3AU
IC71	3AU	Q54	3AU
IC101	3AR	Q61	5AS
IC102	3AQ	Q62	5AS
IC104	3AS	Q70	3AU
IC105	3AS	Q71	4AU
IC106	3AS	Q82	5AT
IC201	4AS	Q83	5AS
IC202	3AT	Q84	5AS
IC203	3AS	Q92	5AT
IC251	3AP	Q93	5AT
IC301	5AV	Q101	3AQ
IC501	3AU	Q102	3AQ
IC502	3AT	Q103	3AQ
IC701	2AQ	Q104	3AR
IC702	2AQ	Q105	3AR
IC723	5AQ	Q107	3AR
IC802	3AP	Q351	6AR
IC803	4AQ	Q352	5AR
IC804	5AQ	Q353	6AR
IC805	4AQ	Q354	6AR
IC806	3AP	Q355	6AR
IC807	3AQ	Q356	6AR
IC808	3AP	Q357	5AR
IC809	3AP	Q358	6AR
IC810	3AP	Q360	6AP
Q1	6AR	Q802	5AR
Q2	5AS	Q803	5AR
Q3	6AS	Q804	5AR
Q4	5AU	Q805	5AQ
Q6	5AT	Q806	5AQ
Q7	6AS	Q807	5AR
Q8	5AS	Q808	5AR
Q10	5AS	Q809	2AQ
Q11	6AS	Q810	2AP
Q12	5AS	Q811	2AP
Q13	6AS	Q813	2AP
Q14	5AS	Q814	2AP
Q15	5AR	Q815	2AP
Q51	3AU		

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



X34-475x-xx

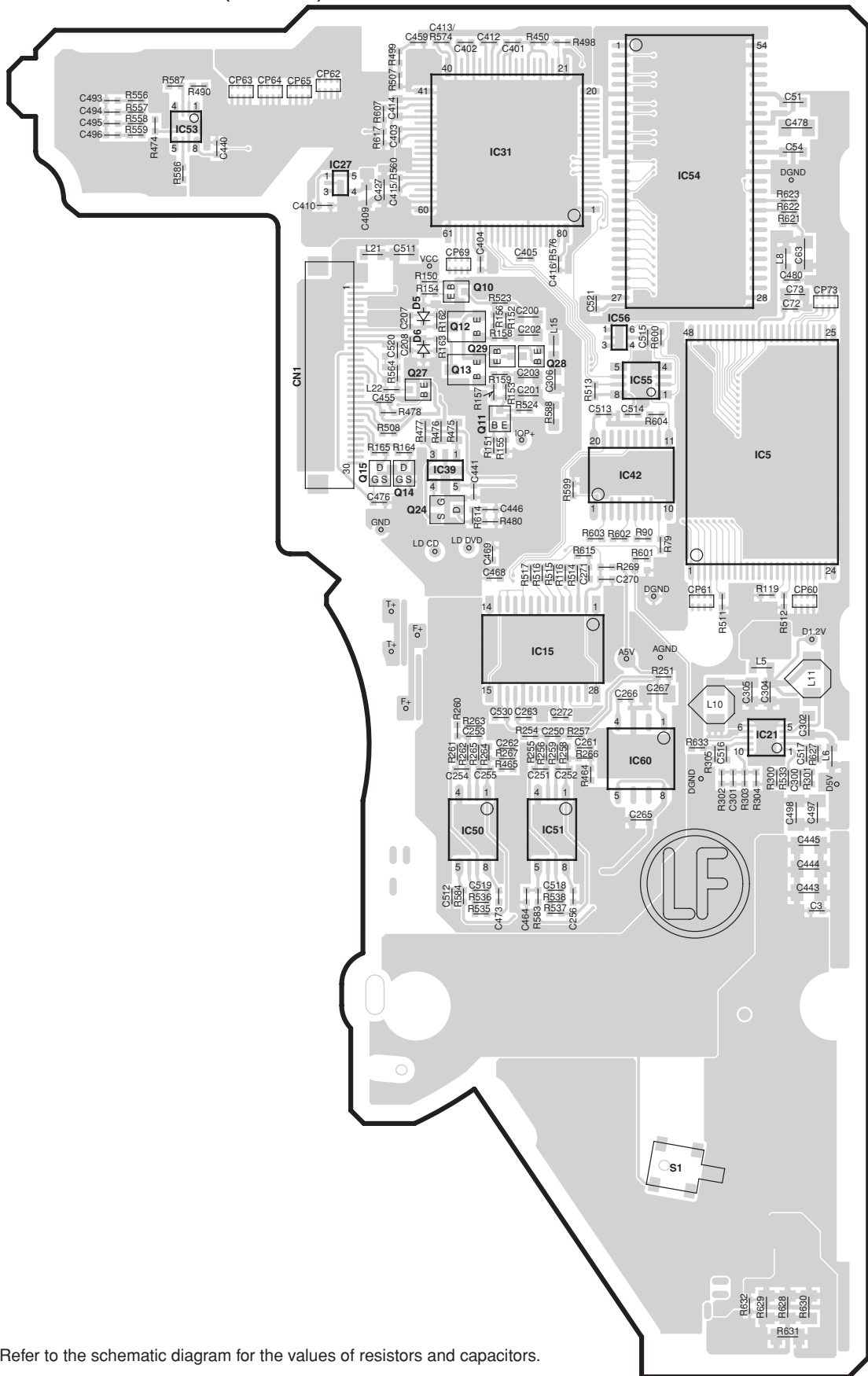
Ref. No	Address
Q9	5BC
Q52	3AZ
Q72	3BA
Q81	5BB
Q85	5BB
Q91	5BB
Q94	5BB
Q95	5BB
Q251	5BE
Q252	5BF
Q359	6BF
Q361	6BF

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

KVT-719DVD/729DVD
/729DVDY/739DVD

PC BOARD (COMPONENT SIDE VIEW)

DVD UNIT X37-1120-03 (J76-0162-02)



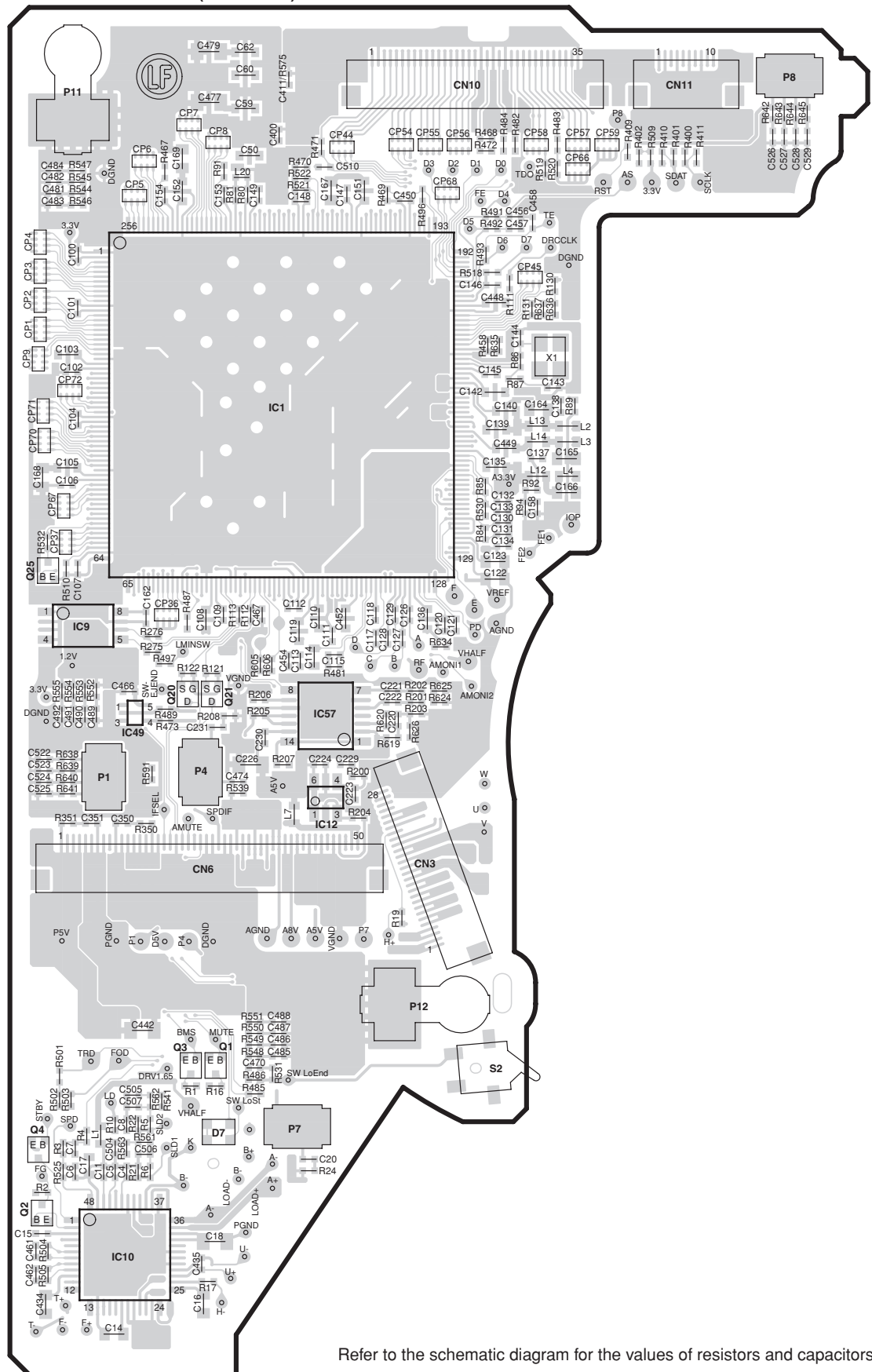
X37-1120-03

Ref. No	Address
IC5	3BL
IC15	4BK
IC21	4BL
IC39	3BK
IC42	3BL
IC50	5BK
IC51	5BK
IC54	2BL
IC55	3BL
IC60	5BL
Q10	3BK
Q11	3BK
Q12	3BK
Q13	3BK
Q14	3BK
Q15	3BJ
Q24	3BK
Q27	3BK
Q28	3BK
Q29	3BK

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

PC BOARD (FOIL SIDE VIEW)

DVD UNIT X37-1120-03 (J76-0162-02)



X37-1120-03

Ref. No	Address
IC1	3BP
IC9	4BO
IC10	7BO
IC12	5BP
IC49	4BO
IC57	4BP
Q1	6BO
Q2	6BN
Q3	6BO
Q4	6BN
Q20	4BO
Q21	4BO
Q25	4BN

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

KVT-719DVD/729DVD
/729DVDY/739DVD

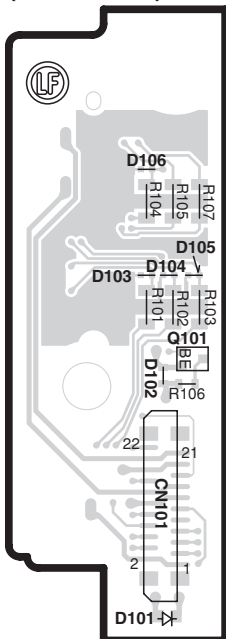
PC BOARD (COMPONENT SIDE VIEW)

(FOIL SIDE VIEW)

X16 B/2



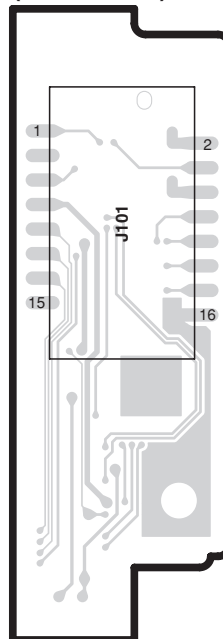
SWITCH UNIT
X16-3920-10 A/2
(J76-0393-22)



X16-3920-10

Ref. No	Address
IC201	5BS
Q101	3BU

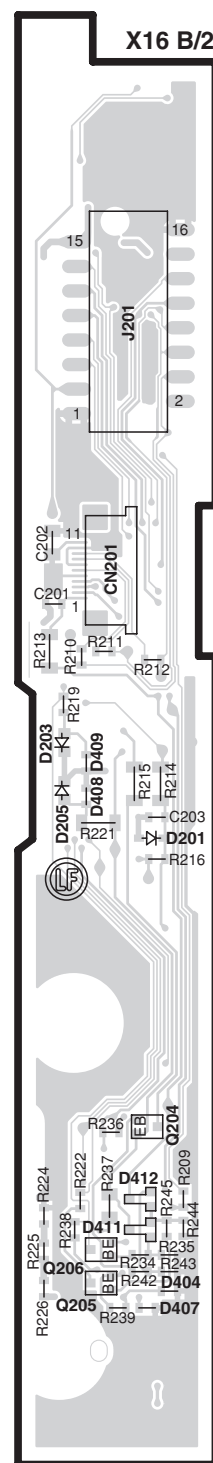
SWITCH UNIT
X16-3920-10 A/2
(J76-0393-22)



X16-3920-10

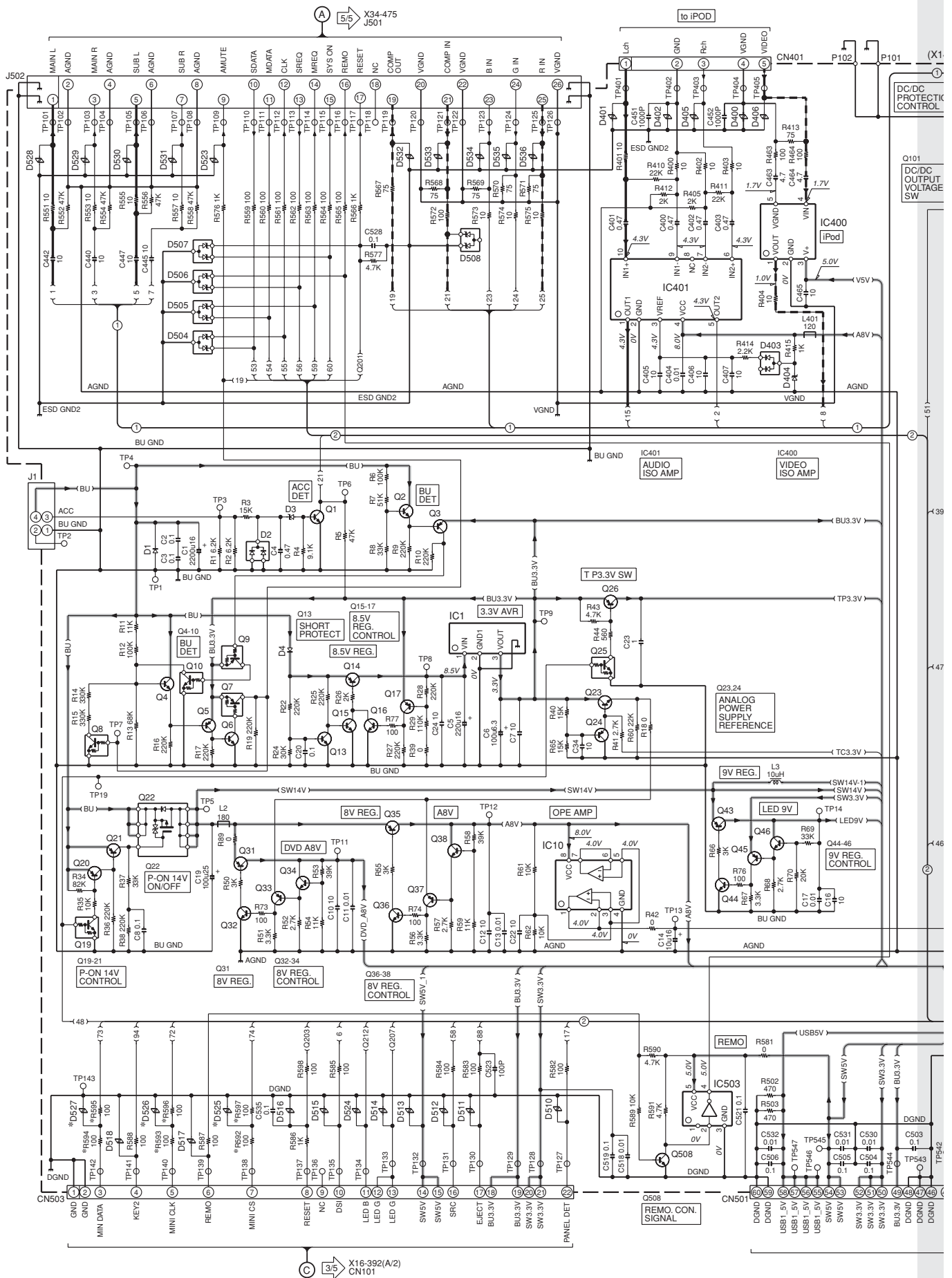
Ref. No	Address
Q206	6BW

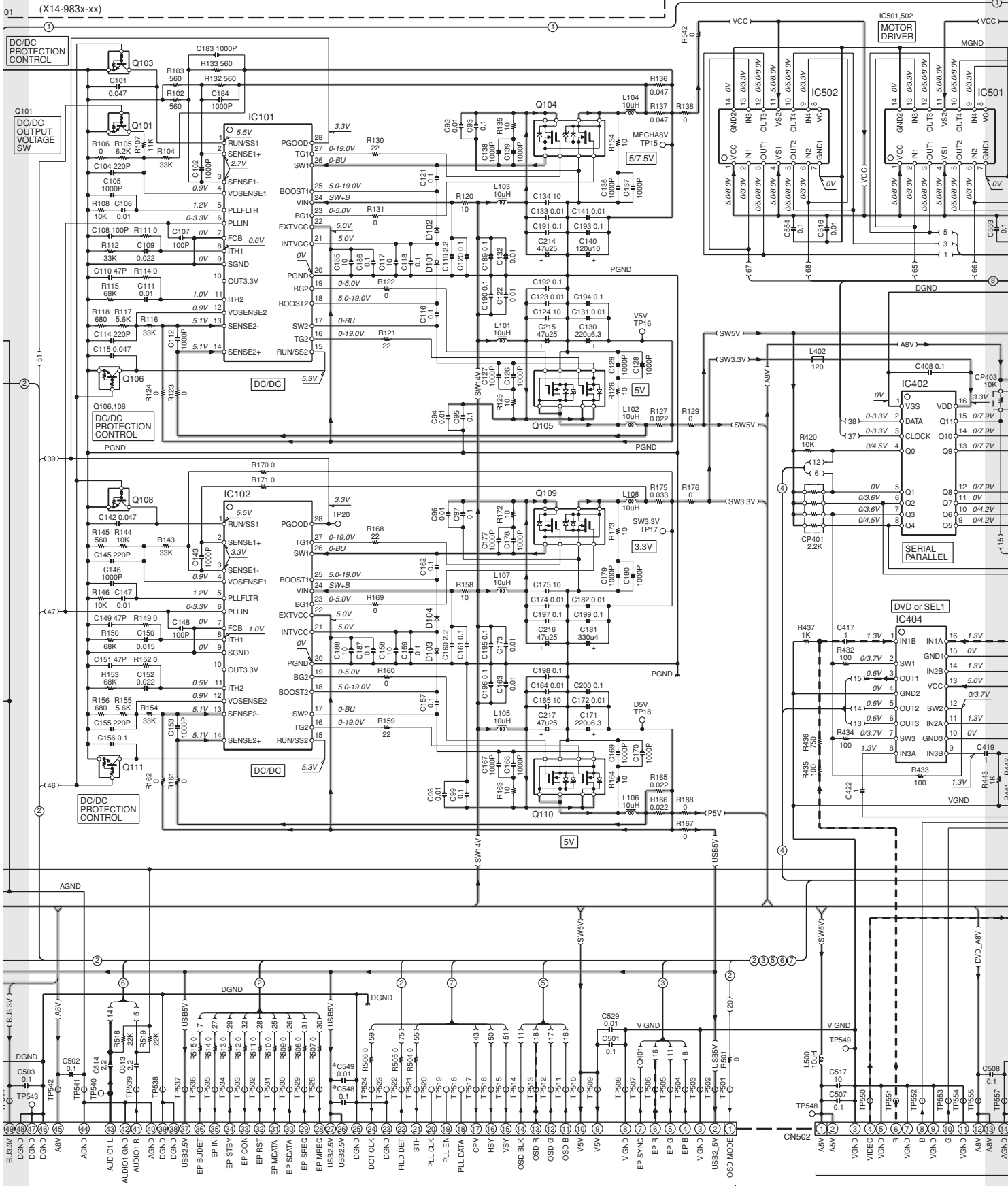
X16 B/2



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

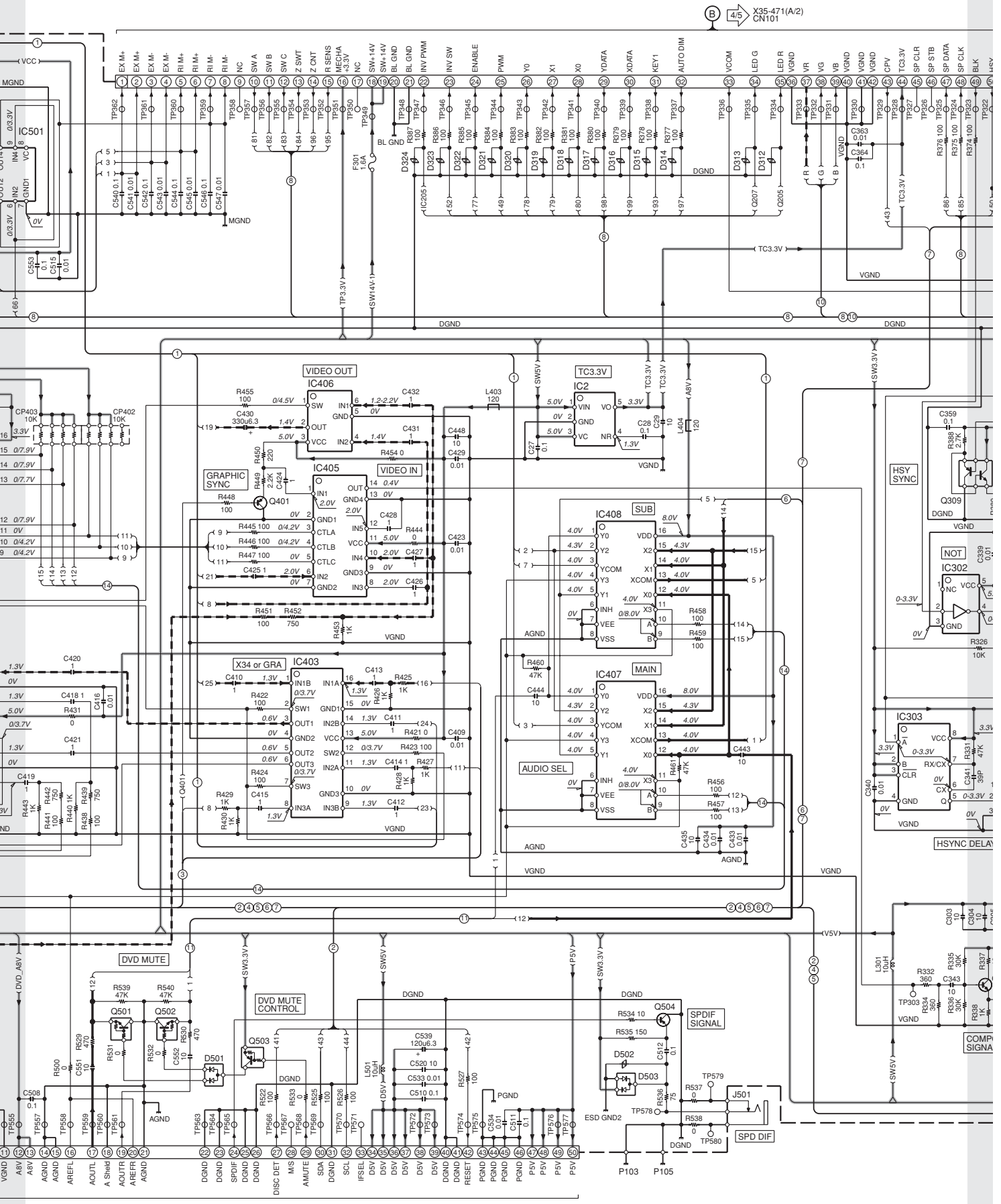
KVT-719DVD/729DVD
/729DVDY/739DVD





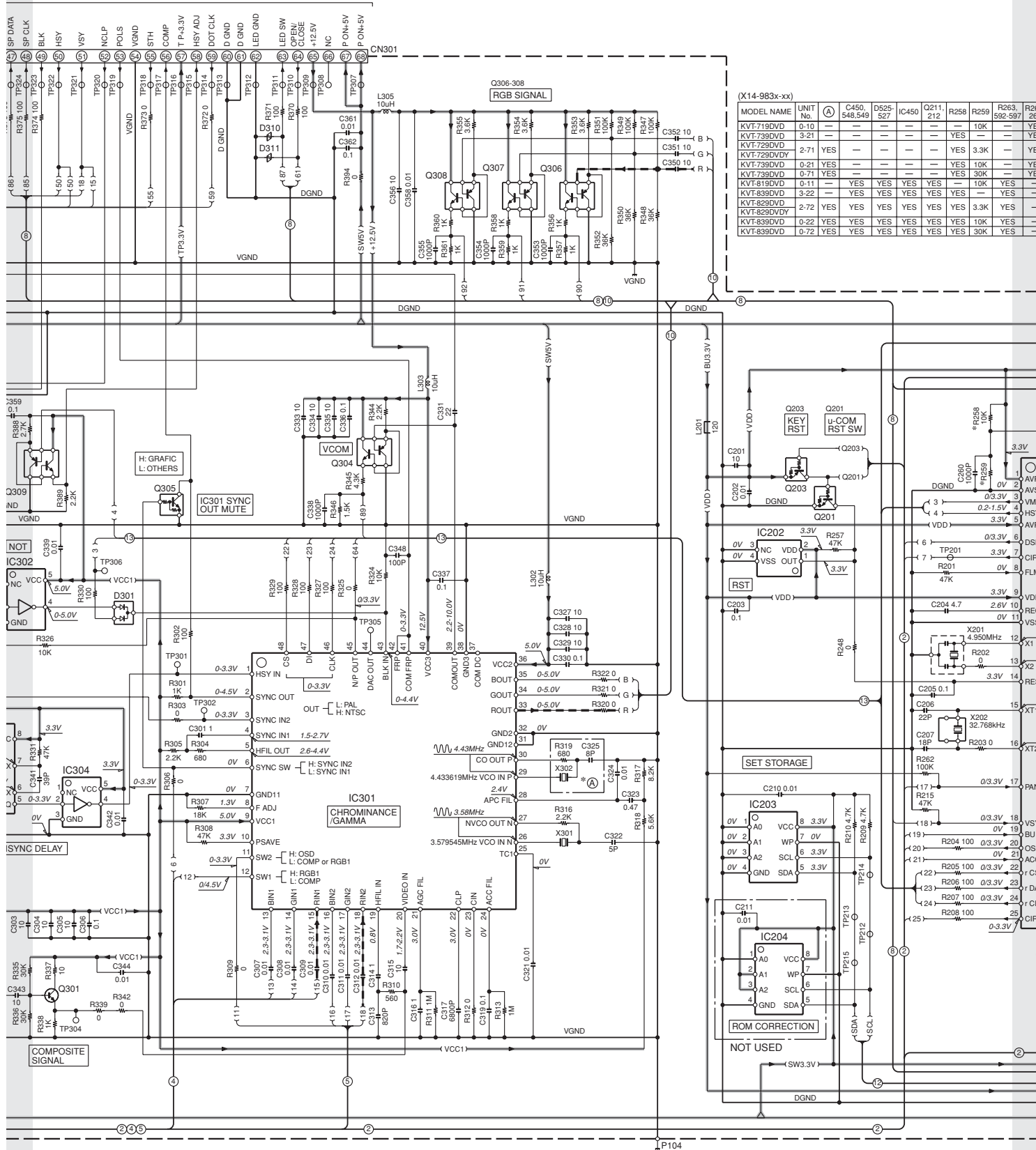
X88-202
CN327 or CN328

KVT-719DVD/729DVD
/729DVDY/739DVD



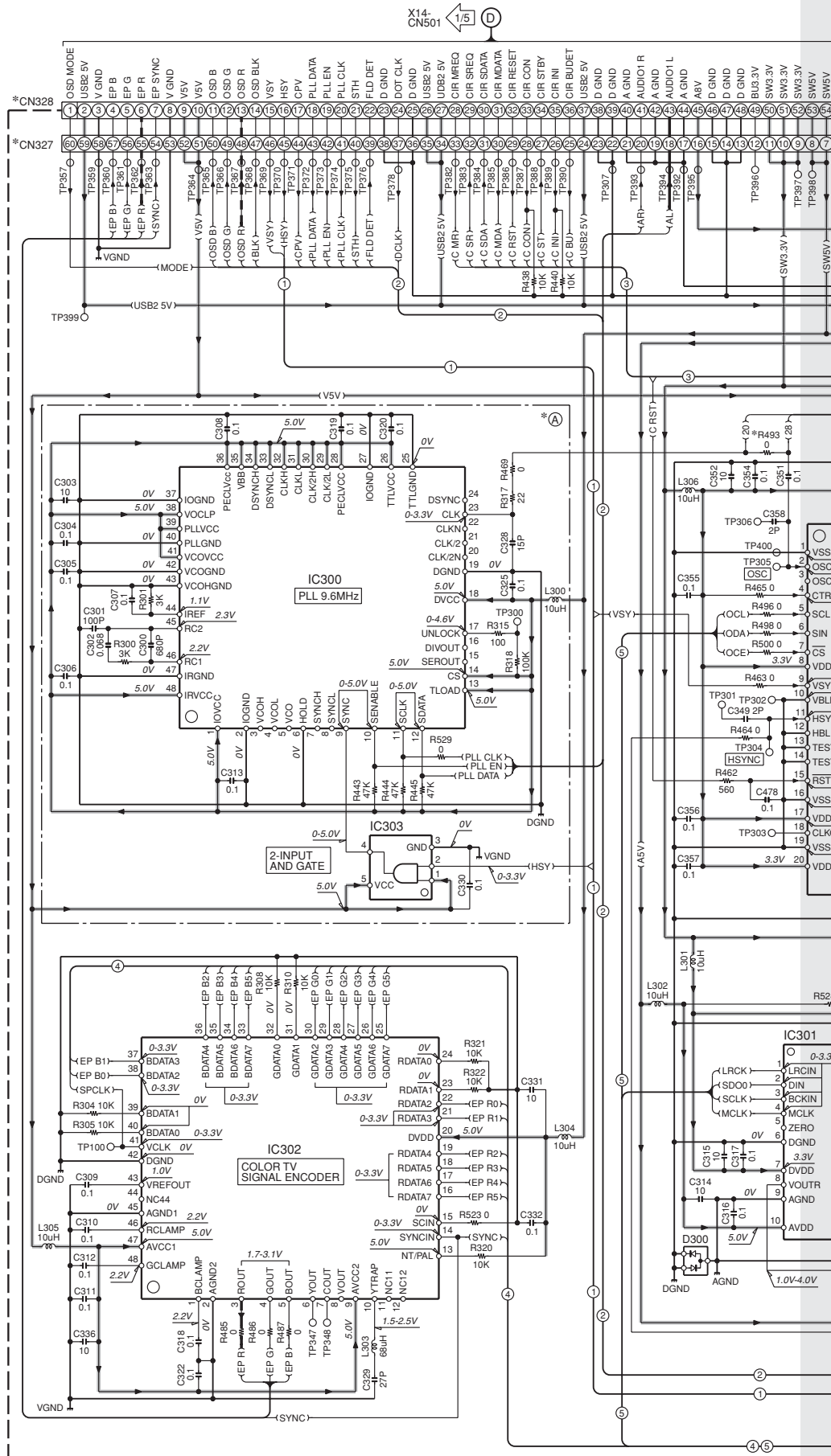
to DVD UNIT X37-112
CNS

KVT-719DVD/729DVD /729DVDY/739DVD

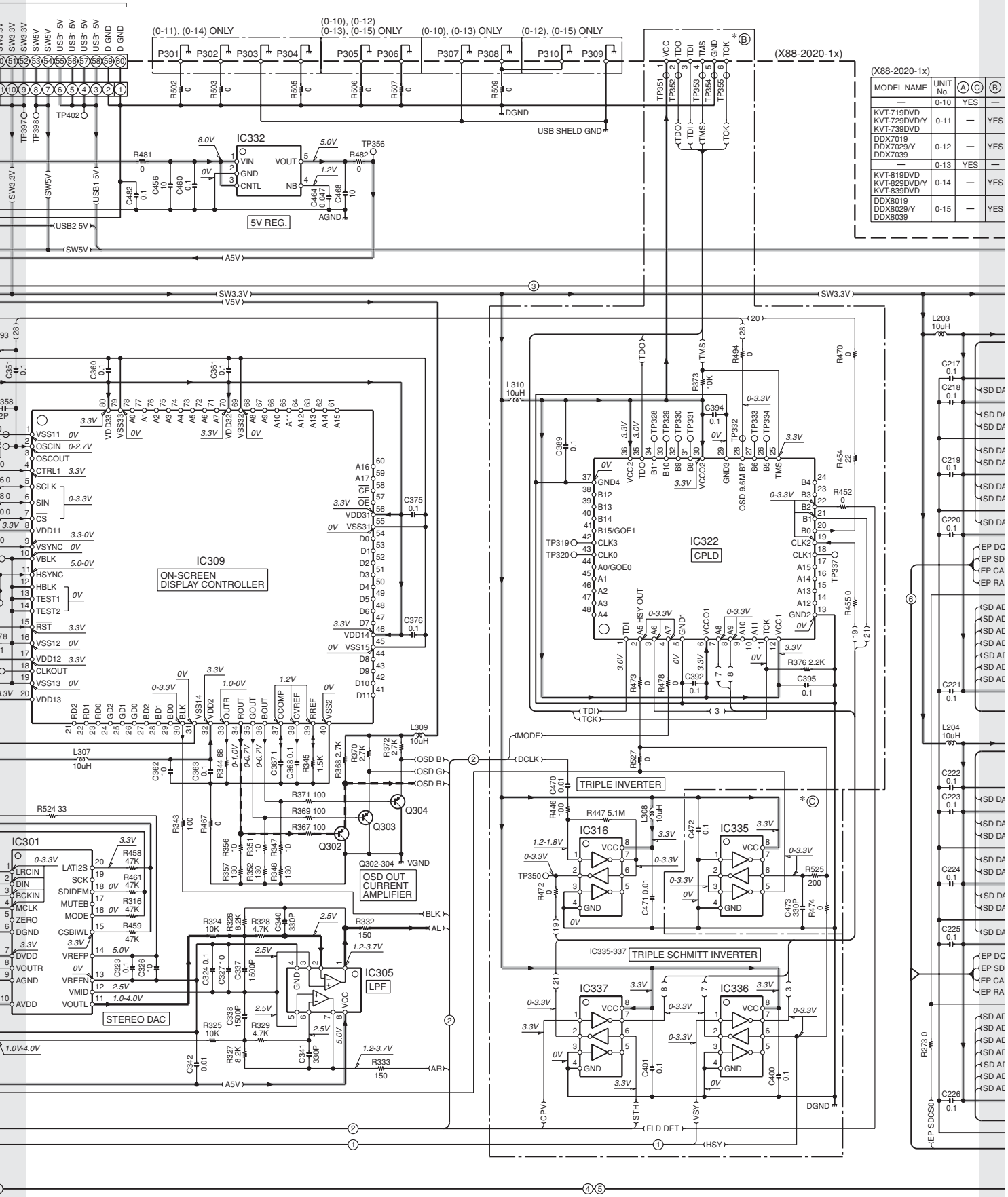


KVT-719DVD/729DVD /729DVDY/739DVD

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KVT-719DVD/729DVD /729DVDY/739DVD

