MONITOR WITH DVD RECEIVER / NAVIGATION SYSTEM

DDX7032/7032M/712
DNX7120/7220/7320

SERVICE MANUAL

KENWOOD

Kenwood Corporation

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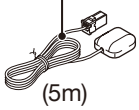
Illustrations is DNX7120

ANT module(GPS-ANT)*
(W02-5305-05)



(5m)

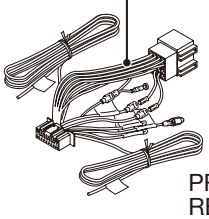
Mounting hardware*
(J21-9867-04)

Screw set *
(N99-1779-15)

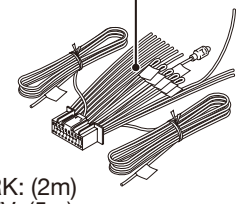
Adhesive double-coated tape *
(H30-0595-04)

Clamper *
(J11-0660-05)

DC cord *
(E30-6825-05)

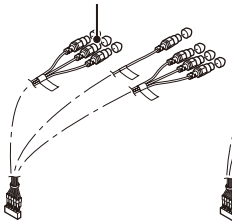


DC cord *
(E30-6824-05)

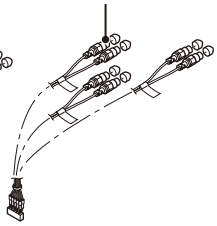


PRK: (2m)
REV: (5m)

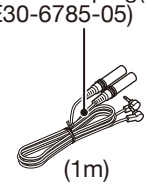
Cord with pinplug(AV)
(E30-6792-05)



Cord with pinplug(PRE)
(E30-6794-05)

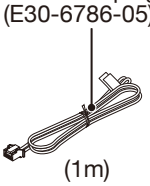


Cord with plug(ipod)*
(E30-6785-05)



(1m)

Cord with plug(relay)
(E30-6786-05)



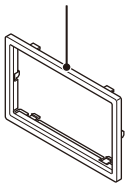
(1m)

Remote controller assy
(A70-2082-15) RC-DV330 :DNX
(A70-2083-15) RC-DV340 :DDX

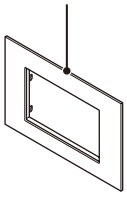
(ILLUSTRATION IS RC-DV340)

Size AAA battery
Not supplied

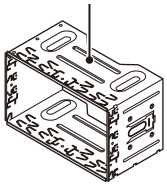
Escutcheon
(B07-3224-01)



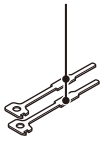
Escutcheon *
(B07-3172-12)



Mounting hardware assy
(J22-0657-03)



Lever
(D10-4589-04) x2

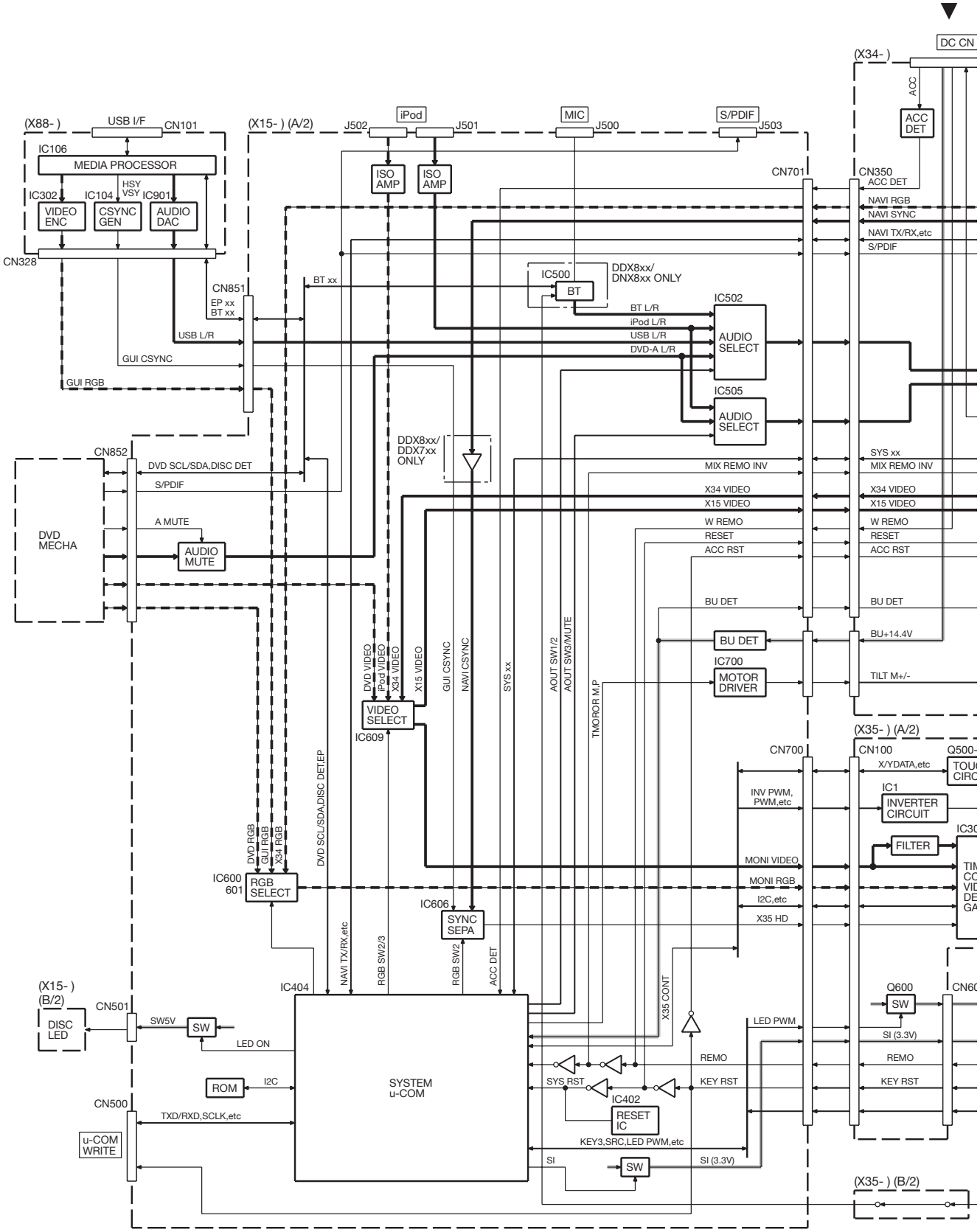


- The IC106 in the Digital I/O unit (X88-2030-11) are not replaceable components. When this IC are defective, replace the whole Digital I/O unit (X88-2030-11).
- The IC5,9,21 and IC60 in the DVD unit (X37-1120-06) are not replaceable components. When these ICs are defective, replace the whole DVD mechanism assembly (X92-6180-01). You cannot replace only the board.

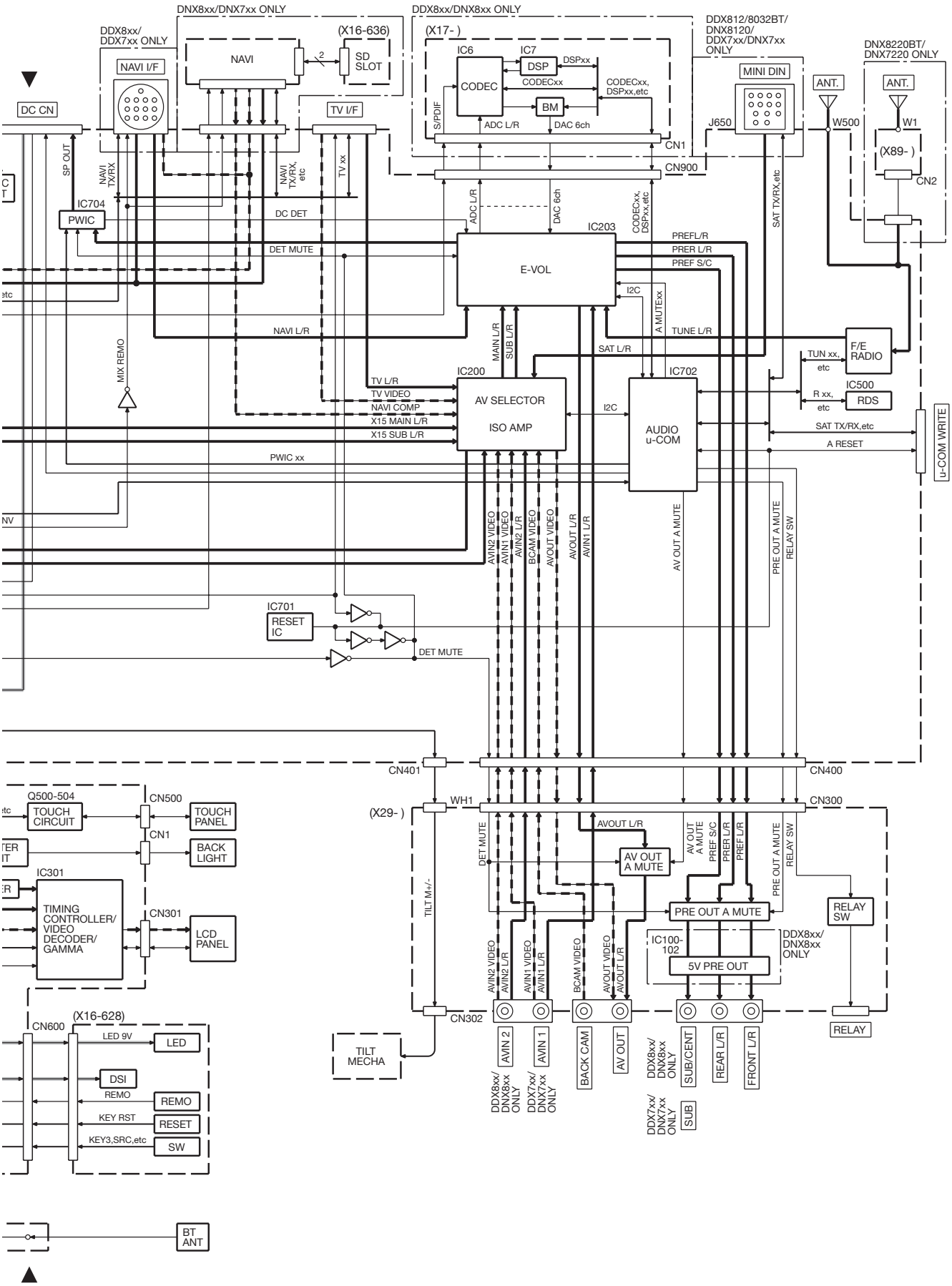
* Depends on the models. Refer to the parts list.

This product uses Lead Free solder.
This product complies with the **RoHS** directive for the European market.

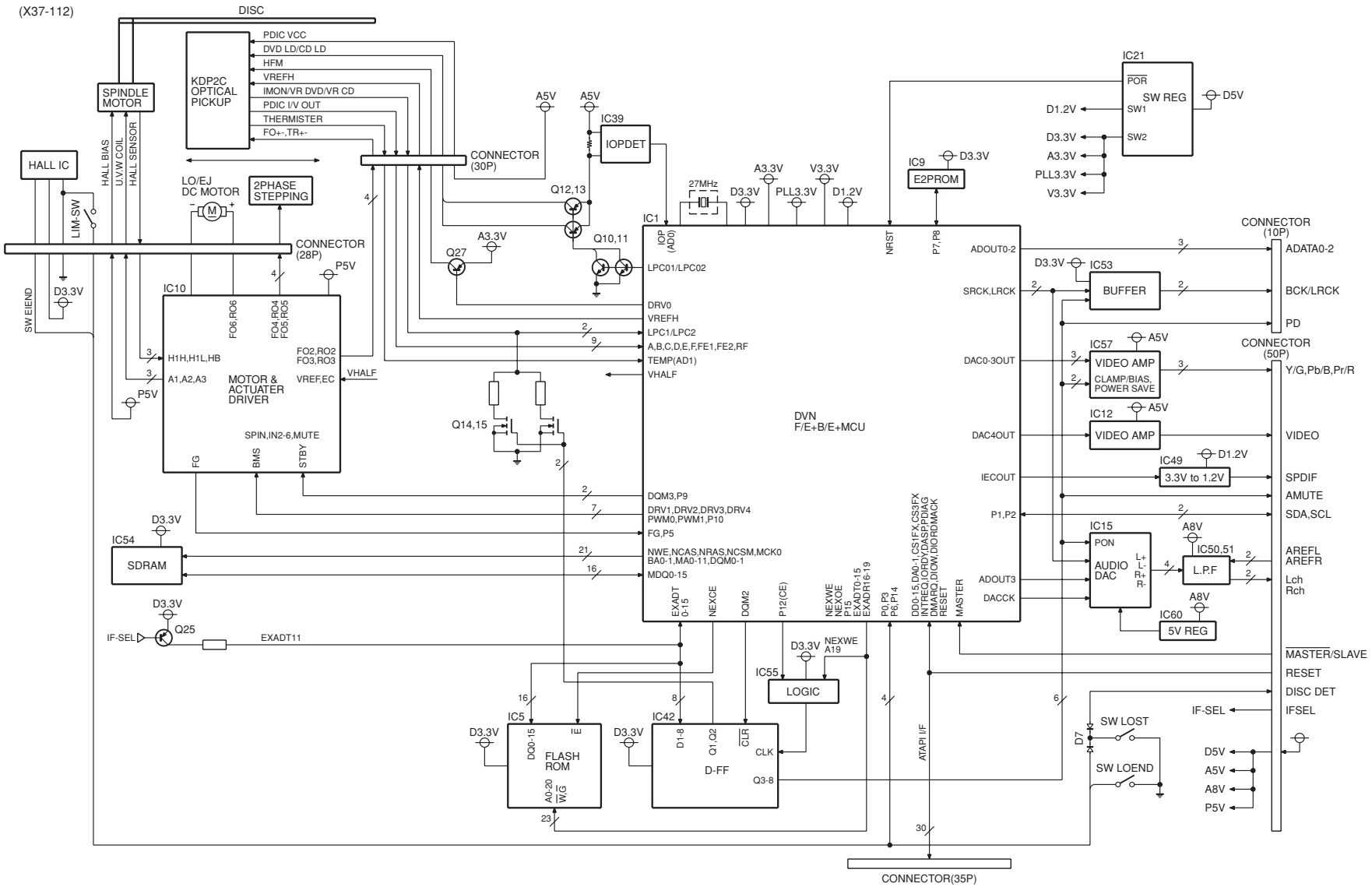
BLOCK DIAGRAM



BLOCK DIAGRAM



BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● VIDEO CONTROL UNIT (X15-115x-xx/X15-117x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC3	5V regulator	T_P+5V, BU_DET
IC4	3.3V regulator	TILT3.3V
IC8	3.3V regulator	TC3.3V
IC200	DC-DC control IC	DC-DC control (MECHA8V, V5V, SW5V (D5V))
IC201	DC-DC control IC	DC-DC control (SW3.3V, P5V, USB5V)
IC400	E2MROM	For saving the settings
IC401	E2MROM	For ROM correction
IC402	Reset IC	System µ-com reset
IC403	Buffer	Buffer for DVBT communication
IC404	MPU	System µ-com
IC405	AND	3.3→5V level conversion (NAVI_RX)
IC500	Op amp	AMP for BT audio
IC501	VIDEO ISO AMP	iPod video signal
IC502	Audio selector	MAIN
IC503	Buffer	BT control signal buffer
IC504	AUDIO ISO AMP	iPod audio signal
IC505	Audio selector	SUB
IC600	Video switch	NAVI or GRAPHIC
IC601	Video switch	DVD or NAVI & GRAPHIC
IC604	NOT	3.3→5V level conversion (NAVI_SYNC)
IC606	SYNC SW	GRAPHIC or NAVI
IC608	Buffer	VSY buffer
IC609	Video switch	X15, X34 VIDEO, COMP
IC612	NOT	NAVI_SYNC reversal
IC700	MOTOR DRIVER	TILT MECHA
Q1	SW	BU_DET detection circuit
Q2,3	SW	P-ON 14V control
Q4,5,11,12	SW	BU_DET detection circuit
Q13	SW	P-ON 14V control
Q14	SW	BU_DET detection circuit
Q15	SW FET	P-ON 14V ON/OFF
Q16~18	SW	BU_DET detection circuit
Q19	Short protection	BU power supply regulator (8.5V)
Q20	8.5V regulator control	BU power supply regulator (8.5V)
Q21	8.5V regulator	BU power supply regulator (8.5V)
Q22,23	8.5V regulator control	BU power supply regulator (8.5V)
Q28	8V regulator	DVD A8V regulator
Q29,31,32	8V regulator control	DVD A8V regulator
Q35	8V regulator	A8V regulator
Q37~39	8V regulator control	A8V regulator
Q44,45	SW	T_P5.0V switch
Q46	9V regulator control	LED9V regulator

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q47	9V regulator	LED9V regulator
Q48,49	SW	TILT3.3V switch
Q200	SW	DC-DC protection control
Q201	SW	DC-DC output voltage switching
Q202~204	SW	DC-DC protection control
Q205	SW	DC-DC SW FET (5V or 8.0V)
Q206	SW	DC-DC SW FET (5V)
Q207	SW	DC-DC SW FET (3.3V)
Q208	SW	DC-DC SW FET (5V)
Q400	SW	TV RESET
Q402	SW	µ-com reset SW
Q403,404	SW	SI
Q500,501	SW	Reset circuit of Garmin NAVI
Q502,503	SW	Audio switching MAIN L/R output SW
Q504	SW	Reset circuit of Garmin NAVI
Q505	SW	Disk slot LED control
Q506	SW	X35 REMO and W_REMO detection and NAVI_REMO output
Q507,508	SW	Audio switching SUB L/R output SW
Q509	SW	Disk slot LED control
Q510	SW	MIX_REMO output
Q600	SW	RGB signal_R
Q601	SW	RGB signal_G
Q602	SW	RGB signal_B
Q603	SW	MUTE of RGB signal_R
Q604	SW	MUTE of RGB signal_G
Q605	SW	MUTE of RGB signal_B
Q700	Buffer	SPDIF signal
Q850	MUTE	DVD MUTE (Lch)
Q851	MUTE	DVD MUTE (Rch)
Q852	SW	DVD MUTE control

● SWITCH UNIT (X16-6280-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Remote control sensor	Infrared Detection unit for Remote Control

● AUDIO UNIT (X17-2030-10)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	OP amp	For audio signal amplification (Center, Sub-woofer)
IC2	OP amp	For audio signal amplification (Rear)
IC3,4	OP amp	For audio signal amplification (Front)
IC5	BASS MANAGEMENT	BASS MANAGEMENT
IC6	CODEC	DIR and A/D, D/A converter
IC7	DSP	Processing of computing for Dolby 5.1ch, dts etc.

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC8	3-terminal regulator	DSP_D3.3V POWER SUPPLY
IC10	3-terminal regulator	DSP_D1.25V POWER SUPPLY

● CONTROL CIRCUIT UNIT (X29-4490-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC100~102	OP amp	5V_AMP
IC103	Voltage Converter	Power supply (9V→ -9V)
Q4	Transistor	AV OUT_AR Mute
Q5	Transistor	Mute SW for AV OUT
Q6	Transistor	AV OUT_AL Mute
Q100	Transistor	PRE FL_Mute
Q101	Transistor	PRE OUT F/R Mute SW
Q102	Transistor	PRE FR_Mute
Q103	Transistor	PRE RL_Mute
Q104	Transistor	PRE RR_Mute
Q105	Transistor	PRE SWR_Mute
Q106	Transistor	PRE OUT SWR/CENTER Mute SW
Q107	Transistor	PRE CENTER_Mute
Q108	Transistor	P_ON SW
Q109,110	Transistor	+B sw
Q111~116	Transistor	Voltage Converter circuit (9V→ -9V)
Q200~205	Transistor	Relay SW1 output, and over current detection circuit
Q206~211	Transistor	Relay SW2 output, and over current detection circuit

● ELECTRIC UNIT (X34-584x-xx/X34-598x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC100	3-terminal regulator	DSP_A5V circuit
IC101	3-terminal regulator	T8V (Distributor power supply) circuit
IC102	Op amp	PW-IC midpoint circuit
IC103	3-terminal regulator	Generate SEL_A5V (AV selector AK4220)
IC104	3-terminal regulator	Generate SEL_3.3V (AV selector AK4220)
IC105	Op amp	PW-IC midpoint circuit
IC106	3-terminal regulator	Generate A8V (Audio 8V)
IC200	AV selector	Audio/Video signal selector
IC201	Op amp	AV selector ISO-AMP
IC202	Op amp	AV-IN2 ISO-AMP
IC203	EVOL IC	Audio volume control and audio signal selection
IC300	Op amp	Buffer for ADC-L/R signal
IC303	Logic IC (Buffer)	DSP, CODEC control and Data signal processing
IC304	Logic IC (AND)	DSP, CODEC control and Data signal processing
IC500	RDS decoder IC	For RDS signal processing and demodulation
IC550	Logic IC (Inverter)	Processing of remote controller signal from NAVI
IC650	Logic IC (AND)	Switching of SAT_TX data

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC701	Voltage detection IC	µ-com reset voltage (3.5V) monitoring
IC702	Pin100 µ-com	Mainly control Audio board
IC704	Power IC	Power amplifier for speaker output
IC705	3-terminal regulator	DSP_D5V circuit
Q1,2	Transistor	P_CON output circuit
Q3	Transistor	Reverse detection circuit
Q4	Transistor	P_CON output circuit
Q5	Transistor	Parking detection circuit
Q6	Transistor	P_CON output circuit
Q7	Transistor	ANT_CON output circuit
Q8	Transistor	ILLUMI detection circuit
Q9	Transistor	ANT_CON output circuit
Q10	Transistor	BU detection circuit
Q11	Transistor	EXT_CONT output circuit
Q13	Transistor	SURGE detection circuit
Q14	Transistor	ACC detection circuit
Q100	Transistor	DSP_A5V circuit
Q101	Transistor	PW-IC midpoint circuit
Q102	Transistor	DSP_A5V circuit
Q103	Transistor	PW-IC midpoint circuit
Q104	Transistor	T8V circuit (E-TYPE ONLY)
Q105	Transistor	BU5V circuit
Q106	Transistor	PW-IC midpoint circuit
Q107	Transistor	T8V circuit (E-TYPE ONLY)
Q108	Transistor	BU5V circuit
Q109,110	Transistor	PW-IC midpoint circuit
Q111,112	Transistor	SW5V circuit
Q113,114	Transistor	SIR_SW14V circuit (K/R-TYPE ONLY)
Q115,116	Transistor	A8V circuit
Q117	Transistor	SIR_SW14V circuit (K/R-TYPE ONLY)
Q118	Transistor	A8V circuit
Q119	Transistor	SIR_SW14V circuit (K/R-TYPE ONLY)
Q120~122	Transistor	DSP_D8V circuit
Q300~302	Transistor	ADC_MUTE circuit
Q500,501	Transistor	On during AM (Tuner8V)
Q650,651	Transistor	SAT_RX SW circuit
Q652	Transistor	SIRIUS_DET SW circuit
Q700	Transistor	RESET detection circuit
Q701	Transistor	DET MUTE circuit (Trigger Reset)
Q702	Transistor	Video signal detection circuit (AV selector → µ-com)
Q703	Transistor	AV selector control RESET circuit
Q704	Transistor	DET MUTE circuit (Trigger Reset)
Q705	Transistor	AV selector control circuit

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q706	Transistor	DET MUTE circuit (Trigger Reset)
Q707	Transistor	AV selector control circuit

● VIDEO UNIT (X35-4940-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Inverter control IC	Control and drive the inverter circuit for the back light
IC100	Mono-multi	Delay 5V power supply for DC/DC IC
IC101	NOT	Reverse
IC102	DC/DC converter IC	+12.5V/-12.0V power supply for VCOM amplifier and +15.0V power supply for LCD
IC200	Op amp	For VCOM amplifier
IC300	Regulator	2.5V regulator
IC301	Chroma and Gamma T/C	Control LCD module
IC302	OR	3.3V conversion
IC303	F ROM	For Mstar FW
IC304	NOT	Reverse
Q1	5V constant voltage	5V power supply for inverter control IC
Q2,3	Inverter driver	Drive the inverter circuit
Q4	Dimmer SW	Be turned on or off by the PWM control signal to dim or not to dim the back light.
Q5	Switch	SW to change the free run frequency of inverter control IC
Q140,141	-10.0V regulator control	-10V regulator for LCD
Q202,203,205	Buffer	For VCOM current amplification
Q300,301	Buffer	For Chroma trap
Q302	Switch	NTSC/PAL switching
Q303,304	Switch	For Mstar RESET
Q500	Touch panel X1 SW	X1 SW: Be turned on when the touch panel is touched or when there is an input at X axis, and apply voltage.
Q501	Touch panel X0 SW	X0 SW: Be turned on when there is an input at X axis, and apply voltage
Q502	Touch panel Y1 SW	Y1 SW: Be turned on when there is an input at Y axis, and apply voltage
Q503	Touch panel Y0 SW	Y0 SW: Be turned on when there is an input at Y axis, and apply voltage
Q504	Touch panel Y0/Y1 SW	Y0/Y1 SW: Be turned on when there is an input at Y axis, and be turned off when there is an input at X axis
Q600,601	LED SW	Control LED (PWM control).

● DIGITAL I/O UNIT (X88-2030-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC100	Fixed Current Limit Power Distribution Switch	Large current distribution switch for USB1
IC101	Fixed Current Limit Power Distribution Switch	Large current distribution switch for USB2
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

COMPONENTS DESCRIPTION

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC202,203	SDRAM 256Mbit	SDRAM for work memory
IC207	iPod Authentication Coprocessor	iPod Authentication
IC211	NOR Flash Memory 256Mbit	Flash Memory for program data and graphic data
IC302	Color TV signal encoder	Graphic signal digital/analog converter
IC305	Dual OP-Amp (LPF)	Stereo DAC Output LPF
IC901	Stereo DAC	Audio signal digital/analog converter
IC902	Low Dropout Voltage Regulator	A8V→A5V (for Stereo DAC and LPF)
IC903	Dual 2-input AND Gate	Output ENABLE for MIC2005-08YM6

● DAUGHTER UNIT (X89-3062-71)

Ref. No.	Application / Function	Operation / Condition / Compatibility
Q1	AMP	GAIN_AMP in FM band

● DVD UNIT (X37-1120-06)

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
IC21	2-output switching REG	5V→3.3V/1.2V
IC39	OP-AMP for Iop measurement	For Iop measurement
IC42	Logic IC for port extension	For port extension
IC49	Low voltage logic	For S/PDIF signal amplitude conversion (3.3V→1.2V)
IC54	SDRAM	To retain data for one chip LSI (Nonvolatile memory)
IC55,56	Logic IC for port extension	For port extension
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 MICROCOMPUTER: 30878MJBA24GP (X15: IC404)

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
1	AV_SDA/TC_SDA/E2P_SDA	I/O	Communication data between AV_SW, T/C, and E2P		
2	NC	O	NC		
3	HSY	I	Hsync input: For VCOM adjustment input from X35		
4	MIX_REMO	I	Remote controller data input		
5	SYS_MDATA	O	Data output to AUDIO μ-com		
6	SYS_SDATA	I	Data input from AUDIO μ-com		
7	SYS_CLK	O	Communication clock with AUDIO μ-com		
8	SYS_MREQ	O	Request to AUDIO μ-com		
9	SYS_SREQ	I	Request from AUDIO μ-com		
10	SYS_ON	O	ON/OFF control of AUDIO μ-com		
11	X0	O	Touch panel control		
12	X1	O	Touch panel control		
13	Y0	O	Touch panel control		
14	ACC_DET	I	ACC detection		L: ACC ON
15	BYTE	I	External data bus width switching		Connected to Vss since this is a single chip
16	CNVSS	I	Terminal for writing data in μ-com		"L" during the normal operation
17	XCIN	I	Sub clock input		32.768kHz
18	XCOUT	O	Sub clock output		32.768kHz
19	RESET	I			L: RESET
20	XOUT	O	Main clock output		11.0592MHz
21	VSS	-			
22	XIN	I	Main clock input		11.0592MHz
23	VCC1	-			
24	NMI	I			Not used
25	BU_DET	I	BU detection		L: BU ON, H: Reduced voltage
26	TV_SC_REQ	I	Communication request from TV_COM		
27	TV_MC_REQ	O	Communication request to TV_COM		
28	TV_SC_CON	O	Start request to TV_COM		
29	TV_SC_DATA	I	DATA input from TV_COM		
30	TV_CLK	O	CLK output to TV_COM		
31	TV_MC_DATA	O	DATA output to TV_COM		
32	PWM	O	LCD brightness control		PWM output
33	POWER_PWM	O	DC-DC_IC oscillation frequency control		381kHz or 316kHz
34	TV_JUDGE	I	Determination of TV_BOX if it is old or new		H: Old, L: New
35	INV_PWM	O	Inverter oscillation frequency control		PWM output
36	NAVI_RX	I	Navi control data input		
37	NAVI_TX	O	Navi control data output		
38	TXD	O	Terminal for writing data in μ-com		
39	VCC1	-			
40	RxD	I	Terminal for writing data in μ-com		
41	VSS	-			
42	SCLK	I	Terminal for writing data in μ-com		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
43	BUSY	O	Terminal for writing data in μ-com		
44	DVD_SDA	I/O	Communication data with DVD mechanism		
45	DVD_SCL	O	Communication clock with DVD mechanism		
46	DISC_DET	I	Disc detection		L: Detected (Disc is found)
47	NAVI_OFF_DET	I	Standby request for Navi power supply Off		Not used
48	DVD_RESET	O	Reset of DVD mechanism		
49	TMOTOR_P	O	Tilt control of the tilt mechanism		
50	TMOTOR_M	O	Tilt control of the tilt mechanism		
51	NC	O	NC		Not used
52	AOUT_SW1	O	AUDIO selector switching	②	
53	AOUT_SW2	O	AUDIO selector switching	②	
54	EPM	I			
55	AOUT_MUTE	O	AUDIO selector switching	②	
56	AOUT_SW3	O	AUDIO selector switching	②	
57	VSS	-			
58	NC	O	NC		Not used
59	VCC2	-			
60	LED_PWM	O	KEY LED brightness control		H: Turn on.
61-63	NC	O	NC		Not used
64	RGB_MUTE	O	RGB MUTE control		H: MUTE ON
65	CE	I			
66,67	NC	O	NC		Not used
68	RGB_SW2	O	RGB selector switching	②	
69	RGB_SW3	O	RGB selector switching	②	
70	PGOOD	I	Error detection in DC-DC_IC		L: Power supply error detected
71	POWER_START	O	DC-DC_IC soft start		L: Start, H: Stop
72	LED_ON	O	Disc slot LED ON/OFF		H: LED ON, L: LED OFF
73	NC	O	NC		Not used
74	VCC2	-			
75	NC	O	NC		Not used
76	VSS	-			
77	SI	O	SI control		When ACC is OFF: Repetition of H and L
78	SRC	I	Source key		L: SRC
79,80	NC	O	NC		Not used
81	EP_BU_DET	O	Make X88 recognize the BU detection		Not used. Output is fixed to L
82	EP_STBY	I	Media processor standby		Not used
83	EP_INI	O	Media processor initial		
84	EP_CON	O	Permission to operate media processor		Not used. Output is fixed to L
85	EP_RST	O	Media processor reset		
86	EP_SREQ	I	Request from media processor		
87	EP_MREQ	O	Request to media processor		
88	EP_RX	I	Media processor control data input		
89	NC	O	NC		Not used
90	EP_TX	O	Media processor control data output		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
91	VCC2	-			
92	PON	O	Power ON/OFF control		H: Power ON
93	VSS	-			
94	MCNT	O	Switching of tilt mechanism power supply voltage		H: 8V, L: 5V
95	JIGU_EJ	I	Operable without tilt mechanism		
96-99	NC	O	NC		Not used
100	WRT_E2P	I	Used for writing data in E2P		H: E2P access, L: Normal
101	NC	O	NC		Not used
102	VD	I	For VCOM adjustment		
103,104	NC	O	NC		Not used
105	EJECT	I	Eject key		
106,107	NC	O	NC		Not used
108	INV_SW	O	Switching of Inverter free run frequency		
109	ENABLE	O	Back light ON/OFF		H: ON, L: OFF
110	WRT_TC	I	Used to update T/C		H: T/C access, L: Normal
111~113	NC	O	NC		Not used
114	TYPE1	I	Destination setting	①	
115	TYPE2	I	Destination setting	①	
116	TYPE3	I	Destination setting	①	
117-121	NC	O	NC		Not used
122	TYPE0	I	Destination setting	①	
123	TC_RESET	O	Reset of T/C		
124	NT_PAL_IN	I	NTSC/PAL identification input		H: NTSC, L: PAL
125	VMUTE	O	VMUTE of X35		H: MUTE ON
126	MST_WAIT	I	MST WAIT request		
127	TC_R	I	For RGB auto adjustment		Not used
128	TC_G	I	For RGB auto adjustment		Not used
129	TC_B	I	For RGB auto adjustment		Not used
130	VSS	-			
131	VCOM	I	For γ curve auto adjustment / DEF.2.8V		
132	VCC1	-			
133-135	NC	O	NC		Not used
136	KEY3	I	Key		
137	XDATA	I	Touch data input		
138	YDATA	I	Touch data input		
139	R_SENS	I	Panel mechanism tilt detection		
140	AVSS	-			
141	A_REMO	I	Analog remote controller for Matsuda		Not used
142	VREF	I			
143	AVCC	-			
144	AV_SCL/TC_SCL/E2P_SCL	O	Communication clock with AV_SW, T/C, and E2P		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth value table

① Destination setting

MODEL	Category	Destination	TYPE3	TYPE2	TYPE1	TYPE0
Low	DDX	K	0	0	1	*
		E	-	-	-	-
		M/M2	0	0	1	*
		V/X	0	0	1	*
		R	0	0	1	*
	DNX	K	0	1	1	*
		E	0	1	1	*
		M	0	1	1	*
		X	0	1	1	*
		R	-	-	-	-
Mid	DDX	K	1	0	1	*
		E/E2	1	0	1	*
		M/M2	1	0	1	*
		X	1	0	1	*
		R	1	0	1	*
	DNX	K	1	1	1	*
		E	1	1	1	*
		M	-	-	-	-
		X	-	-	-	-
		R	-	-	-	-

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

TYPE0 Setup Voltage (Power supply voltage = 3.3)

Destination	Settings for μ-com			Pull down resistance	Pull up resistance
	min	Mid point voltage	max		
K	0.00	0.00	0.41	10	None
E/E2	0.42	0.83	1.23	3.3	10
M/M2	1.24	1.65	2.06	10	10
V/X	2.07	2.48	2.88	30	10
R	2.89		3.30	None	10

② SW truth value table

Audio switching

MAIN L/R output SW

Pin No	52	53
Terminal name	AOUT_SW1	AOUT_SW2
Control IC	TC4052BFT (IC502)	
USB	0	0
DVD	0	1
IPOD	1	0
BT	1	1

SUB L/R output SW

Pin No	55	56
Terminal name	AOUT_MUTE	AOUT_SW3
Control IC	TC4052BFT (IC505)	
-	0	0
DVD	1	0
iPod	1	1

Set "-" in the other unit than DVD and iPod.

Video switching (RGB)

MONITOR output SW

Pin No	68	69	64
Terminal name	RGB_SW2	RGB_SW3	RGB_MUTE
Control IC	NJM2286V IC600	NJM2286V IC601	
GRA	0	0	0
NAVI	1	0	0
DVD	-	1	0
MUTE	-	-	1

MUTE in TV, IPOD, AVIN or BCAM.

MICROCOMPUTER'S TERMINAL DESCRIPTION

● AUDIO MICROCOMPUTER: 30624MWPB74GP (X34: IC702)

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
1	PON	O	Control of peripheral power supply		H: ON, L: OFF
2	P_CON	O	PCON control		H: EXCEPT, L: When STANDBY or POWER OFF
3	CODEC_DO	O	CODEC control (Mid)		
3	NC	O	Not used (Low)		Output is fixed to L
4	CODEC_DI	I	CODEC control (Mid)		
4	NC	O	Not used (Low)		Output is fixed to L
5	CODEC_CLK	O	CODEC control (Mid)		
5	NC	O	Not used (Low)		Output is fixed to L
6	BYTE	I	External data bus switching		Fixed to "L" since this is a single chip
7	CNVSS	I	Emulator connection		H: Program write mode, L: Normal operation
8,9	NC	O	Not used		Output is fixed to L
10	RESET	I	µCOM hard reset		H: Normal operation, L: Reset
11	XOUT	O			Oscillator 11MHz (Internally the unit operates at the frequency of 2 times of the oscillator frequency)
12	VSS	-			
13	XIN	I			Oscillator 11MHz (Internally the unit operates at the frequency of 2 times of the oscillator frequency)
14	VCC1	-			
15	NMI	I	Fixed to "H" for writing-in.		
16	R_CLK	I	RDS CLK input (K, E, M, R)		
16	NC	O	Not used (X, V)		Output is fixed to L
17	CODEC_ERROR	I	CODEC ERROR input (Mid)		
17	NC	O	Not used (Low)		Output is fixed to L
18	NC	O	Not used		Output is fixed to L
19	CODEC_CS	O	CODEC chip select (Mid)		
19	NC	O	Not used (Low)		Output is fixed to L
20	BEEP	O	Beep		Pulse output
21,22	NC	O	Not used		Output is fixed to L
23	BM_SW	O	Bass Management (Mid)		
23	NC	O	Not used (Low)		Output is fixed to L
24	AD_MUTE	O	CODEC input section MUTE (Mid)		H: MUTE OFF, L: MUTE ON
24	NC	O	Not used (Low)		Output is fixed to L
25	DSP_RST	O	DSP: Reset (Mid)		
25	NC	O	Not used (Low)		Output is fixed to L
26	DSP_SS	O	DSP chip select (Mid)		
26	NC	O	Not used (Low)		Output is fixed to L
27	TUN_SCL	O	RADIO TUNER control		
28	TUN_SDA	I/O	RADIO TUNER control		
29	EM_TX	O	Communication with emulator		
29	SAT_TX	O	Communication with SAT		
30	EM_RX	I	Communication with emulator		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
30	SAT_RX	I	Communication with SAT		
31	EM_CLK	I	Communication with emulator		
32	BUSY	O	Output of BUSY signal during writing-in		
33	SYS_SDATA	O	Communication between µ-coms		
34	SYS_MDATA	I	Communication between µ-coms		
35	SYS_MCLK	I	Communication between µ-coms		
36	SYS_SREQ	O	Communication between µ-coms		
37	SYS_MREQ	I	Communication between µ-coms		
38	NC	O	Not used		Output is fixed to L
39	EPM	I	Emulator connection		Logic is fixed by pull down
40	SIR_DET	I	Detection of SIRIUS (13P↔8P conversion cable) connection		H: Connected, L: Not connected
41	SIR_PON	O	SW14 control (K, R)		H: ON, L: OFF
42	SAT_RST	O	SAT RESET (K,R)		
43	SAT_CON	O	Communication with SAT (K, R)		
44	CE	I	Emulator connection		Logic is fixed by pull up.
45	SEL_SCL	O	ASEL control		I2C CLK
46	SEL_SDA	I/O	ASEL control		I2C DATA
47	V_DET	I	Video signal detection		
48	AV_PDN	O	ASEL control RESET		
49	NC	O	Not used		Output is fixed to L
50	AVOUT_SEL	O	AVOUT SEL control (Not used)		Not used. Output is fixed to L
51	NC	O	Not used		Output is fixed to L
52	NC	O	Not used		Output is fixed to L
53	TUN_IFC	I	RADIO TUNER control		H: Station found, L: Station not found
54	R_AFS_H	O	RADIO TUNER control		
55	AM+B	O	RADIO TUNER control		H: AM, L: EXCEPT
56	R_DATA	I	RDS control (K, E, M, R)		
56	NC	O	Not used (X, V)		Output is fixed to L
57	R_QUAL	I	RDS control (K, E, M, R)		
57	NC	O	Not used (X, V)		Output is fixed to L
58	PRE_MUTEF	O	F pre-out mute		H: MUTE OFF, L: MUTE ON
59	PRE_MUTER	O	R pre-out mute		Not used. Output is fixed to L
60	VCC2	-			
61	PRE_MUTESW	O	SW pre-out mute		H: MUTE OFF, L: MUTE ON
62	VSS	-			
63	AUDIO_MUTE0	O	EVOL rear stage mute		H: MUTE OFF, L: MUTE ON
64	AUDIO_MUTE1	O	EVOL rear stage mute		H: MUTE OFF, L: MUTE ON
65	AUDIO_MUTE2	O	EVOL rear stage mute		H: MUTE OFF, L: MUTE ON
66	AUDIO_MUTEA	O	EVOL front stage mute (Not used)		Not used. Output is fixed to L
67	AUDIO_MUTEB	O	EVOL front stage mute		H: MUTE OFF, L: MUTE ON
68	AUDIO_MUTEC	O	EVOL front stage mute		H: MUTE OFF, L: MUTE ON

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
69	E2P_SCL	O	E2P control		I2C CLK
69	AUD_SCL	O	EVOL control		I2C CLK
70	E2P_SDA	I/O	E2P control		I2C DATA
70	AUD_SDA	I/O	EVOL control		I2C DATA
71	A_WRT_E2P	I	E2P writing-in control		H: E2PROM writing-in, L: EXCEPT
72	SYS_ON	I	Start request from system μ-com		
73	BU_DET	I	Reduced voltage detection		H: Reduced voltage, L: Normal
74	RELAY_SW1	O	Relay 1 control		H: Relay ON, L: Relay OFF
75	RELAY_SW2	O	Relay 2 control		H: Relay ON, L: Relay OFF
76	RELAY_DET1	I	Relay 1 output error detection (Short, Over current)		When "RELAY_SW1" is "Hi", L: Normal, H: Error ("Hi" when SW1 is Low)
77	RELAY_DET2	I	Relay 2 output error detection (Short, Over current)		When "RELAY_SW2" is "Hi", L: Normal, H: Error ("Hi" when SW2 is Low)
78	REV_DET	I	Reverse detection		H: Reverse OFF, L: Reverse ON
79	PAK_DET	I	Parking detection		H: Parking ON, L: Parking OFF
80	ILL_DET	I	Illumi detection		H: Illumi OFF, L: Illumi ON
81	A_REMO	O	Remote controller input for Matsuda		Not used. Output is fixed to L
82	ANT_CON	O	ANT CON control		H: ANT UP, L: ANT DOWN
83	EXT_CON	O	EXT CON control		H: OFF, L: ON
84	PWIC_STBY	O	PWIC control		H: POWER ON, L: POWER OFF
85	PWIC_MUTE	O	PWIC mute		H: MUTE OFF, L: MUTE ON
86	RIP_MUTE	O	PWIC power supply control (Mid)		H: MUTE OFF, L: MUTE ON
86	NC	O	Not used (Low)		Output is fixed to L
87	A_TYPE3	I	Destination setting	①	
88	A_TYPE2	I	Destination setting	①	
89	A_TYPE1	I	Destination setting	①	
90	A_TYPE0	I	Destination setting (K, E, M, X)	①	
91	R_NOISE	I	RADIO TUNER control		Noise input
92	TUN_SMET	I	RADIO TUNER control		S meter input
93	LINE_MUTE	I	LINE MUTE input detection		Normal: 1.6V, TEL MUTE: 1V or less, NAVI MUTE: 2.5V or more
94	AVSS	-			
95	PWIC_DCDET	I	Detection of SP output DC offset		H: Normal, L: Offset detection
96	VREF	-			
97	AVCC	-			
98	DSP_SI	I	DSP control (Mid)		
98	NC	O	Not used (Low)		Output is fixed to L
99	DSP_SO	O	DSP control (Mid)		
99	NC	O	Not used (Low)		Output is fixed to L
100	DSP_SCL	O	DSP control (Mid)		
100	NC	O	Not used (Low)		Output is fixed to L

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth value table

① Destination setting

MODEL	Category	Destination	TYPE3	TYPE2	TYPE1	TYPE0
Low	DDX	K	0	0	1	*
		-	-	-	-	-
		M/M2	0	0	1	*
		V/X	0	0	1	*
		R	0	0	1	*
	DNX	K	0	1	1	*
		E	0	1	1	*
		M	0	1	1	*
		X	0	1	1	*
		-	-	-	-	-
Mid	DDX	K	1	0	1	*
		E/E2	1	0	1	*
		M/M2	1	0	1	*
		X	1	0	1	*
		R	1	0	1	*
	DNX	K	1	1	1	*
		E	1	1	1	*
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-

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

TYPE0 Setup Voltage (Power supply voltage = 5)

Destination	Settings for μ-com			Actual pull down resistance (kΩ)	Actual pull up resistance (kΩ)
	min	Mid point voltage	max		
K	0.00	0.00	0.62	10	None
E/E2	0.63	1.25	1.87	3.3	10
M/M2	1.88	2.50	3.12	10	10
V/X	3.13	3.75	4.37	30	10
R	4.38		5.00	None	10

● MEDIA MICROPROCESSOR: EP9307IRZ (X88: IC106)

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
A1	#CS1	I	Watchdog startup	①	
A2	#CS7	I	BOOT bus width select	②	
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)		
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	NC				

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
A14	IPOD_POW (NC)	O	Authentication chip power supply control (Not used)		
A15	#WAIT	I	WAIT input (Not used)		
A16	USB2_NEG	I/O	USB2 data (Not used)		
A17	NC	I			
B1	AD25	O	Address bus		
B2	#CS2	I	Watchdog startup	①	
B2	#CS2	O	SRAM chip select		
B3	#CS6	I	BOOT bus width select	②	
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)		
B10	MIIRXD1	I	(ETHER I/F for design)		
B11	MIITXD2	O	(ETHER I/F for design)		
B12	TXEN	O	(ETHER I/F for design)		
B13,14	NC				
B15	USB2_POS	I/O	USB2 data (Not used)		
B16	DA_MCLK	O	AUDIO DAC Master clock		I2S
B17	3.3V				
C1	AD23	O	Address bus		
C2	DA26	I/O	Data bus		
C3	#CS3	O	SRAM chip select		
C4	DA25	I/O	Data bus		
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)		
C10	MIIRXD2	I	(ETHER I/F for design)		
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	NC				
C15	TRSTN	I	(JTAG I/F for design)		
C16,17	NC				
D1	#SDCS3	O	SDRAM chip select		
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	NC				

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
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		
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	BT_RESET	O	BT reset		
D16,17	NC				
E1	#SDCS2	O	SDRAM chip select		
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		
E8-10	VDD R				
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
E16,17	NC				
F1	#RAS	O	SDRAM RAS		
F2	#SDCS1	O	SDRAM chip select		
F3	#SDCS0	O	SDRAM chip select		
F4	#DQM3	O	Memory data mask		
F5	AD5	O	Address bus		
F6-8	GND R				
F9,10	VDD C				
F11	GND R				
F12	EP_BUDET	I	Momentary power down notification		L: Normal operation H: Momentary power down detection
F13	NC				
F14	ADC_GND				
F15	IPOD_RESET (NC)	O	Authentication chip reset control (Not used)		
F16,17	NC				
G1	#DQM0	O	Memory data mask		
G2	#CAS	O	SDRAM CAS		
G3	DA21	I/O	Data bus		
G4	AD22	O	Address bus		
G5	VDD R				

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
G6,12	GND R				
G13	USB0_ERR	I	5V over current detection in USB0		L: Over current is detected.
G14					L: Over current is detected.
G15,16	NC				
G17	SUB_CLK	I	Sub clock input		
H1	DA18	I/O	Data bus		
H2	DA20	I/O	Data bus		
H3	DA19	I/O	Data bus		
H4	DA16	I/O	Data bus		
H5	VDD R				
H6	VDD C				
H8,9	GND C				
H10	GND C				
H12	GND R				
H13	VDD R				
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		
H16	NC				
H17	#RESET	I	User reset (Not used)		
J1	AD6	O	Address bus		
J2	DA14	I/O	Data bus		
J3	AD7	O	Address bus		
J4	DA13	I/O	Data bus		
J5	VDD R				
J6	VDD C				
J8,10	GND C				
J12	VDD C				
J13	VDD R				
J14,15	NC				
J16	#CS0	O	Nor Flash chip select		
J17	NC				
K1	AD4	O	Address bus		
K2	DA12	I/O	Data bus		
K3	DA10	I/O	Data bus		
K4	DA11	I/O	Data bus		
K5	VDD R				
K6	GND R				
K8-10	GND C				
K12	VDD C				
K13	NC				
K14	PLL_VDD		Main oscillator power supply 1.8V		
K15~17	NC				
L1	DA9	I/O	Data bus		
L2	AD2	O	Address bus		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
L3	AD1	O	Address bus		
L4	DA8	I/O	Data bus		
L5	NC				
L6,12	GND R				
L13,14	NC				
L15	PLL_GND		Main oscillator GND		
L16	XTALI		Main clock		14.7456MHz
L17	XTALO		Main clock		14.7456MHz
M1	NC				
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)		
M6,7	GND R				
M8,9	VDD C				
M10,11	GND R				
M12~17	NC				
N1	E_R2	O	Video data bus (Red)		
N2	E_R4	O	Video data bus (Red)		
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		
N7~10	VDD R				
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	②	
N13	CTS	I	(UART I/F for design)		
N14	RDX0	I	(UART I/F for design)		
N15	TXD0	O	(UART I/F for design)		
N16	EPO_BTI	O	EP9307→BT communication data		
N17	UART_TXD2	O	EP9307 communication data		
P1	SPCLK	O	Video dot clock		
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		
P10	TCK	I	(JTAG I/F for design)		
P11	BOOT1	I	Test mode select	③	

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
P12	I2C_SDA	I/O	Communication data (I2C)		
P12	I2C_SDA	I	Test mode select	③	
P13	G_LED	O	Green LED		
P14	R_LED	O	Red LED		
P15	NC				
P16	EPI_BTO	I	BT→EP9307 communication data		
P17	UART_RDX2	I	SysCom communication data		
R1	E_G3	O	Video data bus (Green)		
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		
R7	DA4	I/O	Data bus		
R8	DA1	I/O	Data bus		
R9	NC				
R10	TDI	I	(JTAG I/F for design)		
R11	BOOT0	I	Test mode select	③	
R12	DA_LRCLK	O	AUDIO DAC Sample rate clock		I2S
R13,14	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		
T1,2	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				
T10	TMS	I	(JTAG I/F for design)		
T11	GND R				
T12	NC				
T13	INT2	I	(ETHER I/F for design)		
T14	NC				
T15	USB1_POS	I/O	USB1 data		
T16,17	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		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	True Value Table	Processing Operation Description
U9	DA0	I/O	Data bus		
U10	TDO	O	(JTAG I/F for design)		
U11	NC				
U12-14	NC				
U15	RTS	O	(UART I/F for design)		
U16	USB1_NEG	I/O	USB1 data		
U17	NC				

Truth value table

① Watch dog startup

#CS1	#CS2	
0	0	Watch dog disabled, Disabled during resetting (Setting in this unit)
0	1	Watch dog disabled, Enabled during resetting
1	0	Watch dog enabled, Disabled during resetting
1	1	Watch dog enabled, Enabled during resetting

② Selection of BOOT bus width and memory

#CS7	#CS6	DA_SDO0	
0	0	0	8bit ROM
0	1	0	16bit ROM (Setting in this unit)
1	0	0	32bit ROM
1	1	0	32bit ROM
0	0	1	16bit SFLASH
0	1	1	16bit SROM
1	0	1	32bit SFLASH
1	1	1	32bit SROM

③ Test mode selection

I2C_SDA	BOOT1	BOOT0	
1	0	0	Normal BOOT (Setting in this unit)
1	0	1	Serial BOOT
1	1	0	FUNCTIONAL TEST
1	1	1	TIC TEST-HTST_TIC
0	0	0	PARAMETRIC TEST
0	0	1	SCAN_TEST-HTST_SCAN
0	1	0	Reserved
0	1	1	Reserved

TEST MODE

This Test mode is applicable to models that are listed in Table 1.

Class	Series	Model Name	Destination
MID	DNX	DNX8120	K
		DNX8220BT	E
	DDX	DDX812	K
		DDX8022BT	E
		DDX8022BTY	E2
		DDX8032BT	M/X/R
LOW	DNX	DNX7120	K
		DNX7220	E
		DNX7320CN	V
	DDX	DDX712	K
		DDX7032	M/X/V/R

Table 1 List of Model Names

1. Overview

The succeeding sections describe the display specifications, control specification of key/remote controller, operations of components, etc. in the Test mode of this unit.

2. Operations

The system can be transferred to the Test mode with the following two approaches:

① While pressing [SRC] and [ATT] keys at the same time (SRC+ATT), press [Reset] key to start the system.

② In the standby source, enter "2 → ▶▶I → 3" from the remote controller (SW: AUD).

Turn the system OFF in 30 minutes when it is started in the Test mode.

3. Screen transition

The system is started with the Test Mode Main screen when it is started in the Test mode. When the system is transferred to the Test mode using the remote controller, it transfers to the Test Mode Main screen.

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

Refer to Section 3 for the functions in each screen.

4. Specification of screens

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

4.1. Test Mode Main screen

This section describes the keys that can be used to transfer to each screen.

Contents of the display shown in the Test Mode Main screen are described in Figure 4.1.

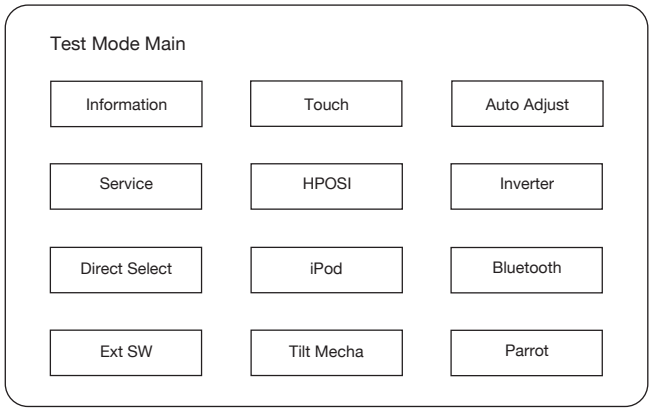


Figure 4.1 Test Mode Main screen

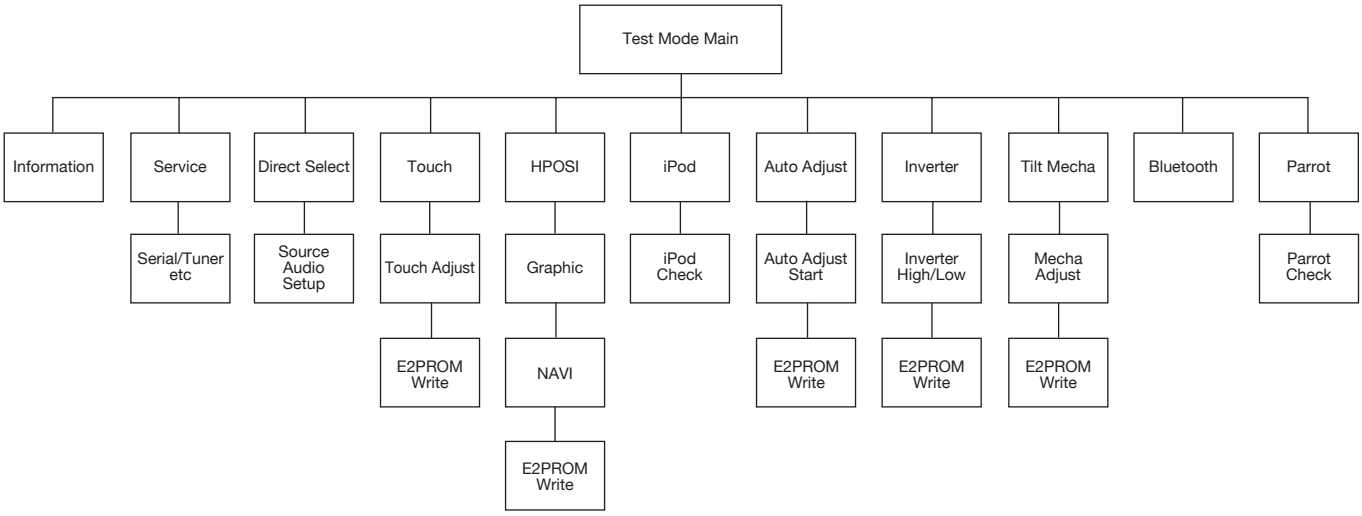


Figure 2 Screen transition

TEST MODE

Key Specification

Information	: Transfer to Information screen.
Service	: Transfer to Service screen.
Direct Select	: Transfer to Direct Select screen.
Ext SW	: Output Ext-SW waveform ("400ms ON/OFF" by the operations, SW1 → SW2).
Touch	: Transfer to Touch Adjust screen.
HPOSI	: Transfer to HPOSI Adjustment screen.
iPod	: Transfer to iPod Authentication Chip Confirmation screen.
Tilt Mecha	: Transfer to Tilt Mecha Position Adjustment screen.
Auto Adjust	: Transfer to Auto Adjust screen.
Inverter	: Transfer to Inverter Confirmation screen.
Bluetooth	: Transfer to Bluetooth Confirmation screen (only in Mid model). This key turns red after the completion of Flash memory initialization in Bluetooth Module.
Parrot	: Transfer to Parrot Confirmation screen (only in Mid model).

