2DIN CD RECEIVER

DPX501/501U/501UY
DPX-MP2090U

SERVICE MANUAL

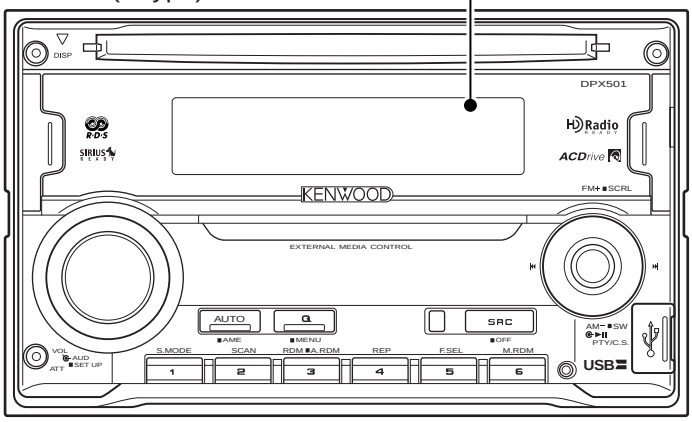
KENWOOD

Kenwood Corporation

B53-0400-00 (N) 960

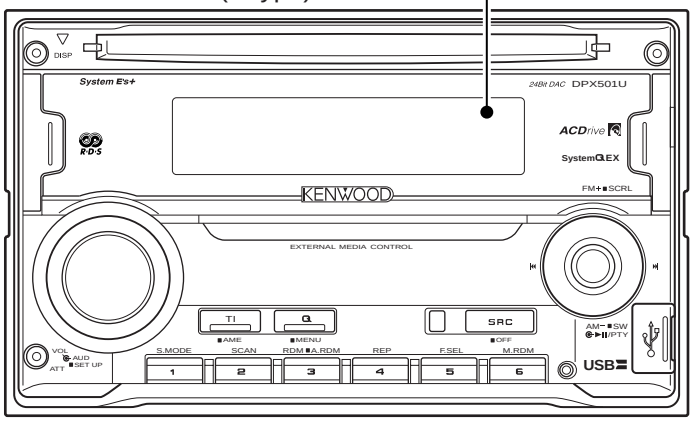
DPX501 (K type)

Panel assy (A64-3814-02)



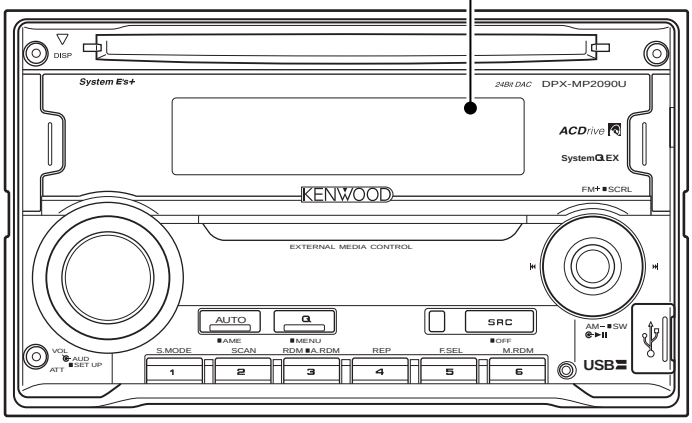
DPX501U/501UY (E type)

Panel assy (A64-3871-02)

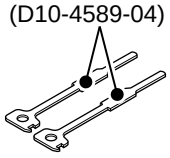


DPX-MP2090U (M type)

Panel assy (A64-3966-02)

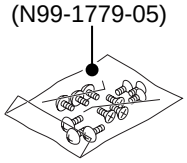


Lever (K,E type)
(D10-4589-04) x2

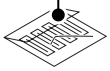


Antenna adaptor (E type)
(T90-0523-05)

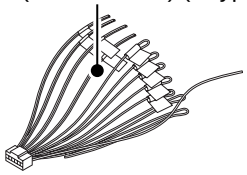
Screw set (K,M type)
(N99-1779-05)



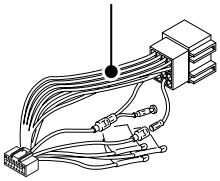
Adhesive double-coated tape (K,E type)
(H30-0595-04)



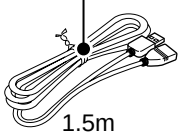
DC cord
(E30-6408-05):(M type)
(E30-6414-05):(K type)



DC cord (E type)
(E30-6412-05)



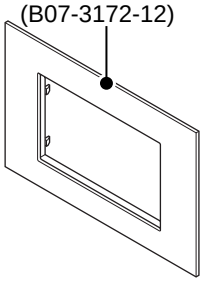
Cord with connector(USB)
(E30-6535-05)



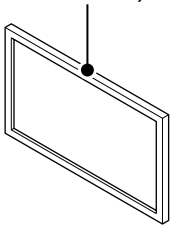
Remote controller assy (K,M type)
(A70-2067-15)

SIZE AA BATTERY(K,M type)
(Not supplied)

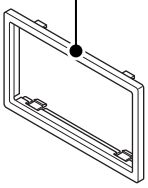
Escutcheon (K,E type)
(B07-3172-12)



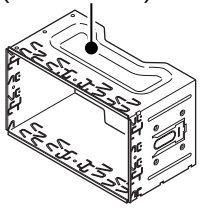
Escutcheon (M type)
(B07-3046-04)



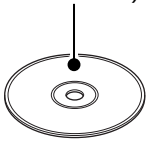
Escutcheon (K,E type)
(B07-3165-02)



Mounting hardware assy (K,E type)
(J22-0429-13)



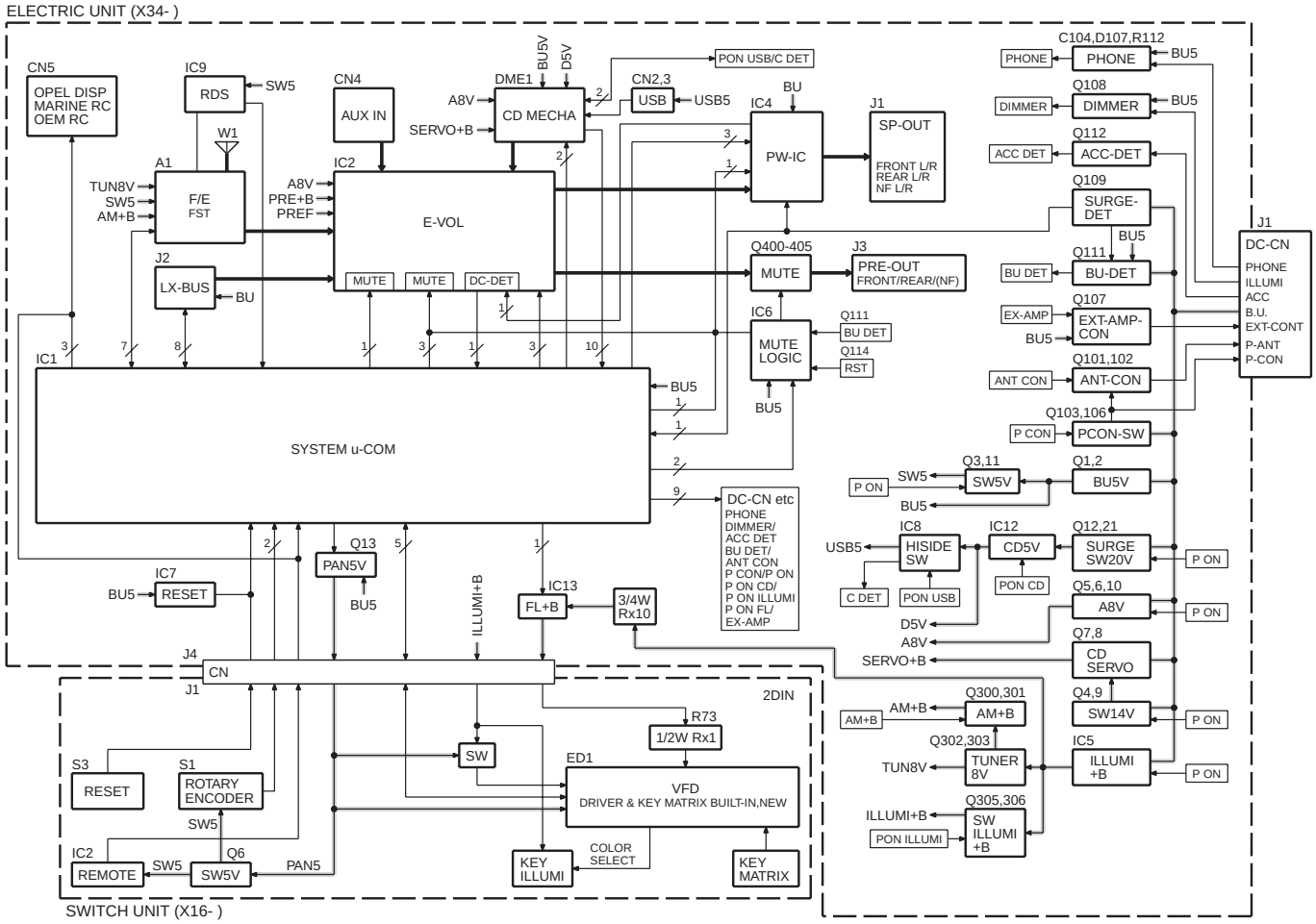
Compact disc
(W01-1673-05):(K,M type)
(W01-1674-05):(E type)



This product uses Lead Free solder.

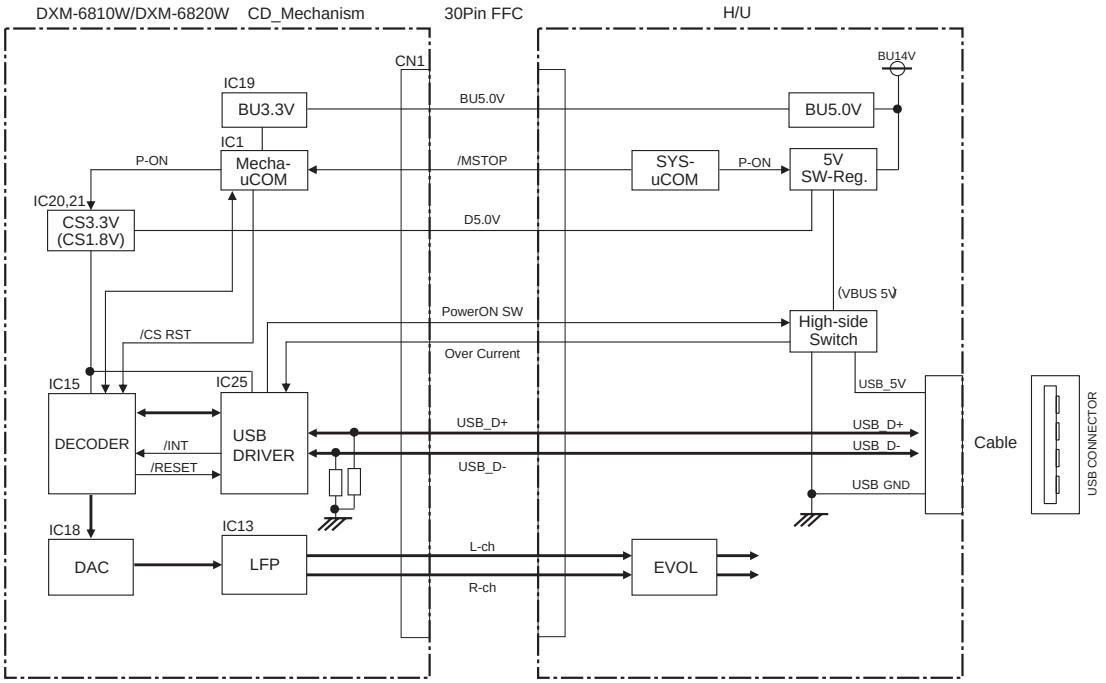
BLOCK DIAGRAM

● Complete view

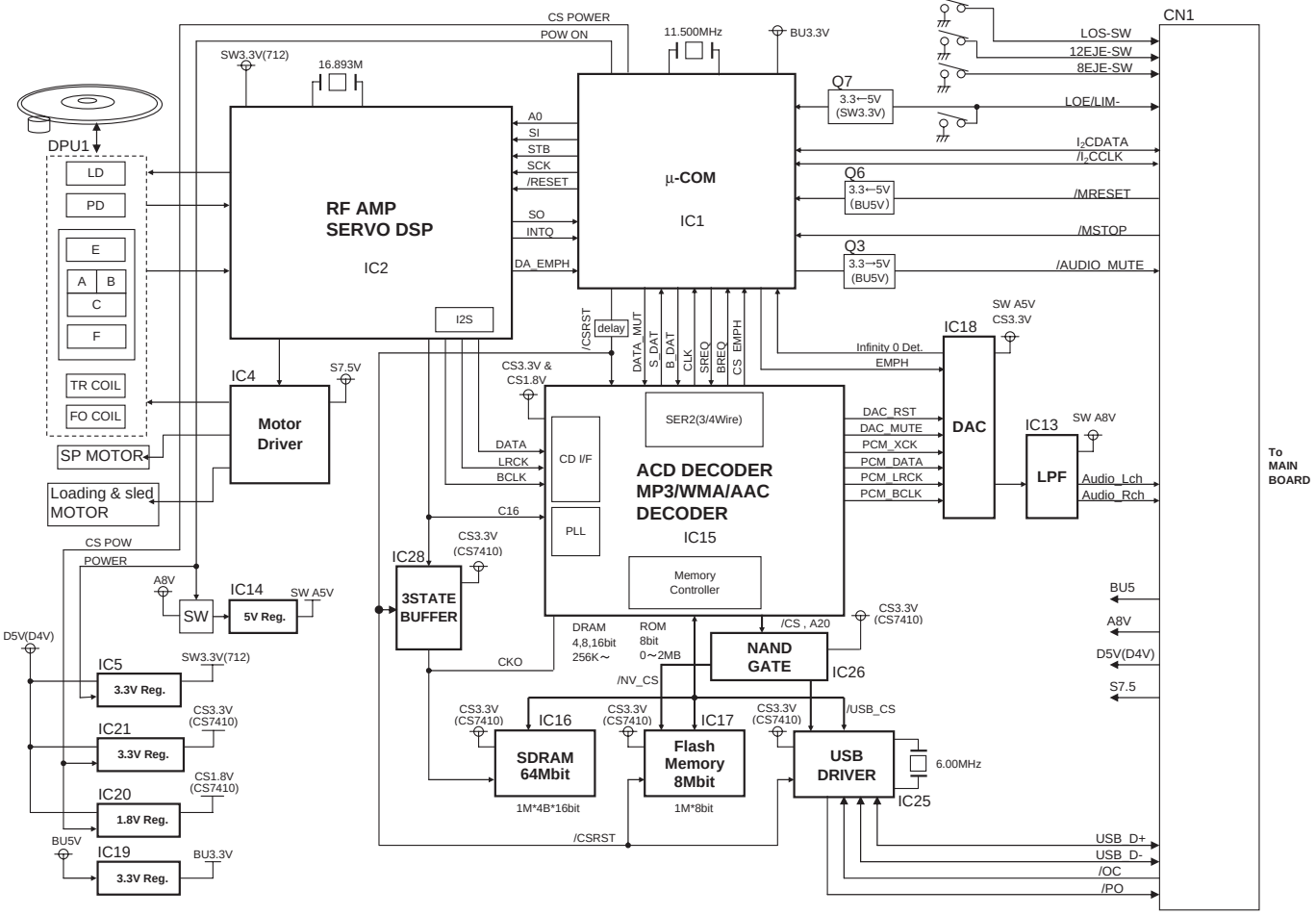


BLOCK DIAGRAM

● AC Drive + USB Mechanism unit



● CD player unit (X32-583)



COMPONENTS DESCRIPTION

● ELECTRIC UNIT (X34-415x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	System μ-COM	Controls FM/AM tuner, the changer, CD mechanism, panel, volume and tone.
IC2	E-VOL	Controls the source, volume, tone.
IC3	A8V REF Power Supply	Outputs 1.27V.
IC4	Power IC	Amplifies the front L/R and the rear L/R to 50W maximum.
IC5	ILLUMI+B Power Supply	Outputs 11.25V.
IC6	Muting Logic IC	Controls logic for muting.
IC7	Reset IC	“Lo” when detection voltage goes below 3.6V or less.
IC8	Hi-side SW	Over current protection of USB power supply. When pin 1 goes “Hi”, USB5V is ON.
IC9	RDS IC	Decodes RDS.
IC10	Installer Memory IC	Installer memory.
IC12	SW Regulator	Supplies power for USB and CD mechanism.
IC13	FL+B Power Supply	Outputs 3.0V.
Q1,2	B.U.5V AVR	While BU is applied, BU5V AVR outputs +5V.
Q3,11	SW5V	When Q11’s base goes “Hi”, SW5V outputs +5V.
Q4,9	SW14V	When Q9’s base goes “Hi”, SW14V outputs 14V.
Q5,6,10	AUDIO8V AVR	When Q10’s base goes “Hi”, A8V AVR outputs 8.0V.
Q7,8	SERVO+B AVR	When Q8’s base goes “Hi”, S+B AVR outputs 7.5V.
Q12,21	Serge Protect for IC12	Outputs 20V when BU is over 20V.
Q13	PANEL5V	When the base goes “Lo”, PANEL5V outputs 5V.
Q17	IC12 ON/OFF	When the base goes “Lo”, IC12 is “ON”.
Q101,102	P-ANT SW	When Q102’s base goes “Hi”, P-ANT SW outputs 14V.
Q103,106	P-CON SW	When Q106’s base goes “Hi”, AVR outputs 14V.
Q104,105	P-CON Protection	Output protection is applied when P-CON output voltage fall is detected. The 2 transistors protect Q103 false operation when P-CON SW is “ON”.
Q107	EXT-AMP-CON	When the base goes “Lo”, Q107 is turned on.
Q108	Small Lamp DET SW	When the base goes “Hi”, Q108 is turned on.
Q109	Serge DET	When the base goes “Hi”, IC4 is changed into standby source.
Q111	BU DET	When the base goes “Hi”, Q111 is turned on.
Q112	ACC DET	When the base goes “Hi”, Q112 is turned on.
Q113	Mute Driver	When the base goes “Hi”, pre-out mute driver is turned on.
Q116	Pre-out Mute Driver	When the base goes “Lo”, mute driver is turned on.
Q300,301	AM+B	When Q301’s base goes “Hi”, AM+B is output.
Q302,303	Tuner8V	When Q303’s base goes “Hi”, Tuner8V outputs 8V.
Q305,306	SW ILLUMI+B	When Q306’s base goes “Hi”, SW ILLUMI+B outputs 11V.
Q400~403 Q406,407	Pre-out Mute SW	When the base goes “Hi”, pre-out is muted.
Q408	Pre-out Mute ON/OFF	When the base goes “Lo”, pre-out mute is "ON".

COMPONENTS DESCRIPTION

● SWITCH UNIT (X16-353x-xx)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Remote Control IC	
Q1~3	GRID_DRIVER	Each transistor's base is "L" then GRID is on.
Q6,7	SW5V	The power supply of IC1 is turned on when Q6's base level goes "L".
Q8	DBO LED SW	DBO LED is turned on when Q8's base level goes "H".
Q9	RED SW	RED LED is turned on when Q9's base level goes "H".
Q12	VFD Restart	Key scan start at Q12's base goes "H", when the set's power is on.

● CD PLAYER UNIT (X32-5830-00)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Mechanism μ-com	
IC2	Signal Processor	
IC4	BTL Driver	Spindel motor, sled (including loading & eject) motor and pick-up actuator
IC5	SW3.3V Regulator	3.3V power supply for IC2, pick-up, IC18 digital part
IC13	Audio Active Filter	2nd LPF
IC14	A5V Regulator	3.3V power supply for DAC
IC15	DSP for Compression Audio Decoder	ACDrive decoder, MP3/WMA/AAC decoder
IC16	Compression Audio Codec SDRAM	
IC17	Decoder Software & Unique ID Strage Flash ROM	
IC18	Audio D-A Converter (24-bit external)	External 24-bit for audio
IC19	BU3.3V Regulator	3.3V power supply for μ-com
IC20	1.8V Regulator	1.8V power supply for IC15 core part
IC21	Decoder/SDRAM/Flash ROM/ USB Driver 3.3V Regulator	Power supply for decoder, SDRAM, flash ROM and USB driver. 3.3V power supply for IC15 port parts, IC16, IC17, IC25, IC26 and IC28.
IC25	USB Host Controller	
IC26	Switching among IC15 & Flash ROM & SDRAM & USB	For DSP for Compression Audio Decoder, Flash ROM, SDRAM and USB
IC28	Clock SW	To SDRAM
Q3	Level Shift 3.3V→5V	
Q6,7	Level Shift 3.3V→5V	
Q8	APC (Auto Power Control)	
Q9,10	Anticipation Sub-beam Delay	During non-searching
Q17	USB Hi-side SW	
D2	Static Electricity Countermeasure	For IC2 built-in reset terminal
D3	Laser Diode Protection	
D9	Static Electricity Countermeasure	

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROCOMPUTER: 30624MWPA86GP (X34: IC1)

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
1	REMO	I	Remote control signal input		Detects pulse width
2	LX MUTE	I	Mute request from slave unit		H: Mute ON, L: Mute OFF
3	AUD SDA	O	E-VOL data output		
4	AUD SEL	O	E-VOL control		
5	AUD SCL	O	E-VOL clock output		
6	BYTE	-			
7	CNVSS	-			
8	XCIN	I			
9	XCOUT	I			
10	RESET	-			
11	XOUT	-			
12	VSS	-			
13	XIN	-	12.0MHz		
14	VCC1	-			
15	NMI	-	Not used		
16	$\overline{\text{CN DET}}$	I	Panel communication detection (Flip-down panel model only)		H: Panel detached, L: Panel attached
17	RDS CLK	I	RDS decoder clock input		
18	LX REQ S	I	Communication request from slave unit		
19	PON AM	I/O	AM power supply control		H: Receiving AM, Hi-z: No AM
20	LX REQ M	O	Communication request to slave unit		
21	TUN IFC OUT	I	Front-end IFC-OUT input		H: Station found, L: No station
22	NC	-	Not used		L fixed
23	RDS AFS M	I/O	Noise detection time constant switching	①	Refer to the truth value table
24	RDS QUAL	I	RDS decoder QUAL input		
25	RDS DATA	I	RDS decoder data input		
26	PWIC BEEP	O	Beep output		
27	TUN SCL	I/O	Front-end I2C clock input and output		MAX400kHz
28	TUN SDA	I/O	Front-end I2C data input and output		
29	VFD DATA	I/O	VFD data input and output		
30	VFD INT	I	VFD INT input		INT input
31	VFD CLK	O	VFD clock output		Normal: 125kHz, Low consumption mode: 62.5kHz
32	VFD RST	O	VFD driver reset		H: Canceling reset, L: Reset L: Momentary power down, panel detached or 11 minutes after ACC OFF
33	ROMCOR SDA	I/O	E2PROM I2C data input and output for ROM correction		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
34	ROMCOR SCL	I/O	E2PROM I2C clock output for ROM correction		
35	$\overline{\text{PON PANEL}}$	I/O	Panel 5V control (Flip-down panel model only)		L: ON Hi-Z: Momentary power down, panel detached or 11 minutes after ACC OFF
36	DSI	I/O	DSI/EJECT LED control (Flip-down panel model only)		OFF: Hi-z, Pulse drive: Panel detached H: Illumination ON or panel opened (POWER ON)
37,38	NC	-	Not used		L fixed
39	EPM	I	Flash EPM input		
40	PANEL DET	I	Panel detection (Flip-down panel model only)		L: Panel detached, H: Panel attached
41	NC	-	Not used		L fixed
42	ROMCOR DET	I	E2PROM writing request		H: Writing
43	PON FL	O	FL+B control		H: FL+B ON, L: FL+B OFF
44	VFD CS	O	VFD chip select control		
45	ROTARY CW	I	VOL key input		Detects pulse width
46	ROTARY CCW	I	VOL key input		Detects pulse width
47	CD DISC12 SW	I	12cm CD detection		
48	CD LOS SW	I	CD loading detection		
49	CD MUTE R	I	Rch CD mute request		H: Normal, L: Requesting Rch mute
50	CD MUTE L	I	Lch CD mute request		H: Normal, L: Requesting Rch mute
51	$\overline{\text{CD MRST}}$	O	CD mecha μ-COM reset		H: Normal, L: Reset
52	$\overline{\text{CD MSTOP}}$	O	CD mechanism μ-COM stop		H: Mecha μ-COM operates, L: Mecha μ-COM stops
53	$\overline{\text{CD DISC8 SW}}$	I	8cm CD detection (Not used)		
54	CD LOE LIM SW	I	CD detection (Chucking SW)		H: Loading completes, L: No disc
55	CD LOEJ	I/O	CD motor control	②	Refer to the truth value table
56	CD MOTOR	O	CD motor control	②	Refer to the truth value table
57	PON ILLUMI	I/O	Key illumination power supply control		H: ON, Hi-Z: OFF
58	$\overline{\text{PON CD}}$	O	Power supply control for CD-WMA		L: POWER ON, H: POWER OFF L: Before M-STOP with reset
59	PON	O	Power supply		H: POWER ON, L: POWER OFF
60	VCC2	-			
61	EXT AMP CON	I/O	EXTERNAL AMP control		
62	VSS	-			
63~65	TYPE 1~3	I	Destination switching	③	Refer to the truth value table
66	TUN TYPE1	I	Destination setting 1	④	Refer to the truth value table
67	TUN TYPE2	I	Destination setting 2	④	Refer to the truth value table
68	OEM DISP DATA	I/O	External display data (Destination K and E only)		External display