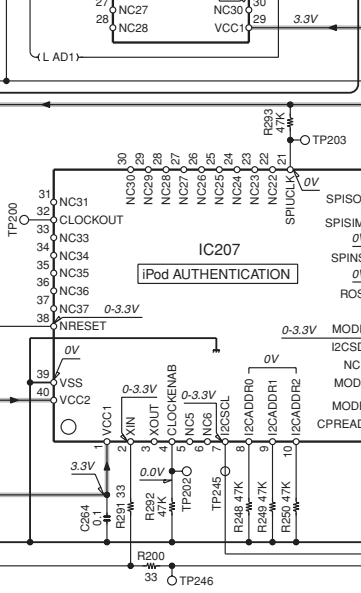
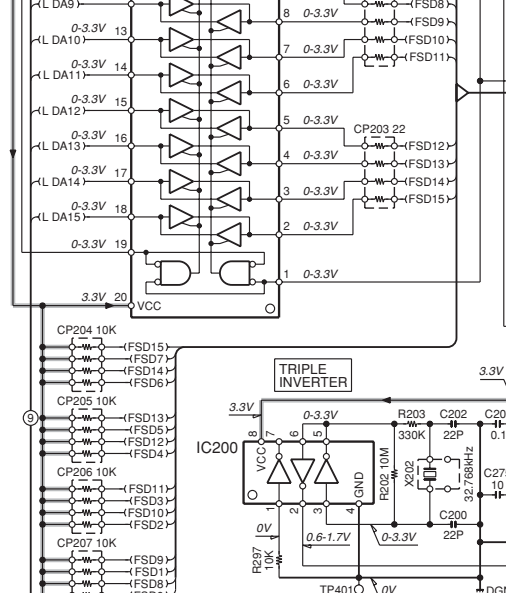
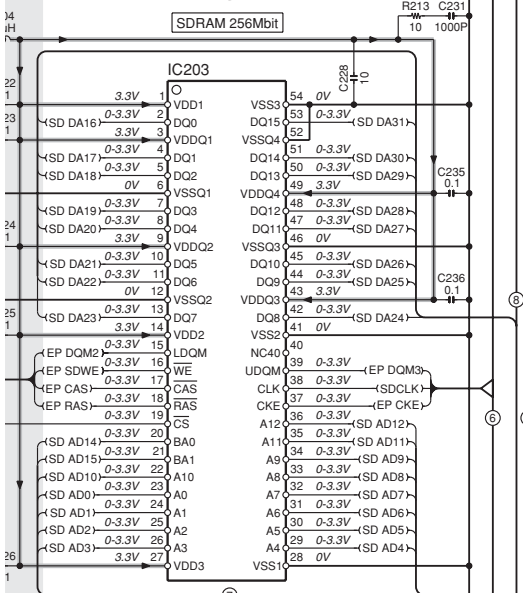
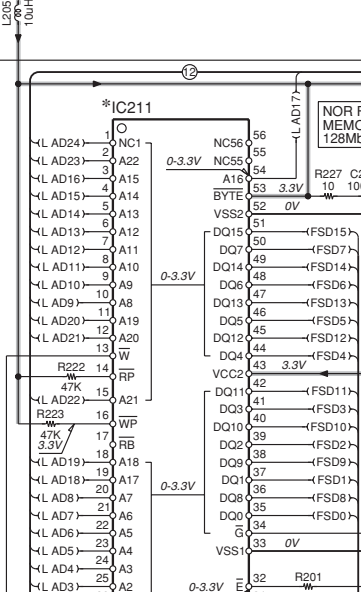
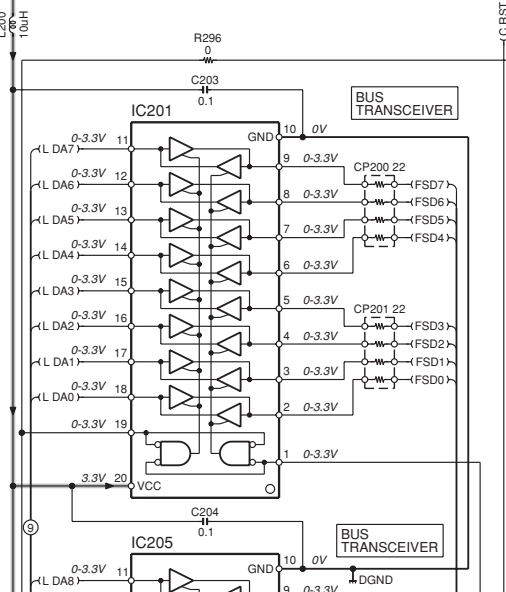
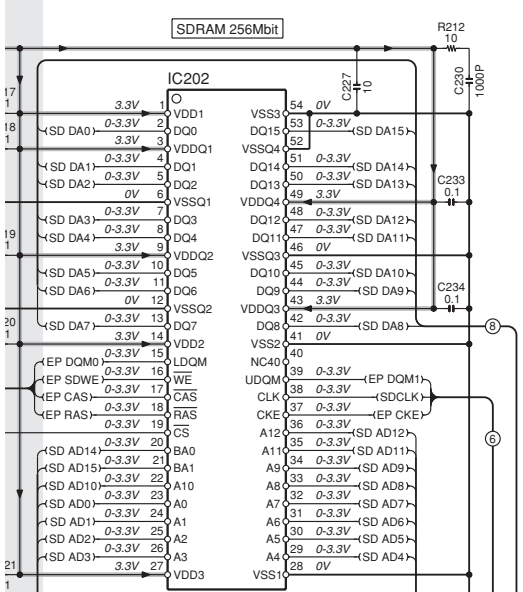
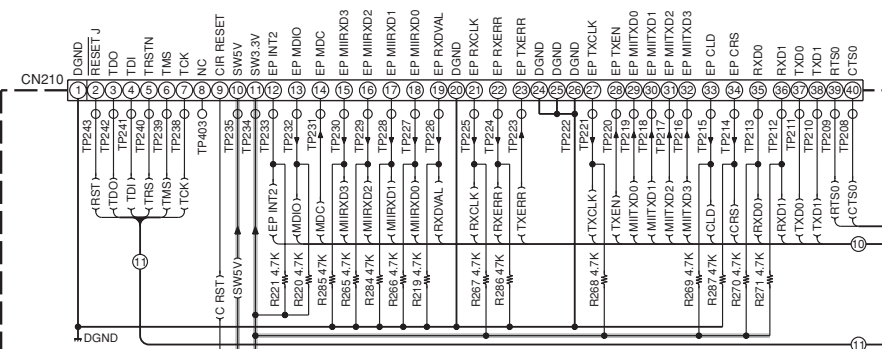


(X88-2020-1x)

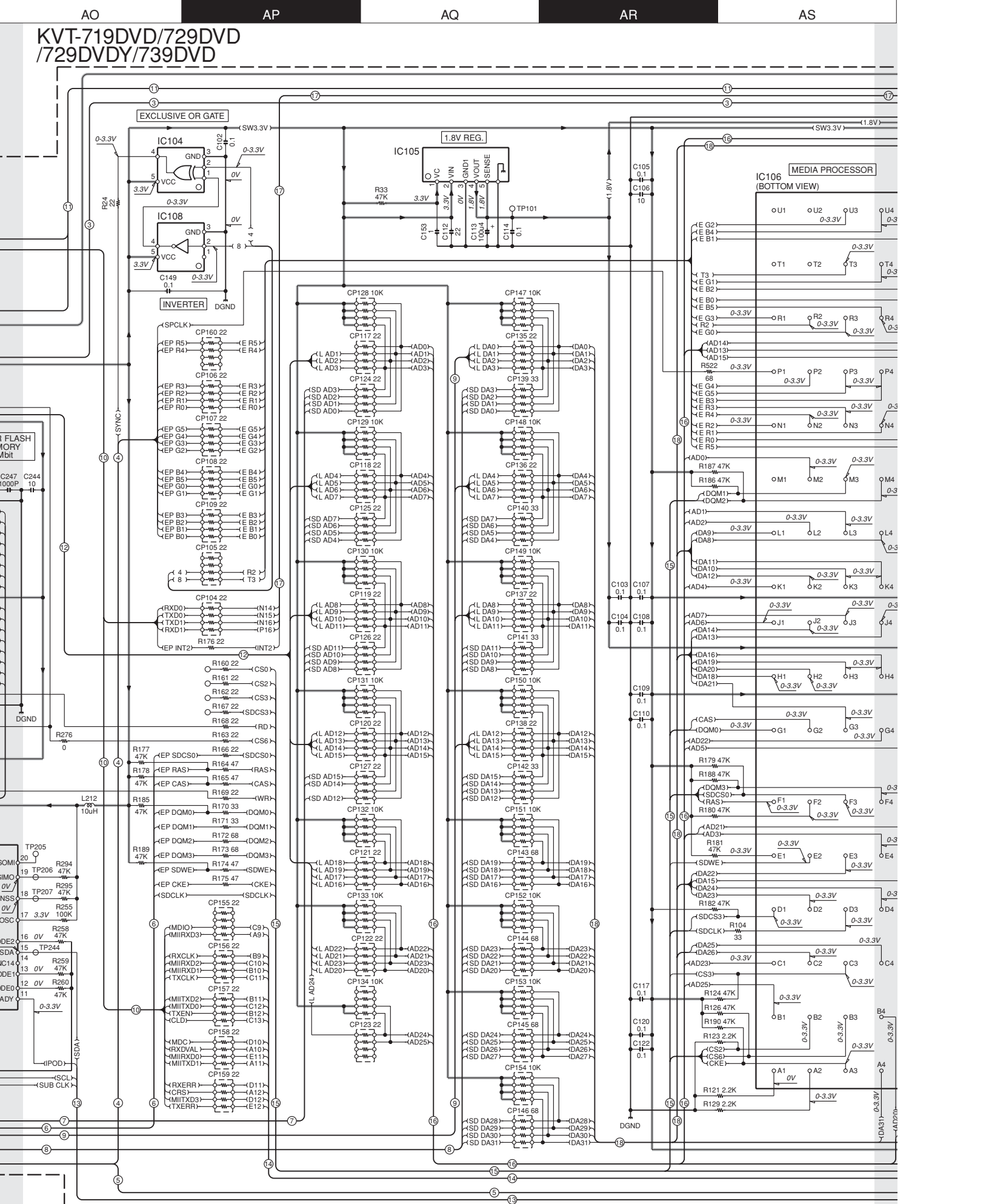
MODEL NAME	UNIT No.	(A)	(B)
—	0-10	YES	—
KVT-719DVD KVT-729DVD/Y KVT-739DVD	0-11	—	YES
DDX7019 DDX7029/Y DDX7039	0-12	—	YES
—	0-13	YES	—
KVT-819DVD KVT-829DVD/Y KVT-839DVD	0-14	—	YES
DDX8019 DDX8029/Y DDX8039	0-15	—	YES

KVT-719DVD/729DVD /729DVDY/739DVD

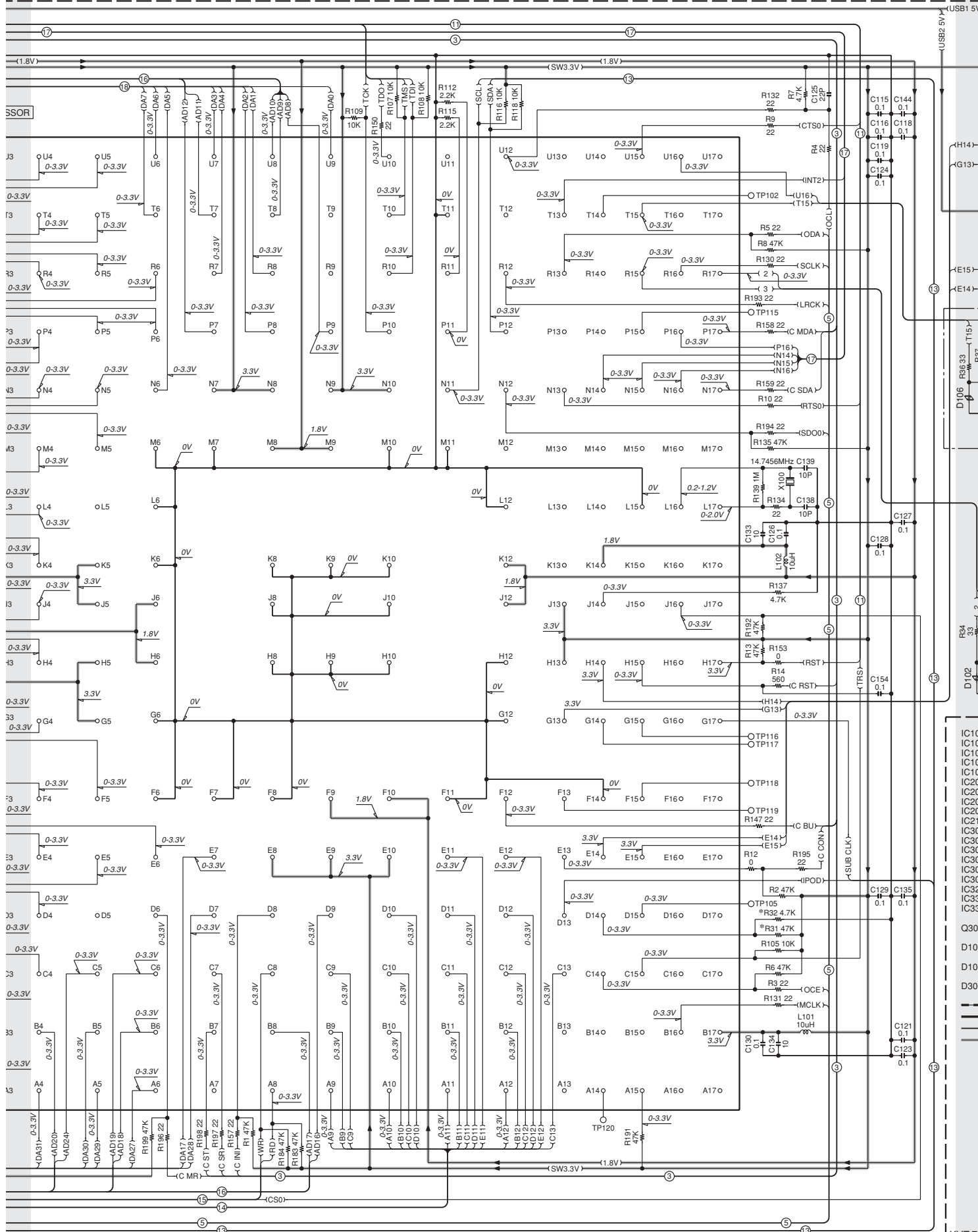
(A)	(C)	(B)	(D)	CN101	CN327	CN328	IC211	J100	J101	R31	R32	R493
YES	—	—	—	—	—	—	DW128F70NF5X2	YES	—	—	—	—
—	—	—	—	—	—	—	DW128F70NF9W7	—	—	—	—	—
—	—	—	—	—	—	—	DW128F70NF9W7	—	—	—	—	—
—	—	—	—	—	—	—	DW128F70NF5X2	—	—	—	—	—
—	—	—	—	—	—	—	DW128F70NF5X2	—	—	—	—	—
—	—	—	—	—	—	—	DW128F70NF5X2	—	—	—	—	—



KVT-719DVD/729DVD
/729DVDY/739DVD



KVT-719DVD/729DVD /729DVDY/739DVD



1

2

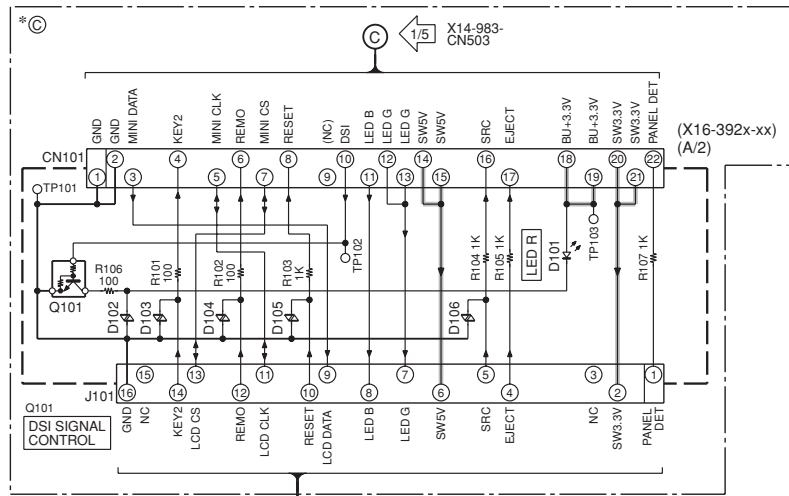
3

4

5

6

7

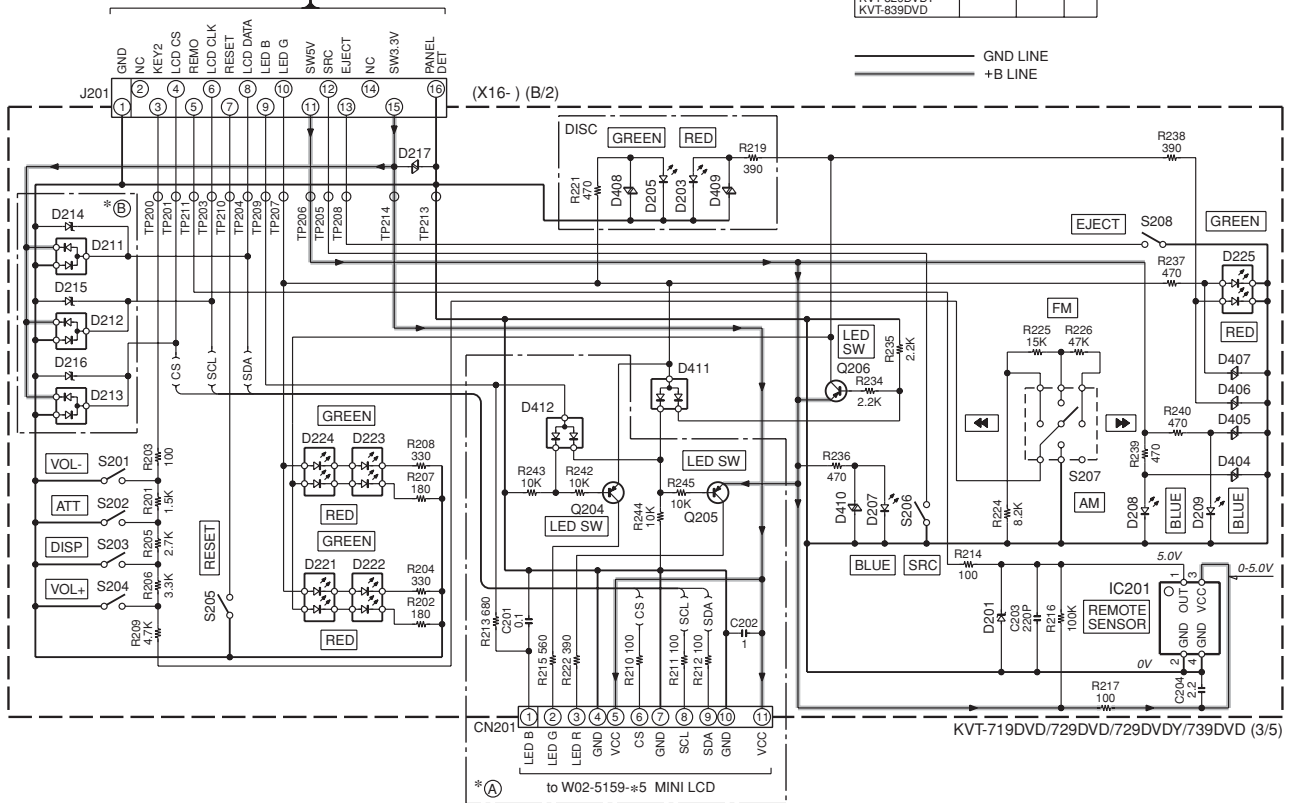


IC201	:RS-181
Q101	:DTC114YUA
Q204-206	:2SA1576A
D101,203	:B30-1713-05
D102,404-410	:AVRM1608180M6A
D103-106	:AVRM1005270MAA
D201,214-216	:UDZ56.2B
D205	:B30-1740-05
D207-209	:B30-1787-05
D211-213	:DA204U
D217	:AVRM1608120M6A
D221-225	:B30-1605-05
D411,412	:DAP202U

(X16-392x-xx)

MODEL NAME	UNIT No.	(A)	(B)	(C)
KVT-719DVD	0-10	—	—	YES
KVT-729DVD	0-10	—	—	YES
KVT-729DVDY	0-10	—	—	YES
KVT-739DVD	0-10	—	—	YES
KVT-819DVD	0-11	YES	—	—
KVT-829DVD	0-11	YES	—	—
KVT-829DVDY	0-11	YES	—	—
KVT-839DVD	0-11	YES	—	—

— GND LINE
— +B LINE

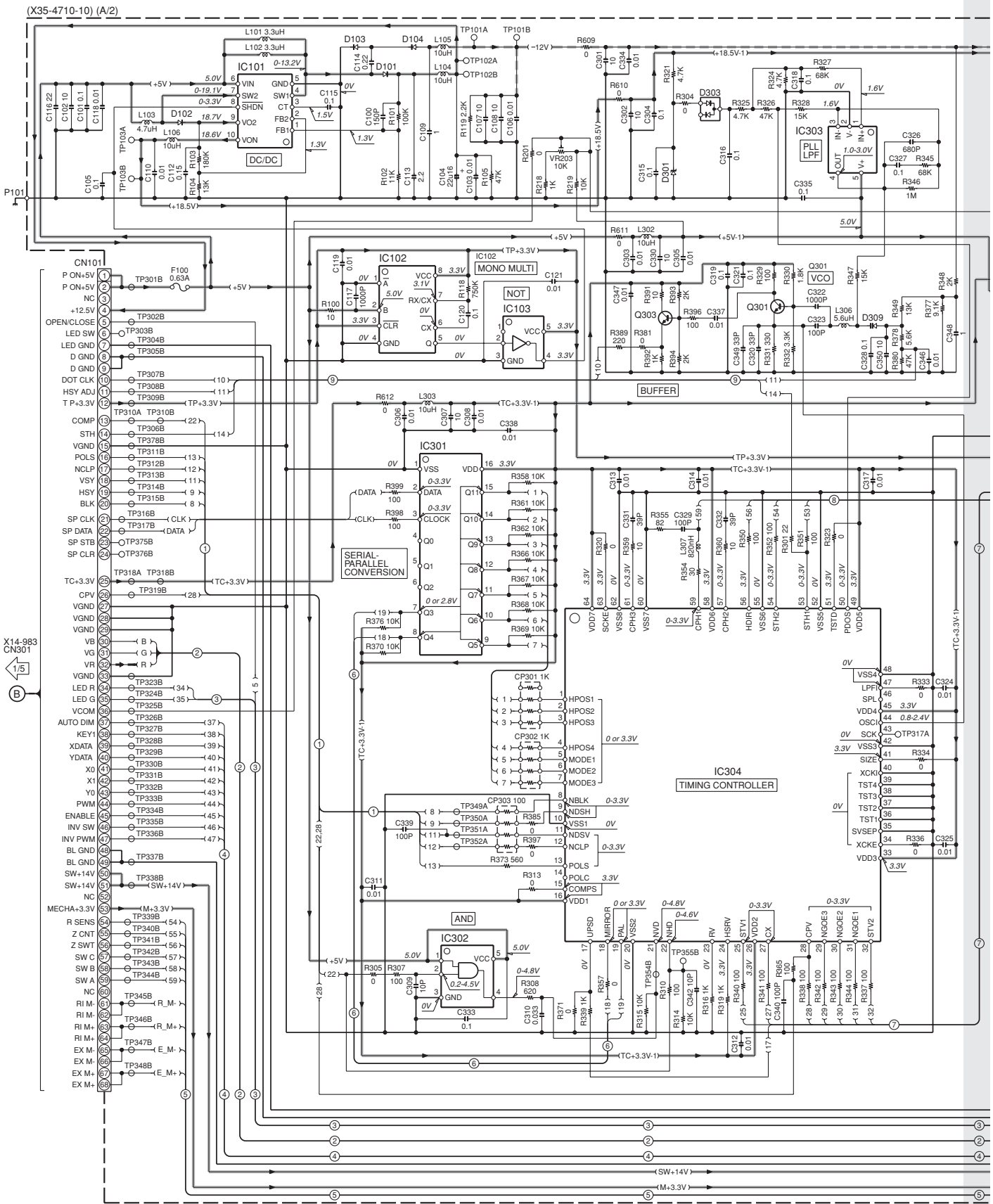


KVT-719DVD/729DVD/729DVDY/739DVD (3/5)

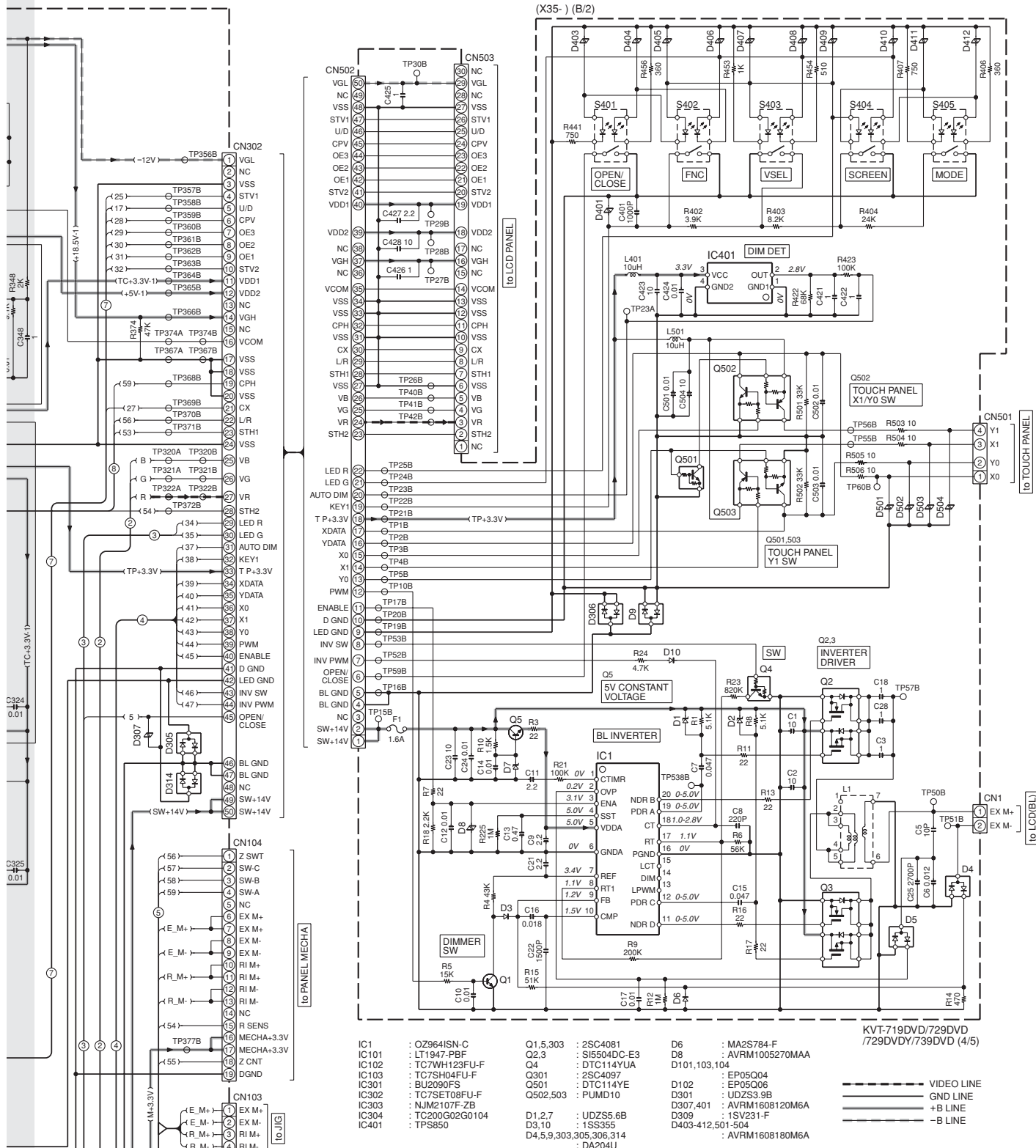
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