4.2. Information screen

This screen is to display such information as version number and other conditions.
The contents displayed on the Information screen are shown in Figure 4.2.

```
Information
  Serial No. : ********      DC Offset : None      Security : Off
  Media Processor        : Redboot  12:00:00 Sep 15 2007
                           Kernel  Sep 15 12:00:00 JST 2007
                           RootFS  070915_12:00
  Low DDX System µ-com : V*.***   ROM : R----   Type : *
  Low DDX Audio µ-com  : V*.***   ROM : R----   Type : *   Span : *
  Mstar                : V*.***
  B/E : V*.***   F/E : V*.***   macrovision : V*.***   Region : *

  BT Module            : V*.***
                                                   [ Return ]
```

Figure 4.2 Information screen

- The "Low/Mid" and "DDX/DNX" that are attached in front of System µ-com/Audio µ-com indicates that the destination information of the board on which System µ-com/Audio µ-com are installed.
- Version information of BT Module is limited to Mid model.

Key Specification

Return	: Transfer to Test Mode Main screen

4.3. Service screen

This screen shows a variety of service information. Pressing each [Clear] key clears the data saved in the nonvolatile memory.
The contents displayed on the Service screen are shown in Figure 4.3.

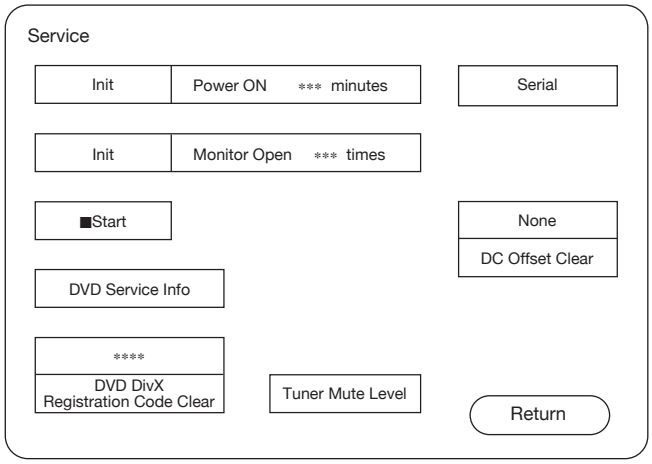


Figure 4.3 Service screen

Key Specification

Serial	: Transfer to the Serial No. Entry screen.
DVD Service Info	: Select the DVD video and display the DVD service information.
Tuner Mute Level	: Transfer to Tuner Mute Level Adjustment screen
DVD DivX Registration Code Clear	: Clear DVD DivX Registration Code.
DC Offset Clear	: Clear DC Offset information in the nonvolatile memory.
Init	: Select the item to be initialized.
■Start	: Pressing this key for one second or longer initializes the information of the item selected by [Init] key.
Return	: Transfer to Test Mode Main screen

- DVD Service Info

  Select the DVD video and display the DVD service information that is created by DVD mechanism.
  Use the [DISP] key or CURSOR (right or left) on the remote controller to feed pages.
  Press the [FNC] key to return from the DVD video to the Service screen.

  * Refer to the DVS-8500 system service documents for the details of DVD Service Info screen.
    Once the system transfers to DVD video screen selected at DVD Service Info, OSD will not be displayed in the DVD video screen. Restart the set (system) to display OSD in DVD video screen.

TEST MODE

- DVD DivX Registration Code
  Display DivX Registration Code, and clear the Code with [Clear] key.
  After the clearing of the Code, display “None”.
  ∗ Clear the Code after ejecting the DISC.

- DC Offset
  When the DC Offset detection information is shown as “None”, it means that the offset is not detected. When it is shown as “Detect (x)”, it means that the offset is detected.
  X=1~3 : The number of capacitor leak detected.
  Clear the detection information using the [Clear] key.

- Service Information
  Display Power On time and the number of Monitor Open.
  Select the item to be initialized by pressing the [Init] key of that item. (Multiple items can be selected, and the selected items are highlighted.)
  After selecting the item that shall be initialized, press the [Start] key for 1 second or longer to initialize the displayed service information.

4.4. Serial No. Entry screen

Enter the serial code of each set from this screen.
The Serial No. Entry screen is shown in Figure 4.4.

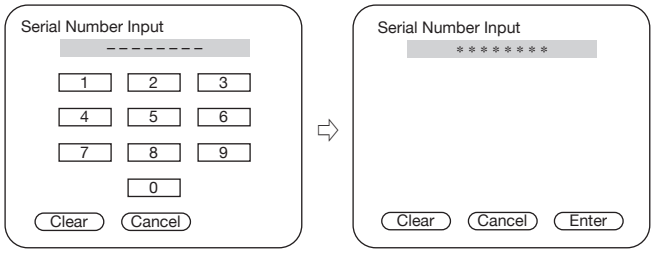


Figure 4.4 Serial No. Entry screen

Key Specification

0~9	: 10key used to enter the serial code.
Clear	: Clear the serial code. being input.
Cancel	: Transfer to Service screen
Enter	: Start entering the serial code. (When the entry is successfully completed, the “Write OK” is shown. When the entry is not successfully completed, the “Write NG” is shown) When the “Write OK” is shown, use this key to transfer to the Service screen. If the “Write NG” is shown, transfer to the Test mode again and repeat the entry from the first step.

4.5. Tuner Mute Level Adjust screen

Adjust the Mute Level stored in the E2PROM of the Tuner F/E.
The Tuner Mute Level Adjust screen is shown in Figure 4.5.

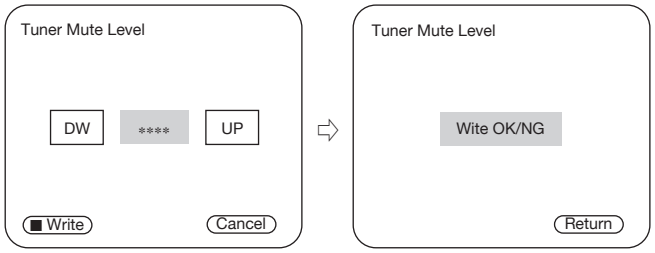


Figure 4.5 Tuner Mute Level Adjust screen

Key Specification

UP	: Mute Level Up
DW	: Mute Level Down
■Write	: Press this key for 1 seconds or longer to make the data writing into the nonvolatile memory.
Canncel	: Transfer to Service screen.
Return	: Transfer to Service screen.

∗ Adjust the Tuner Mute Level under the following conditions. Under the other conditions than the followings, the Tuner Mute Level cannot be adjusted if the Tuner Mute Level Setup screen is shown.
The frequency shall have to be set before transferring to the TUNER MUTE LEVEL ADJUST screen.

Audio Source	: Tuner
LOUD	: OFF
Volume	: Step30
Frequency	: Default value of the set

Note that the frequency remains unchanged after exiting from the Setup screen at the completion of the setup.

4.6. Direct Select screen

Pressing the [Direct Select] key on the Test Mode Main screen allows the screen to transfer to the normal GUI screen.
This time, the system transfers to the Source Direct Select screen, on which nine [Source] keys are displayed.

4.7. Touch Adjust screen

Fine-tune the variations of touch feeling in of each set.
Touch 4 markers one by one, and the adjustment is completed when the “Write OK” is shown on the screen.
If the “Write NG” is shown, transfer to the Test mode again to re-start the adjustment from the first step.
The Touch Adjust screen is shown in Figure 4.7.

TEST MODE

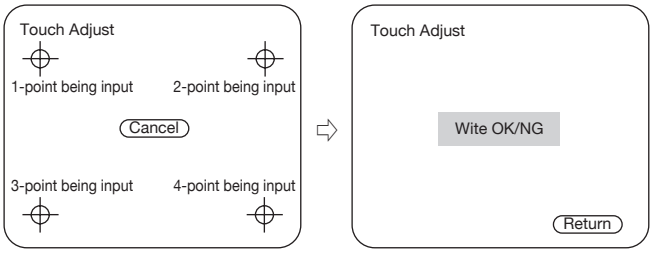


Figure 4.7 Touch Adjust screen

Key Specification

Cancel: When the Cancel button is pressed while entering the 1st point, the system transfers to the Test Mode Main screen.
When the Cancel button is pressed while entering the other point than the 2nd point, the system transfers to the status to enter the 1st point.

Return : Transfer to Test Mode Main screen

4.8. HPOSI Adjust screen

Adjust horizontal position of each screen.
The screen shall be transferred like; “Graphic→NAVI”.
Graphic and NAVI of DNX are used in the adjustment of Dot FREQ/Dot Phase. The HPOSI Adjust screen is shown in Figure 4.8.

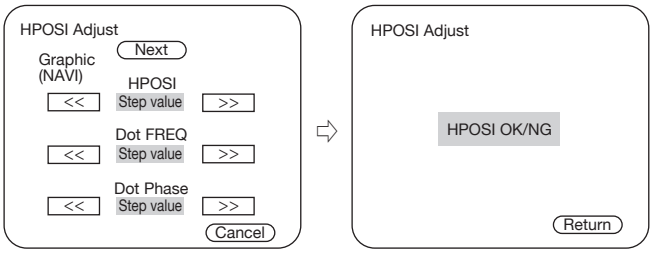


Figure 4.8 HPOSI Adjust screen

Key Specification

Next : Transfer to the next HPOSI Adjustment screen.
When the screen is the NAVI screen, start writing in the nonvolatile memory.

<< : Screen toward the left.

>> : Screen toward the right.

Cancel: Transfer to Test Mode Main screen

Return : Transfer to Test Mode Main screen

If the “HPOSI NG” is displayed (i.e., in case of failure in writing data in the nonvolatile memory), re-enter in the Test Mode again to start over the adjustment.

4.9. iPod Authentication Chip Confirmation screen

Check communication for iPod authentication.
The iPod Authentication Chip Confirmation screen is displayed in Figure 4.9.

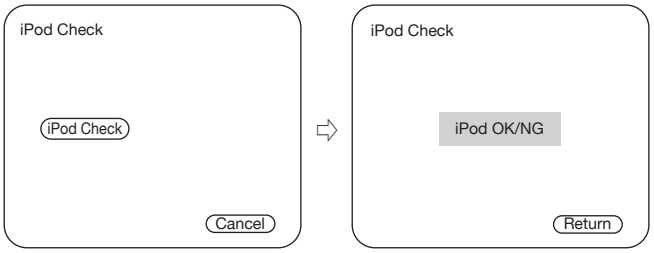


Figure 4.9 iPod Authentication Chip Confirmation screen

Key Specification

iPod Check : Start checking communication for iPod authentication.

Cancel, Return: Transfer to Test Mode Main screen

4.10. Auto Adjust screen

Carry out the automatic adjustment of Chroma / Mstar.
The contents displayed on the Auto Adjust screen are shown in Figure 4.10.

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

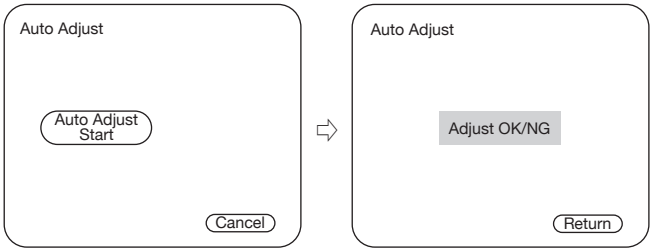


Figure 4.10 Auto Adjust screen

Key Specification

Auto Adjust Start: Start automatic adjustment.

Cancel, Return : Transfer to Test Mode Main screen

4.11. Inverter Confirmation screen

Change the inverter frequency.
The Inverter Confirmation screen is displayed in Figure 4.11.

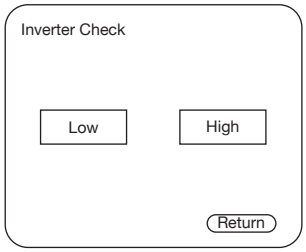


Figure 4.11 Inverter Confirmation screen

Key Specification

Low : Set the inverter frequency at Low level.

High : Set the inverter frequency at High level.

Return : Transfer to Test Mode Main screen

TEST MODE

4.12. Tilt Mecha Position Adjust screen

Adjust the panel mechanism position from this screen.
The Tilt Mecha Position Adjust screen is displayed in Figure 4.12.

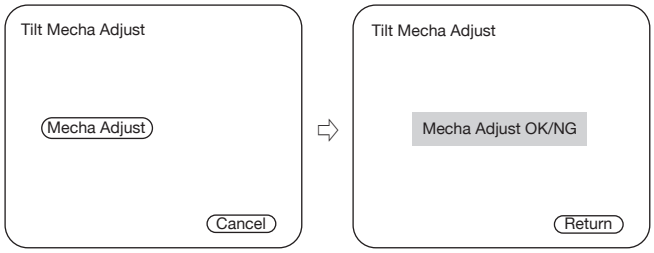


Figure 4.12 Tilt Mecha Position Adjust screen

Key Specification

Mecha Adjust	: Start adjusting the mechanism position.
Cancel	: Transfer to Test Mode Main screen.
Return	: Transfer to Test Mode Main screen.

If the “Mecha Adjust NG” is displayed (i.e., in case of failure in writing data in the nonvolatile memory), re-enter in the Test Mode again to start over the adjustment.
The “NG” is displayed when the status is in any one of the following conditions: (When the “NG” is displayed, no data is written in the nonvolatile memory.)

Failure in writing data in nonvolatile memory
When the voltage acquired is 0.177V or higher in the Open condition
When the voltage acquired is lower than 2.746V or it is higher than 2.888V in the Close condition

Note: In case of “NG”, check if the mechanism position adjustment jig is properly installed or not, and then transfer to the Test mode again to start over the adjustment.

4.13. Bluetooth Confirmation screen (only in Mid model)

Perform LOOPBAK test with the other Bluetooth device in the line.
The Bluetooth Confirmation screen is displayed in Figure 4.13.

- Detect other Bluetooth devices in the line with [Search] key (The detected devices are listed in the screen).
- Select one device that is used as a counterpart of the LOOPBACK test from the device list displayed on the screen. (The selected device is highlighted with the different color from others.)
- Start the LOOPBACK test when “Complete” is displayed in the stats display area.
- After the completion of the LOOPBACK test, press [Clear] key to initialize the flash memory and to set “0000” in PIN Code. The “OK” indicates the completion of the test. “NG” indicates that you have to enter in the Test mode again to start over the test.
- After the completion of the initialization, [Device Name] key is inactive and invalid. Return to the Test Mode Main screen again if the re-adjustment is needed.

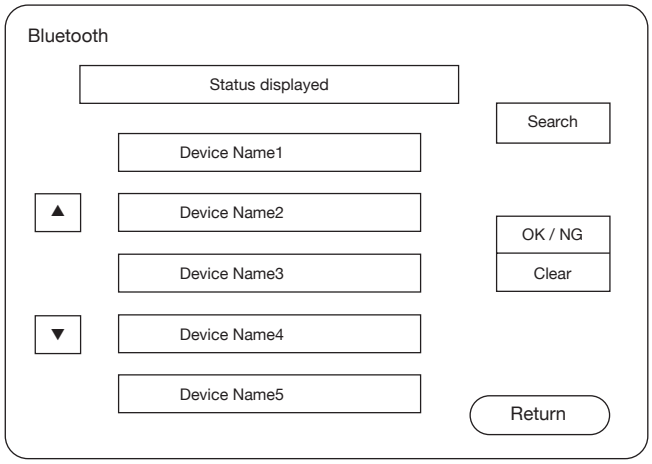


Figure 4.13 Bluetooth Confirmation screen

Key Specification

Search	: Search Bluetooth device.
▲▼	: Use this key to scroll the device list when there are more than 5 devices found.
Device Name	: Connect to the selected device (and then start the LOOPBACK test after the completion of the connection).
Clear	: Initialize the flash memory and to set “0000” in PIN Code.
Return	: Transfer to the Test Mode Main screen.

Status display specification

Searching	: Indicate the status in which Bluetooth devices are being searched.
Complete	: Indicate the status that is ready to start the LOOPBACK test after the completion of the connection with the device.
Connect NG	: If the connection with the device is failed, select a device again and try to make the connection with it.

4.14. Parrot Check screen (only in Mid model)

The Parrot check screen is displayed in Figure 4.14.

TEST MODE

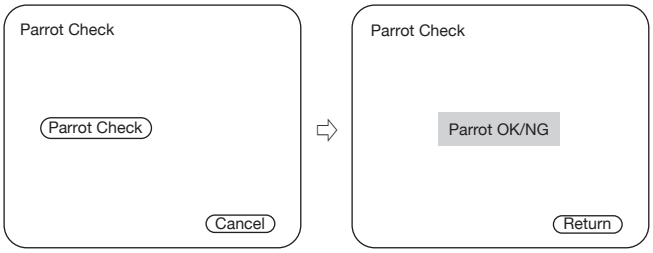


Figure 4.14 Parrot Check screen

Key Specification

Parrot Check : Start Parrot check.
Cancel : Transfer to Test Mode Main screen.
Return : Transfer to Test Mode Main screen.

5. Functional specification

This section describes the test mode specification in each function.

5.1. Display

In the Test mode, the display is exclusively used for the test but screens for Source Control, Audio Control and Setup are same as those that are normally used.
The system shows the touch position (+). However, it is not shown in the Touch Adjust screen (under adjustment).

5.2. Key

The hard key specification is listed in Table 5.2. (Note that the keys that are not listed in the table have conventional functions.)

Key	Function
ATT	Motor driver

Table 5.2 Hard key

Mode Description	Setting
Test Mode	SRC+ATT+Reset
Span switching	SRC + VOL.DW + Reset
DC Offset/Service/Memory Other Clear	SRC+FNC+Reset
Retailer mode: ON	EJECT + VOL.DW + Reset
Retailer mode: OFF	SRC+Reset
RDS test drive mode	EJECT+ATT+Reset
Opening screen re-write mode	EJECT + FNC + Reset

(Reference) Specification for Key Function when multiple keys are pressed

5.3. Remote controller

The remote controller key specification is listed in Table 5.3. (Note that the keys that are not listed in the table have conventional functions.)

The mode of the remote controller shall be “AUDIO”.

Key	Function
FM	DVD video mode
AM	DVD audio mode
Tenkey0	Flicker Adjustment
Tenkey1	Tilt mechanism position adjustment
Tenkey2	DC Offset check
Tenkey3	V-IN (R-CAM) mirror mode switching
Tenkey5	Forced NAVI audio interruption
Tenkey6	Screen adjustment screen callout

Table 5.3 Remote Controller key

5.4. Video Control

In conjunction with the source, AV-OUT is also changed (Any AV-OUT can be accepted when the source is other than the followings).

Source: AV-IN → AV-OUT: AV-IN
Source: iPod → AV-OUT: iPod
Source: DVD → AV-OUT: DVD
Source: TV → AV-OUT: TV
Source: NAVI → AV-OUT: NAVI (DXN only)

5.5. Tuner

- When unable to access E2PROM, display Error (on the Tuner screen).
- K3I forced switching
  Forced to Narrow by pressing and hold Preset 4: xxx. x1MHz
  Forced to Middle by pressing and holding Preset 5: xxx. x2MHz
  Forced to Wide by pressing and holding Preset 6: xxx. x3MHz
- Switch Span (K↔M) with [SRC] key + [Vol.DW] key + [Reset] key.
  Span information is displayed on the Information screen.
- When RDS PS is “RDS_TEST” in the Tuner source, turn OFF P-CON.

5.6. TV Tuner

- In the case of destination E, the default value of TV1 shall be “Area 5 (Russia), 8ch (191.25MHz)” (when KTC-V500 is connected).
- In the case of destination E, the default value of TV1 shall be “Area 4 (Russia), 8ch (191.25MHz)” (when KTC-V300 is connected).

∗ If started up as above, even if the Test mode is cleared by ACC, Power OFF → ON, the setting values are maintained. (The default value is resumed by the Reset.)

TEST MODE

5.7. DVD

- Use CD media KTD-02A, DVD media TDV-540A/TTD-100 to play back in the order of the following sequence.
- Use “Title1-Chapter1” while Loading.
- Check CDDA (KTD-02A)
- Use “Track UP/DW” to play back in the order of sequence as shown below:
  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 5.7.1 and 5.7.2.
  Use FM/AM on the remote controller to change the video/audio check.

For DVD video checking.				
Title	Chapter			Audiostream
3	6	Level		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 5.7.1 DVD Video check

For DVD audio checking.				
Title	Chapter			Audiostream
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 5.7.2 DVD Audio check

5.8. Audio

- The default setting of Volume shall be Step 30.
- In setting up BAL/FAD, the setting “MIN ↔ CENT ↔ MAX” can be made by 1 click.
- In setting up Xover, the setting “MIN ↔ MAX” can be made by 1 click.
- In setting up Tone, the setting “MIN ↔ CENT ↔ MAX” can be made by 1 click.
- The default setting of Tone (EQ) shall be Flat.
- The default setting of System Q shall be Off.
- When there is Digital Out terminal, the setting shall be such that the output is always On.
- The default setting of Line Mute shall be On.

5.9. AV-IF

- The default setting of AV-IN Interruption shall be On.
- The default setting of R-CAM Interruption shall be On.
- Normally an interruption occurs when the R-CAM is detected.
- Reverse condition shall be always On.
- The default setting of SP for NAVI interruption shall be Front ALL.
- Use Tenkey 3 on the remote controller to change V-IN mirror mode.

5.10. Screen adjustment

- By pressing Tenkey 5 on the remote control on each video screen, each video screen’s Screen adjustment items are displayed.
- The default value is Center.1Items can move between “Full Down ↔ Center ↔ Full Up” by 1 click.
- The default value of Bright during illumination Off shall be MAX. (The Bright shall be Center during illumination On.)

5.11. BEEP

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

5.12. DC Offset

- DC Offset detection status (normal/error) clear
  By pressing the [DC Offset Clear] key in the Service screen, clear DC Offset detection information.
- DC Offset detection information is displayed on the Information screen/Service screen.
- In the Test mode, even if DC Offset is detected, it is not written into the nonvolatile memory.
  However, the detection operation shall be carried out and when the DC Offset is detected, the Protect shall be displayed and it becomes all CH Mute operation.
- Volume setting can be changed to the following settings by pressing Tenkey 2 on the remote controller.
  Source : DVD
  Assigned DISC : KTD-02A
  Assigned Track : 15 (20Hz, 0dB)
  Assigned VOL : 26 Step

TEST MODE

5.13. Flicker adjustment

① Use Tenkey 0 on the remote controller to turn the Flicker adjustment On.
② Make the screen mode FULL, and set the monitor video to VIDEO.
③ Press Tenkey 0 on the remote controller during the flicker adjustment to turn the adjustment Off.
④ When the screen mode/monitor video has been changed to Flicker adjustment, it shall be remained as it is after the Flicker adjustment is turned Off.

5.14. Panel Mechanism

- Touch operations shall be available even when the Tilt mechanism is in the Full Open condition.

5.15. Driver for Panel Mechanism Motor

- With the condition when [ATT] key is pressed and hold, the driver port for motor shall be turned On.
- While [ATT] key is being pressed, the motor is turned On in reverse direction when the key is On for the first time and the motor is stopped when the key is Off.
- With the key is pressed On for the second time, the motor is tuned On in the normal (forward) direction, and the motor is stopped when the key is Off. Repeat the same steps in the succeeding procedure.

5.16. Clearing E2PROM contents

- Clear the E2PROM contents which should not remain in it when shipping the unit.
  Clear the contents of E2PROM with “[SRC] key + [FNC] key + [Reset] key”.
  Clear OK: Turn off SI. (Except SI, all of the others shall be as they are in normal.)
  Clear NG: Boot up normally.
  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 correction / Mechanism position adjustment
  Mstar adjustment / DC Offset information / Memory function / Retailer mode information / Service information

Note: Since the above data is cleared (un-defined) when the E2PROM has been replaced during the service, it is required to re-adjust the data in the Test mode.

5.17. Security Code writing-in

- When entering the Security Code that is defined as a pair of the serial number of the product (for other destinations than K/R), use [Security Setup] key on the Setup screen to call the Security screen.
- Only when the Security Code of E2PROM of the product for other destinations than K/R is blank, [Set] key is shown and press that key.
- In the Security Code Writing screen, run the same operation as when registering Security Code in normal mode, and press the [Enter] key to start writing.
  Note: The Security Code to be entered in the above step is the set-specific code linked to the serial No.
- Writing of the code is successfully completed when “Complete” is displayed, and if “NG” is displayed, the writing the code is unsuccessfully completed.
  Note: If “NG” is displayed, transfer to the Test mode again and repeat the above process from the 1st step.

5.18. 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 the unit is Reset or is powered on after the back-up OFF under the Security ON condition, the unit boots up from the Security Code Entry screen.
  ② Select Audio SW mode on the remote controller, and manually enter the code following the next procedure:
  Step 1: Enter "K" (Press Tenkey5 twice)
  Step 2: Enter "C" (Press Tenkey2 three times)
  Step 3: Enter "A" (Press Tenkey2 once)
  Step 4: Enter "R" (Press Tenkey7 three times)
  Note: On the other remote controller than that provided as an accessory, enter “R” by pressing Tenkey7 twice.
  When the entry is made improperly during the Steps 1~4, repeat the code entry from the Step 1 after entering other remote controller Key.
  ③ When the Security Code Entry screen is cleared, the Security Code clear is completed.

5.19. Other

- Do not operate the Back Up Memory function during the Test mode.

ADJUSTMENT

1. Flicker adjustment

● Condition

Video source: Video
Video: Luster white 30%~50%
BRIGHT: MAX
MODE: FULL

● 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 X35-494: VR200 and adjust to make the amplitude of the waveform to minimum.

Oscilloscope range: 20mV, 0.5mS

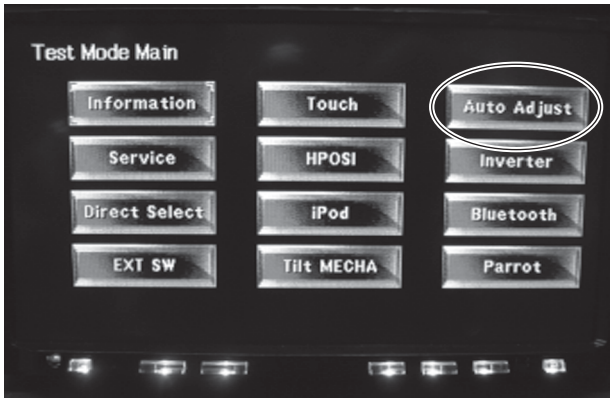
● Note

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 07 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 07 model, GND of the measurement equipment has been floated.

2. VCOM Amplitude and AGC and WB Automatic adjustments

● Adjustment Method

① Press Auto Adjust on the Test Mode Main screen.



② After the automatic adjustment, “Auto Set OK” will be shown to indicate the completion of the adjustment.

3. Adjustment of Horizontal display start position and pixel

● GRAPHIC Adjustment screen

① Proceed to the next Adjustment screen
② Screen Position Adjustment key
③ Display Range Adjustment key
④ Pixel Adjustment key
⑤ Return to the Menu screen
⑥ Screen Horizontal Position Adjustment OSD

① Screen position adjustment key (HPOSI): Adjustment of horizontal position from which the entire screen is displayed. (Default: 0)
② Display range adjustment key (DOT_FREQ): Adjustment of horizontal range in which the video is displayed. (Default: 64)
③ Pixel adjustment key (DOT_PHASE): Adjustment of horizontal position on which the pixel is displayed. (Default: 24)
In “DOT_PHASE” adjustment, do not set the value at 25 or larger but always set the value at lower than its default value (24).

Note: Make the adjustment in the order of sequence of the above number, ①, ②, and ③.

● Video image displayed on 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 or KNA-G520.
Note: Different adjustment screen is shown depending on what type (model) of NAVI is connected.

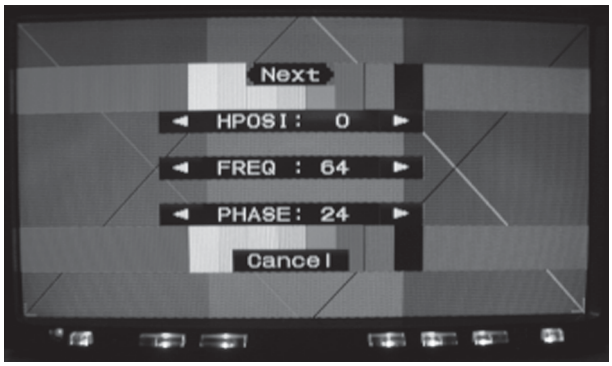
ADJUSTMENT

• DNX_NAVI Adjustment screen

Procedure to display NAVI Adjustment screen

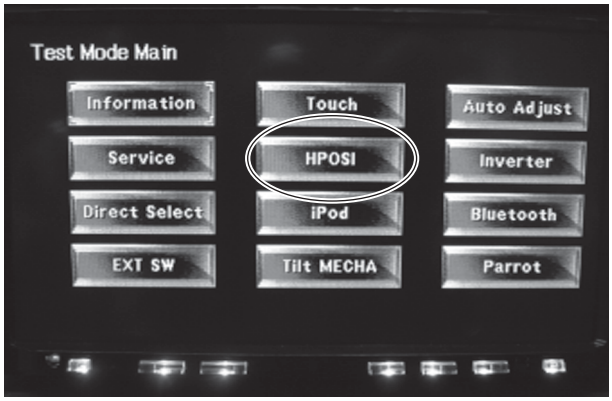
① Start the set.

② Connect special jig on MINI_USB of NAVI.



● Adjustment Procedure

① Press HPOSI on the Test Mode Main screen.



② Adjust 2 types of the display; Graphic and NAVI.

②-1: Graphic

• Screen Position Adjustment: GRAPHIC

Adjust the Screen Position Adjustment key so that the screen becomes horizontally symmetrical.

OK

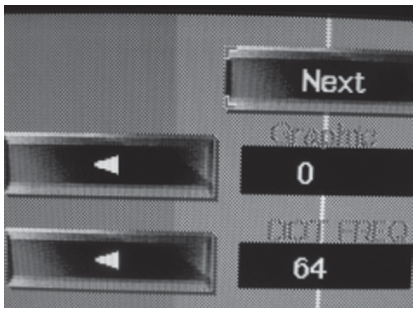
NG

• Display Range Adjustment: DOT FREQ

Adjust the Display Range Adjustment key so that there is no vertical black stripes (blur) on the screen.

OK

Enlarge OK



NG

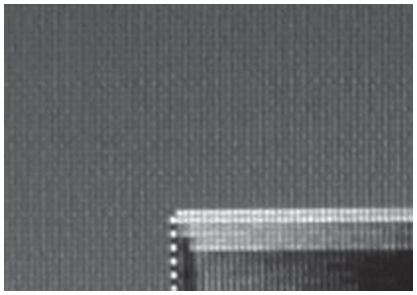
ADJUSTMENT

Enlarge NG

- Pixel Adjustment: DOT PHASE
  Adjust the Pixel Adjustment key so that the screen becomes gray.

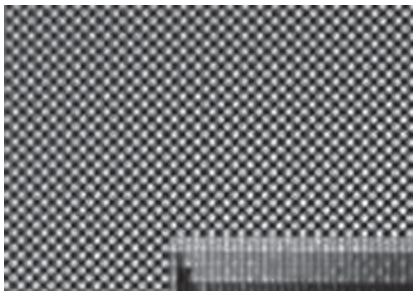
OK

Enlarge OK



NG

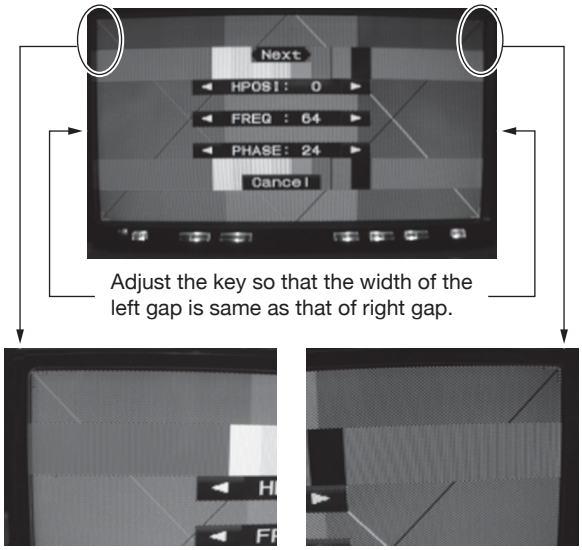
Enlarge NG



②-2-1: DNX_NAVI

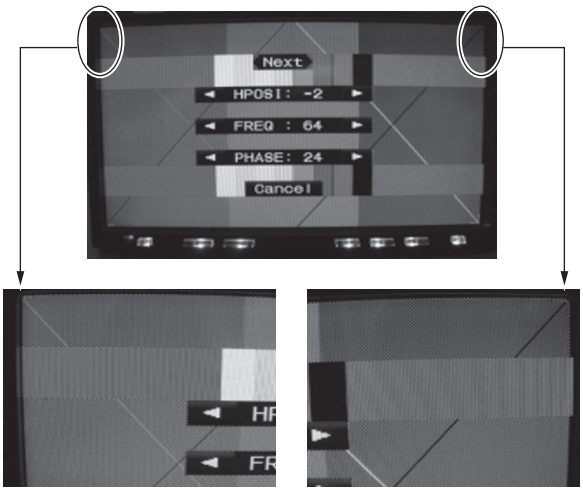
- Screen Position Adjustment: HPOSI
  Adjust the Screen Adjustment key so that the NAVI screen becomes horizontally symmetrical.

OK



Enlarge OK

NG



Enlarge NG

ADJUSTMENT

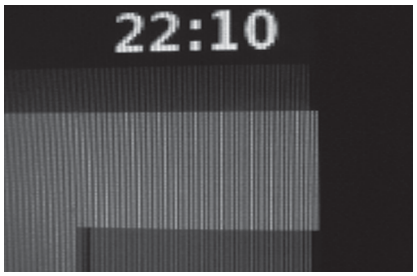
②-2-2: DDX_NAVI KNA-G520

Adjust the Screen Adjustment key so that the NAVI screen becomes horizontally symmetrical.

Adjust the key so that the width of the left gap is same as that of right gap.

Enlarge OK

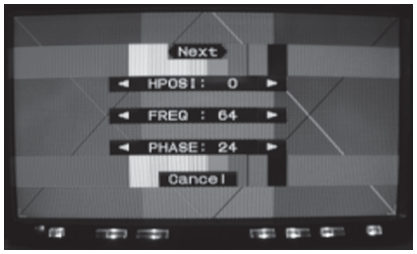
Enlarge OK



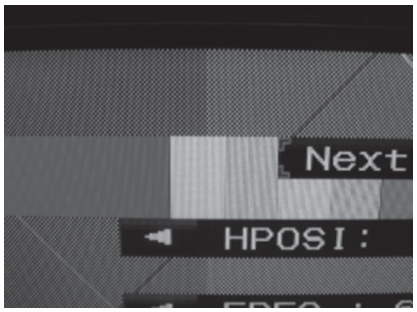
- Display Range Adjustment: FREQ

  Adjust the Display Range Adjustment key so that there is no vertical black stripes (blur) on the screen.

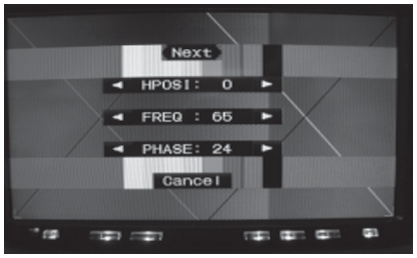
OK



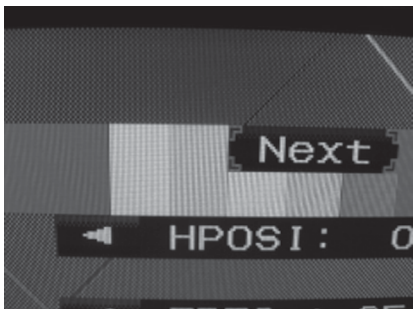
Enlarge OK



NG



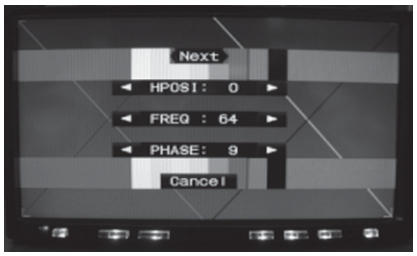
Enlarge NG



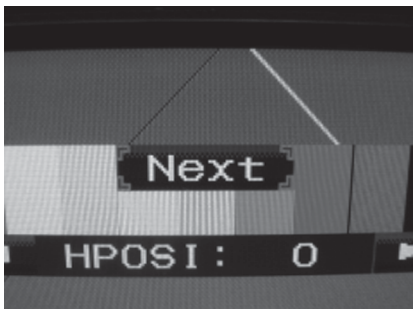
- Pixel Adjustment: PHASE

  Adjust the Pixel Adjustment key so that the screen becomes gray.

OK

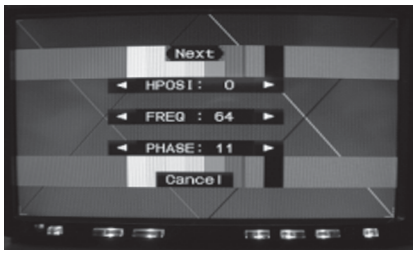


Enlarge OK

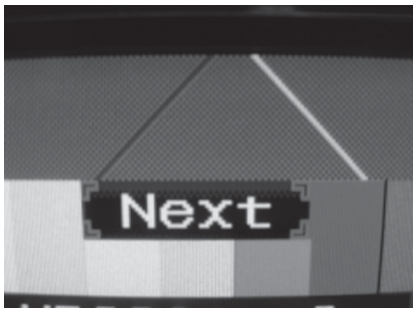


ADJUSTMENT

NG



Enlarge NG



● **Confirmation after the adjustment**

After the adjustment, confirm that the screen is horizontally symmetrical.

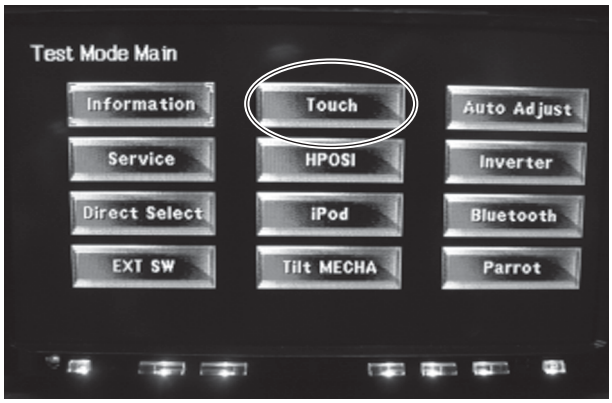
The "HPOSI OK" will be displayed to indicate the completion of the adjustment.

Note: Do not adjust HPOSI after the adjustment of DOT PHASE.

4. Touch panel adjustment

● **Adjustment procedure**

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



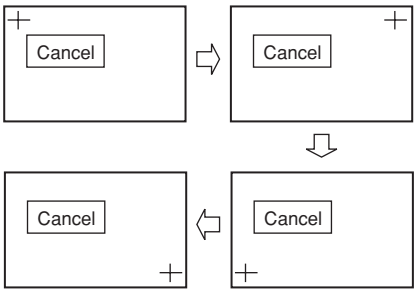
② Touch the center of "+" mark below in the following order.

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

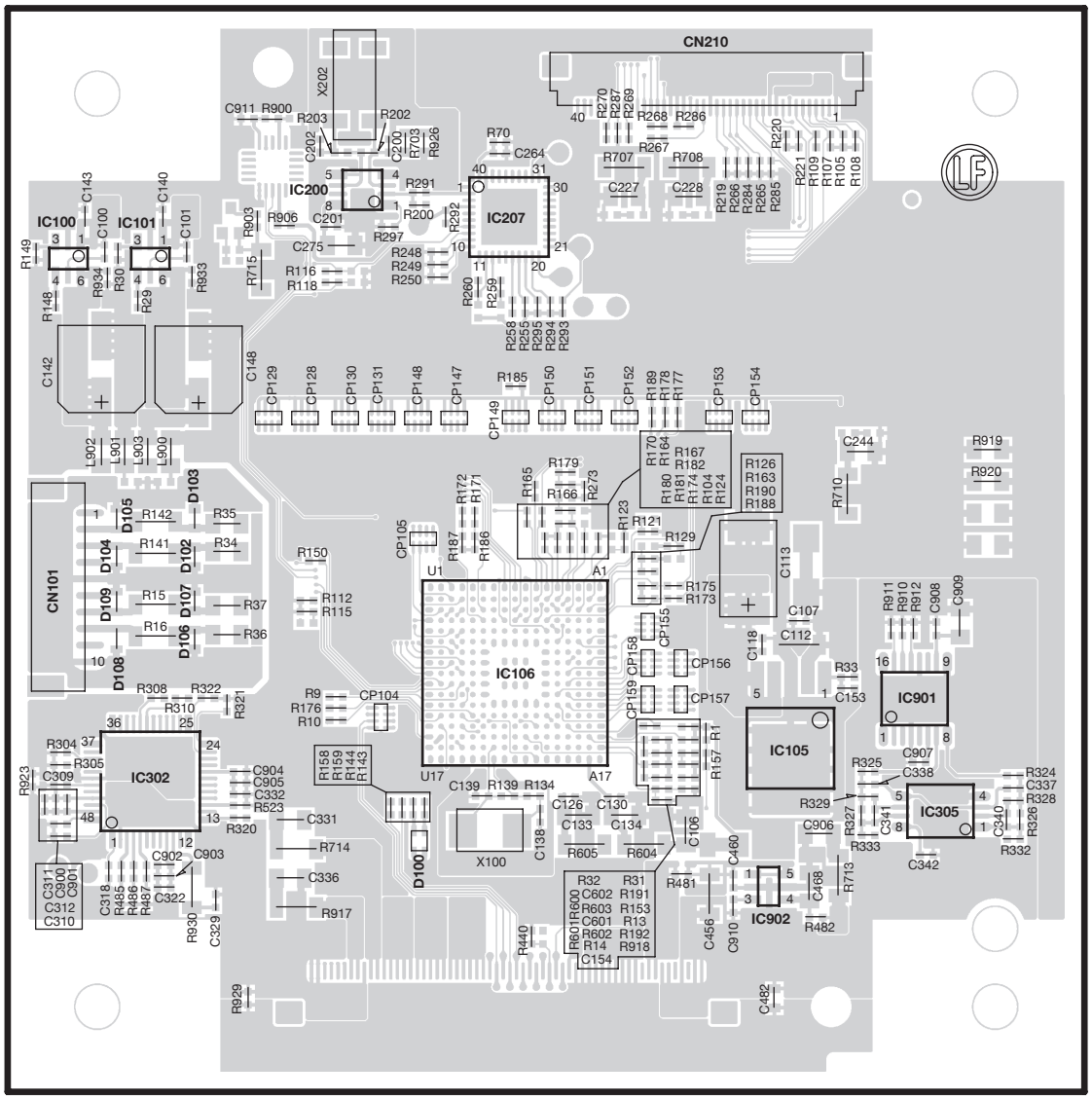
The touch panel adjustment data is finalized when the touch stick is released from the mark.

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.

PC BOARD (COMPONENT SIDE VIEW)

DIGITAL I/O UNIT X88-2030-11 (J76-0512-12)



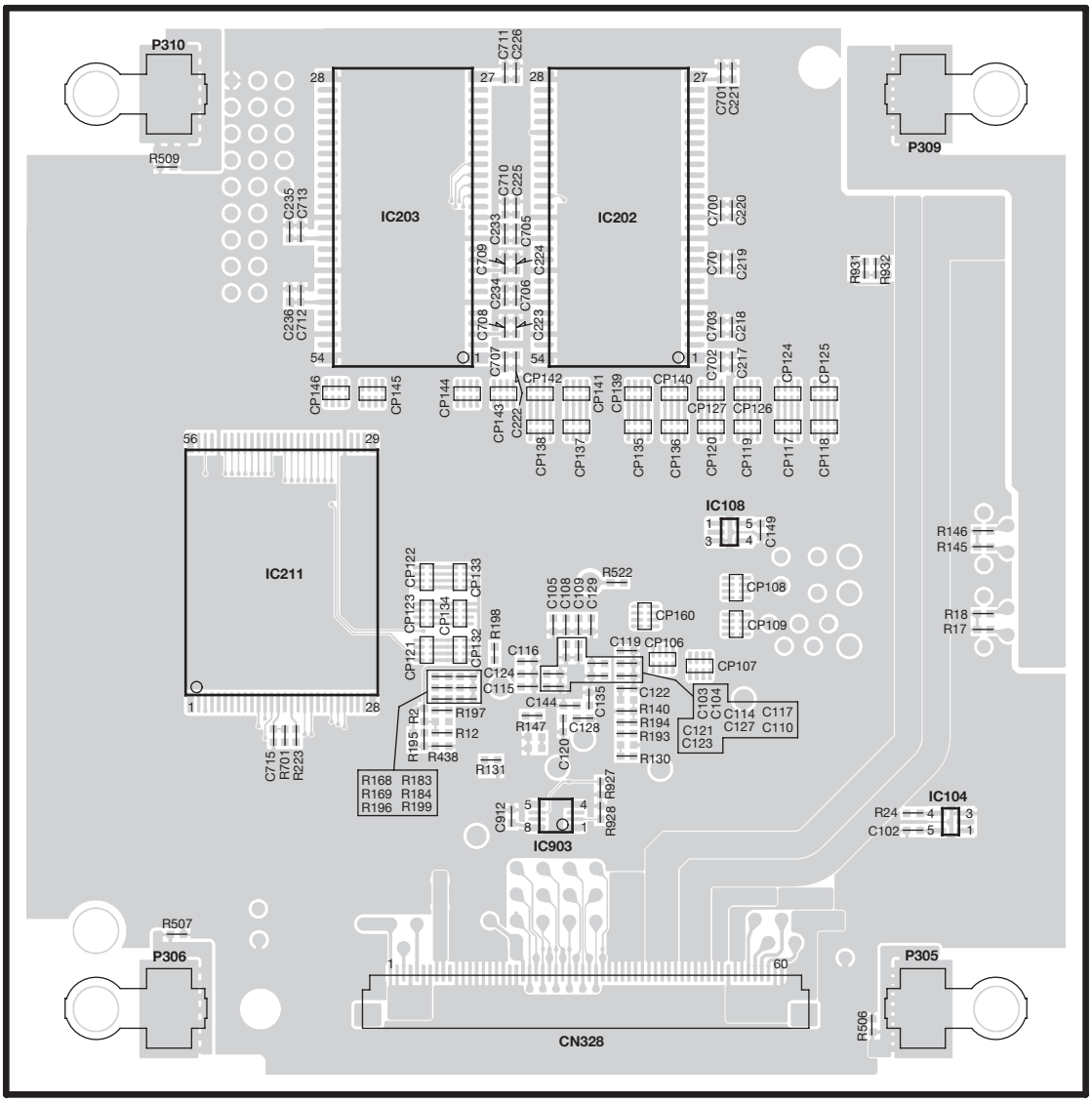
X88-2030-11

Ref. No.	Address
IC100	2B
IC105	4D
IC106	4C
IC200	2B
IC207	2C
IC302	4B
IC305	4E
IC901	4D
IC902	4D

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

PC BOARD (FOIL SIDE VIEW)

DIGITAL I/O UNIT X88-2030-11 (J76-0512-12)

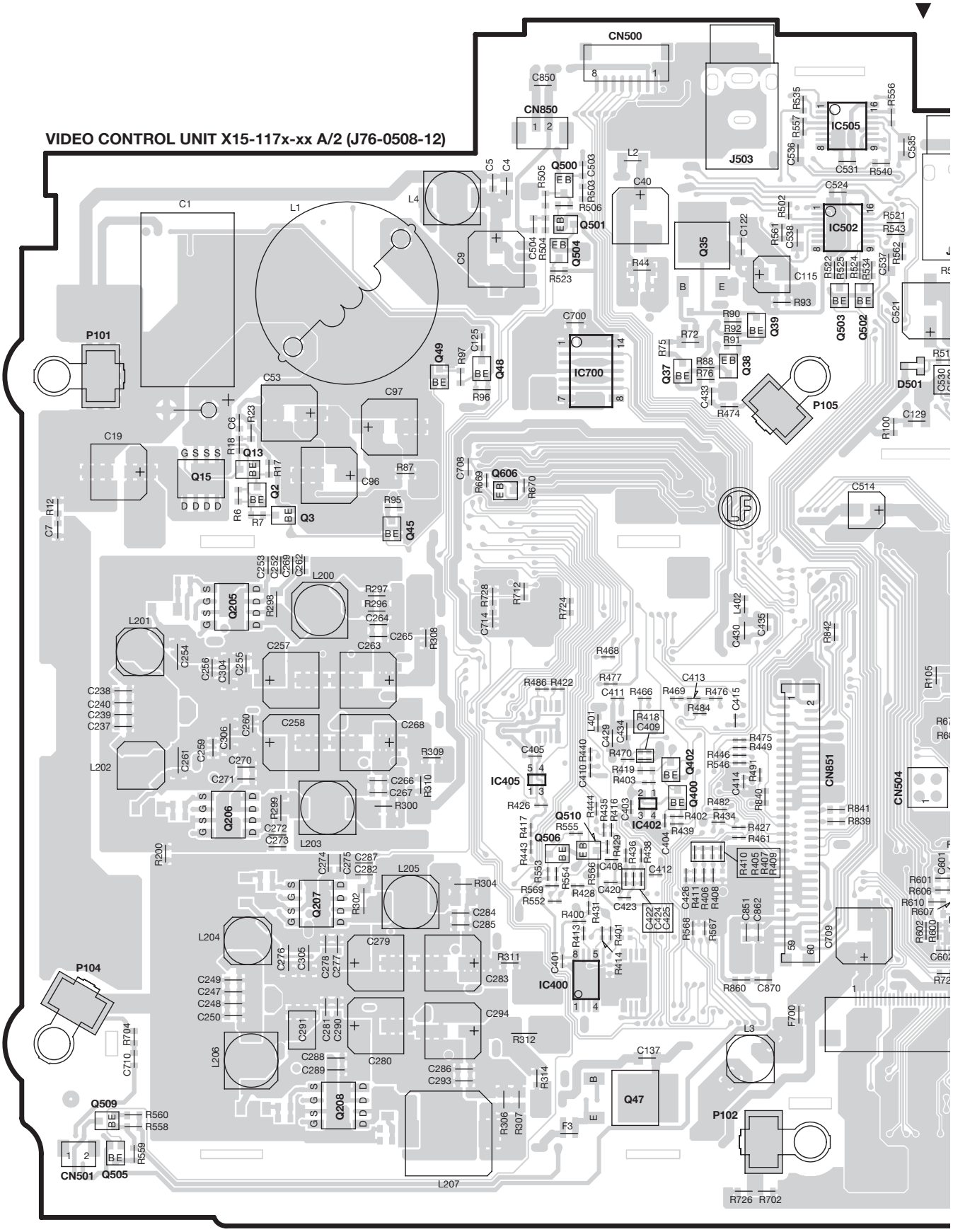


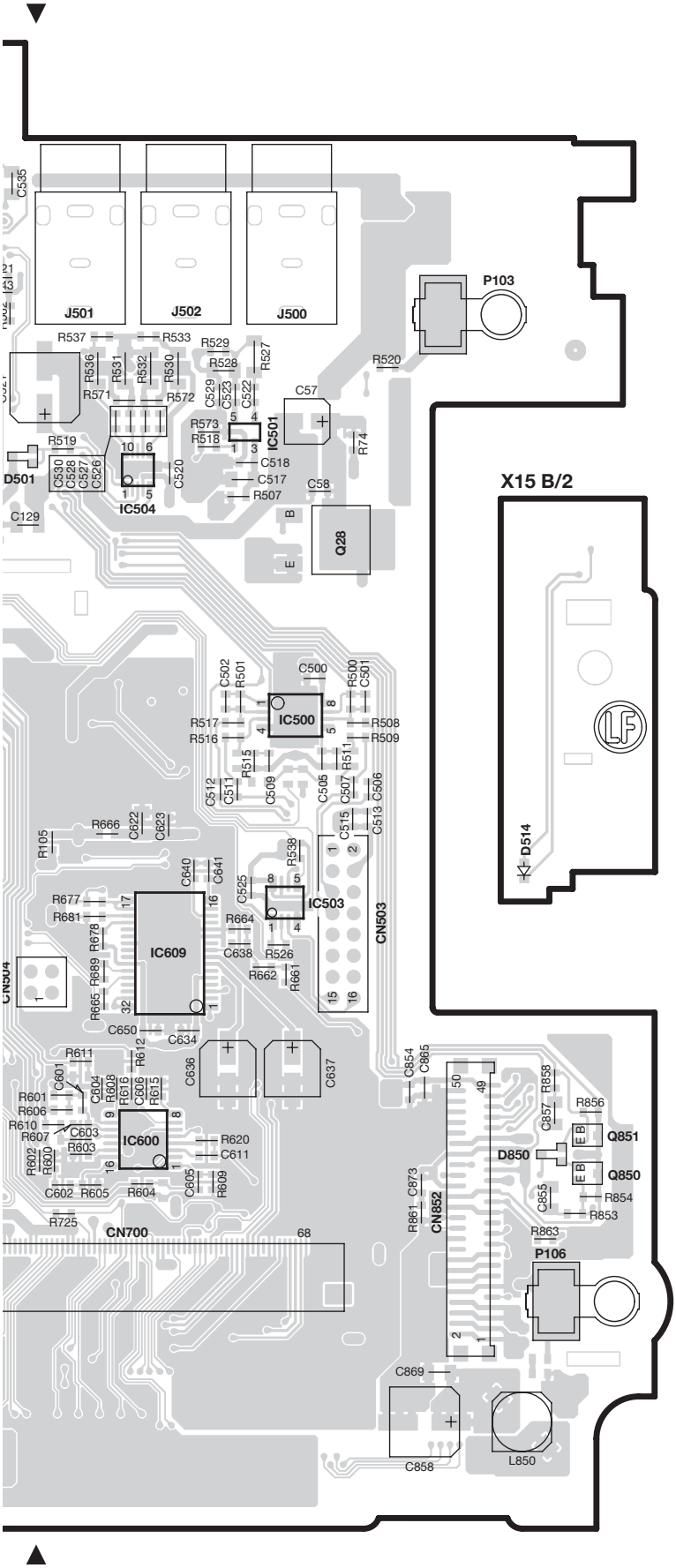
X88-2030-11

Ref. No.	Address
IC104	4I
IC108	3H
IC202	2H
IC203	2G
IC211	3G
IC903	4H

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

PC BOARD (COMPONENT SIDE VIEW)



