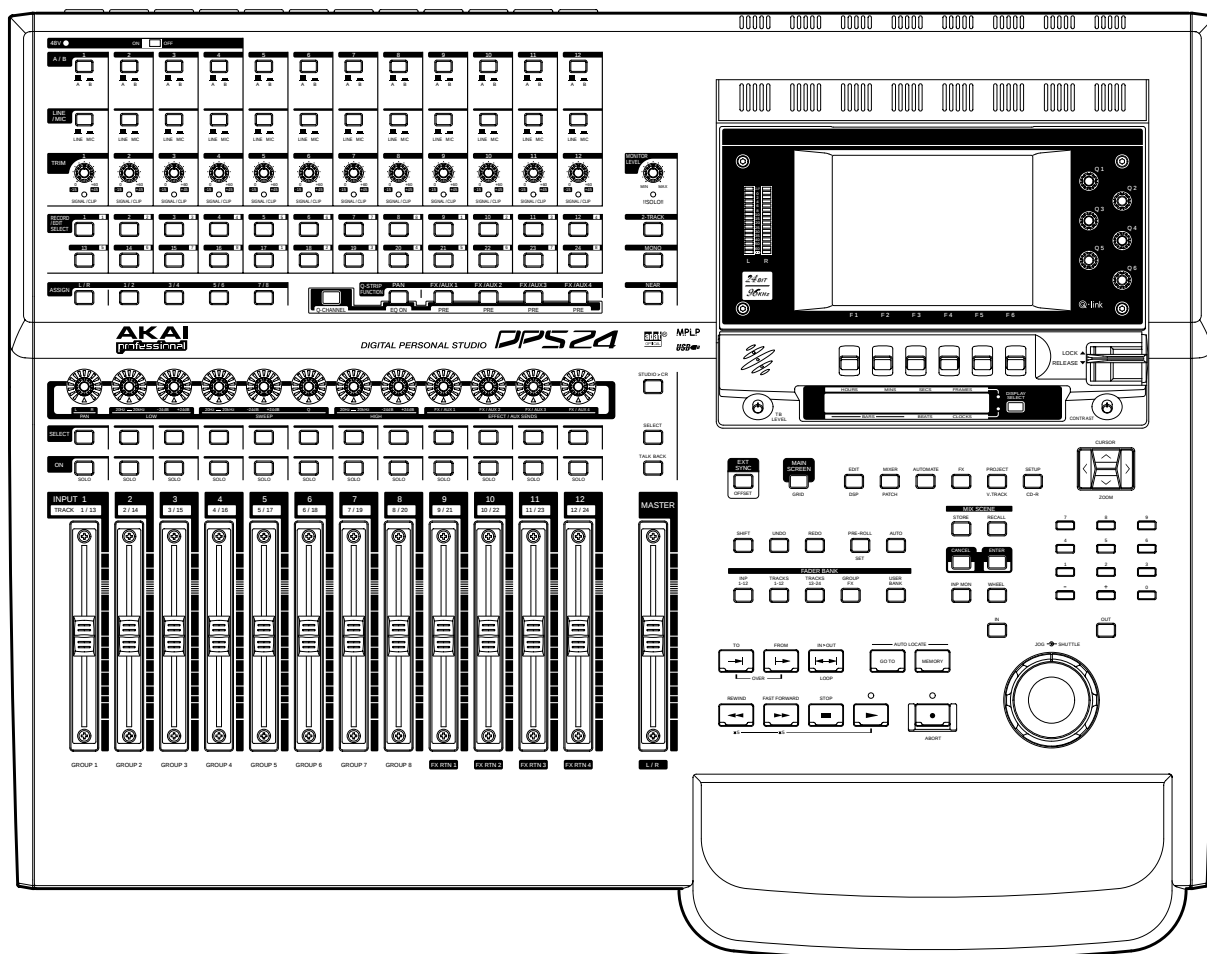




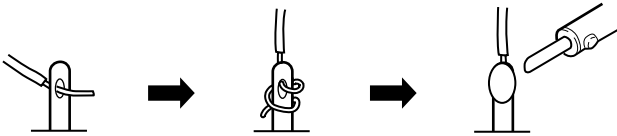
SERVICE MANUAL



DIGITAL PERSONAL STUDIO

★ SAFETY INSTRUCTIONS

1. Parts identified by the $\triangle$ symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with the specified replacements.
Examples : Noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially :
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially :
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (insulating barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit. The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 μ F capacitor, under the unit's normal working conditions.

The leakage-current should be less than 0.5 mA rms AC. The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

★ INFORMATIONS

SYMBOLS FOR PRIMARY DESTINATION

Unit destinations are indicated with letters as shown below.

Symbols	Principal Destinations
A	U.S.A
B	England
E	Europe
J	Japan
V	Germany
X1	Japan
X4	Universal Area

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.

Please leave them at an appropriate depot.



PRECAUTIONS FOR LITHIUM BATTERY

The lithium battery may explode when incorrectly replaced. [OBSERVE THE FOLLOWING WHEN REPLACING]

- Replace with the same make and type or equivalent recommended by manufacturer.
- Place battery in correct polarity.
- Do not short the terminals.
- Do not charge battery.
- Do not dispose of battery in fire.

I. SPECIFICATIONS

Specifications

Power Supply	AC 120V 60Hz (US, Canada), 220-240V 50Hz (Europe) 110W	
Operating Temperature	10 - 35° C	
Operating Humidity	10% - 60% (without condensation)	
Dimensions (mm)	726 (W) x 190 (H) x 579 (D) max. (with LCD tilted down)	
Weight	17.8kg (without drive)	
Display	320 x 240 dots STN graphic LCD with back light	
Sampling Rate	96kHz, 48kHz, 44.1kHz, 32kHz	
Quantization Bit	24 bit/16 bit Linear	
Recording Media	Internal IDE Harddisk	
Recording Time	With 10Gbyte Harddisk drive (24bit)	
	FS=96kHz	Approx. 9 hrs. 55 min. (12 tracks x 49 min. 45 sec.)
	FS=48kHz	Approx. 19 hrs. 50 min. (24 tracks x 49 min. 45 sec.)
	FS=44.1kHz	Approx. 21 hrs. 35 min. (24 tracks x 54 min. 10 sec.)
	FS=32kHz	Approx. 29 hrs. 50 min. (24 tracks x 1 hour 14 min.)
Frequency Response		
	FS=96kHz	10Hz - 44kHz +0/-2dB
	FS=48kHz	10Hz - 22kHz +0/-2dB
	FS=44.1kHz	10Hz - 20kHz +0/-2dB
	FS=32kHz	10Hz - 15kHz +0/-2dB
ADC	24bit 128-times oversampling, enhanced dual bit delta/sigma modulation	
DAC	24bit 8-times oversampling, advanced segment delta/sigma modulation	
Dynamic Range	104dB or more (30kHz LPF, FS=44.1kHz)	
Distortion Ratio	0.003% or less (1kHz, 44.1kHz)	
Channel Crosstalk	80dB or less (10kHz referenced, 100 ohms terminated)	
Wow & Flutter	Below measurable level	
Analog Audio Input	Inputs A	
	1 - 4ch	6.3mm Stereo Phone/XLR Combo Jack - balanced Phantom Power provided (switchable) for XLR connection
	5 - 12ch	6.3mm Stereo Phone/XLR Combo Jack - balanced
	Inputs B	
	1 - 12ch	6.3mm Stereo Phone Jack - balanced
	Hi-Z	12ch 6.3mm Phone Jack - unbalanced
	ADC In	6.3mm Stereo Phone Jack - balanced
	AUX In	6.3mm Stereo Phone Jack - balanced
	2-Track	RCA - unbalanced
Input Level	Mic mode	-62 - -2dBu (+16dBu max. balanced, 1kHz)
	Line mode	-47 - +13dBu (+31dBu max. balanced, 1kHz)
	Hi-Z	-68 - -8dBu (+10dBu max. unbalanced, 1kHz)
	ADC In	+4dBu (+22dBu max. balanced, 1kHz)
	AUX In	+4dBu (+22dBu max. balanced, 1kHz)
	2-Track	-14dBu (+4dBu max. unbalanced, 1kHz)
Impedance	Mic mode	3k ohms (1 - 12ch)
	Line mode	12k ohms (1 - 12ch)
	Hi-Z	1M ohms
	ADC In	10k ohms
	AUX In	10k ohms
	2-Track	15k ohms
Analog Audio Output	Stereo Out	6.3mm Stereo Phone - balanced
	Main (monitor)	6.3mm Stereo Phone - balanced
	Nearfield (monitor)	6.3mm Stereo Phone - balanced
	Studio Out	6.3mm Stereo Phone - balanced
	Direct Out	6.3mm Stereo Phone - balanced
	AUX Sends 1 - 4	6.3mm Stereo Phone - balanced

Output Level	Stereo Out	+4dBu (+22dBu balanced max., 20k ohms load)
	Main (monitor)	+4dBu (+22dBu balanced max., 20k ohms load)
	Nearfield (monitor)	+4dBu (+22dBu balanced max., 20k ohms load)
	Studio Out	+4dBu (+22dBu balanced max., 20k ohms load)
	Direct Out	+4dBu (+22dBu balanced max., 20k ohms load)
	AUX Sends 1 - 4	+4dBu (+22dBu balanced max., 20k ohms load)
Impedance	Stereo Out	1k ohms - balanced
	Main (monitor)	1k ohms - balanced
	Nearfield (monitor)	1k ohms - balanced
	Studio Out	1k ohms - balanced
	Direct Out	1k ohms - balanced
	AUX Sends 1 - 4	1k ohms - balanced
Stereo Phones Output	x 2, 6.3mm Stereo Phone Jack - adjustable	
	Max. Output	155mW/32 ohms
	Digital Audio Input x 1, RCA (SPDIF) 2-channels assignable	
Digital Audio Output	x 1, MP Light Pipe (adat/SPDIF) 8-channels/2-channel assignable	
	x 1, RCA (SPDIF) Master Output	
	x 1, MP Light Pipe (adat/SPDIF) 8-channels assignable/Master Output	
Wordclock	x 1, BNC - In/Out	
Foot switch	x 1, 6.3mm Phone Jack	
MIDI	x 3, 5 pin DIN - IN, OUT, THRU	
ASCII Keyboard	x 1, 6 pin Mini-DIN	
Accessories	3-prong Power Cable	
	Internal Disk Mounting Kit	
	Operator's Manual	
Options	IB-24LTC - SMPTE/EBU LTC Interface Board	
	IB-24ADT - 16-channel adat Interface Board w/adat Sync	
	IB-24SCSI - SCSI Interface Board	

*0dBu = 0.775Vrms

The specifications are subject to change without prior notice.