KVT-719DVD/729DVD
/729DVDY/739DVD

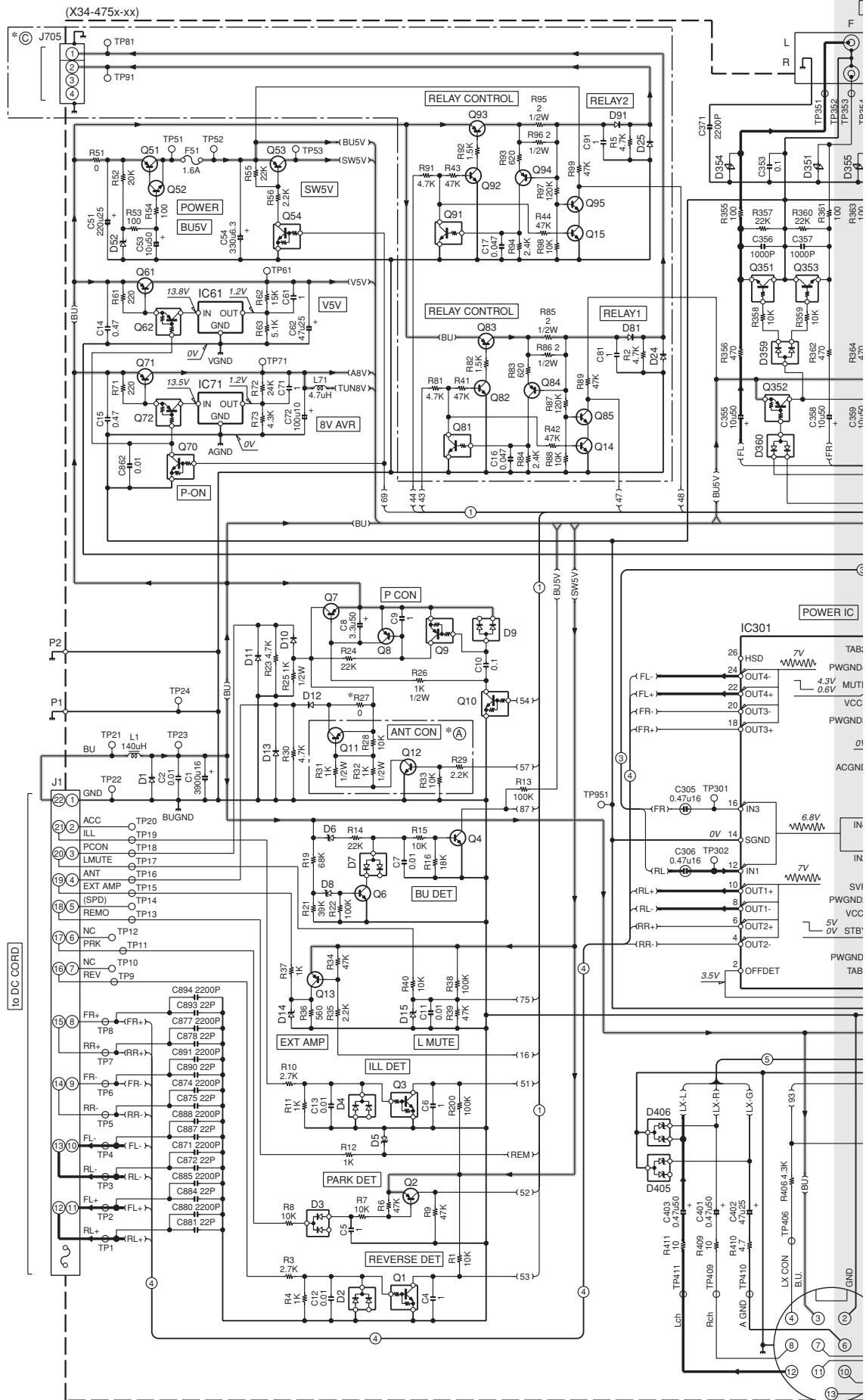


KVT-719DVD/729DVD /729DVDY/739DVD



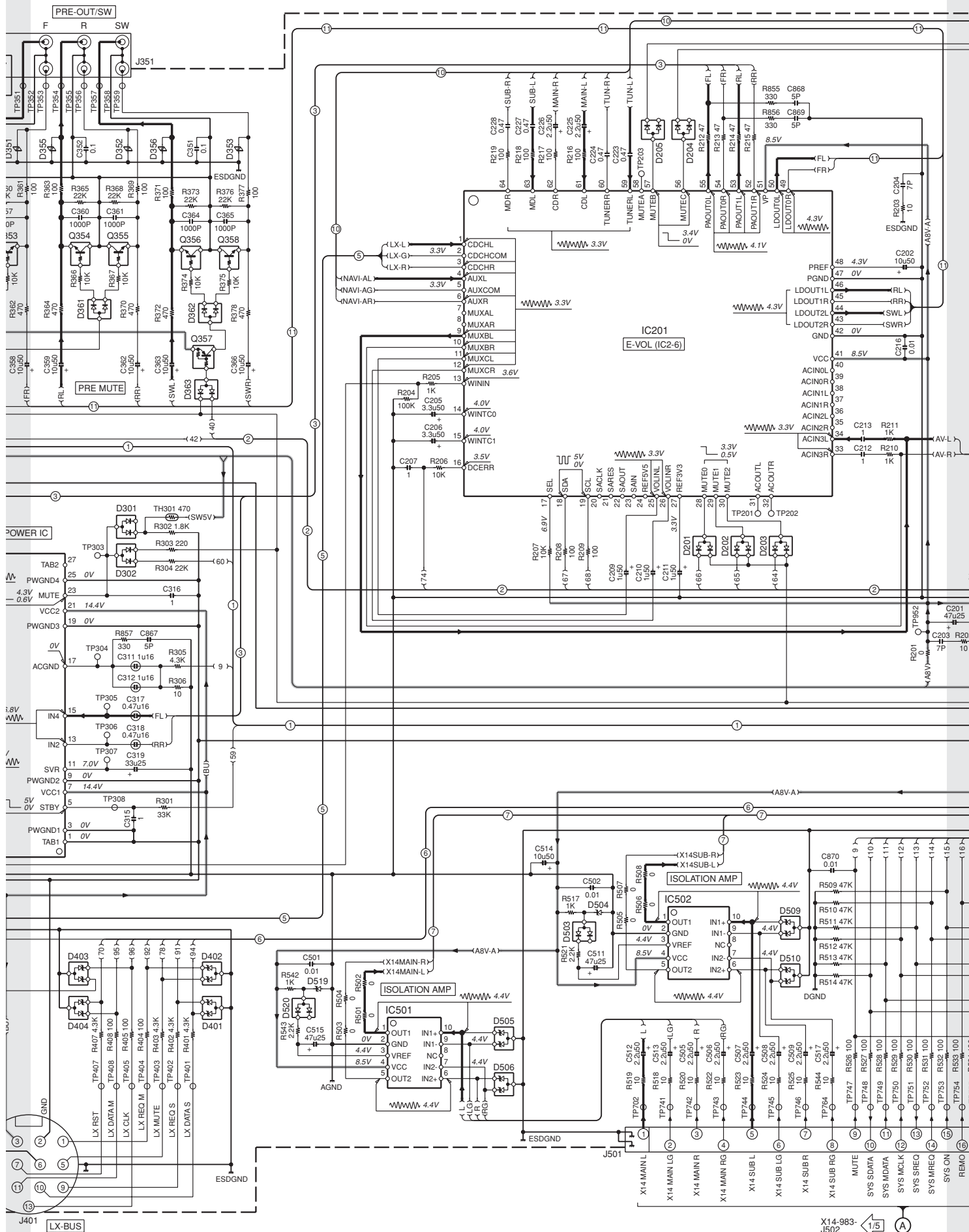
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ▲ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

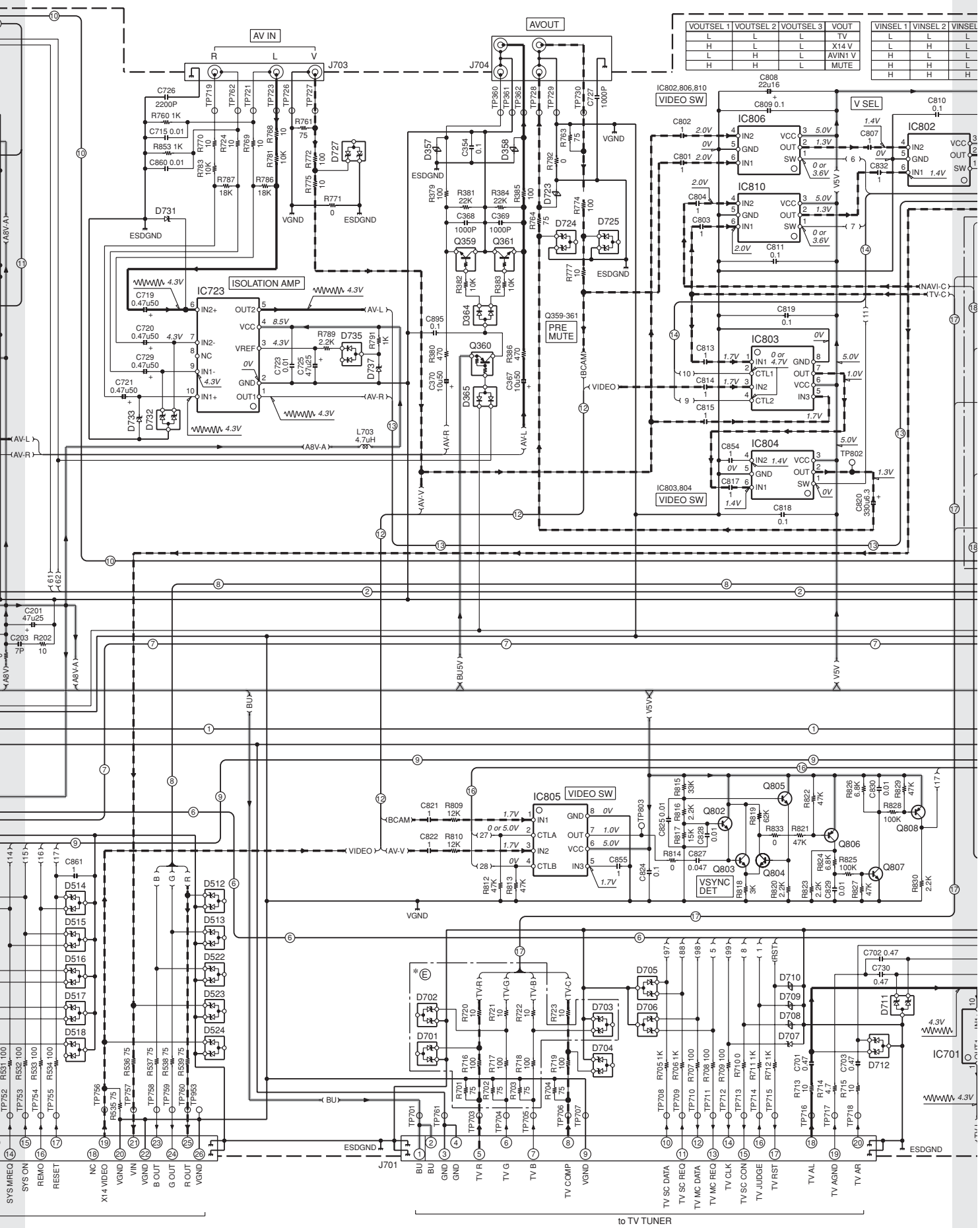


J401

KVT-719DVD/729DVD /729DVDY/739DVD



KVT-719DVD/729DVD
/729DVDY/739DVD



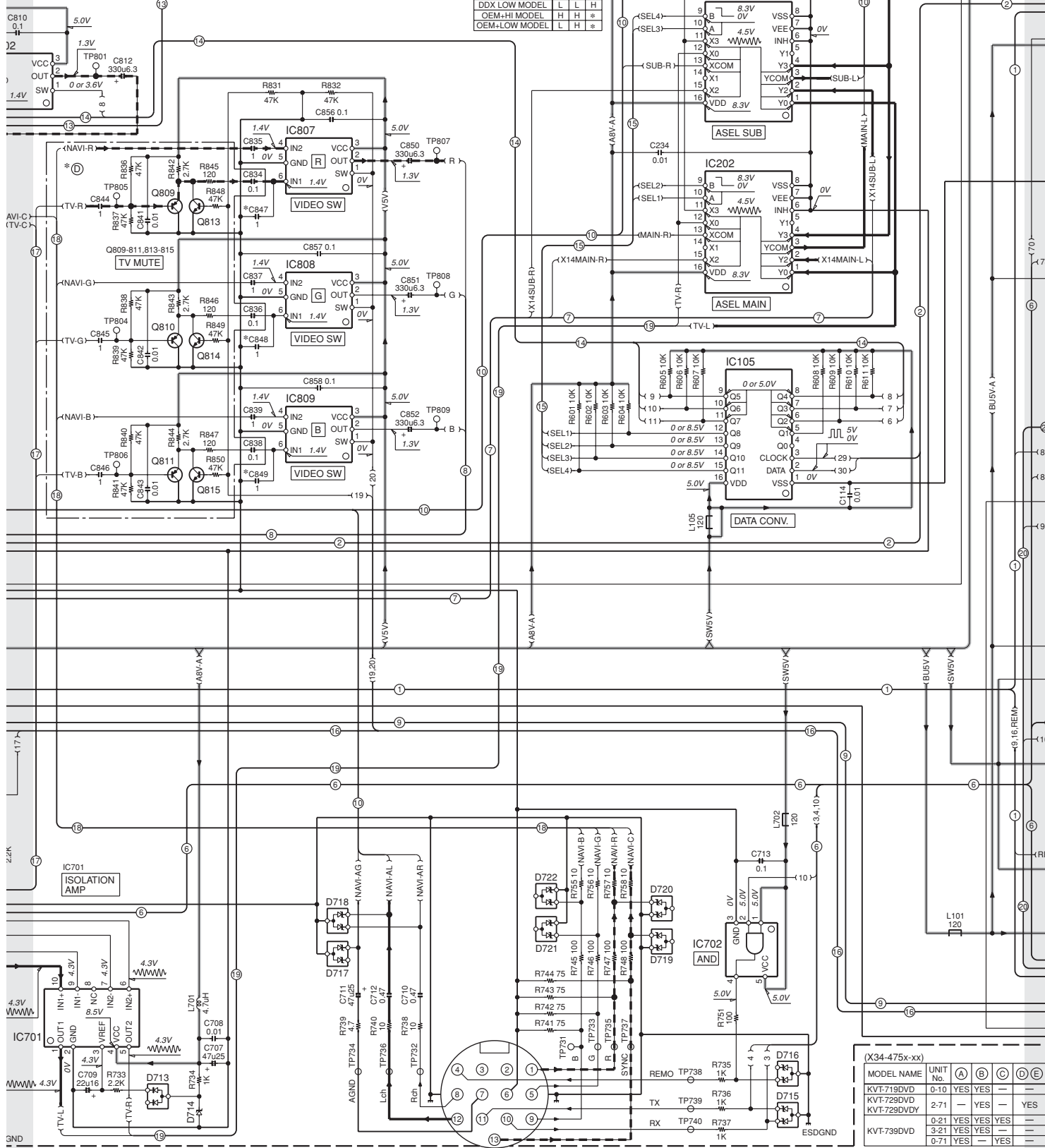
VOUTSEL 1	VOUTSEL 2	VOUTSEL 3	VOUT	VINSEL 1	VINSEL 2	VINSEL
L	L	L	TV	L	L	L
H	L	L	X14 V	L	H	L
L	H	L	AVIN1 V	H	L	L
H	H	L	MUTE	H	H	L
H	H	H		H	H	H

to TV TUNER

KVT-719DVD/729DVD /729DVDY/739DVD

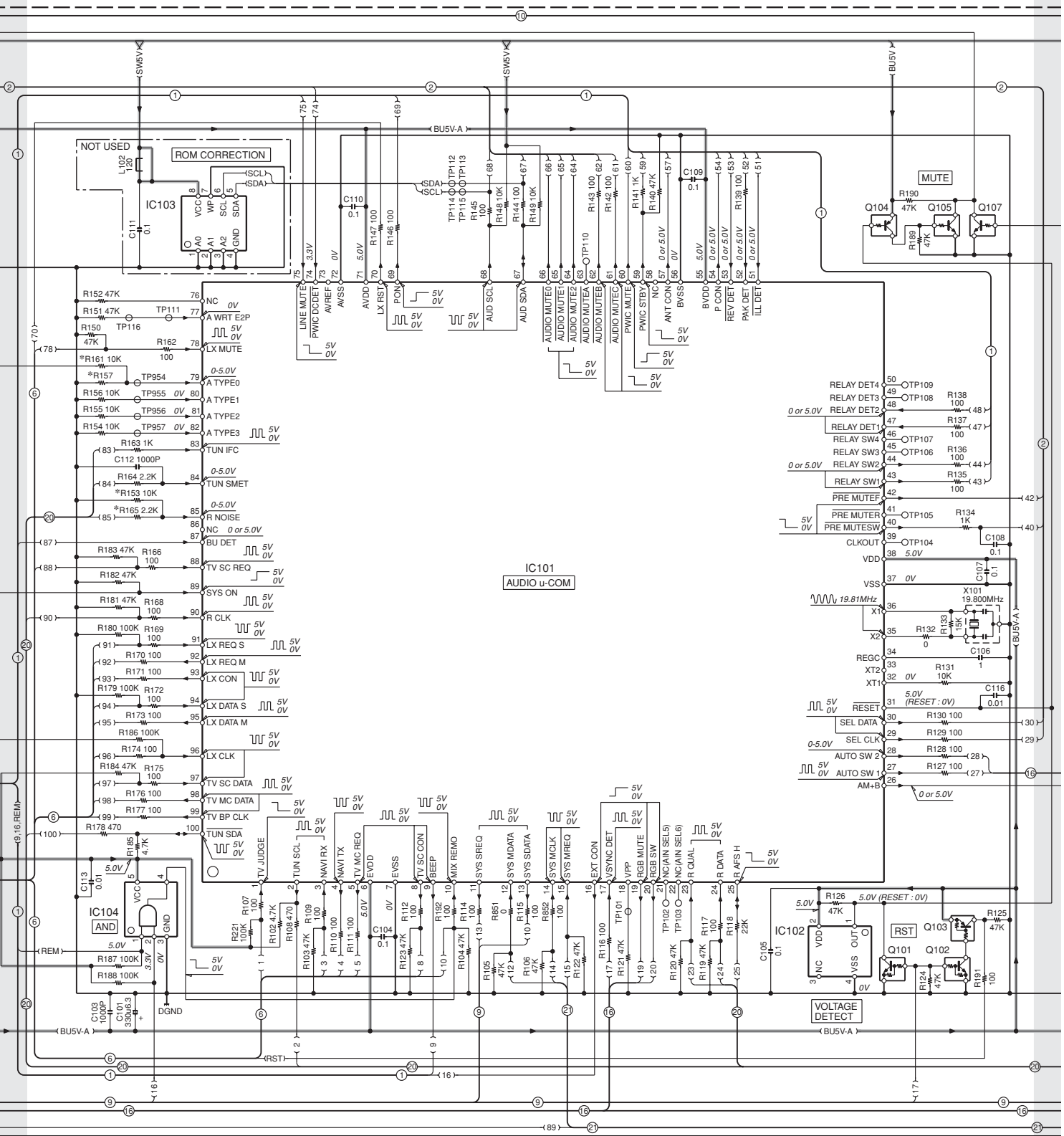
SEL 2	VINSEL 3	VINSEL 4	VIN
L	L	L	BCAME
H	L	L	AVIN1 V
L	L	L	TV
H	L	L	NAVI
H	H	L	X14 V

	TYPE	3	2	1
KVT HI MODEL	H	L	L	L
KVT LOW MODEL	L	L	L	L
DDX HI MODEL	H	L	H	H
DDX LOW MODEL	L	L	H	H
OEM+HI MODEL	H	H	*	*
OEM+LOW MODEL	L	H	*	*



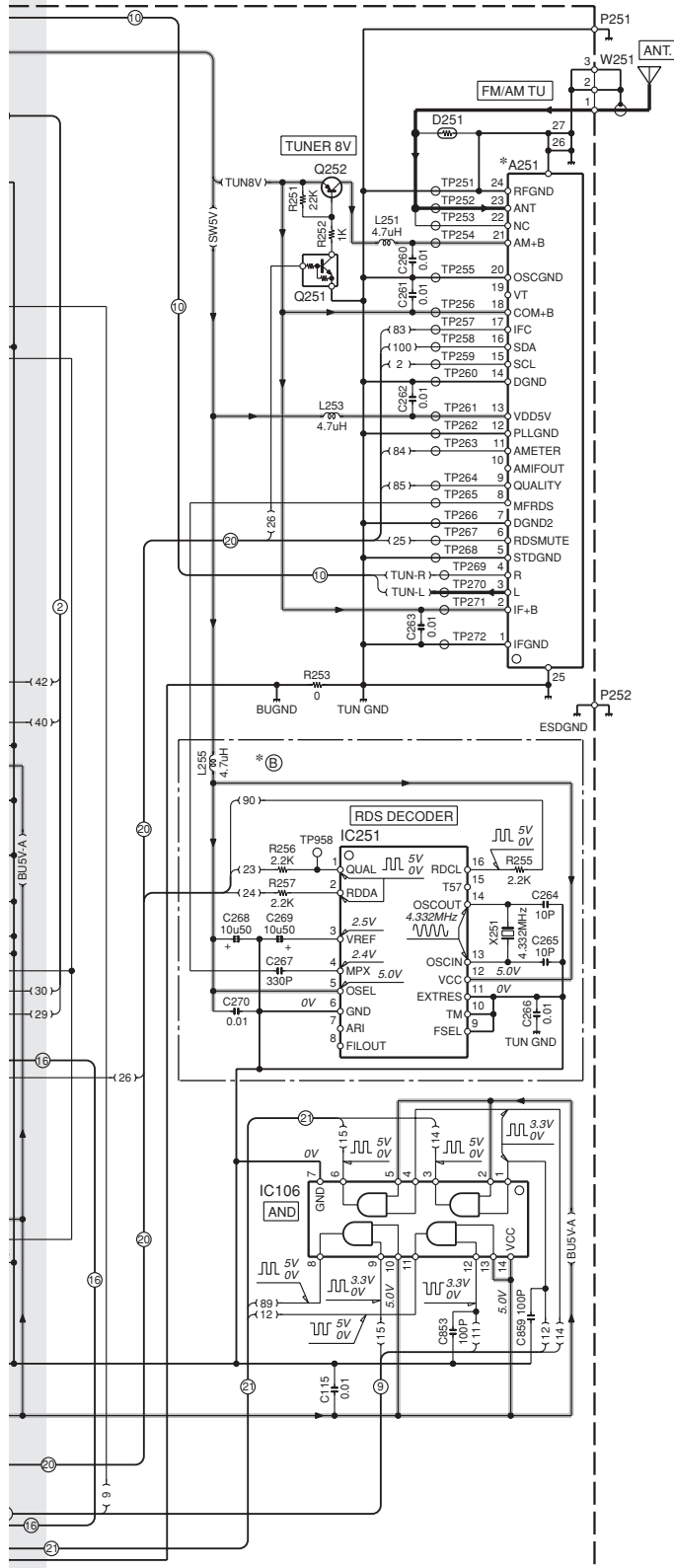
(X34-475x-xx)						
MODEL NAME	UNIT No.	(A)	(B)	(C)	(D)	(E)
KVT-719DVD	0-10	YES	YES	—	—	—
KVT-729DVD	2-71	—	YES	—	—	—
KVT-729DVDY	—	—	—	—	—	—
KVT-739DVD	0-21	YES	YES	YES	—	—
	3-21	YES	YES	—	—	—
	0-71	YES	—	—	—	—

KVT-719DVD/729DVD
/729DVDY/739DVD



Ⓢ	Ⓣ	Ⓜ	Ⓜ	A251	C847-849	R27	R153	R157	R161	R165
—	—	—	—	X86-4080-12	YES	—	—	10K	—	YES
—	—	—	—	X86-4082-71	—	YES	—	3.3K	10K	YES
—	—	—	—	X86-4082-71	YES	—	—	—	10K	YES
—	—	—	—	X86-4080-12	YES	—	—	—	10K	YES
—	—	—	—	X86-4080-12	YES	—	YES	30K	10K	—

IC61.71	: M5237ML-CF6J	IC803	: BA7652AF	Q53.252	: 2SB1699	D1	: RM10ZLFNF
IC101	: 703090BYGCJ30	IC805	: BA7653AFV	Q61	: 2SB1443	D2-4	: DAN202U
IC102	: S-80842CNNB-G	IC806,810	: MM1503-E	Q62.72	: DTA124EUA	D5,707	: UDZ56.2B
IC103	: NOT USED			Q81.91.105	: DTC114TUA	D6.8	: UDZ56.8B
IC104	: TC7SET08FU-F	Q1,3,54,70,251	: DTC124EUA	Q83.93	: 2SB1184	D7,9,201-205,301,302,	: DAP202U
IC105	: BU22090FS	Q2,8,13,84,94,806,		Q101,102	: DTC144EUA	359-365,503,520,713,	: UDZ54.7B
IC106	: TC74VHCT08AFT	808-811	: 2SA1576A	Q104	: DTA114TUA	735	: DAP202U
IC201	: E-TDA7415CB	Q4,6,12,14,15,52,82,85,		Q107	: RT1N440M	D10-13,24,25,81,91	: DAP202U
IC202,203	: TC4052BFT	92,95,802-805,807,		Q351,353-356,358,359,361			: 1SR154-400
IC251	: E-TDA7479AD	813-815	: 2SC4081	Q352,357,360	: DTA144EUA		: DTC323TU
IC301	: E-TDA7850A	Q7	: 2SB1188(Q,R)				: UDZ54.7B
IC501,502,701,723	: NJM79ARB2ZB	Q9,103	: DTA114EUA				: UDZ54.7B
IC702	: TC7S08FU-F	Q10	: DTC114YUA				: DTA144EUA
IC802,804,807-809	: MM1508XNRE-E	Q11	: 2SB1188(R)				: DTA144EUA
		Q51,71	: 2SB1565(E,F)				: AVRM1608180ME



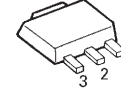
Q2LFNF : D401-406,505,506,509,
202U : 510,712,718,727
S6.2B : : STZ6.8N
S6.8B : D512-518,522-524,
2 : 701-706,711,715-717,
3 : 719-722,724,725,732
202U : : STZ6.2N
154-400 : D709,710 : AVR1608120M6A
S5.6B : D723 : AVR1608270MAA
D731,733 : UDZS8.2B

S4.7B
I-5801-E
M1608180M6A

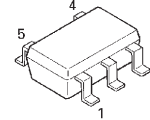
----- VIDEO LINE
===== SIGNAL LINE
===== GND LINE
===== +B LINE

KVT-719DVD/729DVD
/729DVDY/739DVD (5/5)

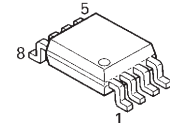
M5237ML-CF0J



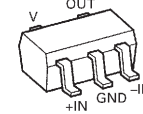
TC7SET08FU-F



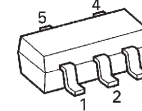
NJM2100V-ZB
NJM4580V-ZB
TC7WHU04FU-F
TC7WH123FU-F



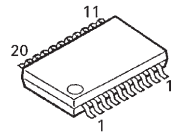
NJM2107F-ZB



TC7SET04FU-F



TC74VHC273FT

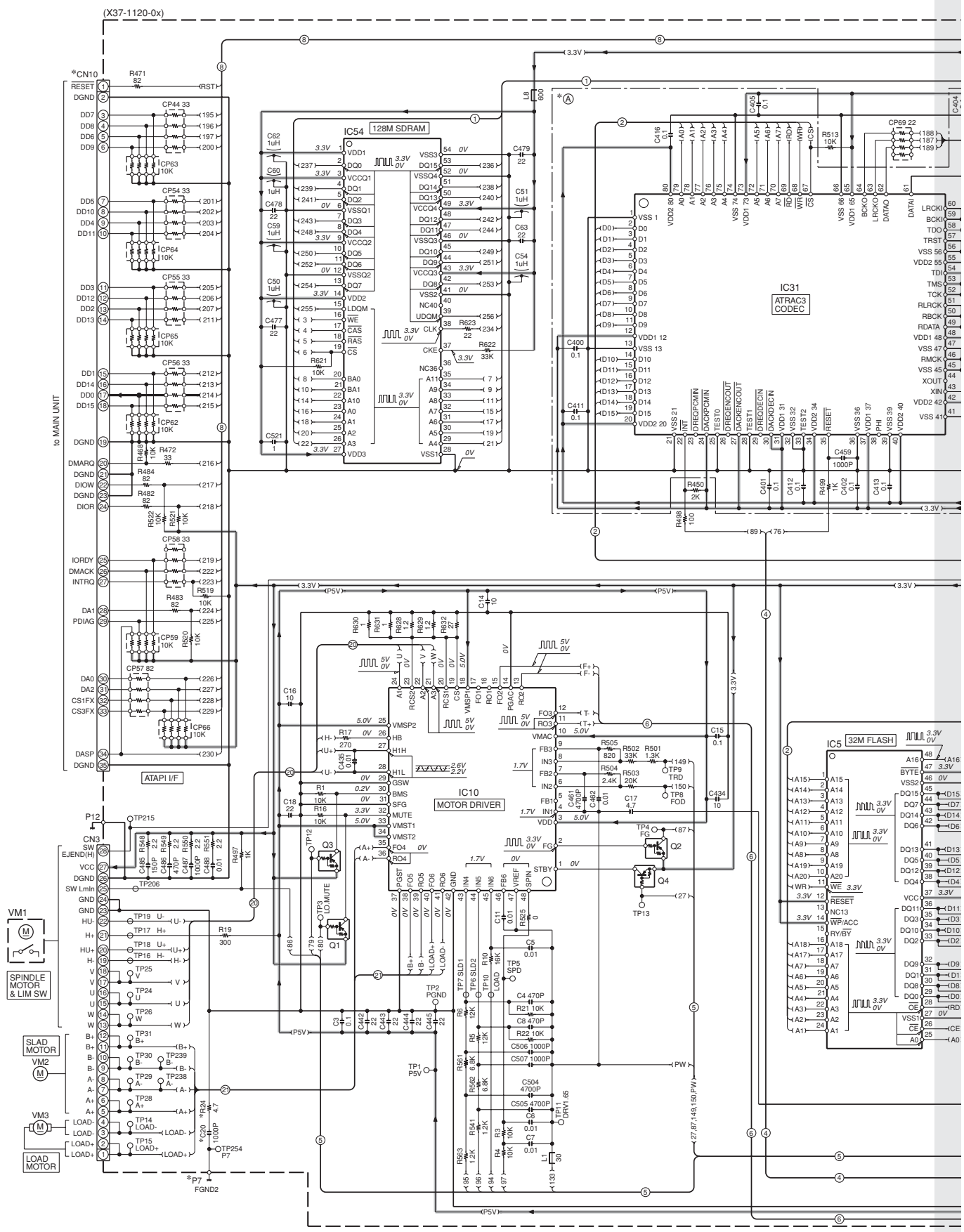


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

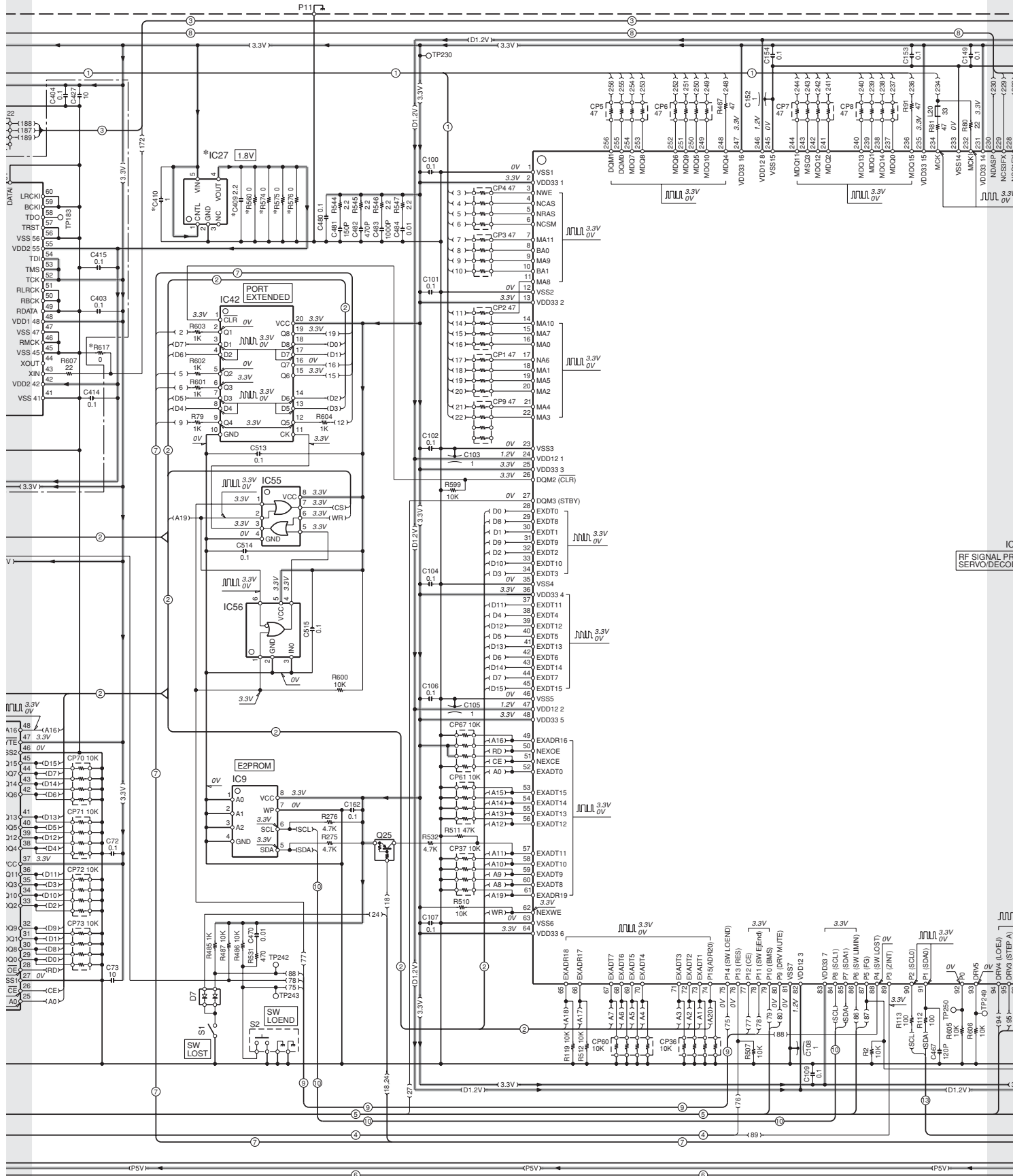
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