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Truth Value Table	Processing Operation Description
69	OEM DISP CLK	I/O	External display clock (Destination K and E only)		External display
70	OEM DISP CE	I/O	External display control request (Destination K and E only)		External display
71	$\overline{\text{EJECT}}$	I	Eject key input (Flip-down panel model only)		L: Eject
72	P CON	O	External amplifier control		H: POWER ON, L: POWER OFF or STANDBY
73	VFD KEY REQ	I	Communication request from VFD driver		Connects to INT
74	ANT CON	O	Power antenna control		Tuner ON: H
75	$\overline{\text{ILLUMI DET}}$	I	Dimmer illumination detection		L: ON, H: OFF
76	$\overline{\text{BU DET}}$	I	Momentary power-down detection		L: BU found, H: No BU or momentary power down
77	$\overline{\text{ACC DET}}$	I	ACC power supply detection		L: ACC found, H: No ACC
78	(PWIC SVR)	O	SVR discharging circuit		H: POWER OFF or 5 seconds after momentary power down, L: Other conditions
79	$\overline{\text{PWIC MUTE}}$	O	Power IC mute		L: STANDBY, momentary power down or TEL mute
80	PWIC STBY	O	Power IC standby control		H: POWER ON, L: POWER OFF
81	LX CON	O	Start-up request to slave unit		H: Slave unit starts up, L: Slave unit stops
82	MUTE PRE R	O	Rch preout mute		CD MUTE R is Lo: H (CD playing), Momentary power down: H, L: DUAL ZONE or NAVI INT
83	MUTE PRE L	O	Lch preout mute		CD MUTE L is Lo: H (CD playing), Momentary power down: H, L: DUAL ZONE or NAVI INT
84	$\overline{\text{MUTE 0}}$	I/O	E-VOL front mute		L: Mute ON, Hi-Z: Mute OFF
85	$\overline{\text{MUTE 1}}$	I/O	E-VOL rear mute		L: Mute ON, Hi-Z: Mute OFF
86	$\overline{\text{MUTE 2}}$	I/O	E-VOL mute (Except front/rear)		
87	LINE MUTE	I	Line mute detection		TEL mute: Below 1V NAVI mute: Over 2.5V
88	$\overline{\text{MUTE PRE SW}}$	I/O	NF preout mute		L: Mute ON, Hi-Z: Mute OFF OFF fixed: Selecting REAR in REAR/SUB selection
89	PWIC DC DET	I	DC offset error detection		
90	LX RST	O	Forced reset to slave unit		H: Reset, L: Normal
91	$\overline{\text{MUTE C}}$	I/O	E-VOL mute		L: Mute ON, Hi-Z: Mute OFF
92	NC	-	Not used		L fixed
93	RDS NOISE	I	FM noise detection		
94	AVSS	-			
95	TUN SMETER	I	S-meter input		
96	VREF	-			Connects to P.ON
97	AVCC	-			Connects to VCC
98	LX DATA S	I	Data from slave unit		
99	LX DATA M	I/O	Data from and to slave unit		
100	LX CLK	I/O	LX-BUS clock		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth value table

① AFS CONTROL

	RDS AFS M	Condition
AFS LOW	L	No sound output with AF search
AFS MID	L	Sound output with AF search
AFS HIGH	Hi-Z	Normal reception

② CD MOTOR CONTROL

	CD MOTOR	CD LOADING/EJECT
Stop	L	L
Load	H	L
Eject	H	H
Brake	H	Hi-z

③ DESTINATION SW

TYPE 3 (Pin 65)	TYPE 2 (Pin 64)	TYPE 1 (Pin 63)	DESTINATION	MODEL
0	0	0	K	KDC-X590
0	0	1	K	KDC-MP632U
0	1	0	E	KDC-W6534U/UY
0	1	1	E	DPX501U/UY
1	0	0	M	KDC-X7533U
1	0	1	M	DPX-MP2090U
1	1	0	K	DPX501
1	1	1	J	DPX-U077

④ TUNER TYPE

	TUN TYPE1 (Pin 66)	TUN TYPE2 (Pin 67)
Kenwood brand model	L	L
OEM model 1	L	H
OEM model 2	H	L
OEM model 3	H	H

MICROCOMPUTER'S TERMINAL DESCRIPTION

● MECHANISM MICROCOMPUTER: M30620FCPGP (X32: IC1)

Pin No.	Pin Name	I/O	Application	Processing Operation Description
1~5	NC	-	Not used	Opened output L fixed
6	BYTE	I	External data bus SW input	Connects to GND
7	CNVSS	I	Processor mode SW	L: Single chip mode H: Microprocessor mode or flash ROM writing
8	$\overline{\text{MUTE}}$	O	Audio mute control	L: Mute ON, H: Mute OFF
9	NC	-	Not used	Opened output L fixed
10	$\overline{\text{RESET}}$	I	Reset detection	L: Reset (Flash ROM writing), H: Normal
11	XOUT	O	Main clock output	Connects to resonator
12	VSS	-	Power supply input	Connects to GND
13	XIN	I	Main clock input	Connects to resonator
14	VCC1	-	Power supply input	Connects to BU3.3V
15	$\overline{\text{NMI}}$	I	NMI interruption input	Input Hi (Pull-up) fixed
16	$\overline{\text{MSTOP}}$	I	STANDBY comeback interrupption	L: Stop, H: Stop cancelled (Hi edge)
17	NC	-	Not used	Opened output L fixed
18	DSP INT	I	DSP interruption signal input	H: Interruption (Hi edge)
19~22	NC	-	Not used	Opened output L fixed
23	E2P SCL	I/O	E2P I2C clock output	Series resistors and E2PROM are not built when ROM collection is not used.
24	E2P SDA	I/O	E2P I2C data input and output	Series resistors and E2PROM are not built when ROM collection is not used.
25,26	NC	-	Not used	Opened output L fixed
27	SCL	I	System μ-com I2C clock input	
28	SDA	I/O	System μ-com I2C data input and output	
29	DSP TXD	O	Data output for DSP serial data	Flash ROM writing: TXD (Pull-up)
30	DSP RXD	I	Data input for DSP serial data	Flash ROM writing: RXD
31	DSP CLK	O	Clock output for DSP serial data	Flash ROM writing: SCLK(Pull-up)
32	DSP STB (BUSY)	O	DSP data strove signal output	Flash ROM writing: BUSY
33	CS SDATA	O	Data output for decoder serial data	
34	CS BDATA	I	Data input for decoder serial data	
35	CS CLK	O	Clock output for decoder serial data	
36~38	NC	-	Not used	Opened output L fixed
39	$\overline{\text{EPM}}$	-	Not used (Flash ROM: EPM)	Opened output L fixed
40	PON D3.3	O	D3.3V POWER ON control	H: POWER ON, L: POWER OFF
41	PON A5	O	A5.0V POWER ON control	H: POWER ON, L: POWER OFF
42	PON CS1	O	IC15 series 3.3V POWER ON control	H: POWER ON, L: POWER OFF
43	PON CS2	O	IC15 series 1.8V POWER ON control	H: POWER ON, L: POWER OFF
44	CE	-	Not used (Flash ROM: CE)	Opened output L fixed
45	$\overline{\text{DRV MUTE}}$	O	Driver mute	L: Stop, H: Mute OFF
46,47	NC	-	Not used	Opened output L fixed

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Application	Processing Operation Description
48	ZERO M	I	0-bit mute detection	H: Mute ON, L: Mute OFF (No distinction of Lch/Rch)
49	DE-EMPHASIS	O	DAC de-emphasis control	H: De-emphasis ON, L: De-emphasis OFF
50,51	NC	-	Not used	Opened output L fixed
52	LIM SW	I	Laser pick-up inner circumference detection SW signal input	H: Inner circumference
53	DISC NORMAL	O	Media discrimination result output (Not used)	H: Normal disc, L: Other disc
54	DISC H RW	O	Media discrimination result output (Not used)	H: High reflecting RW disc, L: Other disc
55	DISC RW	O	Media discrimination result output (Not used)	H: Normal RW disc, L: Other disc
56~59	TEST OUT4~1	O	Output for test	Opened output L fixed
60	VCC2	-	Power supply input	Connects to BU3.3V
61	TEST OUT0	O	Output for test	Opened output L fixed
62	VSS	-	Power supply input	Connects to GND
63~66	NC	-	Not used	Opened output L fixed
67	TEST IN3	I	TEST IN3	Pull-down connection (L: Normal/H: During test)
68	MODEL SEL	I	Model determination	L: DXM-6810W (X32-583), H: DXM-6820W (X32-587)
69	E2P WRITE	I	TEST IN1: E2P writing permission	Pull-down connection (L: Normal/H: During writing)
70	UNIQ ID	I	TEST IN0: Uniqe ID writing permission	Pull-down connection (L: Normal/H: During writing)
71~73	NC	-	Not used	Opened output L fixed
74	SEARCH	O	Searching situation output	H: During seaching, L: Normal
75,76	NC	-	Not used	Opened output L fixed
77	$\overline{\text{DSP RST}}$	O	DSP reset control	L: Reset, H: Normal
78	DSP A0	O	DSP command/parameter discrimination signal output	H: During parameter transmitting L: During command transmitting
79	DA EMPHASIS	I	DSP DA emphasis input	H: emphasis ON, L: emphasis OFF
80	ROM EMPHASIS	I	Decoder ROM emphasis input	H: emphasis ON, L: emphasis OFF
81	$\overline{\text{DATA MUTE}}$	O	Data output status	L: During data output muting, H: During data output
82	$\overline{\text{CS RST}}$	O	Decoder reset control	L: Reset, H: Nornal
83	NC	-	Not used	Opened output L fixed
84	SREQ	O	Decoder SREQ signal output	
85	BREQ	I	Decoder BREQ signal input	
86~93	NC	-	Not used	Opened output L fixed
94	AVSS	-	Analog power supply input	Connects to GND
95	NC	-	Not used	Opened output L fixed
96	VREF	-	Reference voltage input	Not used: Connects to GND
97	AVCC	-	Analog power supply input	Connects to BU3.3V
98~100	NC	-	Not used	Opened output L fixed

TEST MODE

● How to enter the test mode

In order to enter the test mode, reset the unit while simultaneously pressing down [1] and [3] keys.
(Even when the security is set, power can be ON for 30 minutes.)

● How to clear the test mode

The test mode is cleared in case of any of the following events: resetting, momentary power down, Acc OFF and Power OFF.

● Initial conditions of the test mode

- Source is STANDBY.
- Displays lights are all turned on.
- The volume is at –10dB (The display is 30).
- Loudness (LOUD) is OFF.
- CRSC is OFF, regardless of whether there are switching functions or not.
- SYSTEM Q is NATURAL (=FLAT).
- BEEP will sound anytime with a less than 1 second push.
- Auxiliary (AUX) is ON.
- SWPRE is Sub woofer (2 PREOUT model)

● RDS/RBDS automatic measurement

Conventionally, the PS display has been visually checked on the production line. This will be replaced by a new processing. The PS data will be received and the PS contents is to be verified as “RDS_TEST”. When this is verified, the P-CON terminal is forced to go OFF. (In this case, “ _ ” means blank.)

→ This will be a dedicated test mode processing.

On the P-CON, when power is turned off once and, then, turned on again, (Power OFF → ON) the unit will be restarted.

● Special display when set to TUNER

When in TUNER mode, if any of the following displays appear, there is an abnormality with the front end.

- “TNE2P_NG” : Front-end E2PROM values are still default (not determined).
- “TNCON_NG” : In this condition, the communication with the front-end is not possible.

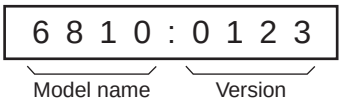
● Forced switching of K3I

In TUNER FM mode, each time [6] key is pressed, the functions move in the following cycle :
AUTO → forced WIDE → forced MIDDLE → force NARROW → AUTO
The initial condition is AUTO and the displays below will appear.

- AUTO : FM1_98.1A
- Forced MIDDLE : FM1_98.1M
- Forced WIDE : FM1_98.1W
- Forced NARROW : FM1_98.1N

● CD source test mode specifications

- Display mode default setting shall be P-TIME.
- Jumps are made to the following tracks by pressing the [▶▶I] key.
  No. 9 → No. 15 → No. 10 → No. 11 → No. 12 → No. 13 → No. 22 → No. 14→ No. 9 (Returns to the beginning)
  It must be noted, however, that when paying MP3 / WMA / AAC disk, which contain 8 files or less, the first track and the following tracks are played in order.
- When [I◀◀] key is pressed, it goes down by 1 track.
- When playing an MP3/WMA/AAC disc, display the file format before starting to play each file. (“MP3”, “WMA”, “AAC”)
- When a CD is used as a source, by pressing [1] key for less than 1 second, a jump to the Track No. 28 is made.
- When a CD is used as a source, by pressing [2] key for less than 1 second, a jump to the Track No. 14 is made.
- When a CD is used as a source, by pressing [3] key for less than 1 second, a display of CD mechanism model name and its version is made. When the pressing of [3] key for less than 1 second is made for the second time, the normal display is resumed. (Time code display)



- When a CD is used as a source, by pressing [6] key for less than 1 second, a jump to the Track No. 15 is made. At the same time, the volume value is set to 25 (2V PRE).

TEST MODE

● Test mode specification for USB source

- While in USB source, by [6] key, set the volume value to 15.

● Audio adjust mode

- By pressing [AUD] key for less than 1 second, the Audio Adjust mode is entered.
- As with the [AUD] key, [∗] key on the remote controller can be used to enter the Audio Adjust mode.
- As for the adjustment items, items for both the AUDIO FUNCTION MODE and SETUP MODE are included.
- By pressing [AUD] or [FM] key briefly, switch the item to be adjusted in the following order. (only in forward rotation) The initial item will be Fader, which is followed by : Balance → Bass Level → Middle Level → Treble Level → HPF Front → HPF Rear → LPF Sub Woofer (After this, it will be arbitrary)
- With the remote controller, continuous forwarding is prohibited.
- Using the VOL knob and [I◄◄] / [►►I] key, the Fader can be adjusted in 3 steps : R15 ↔ 0 ↔ F15 (The initial value is 0)
- Using the VOL knob and [I◄◄] / [►►I] key, the Balance can be adjusted in 3 steps : L15 ↔ 0 ↔ R15 (The initial value is 0)
- Using the VOL knob and [I◄◄] / [►►I] key, the Bass / Middle / Treble Level can be adjusted in 3 steps : –8 ↔ 0 ↔ +8 (The initial value is 0)
- Using the VOL knob and [I◄◄] / [►►I] key, the HPF Front / Rear can be adjusted in 2 steps : Through ↔ 220Hz (The initial value is Through)
- Using the VOL knob and [I◄◄] / [►►I] key, the LPF Sub Woofer can be adjusted in 2 steps : 50Hz ↔ Through (The initial value is Through)
- Using the VOL knob and [I◄◄] / [►►I] key, the Sub Woofer Phase can be adjusted in 2 steps : Reverse ↔ Normal (The initial value is Normal)
- Using the VOL knob and [I◄◄] / [►►I] key, the Volume Offset can be adjusted in 2 steps : –8 ↔ 0 (The initial value is 0)
- Using the VOL knob and [I◄◄] / [►►I] key, the Loudness ON/OFF can be adjusted in 2 steps : OFF ↔ ON (The initial value is OFF)
- Using the VOL knob and [I◄◄] / [►►I] key, 2-Zone ON/OFF can be adjusted in 2 steps : OFF ↔ ON (The initial value is OFF)
- Bass f / Bass Q / Bass EXT / Middle f / Middle Q / Treble f do no appear in audio adjustments.

● MENU items

- Press [Q] key briefly to enter the MENU.
- The [DNPP/SBF] and [DIRECT] keys on the remote controller can also be used to enter the MENU.
- With the remote controller, continuous forwarding is prohibited.
- When a CD/USB is used as a source, the default item will be the F/W Version.

● 2-ZONE (Dual Zone) items

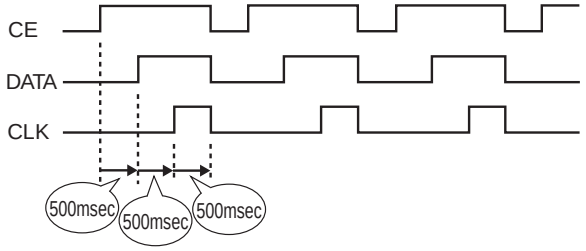
- When using sources other than the STANDBY source, using a short-press on [AUTO] or [TI] key, 2-ZONE ON/OFF is achieved.

● Backup current measurement

When reset in Acc OFF (Back Up ON) condition, MUTE terminal goes off after 2 seconds, instead of 15 seconds. (During this time, the CD mechanism does not function.)

● OPEL communication items (OPEL communication specification supporting model)

During the test mode, OPEL communication line outputs the following (At every 500msec, the output condition of the communication line will be switched.)



● Special display when all lights are on

When all lights are on with the STANDBY source, the following displays are made when the keys shown below are pressed.

[1] key	Version is displayed (forwarding) (Display) TYPE : x___ (“x" is displayed hexadecimally) → 529K–1.02 (“Development name” – “Version”) → All indicators on → ∗ TYPE indicates µ-com destination, and shows real-time condition of the destination terminal

TEST MODE

[2] key	Serial number display (8 digits) (Display) xxxxxxxx
[3] key	Key pressed briefly : Power ON time is displayed. (Display) PON_0Hxx (00~50 is displayed for "xx". When less than 1 hour, displayed by increments of 10 minutes.) xxxxx (00001~10922 is displayed for "xxxxx".) MAX 10922 (times) During Power On time display, by pressing for at least 2 seconds, the Power ON time is cleared.
[4] key	Key pressed briefly : CD operation time is displayed. (Display) CDT_0Hxx (00~50 is displayed for "xx". When less than 1 hour, displayed by increments of 10 minutes.) xxxxx (00001~10922 is displayed for "xxxxx".) MAX 10922 (times) During CD operation time display, by pressing for at least 2 seconds, CD operation time is cleared.
[5] key	Key pressed briefly : CD EJECT number is displayed. (Display) EJCxxxxx MAX 65535 (times) During CD EJECT number display, by pressing for at least 2 seconds, CD EJECT number display is cleared.
[FM] key	ROM correction version display (Display) ROM_R123 When E2PROM is not installed : ROM_ERR_ When un-written : ROM_R – – – When data is incompatible : ROM_R ∗ ∗ ∗
[▶▶I] key	AUDIO data default value setting (Display) AUD_INIT
[I◀◀] key	Key pressed briefly : Forced Power OFF data displayed. (Display) POFF_ - - - (No Forced Power OFF) SEC (Forced Power OFF because of missing Security Code) PNL (Forced Power OFF because of system μ-com panel communication error) While the forced power OFF data is displayed, press and hold for 2 seconds to clear the data.
[▶II] key	Key pressed briefly : CD information display mode ON/OFF While in CD information display mode, press and hold for 2 seconds to clear all CD information. ∗ Please refer to the table right.

● CD information display mode

	Displays I2C communication status. (Display) I2C_OK__ NG
	Displays CD loading error data. (Display) Load_Error____ (Display) __ (1) xx__ (2) xx (number of times is displayed for "xx") MAX 99 (times) Disk detection switch ON/OFF is monitored, and when the loading operation is not completed within the specified time length, or when E-99 mechanism error occurred, record which SW signal had an error. ∗Refer to the note at the end of [CD LOAD error detection].
[AM] key ↑	Displays CD ejection error data. (Display) Eject_Error___ (Display) __ (1) xx__ (2) xx (Display) __ (3) xx__ (4) xx (number of times is displayed for "xx") MAX 99 (times) Disk detection SW ON/OFF is monitored, and when the ejection operation is not completed within the specified time length, or when E-99 mechanism error occurred, record which SW signal had an error. ∗Refer to [CD EJECT error detection]'s note.
↓ [FM] key	Displays CD time code count error data (missing count). (Display) Count_Lose (Display) __CDDA_ : xx (Display) __CDROM : xx (number of times is displayed for "xx") MAX 99 (times) Monitor time code continuity. Record the number of times when discontinuity occurred as error data. Record the data of compressed audio and CD-DA played separately.
	Displays CD time code count error data (count not updated). (Display) Count_Stay (Display) __CDDA_ : xx (Display) __CDROM : xx (number of times is displayed for "xx") MAX 99 (times) When the time code is not renewed for 2 or more seconds, record the number of times occurred as error data (skipped sound).

TEST MODE

● Initializing AUDIO-related value setting

During STANDBY sourcing, by pressing [▶▶I] key for less than 1 second, AUDIO setting values are returned to the default values.

● Other

- At Power ON, "CODE_OFF", "CODE_ON" displays will not be made.
- When the source is STANDBY, press [AUTO] / [TI] key briefly to switch triangle illumi RED ↔ GREEN. (In models with Display Blackout function)
- When the source is STANDBY, press and hold [AUTO] / [TI] key for 1 second to switch PREOUT Rear ↔ Sub Woofer. (2PREOUT model)
- When in USB source, press [1] key briefly to turn ON/OFF the front grass indirect lighting.
- When staring up in the test mode, LINE MUTE prohibition time is set to 1 second instead of 10 seconds.
- While in the test mode, security jig should not be used to write the security code.
- While in the test mode, serial writing jig should not be used to write the serial number.
- While in the test mode, even when a DC offset error is detected, the detection information will not be written to the E2PROM.
- While in the test mode, even after an elapse of pre-set time, the backup memory items will not be written to the E2PROM.
- While in the test mode, backup/installer memory information clear mode, CD mechanism error log information clear mode and DC offset error detection information clear mode, DEMO mode operation will not be conducted.
  Also, in the above mode, the menu of the STANDBY source will not display DEMO ON/OFF switching items.

● Clearing backup/installer memory and CD mechanism information, and service information (Clearing E2PROM data)

Backup/installer memory X34-IC10 (E2PROM) "AU_"
CD mechanism information and service information: TUNER F/E (E2PROM) "CD_"

1. While pressing and holding the [Q] key and the [ATT] key, reset-start to start backup/installer memory data, and CD mechanism and service information initialization.
   (Even when the security is set, power can be ON for 30 minutes.)
   [CD mechanism information]
   - Displays I2C communication condition
   - Displays CD mechanism error log
   - Displays CD loading error data.
   - Displays CD ejection error data.
   - Displays CD time code error count data (missing count).
   - Displays CD time code error count data (count not updated).

   [Service Information]
   - Displays power ON time is displayed.
   - Displays CD operation time.
   - Displays number of CD EJECT times.
   - Displays number of times panel was opened/closed.
   - Displays forced Power OFF data.
2. After the initialization process is completed, the following is displayed.
   At normal termination: "CD_O : AU_O_"
   At abnormal termination 1: "CD_O : AU_X_" (When backup/installer memory initialization is NG.)
   At abnormal termination 2: "CD_X : AU_O_" (When CD mechanism information / service information initialization NG.)
   At abnormal termination 3: "CD_X : AU_X_" (When all initialization NG.)
3. While in this mode, even after an elapse of a pre-set time, no backup memory items will be written to the E2PROM.
4. This mode is released by resetting. (What was on the last screen will not be retained.)

● Clearing DC offset error detection information (E2PROM (F/E) data clear)

1. While simultaneously pressing down on [3] and [6] keys, reset the unit to enter the DC offset error display mode. (Even when the security is set, power can be ON for 30 minutes.)
2. During STANDBY sourcing, the current DC offset error conditions will be displayed.
   When error detected : "DC_ERR__"
   When error not detected : "DC_OK___"
3. While the error conditions are being displayed, press [AUTO] / [TI] key for less than 1 second to clear the detection information. (E2PROM clear)
4. DC offset error display mode is released by resetting. (What was on the last screen will not be retained.)