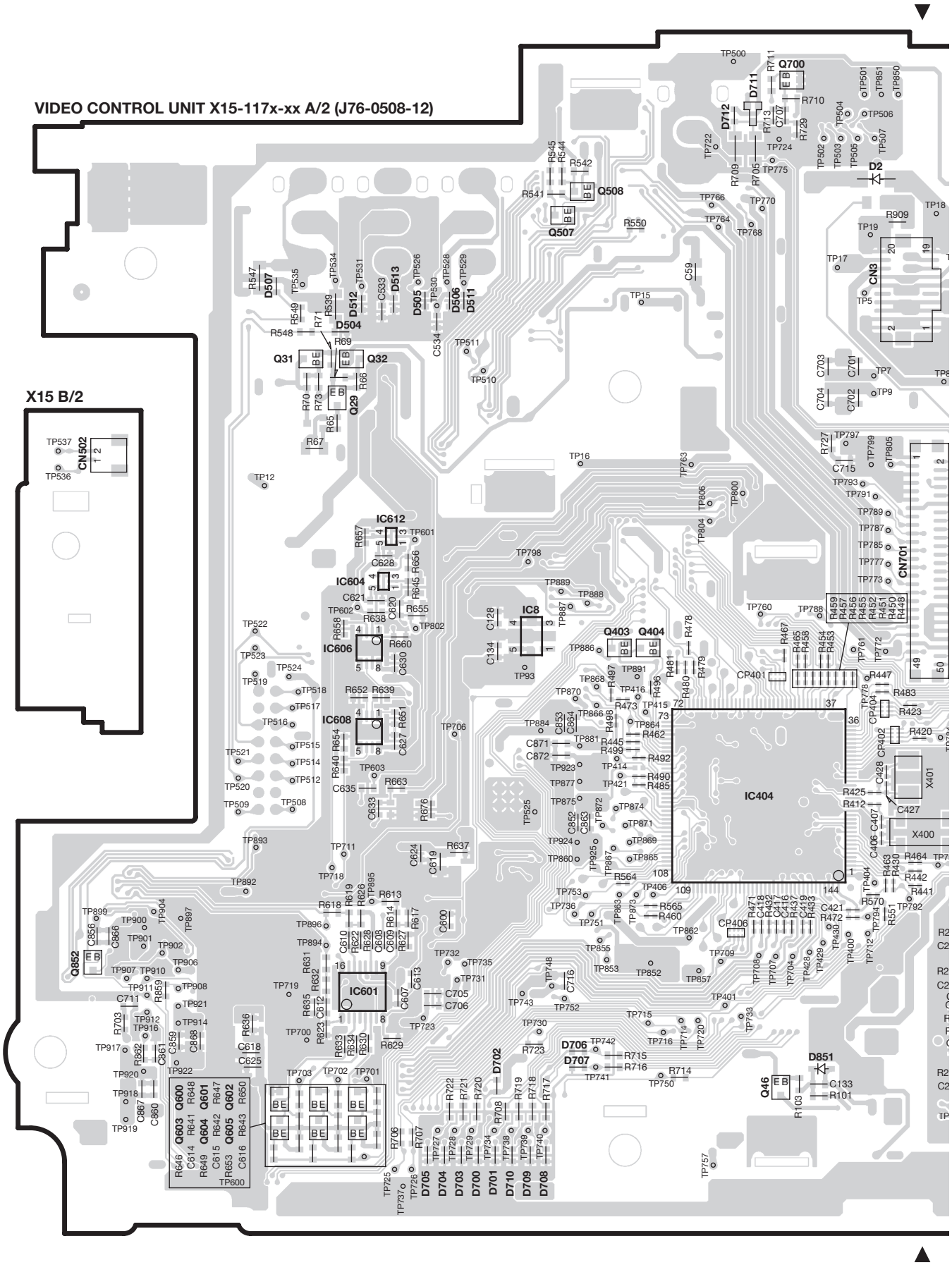


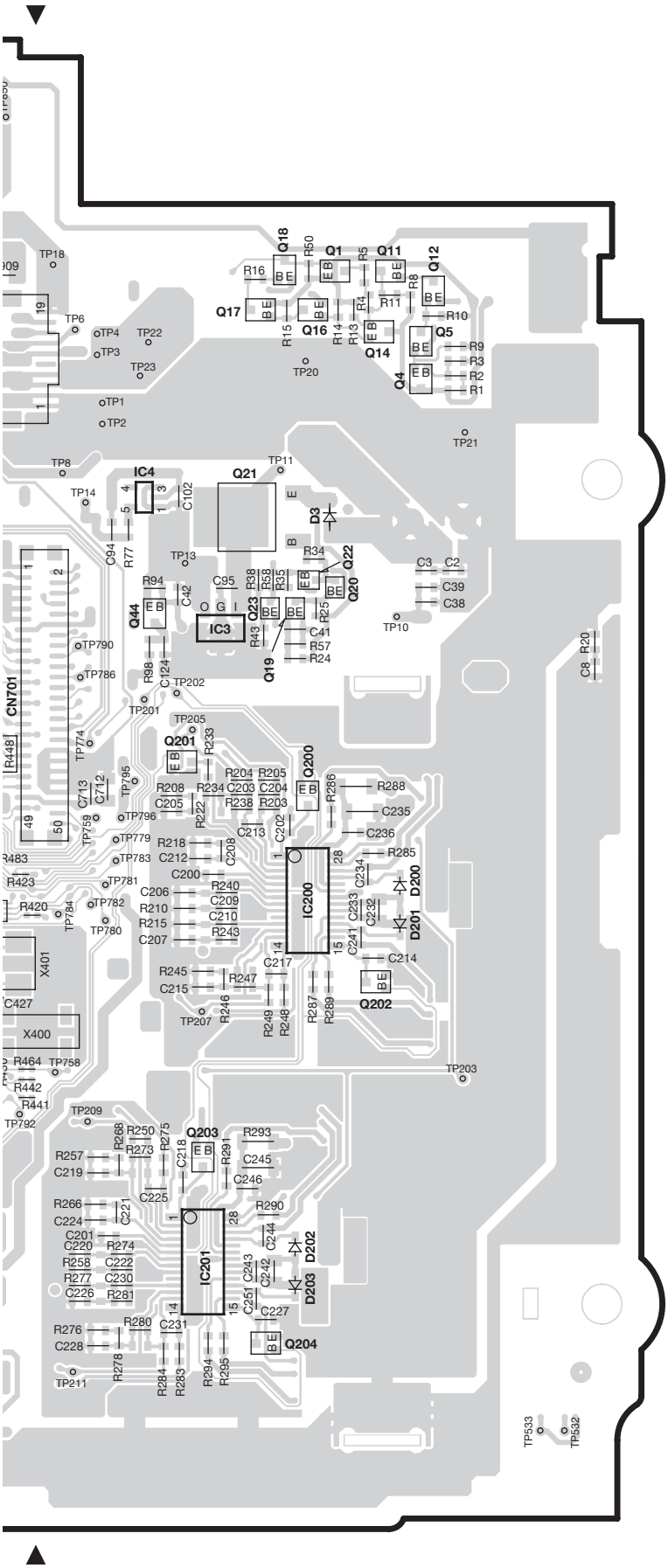
X15-117x-xx

Ref. No.	Address
IC400	6N
IC402	5N
IC405	5M
IC501	3Q
IC502	2O
IC504	3P
IC505	2O
IC600	5P
IC609	5P
IC700	3N
Q2	4L
Q3	4L
Q13	3L
Q15	3L
Q28	3Q
Q35	2N
Q37	3N
Q38	3O
Q39	3O
Q45	4M
Q47	6N
Q48	3M
Q49	3M
Q205	4L
Q206	5L
Q207	5L
Q208	6M
Q400	5N
Q402	5N
Q500	2N
Q501	2N
Q502	3O
Q503	3O
Q504	2N
Q505	7K
Q506	5N
Q509	6K
Q510	5N
Q606	3M
Q850	6R
Q851	5R

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

PC BOARD (FOIL SIDE VIEW)





X15-117x-xx

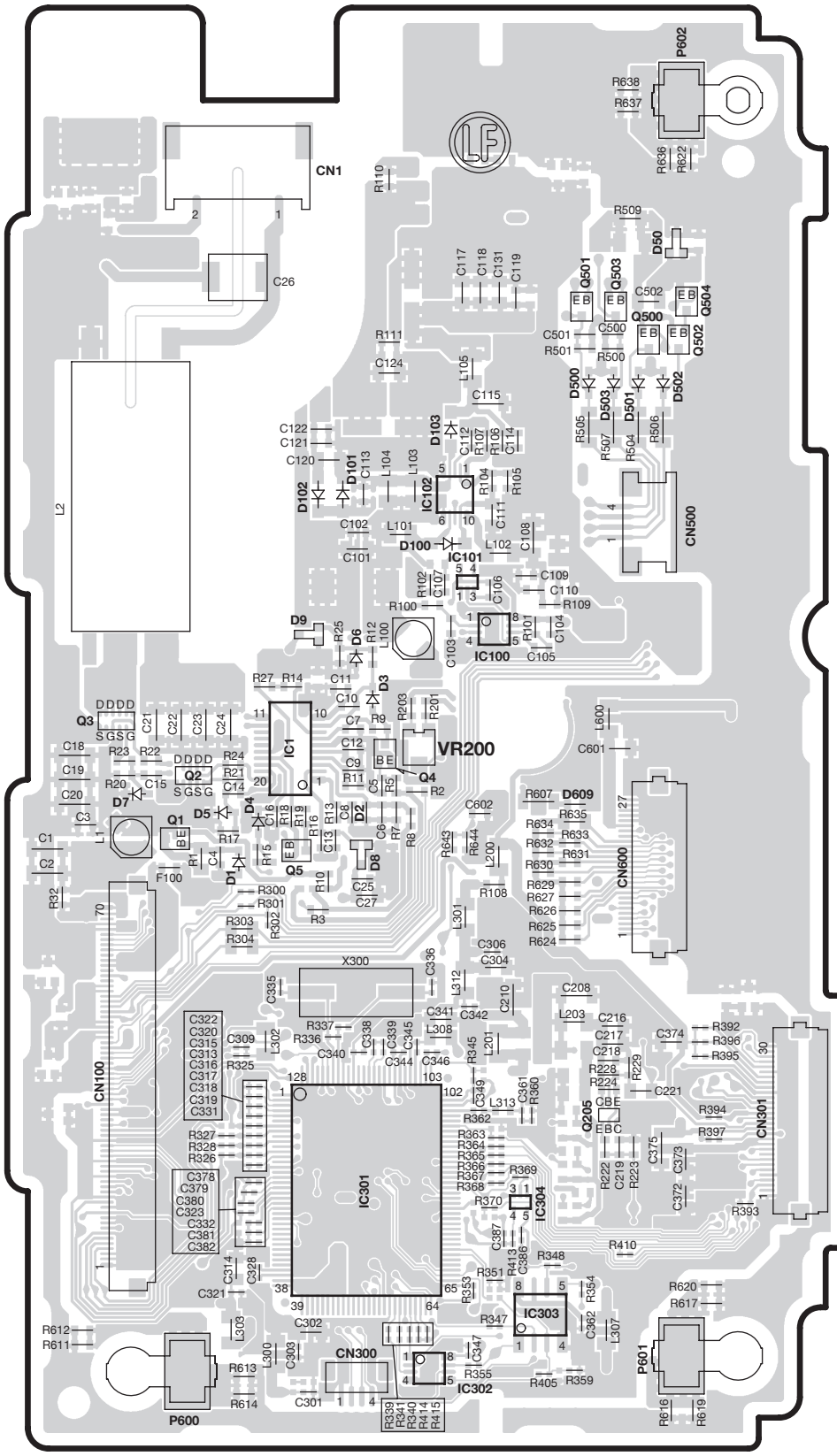
Ref. No.	Address
IC3	4Z
IC4	3Z
IC8	4W
IC200	5AA
IC201	6Z
IC404	5Y
IC601	6W
IC604	4W
IC606	4W
IC608	5W
IC612	4W
Q1	2AA
Q4	3AA
Q5	2AA
Q11	2AA
Q12	2AA
Q14	2AA
Q16	2AA
Q17	2Z
Q18	2AA
Q19	4AA
Q20	3AA
Q21	3Z
Q22	3AA
Q23	3Z
Q29	3W
Q31	3V
Q32	3W
Q44	3Z
Q46	6Y
Q200	4AA
Q201	4Z
Q202	5AA
Q203	5Z
Q204	6AA
Q403	4X
Q404	4X
Q507	2X
Q508	2X
Q600	6V
Q601	6V
Q602	6V
Q603	6V
Q604	6V
Q605	6V
Q700	1Y
Q852	6U

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

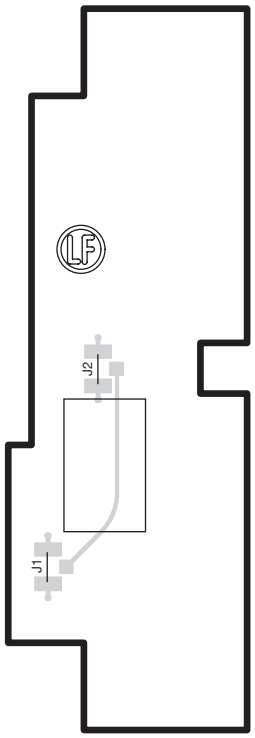
DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (COMPONENT SIDE VIEW)

VIDEO UNIT X35-4940-11 A/2 (J76-0511-12)



X35 B/2



X35-4940-11

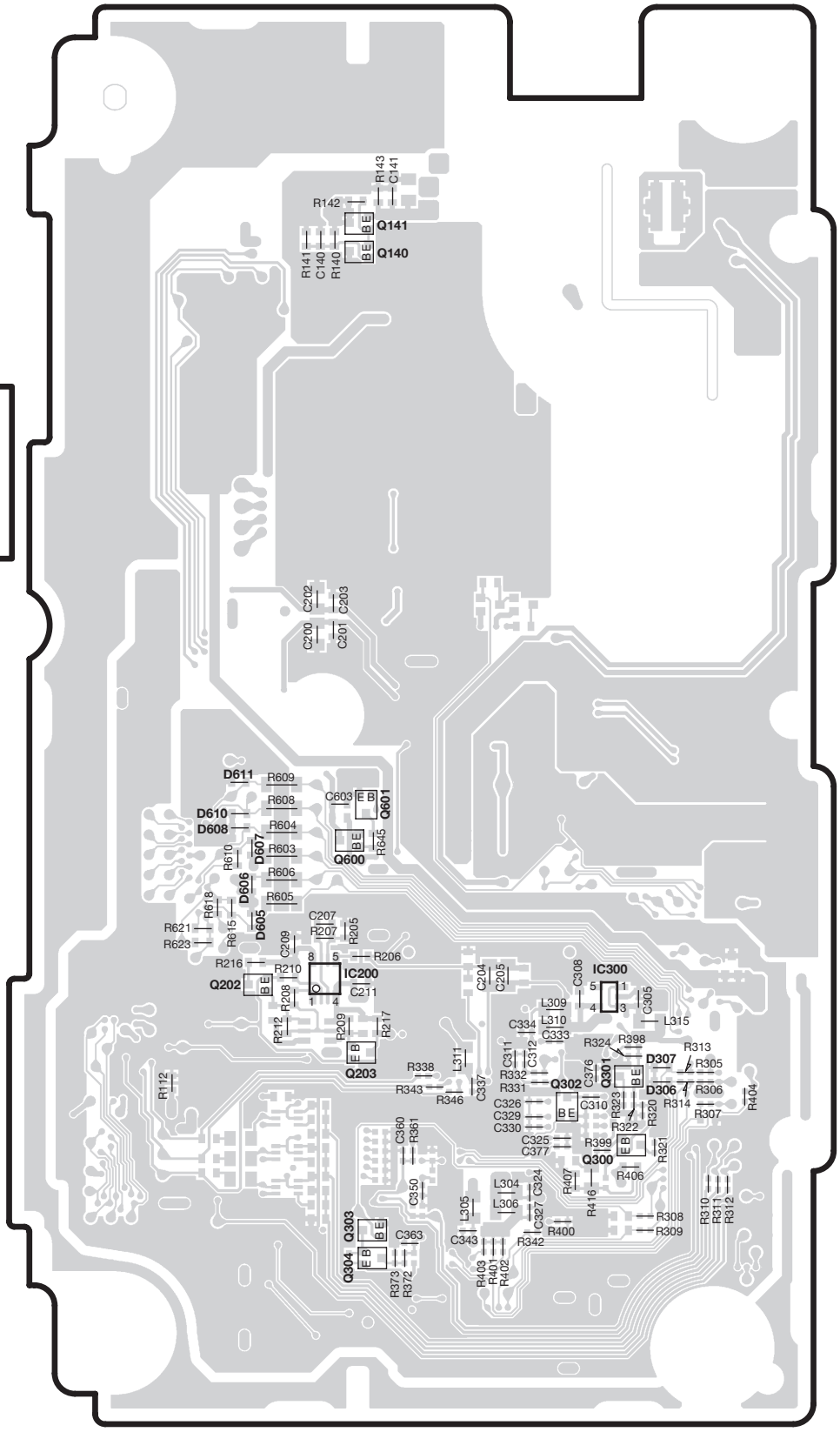
Ref. No.	Address
IC1	4AF
IC100	4AG
IC101	3AG
IC102	3AG
IC301	6AF
IC302	7AG
IC303	6AG
IC304	6AG
Q1	4AF
Q2	4AF
Q3	4AE
Q4	4AG
Q5	5AF
Q205	6AG
Q500	3AG
Q501	2AG
Q502	3AH
Q503	2AG
Q504	3AH

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

PC BOARD (FOIL SIDE VIEW)

X35 B/2

VIDEO UNIT X35-4940-11 A/2 (J76-0511-12)



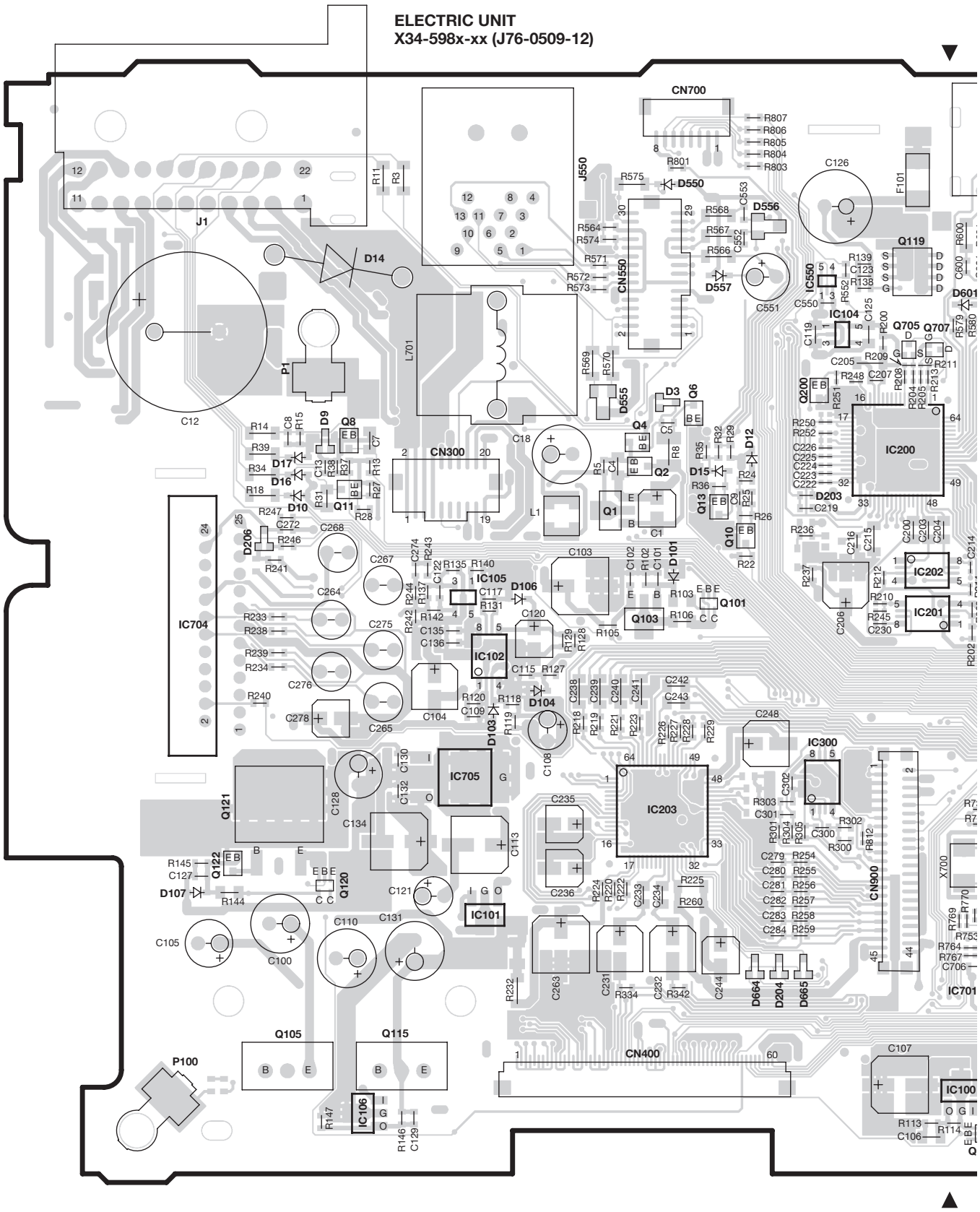
X35-4940-11

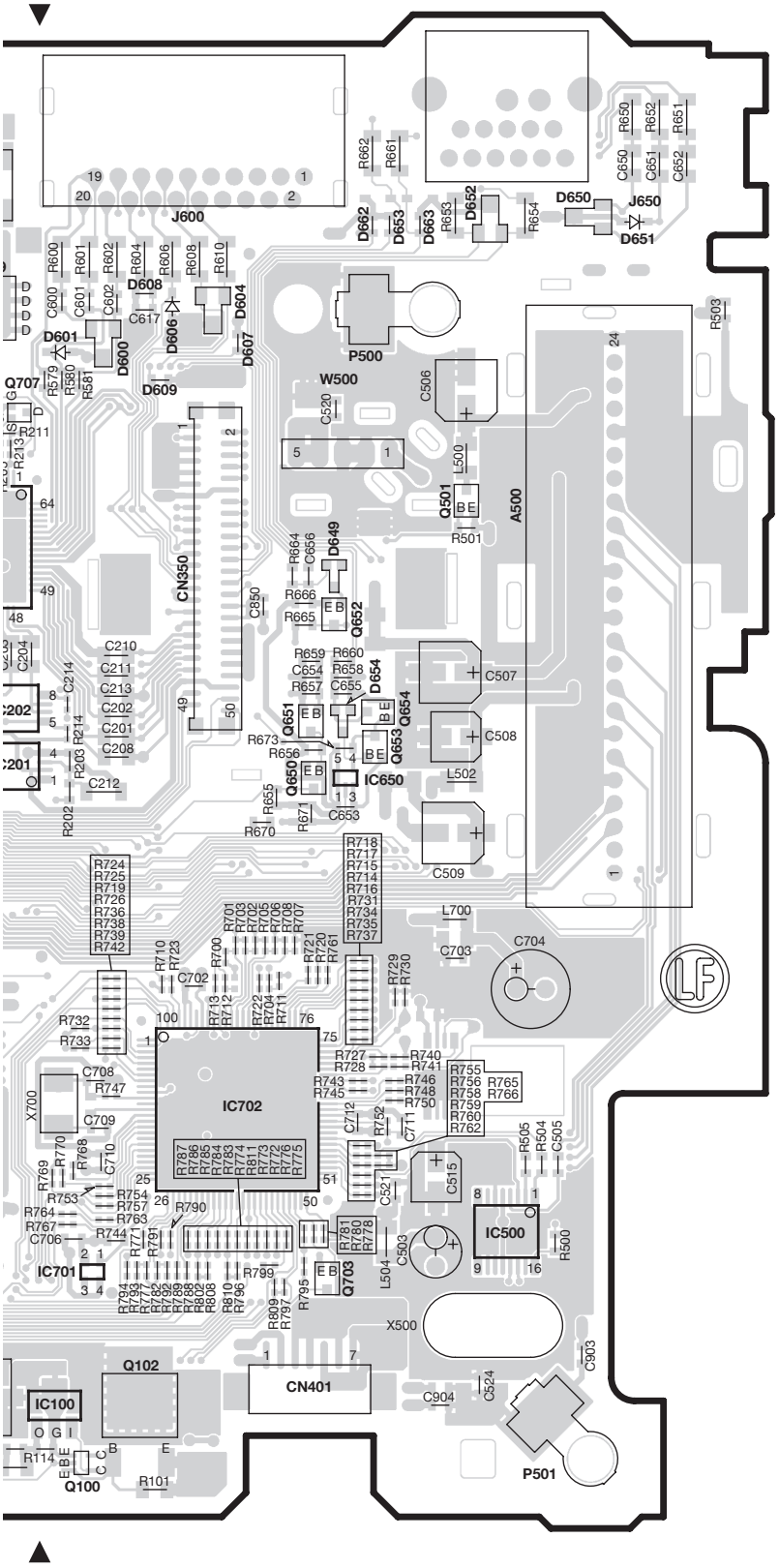
Ref. No.	Address
IC200	5AL
IC300	5AM
Q140	2AL
Q141	2AL
Q202	5AL
Q203	5AL
Q300	6AM
Q301	5AM
Q302	5AM
Q303	6AL
Q304	6AL
Q600	5AL
Q601	4AL

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

DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (COMPONENT SIDE VIEW)

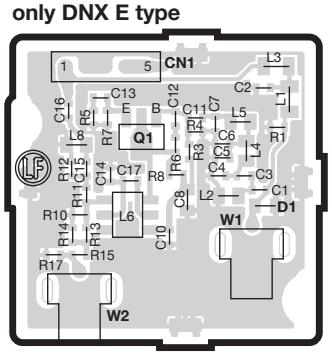




X34-598x-xx

Ref. No.	Address
IC101	5AQ
IC104	3AS
IC106	6AQ
IC200	3AS
IC201	4AS
IC203	5AR
IC500	6AU
IC550	3AS
IC650	4AU
IC701	6AT
IC702	5AT
IC704	4AP
Q1	4AR
Q2	3AR
Q4	3AR
Q6	3AR
Q8	3AQ
Q10	4AR
Q11	4AQ
Q13	4AR
Q105	6AP
Q115	6AQ
Q119	2AS
Q200	3AS
Q501	3AU
Q650	4AU
Q651	4AU
Q652	4AU
Q653	4AU
Q654	4AU
Q703	6AU
Q705	3AS
Q707	3AS

DAUGHTER UNIT
X89-3062-71 (J76-0526-12)
only DNX E type



X89-3062-71

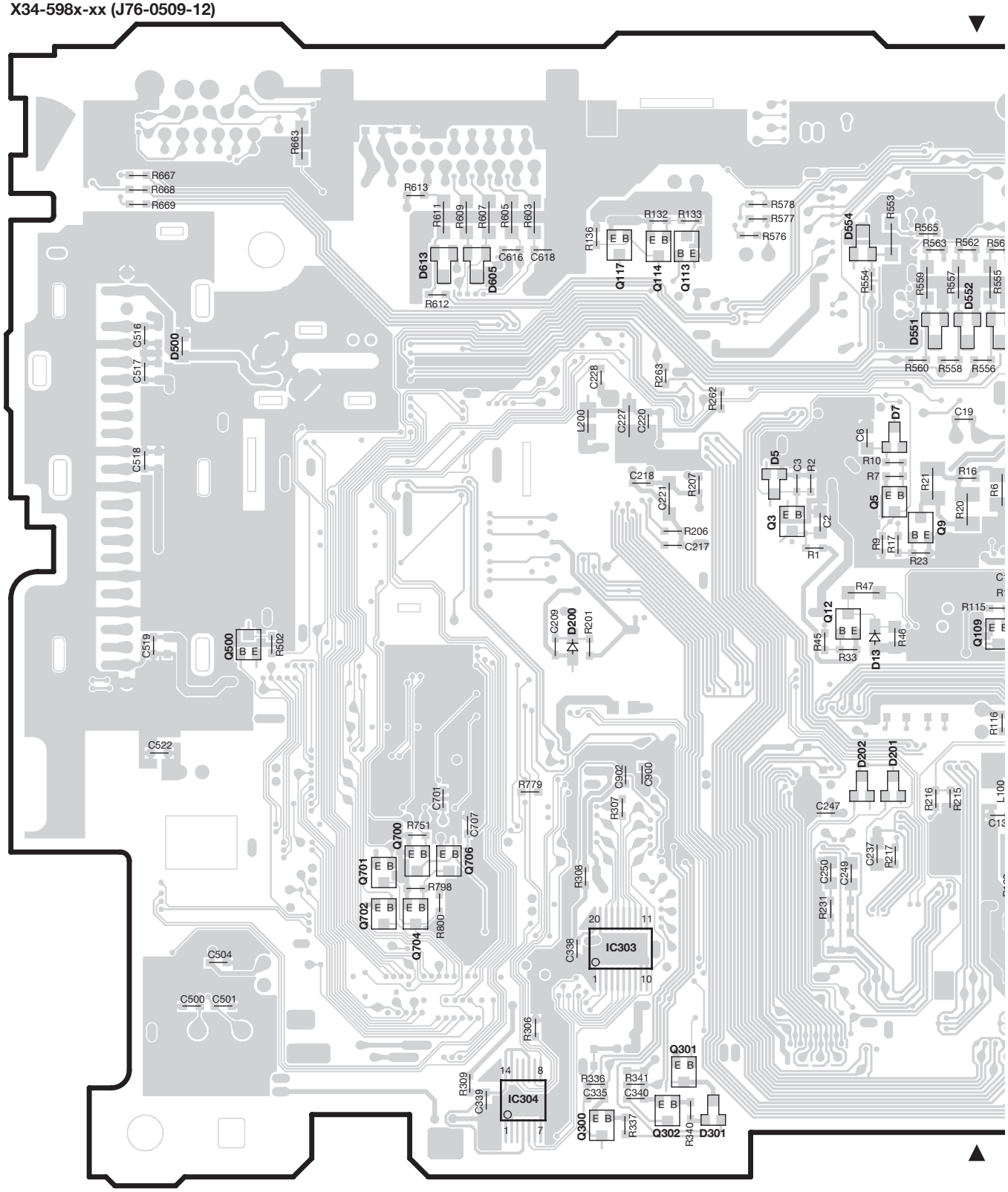
Ref. No.	Address
Q1	6AW

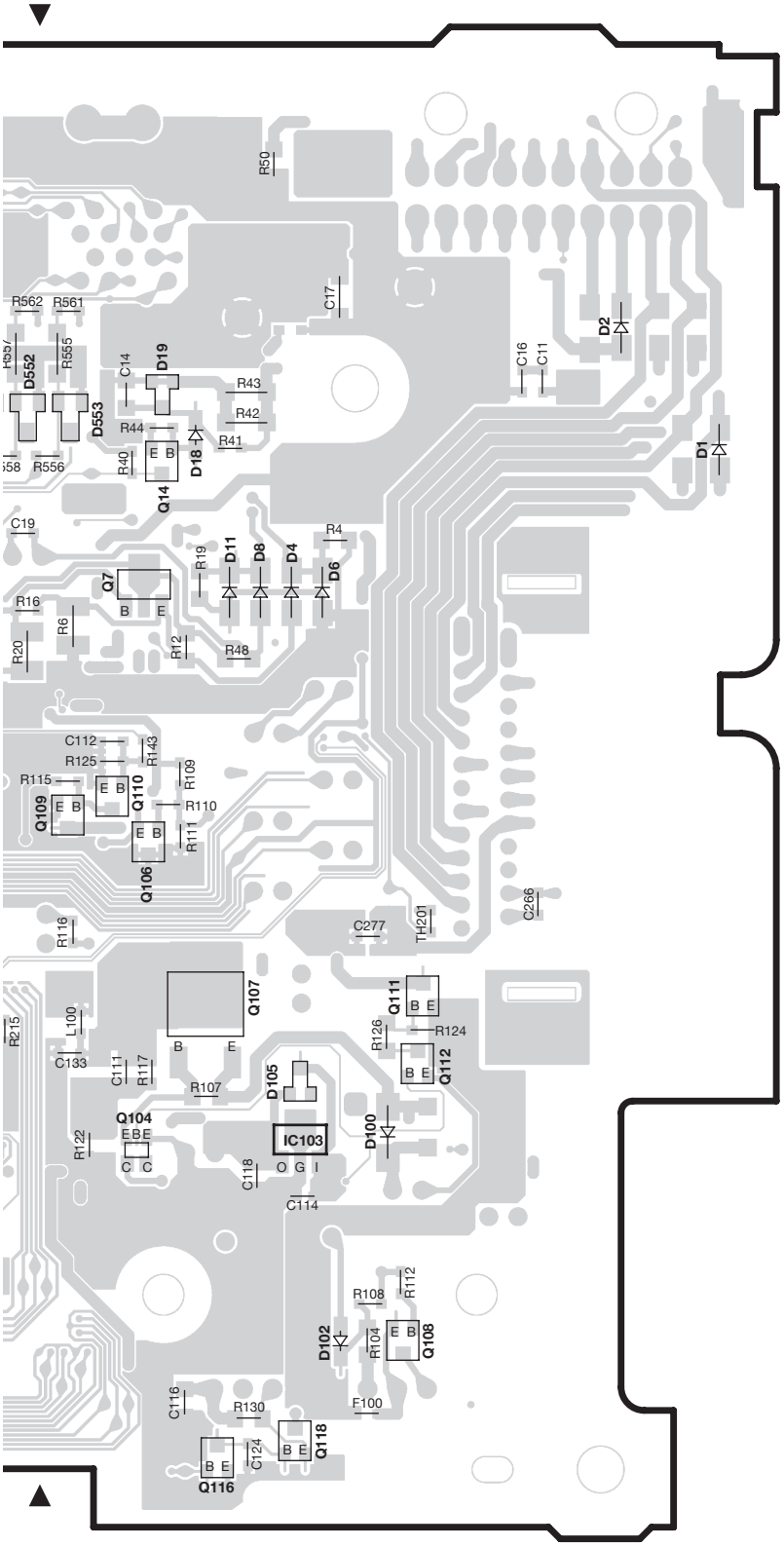
Refer to the schematic diagram for the values of resistors and capacitors.

DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT
X34-598x-xx (J76-0509-12)

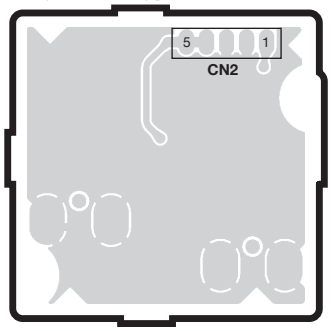




X34-598x-xx

Ref. No.	Address
IC103	5BE
Q3	4BB
Q5	4BC
Q7	3BD
Q9	4BC
Q14	3BD
Q104	5BD
Q107	5BD
Q108	6BE
Q111	5BE
Q112	5BE
Q113	3BB
Q114	3BB
Q116	6BD
Q117	3BB
Q118	6BE
Q500	4AZ
Q700	5BA
Q701	5BA
Q702	5BA
Q704	6BA
Q706	5BA

DAUGHTER UNIT
X89-3062-71 (J76-0526-12)
only DNX E type

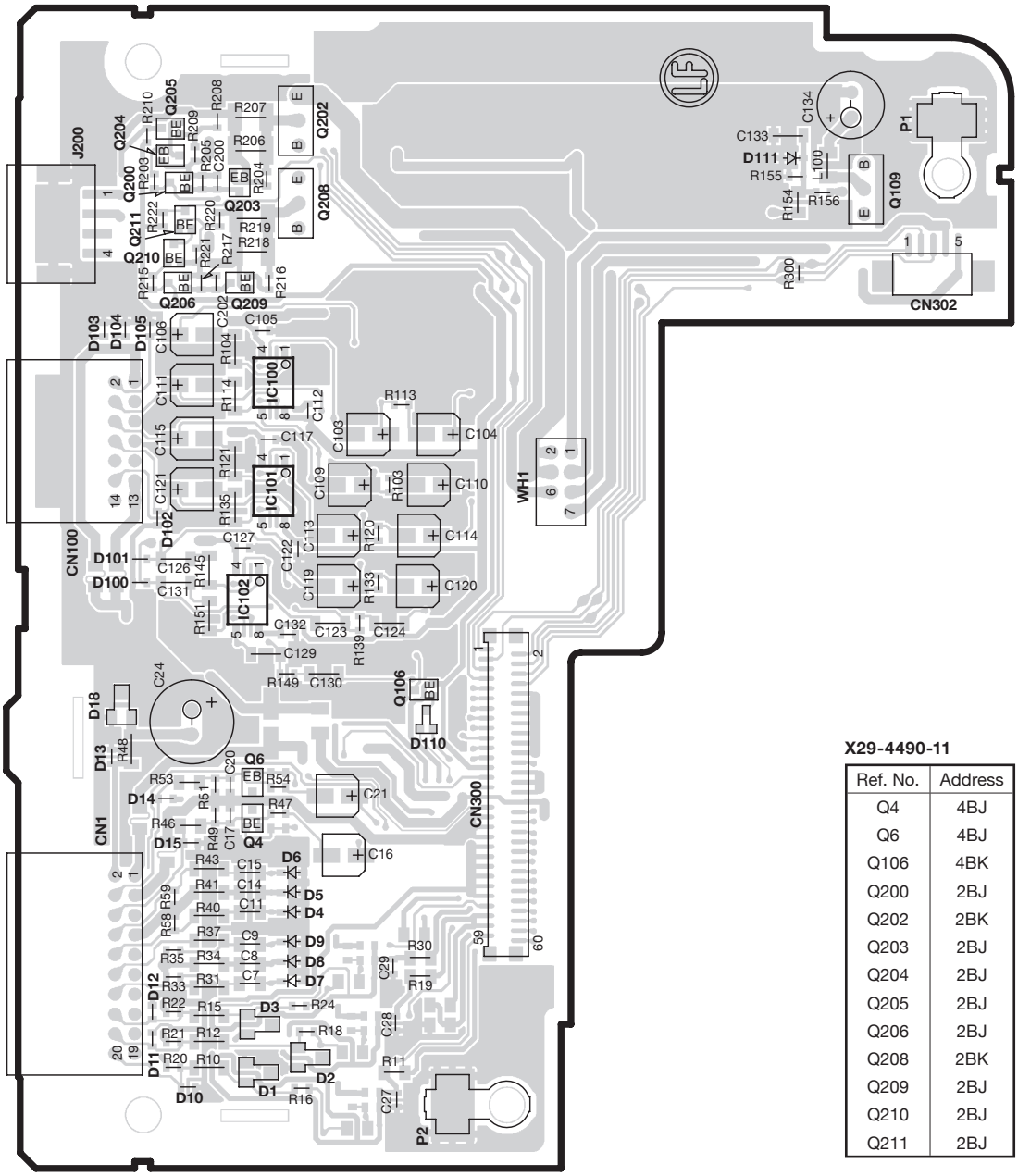


Refer to the schematic diagram for the values of resistors and capacitors.

DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (COMPONENT SIDE VIEW)

CONTROL CIRCUIT UNIT X29-4490-11 (J76-0510-12)



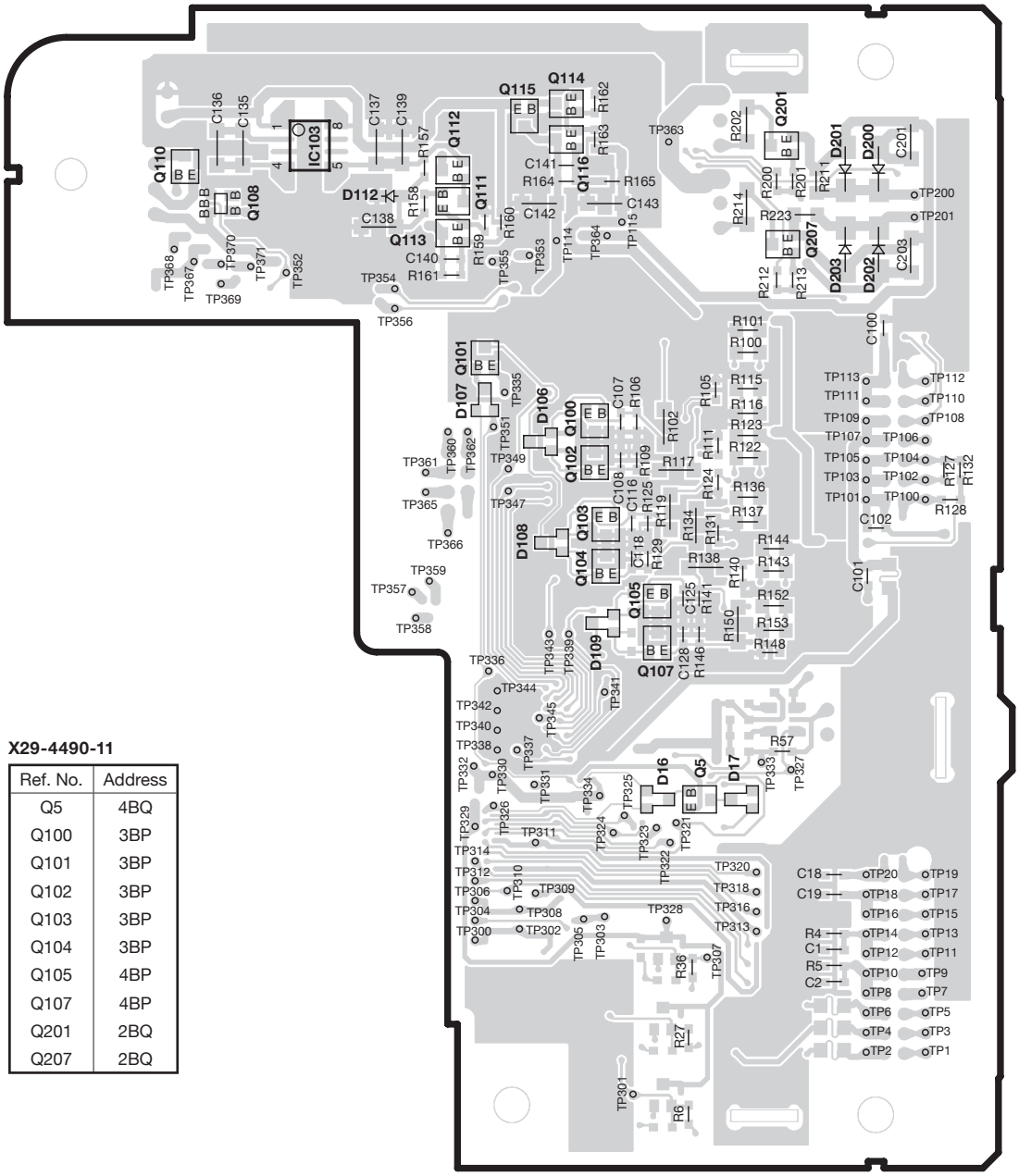
X29-4490-11

Ref. No.	Address
Q4	4BJ
Q6	4BJ
Q106	4BK
Q200	2BJ
Q202	2BK
Q203	2BJ
Q204	2BJ
Q205	2BJ
Q206	2BJ
Q208	2BK
Q209	2BJ
Q210	2BJ
Q211	2BJ

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

PC BOARD (FOIL SIDE VIEW)

CONTROL CIRCUIT UNIT X29-4490-11 (J76-0510-12)



X29-4490-11

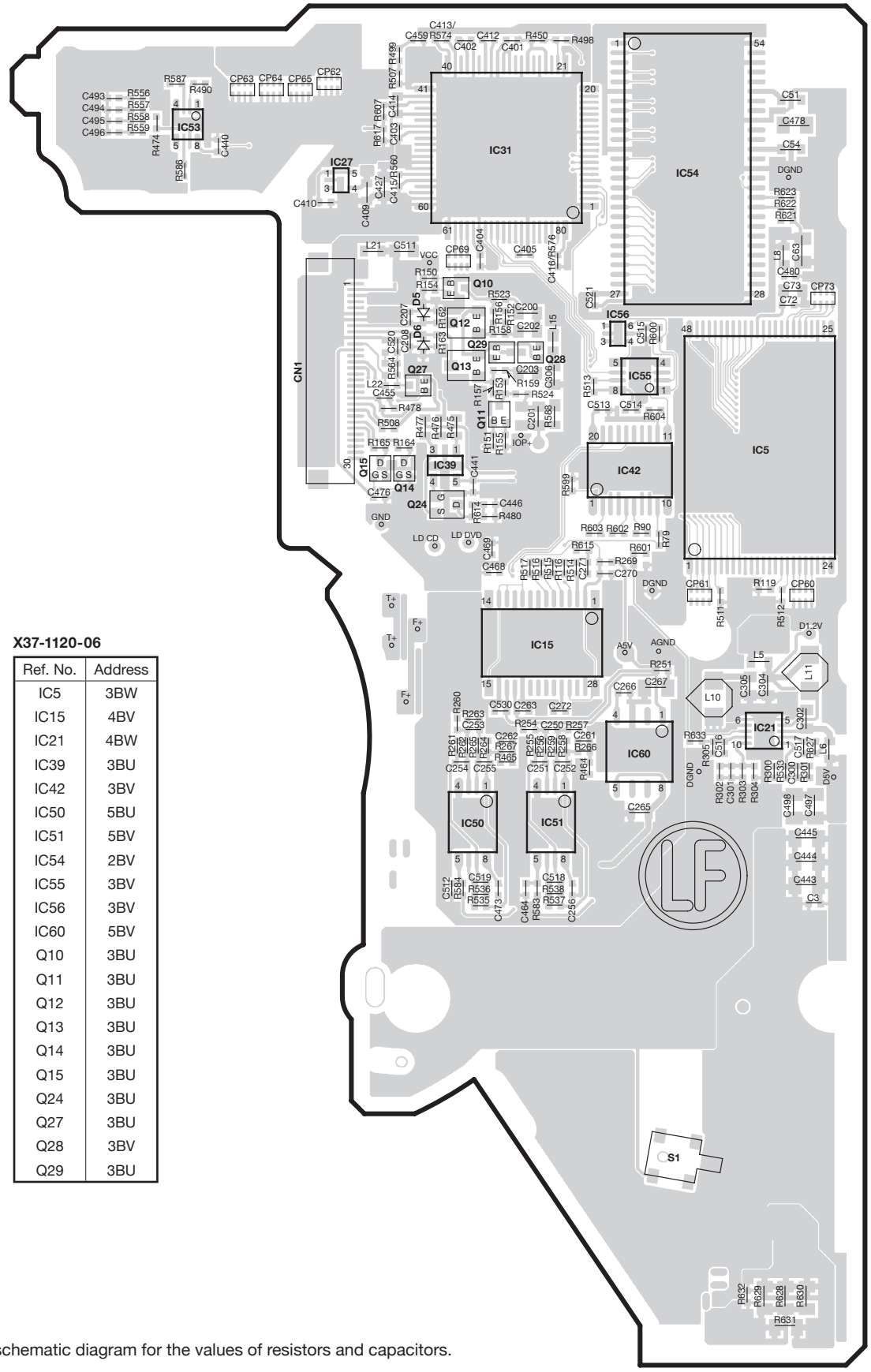
Ref. No.	Address
Q5	4BQ
Q100	3BP
Q101	3BP
Q102	3BP
Q103	3BP
Q104	3BP
Q105	4BP
Q107	4BP
Q201	2BQ
Q207	2BQ

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

DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (COMPONENT SIDE VIEW)

DVD UNIT X37-1120-06 (J76-0162-22)



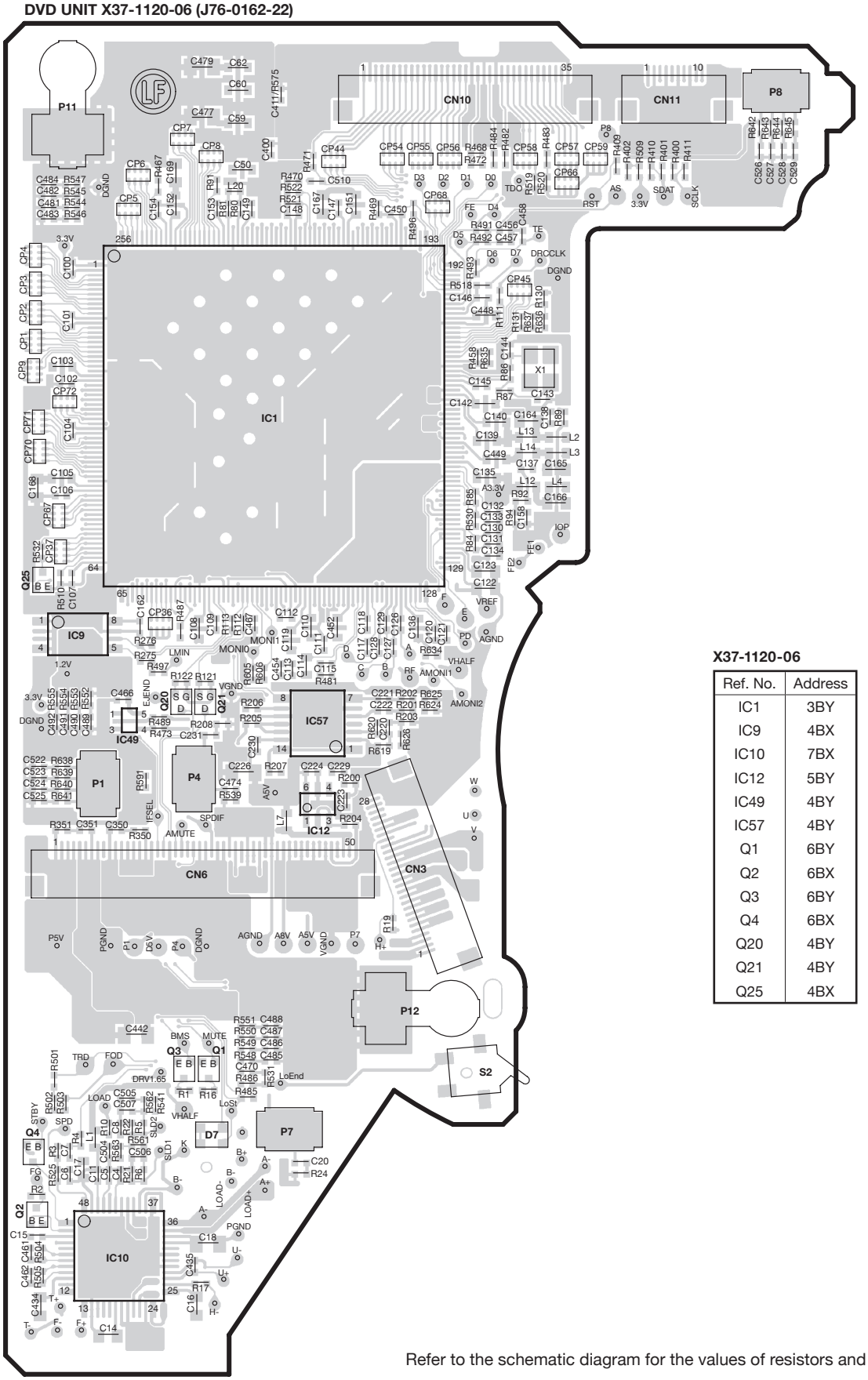
X37-1120-06

Ref. No.	Address
IC5	3BW
IC15	4BV
IC21	4BW
IC39	3BU
IC42	3BV
IC50	5BU
IC51	5BV
IC54	2BV
IC55	3BV
IC56	3BV
IC60	5BV
Q10	3BU
Q11	3BU
Q12	3BU
Q13	3BU
Q14	3BU
Q15	3BU
Q24	3BU
Q27	3BU
Q28	3BV
Q29	3BU

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

PC BOARD (FOIL SIDE VIEW)

DVD UNIT X37-1120-06 (J76-0162-22)



X37-1120-06

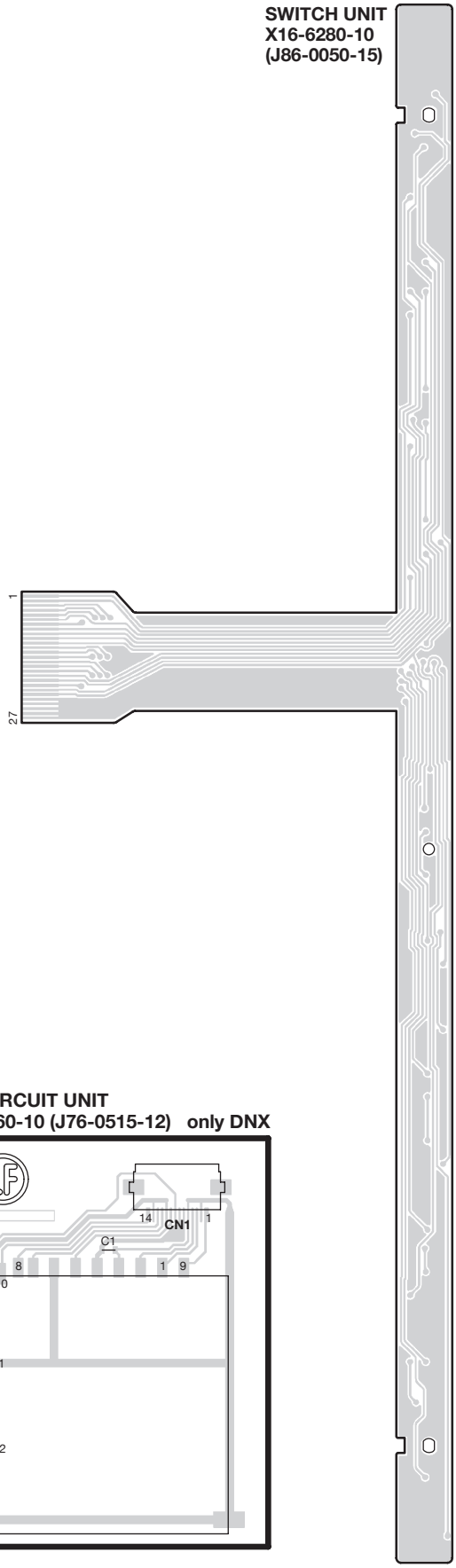
Ref. No.	Address
IC1	3BY
IC9	4BX
IC10	7BX
IC12	5BY
IC49	4BY
IC57	4BY
Q1	6BY
Q2	6BX
Q3	6BY
Q4	6BX
Q20	4BY
Q21	4BY
Q25	4BX

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

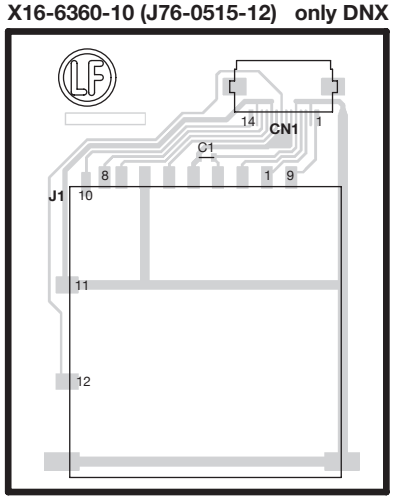
DDX7032/7032M/712
DNX7120/7220/7320

PC BOARD (COMPONENT SIDE VIEW)

SWITCH UNIT
X16-6280-10
(J86-0050-15)

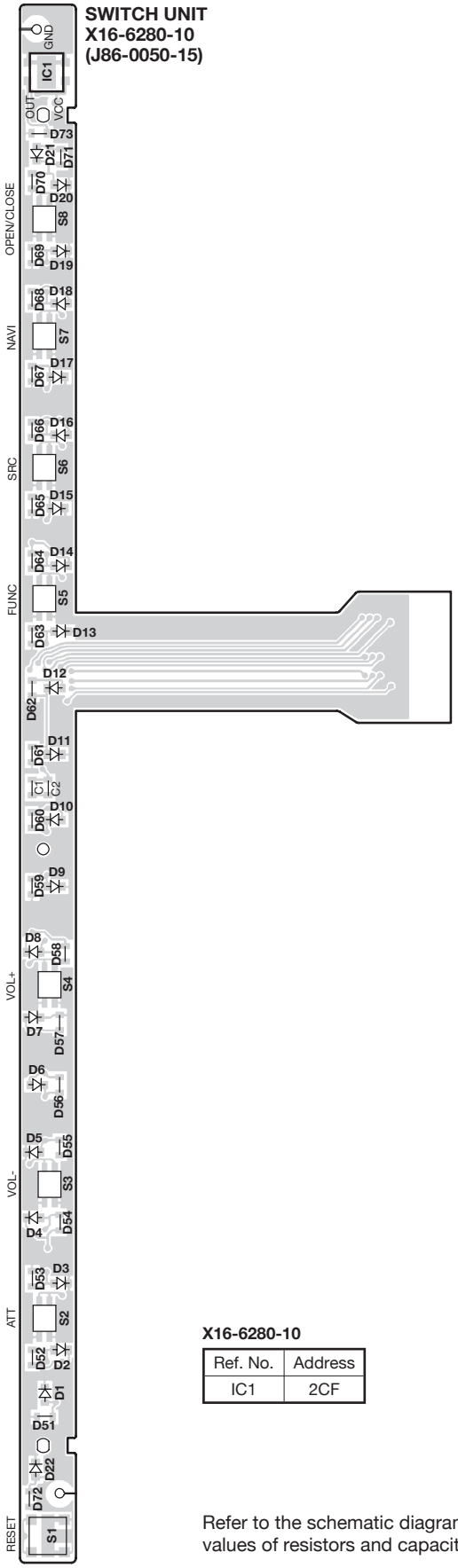


SUB-CIRCUIT UNIT
X16-6360-10 (J76-0515-12) only DNX



PC BOARD (FOIL SIDE VIEW)

SWITCH UNIT
X16-6280-10
(J86-0050-15)