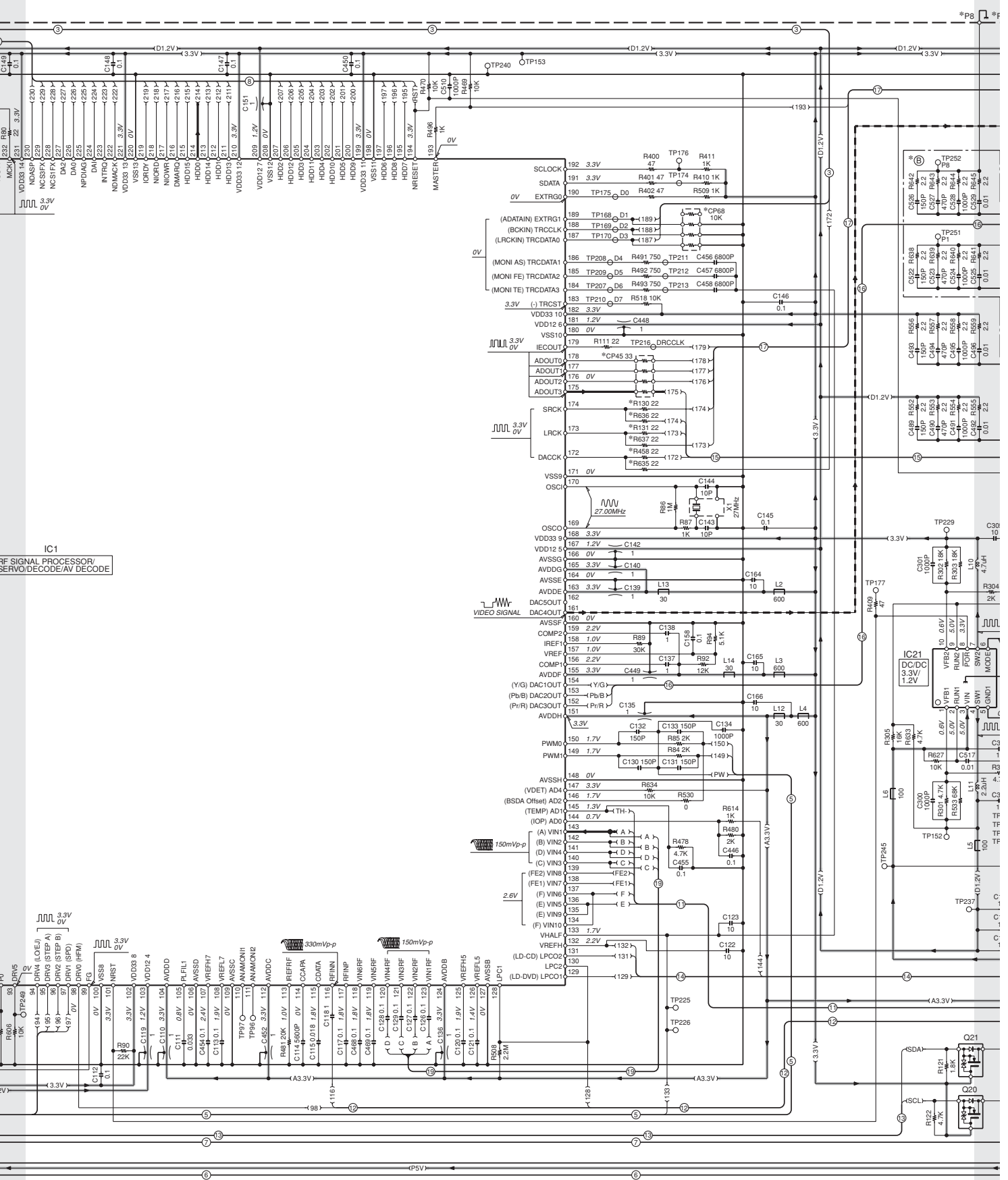
1
2
3
4
5
6
7



KVT-719DVD/729DVD /729DVDY/739DVD

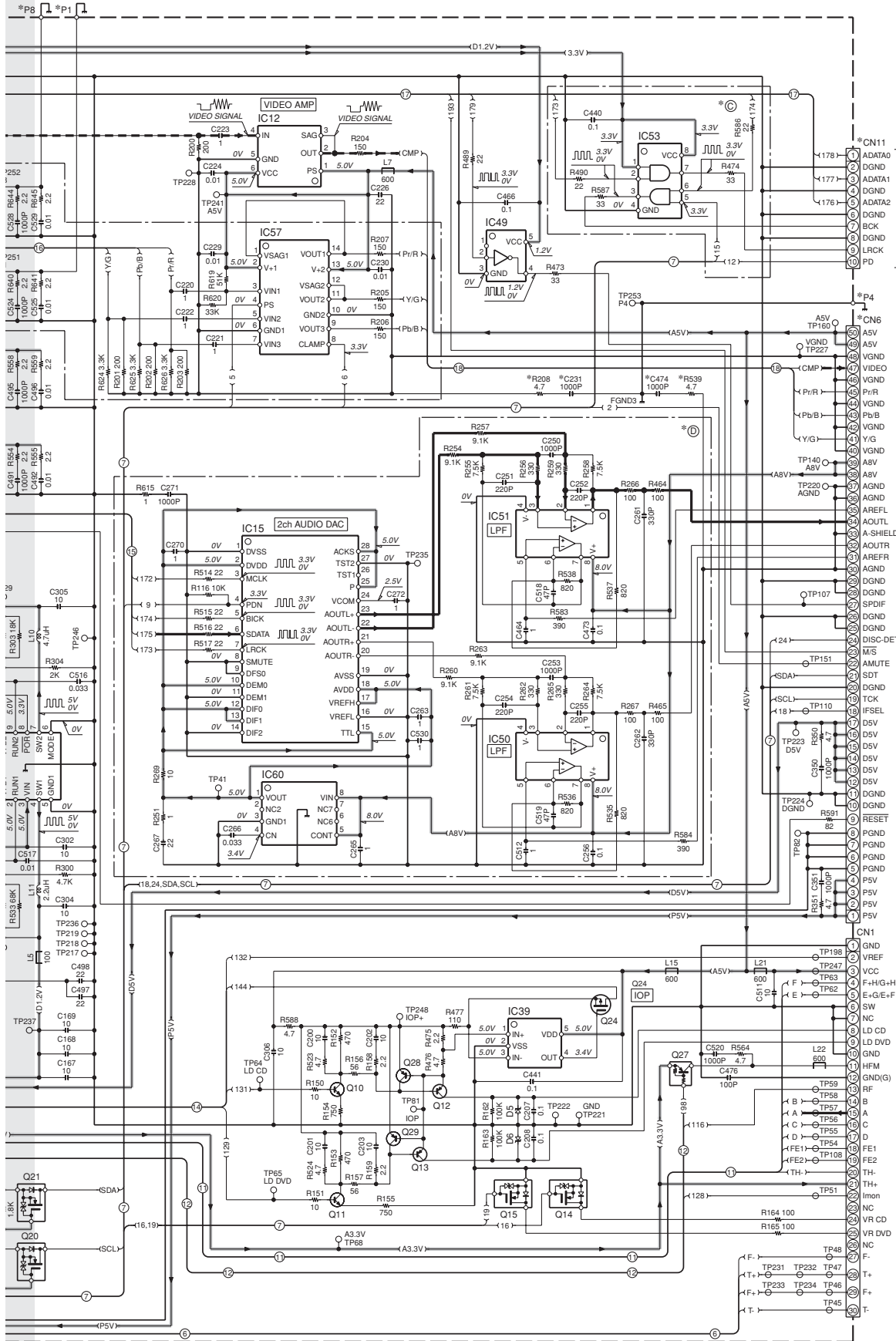


KVT-719DVD/729DVD
/729DVDY/739DVD



CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
 ⚠ Indicates safety critical components. 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.

KVT-719DVD/729DVD /729DVDY/739DVD



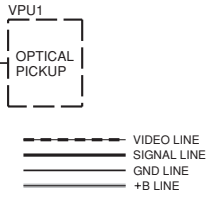
- IC1 : MN2D50016AAUB
- IC3 : S29AL32D70TF1
- IC9 : S24CS04AFT
- IC10 : AN41250A-VB
- IC12 : MM1671XNRE
- IC15 : AK4396VF
- IC49 : TC74HC273FT
- IC51 : LTC3546EDD-F
- IC52 : NUM2865F318ZB
- IC31 : LC82360-E
- IC39 : NUJ7042
- IC42 : TC74HC273FT
- IC49 : TC74HC273FT
- IC50,51 : NUM4580V-ZB
- IC53 : TC7WH08FK-F
- IC54 : IS45S16800L1
- IC55 : TC7WH432FU-F
- IC56 : HD74LV1GW57AE
- IC57 : NUM2573V-ZB
- IC60 : MM1665AHE

- Q1-4,25 : DTA143XE
- Q10,11 : 2SC4617
- Q12,13 : 2SB1709
- Q14,15,20,21 : 2SK3019
- Q24 : SSM3J15FU-F
- Q27 : DTA143ZE
- Q28,29 : 2SA1774

- D5,6 : 015AZ5.1(FY)
- D7 : 1SS402-F

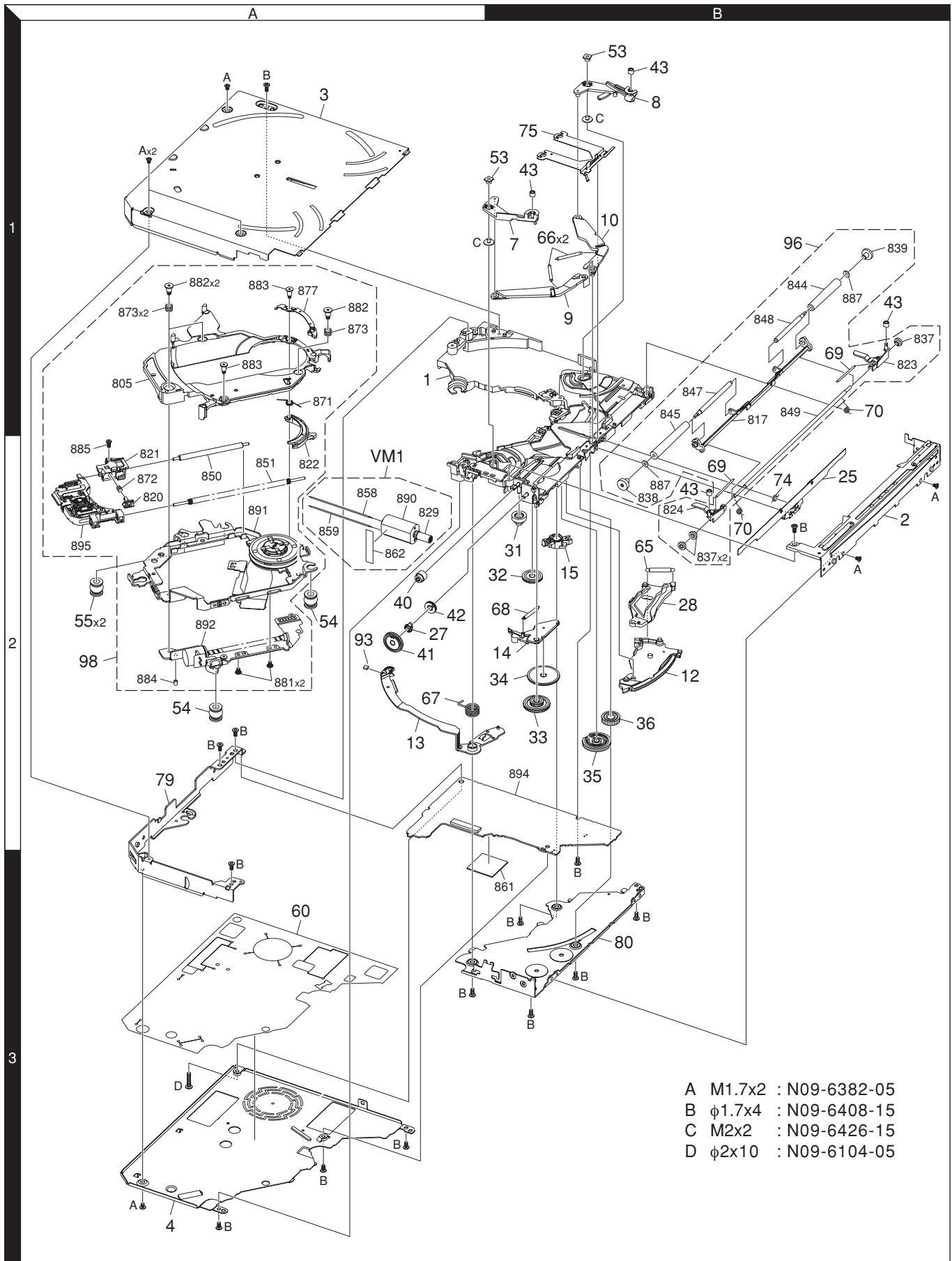
UNIT No.	IC1	IC3	IC9	IC10	IC12	IC15	IC49	IC50,51	IC53	IC54	IC55	IC56	IC57	IC60
0-00	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
0-01	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
0-02	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
0-03	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
0-04	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

to MAIN UNIT

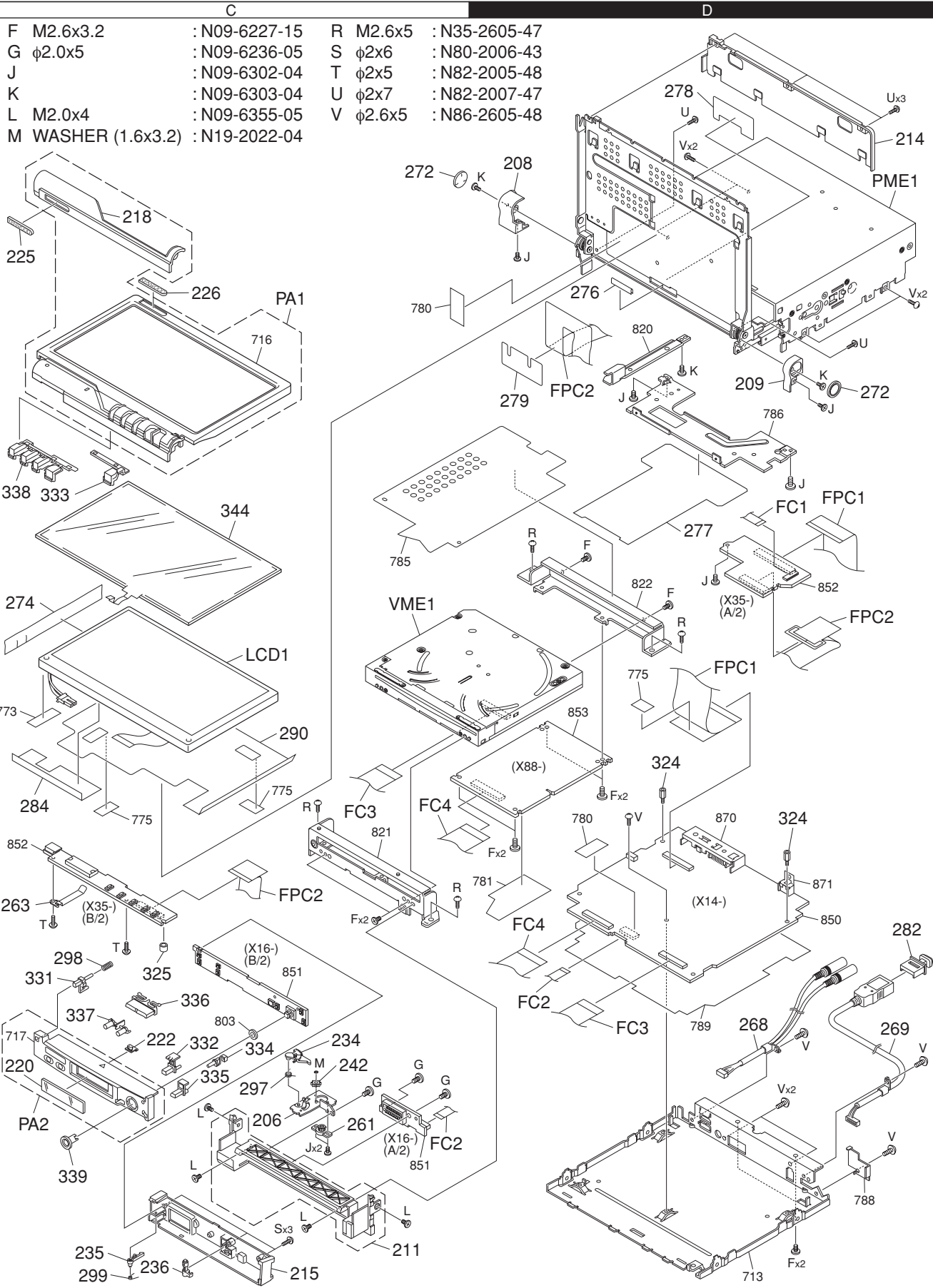


• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

EXPLODED VIEW (DVD MECHANISM)

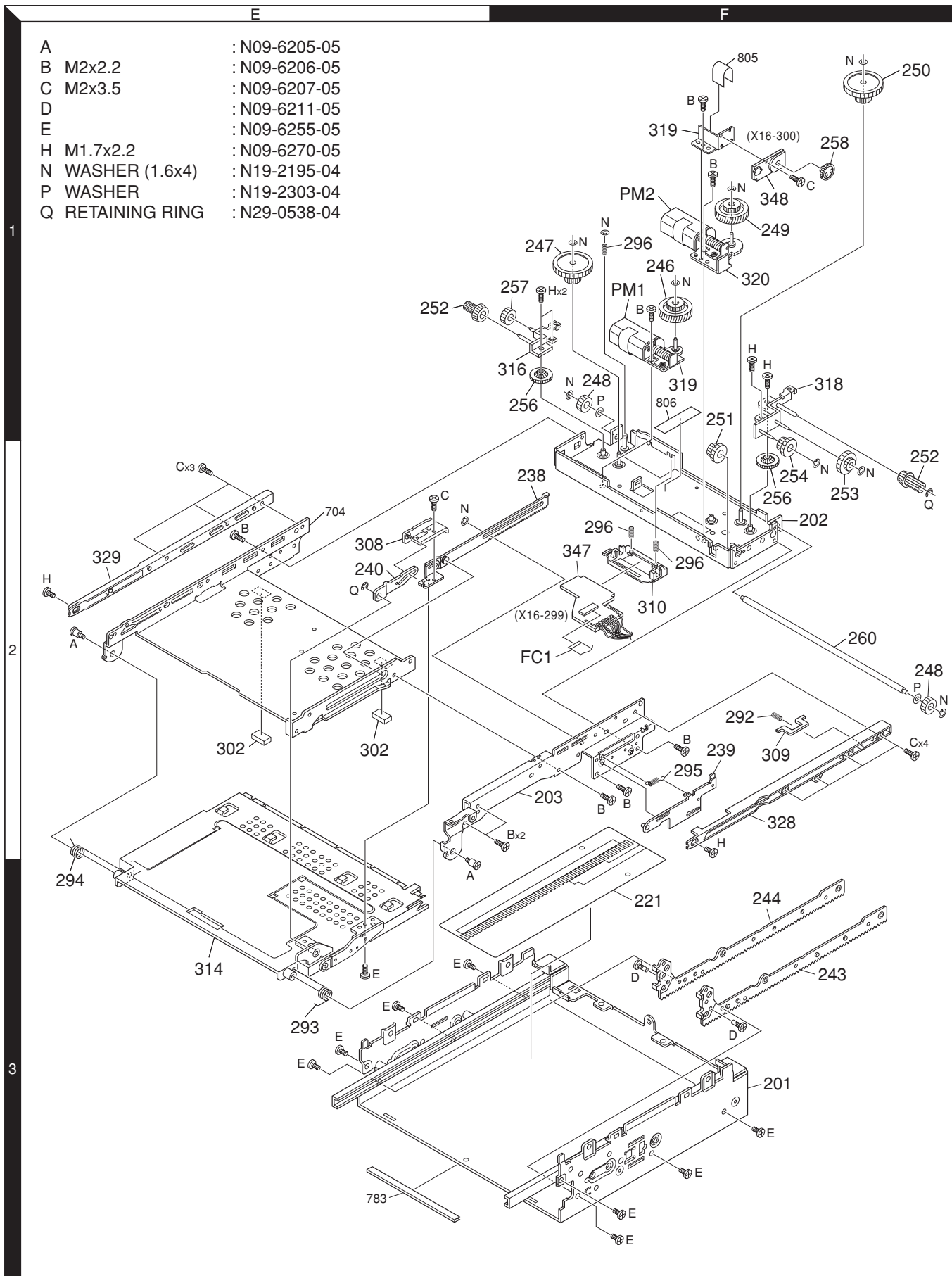


EXPLODED VIEW (UNIT)



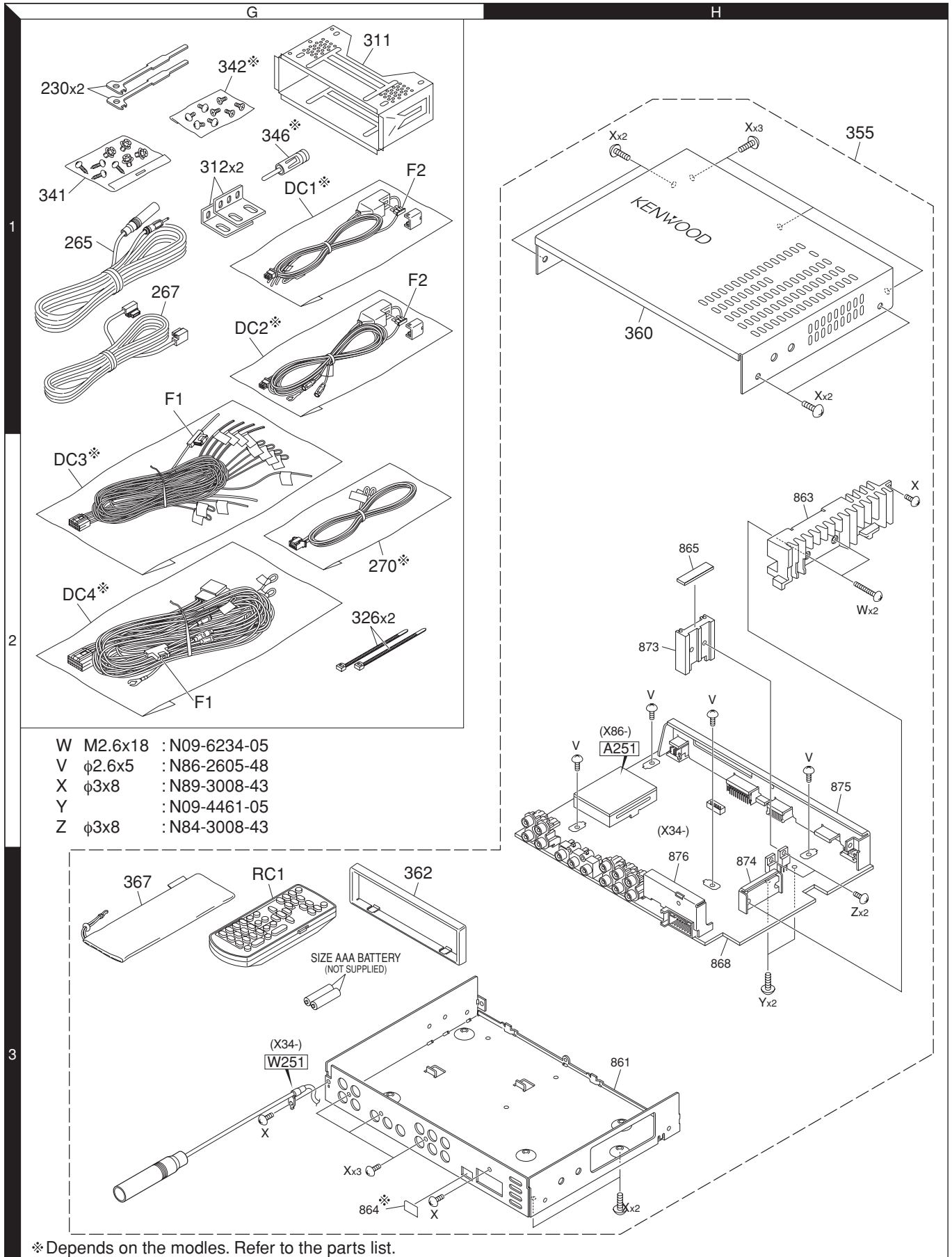
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (DRIVE MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (TUNER BOX & ACCESSORIES)



PARTS LIST

* 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.

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
KVT-719DVD/729DVD/729DVDY/739DVD					
201	3F	*	A10-5164-02	CHASSIS CALKING ASSY	
202	2F	*	A10-5166-03	CHASSIS CALKING ASSY	
203	2F	*	A10-5168-03	CHASSIS CALKING ASSY	
206	3C	*	A11-1645-14	SUB CHASSIS CALKING ASSY	
208	1D	*	A21-6584-02	DRESSING PANEL	
209	1D	*	A21-6585-03	DRESSING PANEL	
211	3C	*	A22-3124-13	SUB PANEL ASSY	
214	1D	*	A46-1818-02	REAR COVER	
215	3C	*	A46-1849-01	REAR COVER	
PA1	1C	*	A64-4106-11	PANEL ASSY	K
PA1	1C	*	A64-4107-11	PANEL ASSY	R1
PA1	1C	*	A64-4108-11	PANEL ASSY	E1E2
PA1	1C	*	A64-4109-11	PANEL ASSY	M1X1
PA2	3C	*	A64-4116-02	PANEL ASSY	KR1X1
PA2	3C	*	A64-4117-02	PANEL ASSY	E1E2M1
PME1	1D	*	A10-5171-01	CHASSIS ASSY	
-			B46-0606-04	ID CARD	KR1
-			B46-0612-14	ID CARD	E1E2M1
-			B46-0612-14	ID CARD	X1
-		*	B54-4513-00	INSTALLATION MANUAL (ENG.SPA.)	KR1
-		*	B54-4514-00	INSTALLATION MANUAL (FRE.)	K
-		*	B54-4515-00	INSTALLATION MANUAL (POR.)	R1
-		*	B54-4516-00	INSTALLATION MANUAL (ENG.)	E1E2
-		*	B54-4517-00	INSTALLATION MANU (FRE.GER.DUT)	E1
-		*	B54-4517-00	INSTALLATION MANU (ITA.SPA.POR)	E1
-		*	B54-4518-00	INSTALLATION MANUAL (ENG.KOR.)	M1X1
-		*	B54-4519-00	INSTALLATION MANUAL (T-CHI.KOR)	M1
-		*	B59-1880-00	SUB-INSTRUCTION MANUAL	
-		*	B64-3569-00	INSTRUCTION MANUAL (ENG.)	KR1
-		*	B64-3570-00	INSTRUCTION MANUAL (FRE.)	K
-		*	B64-3571-00	INSTRUCTION MANUAL (SPA.)	KR1
-		*	B64-3572-00	INSTRUCTION MANUAL (POR.)	R1
-		*	B64-3573-00	INSTRUCTION MANUAL (ENG.)	E1E2
-		*	B64-3574-00	INSTRUCTION MANUAL (FRE.)	E1
-		*	B64-3575-00	INSTRUCTION MANUAL (GER.)	E1
-		*	B64-3576-00	INSTRUCTION MANUAL (DUT.)	E1
-		*	B64-3577-00	INSTRUCTION MANUAL (ITA.)	E1
-		*	B64-3578-00	INSTRUCTION MANUAL (SPA.)	E1
-		*	B64-3579-00	INSTRUCTION MANUAL (POR.)	E1
-		*	B64-3580-00	INSTRUCTION MANUAL (ENG.)	M1X1
-		*	B64-3581-00	INSTRUCTION MANUAL (T-CHI.)	M1
-		*	B64-3582-00	INSTRUCTION MANUAL (KOR.)	M1
218	1C	*	B07-3202-02	ESCUTCHEON	K
218	1C	*	B07-3203-02	ESCUTCHEON	R1M1X1
218	1C	*	B07-3204-02	ESCUTCHEON	E1E2
220	3C	*	B10-4955-03	FRONT GLASS	
221	3F	*	B11-1453-04	REFLECTION SHEET	
222	3C	*	B19-2330-04	LIGHTING BOARD	
225	1C	*	B43-1518-04	BADGE	
226	1C	*	B43-1527-04	BADGE	
LCD1	2C	*	B38-1176-05	LCD	
230	1G	*	D10-4674-04	LEVER	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
234	3C	*	D10-4727-03*A	ARM	
235	3C	*	D10-4728-04*A	ARM	
236	3C	*	D10-4729-04*A	LEVER	
238	2F	*	D10-4836-03	ARM ASSY	
239	2F	*	D10-4837-04	LEVER ASSY	
240	2E	*	D10-4840-03	ARM	
242	3C	*	D13-2280-04*A	GEAR	
243	3F	*	D13-2335-03	RACK (GEAR)	
244	3F	*	D13-2336-03	RACK (GEAR)	
246	1F	*	D13-2338-04	GEAR	
247	1F	*	D13-2339-04	GEAR	
248	2F	*	D13-2340-04	GEAR	
249	1F	*	D13-2341-04	GEAR	
250	1F	*	D13-2342-04	GEAR	
251	1F	*	D13-2343-04	GEAR	
252	1E	*	D13-2344-04	GEAR	
253	2F	*	D13-2345-04	GEAR	
254	2F	*	D13-2346-04	GEAR	
256	1F	*	D13-2349-04	GEAR	
257	1F	*	D13-2350-04	GEAR	
258	1F	*	D13-2351-04	GEAR	
260	2F	*	D21-2446-03	SHAFT	
261	3C	*	D39-0239-05	DAMPER	
263	3C	*	E29-2109-04	LEAD PLATE	
265	2G	*	E30-6483-05	CORD WITH PLUG	
267	1G	*	E30-6688-05	CORD WITH PLUG	
268	3D	*	E30-6689-05	CORD WITH PLUG	
269	3D	*	E30-6690-05	CORD WITH PLUG	
270	2G	*	E30-6693-05	CORD WITH PLUG	
DC1	1G	*	E30-6675-05	DC CORD	M1X1
DC1	1G	*	E30-6675-05	DC CORD	X1
DC2	1G	*	E30-6676-15	DC CORD	E1E2
DC3	1G	*	E30-6680-05	DC CORD	KR1M1
DC3	1G	*	E30-6680-05	DC CORD	X1
DC4	1G	*	E30-6681-15	DC CORD	E1E2
FC1	2F	*	E39-0665-05	FLAT CABLE	
FC2	3D	*	E39-0906-05	FLAT CABLE	
FC3	3D	*	E39-0907-05	FLAT CABLE	
FC4	3D	*	E39-0908-05	FLAT CABLE	
272	1D	*	F07-1184-04	COVER	
274	2C	*	F09-1802-04	SHEET	
276	1D	*	F09-2865-04	SHEET	
277	2D	*	F09-2866-04	SHEET	
278	1D	*	F09-2867-04	SHEET	
279	1D	*	F09-2868-04	SHEET	
282	3D	*	F09-2890-04	CAP	
284	2C	*	F12-0775-04	SHIELDING SHEET	
290	2C	*	F20-2401-03	INSULATING SHEET	
F1	1G	*	F06-1032-05	FUSE 10A	
F2	1G	*	F52-0004-05	MINI FUSE 5A	
292	2F	*	G01-3222-04	COMPRESSION SPRING	
293	3F	*	G01-3223-04	TORSION COIL SPRING	
294	3F	*	G01-3224-04	TORSION COIL SPRING	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

KVT-719DVD/729DVD/729DVDY/739DVD

Ref. No.	Ad	New	Parts No.	Description	Destination
295	2F	*	G01-3225-04	EXTENSION SPRING	
296	2F	*	G01-3226-04	COMPRESSION SPRING	
297	3C		G01-3265-04	TORSION COIL SPRING	
298	3C		G01-3266-04	COMPRESSION SPRING	
299	3C		G01-3267-04	TORSION COIL SPRING	
302	2E	*	G11-3587-04	CUSHION	
-		*	H54-4026-03	ITEM CARTON CASE	K
-		*	H54-4027-03	ITEM CARTON CASE	M1X1
-		*	H54-4028-03	ITEM CARTON CASE	E1
-		*	H54-4029-03	ITEM CARTON CASE	E2
-		*	H54-4064-03	ITEM CARTON CASE	R1
308	2E	*	J19-7004-03	HOLDER	
309	2F	*	J19-7005-04	STABILIZER	
310	2F	*	J19-7007-03	HOLDER	
311	1G		J21-9823-03	MOUNTING HARDWARE ASSY	
312	1G		J22-0054-14	MOUNTING HARDWARE	
314	3E	*	J22-0198-02	MOUNTING HARDWARE ASSY	
316	1F	*	J22-0200-04	MOUNTING HARDWARE ASSY	
318	1F	*	J22-0202-04	MOUNTING HARDWARE ASSY	
319	1F	*	J22-0203-03	MOUNTING HARDWARE ASSY	
319	1F	*	J22-0212-04	MOUNTING HARDWARE	
320	1F	*	J22-0206-03	MOUNTING HARDWARE ASSY	
324	2D	*	J32-1373-04	HEXAGON BOSS	
325	3C	*	J39-0864-04	SPACER	
326	2G	*	J61-0620-05	WIRE BAND	
328	2F	*	J90-1092-03	GUIDE	
329	2E	*	J90-1093-03	GUIDE	
FPC1	2D	*	J86-0033-15	FPC (LEAD FREE)	
FPC2	1D	*	J86-0038-05	FPC (LEAD FREE)	
331	3C		K24-4346-04	PUSH KNOB (RELEASE)	
332	3C	*	K24-4673-03	PUSH KNOB (SRC)	
333	2C	*	K24-4680-03	PUSH KNOB (M.CTRL)	
334	3C	*	K24-4681-04	PUSH KNOB (RESET)	
335	3C	*	K24-4682-13	PUSH KNOB (EJECT)	
336	3C	*	K25-1871-03	PUSH KNOB (VOL)	
337	3C	*	K25-1872-03	PUSH KNOB (ATT.AUTO)	
338	2C	*	K25-1875-02	PUSH KNOB (OPEN-SCRN)	
339	3C	*	K28-0221-04	KEY TOP (4WAY)	
341	1G		N99-1753-05	SCREW SET	
342	1G		N99-1775-05	SCREW SET	
342	1G		N99-1775-05	SCREW SET	
A	2E	*	N09-6205-05	STEPPED SCREW	
B	1F	*	N09-6206-05	MACHINE SCREW (M2X2.2)	
C	2E	*	N09-6207-05	MACHINE SCREW (M2X3.5)	
D	3F	*	N09-6211-05	STEPPED SCREW	
E	3F	*	N09-6225-05	MACHINE SCREW	
F	2D		N09-6227-15	MACHINE SCREW (M2.6X 3.2NI)	
G	3C		N09-6236-05	SEMS (TAPTITE SCREW)(2.0X 5)	
H	1F	*	N09-6270-05	MACHINE SCREW (M1.7X2.2)	
J	1D	*	N09-6302-04	MACHINE SCREW	
K	1D	*	N09-6303-04	MACHINE SCREW	
L	3C		N09-6355-05	MACHINE SCREW (M2.0X4)	
M	3C		N19-2022-04	FLAT WASHER (1.6X3.2X0.25)	