TEST MODE

● FM/AM channel space switching (K,M type)

From the Power OFF condition, while pressing [1] and [5] keys down simultaneously, press the [SRC] key and turn power ON.

● Security

• Forced Power ON mode

Even when the security is set, by resetting while pressing [Q] key and [4] key simultaneously, it is possible to turn the power ON for 30 minutes only.

• Method of clearing the programmable security code (Programmable security models: K type)

1. While "– – – –" is being displayed, press [▶▶I] key for at least 3 seconds while pressing [AUTO] /[TI] key.
   This makes "– – – –" display disappear.
2. Using the remote controller, input "KCAR".
   Press the remote control [5] key 2 times, display "K", and press the [▶▶I] key.
   Press the remote control [2] key 3 times, display "C", and press the [▶▶I] key.
   Press the remote control [2] key once, display "A", and press the [▶▶I] key.
   Press the remote control [7] key 2 times, display "R", and press the [▶▶I] key.
3. The security is released and the unit enters the STANDBY mode.
4. If a wrong code is input, the unit goes into the Code Request mode.

• How to register the security code on the "Car Audio Passport" after replacement of the E2PROM (F/E) (Code security models: E,M type)

1. Enter the test mode. (Refer to the section on "How to Enter the Test Mode.")
2. Press [Q] key briefly to enter the MENU.
   While "CODE_SET" is being displayed, press [▶II] key for at least 1 second and enter the security registration mode.
3. Using [FM] / [AM] / [I◀◀] / [▶▶I] keys, enter the code.
   [FM] key : Number up [AM] key : Number down
   [▶▶I] key : Cursor Right [I◀◀] key : Cursor Left
4. Press [▶II] key for at least 3 seconds to display "RE-ENTER". Then, re-enter the code using the method in above No. "3".
5. Press [▶II] key for at least 3 seconds to display "APPROVED".
6. Release the test mode. (Refer to the section on "How to Release the Test Mode.")

Note : The security code for this model cannot be deleted by "all clear" command.

DC OFFSET ERROR

● Purpose

Prevent customers' vehicle speakers damages, burnouts, and smoking.

Avoid the connected speakers to be burned out, damaged, or to smoke when DC occurs between the audio power amp. + and - outputs.

● Processing after detection

1. System status
- At the detection of DC error, error data is to be saved immediately (E2PROM error log save area).
- Display the error message on the display. The system shall maintain the current condition, including the operation. Shut down audio system power supply. Set Mute to ON.
- Although switching between Power OFF and ON (ACC, BU, and Key operation) is valid, switching from Off to ON shall be error until the μ-com is reset.

∗ While power-on, even if the IC2VI DCErr output terminal logic recovered to normal level value, the error condition shall continue.

- Prohibit to save the backup/installer memory to E2PROM (nonvolatile memory).

2. Controlling μ-com terminal
- Set Mute for all channels including for pre-out.
- Turn off power IC control system power supply. (Set AMP-Standby function to valid)
- Set P-Con output to OFF (Logic by which external AMP unit is turned off).

∗ The purpose is to shut down audio output. Basically, the logic sets the audio output system signal line when in Standby source.

3. Key specification
- No specific limitation (Normal operation).

4. Display specification
- Display the "PROTECT" string and blink all characters at 1Hz.

∗ Use the indication below with the highest priority (error message), and maintain the error message even when the source is changed.

Display Example

● Cancel Condition

- Press the Reset terminal on the main body. or set Backup to OFF (Unplug and plug back in the DC connector).
  The history is maintained (E2PROM data is saved).

● Note while in test mode

- While in test mode, even if DC leak is detected, it is not written into E2PROM.
  When an error is detected, the display is enabled.

● Other

- Function for checking and clearing data in E2PROM by a given key shall be included.
  (Used at production dpt. and service center, etc.)

CD LOAD ERROR DETECTION

● Overview

Record the number of times when mechanism error (SW error) occurred at CD LOAD.

LOAD error recording shall be done in 2 patterns, by the SW status illustrated below.

LOAD error is established when LOAD operation is not completed after LOAD operation is started before the protect timer count is completed.

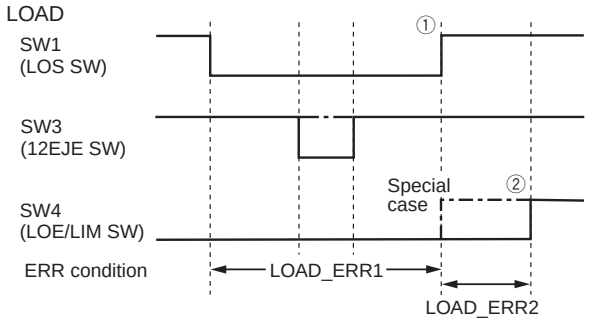
Clearing of record is done in the following situations:

1) After reset is cancelled, when reading EEPROM, the code is NG.
2) While in test mode, the specified key (Play/Pause key pressed for 2 seconds) input.
3) When in EEPROM all-clear initialization mode (refer to the test mode specification document)

- Display is shown on the test mode specification document.
- Number of times with error(s) is 99 at MAX.
- Not recorded in test mode [1+3 keys].

CD LOAD ERROR DETECTION

● Operation



∗ Trigger for starting the sequence: detecting the inserted disc with SW 1 and 3 LOW edge.
(As an exception, protect LOAD when EJECT error)

① If the protect timer was counted up before the LOS (SW1) up edge detection, it is recorded as LOAD_ERR1.
② If the protect timer was counted up after the LOS (SW1) up edge detection, before the LOE/LIM (SW4) up edge detection, it is recorded as LOAD_ERR2.

∗ When DISC was inserted briefly but pulled out immediately (DISC is detected but not inserted), it is considered as an error.
Special case: Even if LOS (SW1) up edge is not detected, if LOE/LIM (SW4) up edge is detected, it is still recorded as LOAD_ERR1. Also, if SW4 up edge is detected, the motor is stopped.

CD EJECT ERROR DETECTION

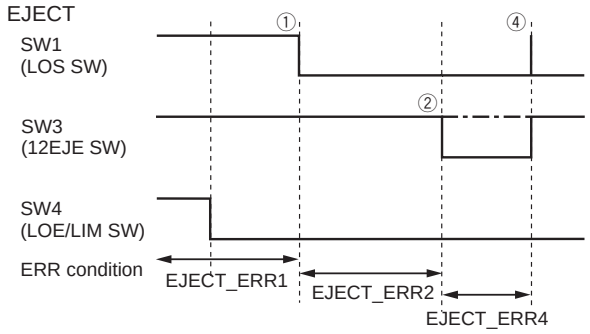
● Overview

Record the number of times when mechanism error (SW error) occurred at CD EJECT.
EJECT error recording shall be done in 4 patterns, by the SW status illustrated below (3 patterns in models other than TYPE-J).
EJECT error is established when EJECT operation is not completed after EJECT operation is started before the protect timer count is completed (False EJECT, or ejection with no CD, is considered as exception and is not recorded).
(False EJECT is determined when: while chucking is not done, and when SW status is determined as NO DISC.)
Clearing of record is done in the following situations :

1) After reset is cancelled, when reading EEPROM, the code is NG.
2) While in test mode, the specified key (Play/Pause key pressed for 2 seconds) is input.
3) When in EEPROM all-clear initialization mode (refer to the test mode specification document).

- Indication is shown on the test mode specification document.
- Number of times with error(s) is 99 times at MAX.
- Not recorded in test mode [1+3 keys].
- When EJECT was error, re-try 3 times, and count each error while re-try as 1 error.

● Operation



∗ Trigger for starting the sequence: detecting DISC ejection by EJECT key. (As an exception, protect EJECT when LOAD error)

① If the protect timer was counted up before the LOS (SW1) down edge detection, it is recorded as EJECT_ERR1.
② If the protect timer was counted up after LOS (SW1) down edge before the 12EJE (SW3) down edge detection, it is recorded as EJECT_ERR2.
④ If the protect timer was counted up after LOS (SW1)/12EJE (SW3) down edge before the down edge detection of any of these, it is recorded as EJECT_ERR4.

∗ When EJECT is started, if not chucking, it is not counted as EJECT error (considered as false EJECT). However, EJECT when SW change is detected.

INSTALLER MEMORY SPECIFICATIONS

At specialists (or specialty stores), when the installer sends the vehicle back to the user, they may make the store-recommended audio configuration.
When the user changes the setting values, when the backup power supply was taken out at times of battery change or when the reset button was pressed, to make it possible to recall the setting values, the store-recommended configuration values can be saved into E2PROM.
The specification detail defer in “with-DSP model” and in “without-DSP model”.

- Calling and saving the configuration is done by the MENU.
- Items to be saved are Bass, Middle, Treble, X’ over, and Sub Woofer Level (Refer to the separate document for more detail). Only one setting can be saved for each item (Bass/Middle/Treble settings can be changed for each source, but only one setting can be saved as the installer memory specification, and the source in which the saving operation was carried out is saved as such).
- The contents read out by the call key shall be reflected only to the current source at the time → EQ curve is “USER” (Bass/Middle/Treble settings can be changed for each source, but not reflected to Bass/Middle/Treble settings of sources other than where the calling operation was carried out).
- When the backup power supply was taken out at times of battery change or when the reset button was pressed, as the initial setting values of Bass, Middle, Treble, X' over, and Sub Woofer Level, the saved memory is reflected. (Bass/Middle/Treble setting initial setting value memory is reflected in all sources.)

NOTE: By such, EQ curve initial setting shall always be “USER” (NOT “NATURAL” or “FLAT”).

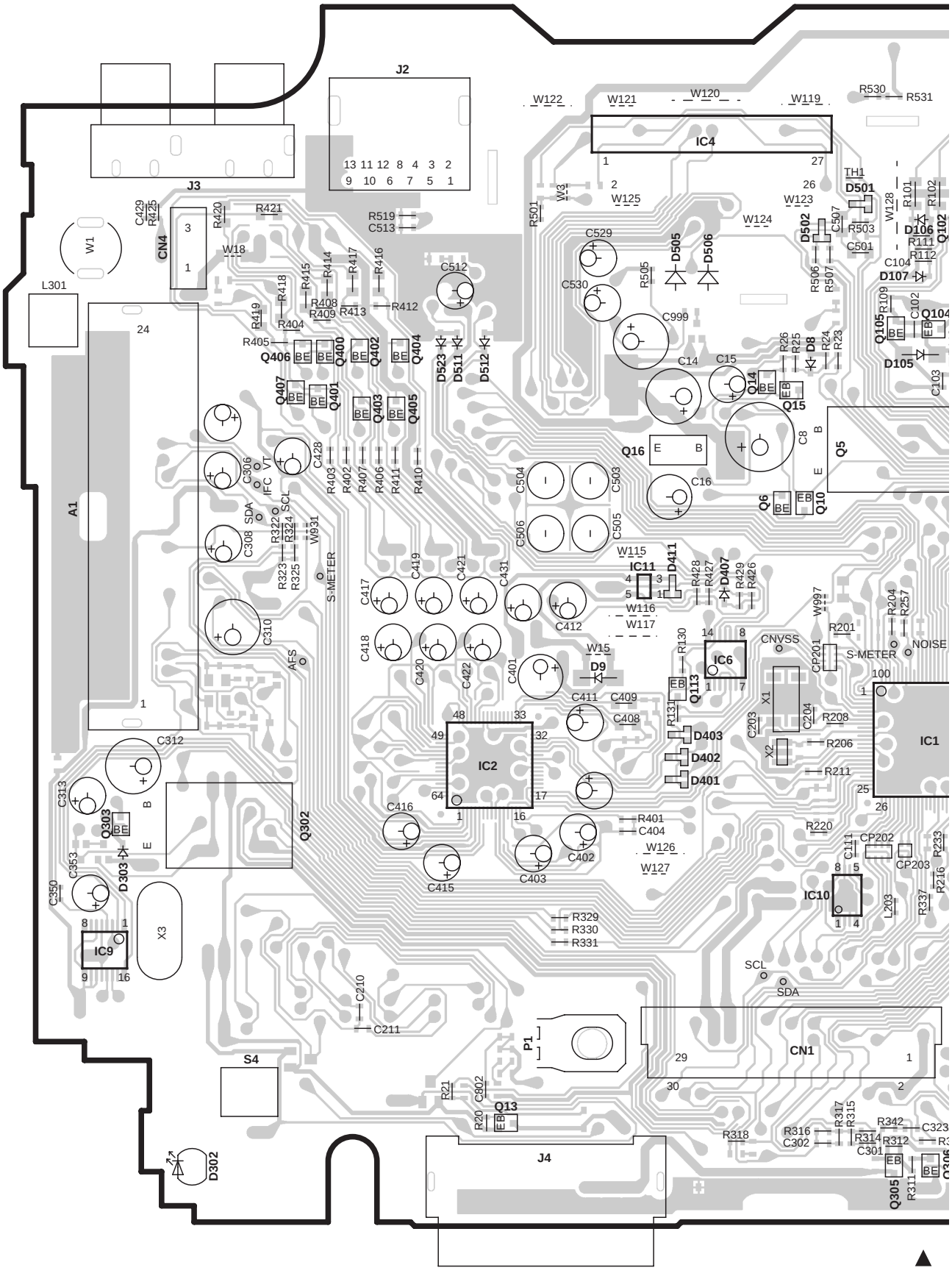
BACKUP MEMORY SPECIFICATIONS

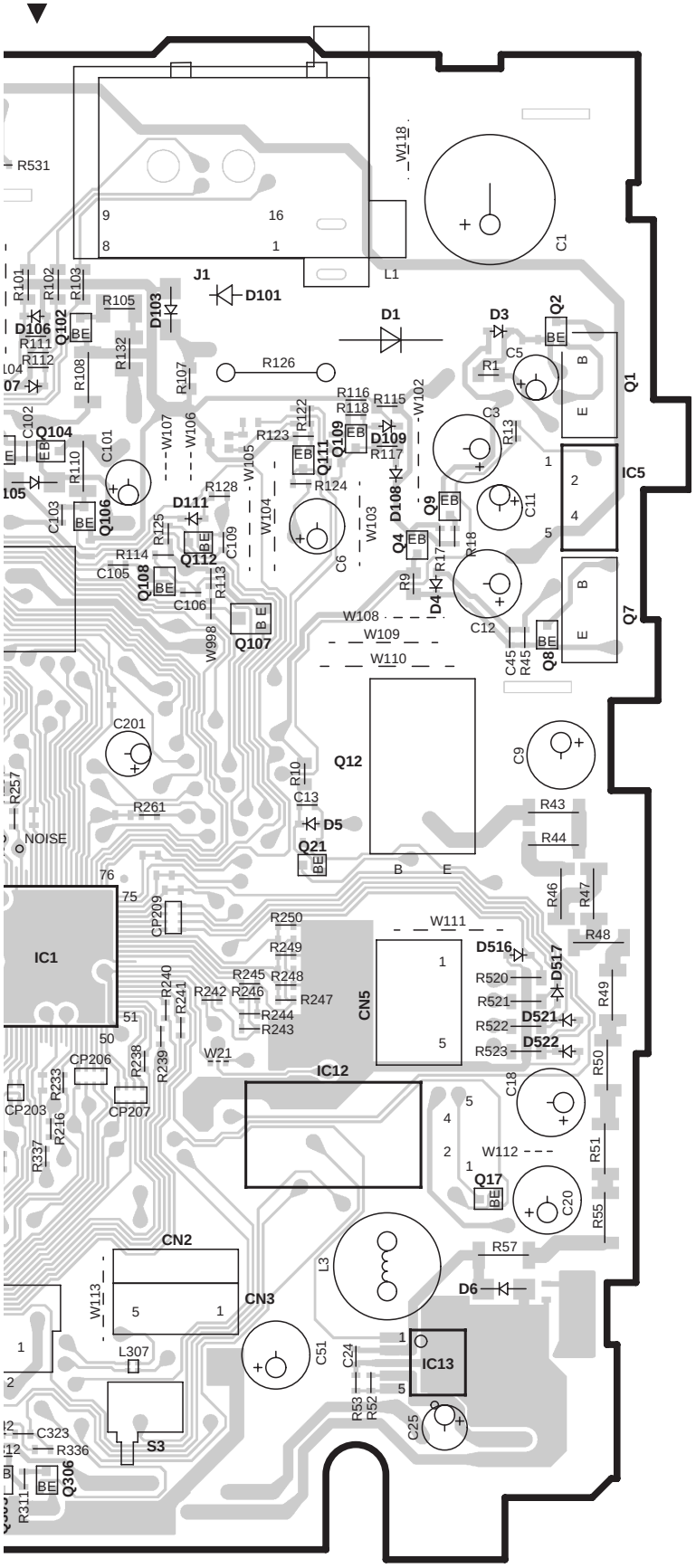
Settings by the user other than the installer memory items are saved into the E2PROM, and when the backup power supply was taken out at times of battery change or when the reset button was pressed, it is made possible to recall the setting values saved.

- While Power ON, the memory is saved and accumulated at a certain interval (temporary).
- Items to be saved into the memory are: Volume Offset (for all sources) and preset frequencies (FM/AM all bands x 6 channels).
- When the backup power supply was taken out at times of battery change or when the reset button was pressed, as the initial setting values of Volume Offset (for all sources) and preset frequencies (FM/AM all bands x 6 channels), the saved memory is reflected.
- In models which includes span-switching, when span is switched, TUNER-preset frequencies are set back to the default values.

PC BOARD (COMPONENT SIDE VIEW)

ELECTRIC UNIT X34-415x-xx (J76-0169-02)





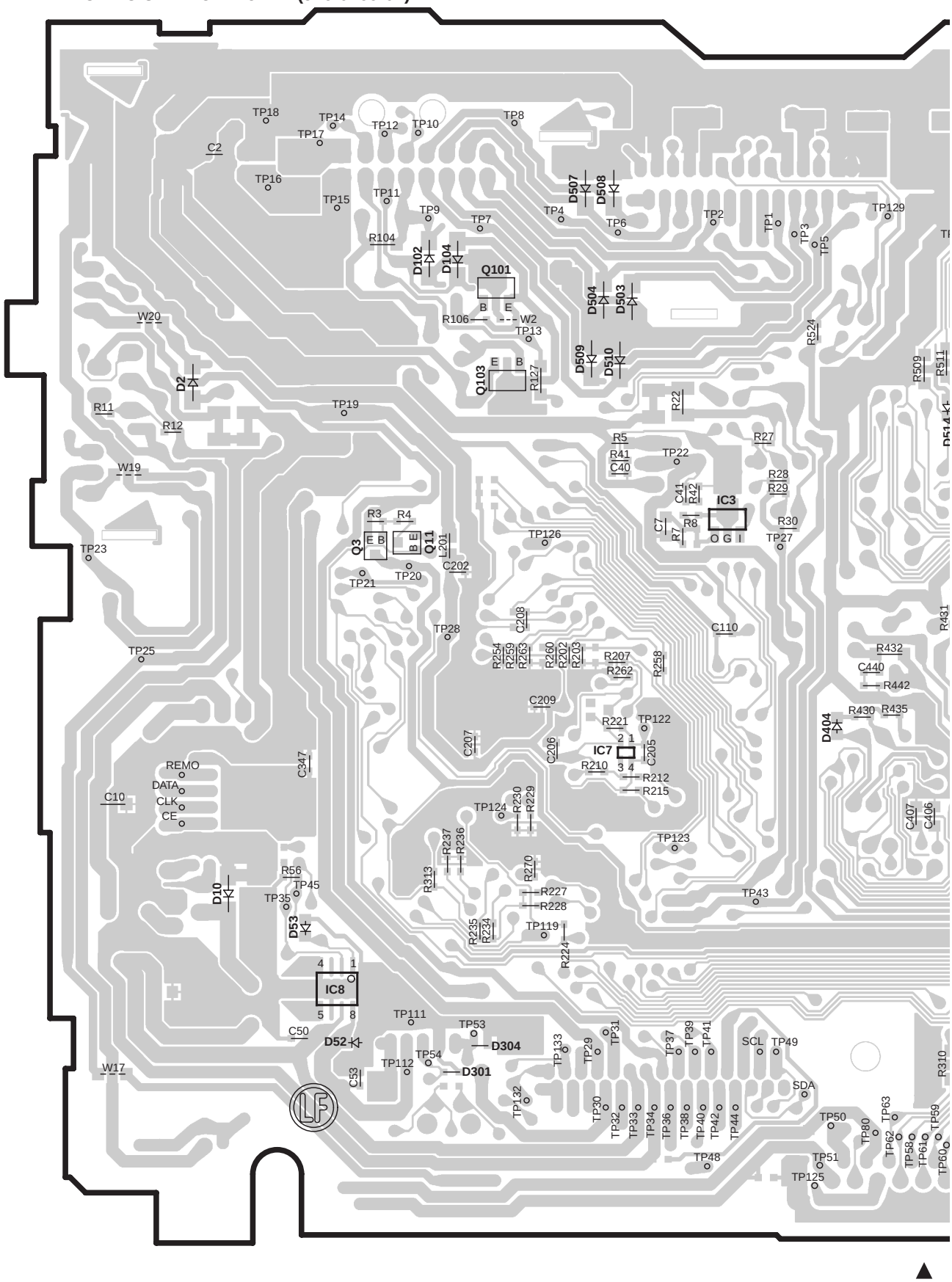
X34-415x-xx

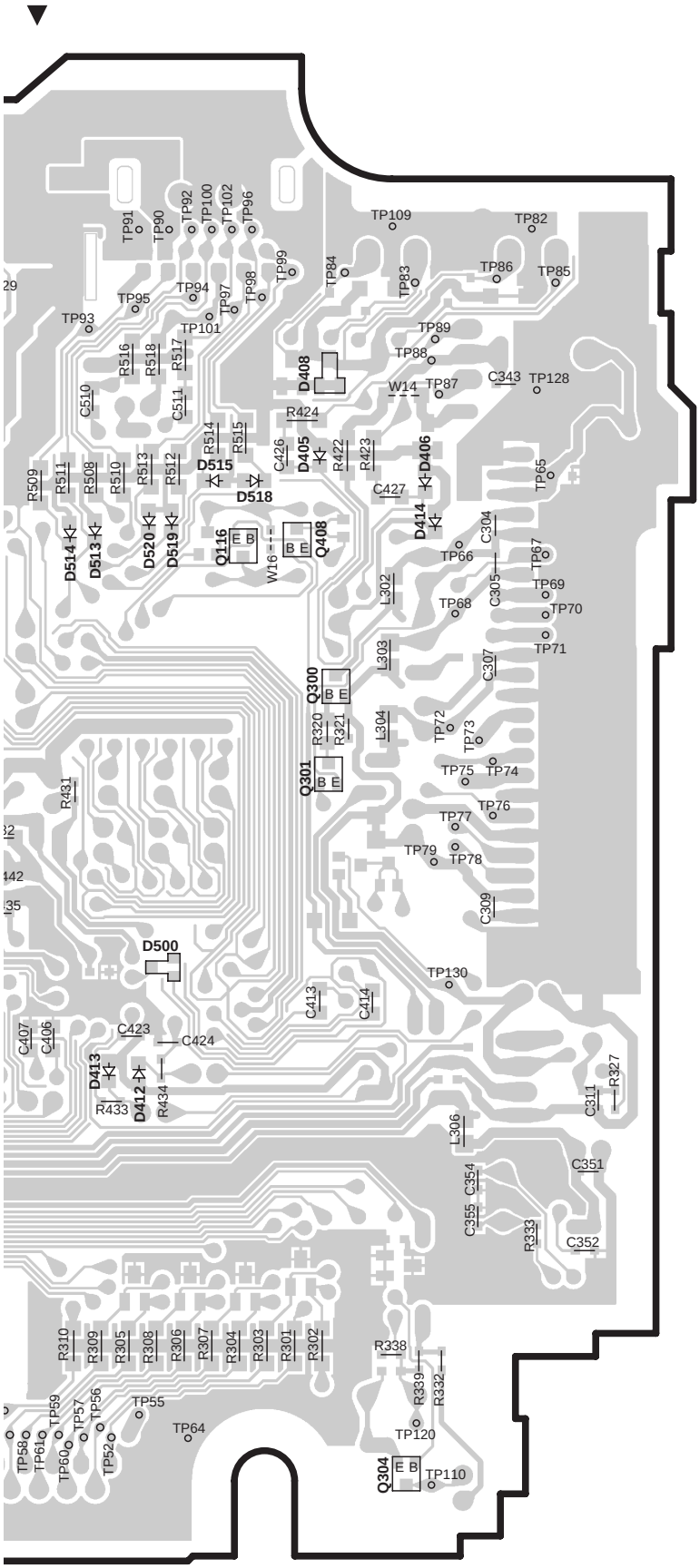
Ref. No.	Address
IC1	5F
IC2	5C
IC4	2D
IC5	3H
IC6	4D
IC9	6B
IC10	5E
IC12	5G
IC13	6G
Q1	3H
Q2	2H
Q4	3G
Q5	3E
Q6	4E
Q7	3H
Q8	4H
Q9	3G
Q10	4E
Q12	4G
Q13	6C
Q17	6G
Q21	4G
Q102	2F
Q104	3F
Q105	3E
Q106	3F
Q107	4F
Q108	3F
Q109	3G
Q111	3G
Q112	3F
Q113	5D
Q302	5C
Q303	5B
Q305	7E
Q306	7F
Q400	3C
Q401	3C
Q402	3C
Q403	3C
Q406	3B
Q407	3B