II. DISASSEMBLY

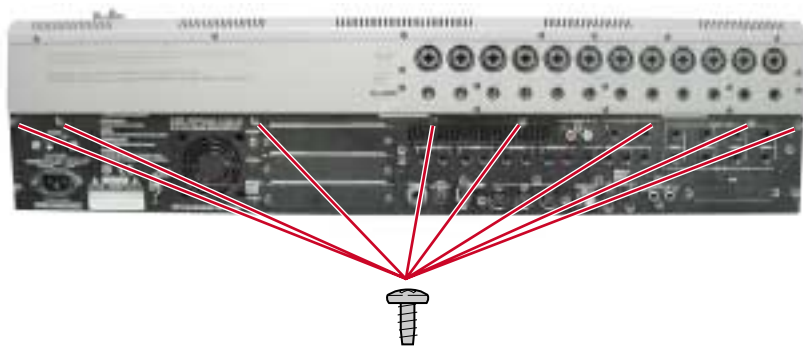
In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in the reverse order.

1. Removal of the FRONT PANEL BLOCK

ZS-378447
ST BID40X10STL BNI

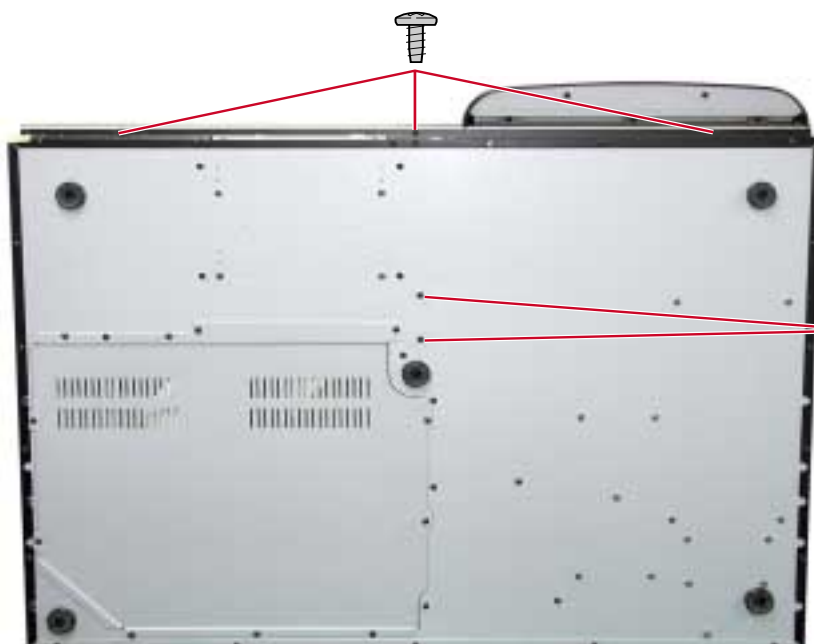


ZS-331182
BT BID30X08STL BNI



ZS-331182
BT BID30X08STL BNI

ZS-331182
BT BID30X08STL BNI

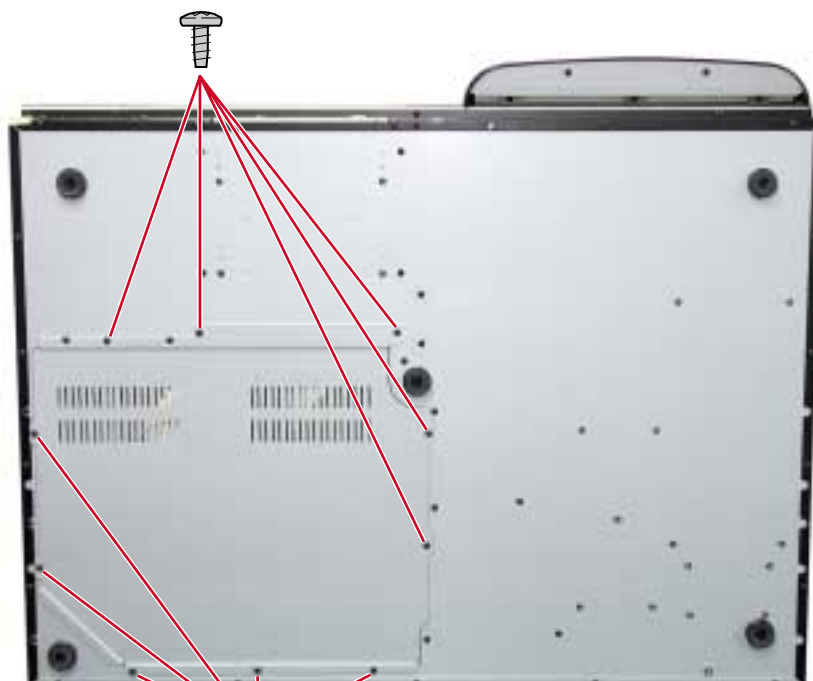


ZS-331182
BT BID30X08STL BNI



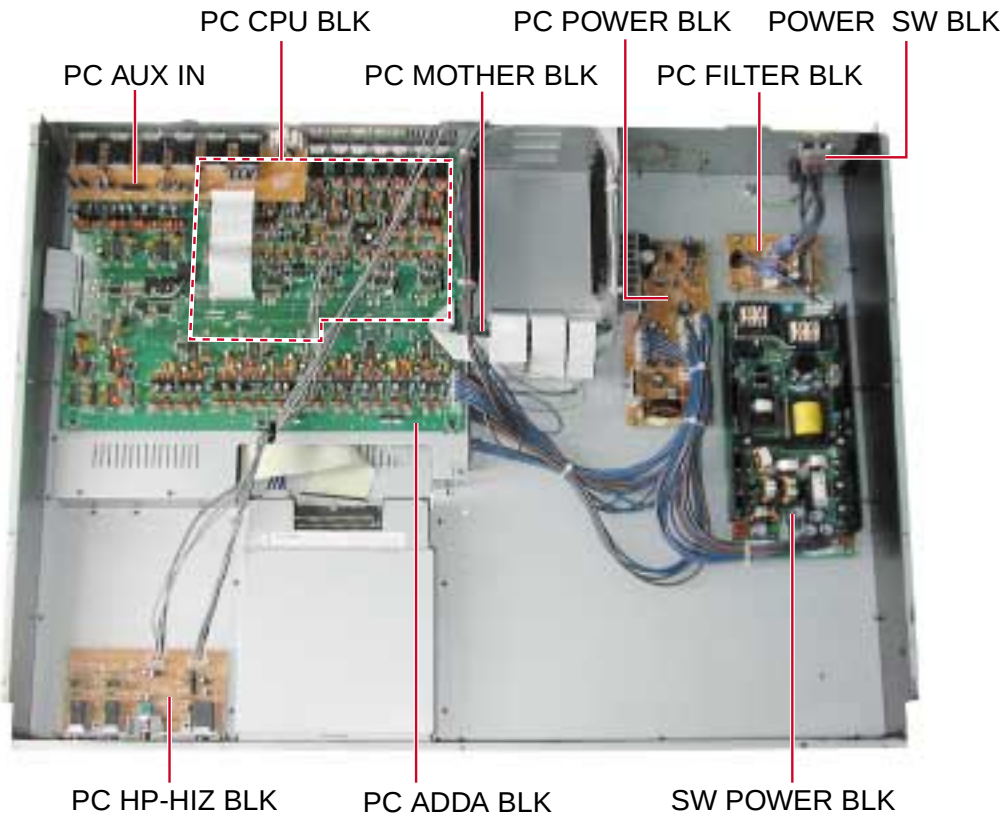
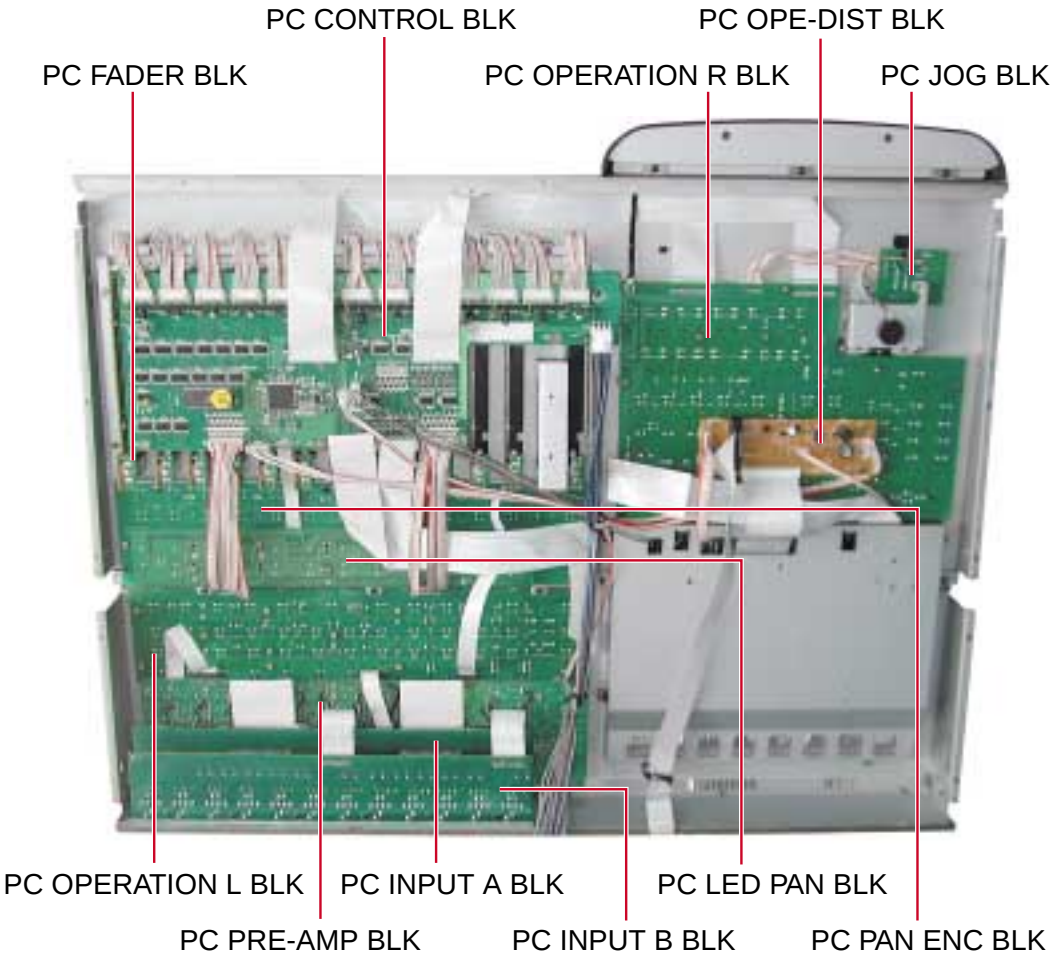
2. Removal of the BOTTOM COVER