Ref. No.	Ad	New	Parts No.	Description	Destination
N	1F	*	N19-2195-04	FLAT WASHER (1.6X4X0.25 BL)	
P	1F	*	N19-2303-04	FLAT WASHER	
Q	2E	*	N29-0538-04	RETAINING RING (2)	
R	2D		N35-2605-47	BINDING HEAD MACHINE SCREW	
S	3C		N80-2006-43	PAN HEAD TAPTITE SCREW	
T	3C		N82-2005-48	BINDING HEAD TAPTITE SCREW	
U	1D	*	N82-2007-47	BINDING HEAD TAPTITE SCREW	
V	3D		N86-2605-48	BINDING HEAD TAPTITE SCREW	
344	2C	*	S79-0858-05	SWITCH ASSY (7INCH/T0.7)	
346	2G		T90-0552-05	ANTENNA ADAPTOR	E1E2
PM1	1F	*	T42-1097-04	MOTOR ASSY	
PM2	1F	*	T42-1099-04	MOTOR ASSY	
347	2F	*	W02-5121-05	ELECTRIC CIRCUIT MODULE	
348	1F	*	W02-5122-05	ELECTRIC CIRCUIT MODULE	
355	1H	*	X90-4240-10	TUNER ASSY	K
355	1H	*	X90-4240-21	TUNER ASSY	M1
355	1H	*	X90-4240-71	TUNER ASSY	X1
355	1H	*	X90-4242-71	TUNER ASSY	E1E2
355	1H	*	X90-4243-21	TUNER ASSY	R1
VME1	2C	*	X92-5920-00	DVD MECHANISM ASSY (DVS-8530V)	
TUNER ASSY (X90-424x-xx)					
360	1H	*	A01-4425-11	METALLIC CABINET	M1X1
360	1H	*	A01-4432-11	METALLIC CABINET	KR1E1
360	1H	*	A01-4432-11	METALLIC CABINET	E2
RC1	2G	*	A70-2082-15	REMOTE CONTROLLER AS (RC-DV330)	M1X1
RC1	2G	*	A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	KR1E1
RC1	2G	*	A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	E2
362	3G		B07-3159-02	ESCUTCHEON	
V	2H		N86-2605-48	BINDING HEAD TAPTITE SCREW	
W	2H		N09-6234-05	MACHINE SCREW (M2.6X18)	
X	1H		N89-3008-43	BINDING HEAD TAPTITE SCREW	
367	3G		W01-1661-05	CARRYING CASE	
VIDEO CONTROL UNIT (X14-983x-xx)					
C1			C90-5670-05	ELECTRO	2200UF 16WV
C2,3			CK73GB1H104K	CHIP C	0.10UF K
C4			CK73FB1E474K	CHIP C	0.47UF K
C5			CE32BF1C221M	CHIP EL	220UF 16WV
C6			CE32BF0J101M	CHIP EL	100UF 6.3WV
C7			CK73FB0J106K	CHIP C	10UF K
C8			CK73GB1H104K	CHIP C	0.10UF K
C10			CK73EB1A106K	CHIP C	10UF K
C11			CK73GB1H103K	CHIP C	0.010UF K
C12			CK73EB1A106K	CHIP C	10UF K
C13			CK73GB1H103K	CHIP C	0.010UF K
C14			CE32BJ1C100M	CHIP EL	10UF 16WV
C16			CK73EB1C106K	CHIP C	10UF K
C17			CK73GB1H103K	CHIP C	0.010UF K
C19			CE32BF1E101M	CHIP EL	100UF 25WV
C20			CK73GB1H104K	CHIP C	0.10UF K
C22			CK73FB0J106K	CHIP C	10UF K

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C23			CK73GB1A105K	CHIP C 1.0UF K	
C24			CK73EB1C106K	CHIP C 10UF K	
C27,28			CK73GB1H104K	CHIP C 0.10UF K	
C29			CK73FB0J106K	CHIP C 10UF K	
C34			CK73FB0J106K	CHIP C 10UF K	
C92			CK73GB1H103K	CHIP C 0.010UF K	
C93			CK73GB1H104K	CHIP C 0.10UF K	
C94			CK73GB1H103K	CHIP C 0.010UF K	
C95			CK73GB1H104K	CHIP C 0.10UF K	
C96			CK73GB1H103K	CHIP C 0.010UF K	
C97			CK73GB1H104K	CHIP C 0.10UF K	
C98			CK73GB1H103K	CHIP C 0.010UF K	
C99			CK73GB1H104K	CHIP C 0.10UF K	
C101			CK73GB1H473K	CHIP C 0.047UF K	
C102			CK73GB1H102K	CHIP C 1000PF K	
C104			CC73GCH1H221J	CHIP C 220PF J	
C105			CK73GB1H102K	CHIP C 1000PF K	
C106			CK73GB1H103K	CHIP C 0.010UF K	
C107,108			CC73GCH1H101J	CHIP C 100PF J	
C109			CK73GB1H223K	CHIP C 0.022UF K	
C110			CC73GCH1H470J	CHIP C 47PF J	
C111			CK73GB1H103K	CHIP C 0.010UF K	
C112			CK73GB1H102K	CHIP C 1000PF K	
C114			CC73GCH1H221J	CHIP C 220PF J	
C115			CK73GB1H473K	CHIP C 0.047UF K	
C116			CK73GB1H104K	CHIP C 0.10UF K	
C117			CK73FB0J106K	CHIP C 10UF K	
C118			CK73GB1H104K	CHIP C 0.10UF K	
C119			CK73EB1E225K	CHIP C 2.2UF K	
C120,121			CK73GB1H104K	CHIP C 0.10UF K	
C122,123			CK73GB1H103K	CHIP C 0.010UF K	
C124			C93-1367-05	CHIP C 10UF K	
C126-129			CK73GB1H102K	CHIP C 1000PF K	
C130		*	CE32AV0J221M	CHIP EL 220UF 6.3WV	
C131-133			CK73GB1H103K	CHIP C 0.010UF K	
C134			C93-1367-05	CHIP C 10UF K	
C136-139			CK73GB1H102K	CHIP C 1000PF K	
C140		*	CE32AV1A121M	CHIP EL 120UF 10WV	
C141			CK73GB1H103K	CHIP C 0.010UF K	
C142			CK73GB1H473K	CHIP C 0.047UF K	
C143			CK73GB1H102K	CHIP C 1000PF K	
C145			CC73GCH1H221J	CHIP C 220PF J	
C146			CK73GB1H102K	CHIP C 1000PF K	
C147			CK73GB1H103K	CHIP C 0.010UF K	
C148			CC73GCH1H101J	CHIP C 100PF J	
C149			CC73GCH1H470J	CHIP C 47PF J	
C150			CK73GB1H153K	CHIP C 0.015UF K	
C151			CC73GCH1H470J	CHIP C 47PF J	
C152			CK73GB1H223K	CHIP C 0.022UF K	
C153			CK73GB1H102K	CHIP C 1000PF K	
C155			CC73GCH1H221J	CHIP C 220PF J	
C156,157			CK73GB1H104K	CHIP C 0.10UF K	
C158			CK73FB0J106K	CHIP C 10UF K	
C159			CK73GB1H104K	CHIP C 0.10UF K	
C160			CK73EB1E225K	CHIP C 2.2UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C161,162			CK73GB1H104K	CHIP C 0.10UF K	
C163,164			CK73GB1H103K	CHIP C 0.010UF K	
C165			C93-1367-05	CHIP C 10UF K	
C167-170			CK73GB1H102K	CHIP C 1000PF K	
C171		*	CE32AV0J221M	CHIP EL 220UF 6.3WV	
C172-174			CK73GB1H103K	CHIP C 0.010UF K	
C175			C93-1367-05	CHIP C 10UF K	
C177-180			CK73GB1H102K	CHIP C 1000PF K	
C181		*	CE32AV0G331M	CHIP EL 330UF 4.0WV	
C182			CK73GB1H103K	CHIP C 0.010UF K	
C183,184			CK73GB1H102K	CHIP C 1000PF K	
C185			CK73FB0J106K	CHIP C 10UF K	
C186,187			CK73GB1H104K	CHIP C 0.10UF K	
C188			CK73FB0J106K	CHIP C 10UF K	
C189-200			CK73GB1H104K	CHIP C 0.10UF K	
C201			CK73FB0J106K	CHIP C 10UF K	
C202			CK73GB1H103K	CHIP C 0.010UF K	
C203			CK73GB1H104K	CHIP C 0.10UF K	
C204			CK73FB0J475K	CHIP C 4.7UF K	
C205			CK73GB1H104K	CHIP C 0.10UF K	
C206			CC73GCH1H220J	CHIP C 22PF J	
C207			CC73GCH1H180J	CHIP C 18PF J	
C208,209			CK73GB1H104K	CHIP C 0.10UF K	
C210			CK73GB1H103K	CHIP C 0.010UF K	
C212			CK73GB1H104K	CHIP C 0.10UF K	
C213			CK73GB1H221K	CHIP C 220PF K	
C214-217			CE32BM1E470M	CHIP EL 47UF 25WV	
C260			CK73GB1H102K	CHIP C 1000PF K	
C301			CK73GB1A105K	CHIP C 1.0UF K	
C303-305			CK73FB0J106K	CHIP C 10UF K	
C306			CK73GB1H104K	CHIP C 0.10UF K	
C307-312			CK73GB1H103K	CHIP C 0.010UF K	
C313			CC73GCH1H821J	CHIP C 820PF J	
C314			CK73GB1A105K	CHIP C 1.0UF K	
C315			CK73EB1A106K	CHIP C 10UF K	
C316			CK73GB1A105K	CHIP C 1.0UF K	
C317			CK73GB1H682K	CHIP C 6800PF K	
C319			CK73GB1H104K	CHIP C 0.10UF K	
C321			CK73GB1H103K	CHIP C 0.010UF K	
C322			CC73GCH1H050C	CHIP C 5.0PF C	
C323			CK73GB1A474K	CHIP C 0.47UF K	
C324			CK73GB1H103K	CHIP C 0.010UF K	
C325			CC73GCH1H080D	CHIP C 8.0PF D	E1E2M1
C325			CC73GCH1H080D	CHIP C 8.0PF D	X1
C327-329			CK73FB0J106K	CHIP C 10UF K	
C330			CK73GB1H104K	CHIP C 0.10UF K	
C331			C93-1403-05	CHIP C 22UF M	
C333-335			CK73EB1C106K	CHIP C 10UF K	
C336,337			CK73GB1H104K	CHIP C 0.10UF K	
C338			CK73GB1H102K	CHIP C 1000PF K	
C339,340			CK73GB1H103K	CHIP C 0.010UF K	
C341			CC73GCH1H390J	CHIP C 39PF J	
C342			CK73GB1H103K	CHIP C 0.010UF K	
C343			CK73EB1A106K	CHIP C 10UF K	
C344			CK73GB1H103K	CHIP C 0.010UF K	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C348			CC73GCH1H101J	CHIP C 100PF J		C551,552			CK73FB0J106K	CHIP C 10UF K	
C350-352			CK73FB0J106K	CHIP C 10UF K		C553,554			CK73GB1H104K	CHIP C 0.10UF K	
C353-355			CK73GB1H102K	CHIP C 1000PF K		CN301			E41-2065-05	FLAT CABLE CONNECTOR	
C356			CK73EB1C106K	CHIP C 10UF K		CN401	*		E41-2806-05	PIN ASSY	
C358			CK73GB1H103K	CHIP C 0.010UF K		CN501			E41-2237-05	FLAT CABLE CONNECTOR (60P)	
C359			CK73GB1H104K	CHIP C 0.10UF K		CN502			E41-2197-05	FLAT CABLE CONNECTOR (50P)	
C361			CK73GB1H103K	CHIP C 0.010UF K		CN503	*		E41-2410-05	FLAT CABLE CONNECTOR (22P)	
C362			CK73GB1H104K	CHIP C 0.10UF K		J1	*		E58-1065-05	RECTANGULAR RECEPTACLE (4P)	
C363			CK73GB1H103K	CHIP C 0.010UF K		J501			E11-0638-05	PHONE JACK	
C364			CK73GB1H104K	CHIP C 0.10UF K		J502	*		E58-1069-05	RECTANGULAR RECEPTACLE	
C400-403			CK73GB1A474K	CHIP C 0.47UF K		F301			F53-0297-05	FUSE (UL,CSA) 1.6A	
C404			CK73GB1H103K	CHIP C 0.010UF K		L2			L92-0373-05	CHIP FERRITE	
C405-407			CK73FB0J106K	CHIP C 10UF K		L3	*		L33-2369-05	CHOKO COIL	
C408			CK73GB1H104K	CHIP C 0.10UF K		L101	*		L33-2369-05	CHOKO COIL	
C409			CK73GB1H103K	CHIP C 0.010UF K		L102	*		L33-2370-05	CHOKO COIL	
C410-415			CK73GB1A105K	CHIP C 1.0UF K		L103	*		L33-2369-05	CHOKO COIL	
C416			CK73GB1H103K	CHIP C 0.010UF K		L104,105	*		L33-2370-05	CHOKO COIL	
C417-422			CK73GB1A105K	CHIP C 1.0UF K		L106	*		L33-2417-05	CHOKO COIL	
C423			CK73GB1H103K	CHIP C 0.010UF K		L107	*		L33-2369-05	CHOKO COIL	
C424-428			CK73GB1A105K	CHIP C 1.0UF K		L108	*		L33-2370-05	CHOKO COIL	
C429			CK73GB1H103K	CHIP C 0.010UF K		L201			L92-0319-05	CHIP FERRITE	
C430			CE32BQ0J331M	CHIP EL 330UF 6.3WV		L301-303			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C431,432			CK73GB1A105K	CHIP C 1.0UF K		L305			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C433,434			CK73GB1H103K	CHIP C 0.010UF K		L401-404			L92-0319-05	CHIP FERRITE	
C435			CK73EB1A106K	CHIP C 10UF K		L500			L41-1001-28	SMALL FIXED INDUCTOR (10U)	
C440			CK73FB0J106K	CHIP C 10UF K		L501	*		L33-2369-05	CHOKO COIL	
C442-445			CK73FB0J106K	CHIP C 10UF K		X201			L78-1210-05	RESONATOR (4.95MHZ)	
C447,448			CK73FB0J106K	CHIP C 10UF K		X202	*		L77-2917-15	CRYSTAL RESONATOR (32.768KHZ)	
C451,452			CK73GB1H102K	CHIP C 1000PF K		X301			L77-2905-05	CRYSTAL RESONATOR (3.579545MHZ)	
C463,464			CK73GB0J475K	CHIP C 4.7UF K		X302			L77-2906-05	CRYSTAL RESONATOR (4.433619MHZ)	E1E2M1
C465			CK73FB0J106K	CHIP C 10UF K		X302			L77-2906-05	CRYSTAL RESONATOR (4.433619MHZ)	X1
C501-508			CK73GB1H104K	CHIP C 0.10UF K		CP401			RK74GB1J222J	CHIP-COM 2.2K J 1/16W	
C510-512			CK73GB1H104K	CHIP C 0.10UF K		CP402,403			RK74GB1J103J	CHIP-COM 10K J 1/16W	
C513,514			CK73FB1A225K	CHIP C 2.2UF K		R1,2	*		RK73EB2E622J	CHIP R 6.2K J 1/4W	
C515,516			CK73GB1H103K	CHIP C 0.010UF K		R3			RK73GB2A153J	CHIP R 15K J 1/10W	
C517			CK73FB0J106K	CHIP C 10UF K		R4			RK73GB2A912J	CHIP R 9.1K J 1/10W	
C518			CK73GB1H103K	CHIP C 0.010UF K		R5			RK73GB2A473J	CHIP R 47K J 1/10W	
C519			CK73GB1H104K	CHIP C 0.10UF K		R6			RK73GH2A104D	CHIP R 100K D 1/10W	
C520			CK73FB0J106K	CHIP C 10UF K		R7			RK73GH2A513D	CHIP R 51K D 1/10W	
C521			CK73GB1H104K	CHIP C 0.10UF K		R8			RK73GH2A333D	CHIP R 33K D 1/10W	
C523			CC73GCH1H101J	CHIP C 100PF J		R9,10			RK73GB2A224J	CHIP R 220K J 1/10W	
C528			CK73GB1H104K	CHIP C 0.10UF K		R11			RK73GH2A113D	CHIP R 11K D 1/10W	
C529-534			CK73GB1H103K	CHIP C 0.010UF K		R12			RK73GH2A104D	CHIP R 100K D 1/10W	
C535			CK73GB1H104K	CHIP C 0.10UF K		R13			RK73GH2A683D	CHIP R 68K D 1/10W	
C539	*		CE32AV0J121M	CHIP EL 120UF 6.3WV		R14,15			RK73GH2A334D	CHIP R 330K D 1/10W	
C540			CK73GB1H104K	CHIP C 0.10UF K		R16,17			RK73GB2A224J	CHIP R 220K J 1/10W	
C541			CK73GB1H103K	CHIP C 0.010UF K		R18			RK73GB2A000J	CHIP R 0.0 J 1/10W	
C542			CK73GB1H104K	CHIP C 0.10UF K		R19			RK73GB2A224J	CHIP R 220K J 1/10W	
C543			CK73GB1H103K	CHIP C 0.010UF K		R22			RK73GB2A224J	CHIP R 220K J 1/10W	
C544			CK73GB1H104K	CHIP C 0.10UF K		R24			RK73GB2A303J	CHIP R 30K J 1/10W	
C545			CK73GB1H103K	CHIP C 0.010UF K		R25			RK73GB2A224J	CHIP R 220K J 1/10W	
C546			CK73GB1H104K	CHIP C 0.10UF K		R26			RK73GB2A202J	CHIP R 2.0K J 1/10W	
C547			CK73GB1H103K	CHIP C 0.010UF K		R27,28			RK73GB2A224J	CHIP R 220K J 1/10W	
C548			CK73GB1H104K	CHIP C 0.10UF K							
C549			CK73GB1H103K	CHIP C 0.010UF K							

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R29			RK73GB2A114J	CHIP R 110K J 1/10W		R134,135			RK73EB2E100J	CHIP R 10 J 1/4W	
R34			RK73GB2A823J	CHIP R 82K J 1/10W		R136,137		*	R92-5160-05	CHIP R 0.047 J 1/4W	
R35			RK73GB2A103J	CHIP R 10K J 1/10W		R138			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R36			RK73GB2A224J	CHIP R 220K J 1/10W		R143			RK73GH2A333D	CHIP R 33K D 1/10W	
R37			RK73GB2A333J	CHIP R 33K J 1/10W		R144			RK73GH2A103D	CHIP R 10K D 1/10W	
R38			RK73GB2A224J	CHIP R 220K J 1/10W		R145			RK73GH2A561D	CHIP R 560 D 1/10W	
R39			RK73GB2A000J	CHIP R 0.0 J 1/10W		R146			RK73GB2A103J	CHIP R 10K J 1/10W	
R40			RK73GB2A153J	CHIP R 15K J 1/10W		R149			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R41			RK73GB2A272J	CHIP R 2.7K J 1/10W		R150			RK73GB2A683J	CHIP R 68K J 1/10W	
R42			RK73GB2A000J	CHIP R 0.0 J 1/10W		R152			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R43			RK73GB2A472J	CHIP R 4.7K J 1/10W		R153			RK73GB2A683J	CHIP R 68K J 1/10W	
R44			RK73GB2A561J	CHIP R 560 J 1/10W		R154			RK73GH2A333D	CHIP R 33K D 1/10W	
R50			RK73GB2A302J	CHIP R 3.0K J 1/10W		R155			RK73GH2A562D	CHIP R 5.6K D 1/10W	
R51			RK73GB2A332J	CHIP R 3.3K J 1/10W		R156			RK73GH2A681D	CHIP R 680 D 1/10W	
R52			RK73GB2A272J	CHIP R 2.7K J 1/10W		R158			RK73EB2E100J	CHIP R 10 J 1/4W	
R53			RK73GB2A393J	CHIP R 39K J 1/10W		R159			RK73GB2A220J	CHIP R 22 J 1/10W	
R54			RK73GB2A113J	CHIP R 11K J 1/10W		R160-162			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R55			RK73GB2A302J	CHIP R 3.0K J 1/10W		R163,164			RK73EB2E100J	CHIP R 10 J 1/4W	
R56			RK73GB2A332J	CHIP R 3.3K J 1/10W		R165,166		*	R92-5158-05	CHIP R 0.022 J 1/4W	
R57			RK73GB2A272J	CHIP R 2.7K J 1/10W		R167			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R58			RK73GB2A393J	CHIP R 39K J 1/10W		R168			RK73GB2A220J	CHIP R 22 J 1/10W	
R59			RK73GB2A113J	CHIP R 11K J 1/10W		R169-171			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R60			RK73GB2A223J	CHIP R 22K J 1/10W		R172,173			RK73EB2E100J	CHIP R 10 J 1/4W	
R61,62			RK73GB2A103J	CHIP R 10K J 1/10W		R175		*	R92-5159-05	CHIP R 0.033 J 1/4W	
R65			RK73GB2A153J	CHIP R 15K J 1/10W		R176			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R66			RK73GB2A302J	CHIP R 3.0K J 1/10W		R188			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R67			RK73GB2A332J	CHIP R 3.3K J 1/10W		R201			RK73GB2A473J	CHIP R 47K J 1/10W	
R68			RK73GB2A272J	CHIP R 2.7K J 1/10W		R202,203			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R69			RK73GB2A333J	CHIP R 33K J 1/10W		R204-208			RK73GB2A101J	CHIP R 100 J 1/10W	
R70			RK73GB2A203J	CHIP R 20K J 1/10W		R209,210			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R73,74			RK73GB2A101J	CHIP R 100 J 1/10W		R211			RK73GB2A103J	CHIP R 10K J 1/10W	
R76,77			RK73GB2A101J	CHIP R 100 J 1/10W		R212			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R89			RK73GB2A000J	CHIP R 0.0 J 1/10W		R213			RK73GB2A473J	CHIP R 47K J 1/10W	
R102,103			RK73GH2A561D	CHIP R 560 D 1/10W		R214			RK73GB2A104J	CHIP R 100K J 1/10W	
R104			RK73GH2A333D	CHIP R 33K D 1/10W		R215			RK73GB2A473J	CHIP R 47K J 1/10W	
R105			RK73GH2A622D	CHIP R 6.2K D 1/10W		R216-227			RK73GB2A101J	CHIP R 100 J 1/10W	
R106			RK73GB2A000J	CHIP R 0.0 J 1/10W		R228,229			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R107			RK73GH2A113D	CHIP R 11K D 1/10W		R230			RK73GB2A104J	CHIP R 100K J 1/10W	
R108			RK73GB2A103J	CHIP R 10K J 1/10W		R231-233			RK73GB2A473J	CHIP R 47K J 1/10W	
R111			RK73GB2A000J	CHIP R 0.0 J 1/10W		R234-236			RK73GB2A101J	CHIP R 100 J 1/10W	
R112			RK73GB2A333J	CHIP R 33K J 1/10W		R237			RK73GB2A473J	CHIP R 47K J 1/10W	
R114			RK73GB2A000J	CHIP R 0.0 J 1/10W		R238-240			RK73GB2A101J	CHIP R 100 J 1/10W	
R115			RK73GB2A683J	CHIP R 68K J 1/10W		R241			RK73GB2A473J	CHIP R 47K J 1/10W	
R116			RK73GH2A333D	CHIP R 33K D 1/10W		R242-246			RK73GB2A101J	CHIP R 100 J 1/10W	
R117			RK73GH2A562D	CHIP R 5.6K D 1/10W		R247			RK73GB2A473J	CHIP R 47K J 1/10W	
R118			RK73GH2A681D	CHIP R 680 D 1/10W		R248			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R120			RK73EB2E100J	CHIP R 10 J 1/4W		R249,250			RK73GB2A473J	CHIP R 47K J 1/10W	
R121			RK73GB2A220J	CHIP R 22 J 1/10W		R251-253			RK73GB2A101J	CHIP R 100 J 1/10W	
R122-124			RK73GB2A000J	CHIP R 0.0 J 1/10W		R254			RK73GB2A473J	CHIP R 47K J 1/10W	
R125,126			RK73EB2E100J	CHIP R 10 J 1/4W		R255,256			RK73GB2A123J	CHIP R 12K J 1/10W	
R127		*	R92-5158-05	CHIP R 0.022 J 1/4W		R257			RK73GB2A473J	CHIP R 47K J 1/10W	
R129			RK73GB2A000J	CHIP R 0.0 J 1/10W		R258			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
R130			RK73GB2A220J	CHIP R 22 J 1/10W		R258			RK73GB2A103J	CHIP R 10K J 1/10W	X1
R131			RK73GB2A000J	CHIP R 0.0 J 1/10W		R258-261			RK73GB2A103J	CHIP R 10K J 1/10W	M1
R132,133			RK73GH2A561D	CHIP R 560 D 1/10W		R259			RK73GB2A303J	CHIP R 30K J 1/10W	X1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R259			RK73GB2A332J	CHIP R 3.3K J 1/10W	E1E2	R394			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R259-261			RK73GB2A103J	CHIP R 10K J 1/10W	K	R400-403			RK73EB2E100J	CHIP R 10 J 1/4W	
R260,261			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2	R404			RK73GB2A100J	CHIP R 10 J 1/10W	
R260,261			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R405			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R262			RK73GB2A104J	CHIP R 100K J 1/10W		R410,411			RK73GB2A223J	CHIP R 22K J 1/10W	
R264			RK73GB2A103J	CHIP R 10K J 1/10W		R412			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R265,266			RK73GB2A000J	CHIP R 0.0 J 1/10W		R413			RK73GB2A750J	CHIP R 75 J 1/10W	
R276			RK73GB2A473J	CHIP R 47K J 1/10W		R414			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R301			RK73GB2A102J	CHIP R 1.0K J 1/10W		R415			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R302			RK73GB2A101J	CHIP R 100 J 1/10W		R420			RK73GB2A103J	CHIP R 10K J 1/10W	
R303			RK73GB2A000J	CHIP R 0.0 J 1/10W		R421			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R304			RK73GB2A681J	CHIP R 680 J 1/10W		R422-424			RK73GB2A101J	CHIP R 100 J 1/10W	
R305			RK73GB2A222J	CHIP R 2.2K J 1/10W		R425-430			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R306			RK73GB2A000J	CHIP R 0.0 J 1/10W		R431			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R307			RK73GH2A183D	CHIP R 18K D 1/10W		R432-435			RK73GB2A101J	CHIP R 100 J 1/10W	
R308			RK73GB2A473J	CHIP R 47K J 1/10W		R436			RK73GB2A751J	CHIP R 750 J 1/10W	
R309			RK73GB2A000J	CHIP R 0.0 J 1/10W		R437			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R310			RK73GB2A561J	CHIP R 560 J 1/10W		R438			RK73GB2A101J	CHIP R 100 J 1/10W	
R311			RK73GB2A105J	CHIP R 1.0M J 1/10W		R439			RK73GB2A751J	CHIP R 750 J 1/10W	
R312			RK73GB2A000J	CHIP R 0.0 J 1/10W		R440			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R313			RK73GB2A105J	CHIP R 1.0M J 1/10W		R441			RK73GB2A101J	CHIP R 100 J 1/10W	
R316			RK73GH2A222D	CHIP R 2.2K D 1/10W		R442			RK73GB2A751J	CHIP R 750 J 1/10W	
R317			RK73GB2A822J	CHIP R 8.2K J 1/10W		R443			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R318			RK73GB2A562J	CHIP R 5.6K J 1/10W		R444			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R319			RK73GH2A681D	CHIP R 680 D 1/10W	E1E2M1	R445-448			RK73GB2A101J	CHIP R 100 J 1/10W	
R319			RK73GH2A681D	CHIP R 680 D 1/10W	X1	R449			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R320-322			RK73GB2A000J	CHIP R 0.0 J 1/10W		R450			RK73GB2A221J	CHIP R 220 J 1/10W	
R324			RK73GB2A103J	CHIP R 10K J 1/10W		R451			RK73GB2A101J	CHIP R 100 J 1/10W	
R325			RK73GB2A000J	CHIP R 0.0 J 1/10W		R452			RK73GB2A751J	CHIP R 750 J 1/10W	
R326			RK73GB2A103J	CHIP R 10K J 1/10W		R453			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R327-330			RK73GB2A101J	CHIP R 100 J 1/10W		R454			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R331			RK73GH2A473D	CHIP R 47K D 1/10W		R455-459			RK73GB2A101J	CHIP R 100 J 1/10W	
R332			RK73GB2A361J	CHIP R 360 J 1/10W		R460,461			RK73GB2A473J	CHIP R 47K J 1/10W	
R334			RK73GB2A361J	CHIP R 360 J 1/10W		R463,464			RK73EB2E101J	CHIP R 100 J 1/4W	
R335,336			RK73GB2A303J	CHIP R 30K J 1/10W		R500,501			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R337			RK73GB2A100J	CHIP R 10 J 1/10W		R504-515			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R338			RK73GB2A102J	CHIP R 1.0K J 1/10W		R518,519			RK73GB2A223J	CHIP R 22K J 1/10W	
R339			RK73GB2A000J	CHIP R 0.0 J 1/10W		R522			RK73GB2A101J	CHIP R 100 J 1/10W	
R342			RK73GB2A000J	CHIP R 0.0 J 1/10W		R525-527			RK73GB2A101J	CHIP R 100 J 1/10W	
R344			RK73GB2A222J	CHIP R 2.2K J 1/10W		R529,530			RK73GB2A471J	CHIP R 470 J 1/10W	
R345			RK73GH2A432D	CHIP R 4.3K D 1/10W		R531-533			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R346			RK73GH2A152D	CHIP R 1.5K D 1/10W		R534			RK73GB2A100J	CHIP R 10 J 1/10W	
R347			RK73GH2A104D	CHIP R 100K D 1/10W		R535			RK73GB2A151J	CHIP R 150 J 1/10W	
R348			RK73GH2A363D	CHIP R 36K D 1/10W		R536			RK73EB2E750J	CHIP R 75 J 1/4W	
R349			RK73GH2A104D	CHIP R 100K D 1/10W		R537,538			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R350			RK73GH2A363D	CHIP R 36K D 1/10W		R539,540			RK73GB2A473J	CHIP R 47K J 1/10W	
R351			RK73GH2A104D	CHIP R 100K D 1/10W		R542			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R352			RK73GH2A363D	CHIP R 36K D 1/10W		R551			RK73GB2A100J	CHIP R 10 J 1/10W	
R353-355			RK73GB2A362J	CHIP R 3.6K J 1/10W		R552			RK73GB2A473J	CHIP R 47K J 1/10W	
R356-361			RK73GH2A102D	CHIP R 1.0K D 1/10W		R553			RK73GB2A100J	CHIP R 10 J 1/10W	
R370,371			RK73GB2A101J	CHIP R 100 J 1/10W		R554			RK73GB2A473J	CHIP R 47K J 1/10W	
R372,373			RK73GB2A000J	CHIP R 0.0 J 1/10W		R555			RK73GB2A100J	CHIP R 10 J 1/10W	
R374-387			RK73GB2A101J	CHIP R 100 J 1/10W		R556			RK73GB2A473J	CHIP R 47K J 1/10W	
R388			RK73GB2A272J	CHIP R 2.7K J 1/10W		R557			RK73GB2A100J	CHIP R 10 J 1/10W	
R389			RK73GB2A222J	CHIP R 2.2K J 1/10W		R558			RK73GB2A473J	CHIP R 47K J 1/10W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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△ Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R559-565			RK73EB2E101J	CHIP R 100 J 1/4W		IC400		*	NJM2505AF-ZB	ANALOGUE IC	
R566			RK73EB2E102J	CHIP R 1.0K J 1/4W		IC401		*	NJM2794RB2ZB	ANALOGUE IC	
R567			RK73EB2E750J	CHIP R 75 J 1/4W		IC402			BU2090FS	MOS-IC	
R568-571			RK73GB2A750J	CHIP R 75 J 1/10W		IC403,404			MM1234XFBE-E	ANALOGUE IC	
R572			RK73GB2A101J	CHIP R 100 J 1/10W		IC405			BA7649F	ANALOGUE IC	
R573-575			RK73GB2A100J	CHIP R 10 J 1/10W		IC406			MM1508XNRE-E	ANALOGUE IC	
R576			RK73GB2A102J	CHIP R 1.0K J 1/10W		IC407,408			TC4052BFT	MOS-IC	
R577			RK73GB2A472J	CHIP R 4.7K J 1/10W		IC501,502			LB1836M-TLM-E	ANALOGUE IC	
R581			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC503			TC7SET04FU-F	MOS-IC	
R582-585			RK73EB2E101J	CHIP R 100 J 1/4W		Q1,2			2SC4081	TRANSISTOR	
R586			RK73EB2E102J	CHIP R 1.0K J 1/4W		Q3			2SA1576A	TRANSISTOR	
R587,588			RK73EB2E101J	CHIP R 100 J 1/4W		Q4			2SC4081	TRANSISTOR	
R589			RK73GB2A103J	CHIP R 10K J 1/10W		Q5			2SA1576A	TRANSISTOR	
R590,591			RK73GB2A472J	CHIP R 4.7K J 1/10W		Q6			2SC4081	TRANSISTOR	
R598			RK73GB2A101J	CHIP R 100 J 1/10W		Q7			DTA114EUA	DIGITAL TRANSISTOR	
D1			1SR154-400	DIODE		Q8			DTC114YUA	DIGITAL TRANSISTOR	
D2			DAN202U	DIODE		Q9			DTA114TUA	DIGITAL TRANSISTOR	
D3			UDZS6.2B	ZENER DIODE		Q10			DTC114YUA	DIGITAL TRANSISTOR	
D4			EP05Q04	DIODE		Q13			2SC4081	TRANSISTOR	
D101-104	*		1SS357-F	DIODE		Q14			2SB1184	TRANSISTOR	
D301			DAN202U	DIODE		Q15,16			2SC4081	TRANSISTOR	
D310,311			AVRM1608120M6A	VARISTOR		Q17			2SA1576A	TRANSISTOR	
D312,313			AVRM1608180M6A	VARISTOR		Q19			DTC144EUA	DIGITAL TRANSISTOR	
D314-324			AVRM1608120M6A	VARISTOR		Q20,21			2SA1576A	TRANSISTOR	
D400			AVRM1608270MAA	VARISTOR		Q22			TPC8110-F	FET	
D401,402			AVRM1608120M6A	VARISTOR		Q23			2SC4081	TRANSISTOR	
D403			DAP202U	DIODE		Q24			2SA1576A	TRANSISTOR	
D404			UDZS4.7B	ZENER DIODE		Q25			DTC114YUA	DIGITAL TRANSISTOR	
D405			AVRM1608120M6A	VARISTOR		Q26			2SB1689	TRANSISTOR	
D406			AVRM1608270MAA	VARISTOR		Q31			2SB1184	TRANSISTOR	
D501			DAP202U	DIODE		Q32			2SC4081	TRANSISTOR	
D502			AVRM1608270MAA	VARISTOR		Q33			2SA1576A	TRANSISTOR	
D503			DA204U	DIODE		Q34			2SC4081	TRANSISTOR	
D504-508			STZ6.2N	ZENER DIODE		Q35			2SB1184	TRANSISTOR	
D510-513			AVRM1608120M6A	VARISTOR		Q36			2SC4081	TRANSISTOR	
D514			AVRM1608180M6A	VARISTOR		Q37			2SA1576A	TRANSISTOR	
D515-518			AVRM1608120M6A	VARISTOR		Q38			2SC4081	TRANSISTOR	
D523			AVRM1608120M6A	VARISTOR		Q43			2SB1184	TRANSISTOR	
D524			AVRM1608180M6A	VARISTOR		Q44			2SC4081	TRANSISTOR	
D528-536			AVRM1608270MAA	VARISTOR		Q45			2SA1576A	TRANSISTOR	
IC1			SI-3033KMS	ANALOGUE IC		Q46			2SC4081	TRANSISTOR	
IC2			PQ1X331M2ZPH	ANALOGUE IC		Q101			DTC114YUA	DIGITAL TRANSISTOR	
IC10			NJM4565V-ZB	ANALOGUE IC		Q103			DTC144EUA	DIGITAL TRANSISTOR	
IC101,102	*		LTC3728LEGN	ANALOGUE IC		Q104,105	*		HAT2218R-E	DUAL FET	
IC201	*		703261YGC315A	MICROCONTROLLER IC		Q106			DTC144EUA	DIGITAL TRANSISTOR	
IC202	*		S1000N30N4T1G	ANALOGUE IC		Q108			DTC144EUA	DIGITAL TRANSISTOR	
IC203			W05-1260-00	ROM IC	K	Q109,110	*		HAT2218R-E	DUAL FET	
IC203			W05-1261-00	ROM IC	E1E2	Q111			DTC144EUA	DIGITAL TRANSISTOR	
IC203			W05-1262-00	ROM IC	M1	Q201			DTC144EUA	DIGITAL TRANSISTOR	
IC203			W05-1263-00	ROM IC	R1X1	Q203			DTA144EUA	DIGITAL TRANSISTOR	
IC205			TC7SET08FU-F	MOS-IC		Q204			DTC114YUA	DIGITAL TRANSISTOR	
IC301			RB5P0090M	ANALOGUE IC		Q205			DTB123YK	DIGITAL TRANSISTOR	
IC302			TC7SET04FU-F	MOS-IC		Q206			DTC114YUA	DIGITAL TRANSISTOR	
IC303			TC7WH123FU-F	MOS-IC		Q207			DTB123YK	DIGITAL TRANSISTOR	
IC304			TC7SH04FU-F	MOS-IC		Q208,209			DTC114YUA	DIGITAL TRANSISTOR	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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PARTS LIST