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

PC BOARD (FOIL SIDE VIEW)

ELECTRIC UNIT X34-415x-xx (J76-0169-02)





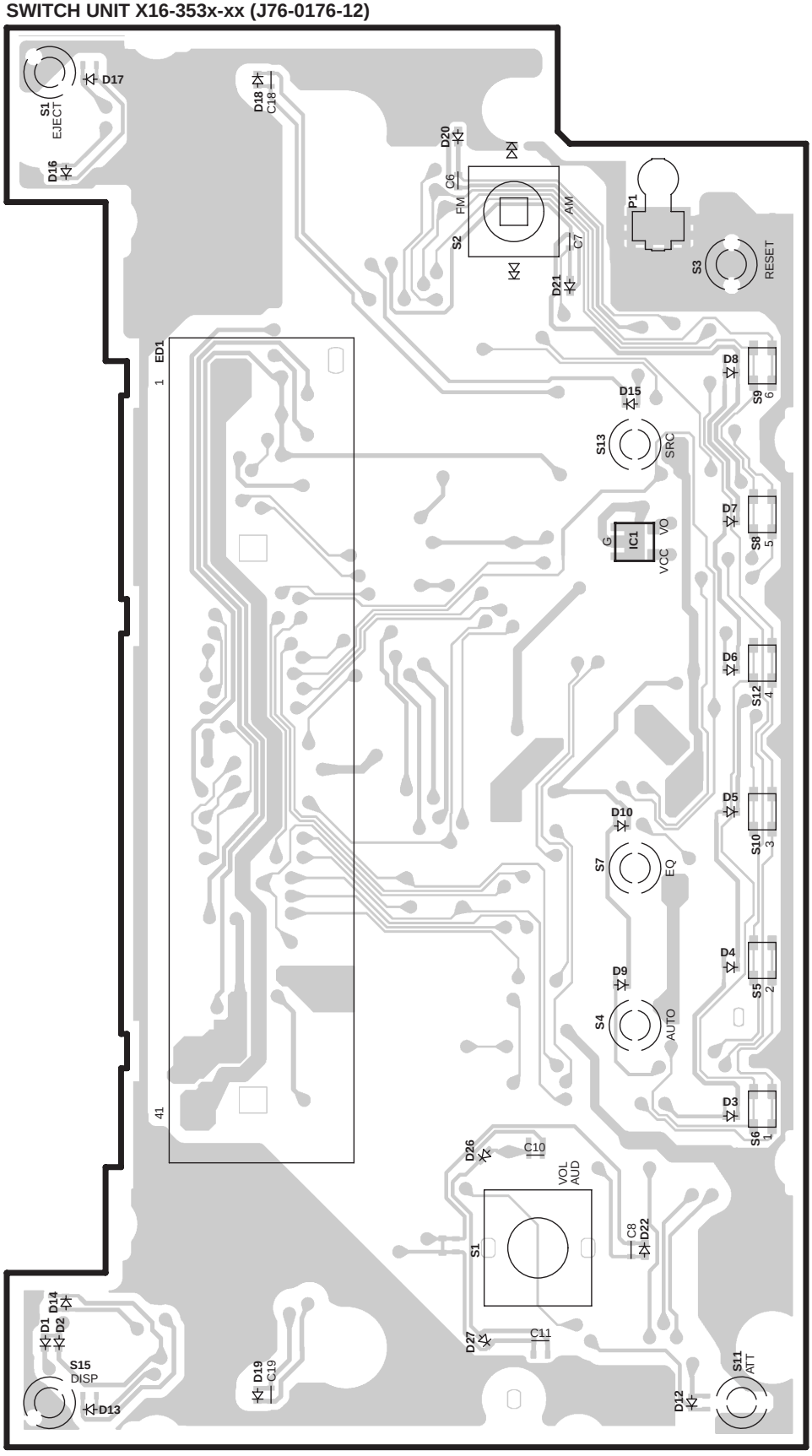
X34-415x-xx

Ref. No.	Address
IC3	4N
IC7	5N
IC8	6M
Q3	4M
Q11	4M
Q101	3M
Q103	3M
Q116	3P
Q300	4Q
Q301	4Q
Q408	3Q

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

PC BOARD (COMPONENT SIDE VIEW)

SWITCH UNIT X16-353x-xx (J76-0176-12)



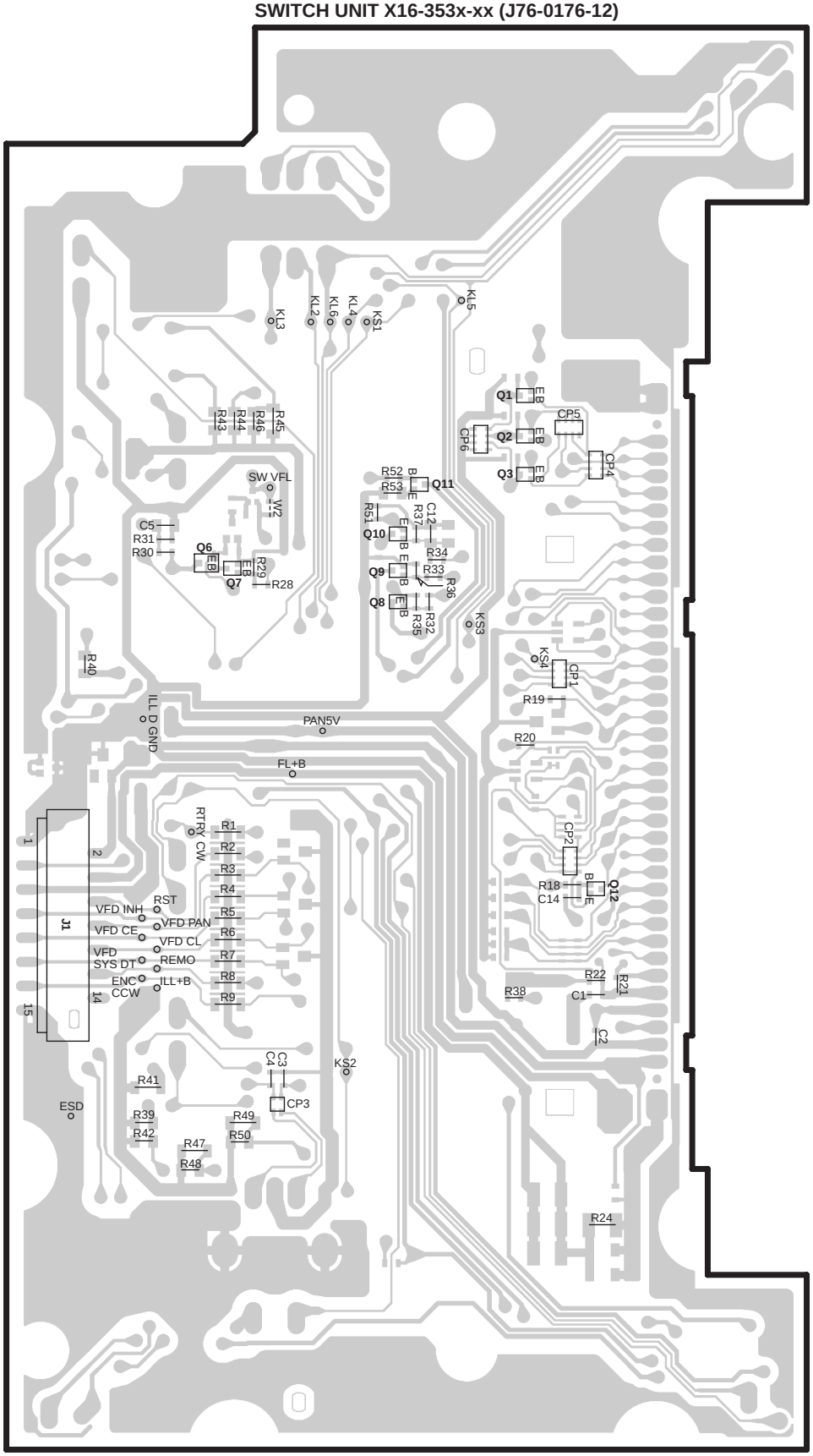
X16-353x-xx

Ref. No.	Address
IC1	3X

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

PC BOARD (FOIL SIDE VIEW)

SWITCH UNIT X16-353x-xx (J76-0176-12)



X16-353x-xx

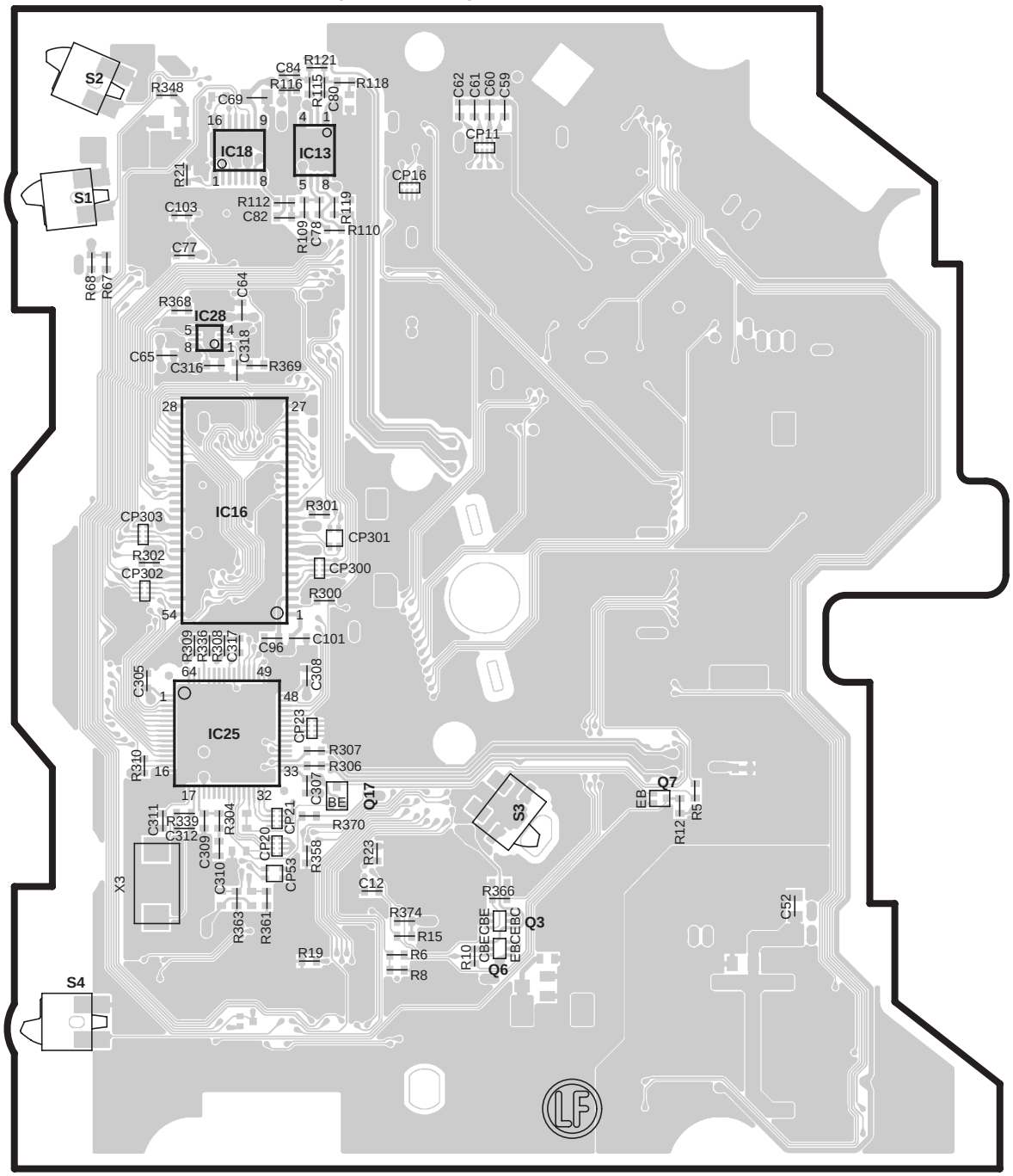
Ref. No.	Address
Q1	3AB
Q2	3AB
Q3	3AB
Q6	3Z
Q7	4AA
Q8	4AA
Q9	3AA
Q10	3AA
Q11	3AA
Q12	5AB

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

DPX501/501U/501UY
DPX-MP2090U

PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT X32-5830-00 (J76-0184-02)



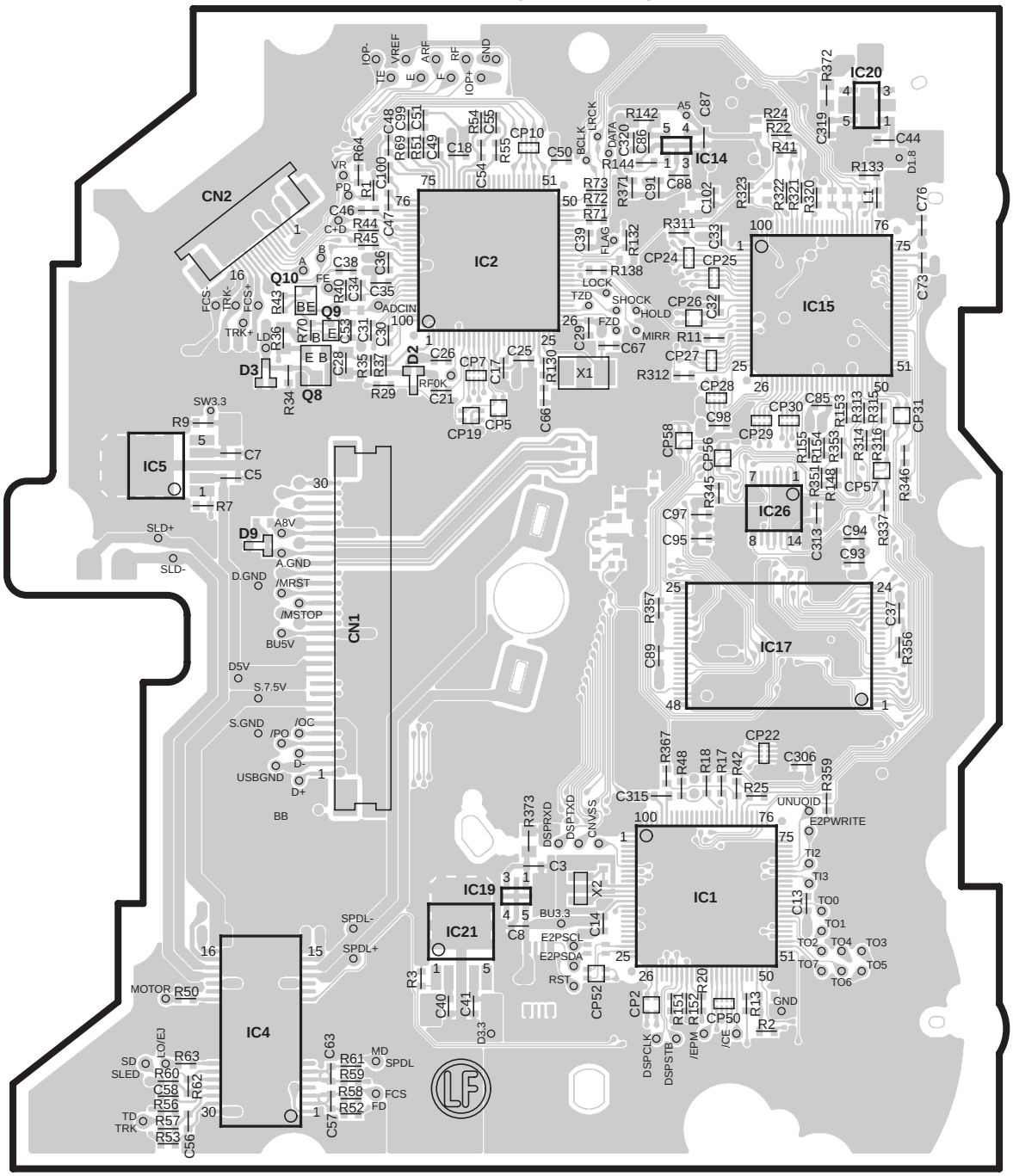
X32-5830-00

Ref. No.	Address	Ref. No.	Address
IC13	2AF	Q3	5AG
IC16	3AF	Q6	5AG
IC18	2AF	Q7	4AH
IC25	4AF	Q17	4AG
IC28	3AF		

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

PC BOARD (FOIL SIDE VIEW)

CD PLAYER UNIT X32-5830-00 (J76-0184-02)

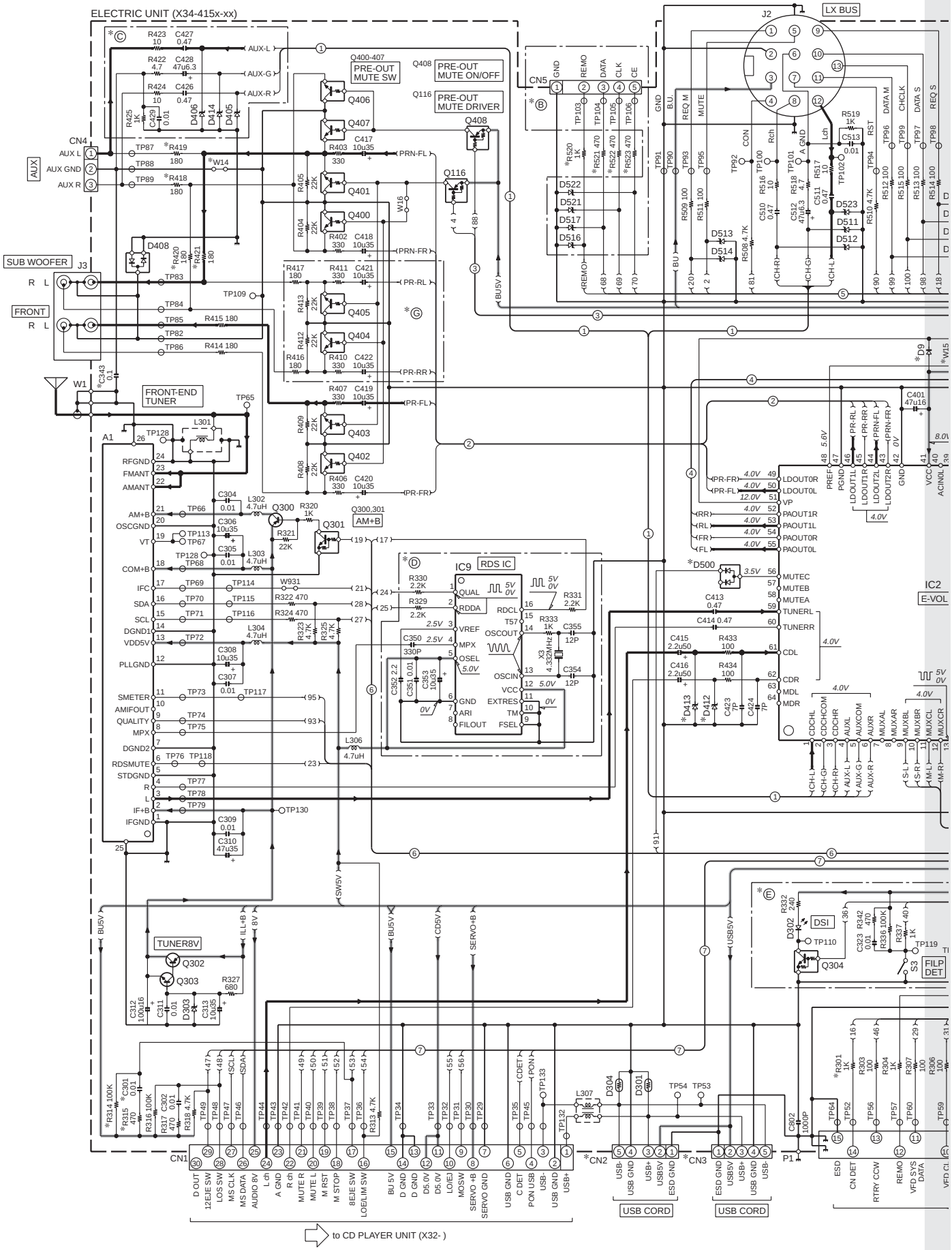


X32-5830-00

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	5AM	IC15	3AM	IC26	3AM
IC2	2AL	IC17	4AM	Q8	3AK
IC4	5AK	IC19	5AL	Q9	3AK
IC5	3AJ	IC20	2AM	Q10	2AK
IC14	2AM	IC21	5AL		

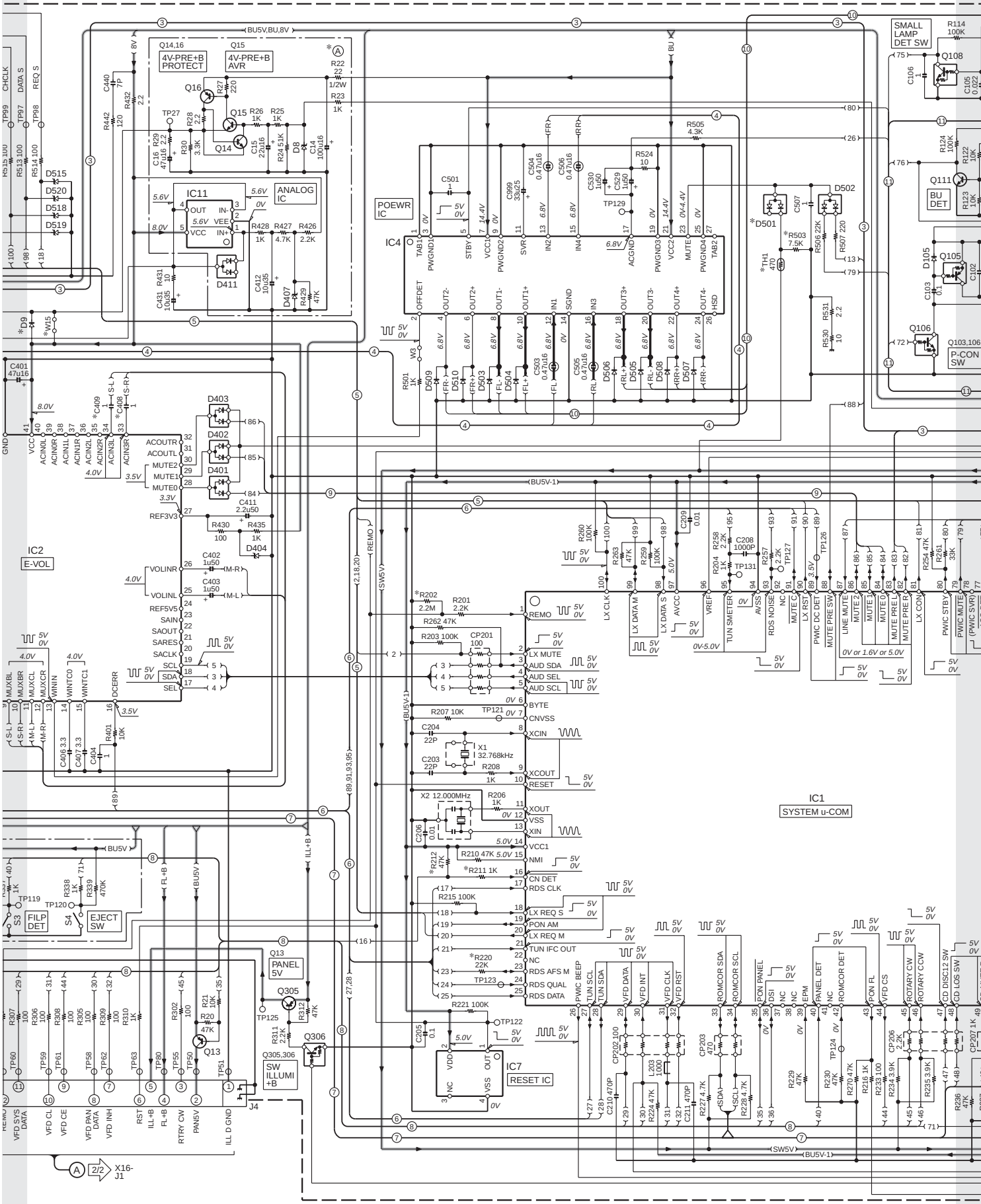
Refer to the schematic diagram for the values of resistors and capacitors.