ZS-331182
BT BID30X08STL BNI



ZS-331182
BT BID30X08STL BNI

III. PRINCIPAL PARTS LOCATION



IV. SUPPLEMENTARY INFORMATION

1. Test Mode

While pressing the SHIFT button, press the CANCEL button to enter the DEBUG PAGE. To leave the DEBUG page, press the MAIN SCREEN button. Return to the DEBUG PAGE from any TEST MODE by pressing the CANCEL button while the SHIFT button is being pressed.

1-1. F1 (BUFFERS)

For confirmation of DISK BUFFERS LEVEL.

1-2. F3 (PANEL)

For confirmation of FADER TOUCH SENSE operation.

F1/F2 (RED TRACK LEDS)

To check whether red LED operation is correct or not.

The RECORD/EDIT SELECT LED, SIGNAL CLIP LED will light up in red.

All other LEDS will light.

F3/F4 (GREEN TRACK LEDS)

To check whether green LED operation is correct or not.

The RECORD/EDIT SELECT LED, SIGNAL CLIP LED will light up in green.

NOTE: After LED CHECK, even when the DEBUG mode has been escaped from, all LED indicators will go out and only renewed modes will light up in order.

1-3. F4 (AUDIO)

The input AUDIO signal will be output to direct according to display indicator specification. The main purpose of this function is for factory testing.

1-4. F2 (MIX DSP) F6 (PATCH)

Not operational at V1.0.

2. PANEL OPERATION TEST MODE

This mode is operated by the OPERATION CPU and is not affected by the CPU circuit of the CPU PCB. This test mode will operate even if the CPU PCB is not operating properly. Turn the power on while pressing down the REWIND, FAST FORWARD, STOP and PLAY buttons.

This mode can be used to confirm correct operation of the SWITCH, FADER VR, MONITOR VR, JOG, SHUTTLE and ENCODER. However, A/B SW, LINE/MIC SW, TRIM, TB LEVEL, PHONE LEVEL are omitted.

NOTE: FADER operation directly after power has been input cannot be tested.

3. OTHER HIDDEN MODES

3-1 With the SHUTTLE knob turned fully to the right, turning the power on will immediately access the VERSION UP mode via the USB.

3-2 With the SHUTTLE knob turned fully to the left, turning the power on will boot up the system without running a hard disc check.

This mode is convenient when the system will not startup because of hard disc data.

3-3 With the SHUTTLE knob turned 1/4 to the left, turning the power on will check hard disc content and start up the system in PROJECT initial settings. Normally the DPS24 starts up in the last PROJECT created. This mode is convenient when there is a problem with the last PROJECT data and the system won't start up.

4. JIG PC BOOT DPS24 (PART No. BA-771030J)

JIG PC BOOT is used for BOOT BLOCK recovery and for CPU circuit testing etc.

Insert in SLOT 1 on the OPTION BOARD. Make sure the power is off before inserting. The JIG PC BOOT will not work in any other slot besides SLOT 1.

When the DPS24 power is turned on, the SELF CHECK function will operate to check each CHIP. If a fault is found somewhere, FAILED will appear and operation will stop.

FAILED will appear when nothing after MIDI SPDIF, WCLK, ASCII are connected, but this is not an indication of faulty operation.

5. OS BOOT BLOCK RECOVERY PROCEDURE

Insert the PC JIG BOOT into SLOT 1. Make sure the power is off before inserting. The JIG PC BOOT will not work in any other slot besides SLOT 1.

1. When the DPS24 power is turned on, the SELF CHECK function will operate to check each CHIP. After confirmation, the screen will normally be returned to.
2. Press the SETUP button, then the F6(OS) button.
3. Press the F2/F3/F4 (upgrade from EPROM) button.
4. Press the F6(YES) button.
5. Press the F6(OK) button.

6. OS UPDATE PROCEDURE

- **OS UPDATE FROM CD-ROM**

You can update the OS from the built-in CD-ROM drive. Please use a CD-ROM that contains the OS for the DPS24.

You can create the OS disc by using your PC's CD-R/W function to write the "DPS24.bin file" onto an ISO 9660 CD-ROM disc.

1. Turn the DPS24 on and insert the OS disc
2. Press the SETUP button, then the F6(OS) button.
3. Set "Update from" to "CD" with Q1 knob.
4. Press the F5/F6 (UPGRADE) button.
5. Confirm the displayed OS version. If not displayed, repeat the procedure.
6. If the correct version is displayed, press the F6(YES) button.
7. Press the F6 (OK) button.
8. Reboot the DPS24.

- **OS UPDATE FROM USB**

The OS update can be made from the PC via the USB port.

You must have the "OS Loader software for DPS24".

The following files are required for the update:

dps24usb.sys (USB set up file)

dps24usb.inf (USB set up file)

usbrom.exe (USB transmission software)

dps24.bin (OS file for DPS24)

These files must be placed in the same folder. (eg. c:\DPS24)

Installing the USB drivers:

1. Connect USB cable between DPS24 and PC.
2. Power up the PC and let it complete the boot up process.
3. Power up the DPS24.

-
4. Your PC should automatically detect the DPS24 and open the New Hardware Wizard.
 5. Choose the option in the New Hardware Wizard that allows you to specify the location of the driver files.
 6. Use the BROWSE function to locate the files expanded into the folder you created.
 7. Click OK and next to install the drivers.

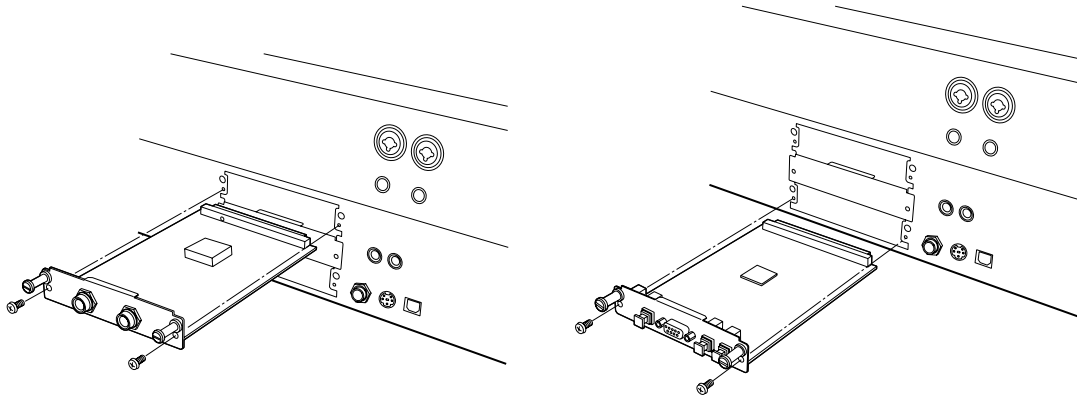
OS UPDATE FROM USB

1. Connect the DPS24 and PC with the USB cable.
2. Turn on the DPS24 and PC.
3. Press the DPS24's SETUP button, then the F6(OS) button.
4. Set "Upgrade from" to the USB port with Q1 knob.
5. Press the F5/F6(upgrade) button, then the F6(YES) button.
6. Wait for the OS to be loaded from the PC.
7. The OS Loader runs only using the MS-DOS Command prompt.
8. In the Command prompt window, switch to the folder you created. (eg. c:\DPS24)
9. Select the update type from the following. Normally select usbrom /v dps24.bin
 - #1. usbrom dps24.bin ----- (normal)
 - #2. usbrom /v dps24.bin ----- (update and checksum)
 - #3. usbrom /bootblock dps24.bin ----- (overwrite boot block)Type in either of the above to execute the program.
10. Reboot the DPS24.