VIDEO CONTROL UNIT (X14-983x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
Q210			DTB123YK	DIGITAL TRANSISTOR	
Q301			2SC4081	TRANSISTOR	
Q304			UMZ1N	TRANSISTOR	
Q305			DTC114YUA	DIGITAL TRANSISTOR	
Q306-309			UMZ1N	TRANSISTOR	
Q401			2SA1576A	TRANSISTOR	
Q501,502			DTC323TU	DIGITAL TRANSISTOR	
Q503			DTA114EUA	DIGITAL TRANSISTOR	
Q504			2SA1576A	TRANSISTOR	
Q508		*	2SC3437-F(Y)	TRANSISTOR	
SWITCH UNIT (X16-3920-10)					
D101			B30-1713-05	LED (SR,TS)	
D203			B30-1713-05	LED (SR,TS)	
D205			B30-1740-05	LED (CL-270PG-C-TSL)	
D207-209			B30-1767-05	LED	
D221-225			B30-1605-05	LED (2COLOR PG/RED)	
C203			CC73GCH1H221J	CHIP C 220PF J	
C204			CK73FB1A225K	CHIP C 2.2UF K	
CN101			E41-2366-05	FLAT CABLE CONNECTOR	
J101			E58-1008-05	RECTANGULAR RECEPTACLE	
J201			E59-0843-05	RECTANGULAR PLUG	
R101,102			RK73EB2E101J	CHIP R 100 J 1/4W	
R103-105			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R106			RK73GB2A101J	CHIP R 100 J 1/10W	
R107			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R201			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R202			RK73GB2A181J	CHIP R 180 J 1/10W	
R203			RK73GB2A101J	CHIP R 100 J 1/10W	
R204			RK73GB2A331J	CHIP R 330 J 1/10W	
R205			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R206			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R207			RK73GB2A181J	CHIP R 180 J 1/10W	
R208			RK73GB2A331J	CHIP R 330 J 1/10W	
R209			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R214			RK73EB2E101J	CHIP R 100 J 1/4W	
R216			RK73GB2A104J	CHIP R 100K J 1/10W	
R217			RK73EB2E101J	CHIP R 100 J 1/4W	
R219			RK73GB2A391J	CHIP R 390 J 1/10W	
R221			RK73EB2E471J	CHIP R 470 J 1/4W	
R224			RK73GB2A822J	CHIP R 8.2K J 1/10W	
R225			RK73GB2A153J	CHIP R 15K J 1/10W	
R226			RK73GB2A473J	CHIP R 47K J 1/10W	
R234,235			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R236			RK73GB2A471J	CHIP R 470 J 1/10W	
R237			RK73FB2B471J	CHIP R 470 J 1/8W	
R238			RK73GB2A391J	CHIP R 390 J 1/10W	
R239,240			RK73GB2A471J	CHIP R 470 J 1/10W	
S201-206			S70-0901-05	TACT SWITCH	
S207			S70-0874-05	TACT SWITCH	
S208			S70-0901-05	TACT SWITCH	
D102			AVRM1608180M6A	VARIATOR	
D103-106			AVRM1005270MAA	VARIATOR	
D201			UDZS6.2B	ZENER DIODE	

Ref. No.	Add	New	Parts No.	Description	Destination
D217			AVRM1608120M6A	VARIATOR	
D404-410			AVRM1608180M6A	VARIATOR	
D411			DAP202U	DIODE	
IC201			RS-181	ANALOGUE IC	
Q101			DTC114YUA	DIGITAL TRANSISTOR	
Q206			2SA1576A	TRANSISTOR	
ELECTRIC UNIT (X34-475x-xx)					
C1			C90-5612-05	ELECTRO 3900UF 16WV	
C2			CK73GB1H103K	CHIP C 0.010UF K	
C4-6			CK73FB1C105K	CHIP C 1.0UF K	
C7			CK73GB1H103K	CHIP C 0.010UF K	
C8			CD04AS1H3R3M	ELECTRO 3.3UF 50WV	
C9			CK73FB1C105K	CHIP C 1.0UF K	
C10			CK73GB1H104K	CHIP C 0.10UF K	
C11-13			CK73GB1H103K	CHIP C 0.010UF K	
C14,15			CK73FB1E474K	CHIP C 0.47UF K	
C16,17			CK73GB1H473K	CHIP C 0.047UF K	M1X1
C51			CD04AY1E221M	ELECTRO 220UF 25WV	
C53			CD04AY1H100M	ELECTRO 10UF 50WV	
C54			CD04AY0J331M	ELECTRO 330UF 6.3WV	
C61			CK73GB1A105K	CHIP C 1.0UF K	
C62			CD04AY1E470M	ELECTRO 47UF 25WV	
C71			CK73GB1A105K	CHIP C 1.0UF K	
C72			CD04AY1A101M	ELECTRO 100UF 10WV	
C81			CK73EB1E105K	CHIP C 1.0UF K	M1X1
C91			CK73EB1E105K	CHIP C 1.0UF K	M1X1
C101			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C103			CK73GB1H102K	CHIP C 1000PF K	
C104,105			CK73GB1H104K	CHIP C 0.10UF K	
C106			CK73GB1A105K	CHIP C 1.0UF K	
C107-110			CK73GB1H104K	CHIP C 0.10UF K	
C112			CK73GB1H102K	CHIP C 1000PF K	
C113-116			CK73GB1H103K	CHIP C 0.010UF K	
C201			CD04BJ1E470M	ELECTRO 47UF 25WV	
C202			CD04AS1V100M	ELECTRO 10UF 35WV	
C203,204			CC73GCH1H070D	CHIP C 7.0PF D	
C205,206			CD04AS1H3R3M	ELECTRO 3.3UF 50WV	
C207			CK73FB1C105K	CHIP C 1.0UF K	
C209-211			CD04AS1H010M	ELECTRO 1UF 50WV	
C212,213			CK73FB1C105K	CHIP C 1.0UF K	
C216			CK73GB1H103K	CHIP C 0.010UF K	
C223,224			CK73FB1E474K	CHIP C 0.47UF K	
C225,226			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C227,228			CK73FB1E474K	CHIP C 0.47UF K	
C233			CD04AS1V100M	ELECTRO 10UF 35WV	
C234,235			CK73GB1H103K	CHIP C 0.010UF K	
C260-263			CK73GB1H103K	CHIP C 0.010UF K	
C264,265			CC73GCH1H100D	CHIP C 10PF D	KR1E1
C264,265			CC73GCH1H100D	CHIP C 10PF D	E2M1
C266			CK73GB1H103K	CHIP C 0.010UF K	KR1E1
C266			CK73GB1H103K	CHIP C 0.010UF K	E2M1
C267			CC73GCH1H331J	CHIP C 330PF J	KR1E1
C267			CC73GCH1H331J	CHIP C 330PF J	E2M1
C268,269			CD04AS1V100M	ELECTRO 10UF 35WV	KR1E1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C268,269			CD04AS1V100M	ELECTRO 10UF 35WV	E2M1
C270			CK73GB1H103K	CHIP C 0.010UF K	KR1E1
C270			CK73GB1H103K	CHIP C 0.010UF K	E2M1
C305,306			C90-6779-05	ELECTRO 0.47UF 16WV	
C311,312			C90-6780-05	ELECTRO 1UF 16WV	
C315,316			CK73GB1A105K	CHIP C 1.0UF K	
C317,318			C90-6779-05	ELECTRO 0.47UF 16WV	
C319			CD04BM1E330M	ELECTRO 33UF 25WV	
C351-354			CK73GB1H104K	CHIP C 0.10UF K	
C355			CD04AS1V100M	ELECTRO 10UF 35WV	
C356,357			CK73GB1H102K	CHIP C 1000PF K	
C358,359			CD04AS1V100M	ELECTRO 10UF 35WV	
C360,361			CK73GB1H102K	CHIP C 1000PF K	
C362,363			CD04AS1V100M	ELECTRO 10UF 35WV	
C364,365			CK73GB1H102K	CHIP C 1000PF K	
C366,367			CD04AS1V100M	ELECTRO 10UF 35WV	
C368,369			CK73GB1H102K	CHIP C 1000PF K	
C370			CD04AS1V100M	ELECTRO 10UF 35WV	
C371			CK73GB1H222K	CHIP C 2200PF K	
C401			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C402			CD04BJ1E470M	ELECTRO 47UF 25WV	
C403			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C501,502			CK73GB1H103K	CHIP C 0.010UF K	
C505-509			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C511			CD04BJ1E470M	ELECTRO 47UF 25WV	
C512,513			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C514			CD04AS1V100M	ELECTRO 10UF 35WV	
C515			CD04BJ1E470M	ELECTRO 47UF 25WV	
C517			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C701-703			CK73GB1A474K	CHIP C 0.47UF K	
C707			CD04BJ1E470M	ELECTRO 47UF 25WV	
C708			CK73GB1H103K	CHIP C 0.010UF K	
C709			CD04AS1C220M	ELECTRO 22UF 16WV	
C710			CK73GB1A474K	CHIP C 0.47UF K	
C711			CD04BJ1E470M	ELECTRO 47UF 25WV	
C712			CK73GB1A474K	CHIP C 0.47UF K	
C713			CK73GB1H104K	CHIP C 0.10UF K	
C715			CK73GB1H103K	CHIP C 0.010UF K	
C719-721			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C723			CK73GB1H103K	CHIP C 0.010UF K	
C725			CD04BJ1E470M	ELECTRO 47UF 25WV	
C726			CK73GB1H222K	CHIP C 2200PF K	
C727			CK73GB1H102K	CHIP C 1000PF K	
C729			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C730			CK73GB1A474K	CHIP C 0.47UF K	
C801-804			CK73GB1A105K	CHIP C 1.0UF K	
C807			CK73GB1A105K	CHIP C 1.0UF K	
C808			CD04AS1C220M	ELECTRO 22UF 16WV	
C809-811			CK73GB1H104K	CHIP C 0.10UF K	
C812			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C813-815			CK73GB1A105K	CHIP C 1.0UF K	
C817			CK73GB1A105K	CHIP C 1.0UF K	
C818,819			CK73GB1H104K	CHIP C 0.10UF K	
C820			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C821,822			CK73GB1A105K	CHIP C 1.0UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C824			CK73GB1H104K	CHIP C 0.10UF K	
C825			CK73GB1H103K	CHIP C 0.010UF K	
C827			CK73GB1H473K	CHIP C 0.047UF K	
C828-830			CK73GB1H103K	CHIP C 0.010UF K	
C832			CK73GB1A105K	CHIP C 1.0UF K	
C834			CK73GB1H104K	CHIP C 0.10UF K	E1E2
C835			CK73GB1A105K	CHIP C 1.0UF K	
C836			CK73GB1H104K	CHIP C 0.10UF K	E1E2
C837			CK73GB1A105K	CHIP C 1.0UF K	
C838			CK73GB1H104K	CHIP C 0.10UF K	E1E2
C839			CK73GB1A105K	CHIP C 1.0UF K	
C841-843			CK73GB1H103K	CHIP C 0.010UF K	E1E2
C844-846			CK73GB1A105K	CHIP C 1.0UF K	E1E2
C847-849			CK73GB1A105K	CHIP C 1.0UF K	KR1M1
C847-849			CK73GB1A105K	CHIP C 1.0UF K	X1
C850-852			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C853			CC73GCH1H101J	CHIP C 100PF J	
C854,855			CK73GB1A105K	CHIP C 1.0UF K	
C856-858			CK73GB1H104K	CHIP C 0.10UF K	
C859			CC73GCH1H101J	CHIP C 100PF J	
C860			CK73GB1H103K	CHIP C 0.010UF K	
C861			CK73GB1A105K	CHIP C 1.0UF K	
C862			CK73GB1H103K	CHIP C 0.010UF K	
C867-869			CC73GCH1H050C	CHIP C 5.0PF C	
C870			CK73GB1H103K	CHIP C 0.010UF K	
C871			CK73GB1H222K	CHIP C 2200PF K	
C872			CC73GCH1H220J	CHIP C 22PF J	
C874			CK73GB1H222K	CHIP C 2200PF K	
C875			CC73GCH1H220J	CHIP C 22PF J	
C877			CK73GB1H222K	CHIP C 2200PF K	
C878			CC73GCH1H220J	CHIP C 22PF J	
C880			CK73GB1H222K	CHIP C 2200PF K	
C881			CC73GCH1H220J	CHIP C 22PF J	
C884			CC73GCH1H220J	CHIP C 22PF J	
C885			CK73GB1H222K	CHIP C 2200PF K	
C887			CC73GCH1H220J	CHIP C 22PF J	
C888			CK73GB1H222K	CHIP C 2200PF K	
C890			CC73GCH1H220J	CHIP C 22PF J	
C891			CK73GB1H222K	CHIP C 2200PF K	
C893			CC73GCH1H220J	CHIP C 22PF J	
C894			CK73GB1H222K	CHIP C 2200PF K	
C895			CK73GB1H104K	CHIP C 0.10UF K	
J1			E58-1043-05	RECTANGULAR RECEPTACLE	
J351		*	E63-0944-05	PIN JACK	
J401			E56-0856-05	CYLINDRICAL RECEPTACLE	
J501		*	E58-1069-05	RECTANGULAR RECEPTACLE	
J701			E58-1034-05	RECTANGULAR RECEPTACLE	
J702			E56-0868-05	CYLINDRICAL RECEPTACLE	
J703		*	E63-0943-05	PIN JACK	
J704		*	E63-0945-05	PIN JACK	
J705			E58-1067-05	RECTANGULAR RECEPTACLE	M1X1
W251	3G		E30-6492-05	CORD WITH PLUG	
F51			F53-0297-05	FUSE (UL,CSA) 1.6A	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
100 X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
L1			L33-1063-25	CHOKE COIL		R40			RK73EB2E103J	CHIP R 10K J 1/4W	
L71			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R41-44			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
L101			L92-0319-05	CHIP FERRITE		R51			RK73EB2E000J	CHIP R 0.0 J 1/4W	
L105			L92-0319-05	CHIP FERRITE		R52			RK73FB2B203J	CHIP R 20K J 1/8W	
L251			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R53,54			RK73GB2A101J	CHIP R 100 J 1/10W	
L253			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R55			RK73GB2A223J	CHIP R 22K J 1/10W	
L255			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	KR1E1	R56			RK73FB2B222J	CHIP R 2.2K J 1/8W	
L255			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	E2M1	R61			RK73FB2B221J	CHIP R 220 J 1/8W	
L701			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R62			RK73GH2A153D	CHIP R 15K D 1/10W	
L702			L92-0319-05	CHIP FERRITE		R63			RK73GH2A512D	CHIP R 5.1K D 1/10W	
L703			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)		R71			RK73FB2B221J	CHIP R 220 J 1/8W	
X101		*	L78-1220-05	RESONATOR (19.8000MHZ)		R72			RK73GH2A243D	CHIP R 24K D 1/10W	
X251			L77-2002-05	CRYSTAL RESONATOR	KR1E1	R73			RK73GH2A432D	CHIP R 4.3K D 1/10W	
X251			L77-2002-05	CRYSTAL RESONATOR	E2M1	R81			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1X1
Y	3H		N09-4461-05	TAPTITE SCREW		R82			RK73EB2E152J	CHIP R 1.5K J 1/4W	M1X1
Z	3H		N84-3008-43	PAN HEAD TAPTITE SCREW		R83			RK73GB2A621J	CHIP R 620 J 1/10W	M1X1
R1			RK73GB2A103J	CHIP R 10K J 1/10W		R84			RK73GB2A242J	CHIP R 2.4K J 1/10W	M1X1
R2			RK73FB2B472J	CHIP R 4.7K J 1/8W	M1X1	R85,86	*		RK73PB2H2R0J	CHIP R 2.0 J 1/2W	M1X1
R3			RK73EB2E272J	CHIP R 2.7K J 1/4W		R87			RK73GB2A124J	CHIP R 120K J 1/10W	M1X1
R4			RK73GB2A102J	CHIP R 1.0K J 1/10W		R88			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1
R5			RK73FB2B472J	CHIP R 4.7K J 1/8W	M1X1	R89			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
R6			RK73GB2A473J	CHIP R 47K J 1/10W		R91			RK73GB2A472J	CHIP R 4.7K J 1/10W	M1X1
R7			RK73GB2A103J	CHIP R 10K J 1/10W		R92			RK73EB2E152J	CHIP R 1.5K J 1/4W	M1X1
R8			RK73EB2E103J	CHIP R 10K J 1/4W		R93			RK73GB2A621J	CHIP R 620 J 1/10W	M1X1
R9			RK73GB2A473J	CHIP R 47K J 1/10W		R94			RK73GB2A242J	CHIP R 2.4K J 1/10W	M1X1
R10			RK73EB2E272J	CHIP R 2.7K J 1/4W		R95,96	*		RK73PB2H2R0J	CHIP R 2.0 J 1/2W	M1X1
R11			RK73GB2A102J	CHIP R 1.0K J 1/10W		R97			RK73GB2A124J	CHIP R 120K J 1/10W	M1X1
R12			RK73EB2E102J	CHIP R 1.0K J 1/4W		R98			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1
R13			RK73GB2A104J	CHIP R 100K J 1/10W		R99			RK73GB2A473J	CHIP R 47K J 1/10W	M1X1
R14			RK73GB2A223J	CHIP R 22K J 1/10W		R102			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R15			RK73GB2A103J	CHIP R 10K J 1/10W		R103-106			RK73GB2A473J	CHIP R 47K J 1/10W	
R16			RK73GB2A183J	CHIP R 18K J 1/10W		R107			RK73GB2A101J	CHIP R 100 J 1/10W	
R19			RK73GB2A683J	CHIP R 68K J 1/10W		R108			RK73GB2A471J	CHIP R 470 J 1/10W	
R21			RK73GB2A393J	CHIP R 39K J 1/10W		R109-112			RK73GB2A101J	CHIP R 100 J 1/10W	
R22			RK73GB2A104J	CHIP R 100K J 1/10W		R114-117			RK73GB2A101J	CHIP R 100 J 1/10W	
R23			RK73FB2B472J	CHIP R 4.7K J 1/8W		R118			RK73GB2A223J	CHIP R 22K J 1/10W	
R24			RK73GB2A223J	CHIP R 22K J 1/10W		R119-126			RK73GB2A473J	CHIP R 47K J 1/10W	
R25,26			RK73PB2H102J	CHIP R 1.0K J 1/2W		R127-130			RK73GB2A101J	CHIP R 100 J 1/10W	
R27			RK73GB2A000J	CHIP R 0.0 J 1/10W	E1E2	R131			RK73GB2A103J	CHIP R 10K J 1/10W	
R28			RK73GB2A103J	CHIP R 10K J 1/10W	KR1M1	R132			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R28			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R133			RK73GB2A153J	CHIP R 15K J 1/10W	
R29			RK73GB2A222J	CHIP R 2.2K J 1/10W	KR1M1	R134			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R29			RK73GB2A222J	CHIP R 2.2K J 1/10W	X1	R135-139			RK73GB2A101J	CHIP R 100 J 1/10W	
R30			RK73FB2B472J	CHIP R 4.7K J 1/8W		R140			RK73GB2A473J	CHIP R 47K J 1/10W	
R31,32			RK73PB2H102J	CHIP R 1.0K J 1/2W	KR1M1	R141			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R31,32			RK73PB2H102J	CHIP R 1.0K J 1/2W	X1	R142-147			RK73GB2A101J	CHIP R 100 J 1/10W	
R33			RK73GB2A103J	CHIP R 10K J 1/10W	KR1M1	R148,149			RK73GB2A103J	CHIP R 10K J 1/10W	
R33			RK73GB2A103J	CHIP R 10K J 1/10W	X1	R150-152			RK73GB2A473J	CHIP R 47K J 1/10W	
R34			RK73GB2A473J	CHIP R 47K J 1/10W		R153-156			RK73GB2A103J	CHIP R 10K J 1/10W	X1
R35			RK73GB2A222J	CHIP R 2.2K J 1/10W		R154-156			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
R36			RK73FB2B561J	CHIP R 560 J 1/8W		R154-157			RK73GB2A103J	CHIP R 10K J 1/10W	KM1
R37			RK73EB2E102J	CHIP R 1.0K J 1/4W		R157			RK73GB2A303J	CHIP R 30K J 1/10W	X1
R38			RK73GB2A104J	CHIP R 100K J 1/10W		R157			RK73GB2A332J	CHIP R 3.3K J 1/10W	E1E2
R39			RK73GB2A473J	CHIP R 47K J 1/10W		R161			RK73GB2A103J	CHIP R 10K J 1/10W	R1E1E2
						R161			RK73GB2A103J	CHIP R 10K J 1/10W	M1X1

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R162			RK73GB2A101J	CHIP R 100 J 1/10W		R377			RK73FB2B101J	CHIP R 100 J 1/8W	
R163			RK73GB2A102J	CHIP R 1.0K J 1/10W		R378			RK73GB2A471J	CHIP R 470 J 1/10W	
R164			RK73GB2A222J	CHIP R 2.2K J 1/10W	X1	R379			RK73FB2B101J	CHIP R 100 J 1/8W	
R164,165			RK73GB2A222J	CHIP R 2.2K J 1/10W	KR1E1	R380			RK73GB2A471J	CHIP R 470 J 1/10W	
R164,165			RK73GB2A222J	CHIP R 2.2K J 1/10W	E2M1	R381			RK73GB2A223J	CHIP R 22K J 1/10W	
R166			RK73GB2A101J	CHIP R 100 J 1/10W		R382,383			RK73GB2A103J	CHIP R 10K J 1/10W	
R168-177			RK73GB2A101J	CHIP R 100 J 1/10W		R384			RK73GB2A223J	CHIP R 22K J 1/10W	
R178			RK73GB2A471J	CHIP R 470 J 1/10W		R385			RK73FB2B101J	CHIP R 100 J 1/8W	
R179,180			RK73GB2A104J	CHIP R 100K J 1/10W		R386			RK73GB2A471J	CHIP R 470 J 1/10W	
R181-184			RK73GB2A473J	CHIP R 47K J 1/10W		R401-403	*		RK73EB2E432J	CHIP R 4.3K J 1/4W	
R185			RK73GB2A472J	CHIP R 4.7K J 1/10W		R404,405			RK73EB2E101J	CHIP R 100 J 1/4W	
R186-188			RK73GB2A104J	CHIP R 100K J 1/10W		R406,407	*		RK73EB2E432J	CHIP R 4.3K J 1/4W	
R189,190			RK73GB2A473J	CHIP R 47K J 1/10W		R408			RK73EB2E101J	CHIP R 100 J 1/4W	
R191,192			RK73GB2A101J	CHIP R 100 J 1/10W		R409			RK73EB2E100J	CHIP R 10 J 1/4W	
R200			RK73GB2A104J	CHIP R 100K J 1/10W		R410			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R201			RK73EB2E000J	CHIP R 0.0 J 1/4W		R411			RK73EB2E100J	CHIP R 10 J 1/4W	
R202,203			RK73GB2A100J	CHIP R 10 J 1/10W		R501-508			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R204			RK73GB2A104J	CHIP R 100K J 1/10W		R509-514			RK73GB2A473J	CHIP R 47K J 1/10W	
R205			RK73GB2A102J	CHIP R 1.0K J 1/10W		R517			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R206,207			RK73GB2A103J	CHIP R 10K J 1/10W		R518-520			RK73EB2E100J	CHIP R 10 J 1/4W	
R208,209			RK73GB2A101J	CHIP R 100 J 1/10W		R521			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R210,211			RK73GB2A102J	CHIP R 1.0K J 1/10W		R522-525			RK73EB2E100J	CHIP R 10 J 1/4W	
R212-215			RK73GB2A470J	CHIP R 47 J 1/10W		R526-534			RK73EB2E101J	CHIP R 100 J 1/4W	
R216-219			RK73GB2A101J	CHIP R 100 J 1/10W		R535			RK73GB2A750J	CHIP R 75 J 1/10W	
R221			RK73GB2A104J	CHIP R 100K J 1/10W		R536-539			RK73EB2E750J	CHIP R 75 J 1/4W	
R251			RK73GB2A223J	CHIP R 22K J 1/10W		R542			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R252			RK73GB2A102J	CHIP R 1.0K J 1/10W		R543			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R253			RK73GB2A000J	CHIP R 0.0 J 1/10W		R544			RK73EB2E100J	CHIP R 10 J 1/4W	
R255-257			RK73GB2A222J	CHIP R 2.2K J 1/10W	KR1E1	R601-611			RK73GB2A103J	CHIP R 10K J 1/10W	
R255-257			RK73GB2A222J	CHIP R 2.2K J 1/10W	E2M1	R701-704			RK73GB2A750J	CHIP R 75 J 1/10W	E1E2
R301			RK73GB2A333J	CHIP R 33K J 1/10W		R704			RK73GB2A750J	CHIP R 75 J 1/10W	KR1M1
R302			RK73GB2A182J	CHIP R 1.8K J 1/10W		R704			RK73GB2A750J	CHIP R 75 J 1/10W	X1
R303			RK73GB2A221J	CHIP R 220 J 1/10W		R705,706			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R304			RK73GB2A223J	CHIP R 22K J 1/10W		R707-709			RK73EB2E101J	CHIP R 100 J 1/4W	
R305			RK73GB2A432J	CHIP R 4.3K J 1/10W		R710			RK73EB2E000J	CHIP R 0.0 J 1/4W	
R306			RK73GB2A100J	CHIP R 10 J 1/10W		R711,712			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R355			RK73FB2B101J	CHIP R 100 J 1/8W		R713			RK73EB2E100J	CHIP R 10 J 1/4W	
R356			RK73GB2A471J	CHIP R 470 J 1/10W		R714			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R357			RK73GB2A223J	CHIP R 22K J 1/10W		R715			RK73EB2E100J	CHIP R 10 J 1/4W	
R358,359			RK73GB2A103J	CHIP R 10K J 1/10W		R716-719			RK73EB2E101J	CHIP R 100 J 1/4W	E1E2
R360			RK73GB2A223J	CHIP R 22K J 1/10W		R719			RK73EB2E101J	CHIP R 100 J 1/4W	KR1M1
R361			RK73FB2B101J	CHIP R 100 J 1/8W		R719			RK73EB2E101J	CHIP R 100 J 1/4W	X1
R362			RK73GB2A471J	CHIP R 470 J 1/10W		R720-723			RK73GB2A100J	CHIP R 10 J 1/10W	E1E2
R363			RK73FB2B101J	CHIP R 100 J 1/8W		R723			RK73GB2A100J	CHIP R 10 J 1/10W	KR1M1
R364			RK73GB2A471J	CHIP R 470 J 1/10W		R723			RK73GB2A100J	CHIP R 10 J 1/10W	X1
R365			RK73GB2A223J	CHIP R 22K J 1/10W		R724			RK73EB2E100J	CHIP R 10 J 1/4W	
R366,367			RK73GB2A103J	CHIP R 10K J 1/10W		R733			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R368			RK73GB2A223J	CHIP R 22K J 1/10W		R734			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R369			RK73FB2B101J	CHIP R 100 J 1/8W		R735-737			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R370			RK73GB2A471J	CHIP R 470 J 1/10W		R738			RK73EB2E100J	CHIP R 10 J 1/4W	
R371			RK73FB2B101J	CHIP R 100 J 1/8W		R739			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R372			RK73GB2A471J	CHIP R 470 J 1/10W		R740			RK73EB2E100J	CHIP R 10 J 1/4W	
R373			RK73GB2A223J	CHIP R 22K J 1/10W		R741-744			RK73GB2A750J	CHIP R 75 J 1/10W	
R374,375			RK73GB2A103J	CHIP R 10K J 1/10W		R745-748			RK73EB2E101J	CHIP R 100 J 1/4W	
R376			RK73GB2A223J	CHIP R 22K J 1/10W		R751			RK73GB2A101J	CHIP R 100 J 1/10W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R755-758			RK73GB2A100J	CHIP R 10 J 1/10W		D24,25			1SR154-400	DIODE	M1X1
R760			RK73GB2A102J	CHIP R 1.0K J 1/10W		D52			UDZS5.6B	ZENER DIODE	
R761			RK73GB2A750J	CHIP R 75 J 1/10W		D81			1SR154-400	DIODE	M1X1
R763			RK73GB2A750J	CHIP R 75 J 1/10W		D91			1SR154-400	DIODE	M1X1
R764			RK73EB2E750J	CHIP R 75 J 1/4W		D201-205			DAP202U	DIODE	
R768-770			RK73EB2E100J	CHIP R 10 J 1/4W		D251			IMSA-6801-E	SURGE ABSORBER	
R771			RK73GB2A000J	CHIP R 0.0 J 1/10W		D301,302			DAP202U	DIODE	
R772			RK73EB2E101J	CHIP R 100 J 1/4W		D351-358			AVRM1608180M6A	VARISTOR	
R774			RK73EB2E101J	CHIP R 100 J 1/4W		D359-365			DAP202U	DIODE	
R775			RK73GB2A100J	CHIP R 10 J 1/10W		D401-406			STZ6.8N	ZENER DIODE	
R777			RK73GB2A100J	CHIP R 10 J 1/10W		D503			DAP202U	DIODE	
R781			RK73GB2A103J	CHIP R 10K J 1/10W		D504			UDZS4.7B	ZENER DIODE	
R783			RK73GB2A103J	CHIP R 10K J 1/10W		D505,506			STZ6.8N	ZENER DIODE	
R786,787			RK73GB2A183J	CHIP R 18K J 1/10W		D509,510			STZ6.8N	ZENER DIODE	
R789			RK73GB2A222J	CHIP R 2.2K J 1/10W		D512-518			STZ6.2N	ZENER DIODE	
R791			RK73GB2A102J	CHIP R 1.0K J 1/10W		D519			UDZS4.7B	ZENER DIODE	
R792			RK73GB2A000J	CHIP R 0.0 J 1/10W		D520			DAP202U	DIODE	
R809,810			RK73GB2A123J	CHIP R 12K J 1/10W		D522-524			STZ6.2N	ZENER DIODE	
R812,813			RK73GB2A473J	CHIP R 47K J 1/10W		D701-706			STZ6.2N	ZENER DIODE	E1E2
R814			RK73GB2A000J	CHIP R 0.0 J 1/10W		D704-706			STZ6.2N	ZENER DIODE	KR1M1
R815			RK73GH2A333D	CHIP R 33K D 1/10W		D704-706			STZ6.2N	ZENER DIODE	X1
R816			RK73GH2A222D	CHIP R 2.2K D 1/10W		D707			UDZS6.2B	ZENER DIODE	
R817			RK73GH2A153D	CHIP R 15K D 1/10W		D708			AVRM1608180M6A	VARISTOR	
R818			RK73GB2A302J	CHIP R 3.0K J 1/10W		D709,710			AVRM1608120M6A	VARISTOR	
R819			RK73GB2A623J	CHIP R 62K J 1/10W		D711			STZ6.2N	ZENER DIODE	
R820			RK73GB2A222J	CHIP R 2.2K J 1/10W		D712			STZ6.8N	ZENER DIODE	
R821,822			RK73GB2A473J	CHIP R 47K J 1/10W		D713			DAP202U	DIODE	
R823			RK73GB2A222J	CHIP R 2.2K J 1/10W		D714			UDZS4.7B	ZENER DIODE	
R824			RK73GB2A682J	CHIP R 6.8K J 1/10W		D715-717			STZ6.2N	ZENER DIODE	
R825			RK73GB2A104J	CHIP R 100K J 1/10W		D718			STZ6.8N	ZENER DIODE	
R826			RK73GB2A682J	CHIP R 6.8K J 1/10W		D719-722			STZ6.2N	ZENER DIODE	
R827			RK73GB2A473J	CHIP R 47K J 1/10W		D723			AVRM1608270MAA	VARISTOR	
R828			RK73GB2A104J	CHIP R 100K J 1/10W		D724,725			STZ6.2N	ZENER DIODE	
R829			RK73GB2A473J	CHIP R 47K J 1/10W		D727			STZ6.8N	ZENER DIODE	
R830			RK73GB2A222J	CHIP R 2.2K J 1/10W		D731			UDZS8.2B	ZENER DIODE	
R831,832			RK73GB2A473J	CHIP R 47K J 1/10W		D732			STZ6.2N	ZENER DIODE	
R833			RK73GB2A000J	CHIP R 0.0 J 1/10W		D733			UDZS8.2B	ZENER DIODE	
R836-841			RK73GB2A473J	CHIP R 47K J 1/10W	E1E2	D735			DAP202U	DIODE	
R842-844			RK73GB2A272J	CHIP R 2.7K J 1/10W	E1E2	D737			UDZS4.7B	ZENER DIODE	
R845-847			RK73GB2A121J	CHIP R 120 J 1/10W	E1E2	IC61			M5237ML-CF0J	ANALOGUE IC	
R848-850			RK73GB2A473J	CHIP R 47K J 1/10W	E1E2	IC71			M5237ML-CF0J	ANALOGUE IC	
R851			RK73GB2A000J	CHIP R 0.0 J 1/10W		IC101	*		703030BYGCJ30	MICROCONTROLLER IC	
R852			RK73GB2A101J	CHIP R 100 J 1/10W		IC102			S-80842CNNB-G	MOS-IC	
R853			RK73GB2A102J	CHIP R 1.0K J 1/10W		IC104			TC7SET08FU-F	MOS-IC	
R855-857			RK73GB2A331J	CHIP R 330 J 1/10W		IC105			BU2090FS	MOS-IC	
D1			RM10ZLFNF	DIODE		IC106			TC74VHCT08AFT	MOS-IC	
D2-4			DAN202U	DIODE		IC201			E-TDA7415CB	ANALOGUE IC	
D5			UDZS6.2B	ZENER DIODE		IC202,203			TC4052BFT	MOS-IC	
D6			UDZS6.8B	ZENER DIODE		IC251			E-TDA7479AD	ANALOGUE IC	KR1E1
D7			DAP202U	DIODE		IC251			E-TDA7479AD	ANALOGUE IC	E2M1
D8			UDZS6.8B	ZENER DIODE		IC301			E-TDA7850A	ANALOGUE IC	
D9			DAP202U	DIODE		IC501,502	*		NJM2794RB2ZB	ANALOGUE IC	
D10-13			1SR154-400	DIODE		IC701	*		NJM2794RB2ZB	ANALOGUE IC	
D14			UDZS5.6B	ZENER DIODE		IC702			TC7S08FU-F	MOS-IC	
D15			UDZS4.7B	ZENER DIODE		IC723	*		NJM2794RB2ZB	ANALOGUE IC	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-475x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
IC802			MM1508XNRE-E	ANALOGUE IC	
IC803			BA7652AF	ANALOGUE IC	
IC804			MM1508XNRE-E	ANALOGUE IC	
IC805			BA7653AFV	ANALOGUE IC	
IC806			MM1503-E	ANALOGUE IC	
IC807-809			MM1508XNRE-E	ANALOGUE IC	
IC810			MM1503-E	ANALOGUE IC	
Q1			DTC124EUA	DIGITAL TRANSISTOR	
Q2			2SA1576A	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q4			2SC4081	TRANSISTOR	
Q6			2SC4081	TRANSISTOR	
Q7			2SB1188(Q,R)	TRANSISTOR	
Q8			2SA1576A	TRANSISTOR	
Q9			DTA114EUA	DIGITAL TRANSISTOR	
Q10			DTC114YUA	DIGITAL TRANSISTOR	
Q11			2SB1188(R)	TRANSISTOR	KR1M1
Q11			2SB1188(R)	TRANSISTOR	X1
Q12			2SC4081	TRANSISTOR	KR1M1
Q12			2SC4081	TRANSISTOR	X1
Q13			2SA1576A	TRANSISTOR	
Q14,15			2SC4081	TRANSISTOR	M1X1
Q51			2SB1565(E,F)	TRANSISTOR	
Q52			2SC4081	TRANSISTOR	
Q53			2SB1689	TRANSISTOR	
Q54			DTC124EUA	DIGITAL TRANSISTOR	
Q61			2SB1443	TRANSISTOR	
Q62			DTA124EUA	DIGITAL TRANSISTOR	
Q70			DTC124EUA	DIGITAL TRANSISTOR	
Q71			2SB1565(E,F)	TRANSISTOR	
Q72			DTA124EUA	DIGITAL TRANSISTOR	
Q81			DTC114TUA	DIGITAL TRANSISTOR	M1X1
Q82			2SC4081	TRANSISTOR	M1X1
Q83			2SB1184	TRANSISTOR	M1X1
Q84			2SA1576A	TRANSISTOR	M1X1
Q85			2SC4081	TRANSISTOR	M1X1
Q91			DTC114TUA	DIGITAL TRANSISTOR	M1X1
Q92			2SC4081	TRANSISTOR	M1X1
Q93			2SB1184	TRANSISTOR	M1X1
Q94			2SA1576A	TRANSISTOR	M1X1
Q95			2SC4081	TRANSISTOR	M1X1
Q101,102			DTC144EUA	DIGITAL TRANSISTOR	
Q103			DTA114EUA	DIGITAL TRANSISTOR	
Q104			DTA114TUA	DIGITAL TRANSISTOR	
Q105			DTC114TUA	DIGITAL TRANSISTOR	
Q107		*	RT1N440M	TRANSISTOR	
Q251			DTC124EUA	DIGITAL TRANSISTOR	
Q252			2SB1689	TRANSISTOR	
Q351			DTC323TU	DIGITAL TRANSISTOR	
Q352			DTA144EUA	DIGITAL TRANSISTOR	
Q353-356			DTC323TU	DIGITAL TRANSISTOR	
Q357			DTA144EUA	DIGITAL TRANSISTOR	
Q358,359			DTC323TU	DIGITAL TRANSISTOR	
Q360			DTA144EUA	DIGITAL TRANSISTOR	
Q361			DTC323TU	DIGITAL TRANSISTOR	