DPX501/501U/501UY
DPX-MP2090U



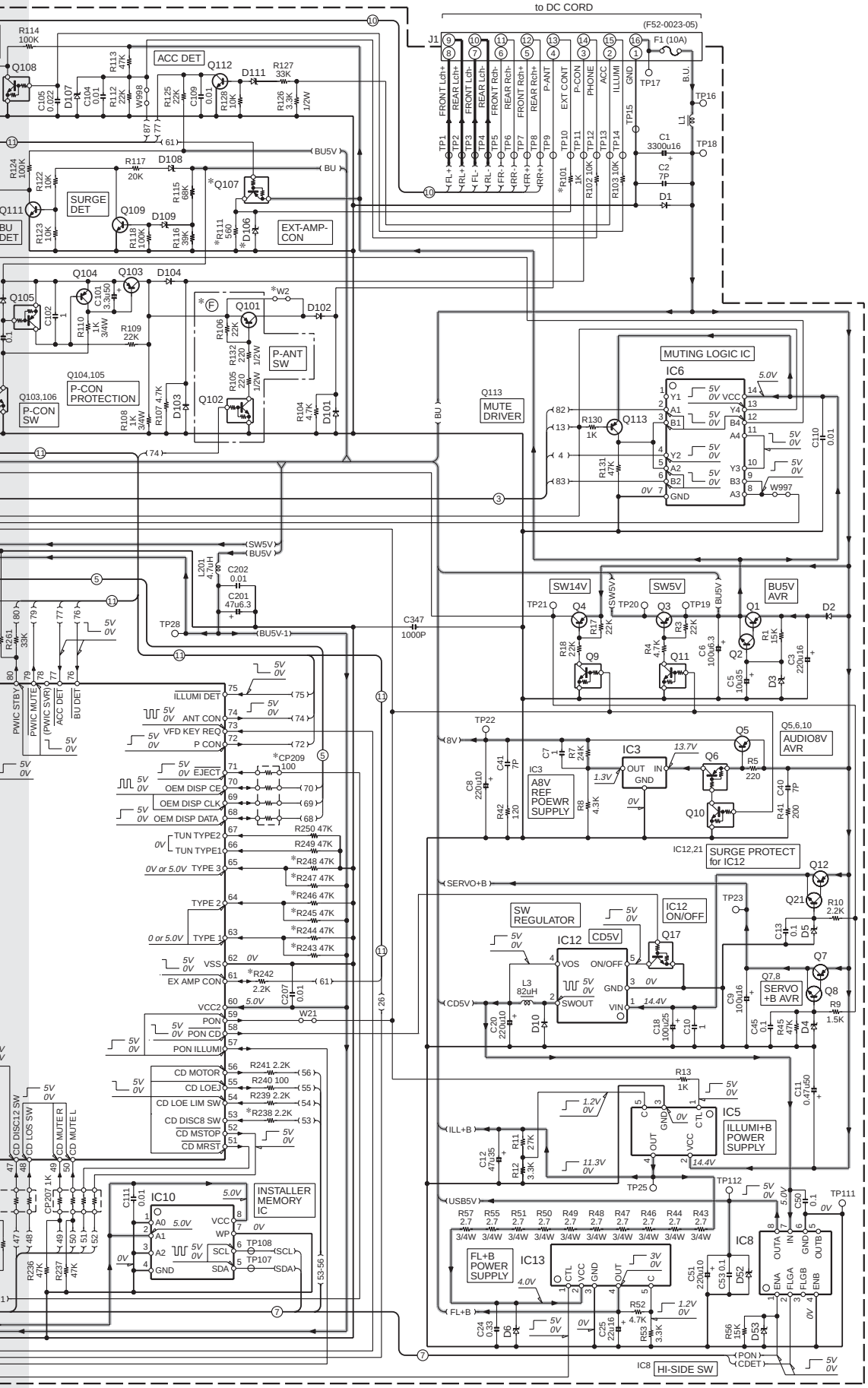
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

DPX501/501U/501UY
DPX-MP2090U



⚠ 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.

DPX501/501U/501UY
DPX-MP2090U



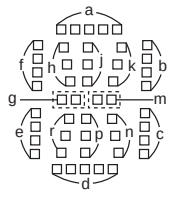
IC1 : 30624MWPA86GP
IC2 : E-TDA7415C
IC3 : M5237ML-CF0J
IC4 : E-TDA7560A
IC5 : BA00CCWT-V5
IC6 : SN74HC02APWR
IC7 : S-80836CNNB-J
IC8 : MIC2026-1YM
IC9 : E-TDA7479AD
IC10 : BR24L04FV-W
IC11 : TA75S558F-F
IC12 : SI-8050RF3NF
IC13 : BA00CC0WFP

Q1,5,7,302	: 2SB1565
Q2,8,14,15,21,303	: KTC4075P(Y,GR)
Q3,4,13,104,113	: KTA2014P(Y,GR)
Q6,116,408	: DTA124EUA
Q9-11,301	: DTC124EUA
Q12	: 2SA1488NF
Q16	: 2SB1443
Q17,108,306	: DTC144EUA
Q101,103	: 2SB1188(Q,R)
Q102,106,304	: DTC114YUA
Q105	: DTA114EUA
Q107	: DTA123JK
Q109,111,112	: 2SC4155A(Q,R,S
Q300	: 2SB1689
Q305	: 2SA1577
Q400-407	: DTC143TUA
D1	: S2V60∗A
D2	: RB160L-40
D3,106,407	: 02DZ5.6F-Y
D4	: 02DZ8.2F-Y
D5	: 02DZ20F-Y
D6	: PTZ4.7B
D8	: 02DZ12F-X
D9,102-105,503,504,507-510	: 1SR154-400
D10	: RB081L-20
D52,53,108,109,405,406	: 02DZ6.8F-Y
D101	: 10EDA20
D107	: 02DZ4.7F-Y
D111,414,511-523	: 02DZ6.2F-Y
D301,304	: IMSA-6802-E
D302	: B30-1710-05
D303	: 02DZ9.1F-Z
D401-403,411,500-502	: BAW56W
D404	: UDZS3.3B
D408	: DA204K
D412,413	: UDZS5.6B
D505,506	: 1SR139-400T64

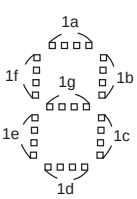
MODEL NAME	DESTINATION	UNIT No.	R202,211,212,301,418,419503	Ⓐ	Ⓖ	Ⓑ	Ⓒ	R220,520	Ⓓ	Ⓔ	R238,314,315	Ⓕ	R243	R244	C301	C343	R245	C408,409	R246	CN2	R247	CN3	R248	CP209	D9,501	R420,421	D106	W2	D412,413	W14	W15	D500	TH1	Q107	R101,111,242
(X34-415x-xx)																																			
DPX-U077	J	0-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX501	K1	0-12	—	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX-MP2090U	M2	0-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX501U/UY	E3/E4	2-72	—	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX-U077	J	0-01	YES	—	—	—	—	YES	—	—	YES	—	YES	—	YES	—	YES	—	—	—	—	—	—	—	YES	YES	YES	—	—	—	—	—	—	—	—
DPX501	K1	0-12	—	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX-MP2090U	M2	0-22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DPX501U/UY	E3/E4	2-72	—	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

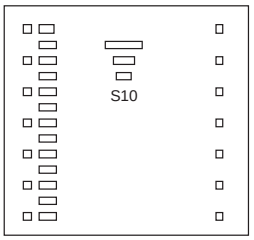
DPX501/501U/501UY
DPX-MP2090U

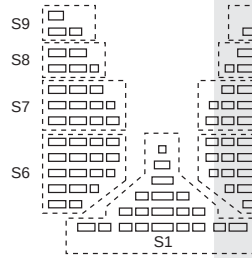


(3G-1G)



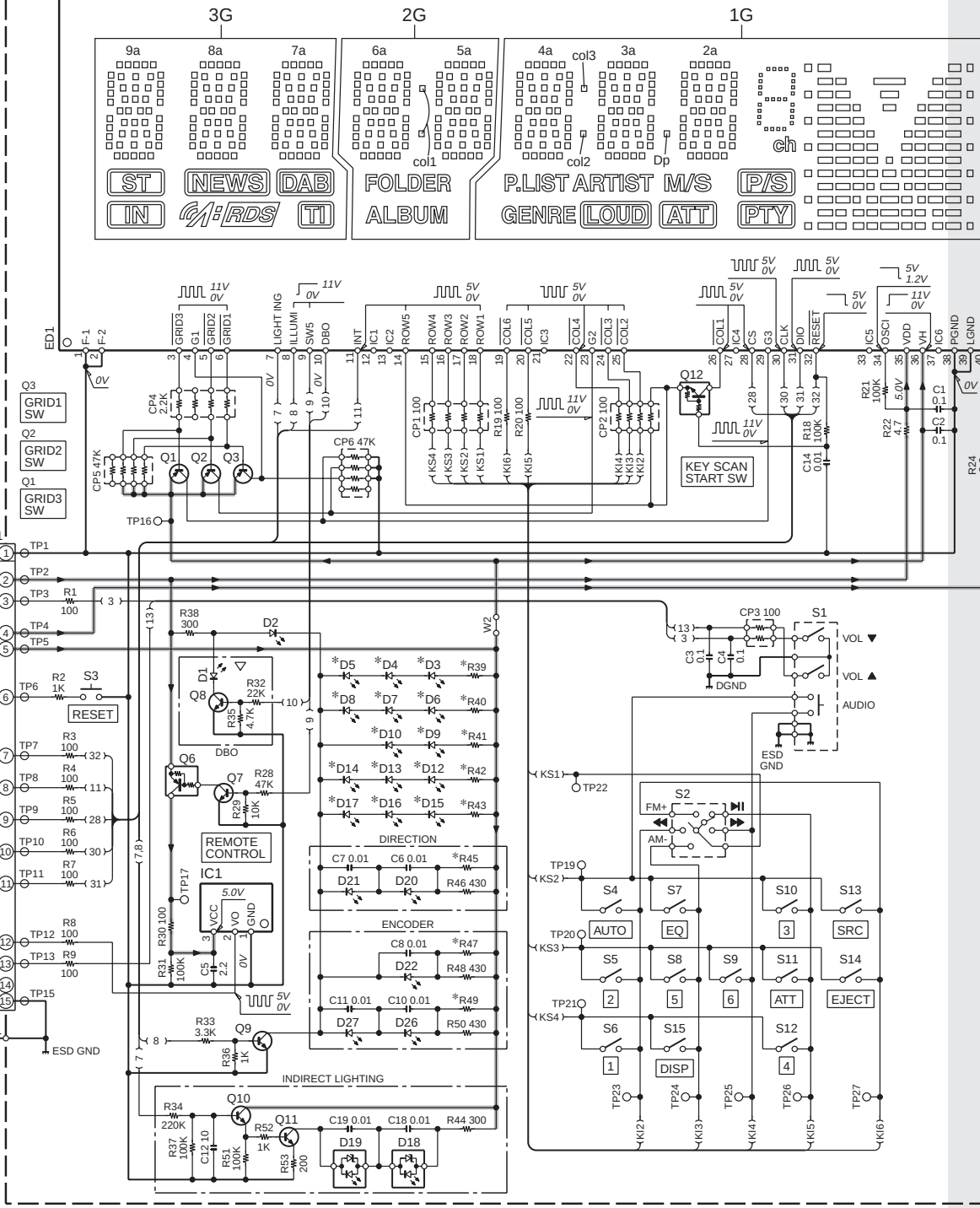
(1G)





(1G)

(X16-353x-xx)



IC1	: PNA4S22M002KW	D1	: B30-1690-05
		D2	: B30-1567-05
Q1-3	: 2SA1774	D3-10,12-17	: *
Q6	: DTA114EUA	D18,19	: B30-1758-05
Q7-11	: 2SC4617	D20-22,26,27	: B30-1731-05
Q12	: DTC144EE		

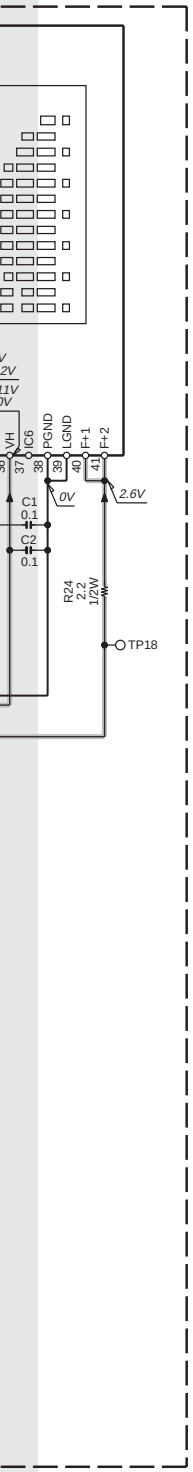
GND LINE
+B LINE

(X16-353x-xx)

MODEL NAME	UNIT No.	D3-10,12-17	R39,40, 42,43	R41	R45, 47,49
DPX-U077 DPX501 DPX501U	0-11	B30-1567-05	620	820	—
DPX501UY DPX-MP2090U	2-71	B30-1690-05	510	680	—

DPX50
DPX-M

DPX501/501U/501UY
DPX-MP2090U

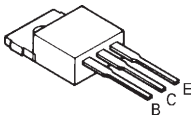


DPX501/501U/501UY
DPX-MP2090U (2/2)

ANODE CONNECTION

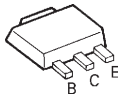
PIN NAME	3G	2G	1G
P1	9a	—	2a
P2	9h	—	2h
P3	9j	—	2j
P4	9k	—	2k
P5	9b	—	2b
P6	9f	—	2f
P7	9m	—	2m
P8	9g	—	2g
P9	9c	—	2c
P10	9e	—	2e
P11	9r	—	2r
P12	9p	—	2p
P13	9n	—	2n
P14	9d	—	2d
P15	8a	6a	4a
P16	7a	5a	3a
P17	8h	6h	4h
P18	7h	5h	3h
P19	8j	6j	4j
P20	7j	5j	3j
P21	8k	6k	4k
P22	7k	5k	3k
P23	8b	6b	4b
P24	7b	5b	3b
P25	8f	6f	4f
P26	7f	5f	3f
P27	8m	6m	4m
P28	7m	5m	3m
P29	8g	6g	4g
P30	7g	5g	3g
P31	8c	6c	4c
P32	7c	5c	3c
P33	8e	6e	4e
P34	7e	5e	3e
P35	8r	6r	4r
P36	7r	5r	3r
P37	8p	6p	4p
P38	7p	5p	3p
P39	8n	6n	4n
P40	7n	5n	3n
P41	8d	6d	4d
P42	7d	5d	3d
P43	—	col1	col2
P44	—	—	col3
P45	—	—	Dp
P46	ST	FOLDER	P.LIST
P47	NEWS	ALBUM	ARTIST
P48	DAB	—	M/S
P49	IN	—	GENRE
P50	RDS	—	LOUD
P51	TI	—	ATT
P52	—	—	1a
P53	—	—	1b
P54	—	—	1f
P55	—	—	1g
P56	—	—	1c
P57	—	—	1e
P58	—	—	1d
P59	—	—	ch
P60	—	—	P/S
P61	—	—	PTY
P62	—	—	S1
P63	—	—	S2
P64	—	—	S3
P65	—	—	S4
P66	—	—	S5
P67	—	—	S6
P68	—	—	S7
P69	—	—	S8
P70	—	—	S9
P71	—	—	S10

2SB1565

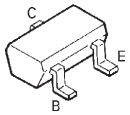


DTA123JK
DTC114YE
DTC114YUA
DTC124EE
DTC143TUA
DTC144EE
2SC4617

2SB1188

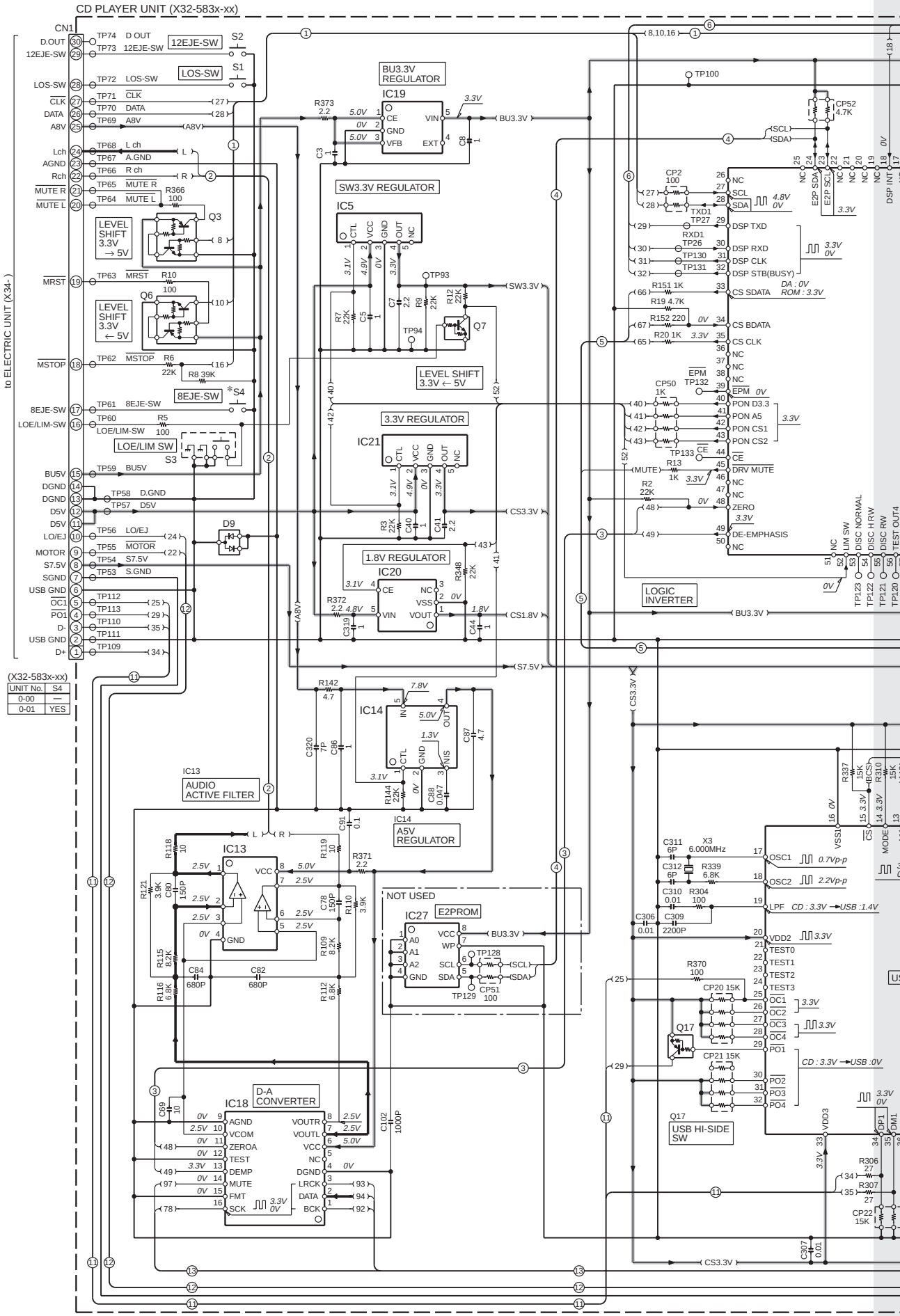


2SA1774
2SC4081

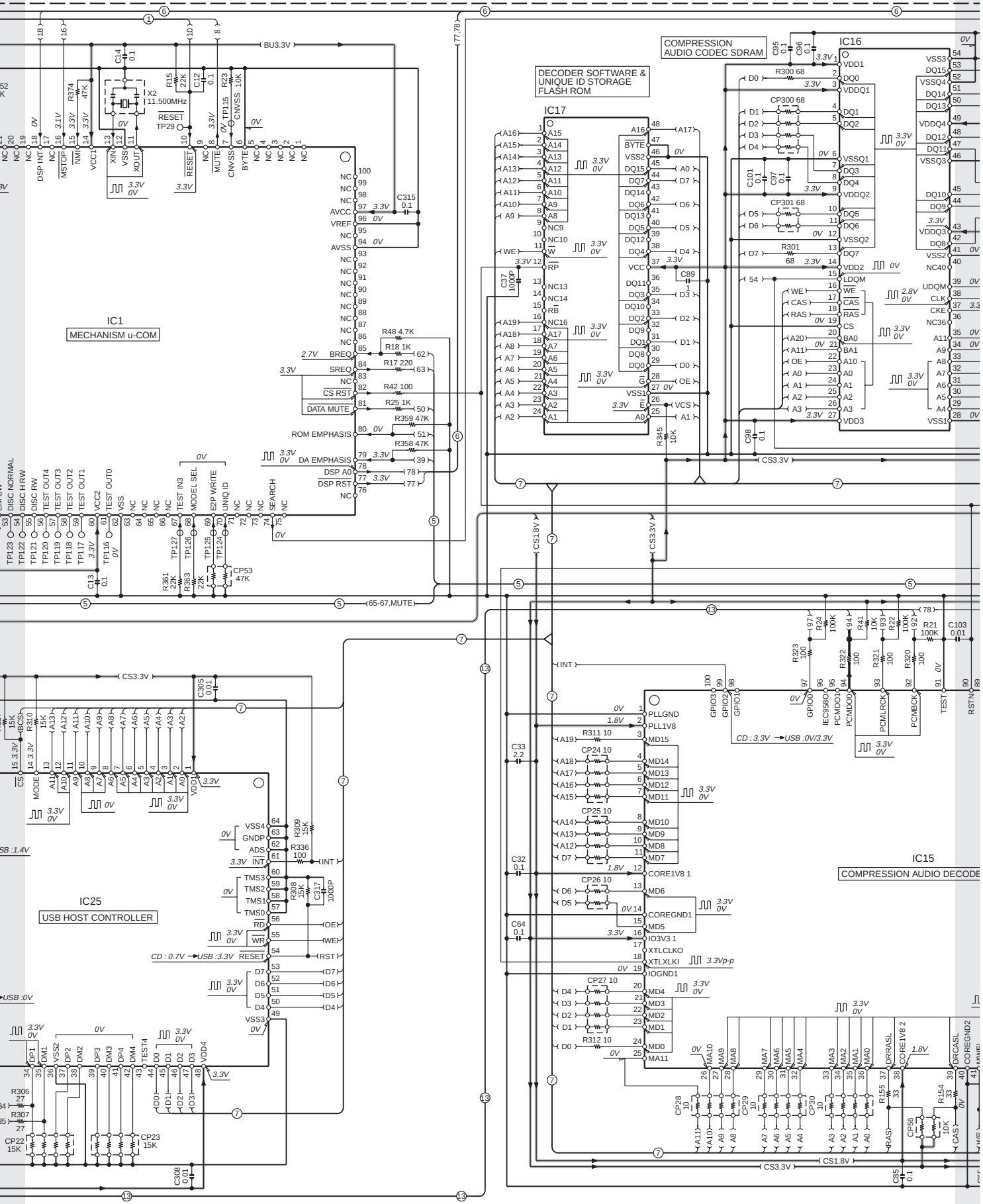


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably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

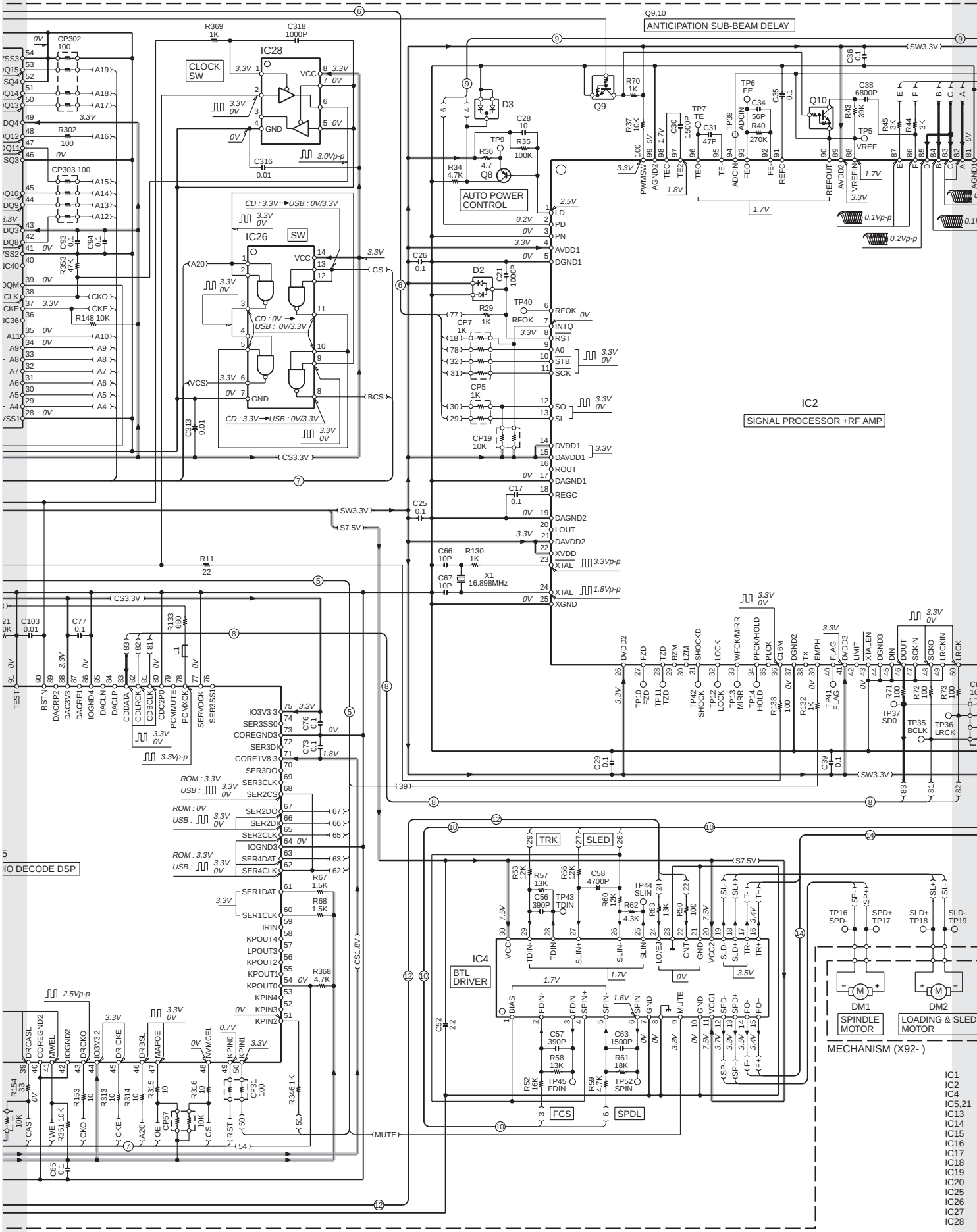
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.