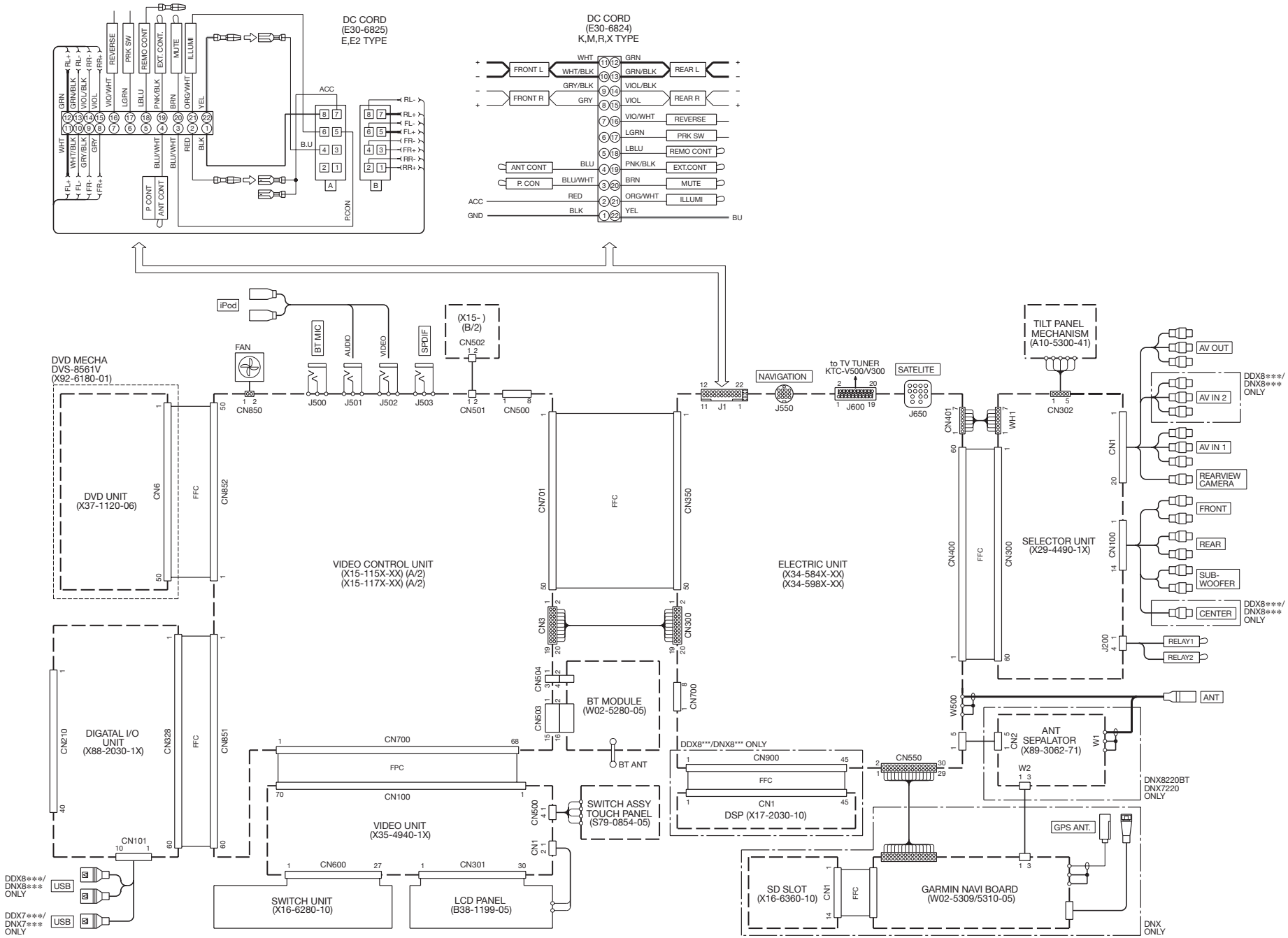
X16-6280-10

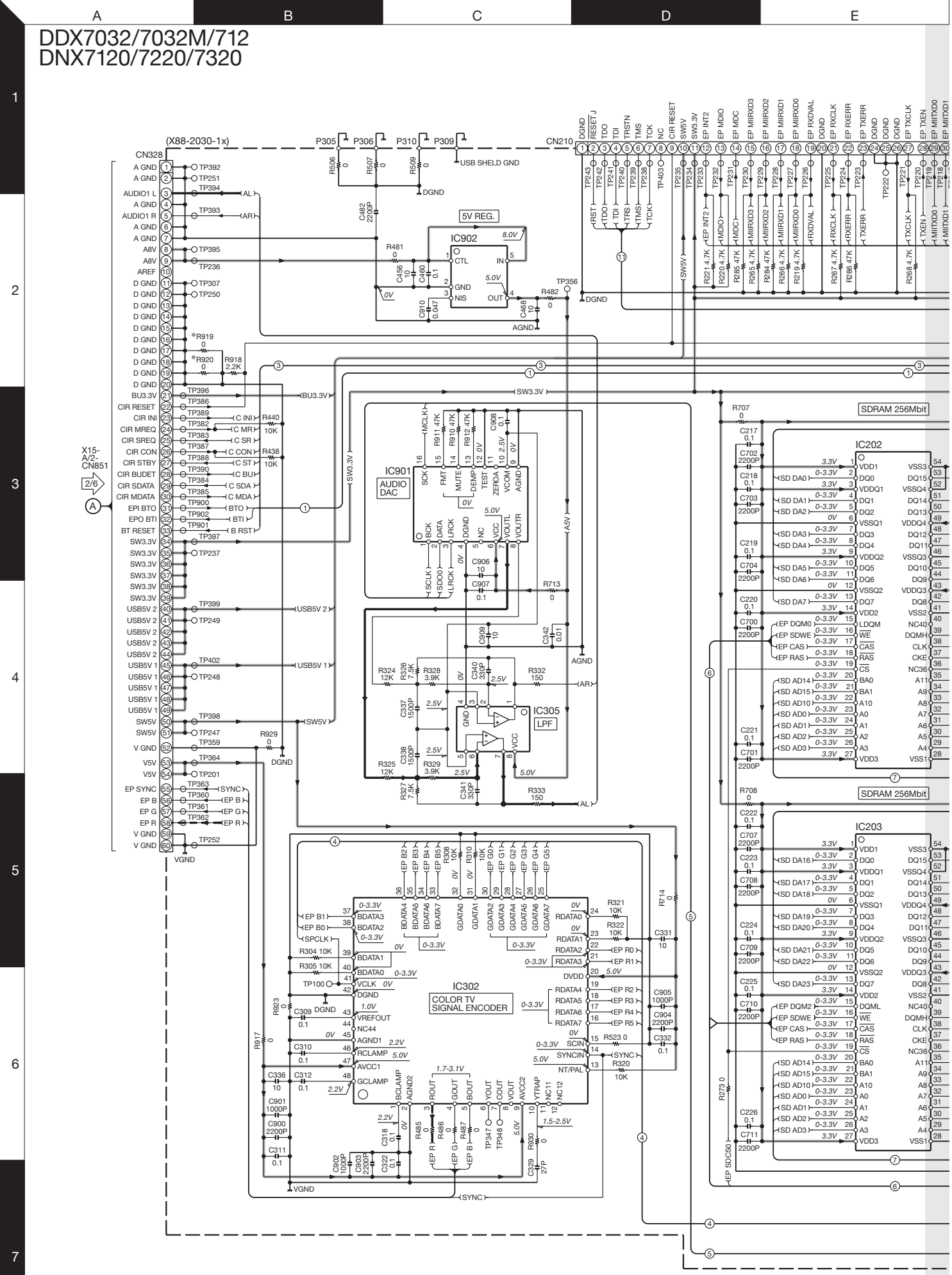
Ref. No.	Address
IC1	2CF

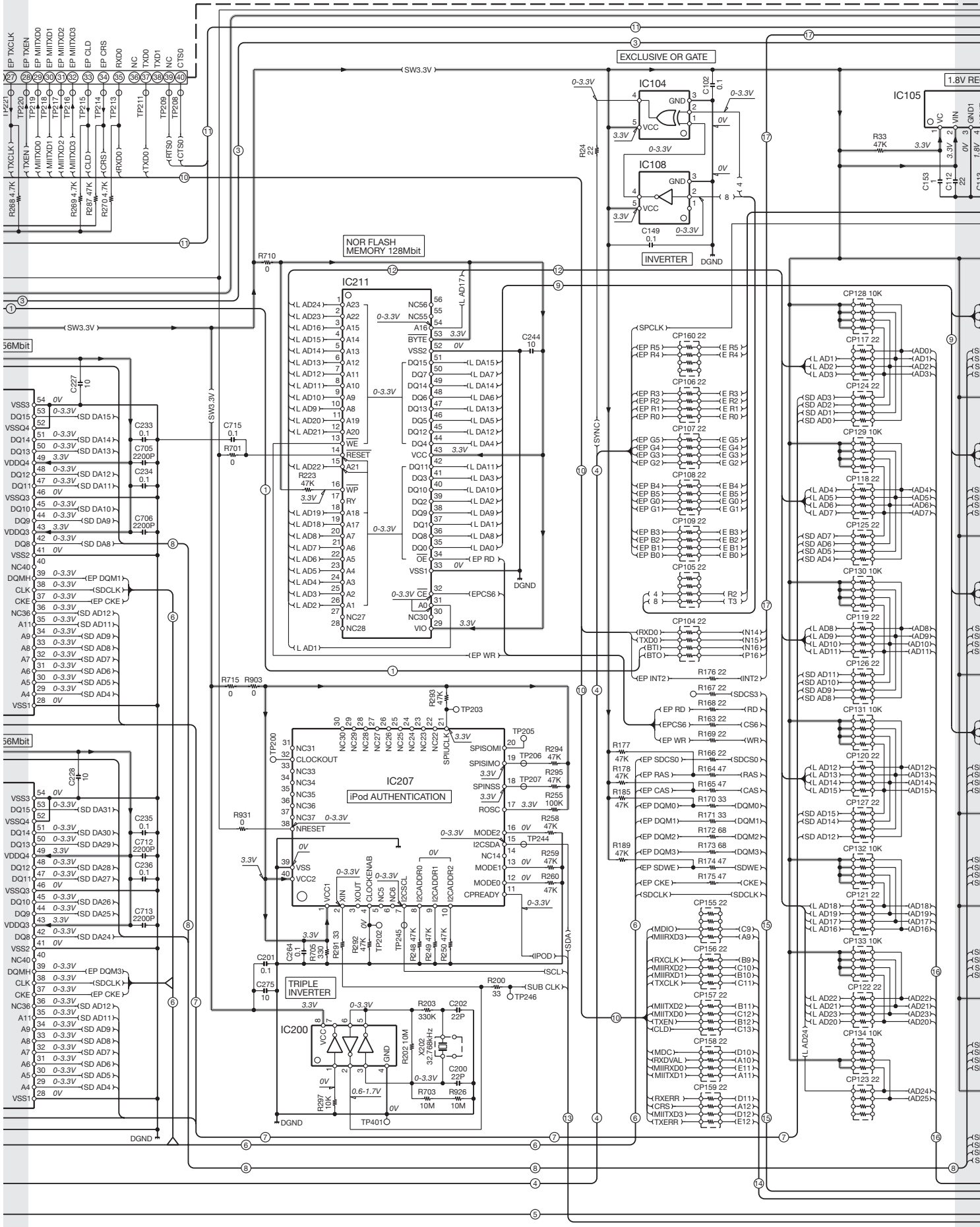
Refer to the schematic diagram for the values of resistors and capacitors.

INTERCONNECTION DIAGRAM

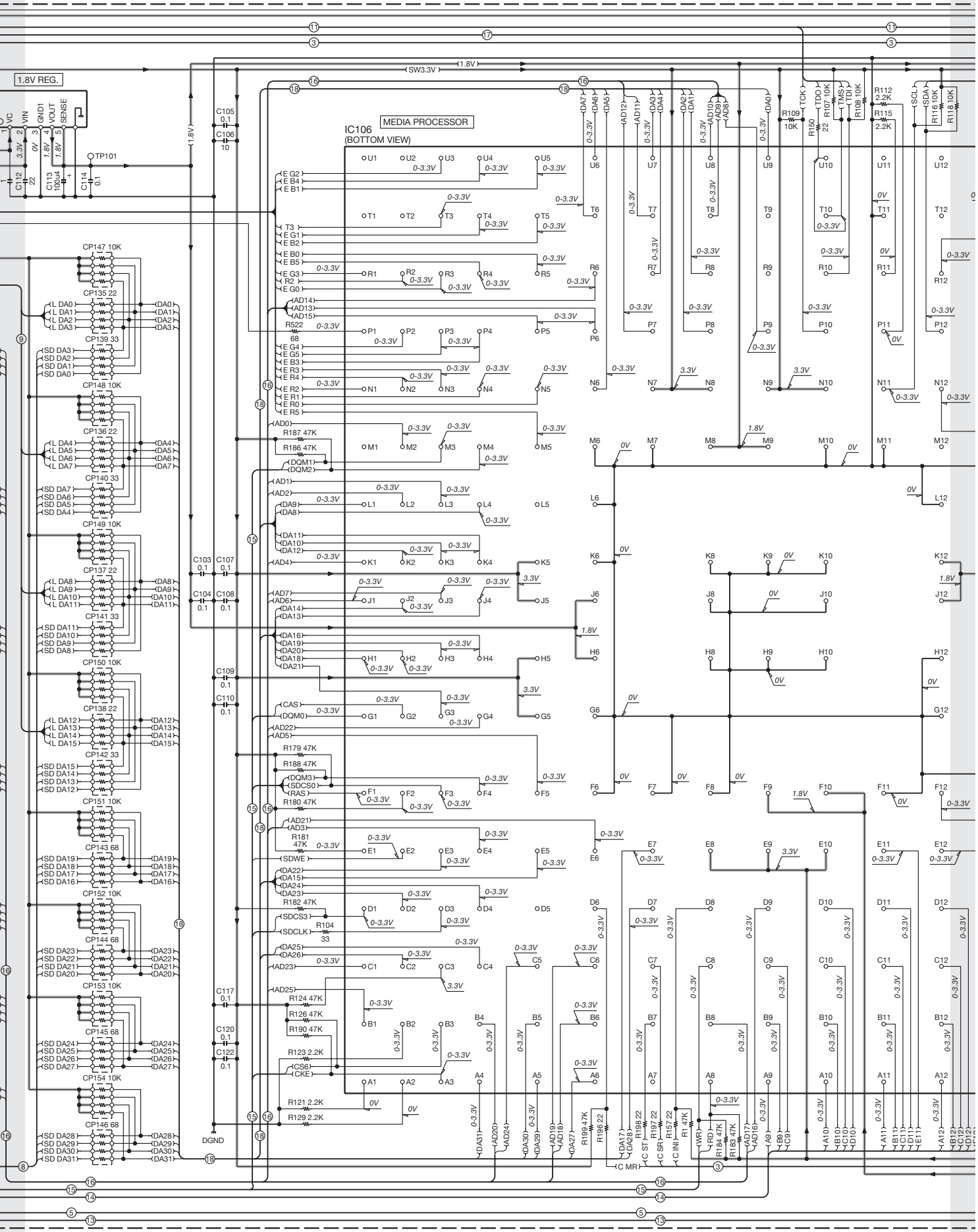
DDX7032/7032M/712
DNX7120/7220/7320

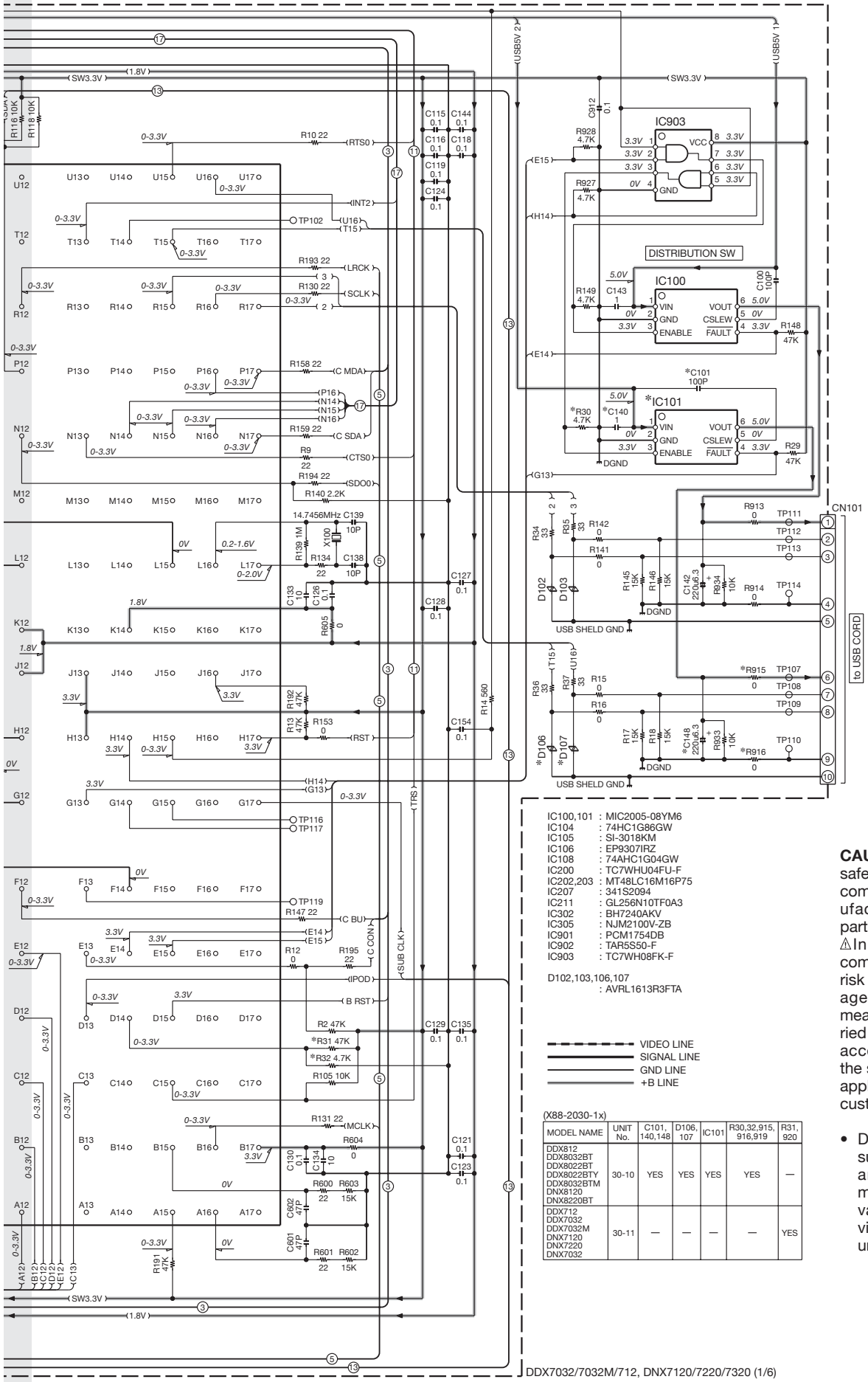



(X88-2030-1x)
CN328
CN210
P305
P306
P310
P309
USB SHELD GND
5V REG.
IC902
IC901
AUDIO DAC
IC305
LPF
IC302
COLOR TV SIGNAL ENCODER
IC202
IC203
SDRAM 256Mbit
X15-A/2-CN851
2/6
VGND
DGND
AGND


EXCLUSIVE OR GATE
IC104
IC105
IC108
INVERTER
NOR FLASH
MEMORY 128Mbit
IC211
IC207
iPod AUTHENTICATION
TRIPLE
INVERTER
IC200
DGND
SW3.3V

DDX7032/7032M/712
DNX7120/7220/7320





DDX7032/7032M/712, DNX7120/7220/7320 (1/6)

IC100,101 : MIC2005-08YM6
IC104 : 74HC1G86GW
IC105 : SI-3018KM
IC106 : EP9307IRZ
IC108 : 74AHC1G04GW
IC200 : TC7WHU04FU-F
IC202,203 : MT48LC16M16P75
IC207 : 341S2094
IC211 : GL256N10TF0A3
IC302 : BH7240AKV
IC305 : NJM2100V-ZB
IC901 : PCM1754DB
IC902 : TAR5S50-F
IC903 : TC7WH08FK-F

D102,103,106,107
: AVRL1613R3FTA

VIDEO LINE
SIGNAL LINE
GND LINE
+B LINE

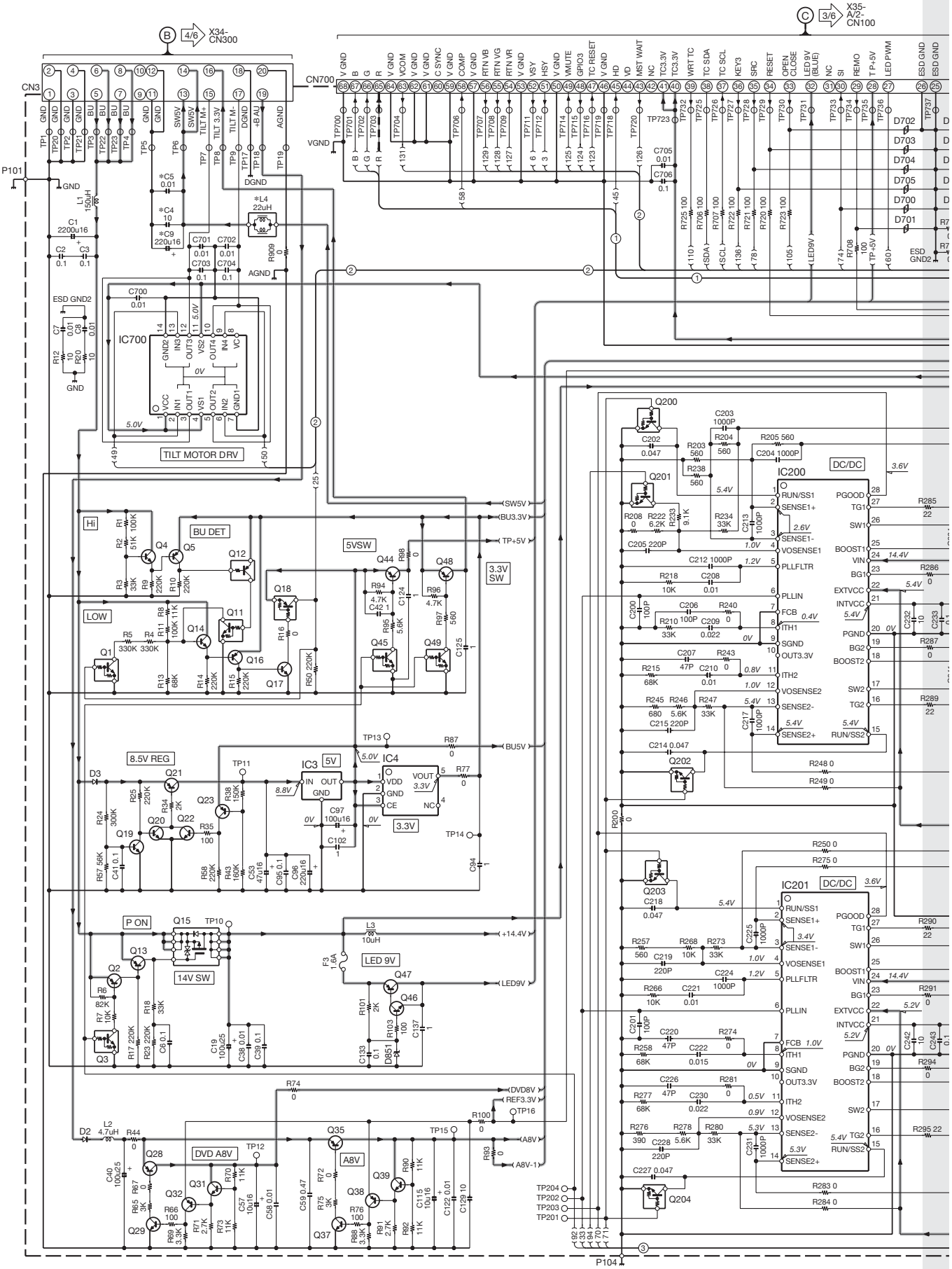
(X88-2030-1x)

MODEL NAME	UNIT No.	C101, 140,148	D106, 107	IC101	R30,32,915, 916,919	R31, 920
DDX812 DDX8032BT DDX8022BT DDX8022BTY DDX8032BTM DNX8120 DNX8220BT	30-10	YES	YES	YES	YES	—
DDX712 DDX7032 DDX7032M DNX7120 DNX7220 DNX7032	30-11	—	—	—	—	YES

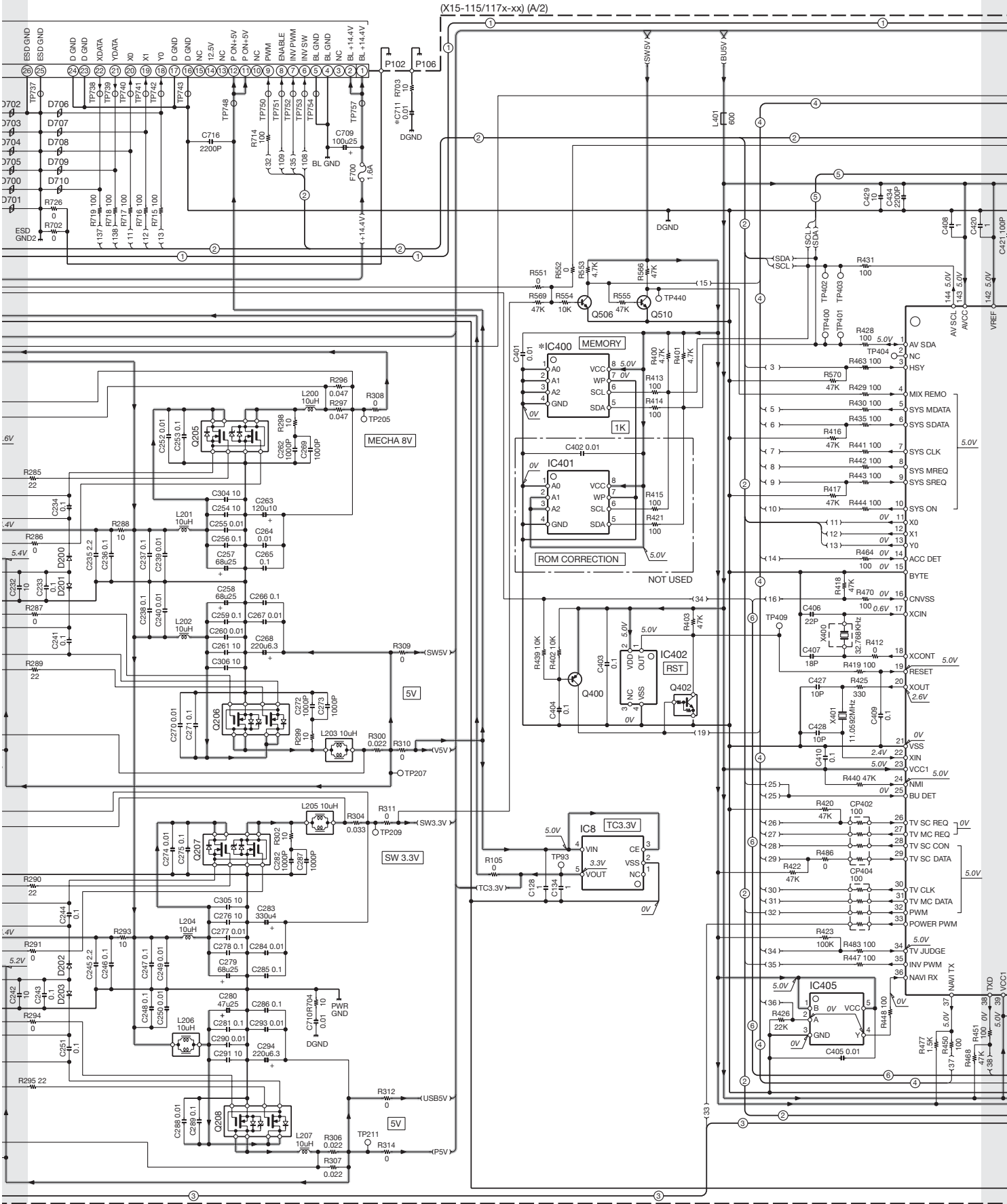
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

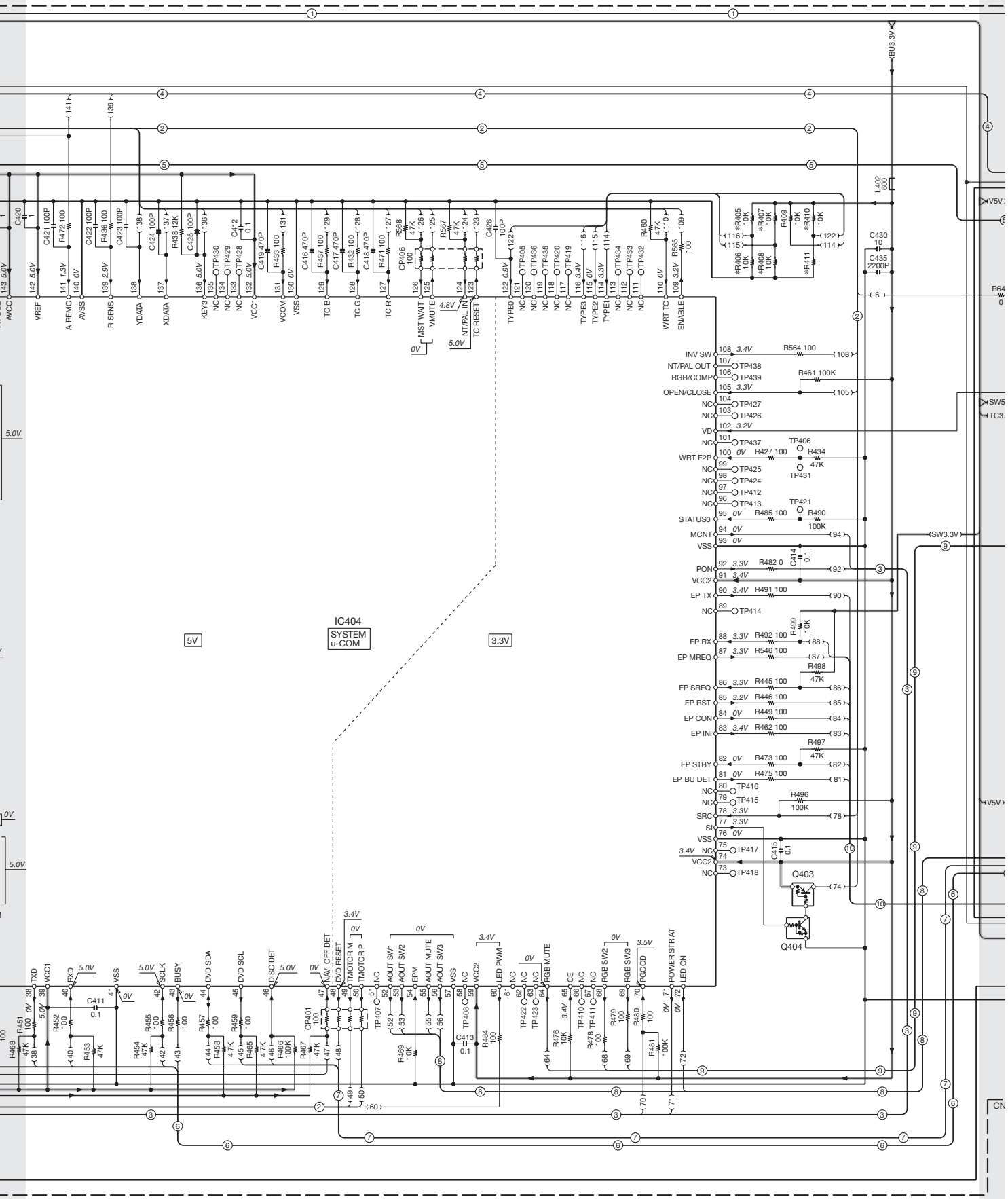
DDX7032/7032M/712
DNX7120/7220/7320



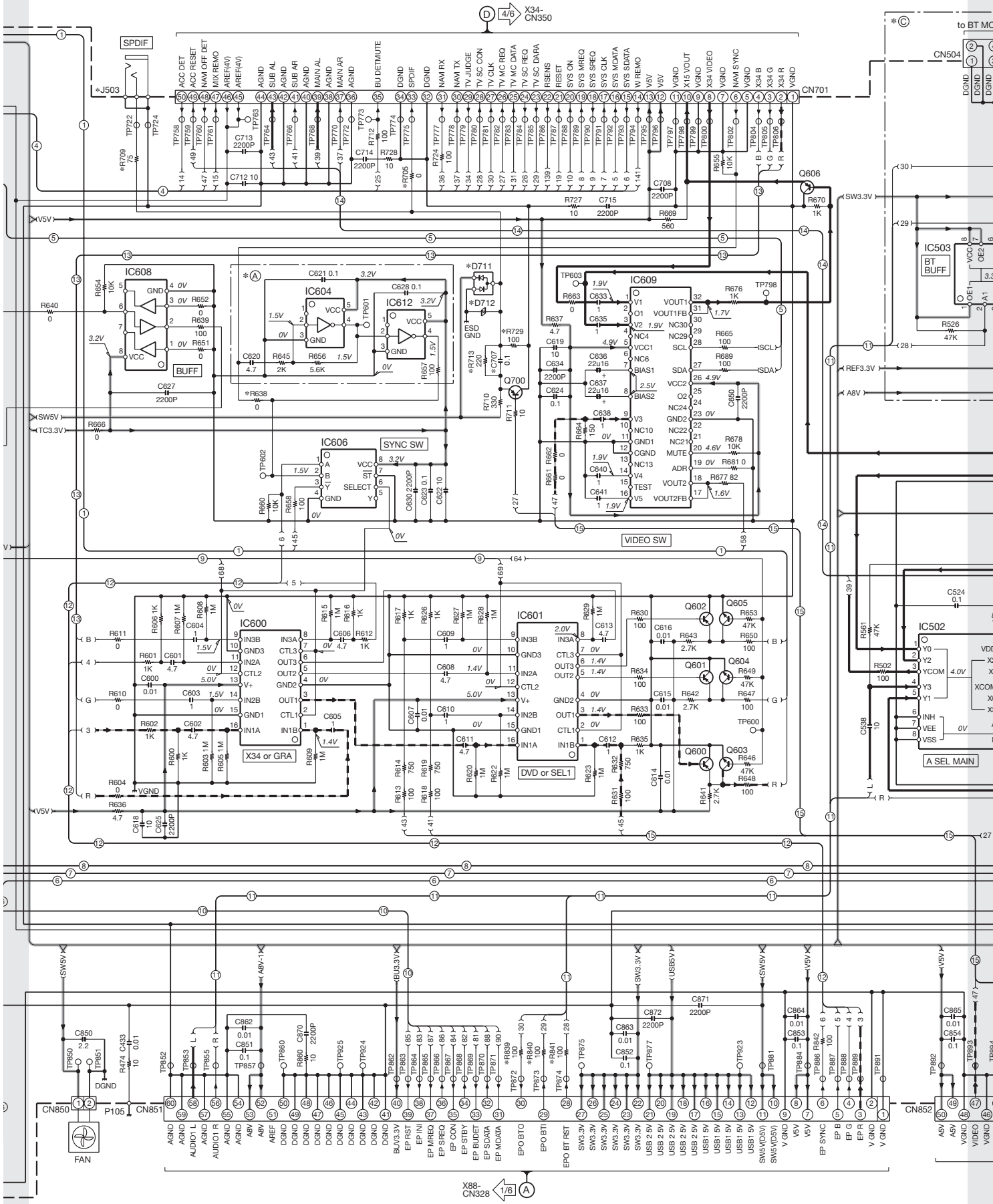
DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320

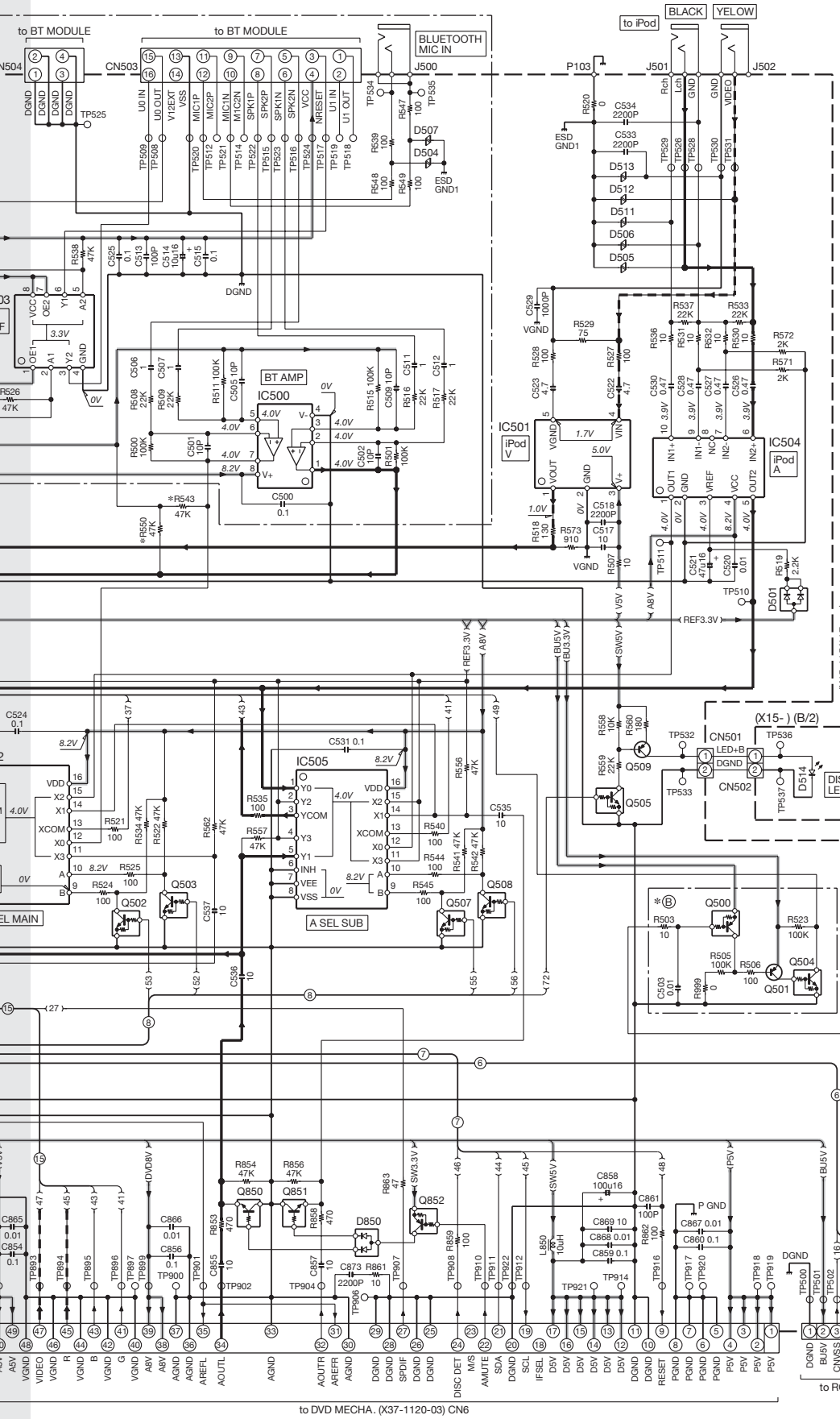


DDX7032/7032M/712
DNX7120/7220/7320



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.

DDX7032/7032M/712
DNX7120/7220/7320



MODEL NAME	DESTI-NATION	UNIT No.	Ⓐ	Ⓑ	Ⓒ	C4,5,9	C707	C711	D711, 712	IC400	J503	L4	R405,705,713, 729,839-841	R406,543, 550,709	R407	R408	R410	R411	R638
DDX812	K	50-10	YES	—	YES	—	—	YES	—	W05-1260-00	—	—	YES	—	—	YES	—	10K	—
DNX8120	K	50-11	YES	YES	YES	YES	—	YES	—	W05-1260-00	—	YES	YES	—	YES	YES	—	10K	YES
DDX8032BT	K1	53-21	YES	YES	YES	—	—	YES	—	W05-1263-00	—	—	YES	—	YES	YES	YES	—	—
DDX8022BT	E1	52-71	YES	—	YES	—	—	YES	—	W05-1261-00	—	—	YES	—	—	—	YES	3.3K	—
DDX8022BTY	E2	52-72	—	YES	YES	YES	—	YES	—	W05-1261-00	—	YES	YES	—	YES	—	YES	3.3K	YES
DDX8026BT	E3	50-21	YES	YES	YES	YES	—	YES	—	W05-1262-00	—	—	YES	—	—	YES	YES	10K	—
DDX8026BTM	M1	50-21	YES	YES	YES	YES	—	YES	—	W05-1262-00	—	—	YES	—	—	YES	YES	10K	—
DDX8026BT	M3	50-21	YES	YES	YES	YES	—	YES	—	W05-1262-00	—	—	YES	—	—	YES	YES	10K	—
DDX712	K1	70-10	YES	—	—	—	YES	—	YES	W05-1260-00	YES	—	YES	YES	YES	YES	—	10K	YES
DNX7120	K2	70-11	YES	YES	—	YES	YES	—	YES	W05-1260-00	YES	YES	YES	YES	YES	YES	YES	10K	YES
DDX7032	R2	73-21	YES	YES	—	YES	YES	—	YES	W05-1263-00	YES	YES	YES	YES	YES	YES	YES	3.3K	YES
DNX7220	E2	72-71	YES	YES	—	YES	YES	—	YES	W05-1261-00	YES	YES	YES	YES	YES	YES	YES	3.3K	YES
DDX7032M	M2	70-21	YES	—	—	—	YES	—	YES	W05-1262-00	YES	—	YES	YES	—	YES	YES	10K	—
DNX7032M	M4	70-21	YES	—	—	—	YES	—	YES	W05-1262-00	YES	—	YES	YES	—	YES	YES	10K	—
DDX7032	X2	70-71	YES	—	—	—	YES	—	YES	W05-1263-00	YES	—	YES	YES	—	YES	YES	30K	—
DNX7320	M5	70-22	—	YES	—	YES	YES	—	YES	W05-1262-00	YES	YES	YES	YES	YES	YES	YES	10K	YES
DNX7320	X3	70-72	—	YES	—	YES	YES	—	YES	W05-1263-00	YES	YES	YES	YES	YES	YES	YES	30K	YES

(X15-115/117x-xx)

IC3 : SI-3050LUS
IC4 : R1114N331B-TR
IC8 : XC6219B332PR
IC200,201 : LTC3728LEGN
IC400 : *
IC401 : NOT USED
IC402 : S-80835CNNB-G
IC404 : 30878MJBA24GP
IC405 : 74AHCT1G08GW
IC500 : NJM4565V-ZB
IC501 : NJM2505AF-ZB
IC502,505 : TC4052BFT
IC503 : 74AHC2G126DP
IC504 : NJM2794RB2ZB
IC600,601 : NJM2286V-ZB
IC604,612 : 74AHC1GU04GW
IC606 : TC7WH157FU-F
IC608 : 74LVC3G34DP
IC609 : AN15885A-VF
IC700 : LB1836M-TLM-E

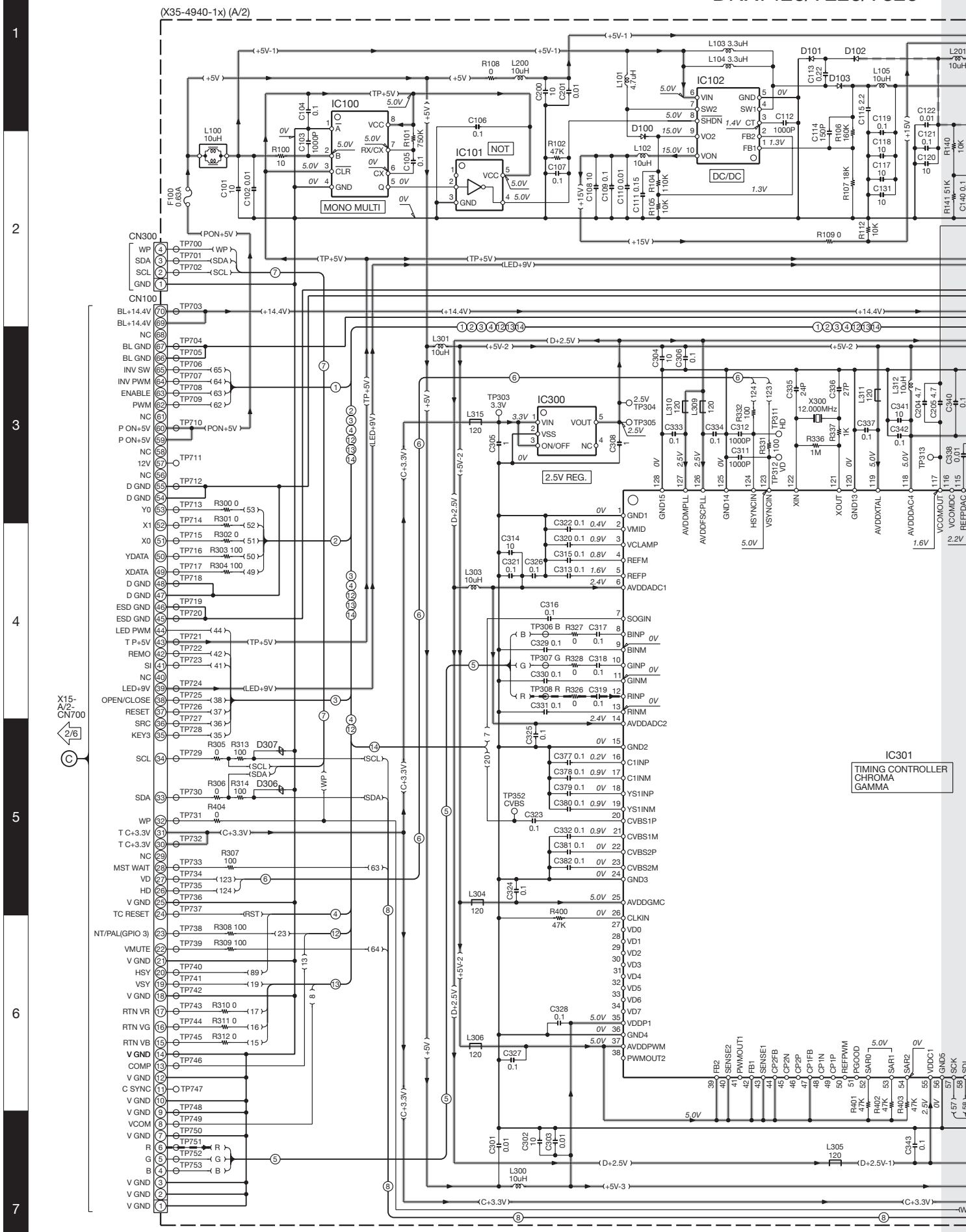
Q1,200,202-204,402 : DTC144EUA
Q2,5,13,16,32,38,400, 501,509,600-602,606,700 : 2SA1576A
Q3,11,45,49,201,404, 502-505,507,508 : DTC114YUA
Q4,14,17,29,31,37,39, 46,506,510,603-605 : 2SC4081
Q12 : DTA114TUA
Q15 : TPC8110-F
Q18 : DTA114EUA
Q19,20,22 : 2SC4617
Q21,28,35,47 : 2SB1184
Q23 : 2SA1774
Q44,48 : 2SB1689
Q205-208 : HAT2218R-E
Q403,500,852 : DTA114YUA
Q850,851 : DTC643TU

D2 : 1SR154-400
D3 : EP05Q04
D200-203 : 1SS357-F
D501,850 : DAP202U
D504,507,700,701 : AVRM16180M6AB
D505,506,511,702-710 : AVRM16120M6AB
D512,513,712 : AVRM16270MAAB
D514 : B30-1767-05
D711 : DA204U
D851 : 02DZ9.1F-Z

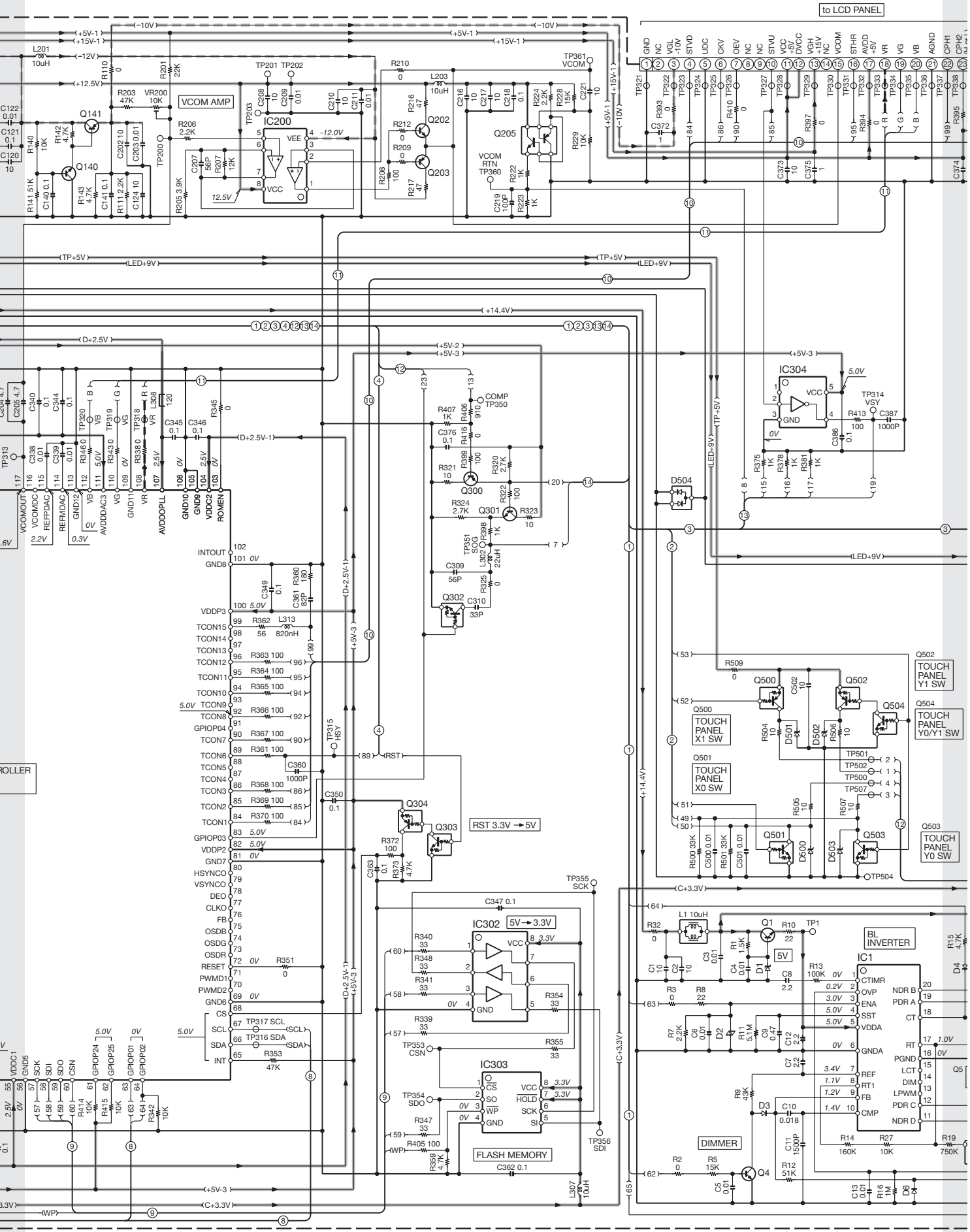
DDX7032/7032M/712, DNX7120/7220/7320 (2/6)

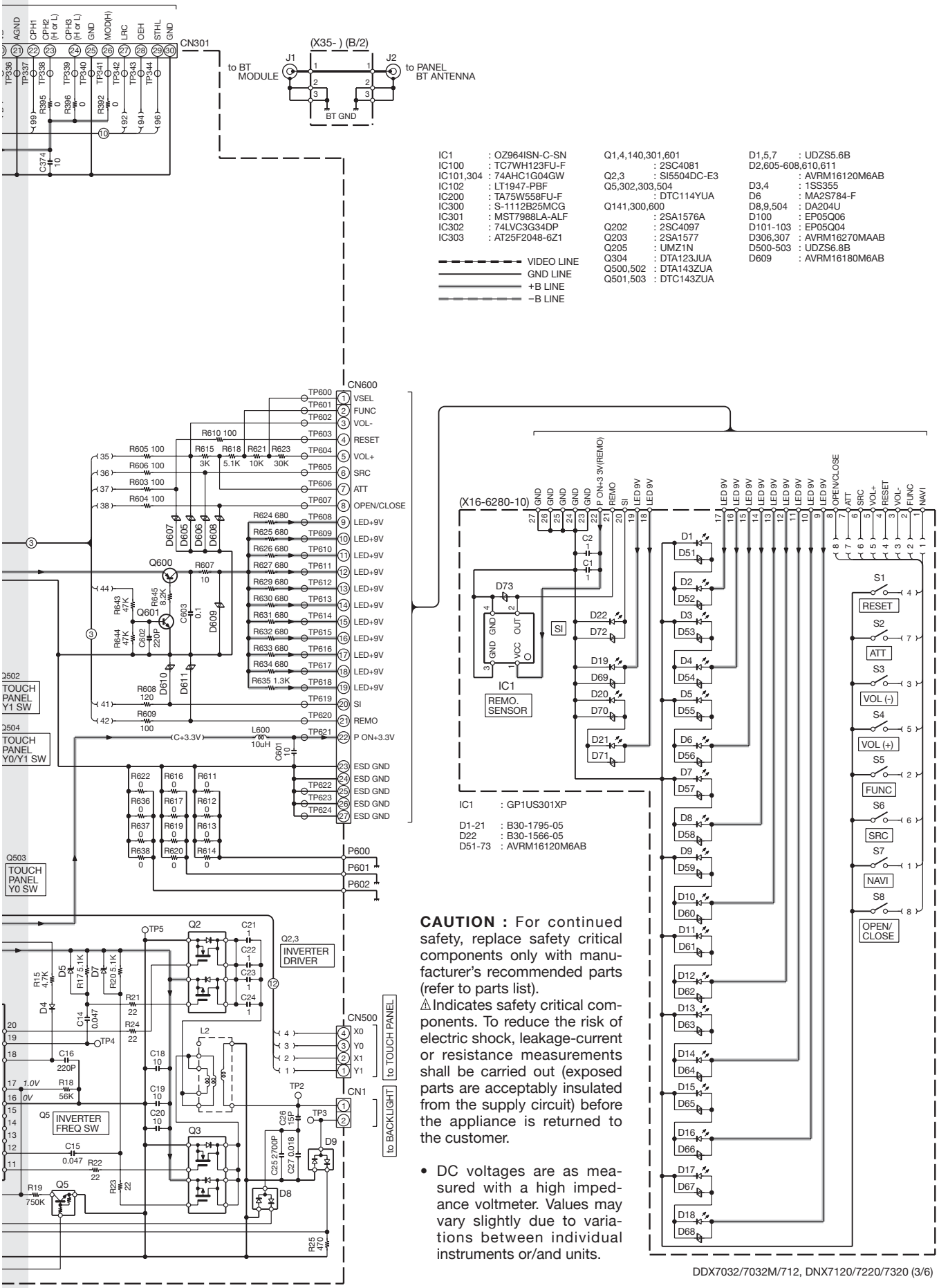
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320





IC1 : OZ964ISN-C-SN
IC100 : TC7WH123FU-F
IC101,304 : 74AHC1G04GW
IC102 : LT1947-PBF
IC200 : TA75W558FU-F
IC300 : S-1112B25MCG
IC301 : MST7988LA-ALF
IC302 : 74LVC3G34DP
IC303 : AT25F2048-6Z1

VIDEO LINE
GND LINE
+B LINE
−B LINE

Q1,4,140,301,601 : 2SC4081
Q2,3 : SI5504DC-E3
Q5,302,303,504 : DTC114YUA
Q141,300,600 : 2SA1576A
Q202 : 2SC4097
Q203 : 2SA1577
Q205 : UMZ1N
Q304 : DTA123JUA
Q500,502 : DTA143ZUA
Q501,503 : DTC143ZUA

D1,5,7 : UDZS5.6B
D2,605-608,610,611 : AVRM16120M6AB
D3,4 : 1SS355
D6 : MA2S784-F
D8,9,504 : DA204U
D100 : EP05Q06
D101-103 : EP05Q04
D306,307 : AVRM16270MAAB
D500-503 : UDZS6.8B
D609 : AVRM16180M6AB

IC1 : GP1US301XP

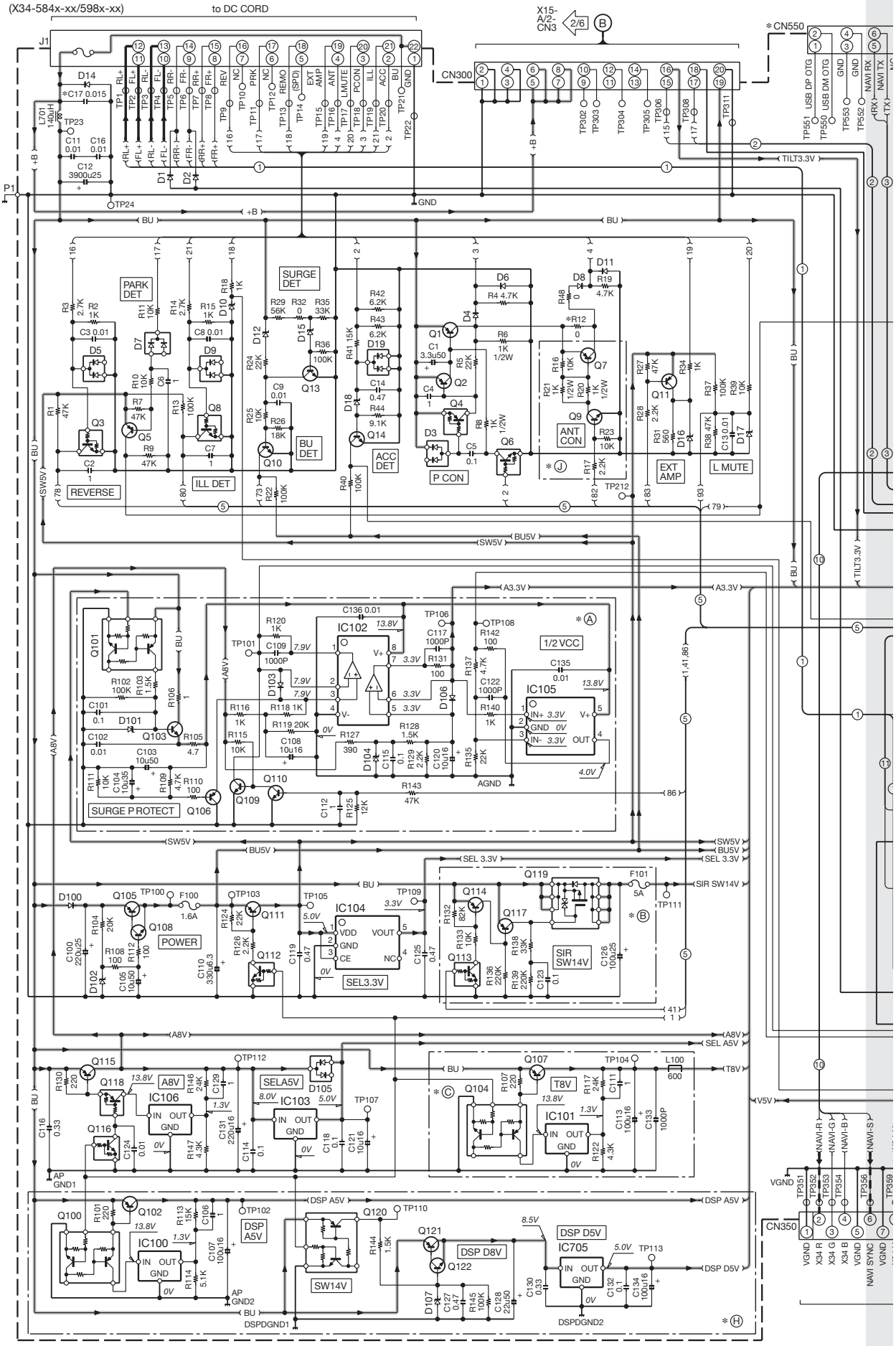
D1-21 : B30-1795-05
D22 : B30-1566-05
D51-73 : AVRM16120M6AB

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.