Ref. No.	Add	New	Parts No.	Description	Destination
Q802-805			2SC4081	TRANSISTOR	
Q806			2SA1576A	TRANSISTOR	
Q807			2SC4081	TRANSISTOR	
Q808			2SA1576A	TRANSISTOR	KR1M1
Q808			2SA1576A	TRANSISTOR	X1
Q808-811			2SA1576A	TRANSISTOR	E1E2
Q813-815			2SC4081	TRANSISTOR	E1E2
TH301			PRF18BE471QB2	POSITIVE RESISTOR	
A251		*	X86-4080-12	FRONT-END UNIT	KR1X1
A251		*	X86-4082-71	FRONT-END UNIT	E1E2M1
VIDEO UNIT (X35-4710-10)					
C1,2			C93-1396-05	CHIP C 10UF Z	
C3			C93-1283-05	CHIP C 1.0UF K	
C5			C93-1363-05	CHIP C 10PF	
C6			C93-1361-05	CHIP C 0.012UF	
C7			CK73GB1H473K	CHIP C 0.047UF K	
C8			C93-1383-05	CHIP C 220PF F	
C9			CK73GB0J225K	CHIP C 2.2UF K	
C10			CK73GB1H103K	CHIP C 0.010UF K	
C11			CK73GB0J225K	CHIP C 2.2UF K	
C12			CK73HB1E103K	CHIP C 0.010UF K	
C13			CK73GB1A474K	CHIP C 0.47UF K	
C14			CK73HB1E103K	CHIP C 0.010UF K	
C15			CK73GB1H473K	CHIP C 0.047UF K	
C16			CK73HB1C183K	CHIP C 0.018UF K	
C17			CK73HB1E103K	CHIP C 0.010UF K	
C18			C93-1283-05	CHIP C 1.0UF K	
C21			CK73GB0J225K	CHIP C 2.2UF K	
C22			CK73HB1H152K	CHIP C 1500PF K	
C23			C93-1396-05	CHIP C 10UF Z	
C24			CK73GB1H103K	CHIP C 0.010UF K	
C25			C93-1286-05	CHIP C 2700PF	
C28			C93-1283-05	CHIP C 1.0UF K	
C100			CC73GCH1H151J	CHIP C 150PF J	
C101			CK73GB1H104K	CHIP C 0.10UF K	
C102			CK73FB0J106K	CHIP C 10UF K	
C103			CK73GB1H103K	CHIP C 0.010UF K	
C104			CE32AU1C220M	CHIP EL 22UF 16WV	
C105			CK73GB1H104K	CHIP C 0.10UF K	
C106			CK73GB1H103K	CHIP C 0.010UF K	
C107,108			CK73EB1C106K	CHIP C 10UF K	
C109			CK73FB1C105K	CHIP C 1.0UF K	
C110			CK73GB1H103K	CHIP C 0.010UF K	
C112			CK73FB1E154K	CHIP C 0.15UF K	
C113			CK73EB1E225K	CHIP C 2.2UF K	
C114			CK73GB1C224K	CHIP C 0.22UF K	
C115			CK73GB1H104K	CHIP C 0.10UF K	
C116			CK73EB0J226K	CHIP C 22UF K	
C117			CK73HB1H102K	CHIP C 1000PF K	
C118			CK73GB1H103K	CHIP C 0.010UF K	
C119			CK73HB1E103K	CHIP C 0.010UF K	
C120			CK73GB1H104K	CHIP C 0.10UF K	
C121			CK73HB1E103K	CHIP C 0.010UF K	
C301			CK73EB1C106K	CHIP C 10UF K	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
104 X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

VIDEO UNIT (X35-4710-10)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C302			C93-1396-05	CHIP C 10UF Z		F1			F53-0297-05	FUSE (UL,CSA) 1.6A	
C303			CK73GB1H103K	CHIP C 0.010UF K		F100			F53-0280-05	FUSE 0.63A	
C304			CK73GB1H104K	CHIP C 0.10UF K		L1			L19-0783-05	TRANSFORMER FOR CONVERTER	
C305,306			CK73GB1H103K	CHIP C 0.010UF K		L101,102			L41-3392-13	SMALL FIXED INDUCTOR (3.3UH)	
C307			CK73FB0J106K	CHIP C 10UF K		L103			L41-4792-13	SMALL FIXED INDUCTOR (4.7UH)	
C308			CK73GB1H103K	CHIP C 0.010UF K		L104-106			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C309			CC73HCH1H100D	CHIP C 10PF D		L302,303			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C310			CK73HB1C333K	CHIP C 0.033UF K		L306			L41-5695-33	SMALL FIXED INDUCTOR (5.6U)	
C311			CK73HB1E103K	CHIP C 0.010UF K		L307			L41-8281-15	SMALL FIXED INDUCTOR (0.82U)	
C312			CK73GB1H103K	CHIP C 0.010UF K		L401			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C312			CK73GB1H103K	CHIP C 0.010UF K		L501			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C313,314			CK73HB1E103K	CHIP C 0.010UF K		CP301,302			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
C315,316			CK73GB1H104K	CHIP C 0.10UF K		CP303			RK74HB1J101J	CHIP-COM 100 J 1/16W	
C317			CK73HB1E103K	CHIP C 0.010UF K		R1			RK73HB1J512J	CHIP R 5.1K J 1/16W	
C318,319			CK73GB1H104K	CHIP C 0.10UF K		R3			RK73HB1J220J	CHIP R 22 J 1/16W	
C320			CC73HCH1H330J	CHIP C 33PF J		R4			RK73GH2A433D	CHIP R 43K D 1/10W	
C321			CK73GB1H104K	CHIP C 0.10UF K		R5			RK73HB1J153J	CHIP R 15K J 1/16W	
C322			CC73GCH1E102J	CHIP C 1000PF J		R6			RK73HH1J563D	CHIP R 56K D 1/16W	
C323			CC73HCH1H101J	CHIP C 100PF J		R7			RK73HB1J220J	CHIP R 22 J 1/16W	
C324,325			CK73HB1E103K	CHIP C 0.010UF K		R8			RK73HB1J512J	CHIP R 5.1K J 1/16W	
C326			CC73GCH1H681J	CHIP C 680PF J		R9			RK73HH1J204D	CHIP R 200K D 1/16W	
C327,328			CK73GB1H104K	CHIP C 0.10UF K		R10			RK73FB2B152J	CHIP R 1.5K J 1/8W	
C329			CC73HCH1H101J	CHIP C 100PF J		R11			RK73HB1J220J	CHIP R 22 J 1/16W	
C330			CK73FB0J106K	CHIP C 10UF K		R12			RK73HB1J105J	CHIP R 1.0M J 1/16W	
C331,332			CC73HCH1H390J	CHIP C 39PF J		R13			RK73HB1J220J	CHIP R 22 J 1/16W	
C333			CK73GB1H104K	CHIP C 0.10UF K		R14			RK73GH2A471D	CHIP R 470 D 1/10W	
C334			CK73GB1H103K	CHIP C 0.010UF K		R15			RK73GH2A513D	CHIP R 51K D 1/10W	
C335			CK73GB1H104K	CHIP C 0.10UF K		R16,17			RK73HB1J220J	CHIP R 22 J 1/16W	
C337			CK73HB1E103K	CHIP C 0.010UF K		R18			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C338			CK73GB1H103K	CHIP C 0.010UF K		R21			RK73HB1J104J	CHIP R 100K J 1/16W	
C339			CC73HCH1H221J	CHIP C 220PF J		R22			RK73GB2A515J	CHIP R 5.1M J 1/10W	
C340			CC73HCH1H101J	CHIP C 100PF J		R23			RK73HH1J824D	CHIP R 820K D 1/16W	
C342			CC73HCH1H100D	CHIP C 10PF D		R24			RK73HB1J472J	CHIP R 4.7K J 1/16W	
C346,347			CK73HB1E103K	CHIP C 0.010UF K		R100			RK73HB1J100J	CHIP R 10 J 1/16W	
C348			CK73FB1C105K	CHIP C 1.0UF K		R101			RK73GH2A104D	CHIP R 100K D 1/10W	
C349			C93-1389-05	CHIP C 33PF J		R102			RK73GH2A113D	CHIP R 11K D 1/10W	
C350		*	CK73GB0J106M	CHIP C 10UF M		R103			RK73GH2A184D	CHIP R 180K D 1/10W	
C401			CK73HB1H102K	CHIP C 1000PF K		R104			RK73GH2A133D	CHIP R 13K D 1/10W	
C421,422			CK73GB1A105K	CHIP C 1.0UF K		R105			RK73HB1J473J	CHIP R 47K J 1/16W	
C423			CK73FB0J106K	CHIP C 10UF K		R118		*	RK73HB1J754J	CHIP R 750K J 1/16W	
C424			CK73HB1E103K	CHIP C 0.010UF K		R119			RK73FB2B222J	CHIP R 2.2K J 1/8W	
C425			CK73FB1C105K	CHIP C 1.0UF K		R201			RK73HB1J000J	CHIP R 0.0 J 1/16W	
C426			CK73EB1E105K	CHIP C 1.0UF K		R218			RK73HB1J102J	CHIP R 1.0K J 1/16W	
C427			CK73GB0J225K	CHIP C 2.2UF K		R219			RK73HB1J103J	CHIP R 10K J 1/16W	
C428			CK73FB0J106K	CHIP C 10UF K		R301			RK73HB1J220J	CHIP R 22 J 1/16W	
C501-503			CK73HB1E103K	CHIP C 0.010UF K		R304,305			RK73HB1J000J	CHIP R 0.0 J 1/16W	
C504			CK73FB0J106K	CHIP C 10UF K		R307			RK73HB1J101J	CHIP R 100 J 1/16W	
CN1			E41-2483-05	PIN ASSY		R308			RK73HB1J621J	CHIP R 620 J 1/16W	
CN101			E41-2608-05	FLAT CABLE CONNECTOR		R310			RK73HB1J101J	CHIP R 100 J 1/16W	
CN103			E41-2359-05	PIN ASSY		R313			RK73HB1J000J	CHIP R 0.0 J 1/16W	
CN104			E41-2444-05	FLAT CABLE CONNECTOR		R314,315			RK73HB1J103J	CHIP R 10K J 1/16W	
CN302		*	E41-2761-05	FLAT CABLE CONNECTOR		R316			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CN501			E41-2087-05	FLAT CABLE CONNECTOR		R319			RK73HB1J102J	CHIP R 1.0K J 1/16W	
CN502		*	E41-2762-05	FLAT CABLE CONNECTOR		R320			RK73HB1J000J	CHIP R 0.0 J 1/16W	
CN503			E41-2564-05	FLAT CABLE CONNECTOR							

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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PARTS LIST

VIDEO UNIT (X35-4710-10)

Ref. No.	Add	New	Parts No.	Description	Destination
R321			RK73GH2A472D	CHIP R 4.7K D 1/10W	
R323			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R324,325			RK73GH2A472D	CHIP R 4.7K D 1/10W	
R326			RK73HH1J473D	CHIP R 47K D 1/16W	
R327			RK73HH1J683D	CHIP R 68K D 1/16W	
R328			RK73HH1J153D	CHIP R 15K D 1/16W	
R329			RK73HH1J101D	CHIP R 100 D 1/16W	
R330			RK73HH1J182D	CHIP R 1.8K D 1/16W	
R331			RK73HH1J331D	CHIP R 330 D 1/16W	
R332			RK73HH1J332D	CHIP R 3.3K D 1/16W	
R333,334			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R336			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R337,338			RK73HB1J101J	CHIP R 100 J 1/16W	
R339			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R340-344			RK73HB1J101J	CHIP R 100 J 1/16W	
R345			RK73HH1J683D	CHIP R 68K D 1/16W	
R346			RK73HH1J105D	CHIP R 1.0M D 1/16W	
R347			RK73HH1J153D	CHIP R 15K D 1/16W	
R348			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R349			RK73HB1J133J	CHIP R 13K J 1/16W	
R350-352			RK73HB1J101J	CHIP R 100 J 1/16W	
R354			RK73HB1J300J	CHIP R 30 J 1/16W	
R355			RK73HB1J820J	CHIP R 82 J 1/16W	
R357			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R358			RK73HB1J103J	CHIP R 10K J 1/16W	
R359,360			RK73HB1J100J	CHIP R 10 J 1/16W	
R361,362			RK73HB1J103J	CHIP R 10K J 1/16W	
R365			RK73HB1J101J	CHIP R 100 J 1/16W	
R366-370			RK73HB1J103J	CHIP R 10K J 1/16W	
R371			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R373			RK73HB1J561J	CHIP R 560 J 1/16W	
R374			RK73HB1J473J	CHIP R 47K J 1/16W	
R376			RK73HB1J103J	CHIP R 10K J 1/16W	
R377			RK73HB1J912J	CHIP R 9.1K J 1/16W	
R378			RK73HB1J562J	CHIP R 5.6K J 1/16W	
R380			RK73HB1J473J	CHIP R 47K J 1/16W	
R381			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R385			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R389			RK73HB1J221J	CHIP R 220 J 1/16W	
R391			RK73HB1J100J	CHIP R 10 J 1/16W	
R392			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R393,394			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R396			RK73HB1J101J	CHIP R 100 J 1/16W	
R397			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R398,399			RK73HB1J101J	CHIP R 100 J 1/16W	
R402			RK73HB1J392J	CHIP R 3.9K J 1/16W	
R403			RK73HB1J822J	CHIP R 8.2K J 1/16W	
R404			RK73HB1J243J	CHIP R 24K J 1/16W	
R406			RK73GB2A361J	CHIP R 360 J 1/10W	
R407			RK73GB2A751J	CHIP R 750 J 1/10W	
R422			RK73HB1J683J	CHIP R 68K J 1/16W	
R423			RK73HB1J104J	CHIP R 100K J 1/16W	
R441			RK73GB2A751J	CHIP R 750 J 1/10W	
R453			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R454			RK73FB2B511J	CHIP R 510 J 1/8W	

Ref. No.	Add	New	Parts No.	Description	Destination
R456			RK73GB2A361J	CHIP R 360 J 1/10W	
R501,502			RK73HB1J333J	CHIP R 33K J 1/16W	
R503-506			RK73GB2A100J	CHIP R 10 J 1/10W	
R609-612			RK73GB2A000J	CHIP R 0.0 J 1/10W	
VR203			R32-0328-05	SEMI FIXED VARIABLE RESISTOR	
S401-405			S70-0937-05	TACT SWITCH	
D1,2			UDZS5.6B	ZENER DIODE	
D3			1SS355	DIODE	
D4,5			DA204U	DIODE	
D6			MA2S784-F	DIODE	
D7			UDZS5.6B	ZENER DIODE	
D8			AVRM1005270MAA	VARIATOR	
D9			DA204U	DIODE	
D10			1SS355	DIODE	
D101			EP05Q04	DIODE	
D102			EP05Q06	DIODE	
D103,104			EP05Q04	DIODE	
D301			UDZS3.9B	ZENER DIODE	
D303			DA204U	DIODE	
D305,306			DA204U	DIODE	
D307			AVRM1608120M6A	VARIATOR	
D309			1SV231-F	VARIABLE CAPACITANCE DIODE	
D314			DA204U	DIODE	
D401			AVRM1608120M6A	VARIATOR	
D403-412			AVRM1608180M6A	VARIATOR	
D501-504			AVRM1608180M6A	VARIATOR	
IC1			OZ964ISN-C	ANALOGUE IC	
IC101			LT1947-PBF	ANALOGUE IC	
IC102			TC7WH123FU-F	MOS-IC	
IC103			TC7SH04FU-F	MOS-IC	
IC301			BU2090FS	MOS-IC	
IC302			TC7SET08FU-F	MOS-IC	
IC303			NJM2107F-ZB	ANALOGUE IC	
IC304			TC200G02G0104	MOS-IC	
IC401			TPS850	ANALOGUE IC	
Q1			2SC4081	TRANSISTOR	
Q2,3			SI5504DC-E3	DUAL FET	
Q4			DTC114YUA	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q301			2SC4097	TRANSISTOR	
Q303			2SC4081	TRANSISTOR	
Q501			DTC114YE	DIGITAL TRANSISTOR	
Q502,503			PUMD10	DUAL TRANSISTOR	
DVD UNIT (X37-1120-03) IN DVD MECHANISM					
C3			CK73HB1A104K	CHIP C 0.10UF K	
C4		*	CC73HCH1H471J	CHIP C 470PF J	
C5-7			CK73HB1E103K	CHIP C 0.010UF K	
C8		*	CC73HCH1H471J	CHIP C 470PF J	
C11			CK73HB1E103K	CHIP C 0.010UF K	
C14		*	CK73GB0J106M	CHIP C 10UF M	
C15			CK73HB1A104K	CHIP C 0.10UF K	
C16		*	CK73GB0J106M	CHIP C 10UF M	
C17			CK73GB0J475K	CHIP C 4.7UF K	
C18			CK73FB0J226M	CHIP C 22UF M	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C20		*	CC73HCH1H102J	CHIP C 1000PF J		C267			CK73FB0J226M	CHIP C 22UF M	
C50,51			C93-1228-05	CHIP C 1UF M		C270			CK73HB0J105K	CHIP C 1.0UF K	
C54			C93-1228-05	CHIP C 1UF M		C271		*	CC73HCH1H102J	CHIP C 1000PF J	
C59,60			C93-1228-05	CHIP C 1UF M		C272			CK73HB0J105K	CHIP C 1.0UF K	
C62			C93-1228-05	CHIP C 1UF M		C300,301		*	CC73HCH1H102J	CHIP C 1000PF J	
C63			CK73FB0J226M	CHIP C 22UF M		C302		*	CK73GB0J106M	CHIP C 10UF M	
C72			CK73HB1A104K	CHIP C 0.10UF K		C304-306		*	CK73GB0J106M	CHIP C 10UF M	
C73		*	CK73GB0J106M	CHIP C 10UF M		C350,351		*	CC73HCH1H102J	CHIP C 1000PF J	
C100-102			CK73HB1A104K	CHIP C 0.10UF K		C434		*	CK73GB0J106M	CHIP C 10UF M	
C103			C93-1228-05	CHIP C 1UF M		C435			CK73HB1E103K	CHIP C 0.010UF K	
C104			CK73HB1A104K	CHIP C 0.10UF K		C441			CK73HB1A104K	CHIP C 0.10UF K	
C105			C93-1228-05	CHIP C 1UF M		C442-445			CK73FB0J226M	CHIP C 22UF M	
C106,107			CK73HB1A104K	CHIP C 0.10UF K		C446			CK73HB1A104K	CHIP C 0.10UF K	
C108			C93-1228-05	CHIP C 1UF M		C448,449			C93-1228-05	CHIP C 1UF M	
C109			CK73HB1A104K	CHIP C 0.10UF K		C450			CK73HB1A104K	CHIP C 0.10UF K	
C110			C93-1228-05	CHIP C 1UF M		C452			C93-1228-05	CHIP C 1UF M	
C111			CK73HB1C333K	CHIP C 0.033UF K		C454,455			CK73HB1A104K	CHIP C 0.10UF K	
C112,113			CK73HB1A104K	CHIP C 0.10UF K		C456-458			CK73HB1H682K	CHIP C 6800PF K	
C114			CK73GB1H562K	CHIP C 5600PF K		C461			CK73HB1H472K	CHIP C 4700PF K	
C115			CK73HB1C183K	CHIP C 0.018UF K		C462			CK73HB1E103K	CHIP C 0.010UF K	
C117			CK73HB1A104K	CHIP C 0.10UF K		C464			CK73HB0J105K	CHIP C 1.0UF K	
C118			CK73HB0J105K	CHIP C 1.0UF K		C466			CK73HB1A104K	CHIP C 0.10UF K	
C119			C93-1228-05	CHIP C 1UF M		C467			CC73HCH1H121J	CHIP C 120PF J	
C120,121			CK73HB1A104K	CHIP C 0.10UF K		C468,469			CK73HB1A104K	CHIP C 0.10UF K	
C122,123		*	CK73GB0J106M	CHIP C 10UF M		C470			CK73HB1E103K	CHIP C 0.010UF K	
C126-129			CK73HB1A104K	CHIP C 0.10UF K		C473			CK73HB1A104K	CHIP C 0.10UF K	
C130-133			CC73HCH1H151J	CHIP C 150PF J		C474		*	CC73HCH1H102J	CHIP C 1000PF J	
C134		*	CC73HCH1H102J	CHIP C 1000PF J		C476			CC73HCH1H101J	CHIP C 100PF J	
C135,136			C93-1228-05	CHIP C 1UF M		C477-479			CK73FB0J226M	CHIP C 22UF M	
C137,138			CK73HB0J105K	CHIP C 1.0UF K		C480			CK73HB1A104K	CHIP C 0.10UF K	
C139,140			C93-1228-05	CHIP C 1UF M		C481			CC73HCH1H151J	CHIP C 150PF J	
C142			C93-1228-05	CHIP C 1UF M		C482		*	CC73HCH1H471J	CHIP C 470PF J	
C143,144			CC73HCH1H100D	CHIP C 10PF D		C483		*	CC73HCH1H102J	CHIP C 1000PF J	
C145-149			CK73HB1A104K	CHIP C 0.10UF K		C484			CK73HB1E103K	CHIP C 0.010UF K	
C151,152			C93-1228-05	CHIP C 1UF M		C485			CC73HCH1H151J	CHIP C 150PF J	
C153,154			CK73HB1A104K	CHIP C 0.10UF K		C486		*	CC73HCH1H471J	CHIP C 470PF J	
C158			CK73HB1A104K	CHIP C 0.10UF K		C487		*	CC73HCH1H102J	CHIP C 1000PF J	
C162			CK73HB1A104K	CHIP C 0.10UF K		C488			CK73HB1E103K	CHIP C 0.010UF K	
C164-169		*	CK73GB0J106M	CHIP C 10UF M		C489			CC73HCH1H151J	CHIP C 150PF J	
C200-203		*	CK73GB0J106M	CHIP C 10UF M		C490		*	CC73HCH1H471J	CHIP C 470PF J	
C207,208			CK73HB1A104K	CHIP C 0.10UF K		C491		*	CC73HCH1H102J	CHIP C 1000PF J	
C220-223			CK73HB0J105K	CHIP C 1.0UF K		C492			CK73HB1E103K	CHIP C 0.010UF K	
C224			CK73HB1E103K	CHIP C 0.010UF K		C493			CC73HCH1H151J	CHIP C 150PF J	
C226			CK73FB0J226M	CHIP C 22UF M		C494		*	CC73HCH1H471J	CHIP C 470PF J	
C229,230			CK73HB1E103K	CHIP C 0.010UF K		C495		*	CC73HCH1H102J	CHIP C 1000PF J	
C231		*	CC73HCH1H102J	CHIP C 1000PF J		C496			CK73HB1E103K	CHIP C 0.010UF K	
C250		*	CC73HCH1H102J	CHIP C 1000PF J		C497,498			CK73FB0J226M	CHIP C 22UF M	
C251,252			CC73HCH1H221J	CHIP C 220PF J		C504,505			CK73HB1H472K	CHIP C 4700PF K	
C253		*	CC73HCH1H102J	CHIP C 1000PF J		C506,507		*	CC73HCH1H102J	CHIP C 1000PF J	
C254,255			CC73HCH1H221J	CHIP C 220PF J		C510		*	CC73HCH1H102J	CHIP C 1000PF J	
C256			CK73HB1A104K	CHIP C 0.10UF K		C511		*	CK73GB0J106M	CHIP C 10UF M	
C261,262		*	CC73HCH1H331J	CHIP C 330PF J		C512			CK73HB0J105K	CHIP C 1.0UF K	
C263			CK73HB0J105K	CHIP C 1.0UF K		C513-515			CK73HB1A104K	CHIP C 0.10UF K	
C265			CK73GB1A105K	CHIP C 1.0UF K		C516			CK73HB1C333K	CHIP C 0.033UF K	
C266			CK73HB1C333K	CHIP C 0.033UF K		C517			CK73HB1E103K	CHIP C 0.010UF K	