CD PLAYER UNIT (X32-583x-xx)
to ELECTRIC UNIT (X34-)
CN1
12EJE-SW
LOS-SW
8EJE-SW
LOE/LIM SW
LEVEL SHIFT 3.3V → 5V
LEVEL SHIFT 3.3V ← 5V
BU3.3V REGULATOR
SW3.3V REGULATOR
3.3V REGULATOR
1.8V REGULATOR
A5V REGULATOR
LEVEL SHIFT 3.3V ← 5V
AUDIO ACTIVE FILTER
D-A CONVERTER
NOT USED
E2PROM
LOGIC INVERTER
USB HI-SIDE SW
(X32-583x-xx)
UNIT No. S4
0-00 —
0-01 YES

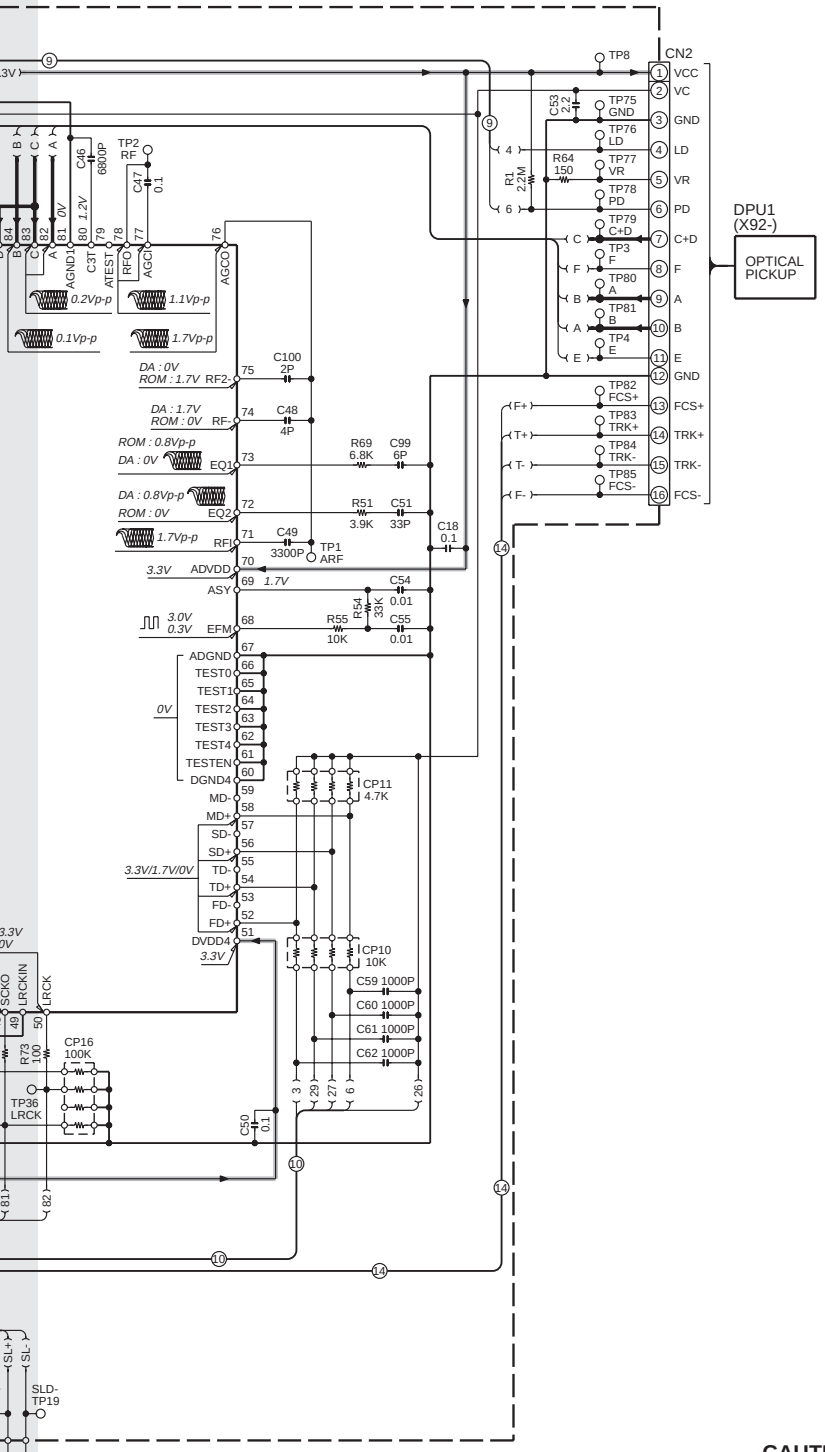
DPX501/501U/501UY
DPX-MP2090U



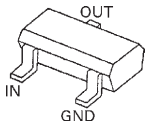
DPX501/501U/501UY
DPX-MP2090U



DPX501/501U/501UY
DPX-MP2090U



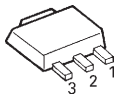
DTA114EUA
DTA124EUA
DTC124EUA
DTC144EUA



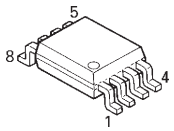
DAN202U

DA204K
DA204U

M5237ML-CF0J



NJM2100V-ZB



IC1 : M30620FCPGP
IC2 : UPD63712GC
IC4 : BA5824FP
IC5,21 : BD33KA5WFP-E2
IC13 : NJM2100V-ZB
IC14 : TAR5S50-F
IC15 : CS7410-IQZ
IC16 : IC42S164007TIG
IC17 : 29LV800CBTI9V1
IC18 : PCM1754DB
IC19 : R1114N331B-TR
IC20 : S-1132B18U5T1G
IC25 : TDUHC1240F0C00
IC26 : TC74LCX00FT-F
IC27 : NOT USED
IC28 : TC7WH125FK-F

Q3 : UMD9N
Q6 : UMD12N
Q7 : DTC124EE
Q8 : 2SB0970
Q9 : DTC114YE
Q10 : DTC114YUA
Q17 : DTA143XUA

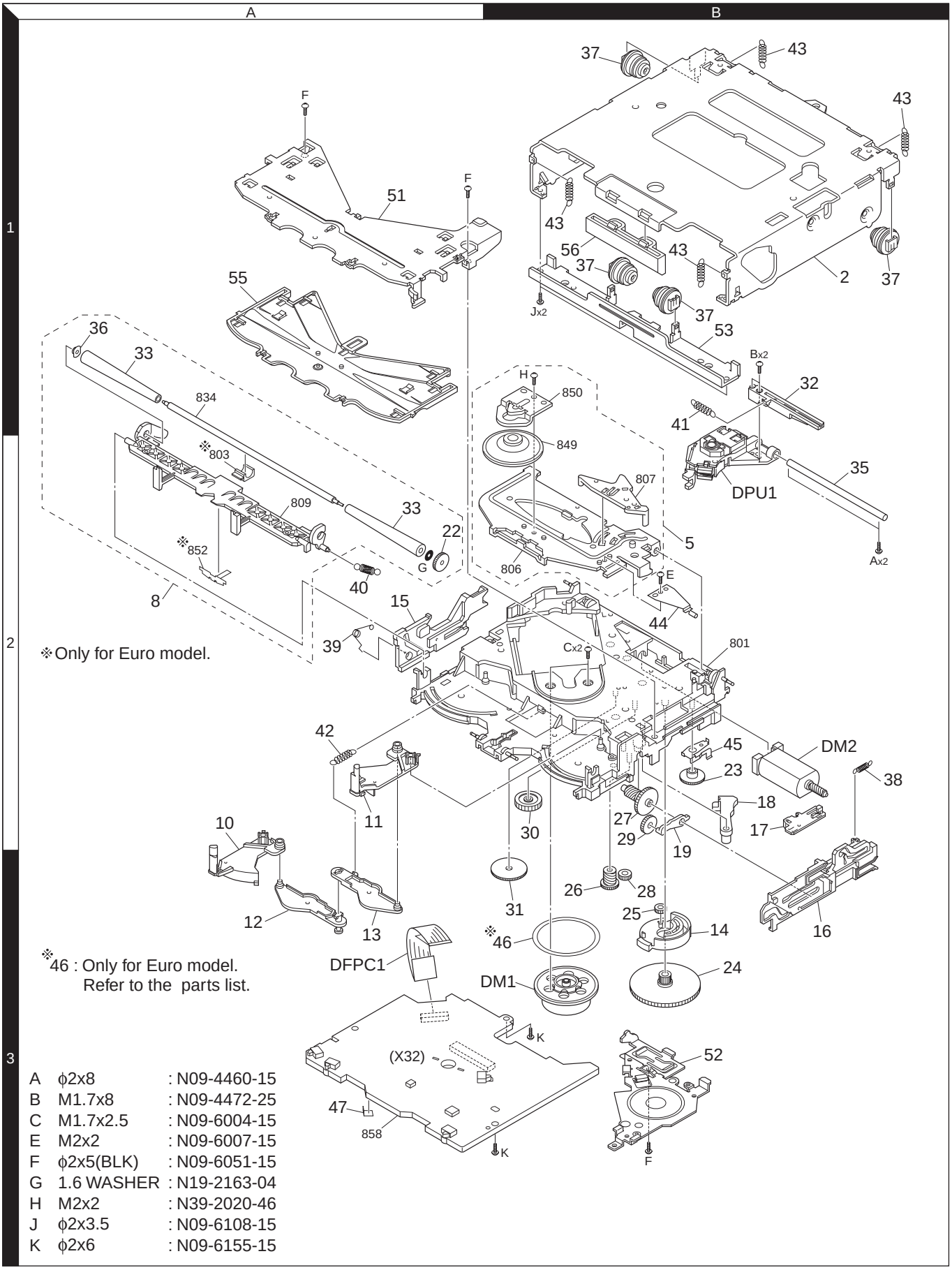
D2,9 : DA204U
D3 : DAN202U

SIGNAL LINE
GND LINE
+B LINE

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.

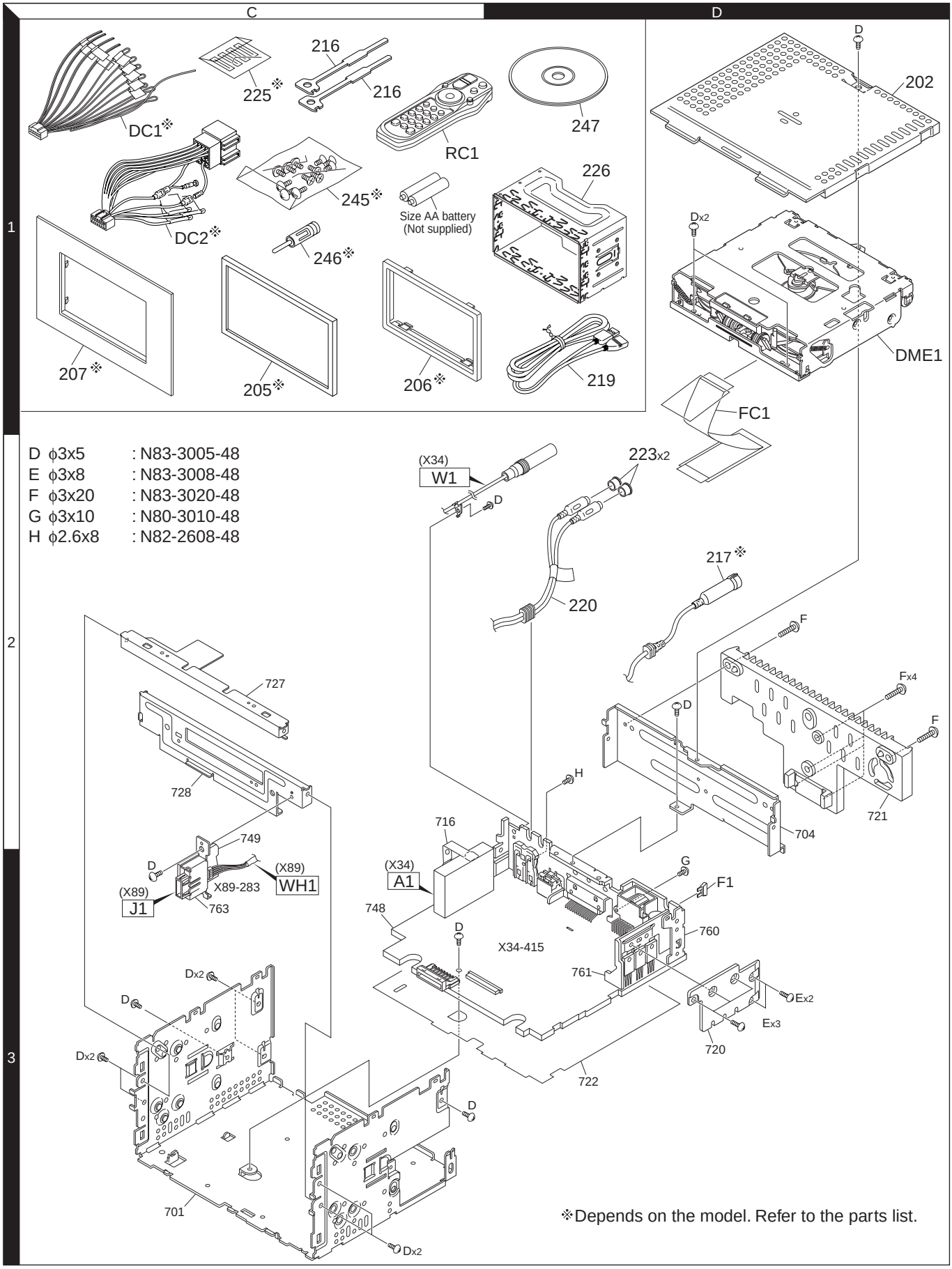
EXPLODED VIEW (CD MECHANISM)



A	ϕ2x8	: N09-4460-15
B	M1.7x8	: N09-4472-25
C	M1.7x2.5	: N09-6004-15
E	M2x2	: N09-6007-15
F	ϕ2x5(BLK)	: N09-6051-15
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-46
J	ϕ2x3.5	: N09-6108-15
K	ϕ2x6	: N09-6155-15

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

EXPLODED VIEW (UNIT)



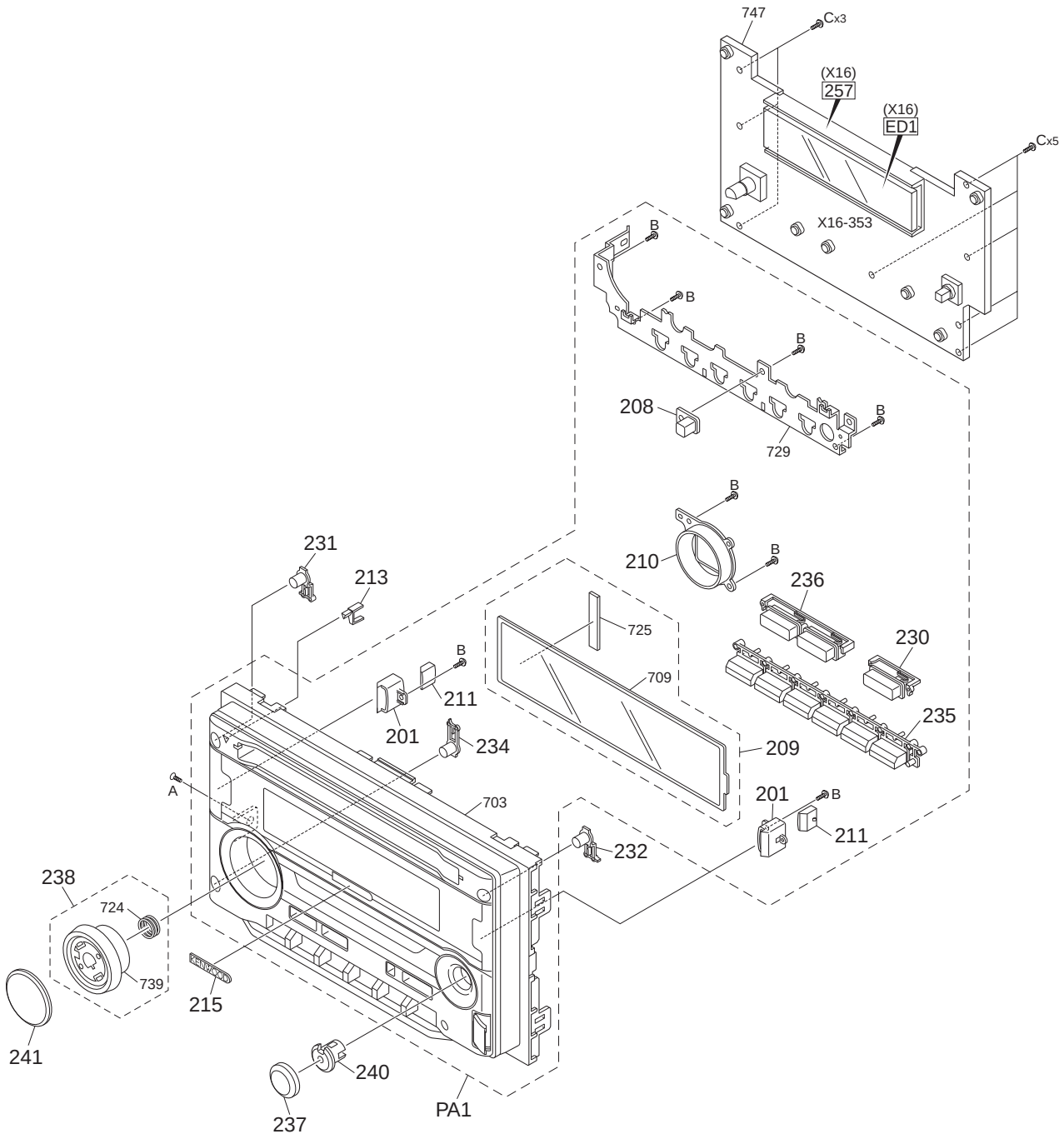
Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (PANEL)

E F

A ϕ2.6x6 : N78-2660-48
B ϕ2x6 : N80-2006-48
C ϕ2x8 : N80-2008-48

1 2 3



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
DPX501/501U/501UY, DPX-MP2090U					
201	2E		A33-0642-03	REFLECTOR	
202	1D	✻	A52-0872-12	TOP PLATE	
PA1	3E	✻	A64-3814-02	PANEL ASSY	K1
PA1	3E	✻	A64-3871-02	PANEL ASSY	E3E4
PA1	3E	✻	A64-3966-02	PANEL ASSY	M2
RC1	1C		A70-2067-15	REMOTE CONTROLLER ASSY (RC-527)	K1M2
-			B46-0612-14	ID CARD	E3E4
-			B46-0682-00	WARRANTY CARD	K1E3M2
-			B59-1850-00	SUB-INSTRUCTION MANUAL	
-		✻	B64-3396-00	INSTRUCTION MANUAL (ENGLISH)	K1
-		✻	B64-3397-00	INSTRUCTION MANUAL (FRENCH)	K1
-		✻	B64-3398-00	INSTRUCTION MANUAL (SPANISH)	K1
-		✻	B64-3402-00	INSTRUCTION MANUAL (ENGLISH)	E3E4
-		✻	B64-3403-00	INSTRUCTION MANUAL (FRENCH)	E3
-		✻	B64-3404-00	INSTRUCTION MANUAL (GERMAN)	E3
-		✻	B64-3405-00	INSTRUCTION MANUAL (DUTCH)	E3
-		✻	B64-3406-00	INSTRUCTION MANUAL (ITALIAN)	E3
-		✻	B64-3407-00	INSTRUCTION MANUAL (SPANISH)	E3
-		✻	B64-3408-00	INSTRUCTION MANUAL (PORTUGUESE)	E3
-		✻	B64-3409-00	INSTRUCTION MANUAL (RUSSIAN)	E4
-		✻	B64-3433-00	INSTRUCTION MANUAL (ENGLISH)	M2
-		✻	B64-3434-00	INSTRUCTION MANUAL (T-CHI.KOR)	M2
205	1C		B07-3046-04	ESCUTCHEON ASSY	M2
206	1C		B07-3165-02	ESCUTCHEON	K1E3E4
207	1C		B07-3172-12	ESCUTCHEON	K1E3E4
208	2F		B10-4811-03	FRONT GLASS	
209	2F	✻	B10-4809-03	FRONT GLASS ASSY	
210	2F		B19-2368-03	LIGHTING BOARD	
211	2E		B19-2370-04	LIGHTING BOARD	
213	2E		B19-2373-03	LIGHTING BOARD	
215	3E		B43-1535-04	BADGE	
216	1C		D10-4589-04	LEVER	K1E3E4
217	2D		E30-6420-05	CORD WITH DIN CONNECTOR	E3E4
219	1D	✻	E30-6535-05	CORD WITH CONNECTOR (USB)	
220	2D		E30-6291-15	CORD WITH PINPLUG	
⚠ DC1	1C		E30-6408-05	DC CORD	M2
⚠ DC1	1C		E30-6414-05	DC CORD	K1
⚠ DC2	1C		E30-6412-05	DC CORD	E3E4
FC1	1D	✻	E39-0812-05	FLAT CABLE	
223	2D		F29-0626-04	INSULATING COVER	
⚠ F1	3D		F52-0006-05	FUSE (MINI BLADE TYPE) 10A	
-			H10-4970-02	POLYSTYRENE FOAMED FIXTURE	M2
-			H10-4971-02	POLYSTYRENE FOAMED FIXTURE	K1E3E4
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1164-04	PROTECTION BAG (0.5X350X480)	
-			H25-1170-04	PROTECTION BAG	M2
-		✻	H54-3663-03	ITEM CARTON CASE	K1
-		✻	H54-3668-03	ITEM CARTON CASE	E3
-		✻	H54-3669-03	ITEM CARTON CASE	E4
-		✻	H54-3803-03	ITEM CARTON CASE	M2
225	1D		H30-0595-04	ADHESIVE DOUBLE-COATED TAPE	K1E3E4
226	1D	✻	J22-0429-13	MOUNTING HARDWARE ASSY	K1E3E4
230	2F		K24-4445-03	PUSH KNOB (SRC)	
231	2E		K24-4448-03	PUSH KNOB (DISP)	
232	3F		K24-4450-03	PUSH KNOB (EJECT)	
234	2E		K24-4454-03	PUSH KNOB (ATT)	
235	3F		K25-1787-02	PUSH KNOB (PRESET)	
236	2F		K25-1801-03	PUSH KNOB (AUTO)	K1M2
236	2F	✻	K25-1820-03	PUSH KNOB (TI)	E3E4
237	3E		K28-0106-03	KEY TOP (CONTROL)	
238	3E		K29-7195-03	KNOB ASSY (VOL)	
240	3E		K29-7197-03	KNOB BASE (CONTROL)	
241	3E		K29-7198-03	KEY TOP (VOL)	
245	1C		N99-1779-05	SCREW SET	K1M2
A	3E		N78-2660-48	PAN HEAD TAPTITE SCREW	
B	2F		N80-2006-48	PAN HEAD TAPTITE SCREW	
C	1F		N80-2008-48	PAN HEAD TAPTITE SCREW	
D	3C		N83-3005-48	PAN HEAD TAPTITE SCREW	
E	3D		N83-3008-48	PAN HEAD TAPTITE SCREW	
F	2D		N83-3020-48	PAN HEAD TAPTITE SCREW	
246	1C		T90-0523-05	ANTENNA ADAPTOR	E3E4
247	1C		W01-1673-05	COMPACT DISC	K1M2
247	1C		W01-1674-05	COMPACT DISC	E3E4
DME1	1D		X92-5440-00	CD MECHANISM ASSY (DXM-6810W)	K1M2
DME1	1D		X92-5440-04	CD MECHANISM ASSY (DXM-6814W)	E3E4