Installation of Options

IB-24LTC/IB-24ADT

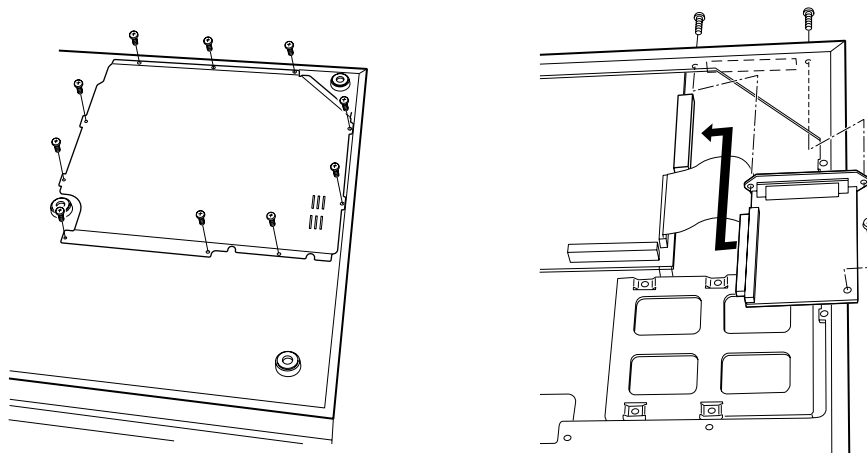
1. Remove the screws for the cover of expansion slot and remove the cover. Save the screws.
2. Slide the Option Board in along the guide groove and press it firmly to ensure secure connection.



3. Tighten the screws back that have been removed in the previous step.

IB-24SCSI

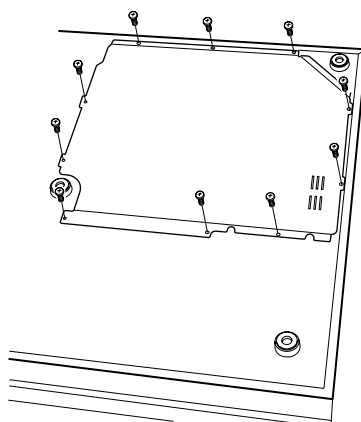
1. From the bottom of the unit, remove the screws for the bottom cover and open the bottom.



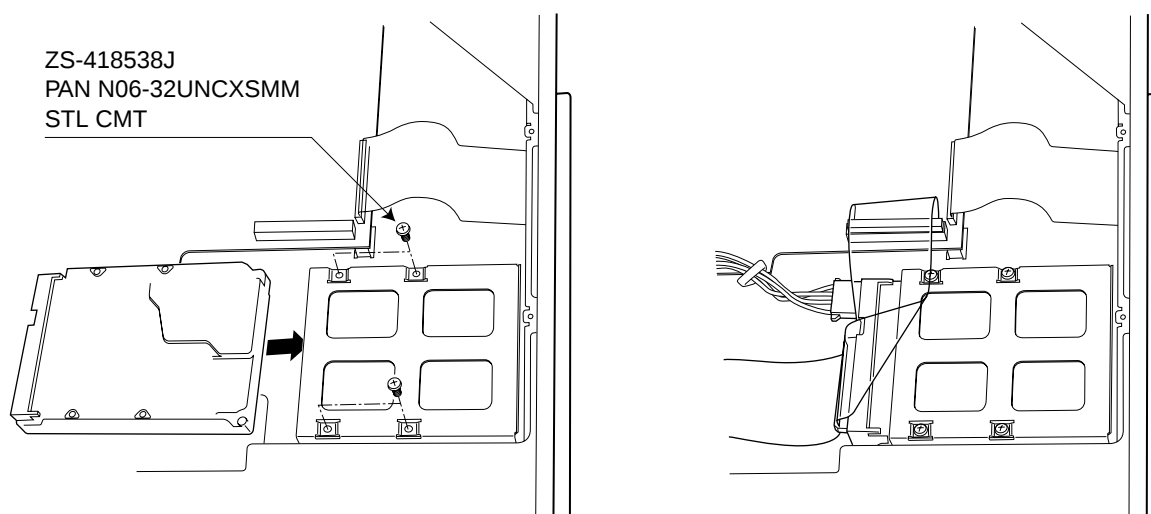
2. Remove the screws for the cover of SCSI option slot on the Rear Panel and remove the cover. Save the screws.
3. Place the board as illustrated, making sure that connectors are securely connected.
4. Mount the board with the screw included in the option board and with those screws removed previously.
5. Place the bottom cover back and tighten all screws.

Hard Disk Drive

1. From the bottom of the unit, remove the screws for the bottom cover and open the bottom.
2. Jumper setting of the hard disk has to be in MASTER mode with the short pin on the hard disk.



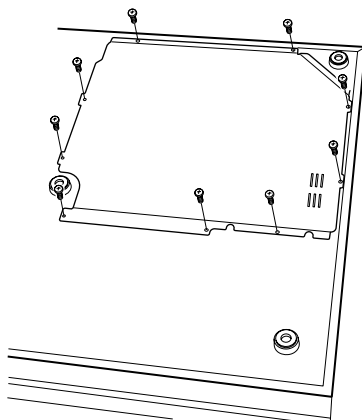
3. Referring to the illustration, slide the Hard Disk Drive in the disk holder and mount it with the screws inside the Internal Disk Mounting Kit. There are inch-threaded screws and millimeter-threaded screws inside. Be sure to use the appropriate type.
4. Connect the 4-pin Power Cable and 40-pin Disk Drive Cable as illustrated. On the Disk Drive Cable, BLUE connector has to be connected to the CPU board on DPS24.



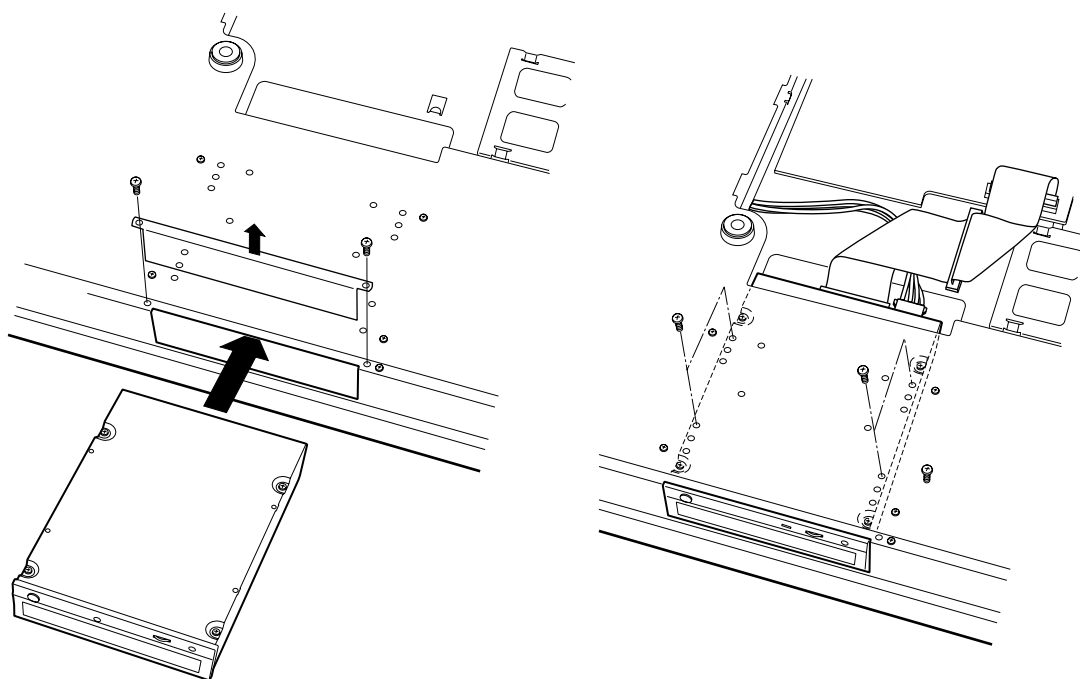
5. Place the bottom cover back and tighten all screws.

CD-R/CD-RW Drive

1. From the bottom of the unit, remove the screws for the bottom cover and open the bottom.



2. Remove the cover for the CD-R/RW Drive on the Front Panel.



3. Jumper setting of the CD-R/RW has to be in SLAVE mode with short pin on the CD-R/RW.
4. Referring to the illustration, slide the CD-R/RW Drive from the front and mount it on the bottom chassis with the screws inside the Internal Disk Mounting Kit. There are inch-threaded screws and millimeter-threaded screws inside. Be sure to use the appropriate type.
5. Connect the 4-pin Power Cable and 40-pin Disk Drive Cable as illustrated.
On the Disk Drive Cable, BLUE connector has to be connect to the CPU board on DPS24.
6. Place the bottom cover back and tighten all screws.

V. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part.
Otherwise, the non-delivery of the part or the delivery of a wrong part may result.

2. Please make sure that Part No. is correct when ordering.
If not, a part different from the one you ordered may be delivered.

3. Since the parts shown in Parts List or Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs.

2. Parts not shown in the Parts List will not in principle be supplied.

3. How to read the Parts List.

1. PC MAIN BOARD BLK

Ref. No.	Part No.	Description
D5	ED-431276C	D SCHOT 1S30-J T05
D110	ED-431276C	D SCHOT 1S30-J T05
⋮		
⋮		
IC5	EI-811073J	ICTRC-6593
IC10	EI-811068J	IC HD74HC157FP

↑

Service parts classification

↑

These reference symbols correspond with component symbols in the Schematic Diagrams.

2. FINAL ASSEMBLY BLK

Ref. No.	Part No.	Description
1.	SA-349332	FOOT
2.	ZS-344754C	ST PAN30x06STL CMT
⋮		
⋮		
44.	SP-417333J	COVER TOP
45.	ZS-418385J	BT BID30X06STL BNI EATRH LOCK
46-A	△ EW-380905J	AC CORD 250S KP300 KS16A H B J [J]
46-B	△ EW-368420J1	AC CORD 200SKP30KS B AC [A]
46-C	△ EW-410608J	AC CORD 250 KP4819D KS31A B E [E,V]

↑

Symbols for primary destination

[A] U.S.A. [J] Japan

[B] England [V] Germany

[E] Europe [x1] Japan

[X4] Universal Area

↑

Safety critical component

↑

This number corresponds with the individual parts index number in the figure.

WARNING

△ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT

△ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

PC BOARD BLK

The PC Board Block may contain several PC Boards. They appear under its block name with their individual part number.

1. P.C.BOARD BLK

Ref.No	Part No.	Description
1	BA-L3056A020A	PC CPU BLK DPS24
2	BA-L3056A030A	PC(#)ADDA BLK DPS24
3	BA-L3056A040A	PC(#)CONTROL BLK DPS24
4	BA-L3056A050A	PC(#)OPE R BLK DPS24
5	BA-L3056A060A	PC(#)OPE L BLK DPS24
6	BA-L3056A070A	PC(#)IO BLK DPS24
7	BA-L3056A080A	PC(#)FADER BLK DPS24

PC(#)ADDA BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARD

Part No.	Description
BA-L3056A502A	PC ADDA BLK
BA-L3056A502B	PC PAN ENC BLK

PC(#)CONTROL BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARDS

Part No.	Description
BA-L3056A503A	PC CONTROL BLK
BA-L3056A503B	PC PRE-AMP BLK
BA-L3056A503C	PC MOTHER BLK

PC(#)OPE R BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARDS

Part No.	Description
BA-L3056A504A	PC OPERATION R BLK
BA-L3056A504B	PC 7 SEG BLK
BA-L3056A504C	PC LCD-DIST BLK
BA-L3056A504D	PC FILTER BLK
BA-L3056A504E	PC Q-LINK BLK
BA-L3056A504F	PC METER BLK
BA-L3056A504G	PC MIC BLK

PC(#)OPE L BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARDS

Part No.	Description
BA-L3056A505A	PC LED PAN BLK
BA-L3056A505B	PC OPERATION L BLK
BA-L3056A505C	PC AUX-IN BLK
BA-L3056A505D	PC OPE-DIST BLK
BA-L3056A505E	PC JOG BLK

PC(#)IO BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARDS

Part No.	Description
BA-L3056A506A	PC INPUT A BLK
BA-L3056A506B	PC INPUT B BLK
BA-L3056A506C	PC POWER BLK
BA-L3056A506D	PC HP-HIZ BLK

PC(#)FADER BLK DPS24 CONSISTIS OF FOLLOWING P.C.BOARDS

Part No.	Description
BA-L3056A507A	PC FADER BLK

2. P.C. CPU BLK

Ref.No	Part No.	Description
J1	EJ-821219X	PHONE J YKB22-5244 NUT 6.3
J2	EJ-403478J	DIN J YKF51-5040 5P
J3	EJ-821236X	SOCKET CONNECTER YKF45-0020 4P
J4	EJ-810323J	SOCKET TCS7927-56
J5	EJ-820150J	SOCKET COAX. BNC-LNRD-BPAA
J6	EJ-394490J	SOCKET OPTICAL GP1F32T
J7	EJ-394459J	SOCKET OPTICAL GP1F32R
J8	EJ-820754X	PIN J YKC21-3079 P2P
J9	EJ-820493X	SOCKET BATTERY BH25TN
BT1	△ EZ-811066J	BATTERY LITHIUM CR2025
J201	EJ-821170X	SOCKET 20FMZ-BT 20P
J202	EJ-812021J	SOCKET 26FMZ-BT 26P
J203	EJ-821171X	SOCKET 28FMZ-BT 28P
J301	EJ-820809X	SOCKET 40FE-BT-VK-N 40P
P11	EJ-820807X	PLUG 128A-050P2A-L14A 50P
P101	EJ-821378X	PLUG 302-40GSB-ATA 40P
P102	EJ-811058J	PLUG 302-16GSB 16P
SF9	△ EF-811099J	FUSE RXE030 60V 0.30A
D1	ED-428998J	D SILICON C.1SS355TE-17 T08E
D2	ED-428998J	D SILICON C.1SS355TE-17 T08E
D3	ED-428998J	D SILICON C.1SS355TE-17 T08E
D5	ED-812338J	D ZENER C.UDZ4.7BTE-17 T08E
D6	ED-428998J	D SILICON C.1SS355TE-17 T08E
D7	ED-428998J	D SILICON C.1SS355TE-17 T08E
IC1	EI-820788X	IC GDS1110BD-206MHZ MBGA [unavailable]
IC2	EI-820802X	IC XC2S150-5FG256C MBGA [unavailable]
IC3	EI-812794J	IC XCB56362PV100 TQFP
IC4	EI-812794J	IC XCB56362PV100 TQFP
IC5	EI-812794J	IC XCB56362PV100 TQFP
IC6	EI-821487X	IC HY57V641620HGT-P
IC7	EI-821487X	IC HY57V641620HGT-P
IC8	EI-821487X	IC HY57V641620HGT-P
IC9	EI-821487X	IC HY57V641620HGT-P
IC10	EI-812979J	IC HD74LVC245ATELL FPELT16E
IC11	EI-812979J	IC HD74LVC245ATELL FPELT16E
IC12	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC13	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC14	EI-820787X	IC GAL16V8D-15QP L3056
IC15	EI-820062J	IC HD74HCT541FP FPELT24
IC16	EI-812979J	IC HD74LVC245ATELL FPELT16E
IC17	EI-812979J	IC HD74LVC245ATELL FPELT16E
IC18	EI-820795X	IC HD74LVC14TELL FPELT12E
IC19	EI-820794X	IC HD74LVC138TELL FPELT12E
IC20	EI-820792X	IC HD74LS08FP FPELT16E
IC21	EI-811096J	IC HD74HC4053FP
IC22	EI-438820J	IC TC74HCU04AF FPELT16E
IC23	EI-820154J	IC CS8420-CS FP
IC24	EI-810887J	IC AV9173-01CS08 FP T12E
IC25	EI-810574J	IC M51957BFP FP73AT12
IC26	EI-820800X	IC RS5C313
IC28	EI-821406X	IC AIC1117CE FP T16E
IC29	EI-821406X	IC AIC1117CE FP T16E
IC30	EI-820801X	IC TE28F160C3BA90
IC31	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC32	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC33	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC34	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC35	EI-812978J	IC HD74LVC541ATELL FPELT16E
IC36	EI-820793X	IC HD74LVC125ATELL FPELT12E
IC37	EI-820955X	IC NET2890
IC51	EI-812794J	IC XCB56362PV100 TQFP
IC52	EI-812852J	IC TC55V16256J-15
IC53	EI-812852J	IC TC55V16256J-15
IC54	EI-820459X	IC GM71VS65163CLT-5
IC55	EI-820459X	IC GM71VS65163CLT-5
PH1	ET-431258J	DETECTOR C.PC400T T12E

Ref.No	Part No.	Description
T1	BT-810651J	TRANS PULSE CIT0705S-35101TFP
TR1	ET-820772X	TR CHIP DTB122JKT146 T08E
TR2	ET-821162X	TR CHIP DTC343TKT146 T08E
TR3	ET-433976J	TR C.DTA114TKA T146T08E
X1	EI-820769X	OSC X*TAL C.SMD-49 3.6864MHZ
X2	EI-820827X	OSC X*TAL C.SG8002JAPCB 50MHZ
X3	EI-427850J	OSC X*TAL MC306 32.768KHZ
X4	EI-821163X	OSC X*TAL C.SG8002JAPCB 48MHZ