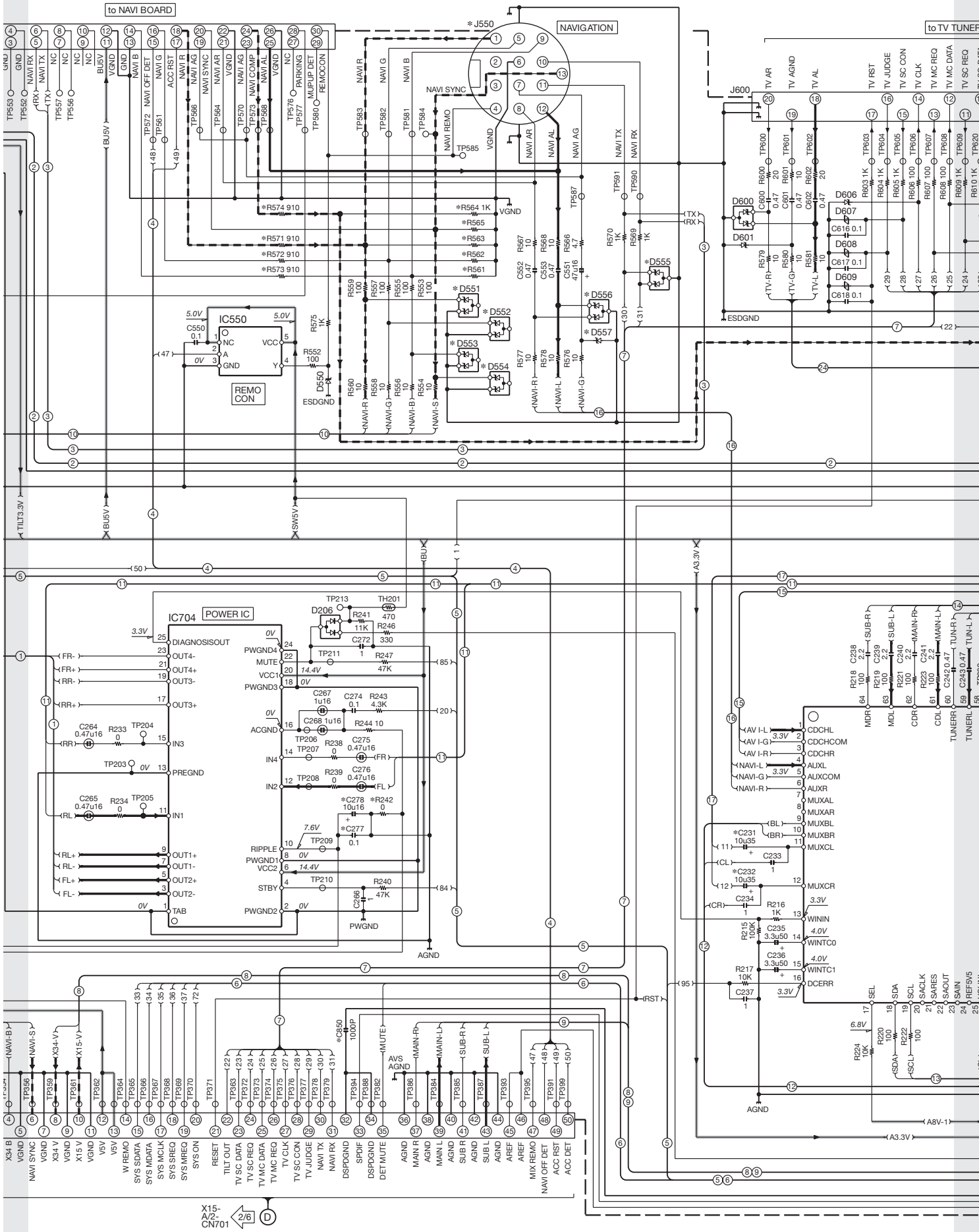
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

DDX7032/7032M/712, DNX7120/7220/7320 (3/6)

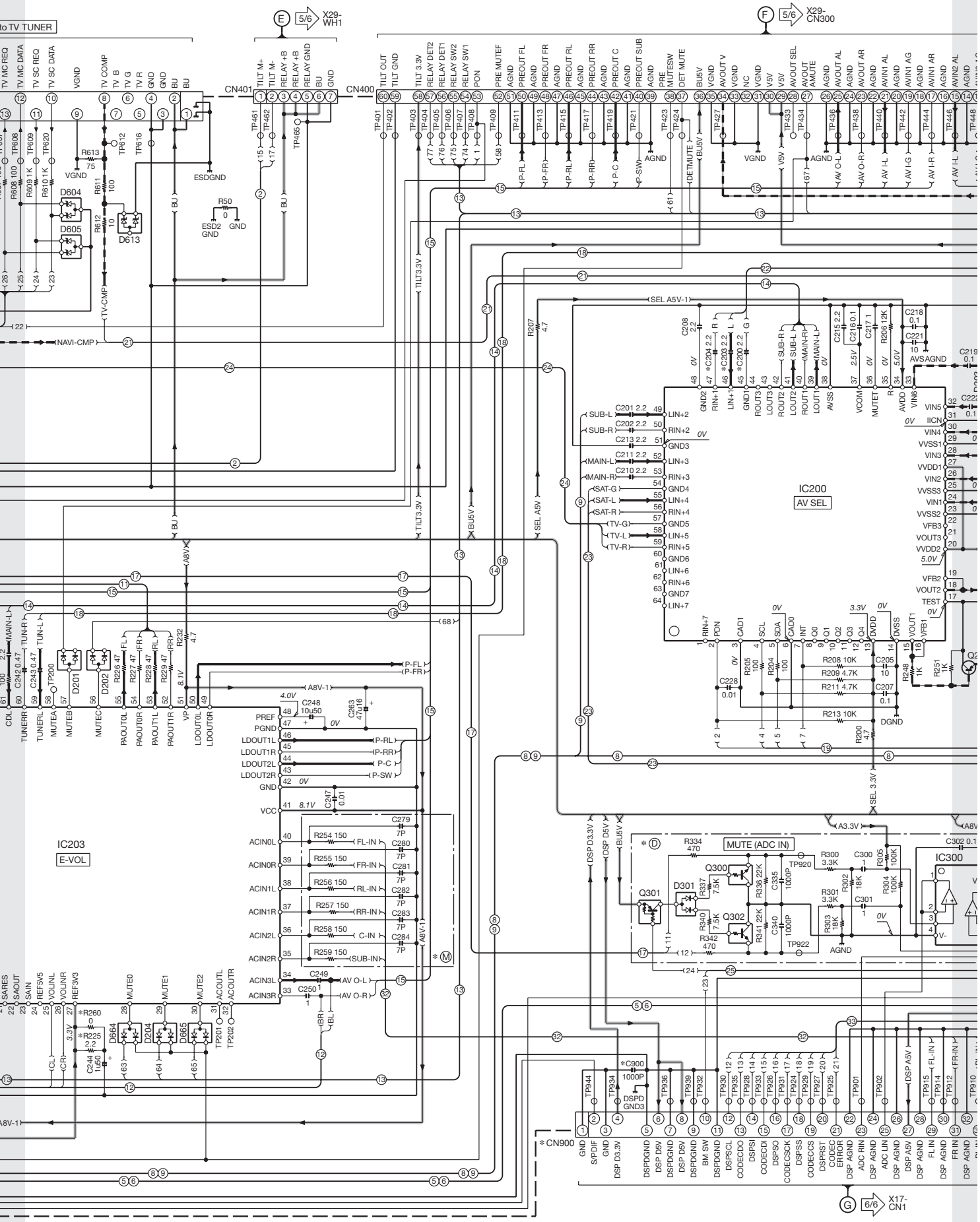
DDX7032/7032M/712
DNX7120/7220/7320



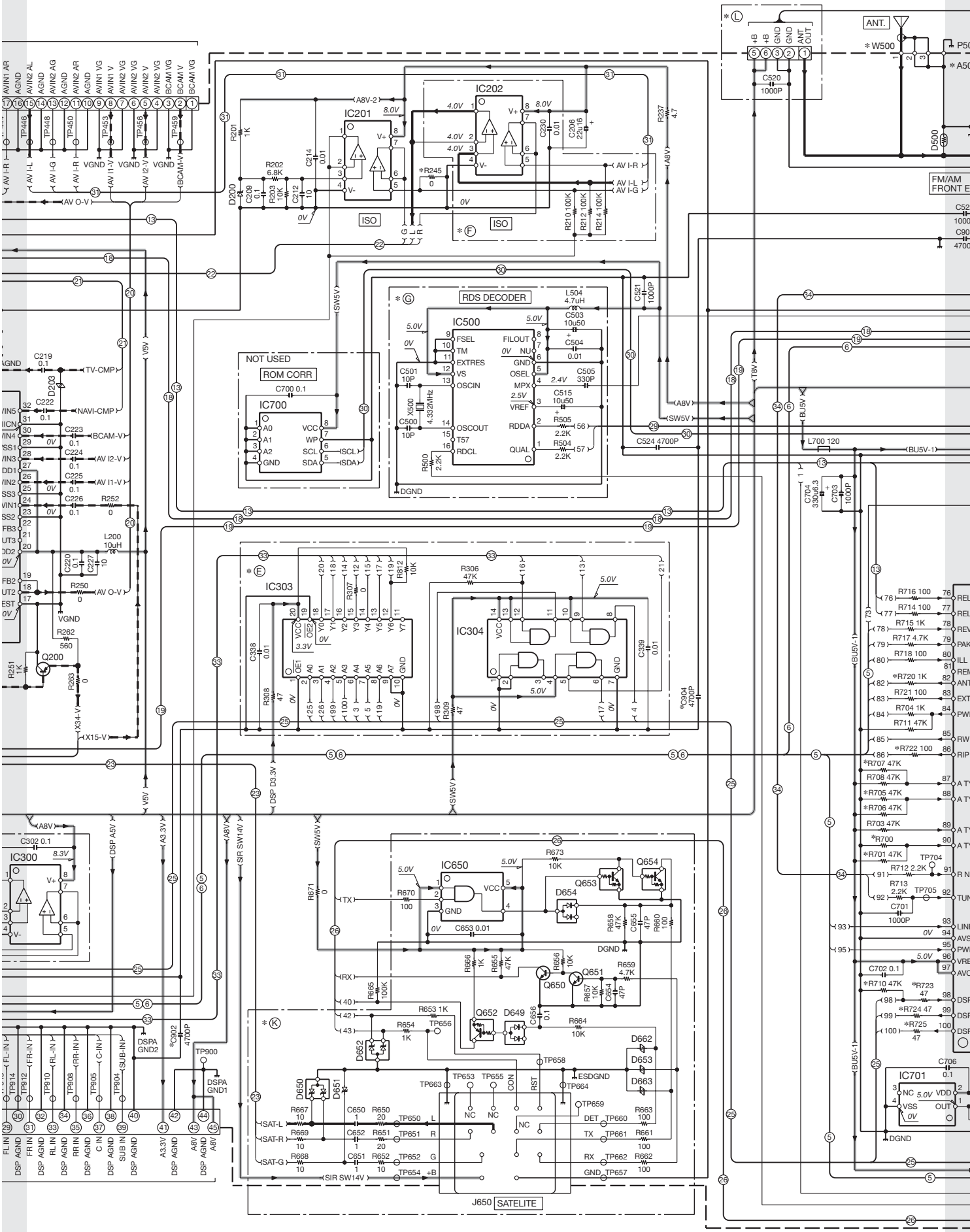
DDX7032/7032M/712
DNX7120/7220/7320



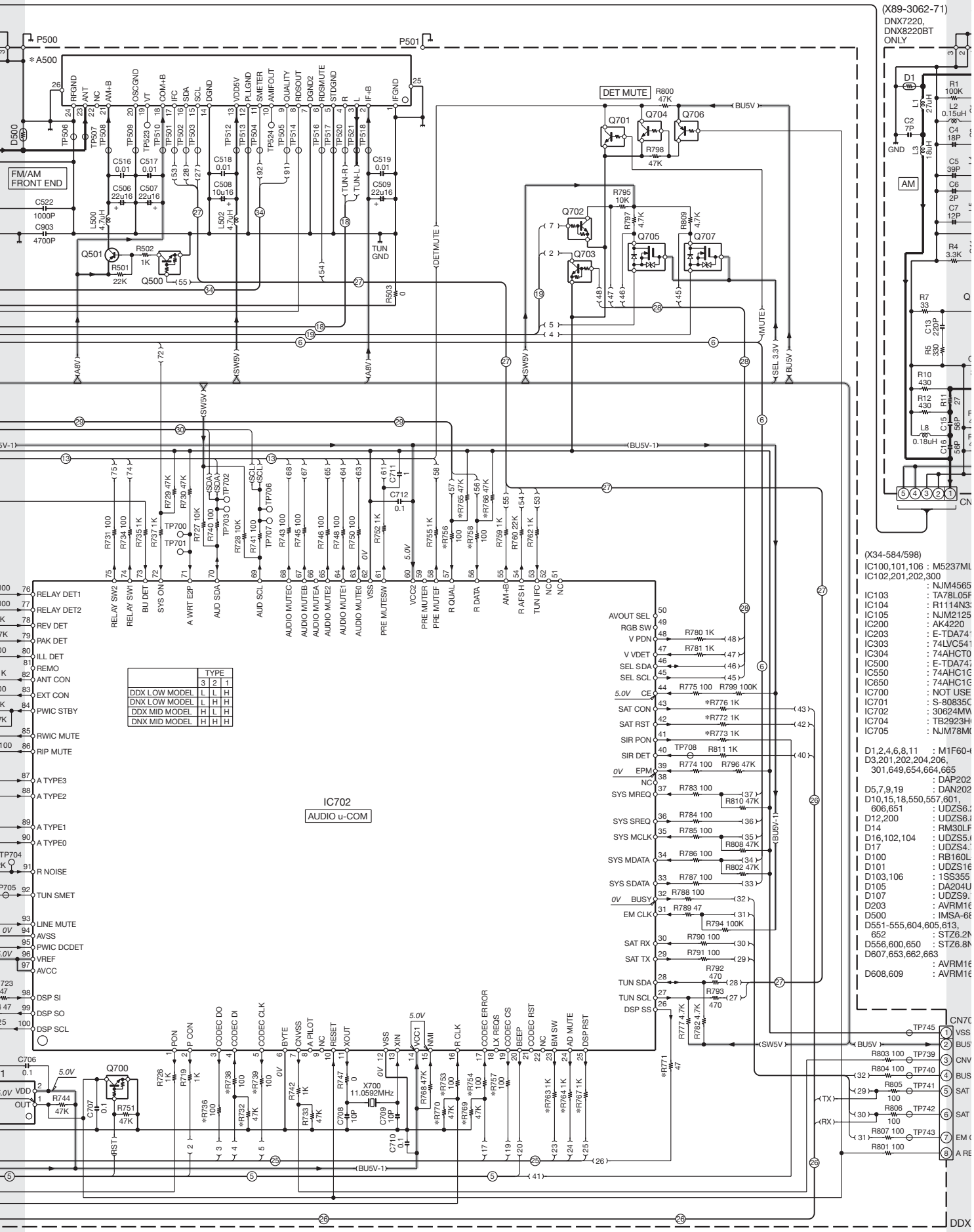
DDX7032/7032M/712
DNX7120/7220/7320

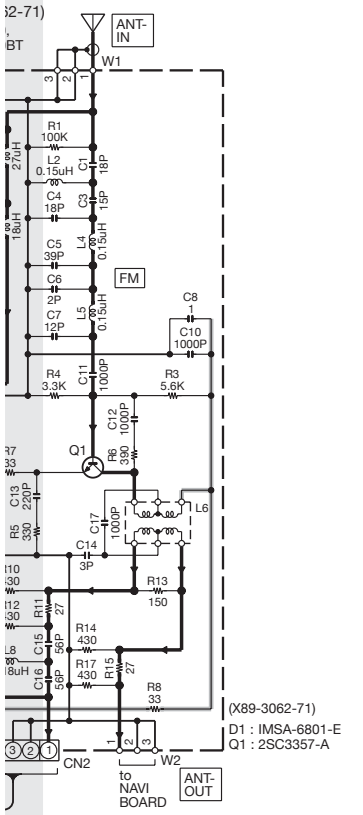


DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320



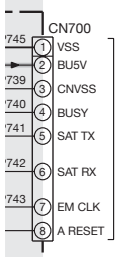


: M5237ML-CF0J
,300
: NJM4565V-ZB
: TA78L05F-F
: R1114N331B-TR
: NJM2125F-ZB
: AK4220
: E-TDA7415CB
: 74LVC541APW
: 74AHCT08PW
: E-TDA7478AD
: 74AHC1G04GW
: 74AHC1G08GW
: NOT USED
: S-80835CNNB-G
: 30624MWPB74GP
: TB2923HQ
: NJM78M05DL1AZB

: M1F60-6063
4,206,
,664,665
: DAP202U
: DAN202U
,557,601,
: UDZS6.2B
: UDZS6.8B
: RM30LF014-102
: UDZS5.6B
: UDZS4.7B
: RB160L-40
: UDZS16B
: 1SS355
: DA204U
: UDZS9.1B
: AVRM16270MAAB
: IMSA-6801-E
,605,613,
: STZ6.2N
: STZ6.8N
,663
: AVRM16180M6AB
: AVRM16120M6AB

Q1 : 2SB1188(Q,R)
Q2,5,11,106,114,117,200 : 2SA1576A
Q3,8,112,116,500,703 : DTC124EUA
Q4,652 : DTA114EUA
Q6,113,702: DTC114YUA
Q7 : 2SB1188(R)
Q9,10,13,14,108-110,122, 650,651 : 2SC4081
Q100,101,104,120 : UMC2N
Q102,107 : 2SB1184
Q103 : 2SC5712-F
Q105,115 : KTA1046-P
Q111,501 : 2SB1689
Q118 : DTA124EUA
Q119 : TPC8110-F
Q121 : 2SB1449(R)-E
Q300,302 : DTC643TU
Q301 : DTA144EUA
Q653,654,700 : DTC144EUA
Q701 : RT1N440M
Q704 : DTC114TUA
Q705,707 : 2SK3019
Q706 : DTA114TUA

VIDEO LINE
SIGNAL LINE
GND LINE
+B LINE



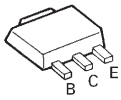
DDX7032/7032M/712, DNX7120/7220/7320 (4/6)

(X34-584x-xx/598x-xx)

MODEL NAME	DESTI-NATION	UNIT No.	Ⓐ	Ⓑ	Ⓚ	Ⓒ	Ⓛ	Ⓓ	Ⓔ	Ⓕ	Ⓗ	Ⓜ	Ⓖ	Ⓙ	A500	C17	C200,203,204,231,232, 277,850,900,902,904	C278	CN550	CN900	D551-557	J550	R12	R225,710,722-725,732,736,738,739, 754,757,763,764,767,769,771	R242,245, 260,707	R561-563	R564,571-574,706	R565	R700	R701	R705	R720	R753,756,758, 765,766,770	R772,773, 776	W500
DDX712	K	X34-5840-10	YES	YES	YES	—	—	—	YES	YES	YES	YES	YES	YES	X86-4030-11	—	YES	—	—	YES	YES	YES	—	YES	—	75	—	75	10K	—	YES	YES	YES	YES	YES
DDX8032BT	R1	X34-5842-21	YES	YES	YES	—	—	—	YES	YES	YES	YES	YES	YES	X86-4030-11	—	YES	—	—	YES	YES	YES	—	YES	—	75	—	75	—	YES	YES	YES	YES	YES	YES
DDX8022BT	E1	X34-5842-71	YES	—	—	—	—	—	YES	—	—	—	—	—	X86-4032-70	YES	YES	—	—	YES	YES	YES	YES	YES	—	75	—	75	3.3K	YES	YES	—	YES	—	YES
DDX8022BTY	E2	X34-5842-71	YES	—	—	—	—	—	YES	—	—	—	—	—	X86-4032-70	YES	YES	—	—	YES	YES	YES	YES	YES	—	75	—	75	10K	YES	YES	YES	YES	—	YES
DDX8032BT	M1	X34-5840-21	YES	—	—	—	—	—	YES	—	—	—	YES	YES	X86-4032-70	—	YES	—	—	YES	YES	YES	—	YES	—	75	—	75	10K	YES	YES	YES	YES	—	YES
DDX8032BTM	M3	X34-5840-22	YES	—	—	—	—	—	YES	—	—	—	YES	YES	X86-4032-70	YES	YES	—	—	YES	YES	YES	—	YES	—	75	—	75	10K	YES	YES	YES	YES	—	YES
DDX8032BT	X1	X34-5840-71	YES	—	—	—	—	—	YES	—	—	—	—	YES	X86-4030-11	—	YES	—	—	YES	YES	YES	—	YES	—	75	—	75	30K	YES	YES	YES	YES	—	YES
DDX712	K1	X34-5980-10	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4030-11	—	—	YES	—	—	YES	YES	—	—	YES	75	—	75	10K	—	YES	YES	YES	YES	YES
DDX7032	R2	X34-5983-21	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4030-11	—	—	YES	—	—	YES	YES	—	—	YES	75	—	75	—	YES	YES	YES	YES	YES	YES
DDX7032	M2	X34-5980-21	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4032-70	—	—	YES	—	—	YES	YES	—	—	YES	75	—	75	10K	YES	YES	YES	YES	YES	YES
DDX7032M	M4	X34-5980-22	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4032-70	YES	—	YES	—	—	YES	YES	—	—	YES	75	—	75	10K	YES	YES	YES	YES	YES	YES
DDX7032	X2	X34-5980-71	—	YES	—	—	—	—	—	—	—	—	—	YES	X86-4030-11	—	—	YES	—	—	YES	YES	—	—	YES	75	—	75	30K	YES	YES	YES	YES	YES	YES
DNX8120	K1	X34-5840-11	YES	YES	—	—	—	—	YES	—	—	—	YES	YES	X86-4030-11	—	—	YES	YES	YES	—	—	—	—	—	10K	YES	10K	10K	—	—	—	—	—	YES
DNX8220BT	E3	X34-5842-72	YES	—	YES	—	YES	—	YES	—	—	—	YES	—	X86-4032-70	YES	—	YES	YES	YES	—	—	YES	YES	—	10K	YES	10K	3.3K	YES	—	YES	YES	YES	—
DNX7120	K2	X34-5980-11	YES	—	YES	—	—	—	—	—	—	—	YES	YES	X86-4030-11	—	—	YES	YES	YES	—	—	—	YES	YES	1K	YES	10K	10K	—	—	—	YES	YES	YES
DNX7220	E2	X34-5982-71	—	YES	YES	YES	—	—	—	—	—	—	YES	—	X86-4032-70	YES	—	YES	YES	YES	—	—	YES	YES	YES	1K	YES	10K	3.3K	YES	—	YES	YES	YES	—
DNX7320	M5	X34-5980-23	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4032-70	—	—	YES	YES	YES	—	—	—	YES	YES	1K	YES	10K	10K	YES	YES	YES	YES	YES	YES
DNX7320	X3	X34-5980-72	—	YES	—	—	—	—	—	—	—	—	YES	YES	X86-4030-11	—	—	YES	YES	YES	—	—	—	YES	YES	1K	YES	10K	30K	YES	YES	—	YES	YES	YES

DTA143XE
DTA143ZE
DTA144EUA
DTC114YUA
2SA1576A
2SC4617

2SB1188
2SC3357-A



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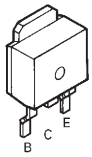

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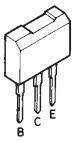

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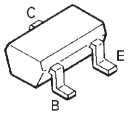
2SC4081



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⚠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.

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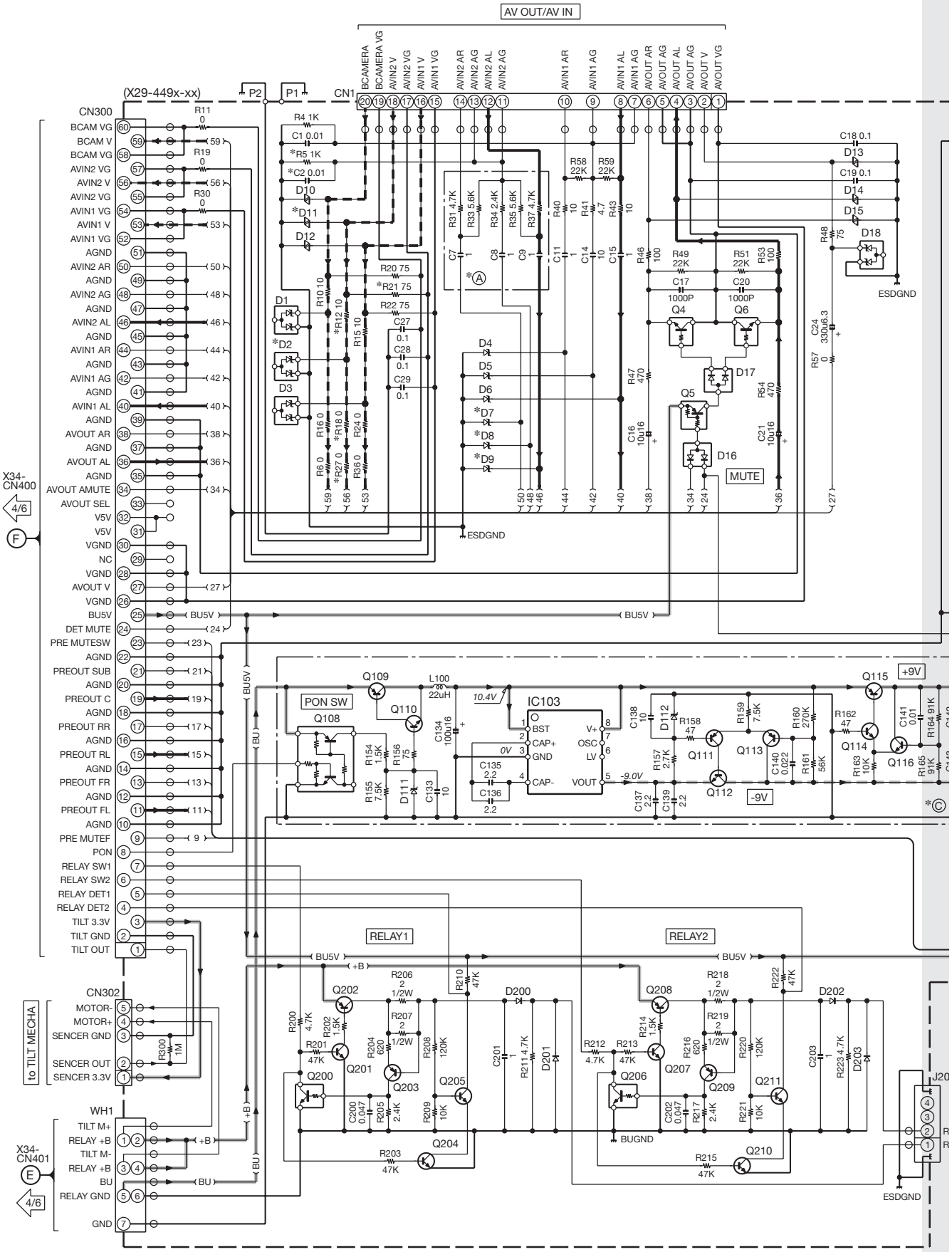
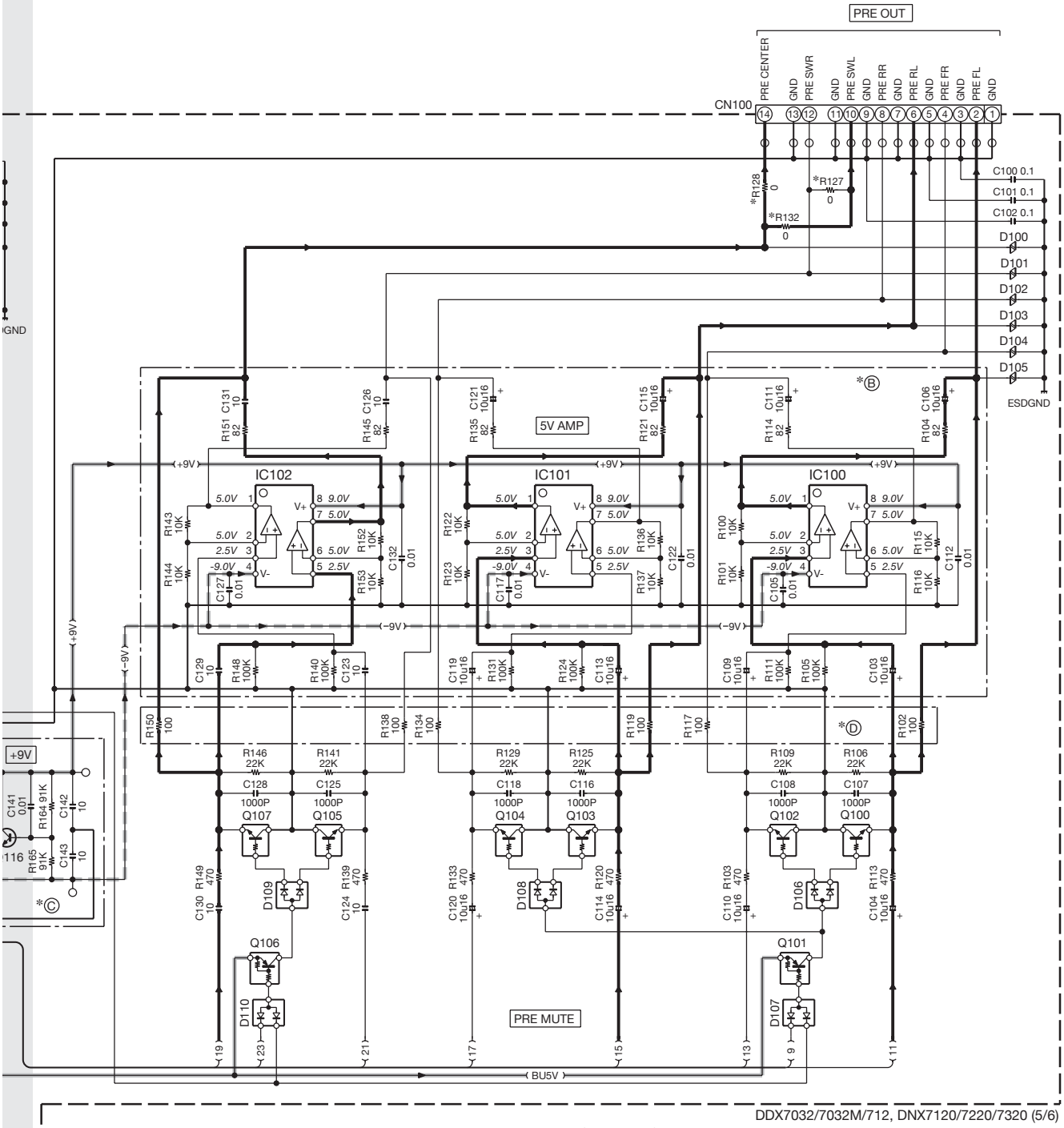
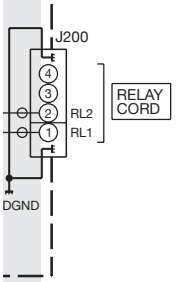
DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712, DNX7120/7220/7320 (5/6)



IC100-102 : NJM4565V-ZB
IC103 : ICL7660SIBAZ

Q4,6,100,102-105,107 : DTC643TU
Q5,101,106 : DTA144EUA
Q108 : UMC2N
Q109,202,208 : 2SB1443
Q110,112,114,116,201, 204,205,207,210,211 : 2SC4081
Q111,113,115,203,209 : 2SA1576A
Q200,206 : DTC114TUA

D1-3,18 : STZ6.2N
D4,6 : UDZS8.2B
D5,8 : UDZS6.2B
D7,9 : UDZS6.8B
D10-13 : AVRM16270MAAB
D14,15,100-105 : AVRM16180M6AB
D16,17,106-110 : DAP202U
D111 : UDZS11B
D112 : UDZS5.6B
D200-203 : 1SR154-400

VIDEO LINE
SIGNAL LINE
GND LINE
+B LINE
−B LINE

(X29-449x-xx)

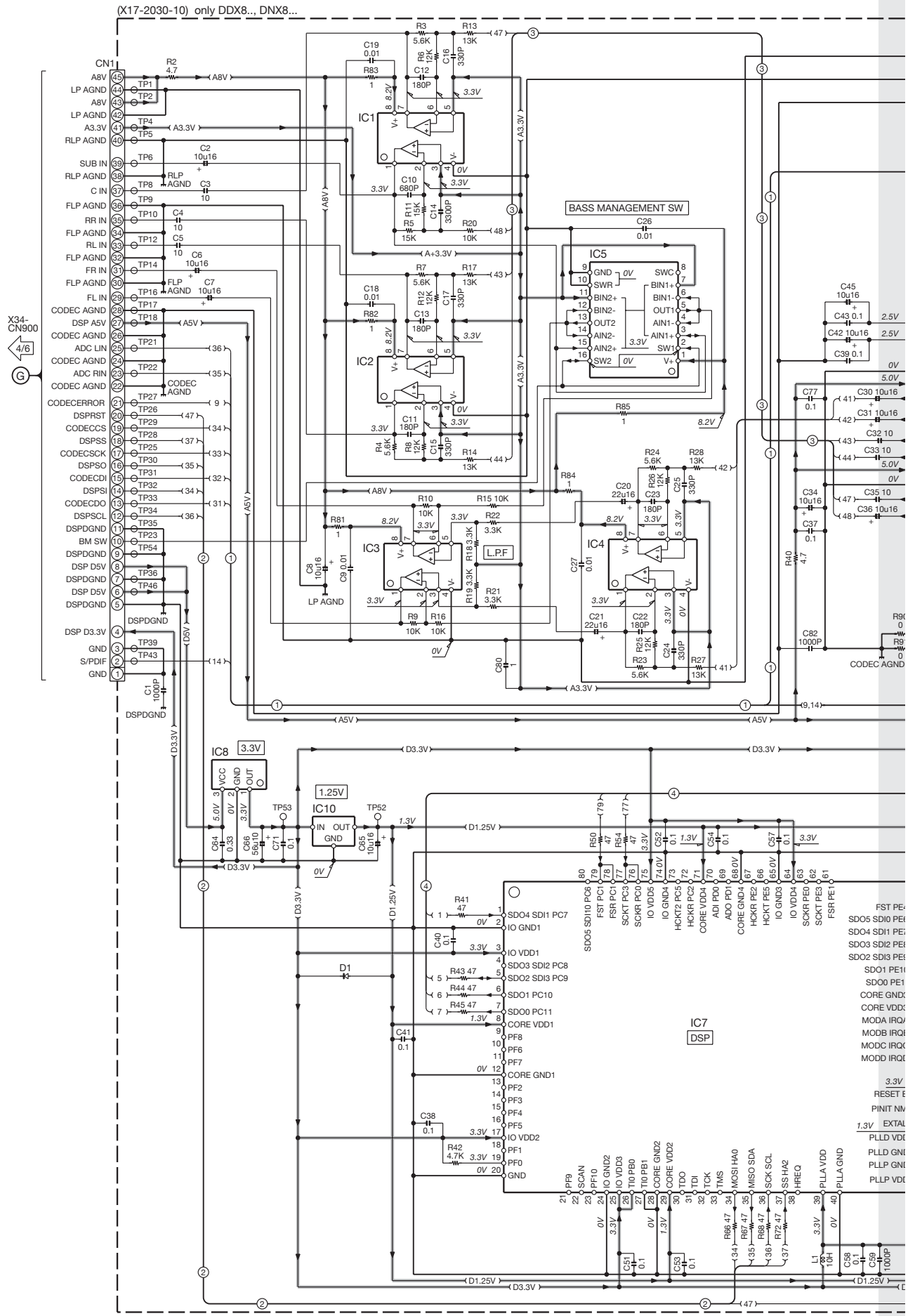
MODEL NAME	UNIT No.	ⒶⒷⒸ	Ⓓ	C2	D2, 7-9,11	R5,12,18,21, 27,127,128	R132
DDX812 DDX8022BT/BTY DDX8032BT/BTM	0-10	YES	—	YES	YES	YES	—
DDX712 DDX7032/M	0-11	—	YES	—	—	—	YES
DNX8120 DNX8220BT	0-10	YES	—	YES	YES	YES	—
DNX7120 DNX7220 DNX7320	0-11	—	YES	—	—	—	YES
—	3-01	—	YES	—	—	—	YES

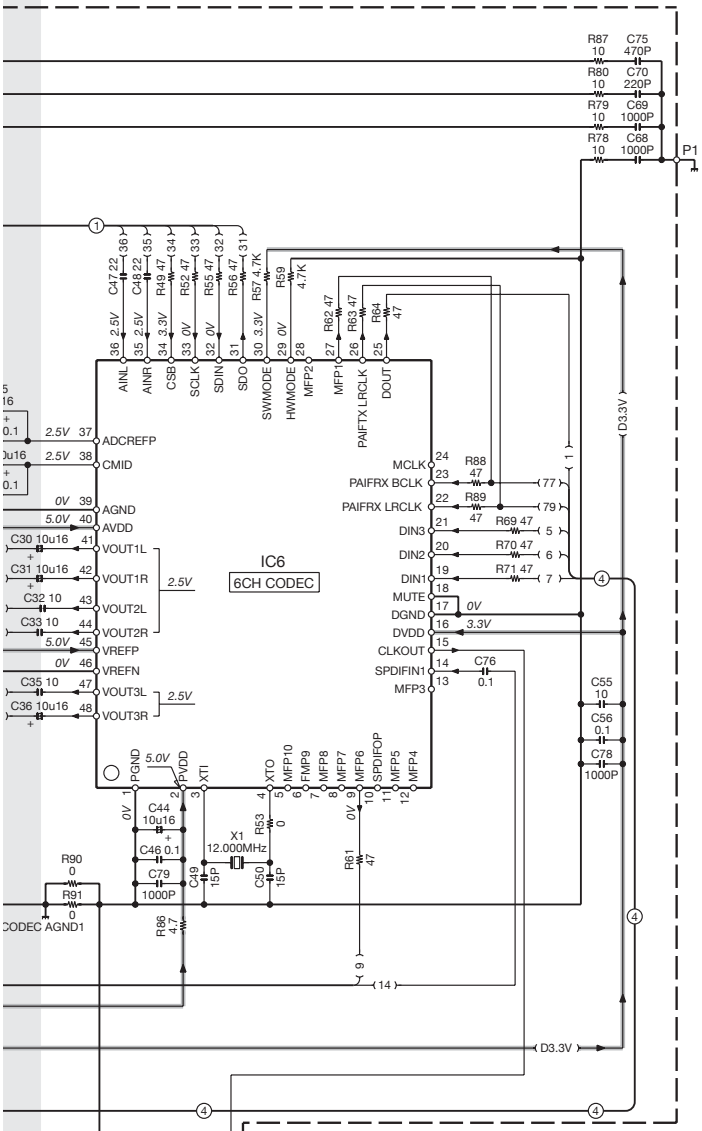
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

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.

DDX7032/7032M/712
DNX7120/7220/7320

(X17-2030-10) only DDX8.., DNX8...

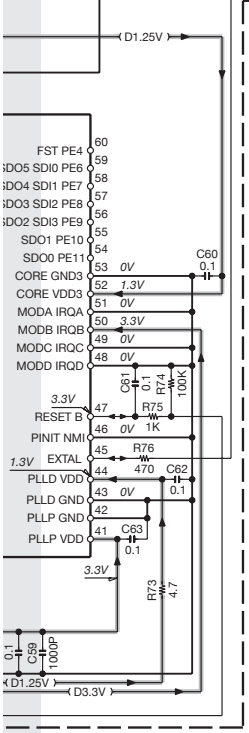


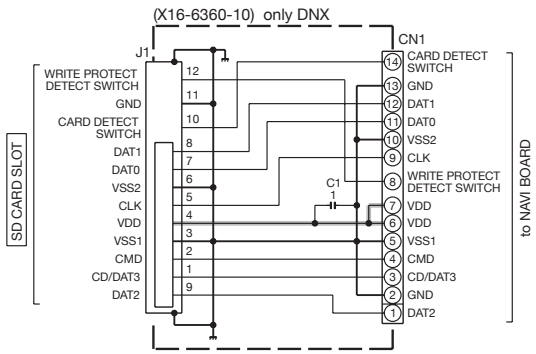


IC1-4 : NJM4580V-ZB
IC5 : NJM2123V-ZB
IC6 : WM8580AGEFTRV
IC7 : DSPC56371AF17
IC8 : BA033CC0FP
IC10 : E-LD1117DTC

D1 : CRS04

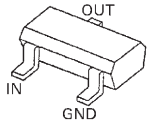
GND LINE
+B LINE





DDX7032/7032M/712, DNX7120/7220/7320 (6/6)

DTA114EUA
DTA114TUA
DTA124EUA
DTC124EUA
DTC144EUA



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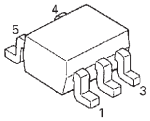

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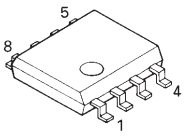

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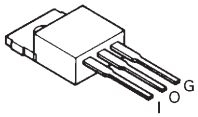

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⚠Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

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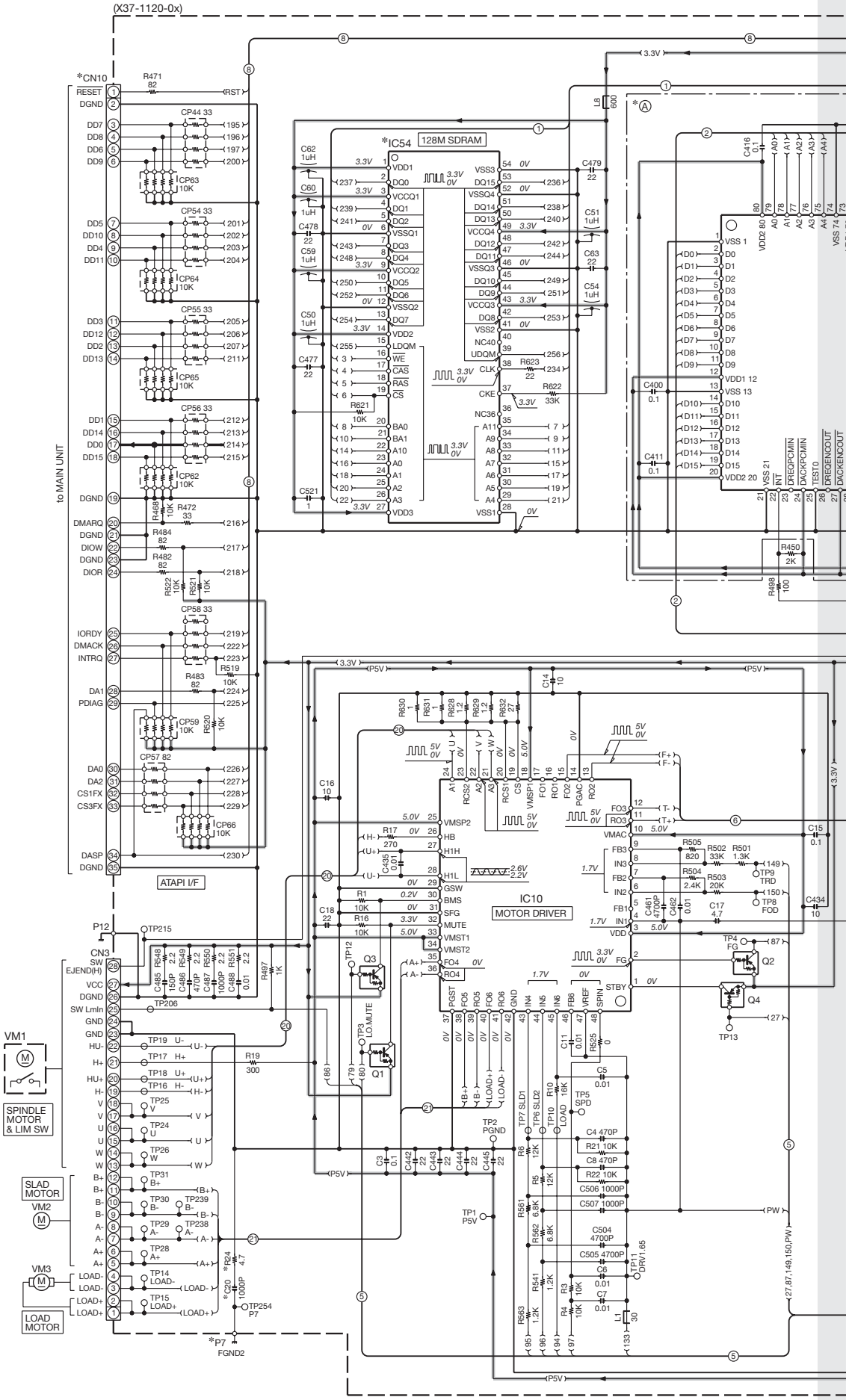
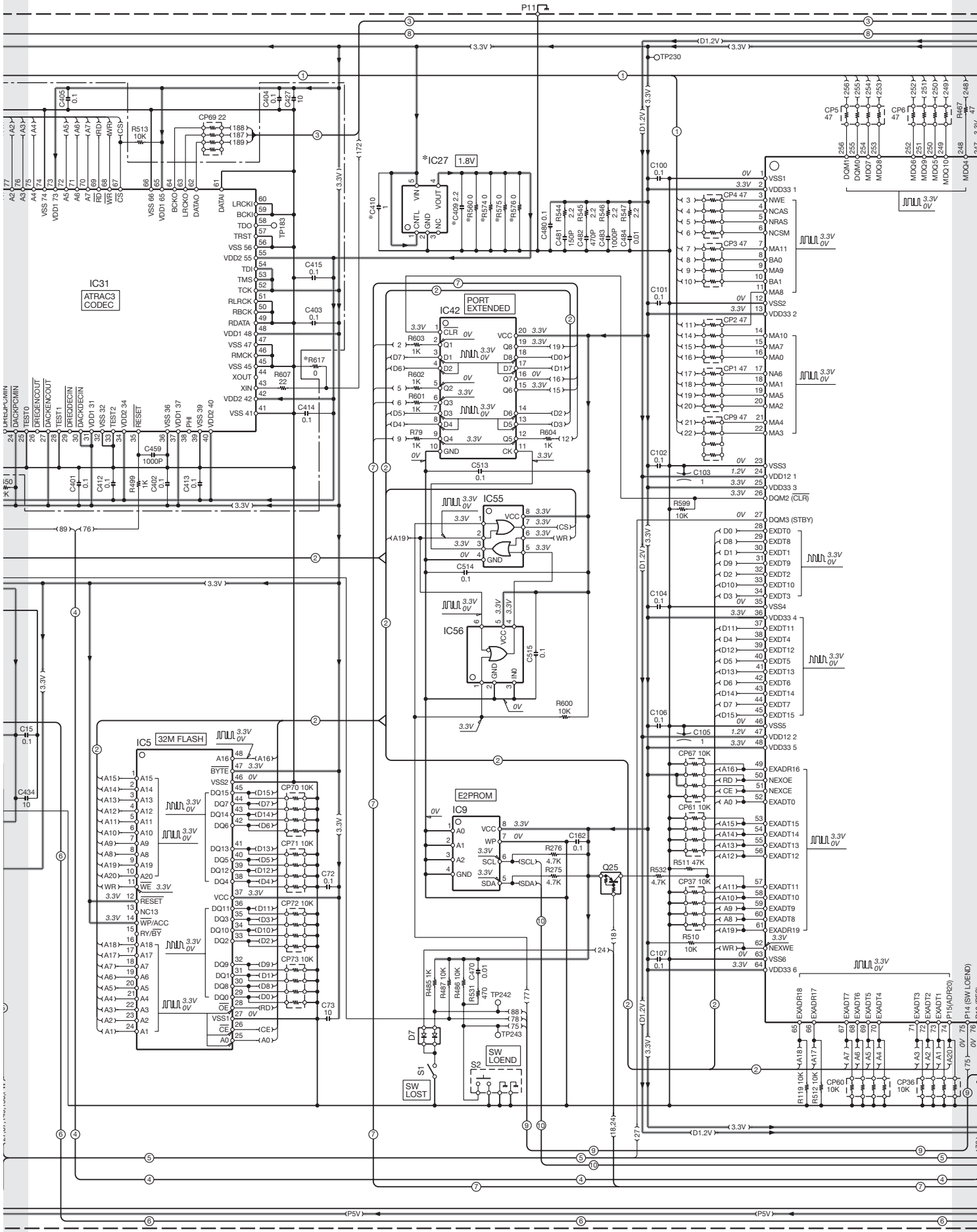
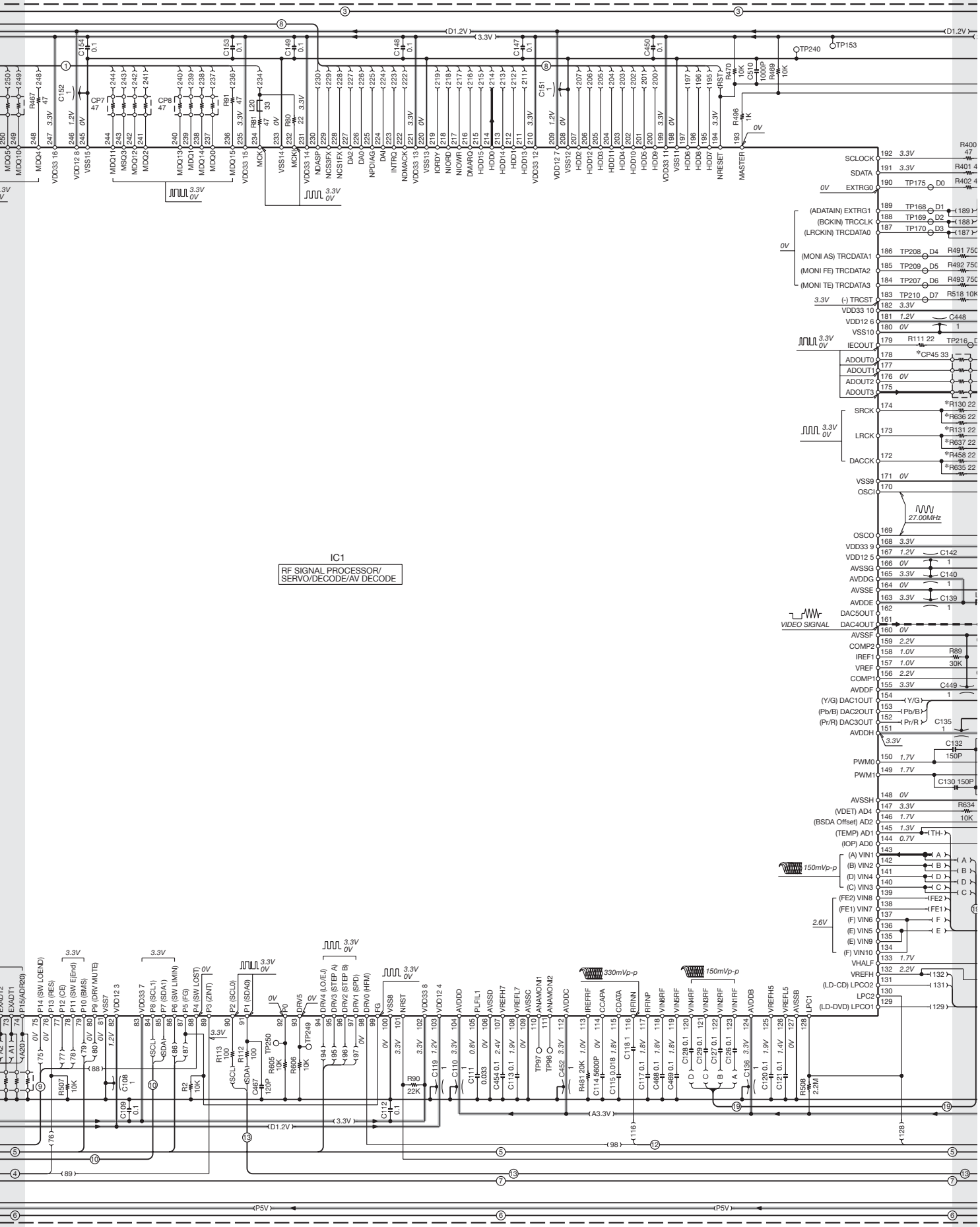
DDX7032/7032M/712
DNX7120/7220/7320