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△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C518,519			CC73HCH1H470J	CHIP C 47PF J		R91			RK73HB1J470J	CHIP R 47 J 1/16W	
C520		*	CC73HCH1H102J	CHIP C 1000PF J		R92			RK73HH1J123D	CHIP R 12K D 1/16W	
C521			CK73HB0J105K	CHIP C 1.0UF K		R94			RK73HH1J512D	CHIP R 5.1K D 1/16W	
C522			CC73HCH1H151J	CHIP C 150PF J		R111			RK73HB1J220J	CHIP R 22 J 1/16W	
C523		*	CC73HCH1H471J	CHIP C 470PF J		R112,113			RK73HB1J101J	CHIP R 100 J 1/16W	
C524		*	CC73HCH1H102J	CHIP C 1000PF J		R116			RK73HB1J103J	CHIP R 10K J 1/16W	
C525			CK73HB1E103K	CHIP C 0.010UF K		R119			RK73HB1J103J	CHIP R 10K J 1/16W	
C526			CC73HCH1H151J	CHIP C 150PF J		R121			RK73HB1J182J	CHIP R 1.8K J 1/16W	
C527		*	CC73HCH1H471J	CHIP C 470PF J		R122			RK73HB1J472J	CHIP R 4.7K J 1/16W	
C528		*	CC73HCH1H102J	CHIP C 1000PF J		R131			RK73HB1J220J	CHIP R 22 J 1/16W	
C529			CK73HB1E103K	CHIP C 0.010UF K		R150,151			RK73HB1J100J	CHIP R 10 J 1/16W	
C530			CK73HB0J105K	CHIP C 1.0UF K		R152,153			RK73HB1J471J	CHIP R 470 J 1/16W	
CN1			E41-2594-05	FLAT CABLE CONNECTOR		R154,155			RK73HB1J751J	CHIP R 750 J 1/16W	
CN3		*	E41-2596-05	FLAT CABLE CONNECTOR		R156,157			RK73HB1J560J	CHIP R 56 J 1/16W	
CN6			E41-2603-05	FLAT CABLE CONNECTOR		R158,159			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
CN10		*	E41-2602-05	FLAT CABLE CONNECTOR		R162,163			RK73HB1J104J	CHIP R 100K J 1/16W	
L1			L92-0365-05	CHIP FERRITE		R164,165			RK73HH1J101D	CHIP R 100 D 1/16W	
L2-4		*	L92-0612-05	CHIP FERRITE		R200-203	*		RK73HH1J201D	CHIP R 200 D 1/16W	
L5,6		*	L92-0611-05	CHIP FERRITE		R204-207	*		RK73HH1J151D	CHIP R 150 D 1/16W	
L7,8		*	L92-0612-05	CHIP FERRITE		R208			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
L10		*	L33-2281-05	SMALL FIXED INDUCTOR		R251			RK73HB1J1R0J	CHIP R 1.0 J 1/16W	
L11		*	L33-2280-05	SMALL FIXED INDUCTOR		R254	*		RK73HH1J912D	CHIP R 9.1K D 1/16W	
L12-14			L92-0365-05	CHIP FERRITE		R255	*		RK73HH1J752D	CHIP R 7.5K D 1/16W	
L15		*	L92-0612-05	CHIP FERRITE		R256			RK73HH1J331D	CHIP R 330 D 1/16W	
L20		*	L92-0617-05	CHIP FERRITE		R257	*		RK73HH1J912D	CHIP R 9.1K D 1/16W	
L21		*	L92-0612-05	CHIP FERRITE		R258	*		RK73HH1J752D	CHIP R 7.5K D 1/16W	
L22			L92-0838-05	CHIP FERRITE		R259			RK73HH1J331D	CHIP R 330 D 1/16W	
X1		*	L77-2924-05	CRYSTAL RESONATOR (27MHZ,30PPM)		R260	*		RK73HH1J912D	CHIP R 9.1K D 1/16W	
CP1-9			RK74HB1J470J	CHIP-COM 47 J 1/16W		R261	*		RK73HH1J752D	CHIP R 7.5K D 1/16W	
CP36,37			RK74HB1J103J	CHIP-COM 10K J 1/16W		R262	*		RK73HH1J331D	CHIP R 330 D 1/16W	
CP44,45			RK74HB1J330J	CHIP-COM 33 J 1/16W		R263	*		RK73HH1J912D	CHIP R 9.1K D 1/16W	
CP54-56			RK74HB1J330J	CHIP-COM 33 J 1/16W		R264	*		RK73HH1J752D	CHIP R 7.5K D 1/16W	
CP57			RK74HB1J820J	CHIP-COM 82 J 1/16W		R265			RK73HH1J331D	CHIP R 330 D 1/16W	
CP58			RK74HB1J330J	CHIP-COM 33 J 1/16W		R266,267			RK73HH1J101D	CHIP R 100 D 1/16W	
CP59-68			RK74HB1J103J	CHIP-COM 10K J 1/16W		R269			RK73HB1J100J	CHIP R 10 J 1/16W	
CP69			RK74HB1J220J	CHIP-COM 22 J 1/16W		R275,276			RK73HB1J472J	CHIP R 4.7K J 1/16W	
CP70-73			RK74HB1J103J	CHIP-COM 10K J 1/16W		R300,301	*		RK73HH1J472D	CHIP R 4.7K D 1/16W	
R1-4			RK73HB1J103J	CHIP R 10K J 1/16W		R302,303	*		RK73HH1J183D	CHIP R 18K D 1/16W	
R5,6			RK73HH1J123D	CHIP R 12K D 1/16W		R304			RK73HH1J202D	CHIP R 2.0K D 1/16W	
R10			RK73HB1J163J	CHIP R 16K J 1/16W		R305			RK73HB1J163J	CHIP R 16K J 1/16W	
R16			RK73HB1J103J	CHIP R 10K J 1/16W		R350,351			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R17			RK73HB1J271J	CHIP R 270 J 1/16W		R400-402			RK73HB1J470J	CHIP R 47 J 1/16W	
R19			RK73HB1J301J	CHIP R 300 J 1/16W		R409			RK73HB1J470J	CHIP R 47 J 1/16W	
R21,22			RK73HH1J103D	CHIP R 10K D 1/16W		R410,411			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R24			RK73HB1J4R7J	CHIP R 4.7 J 1/16W		R450			RK73HB1J202J	CHIP R 2.0K J 1/16W	
R79			RK73HB1J102J	CHIP R 1.0K J 1/16W		R458			RK73HB1J220J	CHIP R 22 J 1/16W	
R80			RK73HB1J220J	CHIP R 22 J 1/16W		R464,465			RK73HH1J101D	CHIP R 100 D 1/16W	
R81			RK73HB1J470J	CHIP R 47 J 1/16W		R467			RK73HB1J470J	CHIP R 47 J 1/16W	
R84,85			RK73HB1J202J	CHIP R 2.0K J 1/16W		R468-470			RK73HB1J103J	CHIP R 10K J 1/16W	
R86			RK73HB1J105J	CHIP R 1.0M J 1/16W		R471			RK73HB1J820J	CHIP R 82 J 1/16W	
R87			RK73HB1J102J	CHIP R 1.0K J 1/16W		R472,473			RK73HB1J330J	CHIP R 33 J 1/16W	
R89			RK73HH1J303D	CHIP R 30K D 1/16W		R475	*		R92-3350-05	CHIP R 2.2 F 1/10W	
R90			RK73HB1J223J	CHIP R 22K J 1/16W		R476			R92-5112-05	CHIP R 4.7 F 1/10W	
						R477			RK73GH2A111D	CHIP R 110 D 1/10W	
						R478			RK73HH1J472D	CHIP R 4.7K D 1/16W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-03) IN DVD MECHANISM

Ref. No.	Add	New	Parts No.	Description	Destination
R480			RK73HH1J202D	CHIP R 2.0K D 1/16W	
R481			RK73HH1J203D	CHIP R 20K D 1/16W	
R482-484			RK73HB1J820J	CHIP R 82 J 1/16W	
R485			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R486,487			RK73HB1J103J	CHIP R 10K J 1/16W	
R489			RK73HB1J220J	CHIP R 22 J 1/16W	
R491-493			RK73HB1J751J	CHIP R 750 J 1/16W	
R496,497			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R498			RK73HB1J101J	CHIP R 100 J 1/16W	
R501		*	RK73HH1J132D	CHIP R 1.3K D 1/16W	
R502			RK73HH1J333D	CHIP R 33K D 1/16W	
R503			RK73HH1J203D	CHIP R 20K D 1/16W	
R504			RK73HB1J242J	CHIP R 2.4K J 1/16W	
R505			RK73HB1J821J	CHIP R 820 J 1/16W	
R507			RK73HB1J103J	CHIP R 10K J 1/16W	
R508			RK73HB1J225J	CHIP R 2.2M J 1/16W	
R509			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R510			RK73HB1J103J	CHIP R 10K J 1/16W	
R511			RK73HB1J473J	CHIP R 47K J 1/16W	
R512,513			RK73HB1J103J	CHIP R 10K J 1/16W	
R514-517			RK73HB1J220J	CHIP R 22 J 1/16W	
R518-522			RK73HB1J103J	CHIP R 10K J 1/16W	
R523,524			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R525			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R530			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R531			RK73HB1J471J	CHIP R 470 J 1/16W	
R532			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R533			RK73HH1J683D	CHIP R 68K D 1/16W	
R535-538		*	RK73HH1J821D	CHIP R 820 D 1/16W	
R539			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R541		*	RK73HH1J122D	CHIP R 1.2K D 1/16W	
R544-559			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
R560			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R561,562			RK73HH1J682D	CHIP R 6.8K D 1/16W	
R563		*	RK73HH1J122D	CHIP R 1.2K D 1/16W	
R564			RK73HB1J4R7J	CHIP R 4.7 J 1/16W	
R574-576			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R583,584		*	RK73HH1J391D	CHIP R 390 D 1/16W	
R588		*	R92-5112-05	CHIP R 4.7 F 1/10W	
R591			RK73HB1J820J	CHIP R 82 J 1/16W	
R599,600			RK73HB1J103J	CHIP R 10K J 1/16W	
R601-604			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R605,606			RK73HB1J103J	CHIP R 10K J 1/16W	
R614			RK73HH1J102D	CHIP R 1.0K D 1/16W	
R615			RK73HB1J1R0J	CHIP R 1.0 J 1/16W	
R617			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R619			RK73HB1J513J	CHIP R 51K J 1/16W	
R620			RK73HB1J333J	CHIP R 33K J 1/16W	
R621			RK73HB1J103J	CHIP R 10K J 1/16W	
R622			RK73HB1J333J	CHIP R 33K J 1/16W	
R623			RK73HB1J220J	CHIP R 22 J 1/16W	
R624-626			RK73HH1J332D	CHIP R 3.3K D 1/16W	
R627			RK73HB1J103J	CHIP R 10K J 1/16W	
R628,629		*	R92-5147-05	CHIP R 1.2 D 1/4W	
R630,631		*	R92-5146-05	CHIP R 1.0 D 1/4W	

Ref. No.	Add	New	Parts No.	Description	Destination
R632		*	RK73HH1J270D	CHIP R 27 D 1/16W	
R633			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R634			RK73HB1J103J	CHIP R 10K J 1/16W	
R636			RK73HB1J220J	CHIP R 22 J 1/16W	
R638-645			RK73HB1J2R2J	CHIP R 2.2 J 1/16W	
S1		*	S68-0911-15	PUSH SWITCH	
S2		*	S68-0910-05	PUSH SWITCH	
D5,6		*	015AZ5.1-F(Y)	ZENER DIODE	
D7			1SS402-F	DIODE	
IC1		*	MN2DS0016AAUB	MOS-IC	
IC5		*	-	ROM IC	
IC9		*	-	ROM IC	
IC10		*	AN41250A-VB	ANALOGUE IC	
IC12		*	MM1671XNRE	ANALOGUE IC	
IC15		*	AK4396VF	MOS-IC	
IC21		*	-	MOS-IC	
IC39		*	NJU7042	ANALOGUE IC	
IC42			TC74VHC273FT	MOS-IC	
IC49		*	TC7SG04FU-F	MOS-IC	
IC50,51		*	NJM4580V-ZB	ANALOGUE IC	
IC54		*	IS45S16800TL1	DRAM IC	
IC55		*	TC7WH32FU-F	MOS-IC	
IC56		*	HD74LV1GW57AE	MOS-IC	
IC57		*	NJM2573V-ZB	ANALOGUE IC	
IC60		*	-	ANALOGUE IC	
Q1-4		*	DTA143XE	DIGITAL TRANSISTOR	
Q10,11		*	2SC4617	TRANSISTOR	
Q12,13		*	2SB1709	TRANSISTOR	
Q14,15		*	2SK3019	FET	
Q20,21		*	2SK3019	FET	
Q24		*	SSM3J15FU-F	FET	
Q25		*	DTA143XE	DIGITAL TRANSISTOR	
Q27		*	DTA143ZE	DIGITAL TRANSISTOR	
Q28,29		*	2SA1774	TRANSISTOR	
DIGITAL I/O UNIT(X88-2020-11)					
C100			CC73HCH1H101J	CHIP C 100PF J	
C102-105			CK73HB1A104K	CHIP C 0.10UF K	
C106		*	CK73GB0J106M	CHIP C 10UF M	
C107-110			CK73HB1A104K	CHIP C 0.10UF K	
C112			CK73EB0J226K	CHIP C 22UF K	
C113		*	C92-1983-05	ELECTRO 100UF 4WV	
C114-124			CK73HB1A104K	CHIP C 0.10UF K	
C125			CC73HCH1H220J	CHIP C 22PF J	
C126-130			CK73HB1A104K	CHIP C 0.10UF K	
C133,134		*	CK73GB0J106M	CHIP C 10UF M	
C135			CK73HB1A104K	CHIP C 0.10UF K	
C138,139			CC73HCH1H100D	CHIP C 10PF D	
C142		*	CE32BN0J221M	CHIP EL 220UF 6.3WV	
C143			CK73HB0J105K	CHIP C 1.0UF K	
C144			CK73HB1A104K	CHIP C 0.10UF K	
C149			CK73HB1A104K	CHIP C 0.10UF K	
C153			CK73HB0J105K	CHIP C 1.0UF K	
C154			CK73HB1A104K	CHIP C 0.10UF K	
C200			CC73HCH1H220J	CHIP C 22PF J	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
K : KVT-719DVD (North America) R1 : KVT-739DVD (Latin America)
X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

● IC5, IC21, and IC60 in the DVD unit (X37-1120-03) are not replaceable components. In case of defective of any of these ICs, replace the DVD mechanism assembly.

△ Indicates safety critical components.

PARTS LIST

DIGITAL I/O UNIT(X88-2020-11)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C201			CK73HB1A104K	CHIP C 0.10UF K		L101,102			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C202			CC73HCH1H220J	CHIP C 22PF J		L103,104			L92-0321-05	CHIP FERRITE	
C203,204			CK73HB1A104K	CHIP C 0.10UF K		L200			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C217-226			CK73HB1A104K	CHIP C 0.10UF K		L203-205			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C227,228		*	CK73GB0J106M	CHIP C 10UF M		L212			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C230,231			CK73HB1H102K	CHIP C 1000PF K		L301,302			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C233-236			CK73HB1A104K	CHIP C 0.10UF K		L303			L41-6805-33	SMALL FIXED INDUCTOR (68U)	
C244		*	CK73GB0J106M	CHIP C 10UF M		L304-310			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
C247			CK73HB1H102K	CHIP C 1000PF K		X100		*	L77-2941-05	CRYSTAL RESONATOR (14.7456MHZ)	
C264			CK73HB1A104K	CHIP C 0.10UF K		X202		*	L77-2917-15	CRYSTAL RESONATOR (32.768KHZ)	
C275		*	CK73GB0J106M	CHIP C 10UF M		CP104-109			RK74HB1J220J	CHIP-COM 22 J 1/16W	
C309-312			CK73HB1A104K	CHIP C 0.10UF K		CP117-127			RK74HB1J220J	CHIP-COM 22 J 1/16W	
C314,315		*	CK73GB0J106M	CHIP C 10UF M		CP128-134			RK74HB1J103J	CHIP-COM 10K J 1/16W	
C316-318			CK73HB1A104K	CHIP C 0.10UF K		CP135-138			RK74HB1J220J	CHIP-COM 22 J 1/16W	
C322-324			CK73HB1A104K	CHIP C 0.10UF K		CP139-142			RK74HB1J330J	CHIP-COM 33 J 1/16W	
C326,327		*	CK73GB0J106M	CHIP C 10UF M		CP143-146			RK74HB1J680J	CHIP-COM 68 J 1/16W	
C329			CC73HCH1H270J	CHIP C 27PF J		CP147-154			RK74HB1J103J	CHIP-COM 10K J 1/16W	
C331		*	CK73GB0J106M	CHIP C 10UF M		CP155-160			RK74HB1J220J	CHIP-COM 22 J 1/16W	
C332			CK73HB1A104K	CHIP C 0.10UF K		CP200-203			RK74HB1J220J	CHIP-COM 22 J 1/16W	
C336		*	CK73GB0J106M	CHIP C 10UF M		CP204-207			RK74HB1J103J	CHIP-COM 10K J 1/16W	
C337,338			CK73HB1H152K	CHIP C 1500PF K		R1,2			RK73HB1J473J	CHIP R 47K J 1/16W	
C340,341		*	CC73HCH1H331J	CHIP C 330PF J		R3-5			RK73HB1J220J	CHIP R 22 J 1/16W	
C342			CK73HB1E103K	CHIP C 0.010UF K		R6			RK73HB1J473J	CHIP R 47K J 1/16W	
C349			CC73HCH1H020C	CHIP C 2.0PF C		R7			RK73HB1J472J	CHIP R 4.7K J 1/16W	
C351			CK73HB1A104K	CHIP C 0.10UF K		R8			RK73HB1J473J	CHIP R 47K J 1/16W	
C352		*	CK73GB0J106M	CHIP C 10UF M		R9,10			RK73HB1J220J	CHIP R 22 J 1/16W	
C354-357			CK73HB1A104K	CHIP C 0.10UF K		R12			RK73HB1J000J	CHIP R 0.0 J 1/16W	
C358			CC73HCH1H020C	CHIP C 2.0PF C		R13			RK73HB1J473J	CHIP R 47K J 1/16W	
C360,361			CK73HB1A104K	CHIP C 0.10UF K		R14			RK73HB1J561J	CHIP R 560 J 1/16W	
C362		*	CK73GB0J106M	CHIP C 10UF M		R15,16			RK73FB2B220J	CHIP R 22 J 1/8W	
C363			CK73HB1A104K	CHIP C 0.10UF K		R17,18			RK73HB1J153J	CHIP R 15K J 1/16W	
C367			CK73HB0J105K	CHIP C 1.0UF K		R24			RK73HB1J220J	CHIP R 22 J 1/16W	
C368			CK73HB1A104K	CHIP C 0.10UF K		R29			RK73HB1J473J	CHIP R 47K J 1/16W	
C375,376			CK73HB1A104K	CHIP C 0.10UF K		R30			RK73HB1J472J	CHIP R 4.7K J 1/16W	
C389			CK73HB1A104K	CHIP C 0.10UF K		R31			RK73HB1J473J	CHIP R 47K J 1/16W	
C392			CK73HB1A104K	CHIP C 0.10UF K		R33			RK73HB1J473J	CHIP R 47K J 1/16W	
C394,395			CK73HB1A104K	CHIP C 0.10UF K		R34-37			RK73FB2B270J	CHIP R 27 J 1/8W	
C400,401			CK73HB1A104K	CHIP C 0.10UF K		R104			RK73HB1J330J	CHIP R 33 J 1/16W	
C456			CK73EB1A106K	CHIP C 10UF K		R105			RK73HB1J103J	CHIP R 10K J 1/16W	
C460			CK73HB1A104K	CHIP C 0.10UF K		R107-109			RK73HB1J103J	CHIP R 10K J 1/16W	
C464			CK73HB1C473K	CHIP C 0.047UF K		R112			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C468		*	CK73GB0J106M	CHIP C 10UF M		R115			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C470,471			CK73HB1E103K	CHIP C 0.010UF K		R116			RK73HB1J103J	CHIP R 10K J 1/16W	
C478			CK73HB1A104K	CHIP C 0.10UF K		R118			RK73HB1J103J	CHIP R 10K J 1/16W	
C482			CK73GB1H222K	CHIP C 2200PF K		R121			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C700-713			CK73HB1H222K	CHIP C 2200PF K		R123			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C715			CK73HB1A104K	CHIP C 0.10UF K		R124			RK73HB1J473J	CHIP R 47K J 1/16W	
C800			CK73HB1H222K	CHIP C 2200PF K		R126			RK73HB1J473J	CHIP R 47K J 1/16W	
C801,802			CK73HB1H102K	CHIP C 1000PF K		R129			RK73HB1J222J	CHIP R 2.2K J 1/16W	
C803,804			CK73HB1H222K	CHIP C 2200PF K		R130-132			RK73HB1J220J	CHIP R 22 J 1/16W	
C805			CK73HB1H102K	CHIP C 1000PF K		R134			RK73HB1J220J	CHIP R 22 J 1/16W	
CN101		*	E41-2839-05	PIN ASSY		R137			RK73HB1J472J	CHIP R 4.7K J 1/16W	
CN210			E41-2195-05	FLAT CABLE CONNECTOR		R139			RK73HB1J105J	CHIP R 1.0M J 1/16W	
CN327			E41-2237-05	FLAT CABLE CONNECTOR		R140			RK73HB1J222J	CHIP R 2.2K J 1/16W	
						R141,142			RK73FB2B220J	CHIP R 22 J 1/8W	

E1 : KVT-729DVD E2 : KVT-729DVDY (Europe)
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X1 : KVT-739DVD (Australia) M1 : KVT-739DVD (Other Areas)

△ Indicates safety critical components.

PARTS LIST

DIGITAL I/O UNIT(X88-2020-11)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
R145,146			RK73HB1J153J	CHIP R 15K J 1/16W		R369			RK73HB1J101J	CHIP R 100 J 1/16W	
R147			RK73HB1J220J	CHIP R 22 J 1/16W		R370			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R148			RK73HB1J473J	CHIP R 47K J 1/16W		R371			RK73HB1J101J	CHIP R 100 J 1/16W	
R149			RK73HB1J472J	CHIP R 4.7K J 1/16W		R372			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R150			RK73HB1J220J	CHIP R 22 J 1/16W		R373			RK73HB1J103J	CHIP R 10K J 1/16W	
R153			RK73HB1J000J	CHIP R 0.0 J 1/16W		R376			RK73HB1J222J	CHIP R 2.2K J 1/16W	
R157-163			RK73HB1J220J	CHIP R 22 J 1/16W		R438			RK73HB1J103J	CHIP R 10K J 1/16W	
R164,165			RK73HB1J470J	CHIP R 47 J 1/16W		R440			RK73HB1J103J	CHIP R 10K J 1/16W	
R166-169			RK73HB1J220J	CHIP R 22 J 1/16W		R445			RK73HB1J473J	CHIP R 47K J 1/16W	
R170,171			RK73HB1J330J	CHIP R 33 J 1/16W		R446			RK73HB1J101J	CHIP R 100 J 1/16W	
R172,173			RK73HB1J680J	CHIP R 68 J 1/16W		R447			RK73GB2A515J	CHIP R 5.1M J 1/10W	
R174,175			RK73HB1J470J	CHIP R 47 J 1/16W		R452			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R176			RK73HB1J220J	CHIP R 22 J 1/16W		R455			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R177-192			RK73HB1J473J	CHIP R 47K J 1/16W		R458,459			RK73HB1J473J	CHIP R 47K J 1/16W	
R193-198			RK73HB1J220J	CHIP R 22 J 1/16W		R461			RK73HB1J473J	CHIP R 47K J 1/16W	
R199			RK73HB1J473J	CHIP R 47K J 1/16W		R462			RK73HB1J561J	CHIP R 560 J 1/16W	
R200			RK73HB1J330J	CHIP R 33 J 1/16W		R463-465			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R201			RK73HB1J000J	CHIP R 0.0 J 1/16W		R467			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R202			RK73HB1J106J	CHIP R 10M J 1/16W		R472,473			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R203			RK73HB1J334J	CHIP R 330K J 1/16W		R478			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R212,213			RK73HB1J100J	CHIP R 10 J 1/16W		R481,482			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R219-221			RK73HB1J472J	CHIP R 4.7K J 1/16W		R485-487			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R223			RK73HB1J473J	CHIP R 47K J 1/16W		R494			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R227			RK73HB1J100J	CHIP R 10 J 1/16W		R496			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R248-250			RK73HB1J473J	CHIP R 47K J 1/16W		R498			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R255			RK73HH1J104D	CHIP R 100K D 1/16W		R500			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R258-260			RK73HB1J473J	CHIP R 47K J 1/16W		R502,503			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R265-271			RK73HB1J472J	CHIP R 4.7K J 1/16W		R505-507			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R273			RK73HB1J000J	CHIP R 0.0 J 1/16W		R509			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R276			RK73HB1J000J	CHIP R 0.0 J 1/16W		R522			RK73HB1J680J	CHIP R 68 J 1/16W	
R284-287			RK73HB1J473J	CHIP R 47K J 1/16W		R523			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R291			RK73HB1J330J	CHIP R 33 J 1/16W		R524			RK73HB1J330J	CHIP R 33 J 1/16W	
R292-295			RK73HB1J473J	CHIP R 47K J 1/16W		R527			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R296			RK73HB1J000J	CHIP R 0.0 J 1/16W		R701			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R297			RK73HB1J103J	CHIP R 10K J 1/16W							
R304,305			RK73HB1J103J	CHIP R 10K J 1/16W		D102,103	*		AVRL1613R3FTA	VARIATOR	
R308			RK73HB1J103J	CHIP R 10K J 1/16W		D104,105			IMSA-6802-E	SURGE ABSORBER	
R310			RK73HB1J103J	CHIP R 10K J 1/16W		D300			DA204U	DIODE	
R316			RK73HB1J473J	CHIP R 47K J 1/16W		IC100			MIC2005-05YM6	MOS-IC	
R320-322			RK73HB1J103J	CHIP R 10K J 1/16W		IC104			TC7S86FU-F	MOS-IC	
R324,325			RK73HB1J103J	CHIP R 10K J 1/16W		IC105			SI-3018KM	ANALOGUE IC	
R326,327			RK73HB1J822J	CHIP R 8.2K J 1/16W		IC106			-	MICROPROCESSOR IC	
R328,329			RK73HB1J472J	CHIP R 4.7K J 1/16W		IC108			TC7SH04FU-F	MOS-IC	
R332,333			RK73HB1J151J	CHIP R 150 J 1/16W		IC200			TC7WHU04FU-F	MOS-IC	
R343			RK73HB1J101J	CHIP R 100 J 1/16W		IC201			TC74LCX245FT	MOS-IC	
R344			RK73HB1J680J	CHIP R 68 J 1/16W		IC202,203	*		K4S561632HUI7	DRAM IC	
R345			RK73HB1J152J	CHIP R 1.5K J 1/16W		IC205			TC74LCX245FT	MOS-IC	
R347	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC207	*		341S1962	MICROPROCESSOR IC	
R348	*		RK73HH1J131D	CHIP R 130 D 1/16W		IC211	*		DW128F70NF9W7	ROM IC	
R351	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC301	*		WM8728SEDSR	ANALOGUE IC	
R352			RK73HH1J131D	CHIP R 130 D 1/16W		IC302	*		BH7240AKV	MOS-IC	
R356	*		RK73HH1J100D	CHIP R 10 D 1/16W		IC305			NJM2100V-ZB	ANALOGUE IC	
R357			RK73HH1J131D	CHIP R 130 D 1/16W		IC309	*		LC74735NW8A20	MOS-IC	
R367			RK73HB1J101J	CHIP R 100 J 1/16W		IC316			TC7WHU04FU-F	MOS-IC	
R368			RK73HB1J272J	CHIP R 2.7K J 1/16W		IC322	*		L4032VN8IPINO	MOS-IC (48PIN 32V)	

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● IC106 in the DIGITAL I/O UNIT (X88-2020-11) is not a replaceable component. In case of defective of this IC, replace the entire unit (X88-2020-11).

△ Indicates safety critical components.

PARTS LIST

DIGITAL I/O UNIT(X88-2020-11)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
IC332 IC336,337 Q302-304			NJM2864F05-ZB TC7WH14FU-F 2SA1576A	ANALOGUE IC MOS-IC TRANSISTOR	
DVD MECHANISM ASSY (X92-5920-00) (DVS-8530V)					
1	1A	*	A10-5331-41	CHASSIS	
2	2B		A10-5332-41	CHASSIS	
3	1A	*	A10-5333-31	CHASSIS	
4	3A	*	A10-5334-22	CHASSIS	
7	1B	*	D10-4918-12	ARM	
8	1B	*	D10-4919-12	ARM	
9	1B	*	D10-4920-02	LEVER	
10	1B	*	D10-4921-02	LEVER	
12	2B	*	D10-4922-12	SLIDER	
13	2A	*	D10-4923-12	ARM	
14	2B	*	D10-4924-13	ARM	
15	2B	*	D10-4925-12	ARM	
25	2B	*	D10-4938-04	SLIDER ASSY	
27	2A	*	D10-4945-04	LEVER	
28	2B	*	D12-0639-02	CAM	
31	2B	*	D13-2402-04	GEAR	
32	2B	*	D13-2403-04	GEAR	
33	2B	*	D13-2404-04	GEAR	
34	2B	*	D13-2405-04	GEAR	
35	2B	*	D13-2406-04	GEAR	
36	2B	*	D13-2407-04	GEAR	
40	2A		D13-2413-04	GEAR	
41	2A		D13-2415-04	GEAR	
42	2A		D13-2416-04	GEAR	
43	1B	*	D14-1013-14	ROLLER	
53	1B	*	D21-2487-04	SHAFT	
54	2A	*	D39-0269-05	DAMPER	
55	2A	*	D39-0270-05	DAMPER	
60	3A	*	F09-2825-23	SHEET	
65	2B	*	G01-3298-04	EXTENSION SPRING	
66	1B	*	G01-3299-04	EXTENSION SPRING	
67	2A	*	G01-3300-14	TORSION COIL SPRING	
68	1B	*	G01-4601-04	EXTENSION SPRING	
69	1B	*	G01-4602-04	EXTENSION SPRING	
70	1B	*	G01-4604-04	TORSION COIL SPRING	
74	2B	*	G01-4609-14	TORSION COIL SPRING	
75	1B	*	G02-1550-03	FLAT SPRING	
79	2A	*	J22-0475-11	MOUNTING HARDWARE	
80	3B	*	J22-0476-01	MOUNTING HARDWARE	
A	1A	*	N09-6382-05	MACHINE SCREW (M1.7X2.0)	
B	3B	*	N09-6408-15	TAPTITE SCREW (1.7X4 P-TITE)	
C	1B	*	N09-6426-15	MACHINE SCREW (LOAD ARM SCREW)	
D	3A		N09-6104-05	MACHINE SCREW (2X10 S-TITE)	
93	2A	*	T99-0471-05	MAGNET	
96	1B	*	X94-2080-00	ROLLER ASSY	
98	2A	*	X94-2060-00	TRAVERSE ASSY (PICKUP,SPINDLE)	
VM1	2A	*	X94-2070-00	MOTOR ASSY (LOADING)	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation

SPECIFICATIONS

Monitor section

Picture size
..... 6.97 inches (diagonal) wide, 154.1 x 87.1mm
Display system Transparent TN LCD panel
Drive system TFT active matrix system
Number of pixels 336,960 (480H x 234V x RGB)
Effective pixels 99.99%
Pixel arrangement RGB striped arrangement
Back lighting Cold Cathode Fluorescent Tube

DVD section

D/A Converter 24bit
Decoder Linear PCM/ Dolby Digital/ dts/MP3/ WMA/AAC
Wow & Flutter Below Measurable Limit
Frequency Response
Sampling frequency; 96kHz 20~44,000Hz
Sampling frequency; 48kHz 20~22,000Hz
Sampling frequency; 44.1kHz 20~20,000Hz
Total Harmonic Distortion 0.01% (1kHz)
S/N Ratio 98dB (DVD-Video 96k)
Dynamic Range 98dB (DVD-Video 96k)
DISC Format DVD-Video/ VIDEO-CD/ CD-DA
Sampling frequency 44.1kHz/ 48kHz/ 96kHz
Quantifying bit number 16/ 20/ 24 bit

USB IF section

USB Standard USB 1.1/ 2.0
File System FAT 16/ 32
Maximum Power Supply Current 500mA
D/A Converter 24Bit
Decoder MP3/ WMA/ AAC

FM tuner section

Frequency Range
K,R 87.9~107.9MHz (200kHz)
M,X 87.5~108.0MHz (50kHz), 87.9~107.9MHz (200kHz)
E 87.5~108.0MHz (50kHz)
Usable Sensitivity (S/N : 26dB)
K,R,M,X 9.3dBf (0.8 μ V/75 Ω)
E 0.7 μ V/75 Ω
Quieting Sensitivity (S/N : 46dB) 15.2dBf (1.6 μ V/75 Ω)
Frequency Response (\pm 3.0dB) 30Hz~15kHz

S/N

K,R,M,X 70dB (MONO)
E 65dB (MONO)
Selectivity (\pm 400kHz) \geq 80dB
Stereo Separation
K,R,M,X 40dB (1kHz)
E 35dB (1kHz)

AM tuner section : K,R,X type

Frequency Range
K,R 530~1700kHz(10kHz)
X 531~1161kHz (9kHz), 530~1700kHz (10kHz)
Usable Sensitivity 28dB μ

LW Tuner section : M,E type

Frequency Range 153~281kHz (9kHz)
Usable Sensitivity
M 28dB μ
E 45 μ V

MW Tuner section : M,E type

Frequency Range
M 531~1611kHz (9kHz), 530~1700kHz (10kHz)
E 531kHz~1611kHz (9kHz)
Usable Sensitivity 28dB μ (25 μ V)

Video section

Color system of external video input
K,R NTSC
M,X,E NTSC/ PAL
External video input level (RCA jacks) 1Vp-p/75 Ω
External audio max input level (RCA jacks) 2V/25k Ω
Analog RGB input 0.7Vp-p/75 Ω
Video Output level (RCA jacks) 1Vp-p/75 Ω
Audio Output level (RCA jacks) 1.2V/10k Ω

Audio section

Maximum Power (Front & Rear) 50W x 4
Full Bandwidth Power (Front & Rear)
K,R (4 Ω , 14.4V, 1% THD) 22W x 4
M,X (at less than 1% THD) 22W x 4
E (PWR DIN45324, +B=14.4V) 30W x 4

SPECIFICATIONS

Preout level.....2V/10kΩ
Preout impedance ≤600Ω
Speaker impedance..... 4~8Ω
Tone action
 Bass 100Hz±8dB
 Middle 1kHz±8dB
 Treble 10kHz±8dB

Operational Temperature Range -10°C~+60°C
Storage Temperature Range -20°C~+85°C
Weight
 Main unit 2.2kg (4.9lbs)
 Hideaway unit..... 1.1kg (2.4lbs)

External SW : M,X type

Maximum Power Supply Current..... 500mA

General

Operating voltage 14.4V (11~16V allowable)
Current Consumption 15A
Installation Size (W × H × D)
 Main Unit
 182 × 53 × 161 mm, 7-3/16 × 2-1/16 × 6-3/8 inch
 Hideaway unit
 228 × 40 × 176 mm, 9 × 1-9/16 × 6-15/16 inch

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Although the effective pixels for the liquid crystal panel is given as 99.99% or more, 0.01% of pixels may not light or may light incorrectly.

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DANGER:

Please do not look at the laser beam directly during repair or operation check.