3. P.C. (#)ADDA BLK

P.C. ADDA BLK

Ref.No	Part No.	Description
D601	ED-811455J	D SILICON H 1SS133T-77 T26
D602	ED-811455J	D SILICON H 1SS133T-77 T26
D603	ED-811455J	D SILICON H 1SS133T-77 T26
D604	ED-811455J	D SILICON H 1SS133T-77 T26
D605	ED-811455J	D SILICON H 1SS133T-77 T26
D606	ED-811455J	D SILICON H 1SS133T-77 T26
D607	ED-811455J	D SILICON H 1SS133T-77 T26
D608	ED-811455J	D SILICON H 1SS133T-77 T26
D609	ED-811455J	D SILICON H 1SS133T-77 T26
D610	ED-811455J	D SILICON H 1SS133T-77 T26
D611	ED-811455J	D SILICON H 1SS133T-77 T26
D612	ED-811455J	D SILICON H 1SS133T-77 T26
IC11	EI-810591J	IC NJM5532L
IC12	EI-810591J	IC NJM5532L
IC31	EI-810591J	IC NJM5532L
IC32	EI-810591J	IC NJM5532L
IC33	EI-812318J	IC AK5393-VS
IC51	EI-810591J	IC NJM5532L
IC52	EI-810591J	IC NJM5532L
IC71	EI-810591J	IC NJM5532L
IC72	EI-810591J	IC NJM5532L
IC73	EI-812318J	IC AK5393-VS
IC91	EI-810591J	IC NJM5532L
IC92	EI-810591J	IC NJM5532L
IC111	EI-810591J	IC NJM5532L
IC112	EI-810591J	IC NJM5532L
IC113	EI-812318J	IC AK5393-VS
IC131	EI-810591J	IC NJM5532L
IC132	EI-810591J	IC NJM5532L
IC134	EI-384806J	IC TC74HC4053AP
IC151	EI-810591J	IC NJM5532L
IC152	EI-810591J	IC NJM5532L
IC153	EI-812318J	IC AK5393-VS
IC154	EI-384806J	IC TC74HC4053AP
IC171	EI-810591J	IC NJM5532L
IC172	EI-810591J	IC NJM5532L
IC191	EI-810591J	IC NJM5532L
IC192	EI-810591J	IC NJM5532L
IC193	EI-812318J	IC AK5393-VS
IC211	EI-810591J	IC NJM5532L
IC212	EI-810591J	IC NJM5532L
IC231	EI-810591J	IC NJM5532L
IC232	EI-810591J	IC NJM5532L
IC233	EI-812318J	IC AK5393-VS
IC251	EI-810591J	IC NJM5532L
IC252	EI-810591J	IC NJM5532L
IC271	EI-810591J	IC NJM5532L
IC272	EI-810591J	IC NJM5532L
IC273	EI-812318J	IC AK5393-VS
IC291	EI-810591J	IC NJM5532L
IC292	EI-810591J	IC NJM5532L
IC311	EI-810591J	IC NJM5532L
IC312	EI-810591J	IC NJM5532L
IC313	EI-812318J	IC AK5393-VS

Ref.No	Part No.	Description
IC331	EI-810591J	IC NJM5532L
IC332	EI-810591J	IC NJM5532L
IC333	EI-821226X	IC OPA2134UA FPT12E
IC345	EI-820799X	IC PCM1738E FPT16E
IC352	EI-810591J	IC NJM5532L
IC353	EI-821226X	IC OPA2134UA FPT12E
IC371	EI-810591J	IC NJM5532L
IC372	EI-810591J	IC NJM5532L
IC373	EI-821226X	IC OPA2134UA FPT12E
IC385	EI-820799X	IC PCM1738E FPT16E
IC392	EI-810591J	IC NJM5532L
IC393	EI-821226X	IC OPA2134UA FPT12E
IC411	EI-810591J	IC NJM5532L
IC412	EI-810591J	IC NJM5532L
IC413	EI-821226X	IC OPA2134UA FPT12E
IC425	EI-820799X	IC PCM1738E FPT16E
IC432	EI-810591J	IC NJM5532L
IC433	EI-821226X	IC OPA2134UA FPT12E
IC451	EI-810591J	IC NJM5532L
IC452	EI-810591J	IC NJM5532L
IC453	EI-821226X	IC OPA2134UA FPT12E
IC465	EI-820799X	IC PCM1738E FPT16E
IC472	EI-810591J	IC NJM5532L
IC473	EI-821226X	IC OPA2134UA FPT12E
IC491	EI-810591J	IC NJM5532L
IC492	EI-810591J	IC NJM5532L
IC493	EI-821226X	IC OPA2134UA FPT12E
IC505	EI-820799X	IC PCM1738E FPT16E
IC512	EI-810591J	IC NJM5532L
IC513	EI-821226X	IC OPA2134UA FPT12E
IC531	EI-431241J	IC HD74HC4052FP FPELT16E
IC532	EI-810591J	IC NJM5532L
IC551	EI-403306J	IC NJM4558L
IC552	EI-810591J	IC NJM5532L
IC601	EI-820951X	IC HD74LVC244AT FPELT16E
IC602	EI-810589J	IC M51957BL
IC603	EI-431115J	IC HD74HC595FP FPELT16E
IC604	EI-431115J	IC HD74HC595FP FPELT16E
IC605	EI-413206J	IC NJM7905FA
IC606	EI-820780X	IC AIC1117-33CE
IC607	EI-812977J	IC HD74LVC08TELL FPELT16E
IC608	EI-431241J	IC HD74HC4052FP FPELT16E
IC609	EI-810591J	IC NJM5532L
IC610	EI-820793X	IC HD74LVC125ATELL FPELT12E
J1	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J2	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J3	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J4	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J203	EJ-821170X	SOCKET 20FMZ-BT 20P
J301	EJ-820809X	SOCKET 40FE-BT-VK-N 40P
J303	EJ-821169X	SOCKET 13FMZ-BT 13P
J304	EJ-821169X	SOCKET 13FMZ-BT 13P
J306	EJ-427802J	SOCKET 26FE-BT 26P
J331	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J351	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J371	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J391	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J411	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J431	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J451	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J471	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J491	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J511	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J531	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
J551	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3
RP601	ER-386637J	COMP R RGLE8X 103J
SF7	△ EF-376821	FUSE ICP-N15 50V 0.6A

Ref.No	Part No.	Description
TR131	ET-362847	TR 2SA1317 S,T,U T05
TR132	ET-362209	TR 2SC3330 S,T,U T05
TR151	ET-362847	TR 2SA1317 S,T,U T05
TR152	ET-362209	TR 2SC3330 S,T,U T05
TR331	ET-820770X	TR 2SD2227S T05
TR332	ET-820770X	TR 2SD2227S T05
TR351	ET-820770X	TR 2SD2227S T05
TR352	ET-820770X	TR 2SD2227S T05
TR371	ET-820770X	TR 2SD2227S T05
TR372	ET-820770X	TR 2SD2227S T05
TR391	ET-820770X	TR 2SD2227S T05
TR392	ET-820770X	TR 2SD2227S T05
TR411	ET-820770X	TR 2SD2227S T05
TR412	ET-820770X	TR 2SD2227S T05
TR431	ET-820770X	TR 2SD2227S T05
TR432	ET-820770X	TR 2SD2227S T05
TR451	ET-820770X	TR 2SD2227S T05
TR452	ET-820770X	TR 2SD2227S T05
TR471	ET-820770X	TR 2SD2227S T05
TR472	ET-820770X	TR 2SD2227S T05
TR491	ET-820770X	TR 2SD2227S T05
TR492	ET-820770X	TR 2SD2227S T05
TR511	ET-820770X	TR 2SD2227S T05
TR512	ET-820770X	TR 2SD2227S T05
TR531	ET-820770X	TR 2SD2227S T05
TR532	ET-820770X	TR 2SD2227S T05
TR551	ET-820770X	TR 2SD2227S T05
TR552	ET-820770X	TR 2SD2227S T05
TR601	ET-389684J	TR DTA113ZS T05
TR602	ET-389684J	TR DTA113ZS T05
TR603	ET-389684J	TR DTA113ZS T05
TR604	ET-820770X	TR 2SD2227S T05
TR605	ET-820770X	TR 2SD2227S T05
TR606	ET-389684J	TR DTA113ZS T05
TR607	ET-389684J	TR DTA113ZS T05
TR608	ET-820770X	TR 2SD2227S T05
TR609	ET-820770X	TR 2SD2227S T05
TR610	ET-820770X	TR 2SD2227S T05
TR611	ET-820770X	TR 2SD2227S T05
TR612	ET-364023	TR DTC114ES T05
TR613	ET-389684J	TR DTA113ZS T05
TR614	ET-364023	TR DTC114ES T05
TR615	ET-389684J	TR DTA113ZS T05
W313	EW-820715X	WIRE ASSY L3056 W313 6P

P.C. PAN ENC BLK

IC801	EI-820790X	IC HD74HC253FP FPELT16E
IC802	EI-820790X	IC HD74HC253FP FPELT16E
IC803	EI-820790X	IC HD74HC253FP FPELT16E
J409	EJ-438452J	SOCKET 10-FMZ-ST 10P
SW801	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW802	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW803	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW804	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW805	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW806	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW807	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW808	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW809	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW810	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW811	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW812	ES-812749J	SW ROTARY ENCORDER EC12E24204