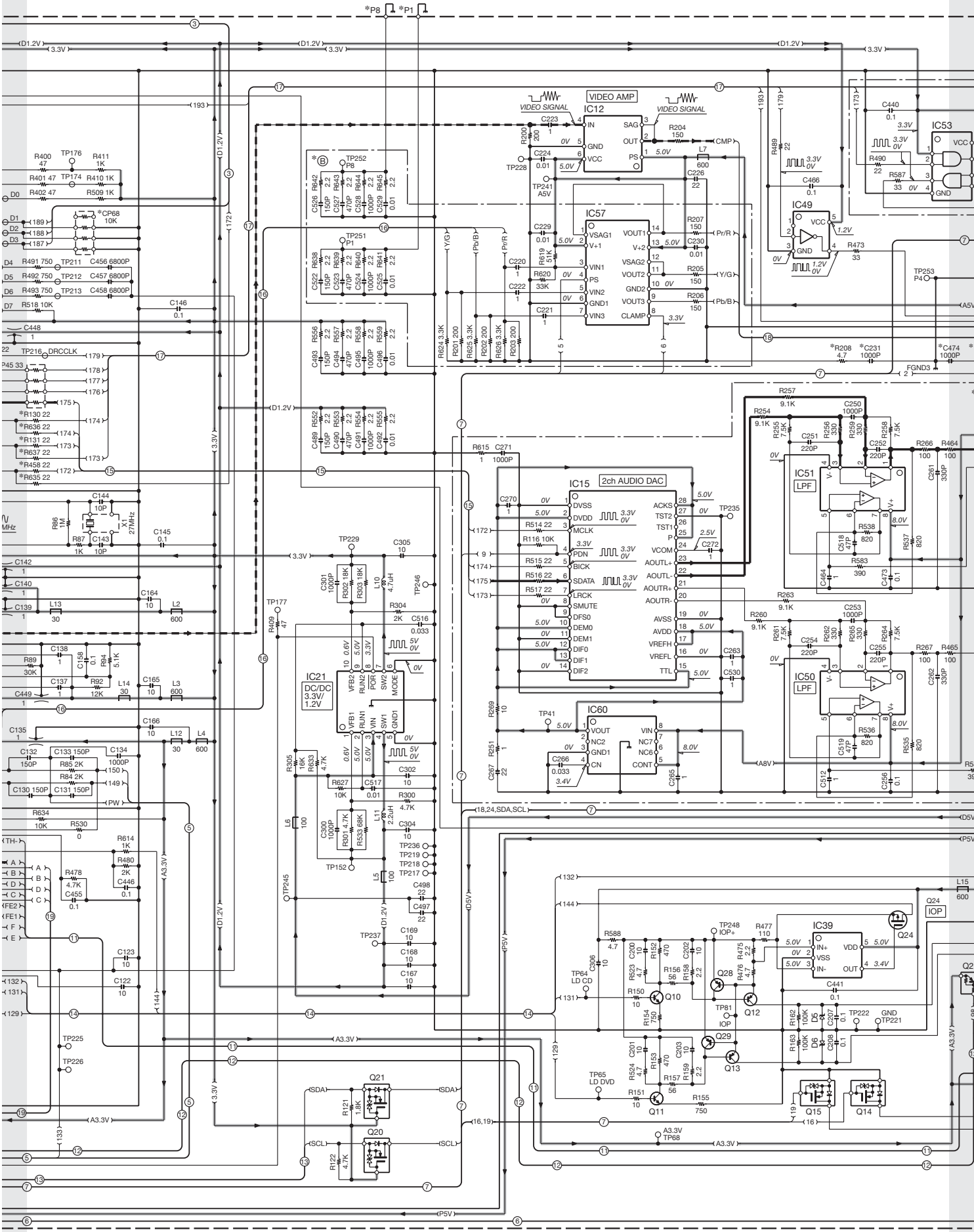
DDX7032/7032M/712
DNX7120/7220/7320



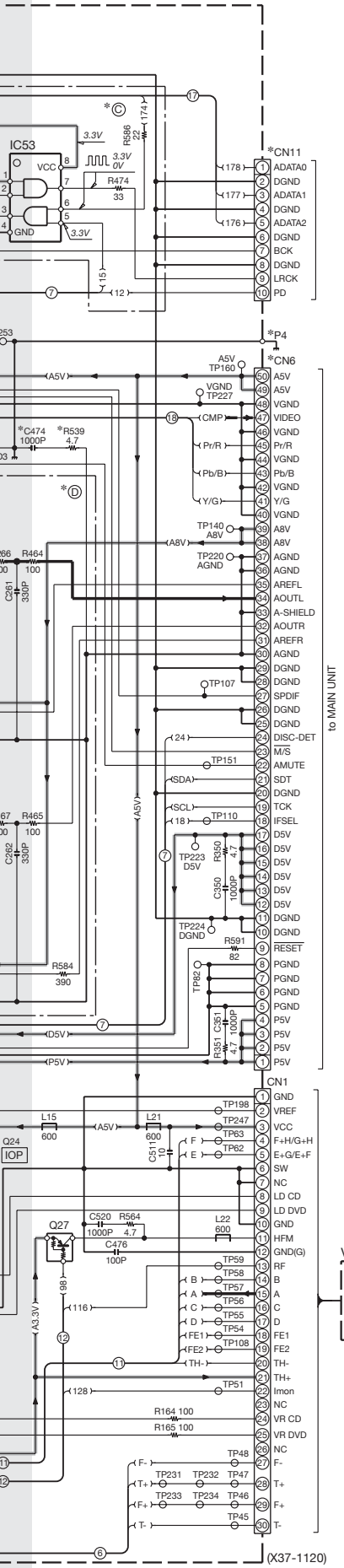
DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320



DDX7032/7032M/712
DNX7120/7220/7320



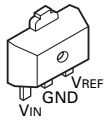
IC1 : MN2DS0016AAUB
IC5 : S29AL32D70TFI
IC9 : S-24CS04AFT
IC10 : AN41250A-VB
IC12 : MM1671XNRE
IC15 : AK4396VF
IC21 : LTC3548EDD-F
IC27 : NJM2865F318ZB
IC31 : LC82360-E
IC39 : NJU7042
IC42 : TC74HC273FT
IC49 : TC7SG04FU-F
IC50,51 : NJM4580V-ZB
IC53 : TC7WH08FK-F
IC54 : *
IC55 : TC7WH32FU-F
IC56 : HD74LV1GW57AE
IC57 : NJM2573V-ZB
IC60 : MM1665AHBE

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-F(Y)
D7 : 1SS402-F

(X37-1120-0x) UNIT No.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	C20, 231,474	C409, 410	CN6	CN10	CN11	CP45	CP68	IC27	IC54	P1,4, 7,8	R24, 208,539	R130, 635,637	R131, 458,636	R560,574-576, 617
0-00	YES	YES	YES	YES	YES	YES	E41-2598-05	E41-2597-05	E41-2595-05	YES	—	YES	IS45S16800TL1	YES	YES	YES	YES	—
0-01	YES	YES	YES	YES	YES	YES	E41-2603-05	E41-2602-05	E41-2601-05	YES	—	YES	IS45S16800TL1	YES	YES	YES	YES	—
0-02	—	—	—	—	—	—	E41-2598-05	E41-2597-05	—	—	YES	—	IS45S16800TL1	—	—	—	—	YES
0-03	—	YES	YES	YES	YES	—	E41-2603-05	E41-2602-05	—	YES	YES	—	IS45S16800TL1	YES	YES	—	YES	YES
0-04	—	—	—	YES	—	—	E41-2603-05	E41-2602-05	—	YES	YES	—	IS45S16800TL1	—	—	—	YES	YES
0-05	—	—	—	—	YES	—	E41-2598-05	E41-2597-05	—	—	YES	—	IS45S16800TL1	YES	YES	—	—	YES
0-06	YES	YES	YES	YES	YES	—	E41-2603-05	E41-2602-05	—	YES	YES	—	HY39S12816F7	YES	YES	—	YES	YES
0-07	—	—	—	—	YES	—	E41-2598-05	E41-2597-05	—	—	YES	—	IS45S16800TL1	YES	YES	—	—	YES

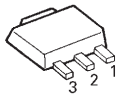
TA78L05F-F



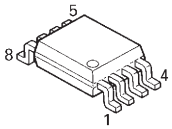
DAP202U
DA204U
DTA114YUA

2SK3019

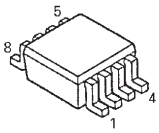
M5237ML-CF0J



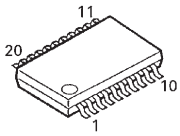
NJM2100V-ZB
NJM4580V-ZB
TC7WHU04FU-F
TC7WH123FU-F



TC7WH157FU-F



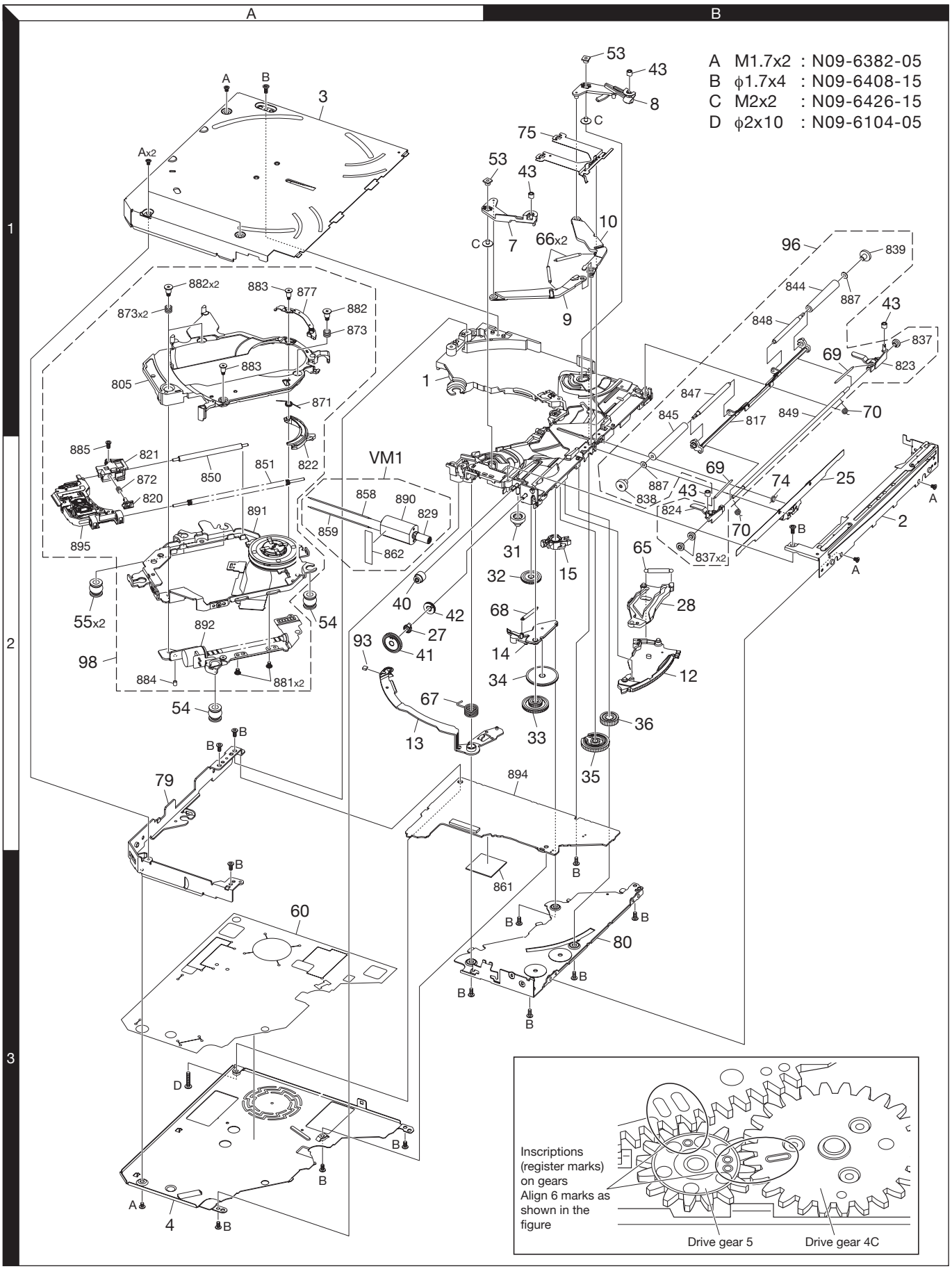
TC74VHC273FT



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.

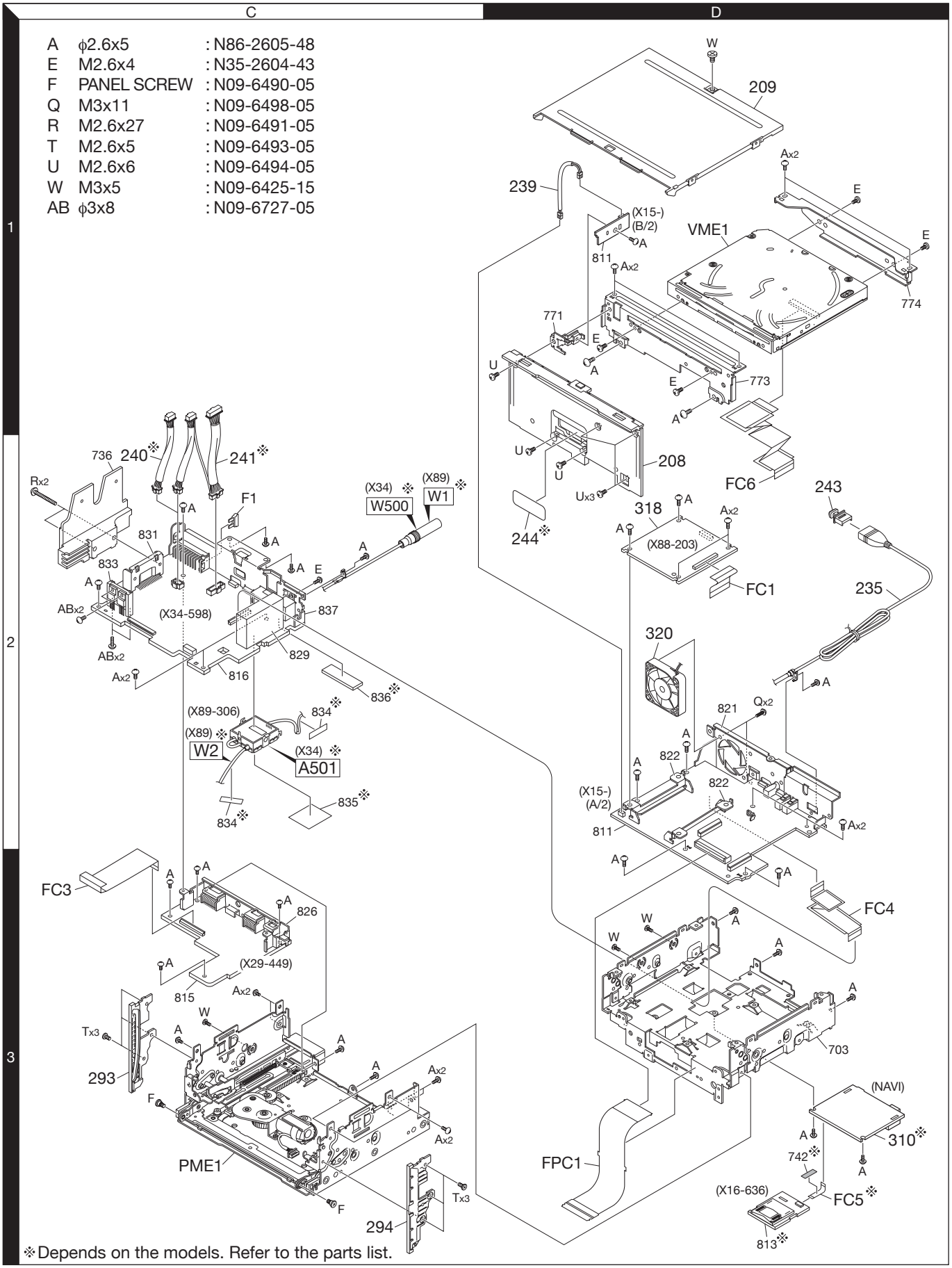
EXPLODED VIEW (DVD MECHANISM)



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

EXPLODED VIEW (UNIT)

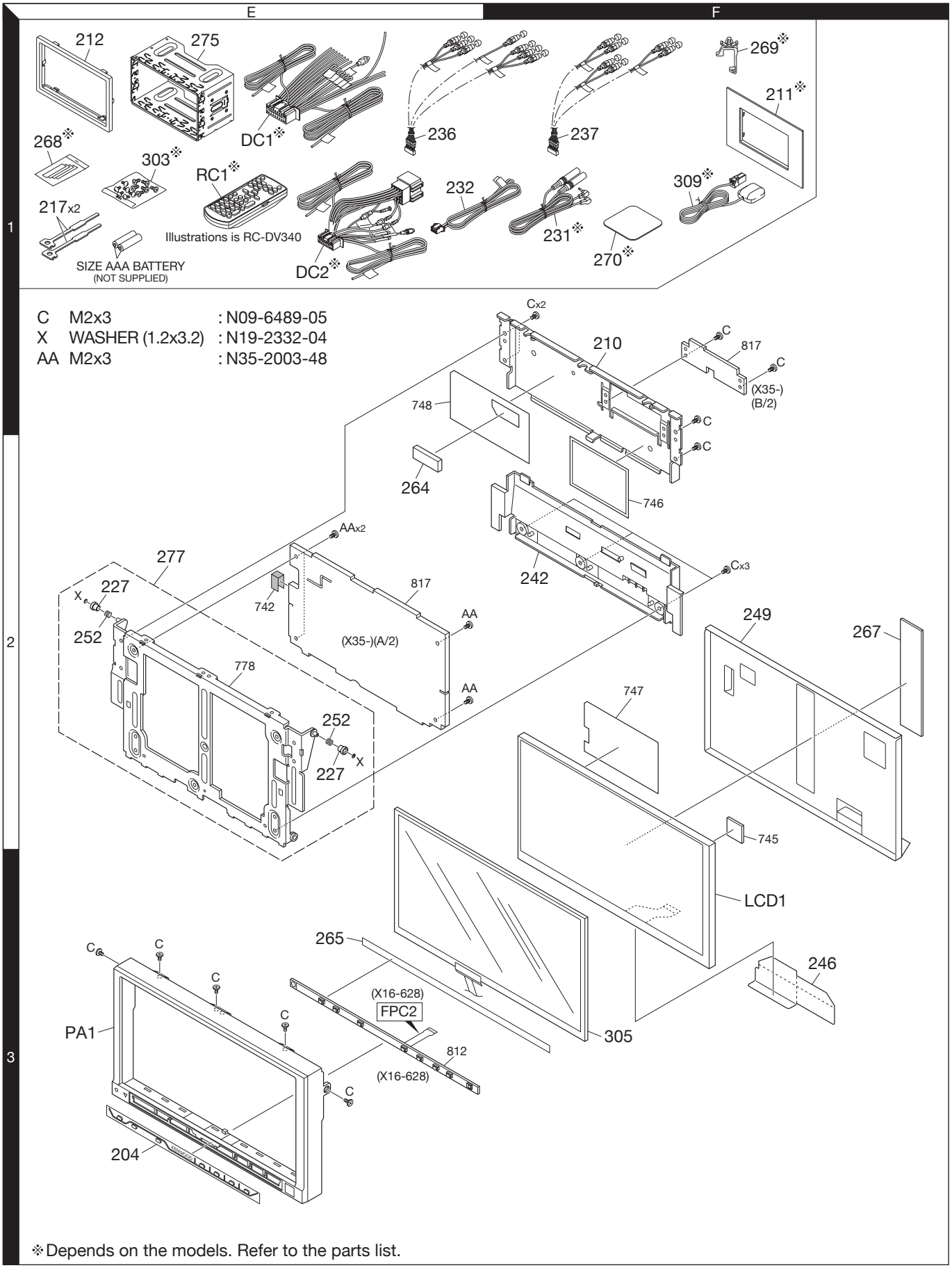
A	φ2.6x5	: N86-2605-48
E	M2.6x4	: N35-2604-43
F	PANEL SCREW	: N09-6490-05
Q	M3x11	: N09-6498-05
R	M2.6x27	: N09-6491-05
T	M2.6x5	: N09-6493-05
U	M2.6x6	: N09-6494-05
W	M3x5	: N09-6425-15
AB	φ3x8	: N09-6727-05



※Depends on the models. Refer to the parts list.

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

EXPLODED VIEW (PANEL)

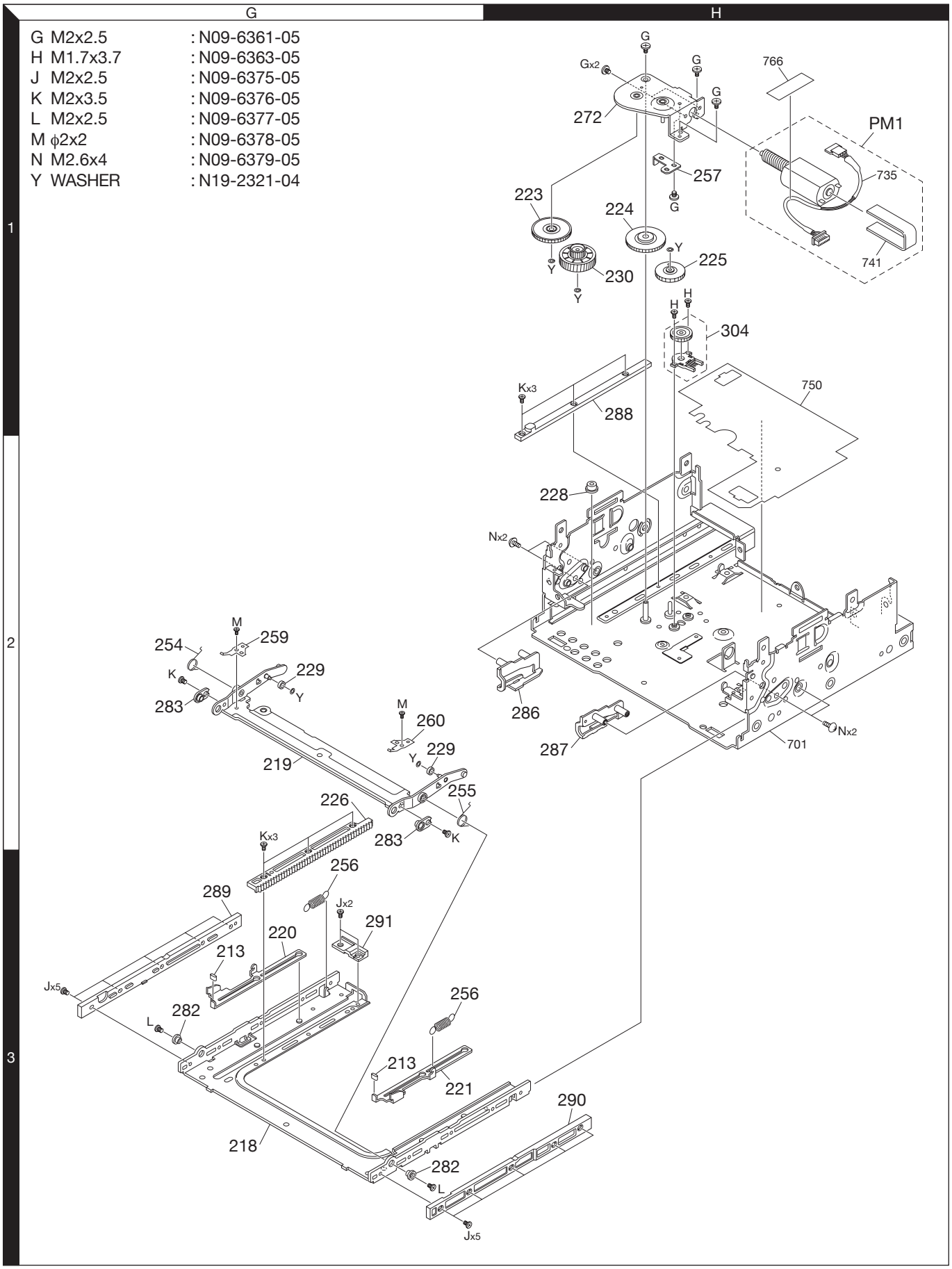


※Depends on the models. Refer to the parts list.

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

EXPLODED VIEW (DRIVE MECHANISM)

G	M2x2.5	: N09-6361-05
H	M1.7x3.7	: N09-6363-05
J	M2x2.5	: N09-6375-05
K	M2x3.5	: N09-6376-05
L	M2x2.5	: N09-6377-05
M	ϕ2x2	: N09-6378-05
N	M2.6x4	: N09-6379-05
Y	WASHER	: N19-2321-04



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

PARTS LIST

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

Ref. No.	Add	New	Parts No.	Description	Destination
DDX7032/7032M/712_DNX7120/7220/7320					
204	3E	✻	A21-6665-03	DRESSING PANEL	
208	1D		A22-3170-01	SUB PANEL ASSY	E2
208	1D		A22-3170-01	SUB PANEL ASSY	K2M5X3
208	1D	✻	A22-3174-01	SUB PANEL ASSY	K1M2M4
208	1D	✻	A22-3174-01	SUB PANEL ASSY	X2R2
209	1D		A52-0895-02	TOP PLATE	
210	1F		A46-1862-02	REAR COVER	
PA1	3E	✻	A64-4509-01	PANEL ASSY	K1
PA1	3E	✻	A64-4510-01	PANEL ASSY	R2X2
PA1	3E	✻	A64-4511-01	PANEL ASSY	M2M4
PA1	3E		A64-4522-01	PANEL ASSY	K2
PA1	3E	✻	A64-4523-01	PANEL ASSY	E2
PA1	3E	✻	A64-4613-01	PANEL ASSY	M5
PA1	3E	✻	A64-4614-01	PANEL ASSY	X3
PME1	3C		A10-5300-41	CHASSIS ASSY	
RC1	1E		A70-2082-15	REMOTE CONTROLLER AS (RC-DV330)	E2
RC1	1E		A70-2082-15	REMOTE CONTROLLER AS (RC-DV330)	K2M5X3
RC1	1E		A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	K1M2M4
RC1	1E		A70-2083-15	REMOTE CONTROLLER AS (RC-DV340)	X2R2
-		✻	B54-4647-00	INSTALLATION MANU (F.G.D.I.S.P)	E2
-			B54-4653-00	INSTALLATION MANU (ENG.FRE.SPA)	K1R2K2
-		✻	B54-4654-00	INSTALLATION MANUAL (POR.)	R2
-		✻	B54-4655-00	INSTALLATION MA (ENG.S-CHI.KOR)	M2X2M4
-		✻	B54-4655-00	INSTALLATION MA (ENG.S-CHI.KOR)	M5X3
-		✻	B54-4664-00	INSTALLATION MANUAL (ARA.)	M4
-			B59-1880-00	SUB-INSTRUCTION MANUAL	
-		✻	B64-4082-00	INSTRUCTION MANUAL (ENG.)	E2
-		✻	B64-4083-00	INSTRUCTION MANUAL (FRE.)	E2
-		✻	B64-4084-00	INSTRUCTION MANUAL (GER.)	E2
-		✻	B64-4085-00	INSTRUCTION MANUAL (DUT.)	E2
-		✻	B64-4086-00	INSTRUCTION MANUAL (ITA.)	E2
-		✻	B64-4087-00	INSTRUCTION MANUAL (SPA.)	E2
-		✻	B64-4088-00	INSTRUCTION MANUAL (POR.)	E2
-			B64-4103-00	INSTRUCTION MANUAL (ENG.)	K1R2K2
-			B64-4104-00	INSTRUCTION MANUAL (FRE.)	K1K2
-			B64-4105-00	INSTRUCTION MANUAL (SPA.)	K1R2K2
-		✻	B64-4106-00	INSTRUCTION MANUAL (POR.)	R2
-		✻	B64-4107-00	INSTRUCTION MANUAL (ENG.)	M2X2M4
-		✻	B64-4107-00	INSTRUCTION MANUAL (ENG.)	M5X3
-		✻	B64-4108-00	INSTRUCTION MANUAL (S-CHI.)	M2M5
-		✻	B64-4109-00	INSTRUCTION MANUAL (KOR.)	M2
-		✻	B64-4110-00	INSTRUCTION MANUAL (ENG.)	K2
-		✻	B64-4111-00	INSTRUCTION MANUAL (FRE.SPA.)	K2
-		✻	B64-4112-00	INSTRUCTION MANUAL (ENG.)	E2
-		✻	B64-4113-00	INSTRUCTION MANUA (FRE.GER.DUT)	E2
-		✻	B64-4114-00	INSTRUCTION MANUA (ITA.SPA.POR)	E2
-		✻	B64-4172-00	INSTRUCTION MANUAL (ARA.)	M4
-		✻	B64-4173-00	INSTRUCTION MANUAL (ENG.S-CHI.)	M5
-		✻	B64-4180-00	INSTRUCTION MANUAL (ENG.)	X3
211	1F		B07-3172-12	ESCUTCHEON	K1M2M4
211	1F		B07-3172-12	ESCUTCHEON	M5X3
211	1F		B07-3172-12	ESCUTCHEON	X2R2K2
212	1E		B07-3224-01	ESCUTCHEON	

Ref. No.	Add	New	Parts No.	Description	Destination
213	3G		B09-0541-04	CAP	
LCD1	3F		B38-1199-05	LCD	
217	1E		D10-4589-04	LEVER	
218	3G		D10-4895-22	SLIDER ASSY	
219	2G		D10-4897-13	ARM ASSY	
220	3G		D10-4899-03	LEVER	
221	3G		D10-4900-03	LEVER	
223	1H		D13-2394-04	GEAR	
224	1H		D13-2395-04	GEAR	
225	1H		D13-2396-04	GEAR	
226	3G		D13-2397-03	RACK (GEAR)	
227	2E		D14-1024-04	ROLLER	
228	2H		D14-1010-04	ROLLER	
229	2G		D14-1011-14	ROLLER	
230	1H		D19-0653-23	CLUTCH ASSY	
231	1F		E30-6785-05	CORD WITH PLUG (IPOD VIDEO)	K1R2K2
232	1F	✻	E30-6786-05	CORD WITH PLUG (RELAY)	
235	2D		E30-6789-05	CORD WITH PLUG (USB)	
236	1E		E30-6792-05	CORD WITH PINPLUG (AV)	
237	1F		E30-6794-05	CORD WITH PINPLUG (PRE)	
239	1D	✻	E39-0915-05+	WIRING HARNESS	
240	2C	✻	E39-0983-15	WIRING HARNESS	K1M2M4
240	2C	✻	E39-0983-15	WIRING HARNESS	X2R2
241	2C	✻	E39-0986-15	WIRING HARNESS	E2
241	2C	✻	E39-0986-15	WIRING HARNESS	K2M5X3
DC1	1E	✻	E30-6824-05	DC CORD	K1M2M4
DC1	1E	✻	E30-6824-05	DC CORD	M5X3
DC1	1E	✻	E30-6824-05	DC CORD	X2R2K2
DC2	1E	✻	E30-6825-05	DC CORD	E2
FC1	2D	✻	E39-1003-05	FLAT CABLE	
FC3	3C	✻	E39-1024-05	FLAT CABLE	
FC4	3D	✻	E39-1025-05	FLAT CABLE	
FC5	3D	✻	E39-1026-05	FLAT CABLE	E2
FC5	3D	✻	E39-1026-05	FLAT CABLE	K2M5X3
FC6	2D	✻	E39-1027-05	FLAT CABLE	
242	2F		F07-1192-02	COVER	
243	2D		F09-2929-04	CAP (USB)	
244	2D		F09-2932-04	SHEET	K1M2M4
244	2D		F09-2932-04	SHEET	X2R2
246	3F		F09-2958-04	SHEET	
249	2F		F20-2432-03	INSULATING SHEET	
⚠ F1	2C		F52-0007-05	FUSE (MINI BLADE TYPE) 15A	
252	2E		G01-4659-04	COMPRESSION SPRING	
254	2G		G01-3288-04	TORSION COIL SPRING	
255	2G		G01-3289-04	TORSION COIL SPRING	
256	3G		G01-3290-04	EXTENSION SPRING	
257	1H		G02-1539-04	FLAT SPRING	
259	2G		G02-1544-04	FLAT SPRING	
260	2G		G02-1545-04	FLAT SPRING	
264	2E		G16-1688-04	SHEET	
265	3E	✻	G16-1713-14	SHEET	
267	2F		G16-1695-04	SHEET	
-			H54-4312-03	ITEM CARTON CASE	K2

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

DDX7032/7032M/712_DNX7120/7220/7320

Ref. No.	Add	New	Parts No.	Description	Destination
-		✻	H54-4313-03	ITEM CARTON CASE	E2
-		✻	H54-4320-03	ITEM CARTON CASE	K1
-		✻	H54-4321-03	ITEM CARTON CASE	R2
-		✻	H54-4322-03	ITEM CARTON CASE	M2X2
-		✻	H54-4375-03	ITEM CARTON CASE	M5X3
-		✻	H54-4377-03	ITEM CARTON CASE	M4
268	1E		H30-0595-04	ADHESIVE DOUBLE-COATED TAPE	K1M2M4
268	1E		H30-0595-04	ADHESIVE DOUBLE-COATED TAPE	M5X3
268	1E		H30-0595-04	ADHESIVE DOUBLE-COATED TAPE	X2R2K2
269	1F		J11-0660-05	CLAMPER	K2
270	1F		J21-9867-04	MOUNTING HARDWARE (GPS-BOTTOM)	E2
270	1F		J21-9867-04	MOUNTING HARDWARE (GPS-BOTTOM)	K2M5X3
272	1H		J22-0444-13	MOUNTING HARDWARE ASSY	
275	1E		J22-0657-03	MOUNTING HARDWARE ASSY	
277	2E	✻	J22-0751-02	MOUNTING HARDWARE ASSY	
282	3G		J31-1075-14	COLLAR (ARM COLLAR)	
283	2G		J31-1077-04	COLLAR (PANEL COLLAR)	
286	2H		J90-1124-13	GUIDE ASSY	
287	2H		J90-1126-13	GUIDE ASSY	
288	2H		J90-1128-03	RAIL	
289	3G		J90-1129-23	RAIL	
290	3H		J90-1130-23	RAIL	
291	3G		J90-1131-03	GUIDE	
293	3C		J90-1160-01	RAIL (L)	
294	3C		J90-1161-01	RAIL (R)	
FPC1	3D	✻	J86-0051-05	FPC (LEAD FREE)	
303	1E		N99-1779-15	SCREW SET	K1M2M4
303	1E		N99-1779-15	SCREW SET	M5X3
303	1E		N99-1779-15	SCREW SET	X2R2K2
A	3C		N86-2605-48	BINDING HEAD TAPTITE SCREW	
AA	2E		N35-2003-48	BINDING HEAD MACHINE SCREW	
C	3E	✻	N09-6489-05	MACHINE SCREW (M2.0X3.0)	
E	1D		N35-2604-43	BINDING HEAD MACHINE SCREW	
F	3C		N09-6490-05	STEPPED SCREW (PANEL SCREW)	
G	1H		N09-6361-05	MACHINE SCREW (M2X2.5)	
H	1H		N09-6363-05	MACHINE SCREW (M1.7X3.7)	
J	3G		N09-6375-05	MACHINE SCREW (M2X2.5)	
K	2G		N09-6376-05	MACHINE SCREW (M2X3.5)	
L	3G		N09-6377-05	MACHINE SCREW (M2X2.5)	
M	2G		N09-6378-05	TAPTITE SCREW (STITE 2X2)	
N	2H		N09-6379-05	MACHINE SCREW (M2.6X4 BIND)	
R	2C		N09-6491-05	MACHINE SCREW (M2.6X27)	
T	3C		N09-6493-05	MACHINE SCREW (M2.6X5)	
U	1D		N09-6494-05	MACHINE SCREW (M2.6X6)	
W	3C		N09-6425-15	MACHINE SCREW (M3.0X5)	
X	2E		N19-2332-04	FLAT WASHER (1.2X3.2X0.25)	
Y	1H		N19-2321-04	FLAT WASHER (1.6X4X0.25)	
304	1H		R31-0248-05	VARIABLE RESISTOR	
305	3F		S79-0854-05	SWITCH ASSY	
PM1	1H		T42-1322-14	MOTOR ASSY	
309	1F		W02-5305-05	ANTENNA MODULE (GPS-ANT)	E2
309	1F		W02-5305-05	ANTENNA MODULE (GPS-ANT)	K2M5X3
310	1D	✻	W02-5307-05	NAVIGATION MODULE (NAVI-M)	M5X3
310	1D	✻	W02-5309-05	NAVIGATION MODULE (NAVI-K)	K2
310	1D	✻	W02-5310-15	NAVIGATION MODULE (NAVI-E)	E2
318	2D		X88-2030-11	DIGITAL I/O UNIT	
VME1	1D	✻	X92-6180-01	DVD MECHANISM ASSY (DVS-8561V)	

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
D514			B30-1767-05	LED	
C1			C90-5670-05	ELECTRO 2200UF 16WV	
C2,3			CK73GB1H104K	CHIP C 0.10UF K	
C4			CK73FB0J106K	CHIP C 10UF K	E2
C4			CK73FB0J106K	CHIP C 10UF K	K2M5X3
C5			CK73GB1H103K	CHIP C 0.010UF K	E2
C5			CK73GB1H103K	CHIP C 0.010UF K	K2M5X3
C6			CK73GB1H104K	CHIP C 0.10UF K	
C7,8			CK73GB1H103K	CHIP C 0.010UF K	
C9			CE32BF1C221M	CHIP EL 220UF 16WV	E2
C9			CE32BF1C221M	CHIP EL 220UF 16WV	K2M5X3
C19			CE32BF1E101M	CHIP EL 100UF 25WV	
C38			CK73GB1H103K	CHIP C 0.010UF K	
C39			CK73GB1H104K	CHIP C 0.10UF K	
C40			CE32BF1E101M	CHIP EL 100UF 25WV	
C41			CK73GB1C104K	CHIP C 0.10UF K	
C42			CK73GB0J105K	CHIP C 1.0UF K	
C53			CE32BJ1C470M	CHIP EL 47UF 16WV	
C57			CE32BJ1C100M	CHIP EL 10UF 16WV	
C58			CK73GB1H103K	CHIP C 0.010UF K	
C59			CK73FB1E474K	CHIP C 0.47UF K	
C94			CK73GB1A105K	CHIP C 1.0UF K	
C95			CK73GB1C104K	CHIP C 0.10UF K	
C96			CE32BF1C221M	CHIP EL 220UF 16WV	
C97			CE32BJ1C101M	CHIP EL 100UF 16WV	
C102			CK73GB1A105K	CHIP C 1.0UF K	
C115			CE32BJ1C100M	CHIP EL 10UF 16WV	
C122			CK73GB1H103K	CHIP C 0.010UF K	
C124,125			CK73GB1A105K	CHIP C 1.0UF K	
C128			CK73GB1A105K	CHIP C 1.0UF K	
C129			CK73FB0J106K	CHIP C 10UF K	
C133			CK73GB1C104K	CHIP C 0.10UF K	
C134			CK73GB1A105K	CHIP C 1.0UF K	
C137			CK73FB1C105K	CHIP C 1.0UF K	
C200,201			CC73GCH1H101J	CHIP C 100PF J	
C202			CK73GB1C473K	CHIP C 0.047UF K	
C203,204			CK73GB1H102K	CHIP C 1000PF K	
C205			CC73GCH1H221J	CHIP C 220PF J	
C206			CC73GCH1H101J	CHIP C 100PF J	
C207			CC73GCH1H470J	CHIP C 47PF J	
C208			CK73GB1H103K	CHIP C 0.010UF K	
C209			CK73GB1H223K	CHIP C 0.022UF K	
C210			CK73GB1H103K	CHIP C 0.010UF K	
C212,213			CK73GB1H102K	CHIP C 1000PF K	
C214			CK73GB1C473K	CHIP C 0.047UF K	
C215			CC73GCH1H221J	CHIP C 220PF J	

⚠Indicates safety critical components.

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description			Destination
C217			CK73GB1H102K	CHIP C	1000PF	K	
C218			CK73GB1C473K	CHIP C	0.047UF	K	
C219			CC73GCH1H221J	CHIP C	220PF	J	
C220			CC73GCH1H470J	CHIP C	47PF	J	
C221			CK73GB1H103K	CHIP C	0.010UF	K	
C222			CK73GB1H153K	CHIP C	0.015UF	K	
C224,225			CK73GB1H102K	CHIP C	1000PF	K	
C226			CC73GCH1H470J	CHIP C	47PF	J	
C227			CK73GB1C473K	CHIP C	0.047UF	K	
C228			CC73GCH1H221J	CHIP C	220PF	J	
C230			CK73GB1H223K	CHIP C	0.022UF	K	
C231			CK73GB1H102K	CHIP C	1000PF	K	
C232			CK73FB0J106K	CHIP C	10UF	K	
C233			CK73GB1C104K	CHIP C	0.10UF	K	
C234			CK73GB1H104K	CHIP C	0.10UF	K	
C235			CK73EB1E225K	CHIP C	2.2UF	K	
C236-238			CK73GB1H104K	CHIP C	0.10UF	K	
C239,240			CK73GB1H103K	CHIP C	0.010UF	K	
C241			CK73GB1H104K	CHIP C	0.10UF	K	
C242			CK73FB0J106K	CHIP C	10UF	K	
C243			CK73GB1C104K	CHIP C	0.10UF	K	
C244			CK73GB1H104K	CHIP C	0.10UF	K	
C245			CK73EB1E225K	CHIP C	2.2UF	K	
C246-248			CK73GB1H104K	CHIP C	0.10UF	K	
C249,250			CK73GB1H103K	CHIP C	0.010UF	K	
C251			CK73GB1H104K	CHIP C	0.10UF	K	
C252			CK73GB1H103K	CHIP C	0.010UF	K	
C253			CK73GB1H104K	CHIP C	0.10UF	K	
C254			CK73EB1E106K	CHIP C	10UF	K	
C255			CK73GB1H103K	CHIP C	0.010UF	K	
C256			CK73GB1H104K	CHIP C	0.10UF	K	
C257,258			CE32BQ1E680M	CHIP EL	68UF	25WV	
C259			CK73GB1H104K	CHIP C	0.10UF	K	
C260			CK73GB1H103K	CHIP C	0.010UF	K	
C261			CK73EB1E106K	CHIP C	10UF	K	
C262			CK73GB1H102K	CHIP C	1000PF	K	
C263			CE32AV1A121M	CHIP EL	120UF	10WV	
C264			CK73GB1H103K	CHIP C	0.010UF	K	
C265,266			CK73GB1C104K	CHIP C	0.10UF	K	
C267			CK73GB1H103K	CHIP C	0.010UF	K	
C268			CE32AV0J221M	CHIP EL	220UF	6.3WV	
C269			CK73GB1H102K	CHIP C	1000PF	K	
C270			CK73GB1H103K	CHIP C	0.010UF	K	
C271			CK73GB1H104K	CHIP C	0.10UF	K	
C272,273			CK73GB1H102K	CHIP C	1000PF	K	
C274			CK73GB1H103K	CHIP C	0.010UF	K	
C275			CK73GB1H104K	CHIP C	0.10UF	K	
C276			CK73EB1E106K	CHIP C	10UF	K	
C277			CK73GB1H103K	CHIP C	0.010UF	K	
C278			CK73GB1H104K	CHIP C	0.10UF	K	
C279			CE32BQ1E680M	CHIP EL	68UF	25WV	
C280			CE32BM1E470M	CHIP EL	47UF	25WV	
C281			CK73GB1H104K	CHIP C	0.10UF	K	
C282			CK73GB1H102K	CHIP C	1000PF	K	
C283			CE32AV0G331M	CHIP EL	330UF	4.0WV	
C284			CK73GB1H103K	CHIP C	0.010UF	K	
C285,286			CK73GB1C104K	CHIP C	0.10UF	K	
C287			CK73GB1H102K	CHIP C	1000PF	K	
C288			CK73GB1H103K	CHIP C	0.010UF	K	
C289			CK73GB1H104K	CHIP C	0.10UF	K	
C290			CK73GB1H103K	CHIP C	0.010UF	K	
C291			C93-1367-05	CHIP C	10UF	K	
C293			CK73GB1H103K	CHIP C	0.010UF	K	
C294			CE32AV0J221M	CHIP EL	220UF	6.3WV	
C304-306			CK73EB1E106K	CHIP C	10UF	K	
C401			CK73HB1E103K	CHIP C	0.010UF	K	
C403,404			CK73HB1A104K	CHIP C	0.10UF	K	
C405			CK73HB1E103K	CHIP C	0.010UF	K	
C406			CC73HCH1H220J	CHIP C	22PF	J	
C407			CC73HCH1H180J	CHIP C	18PF	J	
C408			CK73HB0J105K	CHIP C	1.0UF	K	
C409-415			CK73HB1A104K	CHIP C	0.10UF	K	
C416-419			CC73HCH1H471J	CHIP C	470PF	J	
C420			CK73HB0J105K	CHIP C	1.0UF	K	
C421-426			CC73HCH1H101J	CHIP C	100PF	J	
C427,428			CC73HCH1H100D	CHIP C	10PF	D	
C429,430			CK73FB0J106K	CHIP C	10UF	K	
C433			CK73GB1H103K	CHIP C	0.010UF	K	
C434,435			CK73GB1H222K	CHIP C	2200PF	K	
C503			CK73GB1H104K	CHIP C	0.10UF	K	E2
C503			CK73GB1H104K	CHIP C	0.10UF	K	K2M5X3
C517			CK73FB0J106K	CHIP C	10UF	K	
C518			CK73GB1H222K	CHIP C	2200PF	K	
C520			CK73GB1H103K	CHIP C	0.010UF	K	
C521			CE32BJ1C470M	CHIP EL	47UF	16WV	
C522,523			CK73GB0J475K	CHIP C	4.7UF	K	
C524			CK73GB1C104K	CHIP C	0.10UF	K	
C526-528			CK73GB1A474K	CHIP C	0.47UF	K	
C529			CK73GB1H102K	CHIP C	1000PF	K	
C530			CK73GB1A474K	CHIP C	0.47UF	K	
C531			CK73GB1C104K	CHIP C	0.10UF	K	
C533,534			CK73GB1H222K	CHIP C	2200PF	K	
C535-538			CK73FB0J106K	CHIP C	10UF	K	
C600			CK73GB1H103K	CHIP C	0.010UF	K	
C601,602			CK73GB0J475K	CHIP C	4.7UF	K	
C603-605			CK73GB0J105K	CHIP C	1.0UF	K	
C606			CK73GB0J475K	CHIP C	4.7UF	K	
C607			CK73GB1H103K	CHIP C	0.010UF	K	
C608			CK73GB0J475K	CHIP C	4.7UF	K	
C609,610			CK73GB0J105K	CHIP C	1.0UF	K	
C611			CK73GB0J475K	CHIP C	4.7UF	K	
C612			CK73GB0J105K	CHIP C	1.0UF	K	
C613			CK73GB0J475K	CHIP C	4.7UF	K	
C614-616			CK73GB1H103K	CHIP C	0.010UF	K	
C618,619			CK73FB0J106K	CHIP C	10UF	K	
C620			CK73GB0J475K	CHIP C	4.7UF	K	K1M2M4
C620			CK73GB0J475K	CHIP C	4.7UF	K	X2R2
C621			CK73GB1C104K	CHIP C	0.10UF	K	K1M2M4
C621			CK73GB1C104K	CHIP C	0.10UF	K	X2R2
C622			CK73FB0J106K	CHIP C	10UF	K	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C623,624			CK73GB1C104K	CHIP C 0.10UF K	
C625			CK73GB1H222K	CHIP C 2200PF K	
C627			CK73GB1H222K	CHIP C 2200PF K	
C628			CK73GB1C104K	CHIP C 0.10UF K	K1M2M4
C628			CK73GB1C104K	CHIP C 0.10UF K	X2R2
C630			CK73GB1H222K	CHIP C 2200PF K	
C633			CK73GB1A105K	CHIP C 1.0UF K	
C634			CK73GB1H222K	CHIP C 2200PF K	
C635			CK73GB1A105K	CHIP C 1.0UF K	
C636,637			CE32BJ1C220M	CHIP EL 22UF 16WV	
C638			CK73GB1A105K	CHIP C 1.0UF K	
C640,641			CK73GB1A105K	CHIP C 1.0UF K	
C650			CK73GB1H222K	CHIP C 2200PF K	
C700-702			CK73GB1H103K	CHIP C 0.010UF K	
C703,704			CK73GB1C104K	CHIP C 0.10UF K	
C705			CK73GB1H103K	CHIP C 0.010UF K	
C706,707			CK73GB1C104K	CHIP C 0.10UF K	
C708			CK73GB1H222K	CHIP C 2200PF K	
C709			CE32BF1E101M	CHIP EL 100UF 25WV	
C710,711			CK73GB1H103K	CHIP C 0.010UF K	
C712			CK73FB0J106K	CHIP C 10UF K	
C713-716			CK73GB1H222K	CHIP C 2200PF K	
C850			CK73FB1A225K	CHIP C 2.2UF K	
C851-854			CK73GB1C104K	CHIP C 0.10UF K	
C855			CK73FB0J106K	CHIP C 10UF K	
C856			CK73GB1C104K	CHIP C 0.10UF K	
C857			CK73FB0J106K	CHIP C 10UF K	
C858			CE32BF1C101M	CHIP EL 100UF 16WV	
C859,860			CK73GB1C104K	CHIP C 0.10UF K	
C861			CC73GCH1H101J	CHIP C 100PF J	
C862-868			CK73GB1H103K	CHIP C 0.010UF K	
C869			CK73FB0J106K	CHIP C 10UF K	
C870-873			CK73GB1H222K	CHIP C 2200PF K	
CN3			E41-2771-05	PIN ASSY	
CN500		*	E41-2248-05	PIN ASSY	
CN501			E41-1476-05	PIN ASSY	
CN502			E41-1486-05	PIN ASSY	
CN700			E41-2608-05	FLAT CABLE CONNECTOR	
CN701			E41-2979-05	FLAT CABLE CONNECTOR	
CN850			E41-2735-05	PIN ASSY	
CN851			E41-2980-05	FLAT CABLE CONNECTOR	
CN852			E41-2979-05	FLAT CABLE CONNECTOR	
J501			E11-0625-05	PHONE JACK (LGY6502-0900)	
J502			E11-0656-05	PHONE JACK (3.5D YELLOW)	
J503			E11-0625-05	PHONE JACK (LGY6502-0900)	
320	2D		F09-2923-05	FAN	
F3			F53-0297-05	FUSE (UL,CSA) 1.6A	
F700			F53-0297-05	FUSE (UL,CSA) 1.6A	
⚠ L1			L33-2358-05	CHOKE COIL	
L2			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L3			L33-2369-05	CHOKE COIL 10UH	
L4		*	L33-2475-05	CHOKE COIL 22UH	E2
L4		*	L33-2475-05	CHOKE COIL 22UH	K2M5X3

Ref. No.	Add	New	Parts No.	Description	Destination
L200			L33-2370-05	CHOKE COIL 10UH	
L201,202			L33-2369-05	CHOKE COIL 10UH	
L203			L33-2455-05	CHOKE COIL 10UH	
L204			L33-2369-05	CHOKE COIL 10UH	
L205,206			L33-2455-05	CHOKE COIL 10UH	
L207			L33-2417-05	CHOKE COIL 10UH	
L401,402			L92-0332-05	CHIP FERRITE	
L850			L33-2369-05	CHOKE COIL 10UH	
X400			L77-2921-05	CRYSTAL RESONATOR (32.768KHZ)	
X401		*	L77-2975-05	CRYSTAL RESONATOR (11.0592MHZ)	
Q	2D		N09-6498-05	MACHINE SCREW (M3.0X11)	
CP401,402			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP404			RK74HB1J101J	CHIP-COM 100 J 1/16W	
CP406			RK74HB1J101J	CHIP-COM 100 J 1/16W	
R1			RK73GH2A104D	CHIP R 100K D 1/10W	
R2			RK73GH2A513D	CHIP R 51K D 1/10W	
R3			RK73GH2A333D	CHIP R 33K D 1/10W	
R4,5			RK73GH2A334D	CHIP R 330K D 1/10W	
R6			RK73GB2A823J	CHIP R 82K J 1/10W	
R7			RK73GB2A103J	CHIP R 10K J 1/10W	
R8			RK73GH2A113D	CHIP R 11K D 1/10W	
R9,10			RK73GB2A224J	CHIP R 220K J 1/10W	
R11			RK73GH2A104D	CHIP R 100K D 1/10W	
R12			RK73GB2A100J	CHIP R 10 J 1/10W	
R13			RK73GH2A683D	CHIP R 68K D 1/10W	
R14,15			RK73GB2A224J	CHIP R 220K J 1/10W	
R16			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R17			RK73GB2A224J	CHIP R 220K J 1/10W	
R18			RK73GB2A333J	CHIP R 33K J 1/10W	
R20			RK73GB2A100J	CHIP R 10 J 1/10W	
R23			RK73GB2A224J	CHIP R 220K J 1/10W	
R24			RK73GB2A304J	CHIP R 300K J 1/10W	
R25			RK73GB2A224J	CHIP R 220K J 1/10W	
R34			RK73GB2A202J	CHIP R 2.0K J 1/10W	
R35			RK73GB2A101J	CHIP R 100 J 1/10W	
R38			RK73GB2A154J	CHIP R 150K J 1/10W	
R43			RK73GB2A164J	CHIP R 160K J 1/10W	
R44			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R50			RK73GB2A224J	CHIP R 220K J 1/10W	
R57			RK73GB2A563J	CHIP R 56K J 1/10W	
R58			RK73GB2A224J	CHIP R 220K J 1/10W	
R65			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R66			RK73GB2A101J	CHIP R 100 J 1/10W	
R67			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R69			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R70			RK73GH2A113D	CHIP R 11K D 1/10W	
R71			RK73GB2A272J	CHIP R 2.7K J 1/10W	
R72			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R73			RK73GH2A113D	CHIP R 11K D 1/10W	
R74			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R75			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R76			RK73GB2A101J	CHIP R 100 J 1/10W	
R77			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R87			RK73GB2A000J	CHIP R 0.0 J 1/10W	

⚠Indicates safety critical components.