SWITCH UNIT (X16-353x-xx)

D1			B30-1690-05	LED (1608,YG)				
D2			B30-1567-05	LED (1608,RED)				E4M2
D2-10			B30-1567-05	LED (1608,RED)				K1E3
D3-10			B30-1690-05	LED (1608,YG)				E4M2
D12-17			B30-1567-05	LED (1608,RED)				K1E3
D12-17			B30-1690-05	LED (1608,YG)				E4M2
D18,19			B30-1758-05	LED (1608,BLUE RANK)				
D20-22			B30-1731-05	LED (1608,BLUE)				
D26,27			B30-1731-05	LED 1608,BLUE)				
C1-4			CK73GB1H104K	CHIP C	0.10UF	K		
C5			CK73FB1A225K	CHIP C	2.2UF	K		
C6-8			CK73GB1H103K	CHIP C	0.010UF	K		
C10,11			CK73GB1H103K	CHIP C	0.010UF	K		
C12			CK73FB0J106K	CHIP C	10UF	K		
C14			CK73GB1H103K	CHIP C	0.010UF	K		
C18,19			CK73GB1H103K	CHIP C	0.010UF	K		
J1			E59-0851-05	RECTANGULAR PLUG				
257	1F	✻	J19-7119-12	HOLDER				
CP1,2			RK74GB1J101J	CHIP-COM	100	J	1/16W	
CP3			RK74GA1J101J	CHIP-COM	100	J	1/16W	
CP4			RK74GB1J222J	CHIP-COM	2.2K	J	1/16W	
CP5,6			RK74GB1J473J	CHIP-COM	47K	J	1/16W	
R1			RK73EB2E101J	CHIP R	100	J	1/4W	
R2			RK73EB2E102J	CHIP R	1.0K	J	1/4W	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

SWITCH UNIT (X16-353x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R3-9			RK73EB2E101J	CHIP R 100 J 1/4W	
R18			RK73GB2A104J	CHIP R 100K J 1/10W	
R19,20			RK73GB2A101J	CHIP R 100 J 1/10W	
R21			RK73GB2A104J	CHIP R 100K J 1/10W	
R22			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R24			RK73PB2H2R2J	CHIP R 2.2 J 1/2W	
R28			RK73GB2A473J	CHIP R 47K J 1/10W	
R29			RK73GB2A103J	CHIP R 10K J 1/10W	
R30			RK73GB2A101J	CHIP R 100 J 1/10W	
R31			RK73GB2A104J	CHIP R 100K J 1/10W	
R32			RK73GB2A223J	CHIP R 22K J 1/10W	
R33			RK73GB2A332J	CHIP R 3.3K J 1/10W	
R34			RK73GB2A224J	CHIP R 220K J 1/10W	
R35			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R36			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R37			RK73GB2A104J	CHIP R 100K J 1/10W	
R38			RK73GB2A301J	CHIP R 300 J 1/10W	
R39,40			RK73FB2B511J	CHIP R 510 J 1/8W	E4M2
R39,40			RK73FB2B621J	CHIP R 620 J 1/8W	K1E3
R41			RK73EB2E681J	CHIP R 680 J 1/4W	E4M2
R41			RK73EB2E821J	CHIP R 820 J 1/4W	K1E3
R42,43			RK73FB2B511J	CHIP R 510 J 1/8W	E4M2
R42,43			RK73FB2B621J	CHIP R 620 J 1/8W	K1E3
R44			RK73FB2B301J	CHIP R 300 J 1/8W	
R46			RK73FB2B431J	CHIP R 430 J 1/8W	
R48			RK73FB2B431J	CHIP R 430 J 1/8W	
R50			RK73FB2B431J	CHIP R 430 J 1/8W	
R51			RK73GB2A104J	CHIP R 100K J 1/10W	
R52			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R53			RK73FB2B201J	CHIP R 200 J 1/8W	
W2			R92-1252-05	CHIP R 0 OHM J 1/16W	
S2			S70-0106-05	TACT SWITCH	
S3,4			S70-0051-15	TACT SWITCH	
S5,6			S70-0901-05	TACT SWITCH	
S7			S70-0051-15	TACT SWITCH	
S8-10			S70-0901-05	TACT SWITCH	
S11			S70-0051-15	TACT SWITCH	
S12			S70-0901-05	TACT SWITCH	
S13-15			S70-0051-15	TACT SWITCH	
S1			T99-0457-15	ROTARY ENCODER	
ED1			3-BT-235INK	FLUORESCENT INDICATOR TUBE	
IC1			PNA4S22M02KW	ANALOGUE IC	
Q1-3			2SA1774	TRANSISTOR	
Q6			DTA114EUA	DIGITAL TRANSISTOR	
Q7-11			2SC4617	TRANSISTOR	
Q12			DTC144EE	DIGITAL TRANSISTOR	

CD PLAYER UNIT (X32-5830-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C3			CK73GB1A105K	CHIP C 1.0UF K	
C5			CK73GB1A105K	CHIP C 1.0UF K	
C7			CK73GB0J225K	CHIP C 2.2UF K	
C8			CK73GB1A105K	CHIP C 1.0UF K	
C12-14			CK73GB1H104K	CHIP C 0.10UF K	
C17,18			CK73GB1H104K	CHIP C 0.10UF K	
C21			CK73GB1H102K	CHIP C 1000PF K	
C25,26			CK73GB1H104K	CHIP C 0.10UF K	
C28			CK73FB0J106K	CHIP C 10UF K	
C29			CK73GB1H104K	CHIP C 0.10UF K	
C30			CK73GB1H152K	CHIP C 1500PF K	
C31			CC73GCH1H470J	CHIP C 47PF J	
C32			CK73GB1H104K	CHIP C 0.10UF K	
C33			CK73GB0J225K	CHIP C 2.2UF K	
C34			CC73GCH1H560J	CHIP C 56PF J	
C35,36			CK73GB1H104K	CHIP C 0.10UF K	
C37			CK73GB1H102K	CHIP C 1000PF K	
C38			CK73GB1H682K	CHIP C 6800PF K	
C39			CK73GB1H104K	CHIP C 0.10UF K	
C40			CK73GB1A105K	CHIP C 1.0UF K	
C41			CK73GB0J225K	CHIP C 2.2UF K	
C44			CK73GB1A105K	CHIP C 1.0UF K	
C46			CK73GB1H682K	CHIP C 6800PF K	
C47			CK73GB1H104K	CHIP C 0.10UF K	
C48			CC73GCH1H040C	CHIP C 4.0PF C	
C49			CK73GB1H332K	CHIP C 3300PF K	
C50			CK73GB1H104K	CHIP C 0.10UF K	
C51			CC73GCH1H330J	CHIP C 33PF J	
C52			CK73FB1A225K	CHIP C 2.2UF K	
C53			CK73GB0J225K	CHIP C 2.2UF K	
C54,55			CK73GB1H103K	CHIP C 0.010UF K	
C56,57			CC73GCH1H391J	CHIP C 390PF J	
C58			CK73GB1H472K	CHIP C 4700PF K	
C59-62			CK73GB1H102K	CHIP C 1000PF K	
C63			CK73GB1H152K	CHIP C 1500PF K	
C64,65			CK73GB1H104K	CHIP C 0.10UF K	
C66,67			CC73GCH1H100D	CHIP C 10PF D	
C69			CK73FB0J106K	CHIP C 10UF K	
C73			CK73GB1H104K	CHIP C 0.10UF K	
C76,77			CK73GB1H104K	CHIP C 0.10UF K	
C78			CC73GCH1H151J	CHIP C 150PF J	
C80			CC73GCH1H151J	CHIP C 150PF J	
C82			CC73GCH1H681J	CHIP C 680PF J	
C84			CC73GCH1H681J	CHIP C 680PF J	
C85			CK73GB1H104K	CHIP C 0.10UF K	
C86			CK73GB1A105K	CHIP C 1.0UF K	
C87			CK73GB0J475K	CHIP C 4.7UF K	
C88			CK73GB1H473K	CHIP C 0.047UF K	
C89			CK73GB1A105K	CHIP C 1.0UF K	
C91			CK73GB1H104K	CHIP C 0.10UF K	
C93-98			CK73GB1H104K	CHIP C 0.10UF K	
C99			CC73GCH1H060D	CHIP C 6.0PF D	
C100			CC73GCH1H020C	CHIP C 2.0PF C	
C101			CK73GB1H104K	CHIP C 0.10UF K	
C102			CK73GB1H102K	CHIP C 1000PF K	
C103			CK73GB1H103K	CHIP C 0.010UF K	
C305-308			CK73GB1H103K	CHIP C 0.010UF K	
C309			CK73GB1H222K	CHIP C 2200PF K	
C310			CK73GB1H103K	CHIP C 0.010UF K	
C311,312			CC73GCH1H060D	CHIP C 6.0PF D	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

CD PLAYER UNIT (X32-5830-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C313			CK73GB1H103K	CHIP C 0.010UF K	
C315			CK73GB1H104K	CHIP C 0.10UF K	
C316			CK73GB1H103K	CHIP C 0.010UF K	
C317,318			CK73GB1H102K	CHIP C 1000PF K	
C319			CK73GB1A105K	CHIP C 1.0UF K	
C320			CC73GCH1H070D	CHIP C 7.0PF D	
CN1			E41-2630-05	FLAT CABLE CONNECTOR	
CN2			E41-2612-05	FLAT CABLE CONNECTOR	
L1			L92-0615-05	CHIP FERRITE	
X1			L77-2863-05	CRYSTAL RESONATOR (16.899M)	
X2			L78-1215-05	RESONATOR (11.500MHZ)	
X3			L77-2923-05	CRYSTAL RESONATOR (6.000MHZ,LF)	
CP2			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP5			RK74GA1J102J	CHIP-COM 1.0K J 1/16W	
CP7			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP10			RK74HB1J103J	CHIP-COM 10K J 1/16W	
CP11			RK74HB1J472J	CHIP-COM 4.7K J 1/16W	
CP16			RK74HB1J104J	CHIP-COM 100K J 1/16W	
CP19			RK74GA1J103J	CHIP-COM 10K J 1/16W	
CP20-23			RK74HB1J153J	CHIP-COM 15K J 1/16W	
CP24,25			RK74HB1J100J	CHIP-COM 10 J 1/16W	
CP26			RK74GA1J100J	CHIP-COM 10 J 1/16W	
CP27-30			RK74HB1J100J	CHIP-COM 10 J 1/16W	
CP31			RK74GA1J101J	CHIP-COM 100 J 1/16W	
CP50			RK74HB1J102J	CHIP-COM 1.0K J 1/16W	
CP52			RK74GA1J472J	CHIP-COM 4.7K J 1/16W	
CP53			RK74GA1J473J	CHIP-COM 47K J 1/16W	
CP56,57			RK74GA1J103J	CHIP-COM 10K J 1/16W	
CP300			RK74HB1J680J	CHIP-COM 68 J 1/16W	
CP301			RK74GA1J680J	CHIP-COM 68 J 1/16W	
CP302,303			RK74HB1J101J	CHIP-COM 100 J 1/16W	
R1			RK73GB2A225J	CHIP R 2.2M J 1/10W	
R2,3			RK73GB2A223J	CHIP R 22K J 1/10W	
R5			RK73GB2A101J	CHIP R 100 J 1/10W	
R6			RK73GH2A223D	CHIP R 22K D 1/10W	
R7			RK73GB2A223J	CHIP R 22K J 1/10W	
R8			RK73GH2A393D	CHIP R 39K D 1/10W	
R9			RK73GB2A223J	CHIP R 22K J 1/10W	
R10			RK73GB2A101J	CHIP R 100 J 1/10W	
R11			RK73GB2A220J	CHIP R 22 J 1/10W	
R12			RK73GB2A223J	CHIP R 22K J 1/10W	
R13			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R15			RK73GB2A223J	CHIP R 22K J 1/10W	
R17			RK73GB2A221J	CHIP R 220 J 1/10W	
R18			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R19			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R20			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R21,22			RK73GB2A104J	CHIP R 100K J 1/10W	
R23			RK73GB2A103J	CHIP R 10K J 1/10W	
R24			RK73GB2A104J	CHIP R 100K J 1/10W	
R25			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R29			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R34			RK73GB2A472J	CHIP R 4.7K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R35			RK73GB2A104J	CHIP R 100K J 1/10W	
R36			RK73FB2B4R7J	CHIP R 4.7 J 1/8W	
R37			RK73GB2A103J	CHIP R 10K J 1/10W	
R40			RK73GB2A274J	CHIP R 270K J 1/10W	
R41			RK73GB2A103J	CHIP R 10K J 1/10W	
R42			RK73GB2A101J	CHIP R 100 J 1/10W	
R43			RK73GB2A393J	CHIP R 39K J 1/10W	
R44,45			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R48			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R50			RK73GB2A101J	CHIP R 100 J 1/10W	
R51			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R52			RK73GB2A163J	CHIP R 16K J 1/10W	
R53			RK73GB2A123J	CHIP R 12K J 1/10W	
R54			RK73GB2A333J	CHIP R 33K J 1/10W	
R55			RK73GB2A103J	CHIP R 10K J 1/10W	
R56			RK73GB2A123J	CHIP R 12K J 1/10W	
R57,58			RK73GB2A133J	CHIP R 13K J 1/10W	
R59			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R60			RK73GB2A123J	CHIP R 12K J 1/10W	
R61			RK73GB2A183J	CHIP R 18K J 1/10W	
R62			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R63			RK73GB2A133J	CHIP R 13K J 1/10W	
R64			RK73GB2A151J	CHIP R 150 J 1/10W	
R67,68			RK73GB2A152J	CHIP R 1.5K J 1/10W	
R69			RK73GB2A682J	CHIP R 6.8K J 1/10W	
R70			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R71-73			RK73GB2A101J	CHIP R 100 J 1/10W	
R109			RK73GH2A822D	CHIP R 8.2K D 1/10W	
R110			RK73GH2A392D	CHIP R 3.9K D 1/10W	
R112			RK73GH2A682D	CHIP R 6.8K D 1/10W	
R115			RK73GH2A822D	CHIP R 8.2K D 1/10W	
R116			RK73GH2A682D	CHIP R 6.8K D 1/10W	
R118,119			RK73GH2A100D	CHIP R 10 D 1/10W	
R121			RK73GH2A392D	CHIP R 3.9K D 1/10W	
R130			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R132			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R133			RK73GB2A681J	CHIP R 680 J 1/10W	
R138			RK73GB2A101J	CHIP R 100 J 1/10W	
R142			RK73FB2B4R7J	CHIP R 4.7 J 1/8W	
R144			RK73GB2A223J	CHIP R 22K J 1/10W	
R148			RK73GB2A103J	CHIP R 10K J 1/10W	
R151			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R152			RK73GB2A221J	CHIP R 220 J 1/10W	
R153			RK73GB2A100J	CHIP R 10 J 1/10W	
R154,155			RK73GB2A330J	CHIP R 33 J 1/10W	
R300,301			RK73GB2A680J	CHIP R 68 J 1/10W	
R302			RK73GB2A101J	CHIP R 100 J 1/10W	
R304			RK73GB2A101J	CHIP R 100 J 1/10W	
R306,307			RK73GB2A270J	CHIP R 27 J 1/10W	
R308-310			RK73GB2A153J	CHIP R 15K J 1/10W	
R311-316			RK73GB2A100J	CHIP R 10 J 1/10W	
R320-323			RK73GB2A101J	CHIP R 100 J 1/10W	
R336			RK73GB2A101J	CHIP R 100 J 1/10W	
R337			RK73GB2A153J	CHIP R 15K J 1/10W	
R339			RK73GB2A682J	CHIP R 6.8K J 1/10W	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

CD PLAYER UNIT (X32-5830-00)

Ref. No.	Add	New	Parts No.	Description	Destination
R345			RK73GB2A103J	CHIP R 10K J 1/10W	
R346			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R348			RK73GB2A223J	CHIP R 22K J 1/10W	
R351			RK73GB2A103J	CHIP R 10K J 1/10W	
R353			RK73GB2A473J	CHIP R 47K J 1/10W	
R358,359			RK73GB2A473J	CHIP R 47K J 1/10W	
R361			RK73GB2A223J	CHIP R 22K J 1/10W	
R363			RK73GB2A223J	CHIP R 22K J 1/10W	
R366			RK73GB2A101J	CHIP R 100 J 1/10W	
R368			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R369			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R370			RK73GB2A101J	CHIP R 100 J 1/10W	
R371			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
R372,373			RK73FB2B2R2J	CHIP R 2.2 J 1/8W	
R374			RK73GB2A473J	CHIP R 47K J 1/10W	
S1,2			S68-0863-05	PUSH SWITCH	
S3			S68-0862-05	PUSH SWITCH	
D2			DA204U	DIODE	
D3			DAN202U	DIODE	
D9			DA204U	DIODE	
IC1			M30620FCPGP	MICROCONTROLLER IC	
IC2			UPD63712GC	MOS-IC	
IC4			BA5824FP	ANALOGUE IC	
IC5			BD33KA5WFP-E2	ANALOGUE IC	
IC13			NJM2100V-ZB	ANALOGUE IC	
IC14			TAR5S50-F	ANALOGUE IC	
IC15			CS7410-IQZ	MOS-IC	
IC16			IC42S164007TIG	DRAM IC	
IC17			29LV800CBTI9V1	ROM IC	
IC18			PCM1754DB	MOS-IC	
IC19			R1114N331B-TR	ANALOGUE IC (3.3V LF)	
IC20			S-1132B18U5T1G	ANALOGUE IC	
IC21			BD33KA5WFP-E2	ANALOGUE IC	
IC25			TDUHC1240F0C00	MOS-IC	
IC26			TC74LCX00FT-F	MOS-IC	
IC28			TC7WH125FK-F	MOS-IC	
Q3			UMD9N	TRANSISTOR	
Q6			UMD12N	TRANSISTOR	
Q7			DTC124EE	DIGITAL TRANSISTOR	
Q8			2SB0970	TRANSISTOR	
Q9			DTC114YE	DIGITAL TRANSISTOR	
Q10			DTC114YUA	DIGITAL TRANSISTOR	
Q17			DTA143XUA	DIGITAL TRANSISTOR	