4. P.C. (#)CONTROL BLK

P.C. CONTROL BLK

Ref.No	Part No.	Description
D701	ED-821003X	D SILICON C. DAN217 T146T08
D702	ED-428998J	D SILICON C.1SS355TE-17 T08E
D703	ED-821003X	D SILICON C. DAN217 T146T08
IB701	ER-813231J	COMP R C.MNR14 472J T08P
IB702	ER-813231J	COMP R C.MNR14 472J T08P
IB703	ER-813231J	COMP R C.MNR14 472J T08P
IB704	ER-813231J	COMP R C.MNR14 472J T08P
IB705	ER-813231J	COMP R C.MNR14 472J T08P
IC701	EI-820798X	IC MB91110PMT2-G-BND QFTY
IC702	EI-811086J	IC HD74HC541FP
IC703	EI-401216J	IC HD74HC138FP
IC704	EI-820789X	IC HD74HC238FP FPELT16E
IC705	EI-820789X	IC HD74HC238FP FPELT16E
IC706	EI-812482J	IC HD74HC4051FP
IC707	EI-431253J	IC HD74HC14FP FPELT16E
IC708	EI-811577J	IC HD74HC175FP FPELT16E
IC709	EI-820796X	IC LMC555CMX FP T12E
IC710	EI-401216J	IC HD74HC138FP
IC711	EI-401216J	IC HD74HC138FP
IC712	EI-401216J	IC HD74HC138FP
IC713	EI-401216J	IC HD74HC138FP
IC714	EI-810268J	IC HD74HC273FP
IC715	EI-810268J	IC HD74HC273FP
IC716	EI-810268J	IC HD74HC273FP
IC717	EI-811577J	IC HD74HC175FP FPELT16E
IC718	EI-811577J	IC HD74HC175FP FPELT16E
IC719	EI-812482J	IC HD74HC4051FP
IC720	EI-812482J	IC HD74HC4051FP
IC721	EI-820786X	IC TLC2272CDR FP T16E
IC722	EI-820791X	IC HD74HC86FP FPELT16E
IC723	EI-821405X	IC AIC1117-33CE FP T16E
IC724	EI-431115J	IC HD74HC595FP FPELT16E
IC725	EI-431115J	IC HD74HC595FP FPELT16E
IC726	EI-431115J	IC HD74HC595FP FPELT16E
IC727	EI-821440X	IC M27C256B45XF1 DPS24 V1.0-OP
IC801	EI-820782X	IC BA6286N
IC802	EI-820782X	IC BA6286N
IC803	EI-820782X	IC BA6286N
IC804	EI-820782X	IC BA6286N
IC805	EI-820782X	IC BA6286N
IC806	EI-820782X	IC BA6286N
IC807	EI-820782X	IC BA6286N
IC808	EI-820782X	IC BA6286N
IC809	EI-820782X	IC BA6286N
IC810	EI-820782X	IC BA6286N
IC811	EI-820782X	IC BA6286N
IC812	EI-820782X	IC BA6286N
IC813	EI-820782X	IC BA6286N
J401	EJ-821389X	SOCKET 26FE-BT-VK-N 26P
J402	EJ-820808X	SOCKET 20FE-BT-VK-N 20P
J403	EJ-821389X	SOCKET 26FE-BT-VK-N 26P
J409	EJ-820815X	SOCKET 10FMZ-BT 10P
J410	EJ-821389X	SOCKET 26FE-BT-VK-N 26P
SF10	△ EF-376821	FUSE ICP-N25 50V 0.6A
TR701	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR702	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR703	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR704	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR705	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR706	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR707	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR708	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR709	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR710	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR711	ET-820771X	TR FET CHIP 2SK2103T100 T12E

Ref.No	Part No.	Description
TR712	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR713	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR714	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR715	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR716	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR717	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR718	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR719	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR720	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR721	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR722	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR723	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR724	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR725	ET-820771X	TR FET CHIP 2SK2103T100 T12E
TR726	ET-439329J	TR C.DTA143ZKA T146T08E
TR727	ET-439329J	TR C.DTA143ZKA T146T08E
TR728	ET-439329J	TR C.DTA143ZKA T146T08E
TR729	ET-439329J	TR C.DTA143ZKA T146T08E
TR730	ET-439329J	TR C.DTA143ZKA T146T08E
TR731	ET-439329J	TR C.DTA143ZKA T146T08E
TR732	ET-439329J	TR C.DTA143ZKA T146T08E
TR733	ET-439329J	TR C.DTA143ZKA T146T08E
TR734	ET-439329J	TR C.DTA143ZKA T146T08E
TR735	ET-439329J	TR C.DTA143ZKA T146T08E
TR736	ET-439329J	TR C.DTA143ZKA T146T08E
TR737	ET-439329J	TR C.DTA143ZKA T146T08E
TR738	ET-439329J	TR C.DTA143ZKA T146T08E
TR739	ET-439329J	TR C.DTA143ZKA T146T08E
TR740	ET-439329J	TR C.DTA143ZKA T146T08E
TR741	ET-439329J	TR C.DTA143ZKA T146T08E
TR742	ET-439329J	TR C.DTA143ZKA T146T08E
TR743	ET-439329J	TR C.DTA143ZKA T146T08E
TR744	ET-439329J	TR C.DTA143ZKA T146T08E
TR745	ET-439329J	TR C.DTA143ZKA T146T08E
TR746	ET-439329J	TR C.DTA143ZKA T146T08E
TR747	ET-439329J	TR C.DTA143ZKA T146T08E
TR748	ET-439329J	TR C.DTA143ZKA T146T08E
TR749	ET-439329J	TR C.DTA143ZKA T146T08E
TR750	ET-439329J	TR C.DTA143ZKA T146T08E
TR751	ET-439329J	TR C.DTA143ZKA T146T08E
TR752	ET-439329J	TR C.DTA143ZKA T146T08E
TR753	ET-439329J	TR C.DTA143ZKA T146T08E
TR754	ET-439329J	TR C.DTA143ZKA T146T08E
TR755	ET-439329J	TR C.DTA143ZKA T146T08E
TR756	ET-439329J	TR C.DTA143ZKA T146T08E
TR757	ET-439329J	TR C.DTA143ZKA T146T08E
TR758	ET-439329J	TR C.DTA143ZKA T146T08E
TR759	ET-439329J	TR C.DTA143ZKA T146T08E
X701	EI-820768X	OSC X'TAL C.SMD-49 12.500MHZ