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R88			RK73GB2A332J	CHIP R	3.3K	J	1/10W	
R90			RK73GH2A113D	CHIP R	11K	D	1/10W	
R91			RK73GB2A272J	CHIP R	2.7K	J	1/10W	
R92			RK73GH2A113D	CHIP R	11K	D	1/10W	
R93			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R94			RK73GB2A473J	CHIP R	47K	J	1/10W	
R95			RK73GB2A562J	CHIP R	5.6K	J	1/10W	
R96			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R97			RK73GB2A561J	CHIP R	560	J	1/10W	
R98			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R100			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R101			RK73GB2A202J	CHIP R	2.0K	J	1/10W	
R103			RK73GB2A101J	CHIP R	100	J	1/10W	
R105			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R200			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R203-205			RK73GH2A561D	CHIP R	560	D	1/10W	
R208			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R210			RK73GB2A333J	CHIP R	33K	J	1/10W	
R215			RK73GB2A683J	CHIP R	68K	J	1/10W	
R218			RK73GB2A103J	CHIP R	10K	J	1/10W	
R222			RK73GH2A622D	CHIP R	6.2K	D	1/10W	
R233			RK73GH2A912D	CHIP R	9.1K	D	1/10W	
R234			RK73GH2A333D	CHIP R	33K	D	1/10W	
R238			RK73GH2A561D	CHIP R	560	D	1/10W	
R240			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R243			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R245			RK73GH2A681D	CHIP R	680	D	1/10W	
R246			RK73GH2A562D	CHIP R	5.6K	D	1/10W	
R247			RK73GH2A333D	CHIP R	33K	D	1/10W	
R248-250			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R257			RK73GH2A561D	CHIP R	560	D	1/10W	
R258			RK73GB2A683J	CHIP R	68K	J	1/10W	
R266			RK73GB2A103J	CHIP R	10K	J	1/10W	
R268			RK73GH2A103D	CHIP R	10K	D	1/10W	
R273			RK73GH2A333D	CHIP R	33K	D	1/10W	
R274,275			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R276			RK73GH2A391D	CHIP R	390	D	1/10W	
R277			RK73GB2A683J	CHIP R	68K	J	1/10W	
R278			RK73GH2A562D	CHIP R	5.6K	D	1/10W	
R280			RK73GH2A333D	CHIP R	33K	D	1/10W	
R281			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R283,284			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R285			RK73GB2A220J	CHIP R	22	J	1/10W	
R286,287			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R288			RK73EB2E100J	CHIP R	10	J	1/4W	
R289,290			RK73GB2A220J	CHIP R	22	J	1/10W	
R291			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R293			RK73EB2E100J	CHIP R	10	J	1/4W	
R294			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R295			RK73GB2A220J	CHIP R	22	J	1/10W	
R296,297			R92-5160-05	CHIP R	0.047	J	1/4W	
R298,299			RK73EB2E100J	CHIP R	10	J	1/4W	
R300			R92-5158-05	CHIP R	0.022	J	1/4W	
R302			RK73EB2E100J	CHIP R	10	J	1/4W	
R304			R92-5159-05	CHIP R	0.033	J	1/4W	

Ref. No.	Add	New	Parts No.	Description				Destination
R306,307			R92-5158-05	CHIP R	0.022	J	1/4W	
R308-311			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R312			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R314			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R400,401			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R402			RK73HB1J103J	CHIP R	10K	J	1/16W	
R403			RK73HB1J473J	CHIP R	47K	J	1/16W	
R406			RK73HB1J103J	CHIP R	10K	J	1/16W	K1M2M4
R406			RK73HB1J103J	CHIP R	10K	J	1/16W	X2R2
R406,407			RK73HB1J103J	CHIP R	10K	J	1/16W	E2
R406,407			RK73HB1J103J	CHIP R	10K	J	1/16W	K2M5X3
R408-410			RK73HB1J103J	CHIP R	10K	J	1/16W	R2X2
R408-411			RK73HB1J103J	CHIP R	10K	J	1/16W	M2M4
R408,409			RK73HB1J103J	CHIP R	10K	J	1/16W	K1
R409			RK73HB1J103J	CHIP R	10K	J	1/16W	K2
R409-411			RK73HB1J103J	CHIP R	10K	J	1/16W	M5
R409,410			RK73HB1J103J	CHIP R	10K	J	1/16W	E2X3
R411			RK73HB1J103J	CHIP R	10K	J	1/16W	K1K2
R411			RK73HB1J303J	CHIP R	30K	J	1/16W	X2X3
R411			RK73HB1J332J	CHIP R	3.3K	J	1/16W	E2
R412			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R413,414			RK73HB1J101J	CHIP R	100	J	1/16W	
R416-418			RK73HB1J473J	CHIP R	47K	J	1/16W	
R419			RK73GB2A101J	CHIP R	100	J	1/10W	
R420			RK73HB1J473J	CHIP R	47K	J	1/16W	
R422			RK73HB1J473J	CHIP R	47K	J	1/16W	
R423			RK73HB1J104J	CHIP R	100K	J	1/16W	
R425			RK73HB1J331J	CHIP R	330	J	1/16W	
R426			RK73HB1J223J	CHIP R	22K	J	1/16W	
R427-433			RK73HB1J101J	CHIP R	100	J	1/16W	
R434			RK73HB1J473J	CHIP R	47K	J	1/16W	
R435-437			RK73HB1J101J	CHIP R	100	J	1/16W	
R438			RK73HB1J123J	CHIP R	12K	J	1/16W	
R439			RK73HB1J103J	CHIP R	10K	J	1/16W	
R440			RK73HB1J473J	CHIP R	47K	J	1/16W	
R441-452			RK73HB1J101J	CHIP R	100	J	1/16W	
R453,454			RK73HB1J473J	CHIP R	47K	J	1/16W	
R455-457			RK73HB1J101J	CHIP R	100	J	1/16W	
R458			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R459			RK73HB1J101J	CHIP R	100	J	1/16W	
R460			RK73HB1J473J	CHIP R	47K	J	1/16W	
R461			RK73HB1J104J	CHIP R	100K	J	1/16W	
R462-464			RK73HB1J101J	CHIP R	100	J	1/16W	
R465			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R466			RK73HB1J104J	CHIP R	100K	J	1/16W	
R467,468			RK73HB1J473J	CHIP R	47K	J	1/16W	
R469			RK73HB1J103J	CHIP R	10K	J	1/16W	
R470-473			RK73HB1J101J	CHIP R	100	J	1/16W	
R474			RK73GB2A100J	CHIP R	10	J	1/10W	
R475			RK73HB1J101J	CHIP R	100	J	1/16W	
R476			RK73HB1J103J	CHIP R	10K	J	1/16W	
R477			RK73HB1J152J	CHIP R	1.5K	J	1/16W	
R478-480			RK73HB1J101J	CHIP R	100	J	1/16W	
R481			RK73HB1J104J	CHIP R	100K	J	1/16W	
R482			RK73HB1J000J	CHIP R	0.0	J	1/16W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R483-485			RK73HB1J101J	CHIP R	100	J	1/16W	
R486			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R490			RK73HB1J104J	CHIP R	100K	J	1/16W	
R491,492			RK73HB1J101J	CHIP R	100	J	1/16W	
R496			RK73HB1J104J	CHIP R	100K	J	1/16W	
R497,498			RK73HB1J473J	CHIP R	47K	J	1/16W	
R499			RK73HB1J103J	CHIP R	10K	J	1/16W	
R502			RK73GB2A101J	CHIP R	100	J	1/10W	
R503			RK73GB2A100J	CHIP R	10	J	1/10W	E2
R503			RK73GB2A100J	CHIP R	10	J	1/10W	K2M5X3
R505			RK73GB2A104J	CHIP R	100K	J	1/10W	E2
R505			RK73GB2A104J	CHIP R	100K	J	1/10W	K2M5X3
R506			RK73GB2A101J	CHIP R	100	J	1/10W	E2
R506			RK73GB2A101J	CHIP R	100	J	1/10W	K2M5X3
R507			RK73GB2A100J	CHIP R	10	J	1/10W	
R518			RK73GB2A131J	CHIP R	130	J	1/10W	
R519			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R520			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R521			RK73GB2A101J	CHIP R	100	J	1/10W	
R522			RK73GB2A473J	CHIP R	47K	J	1/10W	
R523			RK73GB2A104J	CHIP R	100K	J	1/10W	E2
R523			RK73GB2A104J	CHIP R	100K	J	1/10W	K2M5X3
R524,525			RK73GB2A101J	CHIP R	100	J	1/10W	
R527			RK73EB2E101J	CHIP R	100	J	1/4W	
R528			RK73FB2B101J	CHIP R	100	J	1/8W	
R529			RK73GB2A750J	CHIP R	75	J	1/10W	
R530-532			RK73EB2E100J	CHIP R	10	J	1/4W	
R533			RK73GB2A223J	CHIP R	22K	J	1/10W	
R534			RK73GB2A473J	CHIP R	47K	J	1/10W	
R535			RK73GB2A101J	CHIP R	100	J	1/10W	
R536			RK73EB2E100J	CHIP R	10	J	1/4W	
R537			RK73GB2A223J	CHIP R	22K	J	1/10W	
R540			RK73GB2A101J	CHIP R	100	J	1/10W	
R541-543			RK73GB2A473J	CHIP R	47K	J	1/10W	
R544,545			RK73GB2A101J	CHIP R	100	J	1/10W	
R546			RK73HB1J101J	CHIP R	100	J	1/16W	
R550			RK73GB2A473J	CHIP R	47K	J	1/10W	
R551,552			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R553			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R554			RK73HB1J103J	CHIP R	10K	J	1/16W	
R555			RK73HB1J473J	CHIP R	47K	J	1/16W	
R556,557			RK73GB2A473J	CHIP R	47K	J	1/10W	
R558			RK73GB2A103J	CHIP R	10K	J	1/10W	
R559			RK73GB2A223J	CHIP R	22K	J	1/10W	
R560			RK73GB2A181J	CHIP R	180	J	1/10W	
R561,562			RK73GB2A473J	CHIP R	47K	J	1/10W	
R564,565			RK73HB1J101J	CHIP R	100	J	1/16W	
R566-570			RK73HB1J473J	CHIP R	47K	J	1/16W	
R571,572			RK73GB2A202J	CHIP R	2.0K	J	1/10W	
R573			RK73GB2A911J	CHIP R	910	J	1/10W	
R600-602			RK73GH2A102D	CHIP R	1.0K	D	1/10W	
R603			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R604			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R605			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R606			RK73GH2A102D	CHIP R	1.0K	D	1/10W	
R607-609			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R610,611			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R612			RK73GH2A102D	CHIP R	1.0K	D	1/10W	
R613			RK73GB2A101J	CHIP R	100	J	1/10W	
R614			RK73GB2A751J	CHIP R	750	J	1/10W	
R615			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R616			RK73GH2A102D	CHIP R	1.0K	D	1/10W	
R617			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R618			RK73GB2A101J	CHIP R	100	J	1/10W	
R619			RK73GB2A751J	CHIP R	750	J	1/10W	
R620			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R622,623			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R626			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R627-629			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
R630,631			RK73GB2A101J	CHIP R	100	J	1/10W	
R632			RK73GB2A751J	CHIP R	750	J	1/10W	
R633,634			RK73GB2A101J	CHIP R	100	J	1/10W	
R635			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R636,637			RK73GB2A4R7J	CHIP R	4.7	J	1/10W	
R638			RK73GB2A000J	CHIP R	0.0	J	1/10W	E2
R638			RK73GB2A000J	CHIP R	0.0	J	1/10W	K2M5X3
R639			RK73GB2A101J	CHIP R	100	J	1/10W	
R640			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R641-643			RK73GB2A272J	CHIP R	2.7K	J	1/10W	
R645			RK73GB2A202J	CHIP R	2.0K	J	1/10W	K1M2M4
R645			RK73GB2A202J	CHIP R	2.0K	J	1/10W	X2R2
R646			RK73GB2A473J	CHIP R	47K	J	1/10W	
R647,648			RK73GB2A101J	CHIP R	100	J	1/10W	
R649			RK73GB2A473J	CHIP R	47K	J	1/10W	
R650			RK73GB2A101J	CHIP R	100	J	1/10W	
R651,652			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R653			RK73GB2A473J	CHIP R	47K	J	1/10W	
R654,655			RK73GB2A103J	CHIP R	10K	J	1/10W	
R656			RK73GB2A562J	CHIP R	5.6K	J	1/10W	K1M2M4
R656			RK73GB2A562J	CHIP R	5.6K	J	1/10W	X2R2
R657,658			RK73GB2A101J	CHIP R	100	J	1/10W	K1M2M4
R657,658			RK73GB2A101J	CHIP R	100	J	1/10W	X2R2
R658			RK73GB2A101J	CHIP R	100	J	1/10W	E2
R658			RK73GB2A101J	CHIP R	100	J	1/10W	K2M5X3
R660			RK73GB2A103J	CHIP R	10K	J	1/10W	
R661-663			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R664			RK73GH2A151D	CHIP R	150	D	1/10W	
R665			RK73GB2A101J	CHIP R	100	J	1/10W	
R666			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R669			RK73HB1J561J	CHIP R	560	J	1/16W	
R670			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R676			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R677		*	RK73GH2A820D	CHIP R	82	D	1/10W	
R678			RK73GB2A103J	CHIP R	10K	J	1/10W	
R681			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R689			RK73GB2A101J	CHIP R	100	J	1/10W	
R702			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R703,704			RK73GB2A100J	CHIP R	10	J	1/10W	
R706-708			RK73GB2A101J	CHIP R	100	J	1/10W	
R709			RK73EB2E750J	CHIP R	75	J	1/4W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R710			RK73GB2A331J	CHIP R 330 J 1/10W	
R711			RK73GB2A100J	CHIP R 10 J 1/10W	
R712			RK73GB2A101J	CHIP R 100 J 1/10W	
R714-725			RK73GB2A101J	CHIP R 100 J 1/10W	
R726			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R727,728			RK73GB2A100J	CHIP R 10 J 1/10W	
R842			RK73GB2A101J	CHIP R 100 J 1/10W	
R853			RK73GB2A471J	CHIP R 470 J 1/10W	
R854			RK73GB2A473J	CHIP R 47K J 1/10W	
R856			RK73GB2A473J	CHIP R 47K J 1/10W	
R858			RK73GB2A471J	CHIP R 470 J 1/10W	
R859			RK73GB2A101J	CHIP R 100 J 1/10W	
R860,861			RK73GB2A100J	CHIP R 10 J 1/10W	
R862			RK73GB2A101J	CHIP R 100 J 1/10W	
R863			RK73GB2A470J	CHIP R 47 J 1/10W	
R909			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R999			RK73GB2A000J	CHIP R 0.0 J 1/10W	E2
R999			RK73GB2A000J	CHIP R 0.0 J 1/10W	K2M5X3
D2			1SR154-400	DIODE	
D3			EP05Q04	DIODE	
D200-203			1SS357-F	DIODE	
D501			DAP202U	DIODE	
D505,506			AVRM16120M6AB	VARISTOR	
D511			AVRM16120M6AB	VARISTOR	
D512,513			AVRM16270MAAB	VARISTOR	
D700,701			AVRM16180M6AB	VARISTOR	
D702-710			AVRM16120M6AB	VARISTOR	
D711			DA204U	DIODE	
D712			AVRM16270MAAB	VARISTOR	
D850			DAP202U	DIODE	
D851			02DZ9.1F-Z	ZENER DIODE	
IC3			SI-3050LUS	ANALOGUE IC	
IC4			R1114N331B-TR	ANALOGUE IC (3.3V LF)	
IC8			XC6219B332PR	ANALOGUE IC	
IC200,201			LTC3728LEGN	ANALOGUE IC	
IC400			W05-1260-00	ROM IC	K1K2
IC400			W05-1261-00	ROM IC	E2
IC400			W05-1261-00	ROM IC	M4
IC400			W05-1262-00	ROM IC	M2M5
IC400			W05-1263-00	ROM IC	R2X2X3
IC402			S-80835CNNB-G	MOS-IC	
IC404		✻	30878MJBA24GP	MICROCONTROLLER IC	
IC405			74AHCT1G08GW	MOS-IC	
IC501			NJM2505AF-ZB	ANALOGUE IC	
IC502			TC4052BFT	MOS-IC	
IC504			NJM2794RB2ZB	ANALOGUE IC	
IC505			TC4052BFT	MOS-IC	
IC600,601			NJM2286V-ZB	ANALOGUE IC	
IC604		✻	74AHC1GU04GW	MOS-IC	K1M2M4
IC604		✻	74AHC1GU04GW	MOS-IC	X2R2
IC606			TC7WH157FU-F	MOS-IC	
IC608			74LVC3G34DP	MOS-IC	
IC609			AN15885A-VF	ANALOGUE IC	
IC612		✻	74AHC1GU04GW	MOS-IC	K1M2M4

Ref. No.	Add	New	Parts No.	Description	Destination
IC612		✻	74AHC1GU04GW	MOS-IC	X2R2
IC700			LB1836M-TLM-E	ANALOGUE IC	
Q1			DTC144EUA	DIGITAL TRANSISTOR	
Q2			2SA1576A	TRANSISTOR	
Q3			DTC114YUA	DIGITAL TRANSISTOR	
Q4			2SC4081	TRANSISTOR	
Q5			2SA1576A	TRANSISTOR	
Q11			DTC114YUA	DIGITAL TRANSISTOR	
Q12			DTA114TUA	DIGITAL TRANSISTOR	
Q13			2SA1576A	TRANSISTOR	
Q14			2SC4081	TRANSISTOR	
Q15			TPC8110-F	FET	
Q16			2SA1576A	TRANSISTOR	
Q17			2SC4081	TRANSISTOR	
Q18			DTA114EUA	DIGITAL TRANSISTOR	
Q19,20			2SC4617	TRANSISTOR	
Q21			2SB1184	TRANSISTOR	
Q22			2SC4617	TRANSISTOR	
Q23			2SA1774	TRANSISTOR	
Q28			2SB1184	TRANSISTOR	
Q29			2SC4081	TRANSISTOR	
Q31			2SC4081	TRANSISTOR	
Q32			2SA1576A	TRANSISTOR	
Q35			2SB1184	TRANSISTOR	
Q37			2SC4081	TRANSISTOR	
Q38			2SA1576A	TRANSISTOR	
Q39			2SC4081	TRANSISTOR	
Q44			2SB1689	TRANSISTOR	
Q45			DTC114YUA	DIGITAL TRANSISTOR	
Q46			2SC4081	TRANSISTOR	
Q47			2SB1184	TRANSISTOR	
Q48			2SB1689	TRANSISTOR	
Q49			DTC114YUA	DIGITAL TRANSISTOR	
Q200			DTC144EUA	DIGITAL TRANSISTOR	
Q201			DTC114YUA	DIGITAL TRANSISTOR	
Q202-204			DTC144EUA	DIGITAL TRANSISTOR	
Q205-208			HAT2218R-E	DUAL FET	
Q400			2SA1576A	TRANSISTOR	
Q402			DTC144EUA	DIGITAL TRANSISTOR	
Q403			DTA114YUA	DIGITAL TRANSISTOR	
Q404			DTC114YUA	DIGITAL TRANSISTOR	
Q500			DTA114YUA	DIGITAL TRANSISTOR	E2
Q500			DTA114YUA	DIGITAL TRANSISTOR	K2M5X3
Q501			2SA1576A	TRANSISTOR	E2
Q501			2SA1576A	TRANSISTOR	K2M5X3
Q502-505			DTC114YUA	DIGITAL TRANSISTOR	E2
Q502-505			DTC114YUA	DIGITAL TRANSISTOR	K2M5X3
Q502,503			DTC114YUA	DIGITAL TRANSISTOR	K1M2M4
Q502,503			DTC114YUA	DIGITAL TRANSISTOR	X2R2
Q505			DTC114YUA	DIGITAL TRANSISTOR	K1M2M4
Q505			DTC114YUA	DIGITAL TRANSISTOR	X2R2
Q506			2SC4081	TRANSISTOR	
Q507,508			DTC114YUA	DIGITAL TRANSISTOR	
Q509			2SA1576A	TRANSISTOR	
Q510			2SC4081	TRANSISTOR	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

VIDEO CONTROL UNIT (X15-117x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
Q600-602			2SA1576A	TRANSISTOR	
Q603-605			2SC4081	TRANSISTOR	
Q606			2SA1576A	TRANSISTOR	
Q700			2SA1576A	TRANSISTOR	
Q850,851			DTC643TU	DIGITAL TRANSISTOR	
Q852			DTA114YUA	DIGITAL TRANSISTOR	
SWITCH UNIT (X16-6280-10)					
D1-21		✻	B30-1795-05	LED (1608 BLUE)	
D22			B30-1566-05	LED (1608 RED)	
C1,2			CK73GB1A105K	CHIP C 1.0UF K	
S1		✻	S70-0948-05	TACT SWITCH	
S2-8		✻	S70-0950-05	TACT SWITCH	
D51-73			AVRM16120M6AB	VARISTOR	
IC1			GP1US301XP	ANALOGUE IC	
SUB-CIRCUIT UNIT (X16-6360-10)					
C1			CK73GB1A105K	CHIP C 1.0UF K	E2
C1			CK73GB1A105K	CHIP C 1.0UF K	K2M5X3
CN1		✻	E41-2451-05	FLAT CABLE CONNECTOR	E2
CN1		✻	E41-2451-05	FLAT CABLE CONNECTOR	K2M5X3
J1			E68-0025-05	JACK (SD CARD SLOT)	E2
J1			E68-0025-05	JACK (SD CARD SLOT)	K2M5X3
CONTROL CIRCUIT UNIT (X29-4490-11)					
C1			CK73GB1H103K	CHIP C 0.010UF K	
C11			CK73FB1C105K	CHIP C 1.0UF K	
C14			CK73FB1C106K	CHIP C 10UF K	
C15			CK73FB1C105K	CHIP C 1.0UF K	
C16			CE32BJ1C100M	CHIP EL 10UF 16WV	
C17			CK73GB1H102K	CHIP C 1000PF K	
C18,19			CK73GB1H104K	CHIP C 0.10UF K	
C20			CK73GB1H102K	CHIP C 1000PF K	
C21			CE32BJ1C100M	CHIP EL 10UF 16WV	
C24			CD04AT0J331M	ELECTRO 330UF 6.3WV	
C27-29			CK73GB1H104K	CHIP C 0.10UF K	
C100-102			CK73GB1H104K	CHIP C 0.10UF K	
C104			CE32BJ1C100M	CHIP EL 10UF 16WV	
C107,108			CK73GB1H102K	CHIP C 1000PF K	
C110			CE32BJ1C100M	CHIP EL 10UF 16WV	
C114			CE32BJ1C100M	CHIP EL 10UF 16WV	
C116			CK73GB1H102K	CHIP C 1000PF K	
C118			CK73GB1H102K	CHIP C 1000PF K	
C120			CE32BJ1C100M	CHIP EL 10UF 16WV	
C124			CK73EB1C106K	CHIP C 10UF K	
C125			CK73GB1H102K	CHIP C 1000PF K	
C128			CK73GB1H102K	CHIP C 1000PF K	
C130			CK73EB1C106K	CHIP C 10UF K	
C200			CK73GB1H473K	CHIP C 0.047UF K	
C201			CK73EB1E105K	CHIP C 1.0UF K	
C202			CK73GB1H473K	CHIP C 0.047UF K	
C203			CK73EB1E105K	CHIP C 1.0UF K	
CN1		✻	E41-2959-05	PIN ASSY	
CN100		✻	E41-2964-05	PIN ASSY	

Ref. No.	Add	New	Parts No.	Description	Destination
CN300			E41-2590-05	FLAT CABLE CONNECTOR	
CN302			E40-6469-05	PIN ASSY	
J200			E58-1067-05	RECTANGULAR RECEPTACLE	
WH1		✻	E39-0985-15	WIRING HARNESS	
R4			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R6			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R10			RK73EB2E100J	CHIP R 10 J 1/4W	
R11			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R15			RK73EB2E100J	CHIP R 10 J 1/4W	
R16			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R19			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R20			RK73GB2A750J	CHIP R 75 J 1/10W	
R22			RK73GH2A750D	CHIP R 75 D 1/10W	
R24			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R30			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R36			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R40			RK73EB2E100J	CHIP R 10 J 1/4W	
R41			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R43			RK73EB2E100J	CHIP R 10 J 1/4W	
R46			RK73FB2B101J	CHIP R 100 J 1/8W	
R47			RK73GB2A471J	CHIP R 470 J 1/10W	
R48			RK73EB2E750J	CHIP R 75 J 1/4W	
R49			RK73GB2A223J	CHIP R 22K J 1/10W	
R51			RK73GB2A223J	CHIP R 22K J 1/10W	
R53			RK73FB2B101J	CHIP R 100 J 1/8W	
R54			RK73GB2A471J	CHIP R 470 J 1/10W	
R57			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R58,59			RK73GB2A223J	CHIP R 22K J 1/10W	
R102			RK73EB2E101J	CHIP R 100 J 1/4W	
R103			RK73GB2A471J	CHIP R 470 J 1/10W	
R106			RK73GB2A223J	CHIP R 22K J 1/10W	
R109			RK73GB2A223J	CHIP R 22K J 1/10W	
R113			RK73GB2A471J	CHIP R 470 J 1/10W	
R117			RK73EB2E101J	CHIP R 100 J 1/4W	
R119			RK73EB2E101J	CHIP R 100 J 1/4W	
R120			RK73GB2A471J	CHIP R 470 J 1/10W	
R125			RK73GB2A223J	CHIP R 22K J 1/10W	
R129			RK73GB2A223J	CHIP R 22K J 1/10W	
R132			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R133			RK73GB2A471J	CHIP R 470 J 1/10W	
R134			RK73EB2E101J	CHIP R 100 J 1/4W	
R138			RK73EB2E101J	CHIP R 100 J 1/4W	
R139			RK73GB2A471J	CHIP R 470 J 1/10W	
R141			RK73GB2A223J	CHIP R 22K J 1/10W	
R146			RK73GB2A223J	CHIP R 22K J 1/10W	
R149			RK73GB2A471J	CHIP R 470 J 1/10W	
R150			RK73EB2E101J	CHIP R 100 J 1/4W	
R200			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R201			RK73GB2A473J	CHIP R 47K J 1/10W	
R202			RK73EB2E152J	CHIP R 1.5K J 1/4W	
R203			RK73GB2A473J	CHIP R 47K J 1/10W	
R204			RK73GB2A621J	CHIP R 620 J 1/10W	
R205			RK73GB2A242J	CHIP R 2.4K J 1/10W	
R206,207			RK73PB2H2R0J	CHIP R 2.0 J 1/2W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

CONTROL CIRCUIT UNIT (X29-4490-11)

Ref. No.	Add	New	Parts No.	Description				Destination
R208			RK73GB2A124J	CHIP R	120K	J	1/10W	
R209			RK73GB2A103J	CHIP R	10K	J	1/10W	
R210			RK73GB2A473J	CHIP R	47K	J	1/10W	
R211			RK73FB2B472J	CHIP R	4.7K	J	1/8W	
R212			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R213			RK73GB2A473J	CHIP R	47K	J	1/10W	
R214			RK73EB2E152J	CHIP R	1.5K	J	1/4W	
R215			RK73GB2A473J	CHIP R	47K	J	1/10W	
R216			RK73GB2A621J	CHIP R	620	J	1/10W	
R217			RK73GB2A242J	CHIP R	2.4K	J	1/10W	
R218,219			RK73PB2H2R0J	CHIP R	2.0	J	1/2W	
R220			RK73GB2A124J	CHIP R	120K	J	1/10W	
R221			RK73GB2A103J	CHIP R	10K	J	1/10W	
R222			RK73GB2A473J	CHIP R	47K	J	1/10W	
R223			RK73FB2B472J	CHIP R	4.7K	J	1/8W	
R300			RK73GB2A105J	CHIP R	1.0M	J	1/10W	
D1			STZ6.2N	ZENER DIODE				
D3			STZ6.2N	ZENER DIODE				
D4			UDZS8.2B	ZENER DIODE				
D5			UDZS6.2B	ZENER DIODE				
D6			UDZS8.2B	ZENER DIODE				
D10			AVRM16270MAAB	VARISTOR				
D12,13			AVRM16270MAAB	VARISTOR				
D14,15			AVRM16180M6AB	VARISTOR				
D16,17			DAP202U	DIODE				
D18			STZ6.2N	ZENER DIODE				
D100-105			AVRM16180M6AB	VARISTOR				
D106-110			DAP202U	DIODE				
D200-203			1SR154-400	DIODE				
Q4			DTC643TU	DIGITAL TRANSISTOR				
Q5			DTA144EUA	DIGITAL TRANSISTOR				
Q6			DTC643TU	DIGITAL TRANSISTOR				
Q100			DTC643TU	DIGITAL TRANSISTOR				
Q101			DTA144EUA	DIGITAL TRANSISTOR				
Q102-105			DTC643TU	DIGITAL TRANSISTOR				
Q106			DTA144EUA	DIGITAL TRANSISTOR				
Q107			DTC643TU	DIGITAL TRANSISTOR				
Q200			DTC114TUA	DIGITAL TRANSISTOR				
Q201			2SC4081	TRANSISTOR				
Q202			2SB1443	TRANSISTOR				
Q203			2SA1576A	TRANSISTOR				
Q204,205			2SC4081	TRANSISTOR				
Q206			DTC114TUA	DIGITAL TRANSISTOR				
Q207			2SC4081	TRANSISTOR				
Q208			2SB1443	TRANSISTOR				
Q209			2SA1576A	TRANSISTOR				
Q210,211			2SC4081	TRANSISTOR				

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
C1			CE32BJ1H3R3M	CHIP EL	3.3UF	50WV		
C2			CK73FB1C105K	CHIP C	1.0UF	K		
C3			CK73GB1H103K	CHIP C	0.010UF	K		
C4			CK73FB1C105K	CHIP C	1.0UF	K		
C5			CK73GB1H104K	CHIP C	0.10UF	K		
C6,7			CK73FB1C105K	CHIP C	1.0UF	K		
C8,9			CK73GB1H103K	CHIP C	0.010UF	K		
C11			CK73GB1H103K	CHIP C	0.010UF	K		
C12			C90-5666-05	ELECTRO	3900UF	25WV		
C13			CK73GB1H103K	CHIP C	0.010UF	K		
C14			CK73FB1E474K	CHIP C	0.47UF	K		
C16			CK73GB1H103K	CHIP C	0.010UF	K		
C17		✻	C93-1470-05	CHIP C	15000PF	K		M4E2
C100			C90-6851-05	ELECTRO	220UF	25WV		
C105			CD04AY1H100M	ELECTRO	10UF	50WV		
C110			CD04AY0J331M	ELECTRO	330UF	6.3WV		
C111			CK73FB1C105K	CHIP C	1.0UF	K		E2
C113			CE32BJ1C101M	CHIP EL	100UF	16WV		E2
C114			CK73GB1C104K	CHIP C	0.10UF	K		
C116			CK73FB1H334K	CHIP C	0.33UF	K		
C118			CK73GB1C104K	CHIP C	0.10UF	K		
C119			CK73FB1E474K	CHIP C	0.47UF	K		
C121			CD04BA1C100M	ELECTRO	10UF	16WV		
C123			CK73GB1H104K	CHIP C	0.10UF	K		
C124			CK73GB1H103K	CHIP C	0.010UF	K		
C125			CK73FB1E474K	CHIP C	0.47UF	K		
C126			CD04AT1E101M	ELECTRO	100UF	25WV		
C129			CK73GB1A105K	CHIP C	1.0UF	K		
C131			C90-5692-05	ELECTRO	220UF	16WV		
C133			CK73GB1H102K	CHIP C	1000PF	K		E2
C201,202			CK73FB1A225K	CHIP C	2.2UF	K		
C205			CK73EB1C106K	CHIP C	10UF	K		
C206			CE32BJ1C220M	CHIP EL	22UF	16WV		
C207			CK73GB1C104K	CHIP C	0.10UF	K		
C208			CK73FB1A225K	CHIP C	2.2UF	K		
C209			CK73GB1C104K	CHIP C	0.10UF	K		
C210,211			CK73FB1A225K	CHIP C	2.2UF	K		
C212			CK73EB1C106K	CHIP C	10UF	K		
C213			CK73FB1A225K	CHIP C	2.2UF	K		
C214			CK73HB1E103K	CHIP C	0.010UF	K		
C215			CK73EB1E225K	CHIP C	2.2UF	K		
C216			CK73GB1C104K	CHIP C	0.10UF	K		
C217			CK73GB1A105K	CHIP C	1.0UF	K		
C218-220			CK73GB1C104K	CHIP C	0.10UF	K		
C221			CK73EB1C106K	CHIP C	10UF	K		
C222-226			CK73HB1A104K	CHIP C	0.10UF	K		
C227			CK73EB1C106K	CHIP C	10UF	K		
C228			CK73GB1H103K	CHIP C	0.010UF	K		
C233,234			CK73FB1C105K	CHIP C	1.0UF	K		
C235,236			CE32BJ1H3R3M	CHIP EL	3.3UF	50WV		
C237			CK73FB1C105K	CHIP C	1.0UF	K		
C238-241			CK73EB1E225K	CHIP C	2.2UF	K		
C242,243			CK73FB1E474K	CHIP C	0.47UF	K		
C244			CE32BJ1H010M	CHIP EL	1.0UF	50WV		
C247			CK73GB1H103K	CHIP C	0.010UF	K		
C248			CE32BJ1V100M	CHIP EL	10UF	35WV		
C249,250			CK73FB1C105K	CHIP C	1.0UF	K		
C263			CE32BJ1C470M	CHIP EL	47UF	16WV		
C264,265			C90-6779-05	ELECTRO	0.47UF	16WV		
C266			CK73GB1A105K	CHIP C	1.0UF	K		

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C267,268			C90-6780-05	ELECTRO 1UF 16WV	
C272			CK73GB1A105K	CHIP C 1.0UF K	
C274			CK73GB1C104K	CHIP C 0.10UF K	
C275,276			C90-6779-05	ELECTRO 0.47UF 16WV	
C278			CE32CL1C100M	CHIP EL 10UF 16WV	
C500,501			CC73GCH1H100D	CHIP C 10PF D	K1R2M2
C500,501			CC73GCH1H100D	CHIP C 10PF D	M4K2E2
C500,501			CC73GCH1H100D	CHIP C 10PF D	M5
C503			CD04AS1V100M	ELECTRO 10UF 35WV	K1R2M2
C503			CD04AS1V100M	ELECTRO 10UF 35WV	M4K2E2
C503			CD04AS1V100M	ELECTRO 10UF 35WV	M5
C504			CK73GB1H103K	CHIP C 0.010UF K	K1R2M2
C504			CK73GB1H103K	CHIP C 0.010UF K	M4K2E2
C504			CK73GB1H103K	CHIP C 0.010UF K	M5
C505			CC73GCH1H331J	CHIP C 330PF J	K1R2M2
C505			CC73GCH1H331J	CHIP C 330PF J	M4K2E2
C505			CC73GCH1H331J	CHIP C 330PF J	M5
C506,507			CE32BJ1C220M	CHIP EL 22UF 16WV	
C508			CE32BJ1C100M	CHIP EL 10UF 16WV	
C509			CE32BJ1C220M	CHIP EL 22UF 16WV	
C515			CE32BJ1C100M	CHIP EL 10UF 16WV	K1R2M2
C515			CE32BJ1C100M	CHIP EL 10UF 16WV	M4K2E2
C515			CE32BJ1C100M	CHIP EL 10UF 16WV	M5
C516-519			CK73GB1H103K	CHIP C 0.010UF K	
C520-522			CK73GB1H102K	CHIP C 1000PF K	E2
C521,522			CK73GB1H102K	CHIP C 1000PF K	K1M2M4
C521,522			CK73GB1H102K	CHIP C 1000PF K	M5X3
C521,522			CK73GB1H102K	CHIP C 1000PF K	X2R2K2
C524			CK73GB1H472K	CHIP C 4700PF K	
C550			CK73GB1C104K	CHIP C 0.10UF K	
C551			CD04AS1C470M	ELECTRO 47UF 16WV	
C552,553			CK73GB1A474K	CHIP C 0.47UF K	
C600-602			CK73GB1A474K	CHIP C 0.47UF K	
C616-618			CK73GB1H104K	CHIP C 0.10UF K	
C650-652			CK73FB1C105K	CHIP C 1.0UF K	
C653			CK73GB1H103K	CHIP C 0.010UF K	
C654,655			CC73GCH1H470J	CHIP C 47PF J	
C656			CK73GB1H104K	CHIP C 0.10UF K	
C701			CK73GB1H102K	CHIP C 1000PF K	
C702			CK73GB1C104K	CHIP C 0.10UF K	
C703			CK73GB1H102K	CHIP C 1000PF K	
C704			CD04BJ0J331M	ELECTRO 330UF 6.3WV	
C706,707			CK73GB1C104K	CHIP C 0.10UF K	
C708,709			CC73GCH1H100D	CHIP C 10PF D	
C710			CK73GB1C104K	CHIP C 0.10UF K	
C711			CK73GB1A105K	CHIP C 1.0UF K	
C712			CK73GB1C104K	CHIP C 0.10UF K	
C903			CK73GB1H472K	CHIP C 4700PF K	
CN300			E41-2771-05	PIN ASSY	
CN350			E41-2979-05	FLAT CABLE CONNECTOR	
CN400			E41-2237-05	FLAT CABLE CONNECTOR	
CN401		*	E40-6470-05	PIN ASSY	
CN550			E41-2772-05	PIN ASSY	E2
CN550			E41-2772-05	PIN ASSY	K2M5X3

Ref. No.	Add	New	Parts No.	Description	Destination
CN700		*	E41-2248-05	PIN ASSY	
J1			E58-1043-05	RECTANGULAR RECEPTACLE	
J550			E56-0864-05	CYLINDRICAL RECEPTACLE	K1M2M4
J550			E56-0864-05	CYLINDRICAL RECEPTACLE	X2R2
J600			E58-1034-05	RECTANGULAR RECEPTACLE	
J650			E58-1097-05	RECTANGULAR RECEPTACLE	
W500		*	E30-6797-05	CORD WITH PLUG (FM/AM ANT)	K1M2M4
W500		*	E30-6797-05	CORD WITH PLUG (FM/AM ANT)	M5X3
W500		*	E30-6797-05	CORD WITH PLUG (FM/AM ANT)	X2R2K2
F100			F53-0297-05	FUSE (UL,CSA) 1.6A	
F101			F53-0306-05	FUSE (UL,CSA) 5A	
L100			L92-0329-05	CHIP FERRITE	E2
L200			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L500			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L502			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L504			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	K1R2M2
L504			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	M4K2E2
L504			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	M5
L700			L92-0319-05	CHIP FERRITE	
L701			L33-2359-05	CHOKE COIL 140UH	
X500			L77-2002-05	CRYSTAL RESONATOR	K1R2M2
X500			L77-2002-05	CRYSTAL RESONATOR	M4K2E2
X500			L77-2002-05	CRYSTAL RESONATOR	M5
X700		*	L77-2975-05	CRYSTAL RESONATOR (11.0592MHZ)	
AB	2C		N09-6727-05	TAPTITE SCREW (3X8 T)	
E	2C		N35-2604-43	BINDING HEAD MACHINE SCREW	
R1			RK73GB2A473J	CHIP R 47K J 1/10W	
R2			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R3			RK73EB2E272J	CHIP R 2.7K J 1/4W	
R4			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R5			RK73GB2A223J	CHIP R 22K J 1/10W	
R6			RK73PB2H102J	CHIP R 1.0K J 1/2W	
R7			RK73GB2A473J	CHIP R 47K J 1/10W	
R8			RK73PB2H102J	CHIP R 1.0K J 1/2W	
R9			RK73GB2A473J	CHIP R 47K J 1/10W	
R10			RK73GB2A103J	CHIP R 10K J 1/10W	
R11			RK73EB2E103J	CHIP R 10K J 1/4W	
R12			RK73FB2B000J	CHIP R 0.0 J 1/8W	E2
R13			RK73GB2A104J	CHIP R 100K J 1/10W	
R14			RK73EB2E272J	CHIP R 2.7K J 1/4W	
R15			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R16			RK73GB2A103J	CHIP R 10K J 1/10W	K1M2M4
R16			RK73GB2A103J	CHIP R 10K J 1/10W	M5X3
R16			RK73GB2A103J	CHIP R 10K J 1/10W	X2R2K2
R17			RK73GB2A222J	CHIP R 2.2K J 1/10W	K1M2M4
R17			RK73GB2A222J	CHIP R 2.2K J 1/10W	M5X3
R17			RK73GB2A222J	CHIP R 2.2K J 1/10W	X2R2K2
R18			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R19			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R20,21			RK73PB2H102J	CHIP R 1.0K J 1/2W	K1M2M4
R20,21			RK73PB2H102J	CHIP R 1.0K J 1/2W	M5X3
R20,21			RK73PB2H102J	CHIP R 1.0K J 1/2W	X2R2K2
R22			RK73GB2A104J	CHIP R 100K J 1/10W	

⚠Indicates safety critical components.

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

PARTS LIST

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R23			RK73GB2A103J	CHIP R	10K	J	1/10W	K1M2M4
R23			RK73GB2A103J	CHIP R	10K	J	1/10W	M5X3
R23			RK73GB2A103J	CHIP R	10K	J	1/10W	X2R2K2
R24			RK73GB2A223J	CHIP R	22K	J	1/10W	
R25			RK73GB2A103J	CHIP R	10K	J	1/10W	
R26			RK73GB2A183J	CHIP R	18K	J	1/10W	
R27			RK73GB2A473J	CHIP R	47K	J	1/10W	
R28			RK73GB2A222J	CHIP R	2.2K	J	1/10W	
R29			RK73GH2A563D	CHIP R	56K	D	1/10W	
R31			RK73FB2B561J	CHIP R	560	J	1/8W	
R32			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R34			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R35			RK73GH2A333D	CHIP R	33K	D	1/10W	
R36,37			RK73GB2A104J	CHIP R	100K	J	1/10W	
R38			RK73GB2A473J	CHIP R	47K	J	1/10W	
R39			RK73EB2E103J	CHIP R	10K	J	1/4W	
R40			RK73GB2A104J	CHIP R	100K	J	1/10W	
R41			RK73GB2A153J	CHIP R	15K	J	1/10W	
R42,43			RK73EB2E622J	CHIP R	6.2K	J	1/4W	
R44			RK73GB2A912J	CHIP R	9.1K	J	1/10W	
R48			RK73FB2B000J	CHIP R	0.0	J	1/8W	
R50			RK73FB2B000J	CHIP R	0.0	J	1/8W	
R104			RK73FB2B203J	CHIP R	20K	J	1/8W	
R107			RK73FB2B221J	CHIP R	220	J	1/8W	E2
R108			RK73GB2A101J	CHIP R	100	J	1/10W	
R112			RK73GB2A101J	CHIP R	100	J	1/10W	
R117			RK73GH2A243D	CHIP R	24K	D	1/10W	E2
R122			RK73GH2A432D	CHIP R	4.3K	D	1/10W	E2
R124			RK73GB2A223J	CHIP R	22K	J	1/10W	
R126			RK73FB2B222J	CHIP R	2.2K	J	1/8W	
R130			RK73FB2B221J	CHIP R	220	J	1/8W	
R132			RK73GB2A823J	CHIP R	82K	J	1/10W	
R133			RK73GB2A103J	CHIP R	10K	J	1/10W	
R136			RK73GB2A224J	CHIP R	220K	J	1/10W	
R138			RK73GB2A333J	CHIP R	33K	J	1/10W	
R139			RK73GB2A224J	CHIP R	220K	J	1/10W	
R146			RK73GH2A243D	CHIP R	24K	D	1/10W	
R147			RK73GH2A432D	CHIP R	4.3K	D	1/10W	
R200			RK73GB2A4R7J	CHIP R	4.7	J	1/10W	
R201			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R202			RK73GB2A682J	CHIP R	6.8K	J	1/10W	
R203			RK73GB2A103J	CHIP R	10K	J	1/10W	
R204,205			RK73HB1J101J	CHIP R	100	J	1/16W	
R206			RK73GH2A123D	CHIP R	12K	D	1/10W	
R207			RK73GB2A4R7J	CHIP R	4.7	J	1/10W	
R208			RK73HB1J103J	CHIP R	10K	J	1/16W	
R209			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R211			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R213			RK73HB1J103J	CHIP R	10K	J	1/16W	
R215			RK73GB2A104J	CHIP R	100K	J	1/10W	
R216			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R217			RK73GB2A103J	CHIP R	10K	J	1/10W	
R218-223			RK73GB2A101J	CHIP R	100	J	1/10W	
R224			RK73GB2A103J	CHIP R	10K	J	1/10W	
R226-229			RK73GB2A470J	CHIP R	47	J	1/10W	

Ref. No.	Add	New	Parts No.	Description				Destination
R232			RK73EB2E4R7J	CHIP R	4.7	J	1/4W	
R233,234			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R237			RK73GB2A4R7J	CHIP R	4.7	J	1/10W	
R238,239			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R240			RK73GB2A473J	CHIP R	47K	J	1/10W	
R241			RK73GB2A113J	CHIP R	11K	J	1/10W	
R242			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R243			RK73GB2A432J	CHIP R	4.3K	J	1/10W	
R244			RK73GB2A100J	CHIP R	10	J	1/10W	
R245			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R246			RK73GB2A331J	CHIP R	330	J	1/10W	
R247			RK73GB2A473J	CHIP R	47K	J	1/10W	
R248			RK73HH1J102D	CHIP R	1.0K	D	1/16W	
R250			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R251			RK73HH1J102D	CHIP R	1.0K	D	1/16W	
R252			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R260			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R262			RK73GB2A561J	CHIP R	560	J	1/10W	
R263			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R500			RK73GB2A222J	CHIP R	2.2K	J	1/10W	K1R2M2
R500			RK73GB2A222J	CHIP R	2.2K	J	1/10W	M4K2E2
R500			RK73GB2A222J	CHIP R	2.2K	J	1/10W	M5
R501			RK73GB2A223J	CHIP R	22K	J	1/10W	
R502			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R503			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R504,505			RK73GB2A222J	CHIP R	2.2K	J	1/10W	K1R2M2
R504,505			RK73GB2A222J	CHIP R	2.2K	J	1/10W	M4K2E2
R504,505			RK73GB2A222J	CHIP R	2.2K	J	1/10W	M5
R552			RK73GB2A101J	CHIP R	100	J	1/10W	
R553			RK73EB2E101J	CHIP R	100	J	1/4W	
R554			RK73GB2A100J	CHIP R	10	J	1/10W	
R555			RK73EB2E101J	CHIP R	100	J	1/4W	
R556			RK73GB2A100J	CHIP R	10	J	1/10W	
R557			RK73EB2E101J	CHIP R	100	J	1/4W	
R558			RK73GB2A100J	CHIP R	10	J	1/10W	
R559			RK73EB2E101J	CHIP R	100	J	1/4W	
R560			RK73GB2A100J	CHIP R	10	J	1/10W	
R561-563			RK73GB2A750J	CHIP R	75	J	1/10W	K1M2M4
R561-563			RK73GB2A750J	CHIP R	75	J	1/10W	X2R2
R561-564			RK73GB2A102J	CHIP R	1.0K	J	1/10W	E2
R561-564			RK73GB2A102J	CHIP R	1.0K	J	1/10W	K2M5X3
R565			RK73GB2A103J	CHIP R	10K	J	1/10W	E2
R565			RK73GB2A103J	CHIP R	10K	J	1/10W	K2M5X3
R565			RK73GB2A750J	CHIP R	75	J	1/10W	K1M2M4
R565			RK73GB2A750J	CHIP R	75	J	1/10W	X2R2
R566			RK73EB2E4R7J	CHIP R	4.7	J	1/4W	
R567,568			RK73EB2E100J	CHIP R	10	J	1/4W	
R569,570			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R571-574			RK73GB2A911J	CHIP R	910	J	1/10W	E2
R571-574			RK73GB2A911J	CHIP R	910	J	1/10W	K2M5X3
R575			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R576-581			RK73GB2A100J	CHIP R	10	J	1/10W	
R600			RK73EB2E200J	CHIP R	20	J	1/4W	
R601			RK73EB2E100J	CHIP R	10	J	1/4W	
R602			RK73EB2E200J	CHIP R	20	J	1/4W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R603-605			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R606-608			RK73EB2E101J	CHIP R	100	J	1/4W	
R609,610			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R611			RK73EB2E101J	CHIP R	100	J	1/4W	
R612			RK73GB2A100J	CHIP R	10	J	1/10W	
R613			RK73GB2A750J	CHIP R	75	J	1/10W	
R650			RK73EB2E200J	CHIP R	20	J	1/4W	
R651			RK73EB2E100J	CHIP R	10	J	1/4W	
R652			RK73EB2E200J	CHIP R	20	J	1/4W	
R653,654			RK73EB2E102J	CHIP R	1.0K	J	1/4W	
R655			RK73GB2A473J	CHIP R	47K	J	1/10W	
R656,657			RK73GB2A103J	CHIP R	10K	J	1/10W	
R658			RK73GB2A473J	CHIP R	47K	J	1/10W	
R659			RK73GB2A472J	CHIP R	4.7K	J	1/10W	
R660			RK73GB2A101J	CHIP R	100	J	1/10W	
R661-663			RK73EB2E101J	CHIP R	100	J	1/4W	
R664			RK73GB2A103J	CHIP R	10K	J	1/10W	
R665			RK73GB2A104J	CHIP R	100K	J	1/10W	
R666			RK73GB2A102J	CHIP R	1.0K	J	1/10W	
R667-669			RK73GB2A100J	CHIP R	10	J	1/10W	
R670			RK73GB2A101J	CHIP R	100	J	1/10W	
R671			RK73GB2A000J	CHIP R	0.0	J	1/10W	
R673			RK73GB2A103J	CHIP R	10K	J	1/10W	
R700			RK73HB1J103J	CHIP R	10K	J	1/16W	K1K2
R700			RK73HB1J303J	CHIP R	30K	J	1/16W	X2X3
R700			RK73HB1J332J	CHIP R	3.3K	J	1/16W	E2
R700,701			RK73HB1J103J	CHIP R	10K	J	1/16W	M2M4M5
R701			RK73HB1J103J	CHIP R	10K	J	1/16W	R2X2E2
R701			RK73HB1J103J	CHIP R	10K	J	1/16W	X3
R703			RK73HB1J473J	CHIP R	47K	J	1/16W	
R704			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R705			RK73HB1J473J	CHIP R	47K	J	1/16W	K1M2M4
R705			RK73HB1J473J	CHIP R	47K	J	1/16W	X2R2
R706,707			RK73HB1J473J	CHIP R	47K	J	1/16W	E2
R706,707			RK73HB1J473J	CHIP R	47K	J	1/16W	K2M5X3
R707			RK73HB1J473J	CHIP R	47K	J	1/16W	K1M2M4
R707			RK73HB1J473J	CHIP R	47K	J	1/16W	X2R2
R711			RK73HB1J473J	CHIP R	47K	J	1/16W	
R712,713			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R714			RK73HB1J101J	CHIP R	100	J	1/16W	
R715			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R716			RK73HB1J101J	CHIP R	100	J	1/16W	
R717			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R718			RK73HB1J101J	CHIP R	100	J	1/16W	
R719			RK73HB1J102J	CHIP R	1.0K	J	1/16W	E2
R719,720			RK73HB1J102J	CHIP R	1.0K	J	1/16W	K1M2M4
R719,720			RK73HB1J102J	CHIP R	1.0K	J	1/16W	M5X3
R719,720			RK73HB1J102J	CHIP R	1.0K	J	1/16W	X2R2K2
R721			RK73HB1J101J	CHIP R	100	J	1/16W	
R726			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R727,728			RK73HB1J103J	CHIP R	10K	J	1/16W	
R729,730			RK73HB1J473J	CHIP R	47K	J	1/16W	
R731			RK73HB1J101J	CHIP R	100	J	1/16W	
R733			RK73HB1J473J	CHIP R	47K	J	1/16W	
R734			RK73HB1J101J	CHIP R	100	J	1/16W	

Ref. No.	Add	New	Parts No.	Description				Destination
R735			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R737			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R740,741			RK73HB1J101J	CHIP R	100	J	1/16W	
R742			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R743			RK73HB1J101J	CHIP R	100	J	1/16W	
R744			RK73GB2A473J	CHIP R	47K	J	1/10W	
R745,746			RK73HB1J101J	CHIP R	100	J	1/16W	
R747			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R748			RK73HB1J101J	CHIP R	100	J	1/16W	
R750			RK73HB1J101J	CHIP R	100	J	1/16W	
R751			RK73GB2A473J	CHIP R	47K	J	1/10W	
R752			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R753			RK73HB1J101J	CHIP R	100	J	1/16W	K1R2M2
R753			RK73HB1J101J	CHIP R	100	J	1/16W	M4K2E2
R753			RK73HB1J101J	CHIP R	100	J	1/16W	M5
R755			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R756			RK73HB1J101J	CHIP R	100	J	1/16W	K1R2M2
R756			RK73HB1J101J	CHIP R	100	J	1/16W	M4K2E2
R756			RK73HB1J101J	CHIP R	100	J	1/16W	M5
R758			RK73HB1J101J	CHIP R	100	J	1/16W	K1R2M2
R758			RK73HB1J101J	CHIP R	100	J	1/16W	M4K2E2
R758			RK73HB1J101J	CHIP R	100	J	1/16W	M5
R759			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R760			RK73HB1J223J	CHIP R	22K	J	1/16W	
R762			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R765,766			RK73HB1J473J	CHIP R	47K	J	1/16W	K1R2M2
R765,766			RK73HB1J473J	CHIP R	47K	J	1/16W	M4K2E2
R765,766			RK73HB1J473J	CHIP R	47K	J	1/16W	M5
R768			RK73HB1J473J	CHIP R	47K	J	1/16W	
R770			RK73HB1J473J	CHIP R	47K	J	1/16W	K1R2M2
R770			RK73HB1J473J	CHIP R	47K	J	1/16W	M4K2E2
R770			RK73HB1J473J	CHIP R	47K	J	1/16W	M5
R772,773			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R774,775			RK73HB1J101J	CHIP R	100	J	1/16W	
R776			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R777			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R780,781			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R782			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R783-788			RK73HB1J101J	CHIP R	100	J	1/16W	
R789			RK73HB1J470J	CHIP R	47	J	1/16W	
R790,791			RK73HB1J101J	CHIP R	100	J	1/16W	
R792,793			RK73HB1J471J	CHIP R	470	J	1/16W	
R794			RK73HB1J104J	CHIP R	100K	J	1/16W	
R795			RK73HB1J103J	CHIP R	10K	J	1/16W	
R796			RK73HB1J473J	CHIP R	47K	J	1/16W	
R797			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R798			RK73GB2A473J	CHIP R	47K	J	1/10W	
R799			RK73HB1J104J	CHIP R	100K	J	1/16W	
R800			RK73GB2A473J	CHIP R	47K	J	1/10W	
R801			RK73GB2A101J	CHIP R	100	J	1/10W	
R802			RK73HB1J473J	CHIP R	47K	J	1/16W	
R803-807			RK73GB2A101J	CHIP R	100	J	1/10W	
R808			RK73HB1J473J	CHIP R	47K	J	1/16W	
R809			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R810			RK73HB1J473J	CHIP R	47K	J	1/16W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R811			RK73HB1J102J	CHIP R 1.0K J 1/16W	
D1,2			M1F60-6063	DIODE	
D3			DAP202U	DIODE	
D4			M1F60-6063	DIODE	
D5			DAN202U	DIODE	
D6			M1F60-6063	DIODE	
D7			DAN202U	DIODE	
D8			M1F60-6063	DIODE	
D9			DAN202U	DIODE	
D10			UDZS6.2B	ZENER DIODE	
D11			M1F60-6063	DIODE	
D12			UDZS6.8B	ZENER DIODE	
D14		*	RM30LF014-102	DIODE	
D15			UDZS6.2B	ZENER DIODE	
D16			UDZS5.6B	ZENER DIODE	
D17			UDZS4.7B	ZENER DIODE	
D18			UDZS6.2B	ZENER DIODE	
D19			DAN202U	DIODE	
D100			RB160L-40	DIODE	
D102			UDZS5.6B	ZENER DIODE	
D105			DA204U	DIODE	
D200			UDZS6.8B	ZENER DIODE	
D201,202			DAP202U	DIODE	
D203			AVRM16270MAAB	VARISTOR	
D204			DAP202U	DIODE	
D206			DAP202U	DIODE	
D500			IMSA-6801-E	SURGE ABSORBER	
D550			UDZS6.2B	ZENER DIODE	
D551-555			STZ6.2N	ZENER DIODE	K1M2M4
D551-555			STZ6.2N	ZENER DIODE	X2R2
D556			STZ6.8N	ZENER DIODE	K1M2M4
D556			STZ6.8N	ZENER DIODE	X2R2
D557			UDZS6.2B	ZENER DIODE	K1M2M4
D557			UDZS6.2B	ZENER DIODE	X2R2
D600			STZ6.8N	ZENER DIODE	
D601			UDZS6.2B	ZENER DIODE	
D604,605			STZ6.2N	ZENER DIODE	
D606			UDZS6.2B	ZENER DIODE	
D607			AVRM16180M6AB	VARISTOR	
D608,609			AVRM16120M6AB	VARISTOR	
D613			STZ6.2N	ZENER DIODE	
D649			DAP202U	DIODE	
D650			STZ6.8N	ZENER DIODE	
D651			UDZS6.2B	ZENER DIODE	
D652			STZ6.2N	ZENER DIODE	
D653			AVRM16180M6AB	VARISTOR	
D654			DAP202U	DIODE	
D662,663			AVRM16180M6AB	VARISTOR	
D664,665			DAP202U	DIODE	
IC101			M5237ML-CF0J	ANALOGUE IC	E2
IC103			TA78L05F-F	ANALOGUE IC	
IC104			R1114N331B-TR	ANALOGUE IC (3.3V LF)	
IC106			M5237ML-CF0J	ANALOGUE IC	
IC200			AK4220	ANALOGUE IC	

Ref. No.	Add	New	Parts No.	Description	Destination
IC201			NJM4565V-ZB	ANALOGUE IC	
IC203			E-TDA7415CB	ANALOGUE IC	
IC500			E-TDA7478AD	ANALOGUE IC	K1R2M2
IC500			E-TDA7478AD	ANALOGUE IC	M4K2E2
IC500			E-TDA7478AD	ANALOGUE IC	M5
IC550			74AHC1G04GW	MOS-IC	
IC650			74AHC1G08GW	MOS-IC	
IC701			S-80835CNNB-G	MOS-IC	
IC702		*	30624MWPB74GP	MICROCONTROLLER IC	
IC704			TB2923HQ	ANALOGUE IC	
Q1			2SB1188(Q,R)	TRANSISTOR	
Q2			2SA1576A	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q4			DTA114EUA	DIGITAL TRANSISTOR	
Q5			2SA1576A	TRANSISTOR	
Q6			DTC114YUA	DIGITAL TRANSISTOR	
Q7			2SB1188(R)	TRANSISTOR	K1M2M4
Q7			2SB1188(R)	TRANSISTOR	M5X3
Q7			2SB1188(R)	TRANSISTOR	X2R2K2
Q8			DTC124EUA	DIGITAL TRANSISTOR	
Q9,10			2SC4081	TRANSISTOR	K1M2M4
Q9,10			2SC4081	TRANSISTOR	M5X3
Q9,10			2SC4081	TRANSISTOR	X2R2K2
Q10			2SC4081	TRANSISTOR	E2
Q11			2SA1576A	TRANSISTOR	
Q13,14			2SC4081	TRANSISTOR	
Q104			UMC2N	TRANSISTOR	E2
Q105			KTA1046-P	TRANSISTOR	
Q107			2SB1184	TRANSISTOR	E2
Q108			2SC4081	TRANSISTOR	
Q111			2SB1689	TRANSISTOR	
Q112			DTC124EUA	DIGITAL TRANSISTOR	
Q113			DTC114YUA	DIGITAL TRANSISTOR	
Q114			2SA1576A	TRANSISTOR	
Q115			KTA1046-P	TRANSISTOR	
Q116			DTC124EUA	DIGITAL TRANSISTOR	
Q117			2SA1576A	TRANSISTOR	
Q118			DTA124EUA	DIGITAL TRANSISTOR	
Q119			TPC8110-F	FET	
Q200			2SA1576A	TRANSISTOR	
Q500			DTC124EUA	DIGITAL TRANSISTOR	
Q501			2SB1689	TRANSISTOR	
Q650,651			2SC4081	TRANSISTOR	
Q652			DTA114EUA	DIGITAL TRANSISTOR	
Q653,654			DTC144EUA	DIGITAL TRANSISTOR	
Q700			DTC144EUA	DIGITAL TRANSISTOR	
Q701			RT1N440M	TRANSISTOR	
Q702			DTC114YUA	DIGITAL TRANSISTOR	
Q703			DTC124EUA	DIGITAL TRANSISTOR	
Q704			DTC114TUA	DIGITAL TRANSISTOR	
Q705			2SK3019	FET	
Q706			DTA114TUA	DIGITAL TRANSISTOR	
Q707			2SK3019	FET	
TH201			PRF18BE471QS2	POSITIVE RESISTOR	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-598x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
A500			X86-4030-11	FRONT-END UNIT	K1R2X2
A500			X86-4030-11	FRONT-END UNIT	K2X3
A500			X86-4032-70	FRONT-END UNIT	M2M4E2
A500			X86-4032-70	FRONT-END UNIT	M5
A501	2C	✻	X89-3062-71	DAUGHTER UNIT	E2
VIDEO UNIT (X35-4940-11)					
C1,2			CK73EB1E106K	CHIP C 10UF K	
C3-6			CK73GB1H103K	CHIP C 0.010UF K	
C7,8			CK73GB0J225K	CHIP C 2.2UF K	
C9			CK73GB1A474K	CHIP C 0.47UF K	
C10			CK73GB1E183K	CHIP C 0.018UF K	
C11			CK73GB1H152K	CHIP C 1500PF K	
C12			CK73GB0J225K	CHIP C 2.2UF K	
C13			CK73GB1H103K	CHIP C 0.010UF K	
C14,15			CK73GB1H473K	CHIP C 0.047UF K	
C16			C93-1383-05	CHIP C 220PF F	
C18-20			CK73EB1E106K	CHIP C 10UF K	
C21-24			C93-1283-05	CHIP C 1.0UF K	
C25		✻	C93-1461-05	CHIP C 2700PF F	
C26			C93-1273-05	CHIP C 15PF J	
C27		✻	C93-1466-05	CHIP C 0.018UF F	
C101			CK73FB0J106K	CHIP C 10UF K	
C102			CK73GB1H103K	CHIP C 0.010UF K	
C103			CC73GCH1H102J	CHIP C 1000PF J	
C104-107			CK73GB1C104K	CHIP C 0.10UF K	
C108			CK73EB1E106K	CHIP C 10UF K	
C109			CK73GB1H104K	CHIP C 0.10UF K	
C110			CK73GB1H103K	CHIP C 0.010UF K	
C111			CK73FB1E154K	CHIP C 0.15UF K	
C112			CC73GCH1H102J	CHIP C 1000PF J	
C113			CK73GB1C224K	CHIP C 0.22UF K	
C114			CC73GCH1H151J	CHIP C 150PF J	
C115			CK73EB1E225K	CHIP C 2.2UF K	
C117,118			CK73FB1C106K	CHIP C 10UF K	
C119			CK73GB1C104K	CHIP C 0.10UF K	
C120			CK73FB1C106K	CHIP C 10UF K	
C121			CK73GB1C104K	CHIP C 0.10UF K	
C122			CK73GB1H103K	CHIP C 0.010UF K	
C124			CK73FB1C106K	CHIP C 10UF K	
C131			CK73FB1C106K	CHIP C 10UF K	
C140,141			CK73GB1C104K	CHIP C 0.10UF K	
C200			CK73FB0J106K	CHIP C 10UF K	
C201			CK73GB1H103K	CHIP C 0.010UF K	
C202			CK73FB1C106K	CHIP C 10UF K	
C203			CK73GB1H103K	CHIP C 0.010UF K	
C204,205			CK73FB1A475K	CHIP C 4.7UF K	
C207			CC73GCH1H560J	CHIP C 56PF J	
C208			CK73EB1E106K	CHIP C 10UF K	
C209			CK73GB1H103K	CHIP C 0.010UF K	
C210			CK73EB1E106K	CHIP C 10UF K	
C211			CK73GB1H103K	CHIP C 0.010UF K	
C216,217			CK73FB1C106K	CHIP C 10UF K	
C218			CK73GB1C104K	CHIP C 0.10UF K	
C219			CC73GCH1H101J	CHIP C 100PF J	
C221			CK73FB1C106K	CHIP C 10UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C301			CK73HB1E103K	CHIP C 0.010UF K	
C302			CK73FB0J106K	CHIP C 10UF K	
C303			CK73HB1E103K	CHIP C 0.010UF K	
C304			CK73FB0J106K	CHIP C 10UF K	
C305			CK73GB1A105K	CHIP C 1.0UF K	
C306			CK73HB1A104K	CHIP C 0.10UF K	
C308			CK73GB1A105K	CHIP C 1.0UF K	
C309			CC73HCH1H560J	CHIP C 56PF J	
C310			CC73HCH1H330J	CHIP C 33PF J	
C311,312			CC73HCH1H102J	CHIP C 1000PF J	
C313			CK73HB1A104K	CHIP C 0.10UF K	
C314			CK73FB0J106K	CHIP C 10UF K	
C315-334			CK73HB1A104K	CHIP C 0.10UF K	
C335			CC73HCH1H240J	CHIP C 24PF J	
C336			CC73HCH1H270J	CHIP C 27PF J	
C337			CK73HB1A104K	CHIP C 0.10UF K	
C338,339			CK73HB1E103K	CHIP C 0.010UF K	
C340			CK73HB1A104K	CHIP C 0.10UF K	
C341			CK73FB0J106K	CHIP C 10UF K	
C342-347			CK73HB1A104K	CHIP C 0.10UF K	
C349,350			CK73HB1A104K	CHIP C 0.10UF K	
C360			CK73HB1H102K	CHIP C 1000PF K	
C361			CC73HCH1H820J	CHIP C 82PF J	
C362,363			CK73HB1A104K	CHIP C 0.10UF K	
C372			CK73FB1C105K	CHIP C 1.0UF K	
C373,374			CK73FB0J106K	CHIP C 10UF K	
C375			CK73EB1E105K	CHIP C 1.0UF K	
C376-382			CK73HB1A104K	CHIP C 0.10UF K	
C386			CK73HB1A104K	CHIP C 0.10UF K	
C387			CK73HB1H102K	CHIP C 1000PF K	
C500,501			CK73GB1H103K	CHIP C 0.010UF K	
C502			CK73FB0J106K	CHIP C 10UF K	
C601			CK73FB0J106K	CHIP C 10UF K	
C602			CC73GCH1H221J	CHIP C 220PF J	
C603			CK73GB1C104K	CHIP C 0.10UF K	
CN1			E41-2642-05	PIN ASSY	
CN100		✻	E41-2985-05	FLAT CABLE CONNECTOR	
CN300			E41-2359-05	PIN ASSY	
CN301			E41-2208-05	FLAT CABLE CONNECTOR	
CN500			E41-2088-05	FLAT CABLE CONNECTOR	
CN600		✻	E41-2974-05	FLAT CABLE CONNECTOR	
F100			F53-0280-05	FUSE 0.63A	
L1			L33-2454-05	CHOKE COIL 10UH	
L2			L19-0802-05	TRANSFORMER FOR CONVERTER	
L100			L33-2454-05	CHOKE COIL 10UH	
L101			L41-4792-13	SMALL FIXED INDUCTOR (4.7UH)	
L102			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L103,104			L41-3392-13	SMALL FIXED INDUCTOR (3.3UH)	
L105			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L200,201			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L203			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L300,301			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L302			L41-2205-33	SMALL FIXED INDUCTOR (22U)	

⚠Indicates safety critical components.