ELECTRIC UNIT (X34-415x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C1			C90-6746-05	ELECTRO 3300UF 16WV	
C2			CC73GCH1H070D	CHIP C 7.0PF D	
C3			C90-5692-05	ELECTRO 220UF 16WV	
C5			CD04AS1V100M	ELECTRO 10UF 35WV	
C6			CD04AS0J101M	ELECTRO 100UF 6.3WV	
C7			CK73FB1C105K	CHIP C 1.0UF K	
C8			CD04AT1A221M	ELECTRO 220UF 10WV	
C9			CD04BA1C101M	ELECTRO 100UF 16WV	
C10			CK73EB1E105K	CHIP C 1.0UF K	
C11			CD04AS1HR47M	ELECTRO 0.47UF 50WV	
C12			CD04BF1V470M	ELECTRO 47UF 35WV	
C13			CK73GB1H104K	CHIP C 0.10UF K	
C18			CD04BF1E101M	ELECTRO 100UF 25WV	
C20			CD04BK1A221M	ELECTRO 220UF 10WV	
C24			CK73GB1A334K	CHIP C 0.33UF K	
C25		*	CD04BA0J220M	ELECTRO 22UF 6.3WV	
C40,41			CC73GCH1H070D	CHIP C 7.0PF D	
C45			CK73GB1H104K	CHIP C 0.10UF K	
C50			CK73GB1H104K	CHIP C 0.10UF K	
C51			CD04BK1A221M	ELECTRO 220UF 10WV	
C53			CK73GB1H104K	CHIP C 0.10UF K	
C101			CD04AS1H3R3M	ELECTRO 3.3UF 50WV	
C102			CK73GB1A105K	CHIP C 1.0UF K	
C103			CK73GB1H104K	CHIP C 0.10UF K	
C104			CK73GB1H103K	CHIP C 0.010UF K	
C105			CK73GB1H223K	CHIP C 0.022UF K	
C106			CK73GB1A105K	CHIP C 1.0UF K	
C109-111			CK73GB1H103K	CHIP C 0.010UF K	
C201			CD04AS0J470M	ELECTRO 47UF 6.3WV	
C202			CK73GB1H103K	CHIP C 0.010UF K	
C203,204			CC73GCH1H220J	CHIP C 22PF J	
C205			CK73GB1H104K	CHIP C 0.10UF K	
C206,207			CK73GB1H103K	CHIP C 0.010UF K	
C208			CK73GB1H102K	CHIP C 1000PF K	
C209			CK73GB1H103K	CHIP C 0.010UF K	
C210,211			CK73GB1H471K	CHIP C 470PF K	
C302			CK73GB1H103K	CHIP C 0.010UF K	
C304,305			CK73GB1H103K	CHIP C 0.010UF K	
C306			CD04AS1V100M	ELECTRO 10UF 35WV	
C307			CK73GB1H103K	CHIP C 0.010UF K	
C308			CD04AS1V100M	ELECTRO 10UF 35WV	
C309			CK73GB1H103K	CHIP C 0.010UF K	
C310			CD04BF1V470M	ELECTRO 47UF 35WV	
C311			CK73GB1H103K	CHIP C 0.010UF K	
C312			CD04BK1C101M	ELECTRO 100UF 16WV	
C313			CD04AS1V100M	ELECTRO 10UF 35WV	
C343			CK73GB1H104K	CHIP C 0.10UF K	
C347			CK73GB1H102K	CHIP C 1000PF K	
C350			CC73GCH1H331J	CHIP C 330PF J	K1E3E4
C351			CK73GB1H103K	CHIP C 0.010UF K	K1E3E4
C352			CK73GB0J225K	CHIP C 2.2UF K	K1E3E4
C353			CD04AS1V100M	ELECTRO 10UF 35WV	K1E3E4
C354,355			CC73GCH1H120J	CHIP C 12PF J	K1E3E4
C401			CD04AS1C470M	ELECTRO 47UF 16WV	
C402,403			CD04AS1H010M	ELECTRO 1UF 50WV	
C404			CK73GB1A105K	CHIP C 1.0UF K	
C406,407			CK73FB1A335K	CHIP C 3.3UF K	
C408,409			CK73FB1C105K	CHIP C 1.0UF K	
C411			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C413,414			CK73FB1E474K	CHIP C 0.47UF K	
C415,416			CD04AS1H2R2M	ELECTRO 2.2UF 50WV	
C417-420			CD04AS1V100M	ELECTRO 10UF 35WV	
C423,424			CC73GCH1H070D	CHIP C 7.0PF D	
C426,427			CK73FB1E474K	CHIP C 0.47UF K	
C428			CD04AS0J470M	ELECTRO 47UF 6.3WV	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-415x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
C429			CK73GB1H103K	CHIP C 0.010UF K	
C431			CD04AS1V100M	ELECTRO 10UF 35WV	
C440			CC73GCH1H070D	CHIP C 7.0PF D	
C501			CK73FB1C105K	CHIP C 1.0UF K	
C503-506			C90-6779-05	ELECTRO 0.47UF 16WV	
C507			CK73FB1C105K	CHIP C 1.0UF K	
C510,511			CK73FB1E474K	CHIP C 0.47UF K	
C512			CD04AS0J470M	ELECTRO 47UF 6.3WV	
C513			CK73GB1H103K	CHIP C 0.010UF K	
C529,530			C90-6711-05	ELECTRO 1UF 50WV	
C802			CK73GB1H102K	CHIP C 1000PF K	
C999			CD04BM1E330M	ELECTRO 33UF 25WV	
CN1			E41-2629-05	FLAT CABLE CONNECTOR	
CN3			E41-0930-05	PIN ASSY	
CN4			E41-2446-05	PIN ASSY	
CN5			E41-0944-05	PIN ASSY	E3E4
⚠ J1			E58-0991-05	RECTANGULAR RECEPTACLE	
J2			E56-0855-05	CYLINDRICAL RECEPTACLE	
J3			E63-0896-05	PIN JACK	
J4			E58-0993-05	RECTANGULAR RECEPTACLE	
W1			E30-6218-15	CORD WITH PLUG (ANT)	
L1			L33-1988-05	CHOKE COIL ASSY	
L3			L33-2335-05	CHOKE COIL	
L201			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L203			L92-0339-05	CHIP FERRITE	
L301			L33-2260-05	CHOKE COIL	
L302-304			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	
L306			L41-4795-33	SMALL FIXED INDUCTOR (4.7U)	K1E3E4
L307			L92-0616-05	CHIP FERRITE	
X1			L77-2880-05	CRYSTAL RESONATOR	
X2			L78-0872-05	RESONATOR (12MHZ)	
X3			L77-2002-05	CRYSTAL RESONATOR	K1E3E4
D	2D		N83-3005-48	PAN HEAD TAPTITE SCREW	
G	3D		N80-3010-48	PAN HEAD TAPTITE SCREW	
H	2D		N82-2608-48	BINDING HEAD TAPTITE SCREW	
CP201,202			RK74GB1J101J	CHIP-COM 100 J 1/16W	
CP203			RK74GA1J471J	CHIP-COM 470 J 1/16W	
CP206			RK74GB1J222J	CHIP-COM 2.2K J 1/16W	
CP207			RK74GB1J102J	CHIP-COM 1.0K J 1/16W	
CP209			RK74GB1J101J	CHIP-COM 100 J 1/16W	E3E4
R1			RK73FB2B153J	CHIP R 15K J 1/8W	
R3			RK73GB2A223J	CHIP R 22K J 1/10W	
R4			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R5			RK73FB2B221J	CHIP R 220 J 1/8W	
R7			RK73GH2A243D	CHIP R 24K D 1/10W	
R8			RK73GH2A432D	CHIP R 4.3K D 1/10W	
R9			RK73FB2B152J	CHIP R 1.5K J 1/8W	
R10			RK73FB2B222J	CHIP R 2.2K J 1/8W	
R11			RK73GH2A273D	CHIP R 27K D 1/10W	
R12			RK73GH2A332D	CHIP R 3.3K D 1/10W	
R13			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R17,18			RK73GB2A223J	CHIP R 22K J 1/10W	
R20			RK73GB2A473J	CHIP R 47K J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R21			RK73GB2A103J	CHIP R 10K J 1/10W	
R41			RK73GB2A201J	CHIP R 200 J 1/10W	
R42			RK73GB2A121J	CHIP R 120 J 1/10W	
R43,44			R92-5110-05	CHIP R 2.7 J 3/4W	
R45			RK73GB2A473J	CHIP R 47K J 1/10W	
R46-51			R92-5110-05	CHIP R 2.7 J 3/4W	
R52			RK73GH2A472D	CHIP R 4.7K D 1/10W	
R53			RK73GH2A332D	CHIP R 3.3K D 1/10W	
R55			R92-5110-05	CHIP R 2.7 J 3/4W	
R56			RK73GB2A153J	CHIP R 15K J 1/10W	
R57			R92-5110-05	CHIP R 2.7 J 3/4W	
R101			RK73EB2E102J	CHIP R 1.0K J 1/4W	E3E4M2
R102,103			RK73EB2E103J	CHIP R 10K J 1/4W	
R104			RK73EB2E472J	CHIP R 4.7K J 1/4W	
R105			RK73PB2H221J	CHIP R 220 J 1/2W	K1M2
R106			RK73GB2A223J	CHIP R 22K J 1/10W	K1M2
R107			RK73FB2B472J	CHIP R 4.7K J 1/8W	
R108			R92-5024-05	CHIP R 1K J 1/2W	
R109			RK73GB2A223J	CHIP R 22K J 1/10W	
R110			R92-5024-05	CHIP R 1K J 1/2W	
R111			RK73FB2B561J	CHIP R 560 J 1/8W	E3E4M2
R112			RK73GB2A223J	CHIP R 22K J 1/10W	
R113			RK73GB2A473J	CHIP R 47K J 1/10W	
R114			RK73GB2A104J	CHIP R 100K J 1/10W	
R115			RK73FB2B683J	CHIP R 68K J 1/8W	
R116			RK73GB2A393J	CHIP R 39K J 1/10W	
R117			RK73FB2B203J	CHIP R 20K J 1/8W	
R118			RK73GB2A104J	CHIP R 100K J 1/10W	
R122,123			RK73GB2A103J	CHIP R 10K J 1/10W	
R124			RK73GB2A104J	CHIP R 100K J 1/10W	
R125			RK73GB2A223J	CHIP R 22K J 1/10W	
R126			RD14DB2H332J-T	SMALL-RD 3.3K J 1/2W	
R127			RK73EB2E333J	CHIP R 33K J 1/4W	
R128			RK73GB2A103J	CHIP R 10K J 1/10W	
R130			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R131			RK73GB2A473J	CHIP R 47K J 1/10W	
R132			RK73PB2H221J	CHIP R 220 J 1/2W	K1M2
R201			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R203			RK73GB2A104J	CHIP R 100K J 1/10W	
R204			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R206			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R207			RK73GB2A103J	CHIP R 10K J 1/10W	
R208			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R210			RK73GB2A473J	CHIP R 47K J 1/10W	
R215			RK73GB2A104J	CHIP R 100K J 1/10W	
R216			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R220			RK73GB2A223J	CHIP R 22K J 1/10W	K1E3E4
R221			RK73GB2A104J	CHIP R 100K J 1/10W	
R224			RK73GB2A473J	CHIP R 47K J 1/10W	
R227,228			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R229,230			RK73GB2A473J	CHIP R 47K J 1/10W	
R233			RK73GB2A101J	CHIP R 100 J 1/10W	
R234,235			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R236,237			RK73GB2A473J	CHIP R 47K J 1/10W	
R239			RK73GB2A222J	CHIP R 2.2K J 1/10W	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-415x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
R240			RK73GB2A101J	CHIP R 100 J 1/10W	
R241			RK73GB2A222J	CHIP R 2.2K J 1/10W	K1
R241,242			RK73GB2A222J	CHIP R 2.2K J 1/10W	E3E4M2
R243			RK73GB2A473J	CHIP R 47K J 1/10W	E3E4M2
R244,245			RK73GB2A473J	CHIP R 47K J 1/10W	K1
R245			RK73GB2A473J	CHIP R 47K J 1/10W	E3E4
R246,247			RK73GB2A473J	CHIP R 47K J 1/10W	M2
R247			RK73GB2A473J	CHIP R 47K J 1/10W	K1
R248-250			RK73GB2A473J	CHIP R 47K J 1/10W	E3E4
R249,250			RK73GB2A473J	CHIP R 47K J 1/10W	K1M2
R254			RK73GB2A473J	CHIP R 47K J 1/10W	
R257,258			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R259,260			RK73GB2A104J	CHIP R 100K J 1/10W	
R261			RK73GB2A333J	CHIP R 33K J 1/10W	
R262,263			RK73GB2A473J	CHIP R 47K J 1/10W	
R270			RK73GB2A473J	CHIP R 47K J 1/10W	
R302,303			RK73EB2E101J	CHIP R 100 J 1/4W	
R304			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R305-309			RK73EB2E101J	CHIP R 100 J 1/4W	
R310			RK73EB2E102J	CHIP R 1.0K J 1/4W	
R311			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R312			RK73GB2A473J	CHIP R 47K J 1/10W	
R313			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R316			RK73GB2A104J	CHIP R 100K J 1/10W	
R317			RK73GB2A471J	CHIP R 470 J 1/10W	
R318			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R320			RK73FB2B102J	CHIP R 1.0K J 1/8W	
R321			RK73GB2A223J	CHIP R 22K J 1/10W	
R322			RK73GB2A471J	CHIP R 470 J 1/10W	
R323			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R324			RK73GB2A471J	CHIP R 470 J 1/10W	
R325			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R327			RK73GB2A681J	CHIP R 680 J 1/10W	
R329-331			RK73GB2A222J	CHIP R 2.2K J 1/10W	K1E3E4
R333			RK73GB2A102J	CHIP R 1.0K J 1/10W	K1E3E4
R401			RK73GB2A103J	CHIP R 10K J 1/10W	
R402,403			RK73GB2A331J	CHIP R 330 J 1/10W	
R404,405			RK73GB2A223J	CHIP R 22K J 1/10W	
R406,407			RK73GB2A331J	CHIP R 330 J 1/10W	
R408,409			RK73GB2A223J	CHIP R 22K J 1/10W	
R414,415			RK73FB2B181J	CHIP R 180 J 1/8W	
R420,421			RK73FB2B181J	CHIP R 180 J 1/8W	
R422			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R423,424			RK73EB2E100J	CHIP R 10 J 1/4W	
R425			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R430			RK73GB2A101J	CHIP R 100 J 1/10W	
R431			RK73GB2A100J	CHIP R 10 J 1/10W	
R432			RK73EB2E2R2J	CHIP R 2.2 J 1/4W	
R433,434			RK73GB2A101J	CHIP R 100 J 1/10W	
R435			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R442			RK73GB2A121J	CHIP R 120 J 1/10W	
R501			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R505			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R506			RK73GB2A223J	CHIP R 22K J 1/10W	
R507			RK73GB2A221J	CHIP R 220 J 1/10W	

Ref. No.	Add	New	Parts No.	Description	Destination
R508			RK73EB2E472J	CHIP R 4.7K J 1/4W	
R509			RK73EB2E101J	CHIP R 100 J 1/4W	
R510			RK73EB2E472J	CHIP R 4.7K J 1/4W	
R511-515			RK73EB2E101J	CHIP R 100 J 1/4W	
R516,517			RK73EB2E100J	CHIP R 10 J 1/4W	
R518			RK73EB2E4R7J	CHIP R 4.7 J 1/4W	
R519			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R520			RK73EB2E102J	CHIP R 1.0K J 1/4W	K1E3E4
R521-523			RK73EB2E471J	CHIP R 470 J 1/4W	E3E4
R524			RK73GB2A100J	CHIP R 10 J 1/10W	
R530			RK73GB2A100J	CHIP R 10 J 1/10W	
R531			RK73GB2A2R2J	CHIP R 2.2 J 1/10W	
W2,3			R92-1252-05	CHIP R 0 OHM J 1/16W	E3E4
W3			R92-1252-05	CHIP R 0 OHM J 1/16W	K1M2
W15			R92-2053-05	CHIP R 0 OHM J 1/8W	
W16			R92-1252-05	CHIP R 0 OHM J 1/16W	
W17-20			R92-2053-05	CHIP R 0 OHM J 1/8W	
W21			R92-1252-05	CHIP R 0 OHM J 1/16W	
W931			R92-1252-05	CHIP R 0 OHM J 1/16W	
W997,998			R92-1252-05	CHIP R 0 OHM J 1/16W	
D1			S2V60✻A	DIODE	
D2			RB160L-40	DIODE	
D3			02DZ5.6F-Y	ZENER DIODE	
D4			02DZ8.2F-Y	ZENER DIODE	
D5			02DZ20F-Y	ZENER DIODE	
D6		✻	PTZ4.7B	ZENER DIODE	
D10			RB081L-20	DIODE	
D52,53			02DZ6.8F-Y	ZENER DIODE	
D101			10EDA20	DIODE	
D102-105			1SR154-400	DIODE	
D106			02DZ5.6F-Y	ZENER DIODE	E3E4M2
D107			02DZ4.7F-Y	ZENER DIODE	
D108,109			02DZ6.8F-Y	ZENER DIODE	
D111			02DZ6.2F-Y	ZENER DIODE	
D301			IMSA-6802-E	SURGE ABSORBER	
D303			02DZ9.1F-Z	ZENER DIODE	
D304			IMSA-6802-E	SURGE ABSORBER	
D401-403			BAW56W	DIODE	
D404			UDZS3.3B	ZENER DIODE	
D405,406			02DZ6.8F-Y	ZENER DIODE	
D408			DA204K	DIODE	
D412,413			UDZS5.6B	ZENER DIODE	
D414			02DZ6.2F-Y	ZENER DIODE	
D500			BAW56W	DIODE	E3E4
D502			BAW56W	DIODE	
D503,504			1SR154-400	DIODE	
D505,506			1SR139-400T64	DIODE	
D507-510			1SR154-400	DIODE	
D511-515			02DZ6.2F-Y	ZENER DIODE	K1M2
D511-523			02DZ6.2F-Y	ZENER DIODE	E3E4
D518-520			02DZ6.2F-Y	ZENER DIODE	K1M2
D523			02DZ6.2F-Y	ZENER DIODE	K1M2
IC1			30624MWPA86GP	MICROCONTROLLER IC	
IC2			E-TDA7415C	ANALOGUE IC	
IC3			M5237ML-CF0J	ANALOGUE IC	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

ELECTRIC UNIT (X34-415x-xx)

Ref. No.	Add	New	Parts No.	Description	Destination
IC4			E-TDA7560A	ANALOGUE IC	
IC5			BA00CCWT-V5	ANALOGUE IC	
IC6			SN74HC02APWR	MOS-IC	
IC7			S-80836CNNB-J	MOS-IC	
IC8			MIC2026-1YM	MOS-IC	
IC9			E-TDA7479AD	ANALOGUE IC	K1E3E4
IC10			BR24L04FV-W	ROM IC	
IC12			SI-8050RF3NF	ANALOGUE IC	
IC13			BA00CC0WFP	ANALOGUE IC	
Q1			2SB1565	TRANSISTOR	
Q2			KTC4075P(Y,GR)	TRANSISTOR	
Q3,4			KTA2014P(Y,GR)	TRANSISTOR	
Q5			2SB1565	TRANSISTOR	
Q6			DTA124EUA	DIGITAL TRANSISTOR	
Q7			2SB1565	TRANSISTOR	
Q8			2SC4081	TRANSISTOR	
Q9-11			DTC124EUA	DIGITAL TRANSISTOR	
Q12			2SA1488NF	TRANSISTOR	
Q13			KTA2014P(Y,GR)	TRANSISTOR	
Q17			DTC144EUA	DIGITAL TRANSISTOR	
Q21			KTC4075P(Y,GR)	TRANSISTOR	
Q101			2SB1188(Q,R)	TRANSISTOR	K1M2
Q102			DTC114YUA	DIGITAL TRANSISTOR	K1M2
Q103			2SB1188(Q,R)	TRANSISTOR	
Q104			KTA2014P(Y,GR)	TRANSISTOR	
Q105			DTA114EUA	DIGITAL TRANSISTOR	
Q106			DTC114YUA	DIGITAL TRANSISTOR	
Q107			DTA123JK	DIGITAL TRANSISTOR	E3E4M2
Q108			DTC144EUA	DIGITAL TRANSISTOR	
Q109			2SC4155A(Q,R,S	TRANSISTOR	
Q111			2SC4081	TRANSISTOR	
Q112			2SC4155A(Q,R,S	TRANSISTOR	
Q113			KTA2014P(Y,GR)	TRANSISTOR	
Q116			DTA124EUA	DIGITAL TRANSISTOR	
Q300			2SB1689	TRANSISTOR	
Q301			DTC124EUA	DIGITAL TRANSISTOR	
Q302			2SB1565	TRANSISTOR	
Q303			KTC4075P(Y,GR)	TRANSISTOR	
Q305			2SA1577	TRANSISTOR	
Q306			DTC144EUA	DIGITAL TRANSISTOR	
Q400-403			DTC143TUA	DIGITAL TRANSISTOR	
Q406,407			DTC143TUA	DIGITAL TRANSISTOR	
Q408			DTA124EUA	DIGITAL TRANSISTOR	
A1	3E		X86-4000-11	FRONT-END UNIT	K1M2
A1	3E		X86-4002-70	FRONT-END UNIT	E3E4
DAUGHTER UNIT (X89-2830-10)					
J1		✻	E59-0849-05	RECTANGULAR PLUG	
WH1		✻	E39-0848-15	WIRING HARNESS	
CD MECHANISM ASSY (X92-5440-00/04) (DXM-6810W/6814W)					
2	1B		A10-4827-32	CHASSIS	
5	2B		D10-4576-93	ARM ASSY	
8	2A		D10-4787-63	LEVER ASSY	E3E4
8	2A	✻	D10-4901-13	LEVER ASSY	K1M2

Ref. No.	Add	New	Parts No.	Description	Destination
10	2A		D10-4581-13	ARM	
11	2A		D10-4582-13	ARM	
12	3A		D10-4583-03	ARM	
13	3A		D10-4584-03	ARM	
14	3B		D10-4585-03	ARM	
15	2A		D10-4586-13	SLIDER	
16	3B		D10-4587-52	SLIDER	
17	2B		D10-4588-13	SLIDER	
18	2B		D10-4595-04	ARM	
19	2B		D10-4596-24	ARM	
22	2A		D13-2151-04	GEAR	
23	2B		D13-2152-04	GEAR	
24	3B		D13-2153-04	GEAR	
25	3B		D13-2154-04	GEAR	
26	3B		D13-2155-04	WORM	
27	2B		D13-2156-14	GEAR	
28	3B		D13-2157-04	GEAR	
29	2B		D13-2158-04	GEAR	
30	2B		D13-2168-04	GEAR	
31	3B		D13-2171-04	GEAR	
32	1B		D13-2172-13	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER	
35	2B		D21-2382-04	SHAFT	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0246-05	DAMPER	K1M2
37	1B		D39-0260-05	DAMPER	E3E4
38	2B		G01-3072-04	EXTENSION SPRING	
39	2A		G01-3073-04	TORSION COIL SPRING	
40	2A		G01-3074-04	EXTENSION SPRING	
41	1B		G01-3075-24	EXTENSION SPRING	
42	2A		G01-3076-04	EXTENSION SPRING	
43	1B		G01-3077-14	EXTENSION SPRING	
44	2B		G02-1399-04	FLAT SPRING	
45	2B		G02-1408-04	FLAT SPRING	
46	3B		F09-1804-04	SHEET	E3E4
47	3A		F09-2824-14	SHEET	
51	1A		J21-9676-32	MOUNTING HARDWARE	
52	3B		J21-9677-22	MOUNTING HARDWARE	
53	1B		J21-9678-13	MOUNTING HARDWARE	
55	1A		J90-1001-11	GUIDE	
56	1B		J90-1023-03	GUIDE	
DFPC1	3A		J86-0027-05	FPC (LEAD FREE)	
A	2B		N09-4460-15	TAPTITE SCREW (PT2X8)	
B	1B		N09-4472-25	MACHINE SCREW (M1.7X8.0)	
C	2B		N09-6004-15	MACHINE SCREW (M1.7X2.5)	
E	2B		N09-6007-15	MACHINE SCREW (PAN M2X2)	
F	1A		N09-6051-15	TAPTITE SCREW (BIND P 2X5)	
G	2A		N19-2163-04	FLAT WASHER	
H	1B		N39-2020-46	PAN HEAD MACHINE SCREW	
J	1B		N09-6108-15	TAPTITE SCREW (M2X3.5)	
K	3B		N09-6155-15	SEMS (TAPTITE SCREW) (PT2X6)	
DM1	3B		T42-1066-14	DC MOTOR (SPINDLE)	

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

PARTS LIST

CD MECHANISM ASSY (X92-5440-00/04) (DXM-6810W/6814W)

Ref. No.	Add	New	Parts No.	Description	Destination
DM2	2B		T42-1067-14	DC MOTOR (LOADING)	
DPU1	2B		X93-2010-01	OPTICAL PICKUP ASSY	

Ref. No.	Add	New	Parts No.	Description	Destination

E3 : DPX501U **E4** : DPX501UY (Europe)
K1 : DPX501 (North America)
M2 : DPX-MP2090U (Other Areas)

⚠ Indicates safety critical components.

SPECIFICATIONS

FM tuner section

Frequency range
- DPX501U/501UY ..... 87.5MHz~108.0MHz (50kHz space)
- DPX501 ..... 87.9MHz~107.9MHz (200kHz space)
- DPX-MP2090U ..... 87.5MHz~108.0MHz (50kHz space)
- ..... 87.9MHz~107.9MHz (200kHz space)

Usable sensitivity
- DPX501U/501UY (S/N=26dB) 0.7µV/75Ω
- DPX501, DPX-MP2090U (S/N=30dB)
- 9.3dBf (0.8µV/75Ω)

Quieting Sensitivity
- DPX501U/501UY (S/N=46dB) 1.6µV/75Ω
- DPX501, DPX-MP2090U (S/N=50dB)
- 15.2dBf (1.6µV/75Ω)

Frequency response (±3.0dB) ..... 30Hz~15kHz
Signal to Noise ratio (MONO)
- DPX501U/501UY 65dB
- DPX501, DPX-MP2090U 70dB

Selectivity (±400kHz) ..... ≧80dB
Stereo separation (1kHz)
- DPX501U/501UY 35dB
- DPX501, DPX-MP2090U 40dB

AM tuner section (DPX501, DPX-MP2090U)

Frequency range
- DPX501 ..... 530kHz~1700kHz (10kHz space)
- DPX-MP2090U ..... 531kHz~1611kHz (9kHz space)
- ..... 530kHz~1700kHz (10kHz space)

Usable sensitivity (S/N=20dB) 28dBµ (25µV)

MW tuner section (DPX501U/501UY)

Frequency range ..... 531kHz~1611kHz (9kHz space)
Usable sensitivity (S/N=20dB) 25µV

LW tuner section (DPX501U/501UY)

Frequency range ..... 153kHz~281kHz
Usable sensitivity (S/N=20dB) 45µV

CD player section

Laser diode ..... GaAlAs
Digital filter (D/A) ..... 8 Times Over Sampling
D/A Converter 1Bit
Spindle speed (Audio file)
- DPX501/501U/501UY ..... 500~200rpm (CLV)
- DPX-MP2090U ..... 1000~400rpm (CLV 2 times)

Wow & Flutter ..... Below Measurable Limit
Frequency response (±1dB) ..... 10Hz~20kHz
Total harmonic distortion (1kHz) 0.008%
Signal to Noise ratio (1kHz) 105dB
Dynamic range 93dB
MP3 decode ..... Compliant with MPEG-1/2 Audio Layer-3
WMA decode ..... Compliant with Windows Media Audio
AAC decode ..... AAC-LC ".m4a" files

USB Interface

USB Standard USB1.1/2.0
Maximum Supply current 500mA
File System FAT16/32
MP3 decode ..... Compliant with MPEG-1/2 Audio Layer-3
WMA decode ..... Compliant with Windows Media Audio
AAC decode ..... AAC-LC ".m4a" files

Audio section

Maximum output power ..... 50W x 4
Output power (DIN 45324, +B=14.4V)
- DPX501U/501UY ..... 30W x 4

Full Bandwidth Power (at less than 1% THD)
- DPX501, DPX-MP2090U ..... 22W x 4

Speaker impedance ..... 4~8Ω
Tone action
- Bass ..... 100Hz±8dB
- Middle ..... 1kHz±8dB
- Treble ..... 10kHz±8dB

Preout level/Load (during disc play) 2500mV/10kΩ
Preout impedance ..... ≦600Ω

Auxiliary input

Frequency responce (±1dB) ..... 20Hz~20kHz
Input Maximum Voltage 1200mV
Input impedance 100kΩ

General

Operating voltage (11~16V allowable) 14.4V
Current consumption 10A
Installation Size (W x H x D)
- DPX-MP2090U ..... 178 x 100 x 155 mm
- DPX501/501U/501UY ..... 182 x 112 x 160 mm
- ..... 7-3/16 x 4-7/16 x 6-5/16 inch

Weight
- DPX-MP2090U 1.64kg
- DPX501/501U/501UY ..... 1.60kg (3.53 lbs)

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

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