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

PARTS LIST

VIDEO UNIT (X35-4940-11)

Ref. No.	Add	New	Parts No.	Description	Destination
L303			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L304-306			L92-0319-05	CHIP FERRITE	
L307			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L308-311			L92-0319-05	CHIP FERRITE	
L312			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
L313			L41-8281-15	SMALL FIXED INDUCTOR (0.82U)	
L315			L92-0319-05	CHIP FERRITE	
L600			L41-1005-33	SMALL FIXED INDUCTOR (10U)	
X300			L77-2965-05	CRYSTAL RESONATOR (12.000MHZ)	
R1			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R2,3			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R5			RK73GB2A153J	CHIP R 15K J 1/10W	
R7			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R8			RK73GB2A220J	CHIP R 22 J 1/10W	
R9			RK73GH2A433D	CHIP R 43K D 1/10W	
R10			RK73GB2A220J	CHIP R 22 J 1/10W	
R11			RK73GB2A515J	CHIP R 5.1M J 1/10W	
R12			RK73GH2A513D	CHIP R 51K D 1/10W	
R13			RK73GB2A104J	CHIP R 100K J 1/10W	
R14			RK73GH2A164D	CHIP R 160K D 1/10W	
R15			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R16			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R17			RK73GB2A512J	CHIP R 5.1K J 1/10W	
R18			RK73GH2A563D	CHIP R 56K D 1/10W	
R19			RK73GH2A754D	CHIP R 750K D 1/10W	
R20			RK73GB2A512J	CHIP R 5.1K J 1/10W	
R21-24			RK73GB2A220J	CHIP R 22 J 1/10W	
R25			RK73GH2A471D	CHIP R 470 D 1/10W	
R27			RK73GH2A103D	CHIP R 10K D 1/10W	
R32			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R100			RK73GB2A100J	CHIP R 10 J 1/10W	
R101			RK73GB2A754J	CHIP R 750K J 1/10W	
R102			RK73GB2A473J	CHIP R 47K J 1/10W	
R104			RK73GH2A114D	CHIP R 110K D 1/10W	
R105			RK73GH2A103D	CHIP R 10K D 1/10W	
R106			RK73GH2A164D	CHIP R 160K D 1/10W	
R107			RK73GH2A183D	CHIP R 18K D 1/10W	
R108-110			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R111			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R112			RK73GB2A103J	CHIP R 10K J 1/10W	
R140			RK73GH2A103D	CHIP R 10K D 1/10W	
R141			RK73GH2A513D	CHIP R 51K D 1/10W	
R142,143			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R201			RK73GB2A223J	CHIP R 22K J 1/10W	
R203			RK73GB2A473J	CHIP R 47K J 1/10W	
R205			RK73GH2A392D	CHIP R 3.9K D 1/10W	
R206			RK73GH2A222D	CHIP R 2.2K D 1/10W	
R207			RK73GH2A123D	CHIP R 12K D 1/10W	
R208			RK73GB2A101J	CHIP R 100 J 1/10W	
R209,210			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R212			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R216,217			RK73GB2A470J	CHIP R 47 J 1/10W	
R222,223			RK73GH2A102D	CHIP R 1.0K D 1/10W	
R224			RK73GB2A222J	CHIP R 2.2K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R228			RK73GH2A153D	CHIP R 15K D 1/10W	
R229			RK73GH2A103D	CHIP R 10K D 1/10W	
R300-302			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R303,304			RK73FB2B101J	CHIP R 100 J 1/8W	
R305,306			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R307-309			RK73HB1J101J	CHIP R 100 J 1/16W	
R310-312			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R313,314			RK73HB1J101J	CHIP R 100 J 1/16W	
R320			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R321			RK73HB1J100J	CHIP R 10 J 1/16W	
R322			RK73HB1J101J	CHIP R 100 J 1/16W	
R323			RK73HB1J100J	CHIP R 10 J 1/16W	
R324			RK73HB1J272J	CHIP R 2.7K J 1/16W	
R325-328			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R331,332			RK73HB1J101J	CHIP R 100 J 1/16W	
R336			RK73HB1J105J	CHIP R 1.0M J 1/16W	
R337			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R338			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R339-341			RK73HB1J330J	CHIP R 33 J 1/16W	
R342			RK73HB1J103J	CHIP R 10K J 1/16W	
R343			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R345,346			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R347,348			RK73HB1J330J	CHIP R 33 J 1/16W	
R351			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R353			RK73HB1J473J	CHIP R 47K J 1/16W	
R354,355			RK73HB1J330J	CHIP R 33 J 1/16W	
R359			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R360			RK73HB1J181J	CHIP R 180 J 1/16W	
R361			RK73HB1J101J	CHIP R 100 J 1/16W	
R362			RK73HB1J560J	CHIP R 56 J 1/16W	
R363-370			RK73HB1J101J	CHIP R 100 J 1/16W	
R372			RK73HB1J101J	CHIP R 100 J 1/16W	
R373			RK73HB1J472J	CHIP R 4.7K J 1/16W	
R392-397			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R398			RK73HB1J102J	CHIP R 1.0K J 1/16W	
R399			RK73HB1J101J	CHIP R 100 J 1/16W	
R400-403			RK73HB1J473J	CHIP R 47K J 1/16W	
R404			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R405			RK73HB1J101J	CHIP R 100 J 1/16W	
R406			RK73GH2A911D	CHIP R 910 D 1/10W	
R407			RK73GH2A102D	CHIP R 1.0K D 1/10W	
R410			RK73HB1J000J	CHIP R 0.0 J 1/16W	
R413			RK73HB1J101J	CHIP R 100 J 1/16W	
R414,415			RK73HB1J103J	CHIP R 10K J 1/16W	
R416			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R500,501			RK73GB2A333J	CHIP R 33K J 1/10W	
R504-507			RK73EB2E100J	CHIP R 10 J 1/4W	
R509			RK73FB2B000J	CHIP R 0.0 J 1/8W	
R603-606			RK73EB2E101J	CHIP R 100 J 1/4W	
R607			RK73EB2E100J	CHIP R 10 J 1/4W	
R608			RK73EB2E121J	CHIP R 120 J 1/4W	
R609			RK73EB2E101J	CHIP R 100 J 1/4W	
R610			RK73GB2A101J	CHIP R 100 J 1/10W	
R611-614			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R615			RK73GB2A302J	CHIP R 3.0K J 1/10W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

VIDEO UNIT (X35-4940-11)

Ref. No.	Add	New	Parts No.	Description	Destination
R616,617			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R618			RK73GB2A512J	CHIP R 5.1K J 1/10W	
R619,620			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R621			RK73GB2A103J	CHIP R 10K J 1/10W	
R622			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R623			RK73GB2A303J	CHIP R 30K J 1/10W	
R624-627			RK73GB2A681J	CHIP R 680 J 1/10W	
R629-634			RK73GB2A681J	CHIP R 680 J 1/10W	
R635			RK73FB2B132J	CHIP R 1.3K J 1/8W	
R636-638			RK73GB2A000J	CHIP R 0.0 J 1/10W	
R643,644			RK73GB2A473J	CHIP R 47K J 1/10W	
R645			RK73GB2A822J	CHIP R 8.2K J 1/10W	
VR200			R32-0350-05	SEMI FIXED VARIABLE RESIS (10K)	
D1			UDZS5.6B	ZENER DIODE	
D2			AVRM16120M6AB	VARISTOR	
D3,4			1SS355	DIODE	
D5			UDZS5.6B	ZENER DIODE	
D6			MA2S784-F	DIODE	
D7			UDZS5.6B	ZENER DIODE	
D8,9			DA204U	DIODE	
D100			EP05Q06	DIODE	
D101-103			EP05Q04	DIODE	
D306,307			AVRM16270MAAB	VARISTOR	
D500-503			UDZS6.8B	ZENER DIODE	
D504			DA204U	DIODE	
D605-608			AVRM16120M6AB	VARISTOR	
D609			AVRM16180M6AB	VARISTOR	
D610,611			AVRM16120M6AB	VARISTOR	
IC1			OZ964ISN-C-SN	ANALOGUE IC	
IC100			TC7WH123FU-F	MOS-IC	
IC101			74AHC1G04GW	MOS-IC	
IC102			LT1947-PBF	ANALOGUE IC	
IC200			TA75W558FU-F	ANALOGUE IC	
IC300			S-1112B25MCG	ANALOGUE IC	
IC301			MST7988LA-ALF	MOS-IC	
IC302			74LVC3G34DP	MOS-IC	
IC303		*	AT25F2048-6Z1	ROM IC	
IC304			74AHC1G04GW	MOS-IC	
Q1			2SC4081	TRANSISTOR	
Q2,3			SI5504DC-E3	DUAL FET	
Q4			2SC4081	TRANSISTOR	
Q5			DTC114YUA	DIGITAL TRANSISTOR	
Q140			2SC4081	TRANSISTOR	
Q141			2SA1576A	TRANSISTOR	
Q202			2SC4097	TRANSISTOR	
Q203			2SA1577	TRANSISTOR	
Q205			UMZ1N	TRANSISTOR	
Q300			2SA1576A	TRANSISTOR	
Q301			2SC4081	TRANSISTOR	
Q302,303			DTC114YUA	DIGITAL TRANSISTOR	
Q304			DTA123JUA	DIGITAL TRANSISTOR	
Q500			DTA143ZUA	DIGITAL TRANSISTOR	
Q501			DTC143ZUA	DIGITAL TRANSISTOR	
Q502			DTA143ZUA	DIGITAL TRANSISTOR	
Q503			DTC143ZUA	DIGITAL TRANSISTOR	
Q504			DTC114YUA	DIGITAL TRANSISTOR	
Q600			2SA1576A	TRANSISTOR	
Q601			2SC4081	TRANSISTOR	

DVD UNIT (X37-1120-06) IN DVD MECHA.

Ref. No.	Add	New	Parts No.	Description	Destination
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	
C20			CC73HCH1H102J	CHIP C 1000PF J	
C50,51			C93-1228-05	CHIP C 1UF M	
C54			C93-1228-05	CHIP C 1UF M	
C59,60			C93-1228-05	CHIP C 1UF M	
C62			C93-1228-05	CHIP C 1UF M	
C63			CK73FB0J226M	CHIP C 22UF M	
C72			CK73HB1A104K	CHIP C 0.10UF K	
C73			CK73GB0J106M	CHIP C 10UF M	
C100-102			CK73HB1A104K	CHIP C 0.10UF K	
C103			C93-1228-05	CHIP C 1UF M	
C104			CK73HB1A104K	CHIP C 0.10UF K	
C105			C93-1228-05	CHIP C 1UF M	
C106,107			CK73HB1A104K	CHIP C 0.10UF K	
C108			C93-1228-05	CHIP C 1UF M	
C109			CK73HB1A104K	CHIP C 0.10UF K	
C110			C93-1228-05	CHIP C 1UF M	
C111			CK73HB1C333K	CHIP C 0.033UF K	
C112,113			CK73HB1A104K	CHIP C 0.10UF K	
C114			CK73GB1H562K	CHIP C 5600PF K	
C115			CK73HB1C183K	CHIP C 0.018UF K	
C117			CK73HB1A104K	CHIP C 0.10UF K	
C118			CK73HB0J105K	CHIP C 1.0UF K	
C119			C93-1228-05	CHIP C 1UF M	
C120,121			CK73HB1A104K	CHIP C 0.10UF K	
C122,123			CK73GB0J106M	CHIP C 10UF M	
C126-129			CK73HB1A104K	CHIP C 0.10UF K	
C130-133			CC73HCH1H151J	CHIP C 150PF J	
C134			CC73HCH1H102J	CHIP C 1000PF J	
C135,136			C93-1228-05	CHIP C 1UF M	
C137,138			CK73HB0J105K	CHIP C 1.0UF K	
C139,140			C93-1228-05	CHIP C 1UF M	
C142			C93-1228-05	CHIP C 1UF M	
C143,144			CC73HCH1H100D	CHIP C 10PF D	
C145-149			CK73HB1A104K	CHIP C 0.10UF K	
C151,152			C93-1228-05	CHIP C 1UF M	
C153,154			CK73HB1A104K	CHIP C 0.10UF K	
C158			CK73HB1A104K	CHIP C 0.10UF K	
C162			CK73HB1A104K	CHIP C 0.10UF K	
C164-169			CK73GB0J106M	CHIP C 10UF M	
C200-203			CK73GB0J106M	CHIP C 10UF M	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-06) IN DVD MECHA.

Ref. No.	Add	New	Parts No.	Description			Destination
C207,208			CK73HB1A104K	CHIP C	0.10UF	K	
C220-223			CK73HB0J105K	CHIP C	1.0UF	K	
C224			CK73HB1E103K	CHIP C	0.010UF	K	
C226			CK73FB0J226M	CHIP C	22UF	M	
C229,230			CK73HB1E103K	CHIP C	0.010UF	K	
C231			CC73HCH1H102J	CHIP C	1000PF	J	
C250			CC73HCH1H102J	CHIP C	1000PF	J	
C251,252			CC73HCH1H221J	CHIP C	220PF	J	
C253			CC73HCH1H102J	CHIP C	1000PF	J	
C254,255			CC73HCH1H221J	CHIP C	220PF	J	
C256			CK73HB1A104K	CHIP C	0.10UF	K	
C261,262			CC73HCH1H331J	CHIP C	330PF	J	
C263			CK73HB0J105K	CHIP C	1.0UF	K	
C265			CK73GB1A105K	CHIP C	1.0UF	K	
C266			CK73HB1C333K	CHIP C	0.033UF	K	
C267			CK73FB0J226M	CHIP C	22UF	M	
C270			CK73HB0J105K	CHIP C	1.0UF	K	
C271			CC73HCH1H102J	CHIP C	1000PF	J	
C272			CK73HB0J105K	CHIP C	1.0UF	K	
C300,301			CC73HCH1H102J	CHIP C	1000PF	J	
C302			CK73GB0J106M	CHIP C	10UF	M	
C304-306			CK73GB0J106M	CHIP C	10UF	M	
C350,351			CC73HCH1H102J	CHIP C	1000PF	J	
C434			CK73GB0J106M	CHIP C	10UF	M	
C435			CK73HB1E103K	CHIP C	0.010UF	K	
C441			CK73HB1A104K	CHIP C	0.10UF	K	
C442-445			CK73FB0J226M	CHIP C	22UF	M	
C446			CK73HB1A104K	CHIP C	0.10UF	K	
C448,449			C93-1228-05	CHIP C	1UF	M	
C450			CK73HB1A104K	CHIP C	0.10UF	K	
C452			C93-1228-05	CHIP C	1UF	M	
C454,455			CK73HB1A104K	CHIP C	0.10UF	K	
C456-458			CK73HB1H682K	CHIP C	6800PF	K	
C461			CK73HB1H472K	CHIP C	4700PF	K	
C462			CK73HB1E103K	CHIP C	0.010UF	K	
C464			CK73HB0J105K	CHIP C	1.0UF	K	
C466			CK73HB1A104K	CHIP C	0.10UF	K	
C467			CC73HCH1H121J	CHIP C	120PF	J	
C468,469			CK73HB1A104K	CHIP C	0.10UF	K	
C470			CK73HB1E103K	CHIP C	0.010UF	K	
C473			CK73HB1A104K	CHIP C	0.10UF	K	
C474			CC73HCH1H102J	CHIP C	1000PF	J	
C476			CC73HCH1H101J	CHIP C	100PF	J	
C477-479			CK73FB0J226M	CHIP C	22UF	M	
C480			CK73HB1A104K	CHIP C	0.10UF	K	
C481			CC73HCH1H151J	CHIP C	150PF	J	
C482			CC73HCH1H471J	CHIP C	470PF	J	
C483			CC73HCH1H102J	CHIP C	1000PF	J	
C484			CK73HB1E103K	CHIP C	0.010UF	K	
C485			CC73HCH1H151J	CHIP C	150PF	J	
C486			CC73HCH1H471J	CHIP C	470PF	J	
C487			CC73HCH1H102J	CHIP C	1000PF	J	
C488			CK73HB1E103K	CHIP C	0.010UF	K	
C489			CC73HCH1H151J	CHIP C	150PF	J	
C490			CC73HCH1H471J	CHIP C	470PF	J	

Ref. No.	Add	New	Parts No.	Description			Destination
C491			CC73HCH1H102J	CHIP C	1000PF	J	
C492			CK73HB1E103K	CHIP C	0.010UF	K	
C493			CC73HCH1H151J	CHIP C	150PF	J	
C494			CC73HCH1H471J	CHIP C	470PF	J	
C495			CC73HCH1H102J	CHIP C	1000PF	J	
C496			CK73HB1E103K	CHIP C	0.010UF	K	
C497,498			CK73FB0J226M	CHIP C	22UF	M	
C504,505			CK73HB1H472K	CHIP C	4700PF	K	
C506,507			CC73HCH1H102J	CHIP C	1000PF	J	
C510			CC73HCH1H102J	CHIP C	1000PF	J	
C511			CK73GB0J106M	CHIP C	10UF	M	
C512			CK73HB0J105K	CHIP C	1.0UF	K	
C513-515			CK73HB1A104K	CHIP C	0.10UF	K	
C516			CK73HB1C333K	CHIP C	0.033UF	K	
C517			CK73HB1E103K	CHIP C	0.010UF	K	
C518,519			CC73HCH1H470J	CHIP C	47PF	J	
C520			CC73HCH1H102J	CHIP C	1000PF	J	
C521			CK73HB0J105K	CHIP C	1.0UF	K	
C522			CC73HCH1H151J	CHIP C	150PF	J	
C523			CC73HCH1H471J	CHIP C	470PF	J	
C524			CC73HCH1H102J	CHIP C	1000PF	J	
C525			CK73HB1E103K	CHIP C	0.010UF	K	
C526			CC73HCH1H151J	CHIP C	150PF	J	
C527			CC73HCH1H471J	CHIP C	470PF	J	
C528			CC73HCH1H102J	CHIP C	1000PF	J	
C529			CK73HB1E103K	CHIP C	0.010UF	K	
C530			CK73HB0J105K	CHIP C	1.0UF	K	
CN1			E41-2594-05	FLAT CABLE CONNECTOR			
CN3			E41-2596-05	FLAT CABLE CONNECTOR			
CN6			E41-2603-05	FLAT CABLE CONNECTOR			
CN10			E41-2602-05	FLAT CABLE CONNECTOR			
L1			L92-0365-05	CHIP FERRITE			
L2-4			L92-0612-05	CHIP FERRITE			
L5,6			L92-0611-05	CHIP FERRITE			
L7,8			L92-0612-05	CHIP FERRITE			
L10			L33-2281-05	SMALL FIXED INDUCTOR			
L11			L33-2280-05	SMALL FIXED INDUCTOR			
L12-14			L92-0365-05	CHIP FERRITE			
L15			L92-0612-05	CHIP FERRITE			
L20			L92-0617-05	CHIP FERRITE			
L21			L92-0612-05	CHIP FERRITE			
L22			L92-0838-05	CHIP FERRITE			
X1			L77-2924-05	CRYSTAL RESONATOR (27MHZ,30PPM)			
CP1-9			RK74HB1J470J	CHIP-COM	47	J 1/16W	
CP36,37			RK74HB1J103J	CHIP-COM	10K	J 1/16W	
CP44,45			RK74HB1J330J	CHIP-COM	33	J 1/16W	
CP54-56			RK74HB1J330J	CHIP-COM	33	J 1/16W	
CP57			RK74HB1J820J	CHIP-COM	82	J 1/16W	
CP58			RK74HB1J330J	CHIP-COM	33	J 1/16W	
CP59-68			RK74HB1J103J	CHIP-COM	10K	J 1/16W	
CP69			RK74HB1J220J	CHIP-COM	22	J 1/16W	
CP70-73			RK74HB1J103J	CHIP-COM	10K	J 1/16W	
R1-4			RK73HB1J103J	CHIP R	10K	J 1/16W	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

PARTS LIST

DVD UNIT (X37-1120-06) IN DVD MECHA.

Ref. No.	Add	New	Parts No.	Description				Destination
R5,6			RK73HH1J123D	CHIP R	12K	D	1/16W	
R10			RK73HB1J163J	CHIP R	16K	J	1/16W	
R16			RK73HB1J103J	CHIP R	10K	J	1/16W	
R17			RK73HB1J271J	CHIP R	270	J	1/16W	
R19			RK73HB1J301J	CHIP R	300	J	1/16W	
R21,22			RK73HH1J103D	CHIP R	10K	D	1/16W	
R24			RK73HB1J4R7J	CHIP R	4.7	J	1/16W	
R79			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R80			RK73HB1J220J	CHIP R	22	J	1/16W	
R81			RK73HB1J470J	CHIP R	47	J	1/16W	
R84,85			RK73HB1J202J	CHIP R	2.0K	J	1/16W	
R86			RK73HB1J105J	CHIP R	1.0M	J	1/16W	
R87			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R89			RK73HH1J303D	CHIP R	30K	D	1/16W	
R90			RK73HB1J223J	CHIP R	22K	J	1/16W	
R91			RK73HB1J470J	CHIP R	47	J	1/16W	
R92			RK73HH1J123D	CHIP R	12K	D	1/16W	
R94			RK73HH1J512D	CHIP R	5.1K	D	1/16W	
R111			RK73HB1J220J	CHIP R	22	J	1/16W	
R112,113			RK73HB1J101J	CHIP R	100	J	1/16W	
R116			RK73HB1J103J	CHIP R	10K	J	1/16W	
R119			RK73HB1J103J	CHIP R	10K	J	1/16W	
R121			RK73HB1J182J	CHIP R	1.8K	J	1/16W	
R122			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R131			RK73HB1J220J	CHIP R	22	J	1/16W	
R150,151			RK73HB1J100J	CHIP R	10	J	1/16W	
R152,153			RK73HB1J471J	CHIP R	470	J	1/16W	
R154,155			RK73HB1J751J	CHIP R	750	J	1/16W	
R156,157			RK73HB1J560J	CHIP R	56	J	1/16W	
R158,159			RK73HB1J2R2J	CHIP R	2.2	J	1/16W	
R162,163			RK73HB1J104J	CHIP R	100K	J	1/16W	
R164,165			RK73HH1J101D	CHIP R	100	D	1/16W	
R200-203			RK73HH1J201D	CHIP R	200	D	1/16W	
R204-207			RK73HH1J151D	CHIP R	150	D	1/16W	
R208			RK73HB1J4R7J	CHIP R	4.7	J	1/16W	
R251			RK73HB1J1R0J	CHIP R	1.0	J	1/16W	
R254			RK73HH1J912D	CHIP R	9.1K	D	1/16W	
R255			RK73HH1J752D	CHIP R	7.5K	D	1/16W	
R256			RK73HH1J331D	CHIP R	330	D	1/16W	
R257			RK73HH1J912D	CHIP R	9.1K	D	1/16W	
R258			RK73HH1J752D	CHIP R	7.5K	D	1/16W	
R259			RK73HH1J331D	CHIP R	330	D	1/16W	
R260			RK73HH1J912D	CHIP R	9.1K	D	1/16W	
R261			RK73HH1J752D	CHIP R	7.5K	D	1/16W	
R262			RK73HH1J331D	CHIP R	330	D	1/16W	
R263			RK73HH1J912D	CHIP R	9.1K	D	1/16W	
R264			RK73HH1J752D	CHIP R	7.5K	D	1/16W	
R265			RK73HH1J331D	CHIP R	330	D	1/16W	
R266,267			RK73HH1J101D	CHIP R	100	D	1/16W	
R269			RK73HB1J100J	CHIP R	10	J	1/16W	
R275,276			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R300,301			RK73HH1J472D	CHIP R	4.7K	D	1/16W	
R302,303			RK73HH1J183D	CHIP R	18K	D	1/16W	
R304			RK73HH1J202D	CHIP R	2.0K	D	1/16W	
R305			RK73HB1J163J	CHIP R	16K	J	1/16W	

Ref. No.	Add	New	Parts No.	Description				Destination
R350,351			RK73HB1J4R7J	CHIP R	4.7	J	1/16W	
R400-402			RK73HB1J470J	CHIP R	47	J	1/16W	
R409			RK73HB1J470J	CHIP R	47	J	1/16W	
R410,411			RK73HB1J102J	CHIP R	1.0K	J	1/16W	
R450			RK73HB1J202J	CHIP R	2.0K	J	1/16W	
R458			RK73HB1J220J	CHIP R	22	J	1/16W	
R464,465			RK73HH1J101D	CHIP R	100	D	1/16W	
R467			RK73HB1J470J	CHIP R	47	J	1/16W	
R468-470			RK73HB1J103J	CHIP R	10K	J	1/16W	
R471			RK73HB1J820J	CHIP R	82	J	1/16W	
R472,473			RK73HB1J330J	CHIP R	33	J	1/16W	
R475			R92-3350-05	CHIP R	2.2	F	1/10W	
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	
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	

⚠Indicates safety critical components.

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

PARTS LIST

DVD UNIT (X37-1120-06) IN DVD MECHA.

Ref. No.	Add	New	Parts No.	Description				Destination
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	
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			S68-0914-05	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		*	HYI39S12816F7	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 (X88-2030-11)

Ref. No.	Add	New	Parts No.	Description				Destination
C100			CC73HCH1H101J	CHIP C	100PF	J		
C102-105			CK73HB1A104K	CHIP C	0.10UF	K		
C106			CK73FB0J106K	CHIP C	10UF	K		
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		
C126-130			CK73HB1A104K	CHIP C	0.10UF	K		
C133,134			CK73FB0J106K	CHIP C	10UF	K		
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		
C201			CK73HB1A104K	CHIP C	0.10UF	K		
C202			CC73HCH1H220J	CHIP C	22PF	J		
C217-226			CK73HB1A104K	CHIP C	0.10UF	K		
C227,228			CK73FB0J106K	CHIP C	10UF	K		
C233-236			CK73HB1A104K	CHIP C	0.10UF	K		
C244			CK73FB0J106K	CHIP C	10UF	K		
C264			CK73HB1A104K	CHIP C	0.10UF	K		
C275			CK73FB0J106K	CHIP C	10UF	K		
C309-312			CK73HB1A104K	CHIP C	0.10UF	K		
C318			CK73HB1A104K	CHIP C	0.10UF	K		
C322			CK73HB1A104K	CHIP C	0.10UF	K		
C329			CC73HCH1H270J	CHIP C	27PF	J		
C331			CK73FB0J106K	CHIP C	10UF	K		
C332			CK73HB1A104K	CHIP C	0.10UF	K		
C336			CK73FB0J106K	CHIP C	10UF	K		
C337,338			CK73HB1H152K	CHIP C	1500PF	K		
C340,341			CC73HCH1H331J	CHIP C	330PF	J		
C342			CK73HB1E103K	CHIP C	0.010UF	K		
C456			CK73EB1A106K	CHIP C	10UF	K		
C460			CK73HB1A104K	CHIP C	0.10UF	K		
C468			CK73FB0J106K	CHIP C	10UF	K		
C482			CK73GB1H222K	CHIP C	2200PF	K		
C601,602			CC73HCH1H470J	CHIP C	47PF	J		
C700-713			CK73HB1H222K	CHIP C	2200PF	K		
C715			CK73HB1A104K	CHIP C	0.10UF	K		
C900			CK73HB1H222K	CHIP C	2200PF	K		
C901,902			CK73HB1H102K	CHIP C	1000PF	K		
C903,904			CK73HB1H222K	CHIP C	2200PF	K		
C905			CK73HB1H102K	CHIP C	1000PF	K		
C906			CK73FB0J106K	CHIP C	10UF	K		
C907,908			CK73HB1A104K	CHIP C	0.10UF	K		
C909			CK73FB0J106K	CHIP C	10UF	K		
C910			CK73HB1C473K	CHIP C	0.047UF	K		
C912			CK73HB1A104K	CHIP C	0.10UF	K		
CN101			E41-2839-05	PIN ASSY				
CN210			E41-2195-05	FLAT CABLE CONNECTOR				
CN328			E41-2237-05	FLAT CABLE CONNECTOR				
L901,902			L92-0321-05	CHIP FERRITE				
X100			L77-2941-05	CRYSTAL RESONATOR (14.7456MHZ)				
X202			L77-2917-15	CRYSTAL RESONATOR (32.768KHZ)				

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

The IC5,9,21 and IC60 in the DVD unit (X37-1120-06) are not replaceable components. When these ICs are defective, replace the whole DVD mechanism assembly (X92-6180-01).

PARTS LIST

DIGITAL I/O UNIT (X88-2030-11)

Ref. No.	Add	New	Parts No.	Description				Destination
CP104-109			RK74HB1J220J	CHIP-COM	22	J	1/16W	
CP117-127			RK74HB1J220J	CHIP-COM	22	J	1/16W	
CP128-134			RK74HB1J103J	CHIP-COM	10K	J	1/16W	
CP135-138			RK74HB1J220J	CHIP-COM	22	J	1/16W	
CP139-142			RK74HB1J330J	CHIP-COM	33	J	1/16W	
CP143-146			RK74HB1J680J	CHIP-COM	68	J	1/16W	
CP147-154			RK74HB1J103J	CHIP-COM	10K	J	1/16W	
CP155-160			RK74HB1J220J	CHIP-COM	22	J	1/16W	
R1,2			RK73HB1J473J	CHIP R	47K	J	1/16W	
R9,10			RK73HB1J220J	CHIP R	22	J	1/16W	
R12			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R13			RK73HB1J473J	CHIP R	47K	J	1/16W	
R14			RK73HB1J561J	CHIP R	560	J	1/16W	
R15,16			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R17,18			RK73HB1J153J	CHIP R	15K	J	1/16W	
R24			RK73HB1J220J	CHIP R	22	J	1/16W	
R29			RK73HB1J473J	CHIP R	47K	J	1/16W	
R31			RK73HB1J473J	CHIP R	47K	J	1/16W	
R33			RK73HB1J473J	CHIP R	47K	J	1/16W	
R34-37			RK73FB2B330J	CHIP R	33	J	1/8W	
R104			RK73HB1J330J	CHIP R	33	J	1/16W	
R105			RK73HB1J103J	CHIP R	10K	J	1/16W	
R107-109			RK73HB1J103J	CHIP R	10K	J	1/16W	
R112			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R115			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R116			RK73HB1J103J	CHIP R	10K	J	1/16W	
R118			RK73HB1J103J	CHIP R	10K	J	1/16W	
R121			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R123			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R124			RK73HB1J473J	CHIP R	47K	J	1/16W	
R126			RK73HB1J473J	CHIP R	47K	J	1/16W	
R129			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R130,131			RK73HB1J220J	CHIP R	22	J	1/16W	
R134			RK73HB1J220J	CHIP R	22	J	1/16W	
R139			RK73HB1J105J	CHIP R	1.0M	J	1/16W	
R140			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R141,142			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R145,146			RK73HB1J153J	CHIP R	15K	J	1/16W	
R147			RK73HB1J220J	CHIP R	22	J	1/16W	
R148			RK73HB1J473J	CHIP R	47K	J	1/16W	
R149			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R150			RK73HB1J220J	CHIP R	22	J	1/16W	
R153			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R157-159			RK73HB1J220J	CHIP R	22	J	1/16W	
R163			RK73HB1J220J	CHIP R	22	J	1/16W	
R164,165			RK73HB1J470J	CHIP R	47	J	1/16W	
R166-169			RK73HB1J220J	CHIP R	22	J	1/16W	
R170,171			RK73HB1J330J	CHIP R	33	J	1/16W	
R172,173			RK73HB1J680J	CHIP R	68	J	1/16W	
R174,175			RK73HB1J470J	CHIP R	47	J	1/16W	
R176			RK73HB1J220J	CHIP R	22	J	1/16W	
R177-192			RK73HB1J473J	CHIP R	47K	J	1/16W	
R193-198			RK73HB1J220J	CHIP R	22	J	1/16W	
R199			RK73HB1J473J	CHIP R	47K	J	1/16W	
R200			RK73HB1J330J	CHIP R	33	J	1/16W	

Ref. No.	Add	New	Parts No.	Description				Destination
R202			RK73HB1J106J	CHIP R	10M	J	1/16W	
R203			RK73HB1J334J	CHIP R	330K	J	1/16W	
R219-221			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R223			RK73HB1J473J	CHIP R	47K	J	1/16W	
R248-250			RK73HB1J473J	CHIP R	47K	J	1/16W	
R255			RK73HH1J104D	CHIP R	100K	D	1/16W	
R258-260			RK73HB1J473J	CHIP R	47K	J	1/16W	
R265-270			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R273			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R284-287			RK73HB1J473J	CHIP R	47K	J	1/16W	
R291			RK73HB1J330J	CHIP R	33	J	1/16W	
R292-295			RK73HB1J473J	CHIP R	47K	J	1/16W	
R297			RK73HB1J103J	CHIP R	10K	J	1/16W	
R304,305			RK73HB1J103J	CHIP R	10K	J	1/16W	
R308			RK73HB1J103J	CHIP R	10K	J	1/16W	
R310			RK73HB1J103J	CHIP R	10K	J	1/16W	
R320-322			RK73HB1J103J	CHIP R	10K	J	1/16W	
R324,325			RK73HB1J123J	CHIP R	12K	J	1/16W	
R326,327			RK73HB1J752J	CHIP R	7.5K	J	1/16W	
R328,329			RK73HB1J392J	CHIP R	3.9K	J	1/16W	
R332,333			RK73HB1J151J	CHIP R	150	J	1/16W	
R438			RK73HB1J103J	CHIP R	10K	J	1/16W	
R440			RK73HB1J103J	CHIP R	10K	J	1/16W	
R481,482			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R485-487			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R506,507			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R522			RK73HB1J680J	CHIP R	68	J	1/16W	
R523			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R600,601			RK73HB1J220J	CHIP R	22	J	1/16W	
R602,603			RK73HB1J153J	CHIP R	15K	J	1/16W	
R604,605			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R701			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R703			RK73GB2A106J	CHIP R	10M	J	1/10W	
R705			RK73HB1J331J	CHIP R	330	J	1/16W	
R707,708			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R710			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R713-715			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R903			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R910-912			RK73HB1J473J	CHIP R	47K	J	1/16W	
R917			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R918			RK73HB1J222J	CHIP R	2.2K	J	1/16W	
R920			RK73FB2B000J	CHIP R	0.0	J	1/8W	
R923			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R926			RK73GB2A106J	CHIP R	10M	J	1/10W	
R927,928			RK73HB1J472J	CHIP R	4.7K	J	1/16W	
R929			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R930			RK73EB2E000J	CHIP R	0.0	J	1/4W	
R931			RK73HB1J000J	CHIP R	0.0	J	1/16W	
R934			RK73HB1J103J	CHIP R	10K	J	1/16W	
D102,103			AVRL1613R3FTA	VARISTOR				
IC100			MIC2005-08YM6	MOS-IC				
IC104		*	74HC1G86GW	MOS-IC				
IC105			SI-3018KM	ANALOGUE IC				
IC106			-	MICROPROCESSOR IC				

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

The IC106 in the Digital I/O unit (X88-2030-11) are not replaceable components. When this IC are defective, replace the whole Digital I/O unit (X88-2030-11).

PARTS LIST

DIGITAL I/O UNIT (X88-2030-11)

Ref. No.	Add	New	Parts No.	Description	Destination
IC108			74AHC1G04GW	MOS-IC	
IC200			TC7WHU04FU-F	MOS-IC	
IC202,203			MT48LC16M16P75	DRAM IC	
IC207			341S2094	MICROPROCESSOR IC	
IC211		✻	GL256N10TF0A3	ROM IC	
IC302			BH7240AKV	MOS-IC	
IC305			NJM2100V-ZB	ANALOGUE IC	
IC901			PCM1754DB	MOS-IC	
IC902			TAR5S50-F	ANALOGUE IC	
IC903			TC7WH08FK-F	MOS-IC	
DAUGHTER UNIT (X89-3062-71)					
C1			CC73GCH1H180J	CHIP C 18PF J	E2
C2			CC73GCH1H070D	CHIP C 7.0PF D	E2
C3			CC73GCH1H150J	CHIP C 15PF J	E2
C4			CC73GCH1H180J	CHIP C 18PF J	E2
C5			CC73GCH1H390J	CHIP C 39PF J	E2
C6			CC73GCH1H020C	CHIP C 2.0PF C	E2
C7			CC73GCH1H120J	CHIP C 12PF J	E2
C8			CK73FB1C105K	CHIP C 1.0UF K	E2
C10-12			CC73GCH1H102J	CHIP C 1000PF J	E2
C13			CC73GCH1H221J	CHIP C 220PF J	E2
C14			CC73GCH1H030C	CHIP C 3.0PF C	E2
C15,16			CC73GCH1H560J	CHIP C 56PF J	E2
C17			CC73GCH1H102J	CHIP C 1000PF J	E2
CN2		✻	E41-3009-05	PIN ASSY	E2
W1		✻	E30-6804-05	CORD WITH PLUG (JASO)	E2
W2		✻	E30-6805-05	CORD WITH PLUG (PIN)	E2
L1			L41-2705-33	SMALL FIXED INDUCTOR (27U)	E2
L2			L41-1588-18	SMALL FIXED INDUCTOR	E2
L3			L41-1805-33	SMALL FIXED INDUCTOR (18U)	E2
L4,5			L41-1588-18	SMALL FIXED INDUCTOR	E2
L6		✻	L19-0825-05	BALUN TRANSFORMER	E2
L8		✻	L41-1888-18	SMALL FIXED INDUCTOR (0.18U)	E2
R1			RK73GB2A104J	CHIP R 100K J 1/10W	E2
R3			RK73GB2A562J	CHIP R 5.6K J 1/10W	E2
R4			RK73GB2A332J	CHIP R 3.3K J 1/10W	E2
R5			RK73GB2A331J	CHIP R 330 J 1/10W	E2
R6			RK73GB2A391J	CHIP R 390 J 1/10W	E2
R7,8			RK73GB2A330J	CHIP R 33 J 1/10W	E2
R10			RK73GB2A431J	CHIP R 430 J 1/10W	E2
R11			RK73GB2A270J	CHIP R 27 J 1/10W	E2
R12			RK73GB2A431J	CHIP R 430 J 1/10W	E2
R13			RK73GB2A151J	CHIP R 150 J 1/10W	E2
R14			RK73GB2A431J	CHIP R 430 J 1/10W	E2
R15			RK73GB2A270J	CHIP R 27 J 1/10W	E2
R17			RK73GB2A431J	CHIP R 430 J 1/10W	E2
D1			IMSA-6801-E	SURGE ABSORBER	E2
Q1			2SC3357-A	TRANSISTOR	E2
DVD MECHANISM ASSY (X92-6180-01) (DVS-8561V)					
1	1A	✻	A10-5331-61	CHASSIS	
2	2B		A10-5332-51	CHASSIS	
3	1A		A10-5333-31	CHASSIS	
4	3A		A10-5460-02	CHASSIS	

Ref. No.	Add	New	Parts No.	Description	Destination
7	1B		D10-4918-22	ARM	
8	1B		D10-4919-22	ARM	
9	1B		D10-4920-02	LEVER	
10	1B		D10-4921-02	LEVER	
12	2B		D10-4922-12	SLIDER	
13	2A		D10-7011-02	ARM	
14	2B		D10-4924-13	ARM	
15	2B		D10-4925-12	ARM	
25	2B		D10-4973-04	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		D21-2487-24	SHAFT	
54	2A		D39-0275-05	DAMPER	
55	2A		D39-0276-05	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	2B		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		G02-1564-03	FLAT SPRING	
79	2A		J22-0475-21	MOUNTING HARDWARE	
80	3B		J22-0636-01	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)	

E2 : DNX7220 (Europe)
K1 : DDX712 **K2** : DNX7120 (North America)
X2 : DDX7032 **X3** : DNX7320 (Australia) **R2** : DDX7032 (Latin America)
M2 : DDX7032 **M4** : DDX7032M **M5** : DNX7320 (Other Areas)

⚠Indicates safety critical components.

SPECIFICATIONS (K/R TYPE)

Monitor section
Picture Size ..... 6.95 inches (diagonal) wide
..... 156.2 mm (W) x 82.4 mm (H)
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 player section
D/A Converter.....24 bit
Audio Decoder
..... Linear PCM/ Dolby Digital/ dts/ MP3/ WMA/ AAC
Video Decoder..... MPEG1/ MPEG2/ MPEG4 (DivX)
Wow & Flutter ..... Below Measurable Limit
Frequency Response
Sampling frequency; 96 kHz.....20 – 44,000 Hz
Sampling frequency; 48 kHz.....20 – 22,000 Hz
Sampling frequency; 44.1 kHz.....20 – 20,000 Hz
Total Harmonic Distortion..... 0.008 % (1 kHz)
S/N Ratio (dB)..... 98 dB (DVD-Video 96 kHz)
Dynamic Range ..... 98 dB (DVD-Video 96 kHz)
Disc Format ..... DVD-Video/ VIDEO-CD/ CD-DA
Sampling Frequency ..... 44.1/ 48/ 96 kHz
Quantifying Bit Number..... 16/ 20/ 24 bit

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

FM tuner section
Frequency Range (200 kHz) ..... 87.9 MHz – 107.9 MHz
Usable Sensitivity (S/N : 30 dB) ..... 9.3 dBf (0.8 μV/ 75 Ω)
Quieting Sensitivity (S/N : 50 dB) ..... 15.2 dBf (1.6 μV/ 75 Ω)
Frequency Response (± 3.0 dB).....30 Hz – 15 kHz
S/N Ratio (dB)..... 70 dB (MONO)
Selectivity (± 400 kHz)..... ≥ 80 dB
Stereo Separation..... 40 dB (1 kHz)

AM tuner section
Frequency Range (10 kHz) .....530 kHz – 1700 kHz
Usable Sensitivity ..... 28 dBμ

Video section
Color System of External Video Input ..... NTSC
External Video Input Level (mini jack)..... 1 Vp-p/ 75 Ω
External Audio Max Input Level (mini jack) .....2 V/ 25 kΩ
Video Output Level (RCA jacks) ..... 1 Vp-p/ 75 Ω
Audio Output Level (RCA jacks).....1.2 V/ 10 kΩ
Analog RGB input (DDX712/DDX7032 only) .. 0.7 Vp-p/ 75 Ω

Audio section
Maximum Power (Front & Rear) .....50 W x 4
Full Bandwidth Power (Front & Rear)
(4 Ω, 14.4 V, 1 % THD) .....22 W x 4
Preout Level (V) .....2 V/ 10 kΩ
Preout Impedance..... ≤600 Ω
Speaker Impedance ..... 4 – 8 Ω
Tone action
Bass .....100 Hz ± 8 dB
Middle .....1 kHz ± 8 dB
Treble .....10 kHz ± 8 dB

External SW
Maximum Power Supply Current ..... 500 mA

Navigation section (DNX7120 only)
Receiver..... High-sensitivity GPS receiver
Reception Frequency ..... 1575.42 MHz (C/A code)
Acquisition Times
Cold ..... < 38 seconds
Factory Reset..... < 45 seconds
(On average for a stationary receiver with a clear view of the sky)
Accuracy
Position ..... < 10 meters typical
Velocity.....0.05 m/sec. RMS
Position Method ..... GPS
Antenna ..... External GPS antenna

General
Operating voltage.....14.4 V (11 – 16 V allowable)
Current Consumption.....15 A
Dimensions (W × H × D) ..... 182 × 112 × 163 mm
.....7-3/16 x 4-7/16 x 6-7/16 inch
Operational Temperature Range ..... -10 °C – +60 °C
Storage Temperature Range ..... -20 °C – +85 °C
Weight (DNX7120) ..... 2.5 kg (5.5 lbs)
Weight (DDX712/DDX7032)..... 2.45 kg (5.4 lbs)

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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.

SPECIFICATIONS (M/X TYPE)

Monitor section

Picture Size ..... 6.95 inches (diagonal) wide
..... 156.2 mm (W) x 82.4 mm (H)
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 player section

D/A Converter.....24 bit
Audio Decoder
..... Linear PCM/ Dolby Digital/ dts/ MP3/ WMA/ AAC
Video Decoder..... MPEG1/ MPEG2/ MPEG4 (DivX)
Wow & Flutter ..... Below Measurable Limit
Frequency Response
Sampling frequency; 96 kHz.....20 – 44,000 Hz
Sampling frequency; 48 kHz.....20 – 22,000 Hz
Sampling frequency; 44.1 kHz.....20 – 20,000 Hz
Total Harmonic Distortion..... 0.008 % (1 kHz)
S/N Ratio (dB)..... 98 dB (DVD-Video 96 kHz)
Dynamic Range ..... 98 dB (DVD-Video 96 kHz)
Disc Format ..... DVD-Video/ VIDEO-CD/ CD-DA
Sampling Frequency ..... 44.1/ 48/ 96 kHz
Quantifying Bit Number..... 16/ 20/ 24 bit

USB interface section

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

FM tuner section

Frequency Range
200 kHz..... 87.9 MHz – 107.9 MHz
50 kHz..... 87.5 MHz – 108.0 MHz
Usable Sensitivity (S/N : 26 dB) ..... 9.3 dBf (0.8 μV/ 75 Ω)
Quieting Sensitivity (S/N : 46 dB) ..... 15.2 dBf (1.6 μV/ 75 Ω)
Frequency Response (± 3.0 dB).....30 Hz – 15 kHz
S/N Ratio (dB)..... 70 dB (MONO)
Selectivity (± 400 kHz)..... ≥ 80 dB
Stereo Separation..... 40 dB (1 kHz)

AM tuner section

Frequency Range
AM (10 kHz) .....530 kHz – 1700 kHz
LW (9 kHz).....153 kHz – 281 kHz
MW (9 kHz) .....531 kHz – 1611 kHz
Usable Sensitivity
AM..... 28 dBμ
LW.....45 μV
MW.....25 μV

Video section

Color System of External Video Input .....NTSC/ PAL
External Video Input Level (mini jack)..... 1 Vp-p/ 75 Ω
External Audio Max Input Level (mini jack) .....2 V/ 25 kΩ
Video Output Level (RCA jacks) ..... 1 Vp-p/ 75 Ω
Audio Output Level (RCA jacks).....1.2 V/ 10 kΩ
Analog RGB input (DDX7032/DDX7032M only)
..... 0.7 Vp-p/ 75 Ω

Audio section

Maximum Power (Front & Rear) .....50 W x 4
Full Bandwidth Power (Front & Rear)
(at Less than 1 % THD) .....22 W x 4
Preout Level (V) .....2 V/ 10 kΩ
Preout Impedance..... ≤600 Ω
Speaker Impedance ..... 4 – 8 Ω
Tone action
Bass .....100 Hz ± 8 dB
Middle .....1 kHz ± 8 dB
Treble .....10 kHz ± 8 dB

Navigation section (DNX7320 only)

Receiver..... High-sensitivity GPS receiver
Reception Frequency ..... 1575.42 MHz (C/A code)
Acquisition Times
Cold ..... < 38 seconds
Factory Reset..... < 45 seconds
(On average for a stationary receiver with a clear view of the sky)
Accuracy
Position ..... < 10 meters typical
Velocity..... 0.05 m/sec. RMS
Position Method ..... GPS
Antenna ..... External GPS antenna

General

Operating voltage.....14.4 V (11 – 16 V allowable)
Current Consumption.....15 A
Dimensions (W × H × D)..... 182 × 112 × 163 mm
Operational Temperature Range ..... -10 °C – +60 °C
Storage Temperature Range ..... -20 °C – +85 °C
Weight (DNX7320) .....2.5 kg
Weight (DDX7032/DDX7032M).....2.45 kg

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SPECIFICATIONS (E TYPE)

Monitor section
Picture Size ..... 6.95 inches (diagonal) wide
..... 156.2 mm (W) x 82.4 mm (H)
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 player section
D/A Converter.....24 bit
Audio Decoder
..... Linear PCM/ Dolby Digital/ dts/ MP3/ WMA/ AAC
Video Decoder..... MPEG1/ MPEG2/ MPEG4 (DivX)
Wow & Flutter ..... Below Measurable Limit
Frequency Response
Sampling frequency; 96 kHz.....20 – 44,000 Hz
Sampling frequency; 48 kHz.....20 – 22,000 Hz
Sampling frequency; 44.1 kHz.....20 – 20,000 Hz
Total Harmonic Distortion..... 0.008 % (1 kHz)
S/N Ratio (dB)..... 98 dB (DVD-Video 96 kHz)
Dynamic Range ..... 98 dB (DVD-Video 96 kHz)
Disc Format ..... DVD-Video/ VIDEO-CD/ CD-DA
Sampling Frequency ..... 44.1/ 48/ 96 kHz
Quantifying Bit Number..... 16/ 20/ 24 bit

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

FM tuner section
Frequency Range (50 kHz) ..... 87.5 MHz – 108.0 MHz
Usable Sensitivity (S/N : 26 dB) .....0.8 μV/ 75 Ω
Quieting Sensitivity (S/N : 46 dB) .....1.6 μV/ 75 Ω
Frequency Response (± 3.0 dB).....30 Hz – 15 kHz
S/N Ratio (dB)..... 65 dB (MONO)
Selectivity (± 400 kHz)..... ≥ 80 dB
Stereo Separation..... 35 dB (1 kHz)

AM tuner section
Frequency Range (9 kHz)
LW.....153 kHz – 281 kHz
MW.....531 kHz – 1611 kHz
Usable Sensitivity
LW.....35 μV
MW.....50 μV

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

Video section
Color System of External Video Input .....NTSC/ PAL
External Video Input Level (RCA jack)..... 1 Vp-p/ 75 Ω
External Audio Max Input Level (RCA jack).....2 V/ 25 kΩ
Video Output Level (RCA jacks) ..... 1 Vp-p/ 75 Ω
Audio Output Level (RCA jacks).....1.2 V/ 10 kΩ

Audio section
Maximum Power (Front & Rear) .....50 W x 4
Full Bandwidth Power (Front & Rear)
(PWR DIN45324, +B=14.4v).....30 W x 4
Preout Level (V) .....2 V/ 10 kΩ
Preout Impedance.....≤600 Ω
Speaker Impedance ..... 4 – 8 Ω
Tone action
Bass.....100 Hz ± 8 dB
Middle .....1 kHz ± 8 dB
Treble .....10 kHz ± 8 dB

External SW
Maximum Power Supply Current ..... 500 mA

Navigation section
Receiver..... High-sensitivity GPS receiver
Reception Frequency ..... 1575.42 MHz (C/A code)
Acquisition Times
Cold .....< 38 seconds
Factory Reset.....< 45 seconds
(On average for a stationary receiver with a clear view of the sky)
Accuracy
Position .....< 10 meters typical
Velocity.....0.05 m/sec. RMS
Position Method ..... GPS
Antenna ..... External GPS antenna

General
Operating voltage.....14.4 V (11 – 16 V allowable)
Current Consumption.....15 A
Dimensions (W × H × D) ..... 182 × 112 × 163 mm
Operational Temperature Range ..... -10 °C – +60 °C
Storage Temperature Range ..... -20 °C – +85 °C
Weight .....2.5 kg

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