P.C. PRE-AMP BLK

Ref.No	Part No.	Description	Ref.No	Part No.	Description
IC301	EI-810591J	IC NJM5532L	TR354	ET-821232X	TR 2SC3329 GR,BL T05
IC351	EI-810591J	IC NJM5532L	TR401	ET-821232X	TR 2SC3329 GR,BL T05
IC401	EI-810591J	IC NJM5532L	TR402	ET-821232X	TR 2SC3329 GR,BL T05
IC451	EI-810591J	IC NJM5532L	TR403	ET-821232X	TR 2SC3329 GR,BL T05
IC501	EI-810591J	IC NJM5532L	TR404	ET-821232X	TR 2SC3329 GR,BL T05
IC551	EI-810591J	IC NJM5532L	TR451	ET-821232X	TR 2SC3329 GR,BL T05
J303	EJ-821172X	SOCKET 13FMZ-ST 13P	TR452	ET-821232X	TR 2SC3329 GR,BL T05
J304	EJ-821172X	SOCKET 13FMZ-ST 13P	TR453	ET-821232X	TR 2SC3329 GR,BL T05
J305	EJ-821172X	SOCKET 13FMZ-ST 13P	TR454	ET-821232X	TR 2SC3329 GR,BL T05
J308	EJ-820809X	SOCKET 40FE-BT-VK-N 40P	TR501	ET-821232X	TR 2SC3329 GR,BL T05
J309	EJ-820809X	SOCKET 40FE-BT-VK-N 40P	TR502	ET-821232X	TR 2SC3329 GR,BL T05
SW1	ES-820707X	SW PUSH SPPH43-W	TR503	ET-821232X	TR 2SC3329 GR,BL T05
SW2	ES-820707X	SW PUSH SPPH43-W	TR504	ET-821232X	TR 2SC3329 GR,BL T05
SW51	ES-820707X	SW PUSH SPPH43-W	TR551	ET-821232X	TR 2SC3329 GR,BL T05
SW52	ES-820707X	SW PUSH SPPH43-W	TR552	ET-821232X	TR 2SC3329 GR,BL T05
SW101	ES-820707X	SW PUSH SPPH43-W	TR553	ET-821232X	TR 2SC3329 GR,BL T05
SW102	ES-820707X	SW PUSH SPPH43-W	TR554	ET-821232X	TR 2SC3329 GR,BL T05
SW151	ES-820707X	SW PUSH SPPH43-W	TR555	ET-365191	TR FET 2SK363 GR T05
SW152	ES-820707X	SW PUSH SPPH43-W	TR556	ET-365191	TR FET 2SK363 GR T05
SW201	ES-820707X	SW PUSH SPPH43-W	TR601	ET-365191	TR FET 2SK363 GR T05
SW202	ES-820707X	SW PUSH SPPH43-W	TR602	ET-365191	TR FET 2SK363 GR T05
SW251	ES-820707X	SW PUSH SPPH43-W	TR603	ET-362209	TR 2SC3330 S,T,U T05
SW252	ES-820707X	SW PUSH SPPH43-W	TR604	ET-362209	TR 2SC3330 S,T,U T05
SW301	ES-820707X	SW PUSH SPPH43-W	TR610	ET-362847	TR 2SA1317 S,T,U T05
SW302	ES-820707X	SW PUSH SPPH43-W	TR611	ET-362209	TR 2SC3330 S,T,U T05
SW351	ES-820707X	SW PUSH SPPH43-W	VR1	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW352	ES-820707X	SW PUSH SPPH43-W	VR51	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW401	ES-820707X	SW PUSH SPPH43-W	VR101	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW402	ES-820707X	SW PUSH SPPH43-W	VR151	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW451	ES-820707X	SW PUSH SPPH43-W	VR201	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW452	ES-820707X	SW PUSH SPPH43-W	VR251	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW501	ES-820707X	SW PUSH SPPH43-W	VR301	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW502	ES-820707X	SW PUSH SPPH43-W	VR351	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW551	ES-820707X	SW PUSH SPPH43-W	VR401	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW552	ES-820707X	SW PUSH SPPH43-W	VR451	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
SW601	ES-821228X	SW SLIDE SSSB041600	VR501	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
TR1	ET-821232X	TR 2SC3329 GR,BL T05	VR551	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203
TR2	ET-821232X	TR 2SC3329 GR,BL T05	VR651	EV-820765X	VR ROTARY RK09K113 L30 DCUT B103
TR3	ET-821232X	TR 2SC3329 GR,BL T05	W307	EW-820713X	WIRE ASSY L3056 W307 3P
TR4	ET-821232X	TR 2SC3329 GR,BL T05	W312	EW-820714X	WIRE ASSY L3056 W312 7P
TR51	ET-821232X	TR 2SC3329 GR,BL T05	P.C. MOTHER BLK		
TR52	ET-821232X	TR 2SC3329 GR,BL T05	J201	EJ-821170X	SOCKET 20FMZ-BT 20P
TR53	ET-821232X	TR 2SC3329 GR,BL T05	J202	EJ-812021J	SOCKET 26FMZ-BT 26P
TR54	ET-821232X	TR 2SC3329 GR,BL T05	J203	EJ-821171X	SOCKET 28FMZ-BT 28P
TR101	ET-821232X	TR 2SC3329 GR,BL T05	J204	EJ-821170X	SOCKET 20FMZ-BT 20P
TR102	ET-821232X	TR 2SC3329 GR,BL T05	P204	EJ-413148J	PLUG 128D-064P2C-S14A 64P
TR103	ET-821232X	TR 2SC3329 GR,BL T05	P205	EJ-413148J	PLUG 128D-064P2C-S14A 64P
TR104	ET-821232X	TR 2SC3329 GR,BL T05	P206	EJ-413148J	PLUG 128D-064P2C-S14A 64P
TR151	ET-821232X	TR 2SC3329 GR,BL T05	5. P.C. (#)OPE R BLK		
TR152	ET-821232X	TR 2SC3329 GR,BL T05	P.C. OPERATION R BLK		
TR153	ET-821232X	TR 2SC3329 GR,BL T05	Ref.No	Part No.	Description
TR154	ET-821232X	TR 2SC3329 GR,BL T05	D201	ED-820636X	D LED SEL5755C YELLOW
TR201	ET-821232X	TR 2SC3329 GR,BL T05	D202	ED-820665X	D LED SEL5955A ORANGE
TR202	ET-821232X	TR 2SC3329 GR,BL T05	D203	ED-820636X	D LED SEL5755C YELLOW
TR203	ET-821232X	TR 2SC3329 GR,BL T05	D204	ED-820636X	D LED SEL5755C YELLOW
TR204	ET-821232X	TR 2SC3329 GR,BL T05	D205	ED-820636X	D LED SEL5755C YELLOW
TR251	ET-821232X	TR 2SC3329 GR,BL T05	D206	ED-820636X	D LED SEL5755C YELLOW
TR252	ET-821232X	TR 2SC3329 GR,BL T05	D207	ED-820636X	D LED SEL5755C YELLOW
TR253	ET-821232X	TR 2SC3329 GR,BL T05	D208	ED-820636X	D LED SEL5755C YELLOW
TR254	ET-821232X	TR 2SC3329 GR,BL T05	D212	ED-820636X	D LED SEL5755C YELLOW
TR301	ET-821232X	TR 2SC3329 GR,BL T05	D213	ED-820636X	D LED SEL5755C YELLOW
TR302	ET-821232X	TR 2SC3329 GR,BL T05	D214	ED-820636X	D LED SEL5755C YELLOW
TR303	ET-821232X	TR 2SC3329 GR,BL T05	D215	ED-820636X	D LED SEL5755C YELLOW
TR304	ET-821232X	TR 2SC3329 GR,BL T05	D216	ED-820636X	D LED SEL5755C YELLOW
TR351	ET-821232X	TR 2SC3329 GR,BL T05			
TR352	ET-821232X	TR 2SC3329 GR,BL T05			
TR353	ET-821232X	TR 2SC3329 GR,BL T05			

Ref.No	Part No.	Description
D217	ED-820636X	D LED SEL5755C YELLOW
D218	ED-820636X	D LED SEL5755C YELLOW
D221	ED-820665X	D LED SEL5955A ORANGE
D222	ED-820665X	D LED SEL5955A ORANGE
D224	ED-820665X	D LED SEL5955A ORANGE
D225	ED-820665X	D LED SEL5955A ORANGE
D226	ED-820665X	D LED SEL5955A ORANGE
D239	ED-820777X	D LED MPG3372X GREEN
D240	ED-821292X	D LED BR3372X RED
J403	EJ-820812X	SOCKET 26FE-ST-VK-N 26P
J410	EJ-820812X	SOCKET 26FE-ST-VK-N 26P
J411	EJ-820812X	SOCKET 26FE-ST-VK-N 26P
SW201	ES-410552J	SW TACT SKHVBE T05
SW202	ES-410552J	SW TACT SKHVBE T05
SW203	ES-410552J	SW TACT SKHVBE T05
SW204	ES-410552J	SW TACT SKHVBE T05
SW205	ES-410552J	SW TACT SKHVBE T05
SW206	ES-410552J	SW TACT SKHVBE T05
SW207	ES-410552J	SW TACT SKHVBE T05
SW208	ES-410552J	SW TACT SKHVBE T05
SW209	ES-410552J	SW TACT SKHVBE T05
SW210	ES-410552J	SW TACT SKHVBE T05
SW211	ES-410552J	SW TACT SKHVBE T05
SW212	ES-410552J	SW TACT SKHVBE T05
SW213	ES-410552J	SW TACT SKHVBE T05
SW214	ES-410552J	SW TACT SKHVBE T05
SW215	ES-410552J	SW TACT SKHVBE T05
SW216	ES-410552J	SW TACT SKHVBE T05
SW217	ES-410552J	SW TACT SKHVBE T05
SW218	ES-410552J	SW TACT SKHVBE T05
SW221	ES-410552J	SW TACT SKHVBE T05
SW222	ES-410552J	SW TACT SKHVBE T05
SW223	ES-410552J	SW TACT SKHVBE T05
SW224	ES-410552J	SW TACT SKHVBE T05
SW225	ES-410552J	SW TACT SKHVBE T05
SW226	ES-410552J	SW TACT SKHVBE T05
SW227	ES-410552J	SW TACT SKHVBE T05
SW228	ES-410552J	SW TACT SKHVBE T05
SW231	ES-415015J	SW TACT SKQEAD
SW232	ES-415015J	SW TACT SKQEAD
SW233	ES-415015J	SW TACT SKQEAD
SW234	ES-415015J	SW TACT SKQEAD
SW235	ES-415015J	SW TACT SKQEAD
SW236	ES-415015J	SW TACT SKQEAD
SW237	ES-415015J	SW TACT SKQEAD
SW238	ES-415015J	SW TACT SKQEAD
SW239	ES-415015J	SW TACT SKQEAD
SW240	ES-415015J	SW TACT SKQEAD
SW241	ES-410552J	SW TACT SKHVBE T05
SW242	ES-410552J	SW TACT SKHVBE T05
SW243	ES-410552J	SW TACT SKHVBE T05
SW244	ES-410552J	SW TACT SKHVBE T05
SW251	ES-410552J	SW TACT SKHVBE T05
SW252	ES-410552J	SW TACT SKHVBE T05
SW253	ES-410552J	SW TACT SKHVBE T05
SW254	ES-410552J	SW TACT SKHVBE T05
SW255	ES-410552J	SW TACT SKHVBE T05
SW256	ES-410552J	SW TACT SKHVBE T05
SW257	ES-410552J	SW TACT SKHVBE T05
SW258	ES-410552J	SW TACT SKHVBE T05
SW259	ES-410552J	SW TACT SKHVBE T05
SW260	ES-410552J	SW TACT SKHVBE T05
SW261	ES-410552J	SW TACT SKHVBE T05
SW262	ES-410552J	SW TACT SKHVBE T05

P.C. 7 SEG BLK

D701	ED-812445J	IND LE SA04-21IDB
------	------------	-------------------

Ref.No	Part No.	Description
D702	ED-812445J	IND LE SA04-21IDB
D703	ED-812445J	IND LE SA04-21IDB
D704	ED-812445J	IND LE SA04-21IDB
D705	ED-812445J	IND LE SA04-21IDB
D706	ED-812445J	IND LE SA04-21IDB
D707	ED-812445J	IND LE SA04-21IDB
D708	ED-812445J	IND LE SA04-21IDB
D709	ED-820665X	D LED SEL5955A ORANGE
D710	ED-820665X	D LED SEL5955A ORANGE
IC721	EI-403306J	IC NJM4558L
J411	EJ-820812X	SOCKET 26FE-ST-VK-N 26P
SW711	ES-410552J	SW TACT SKHVBE T05
SW712	ES-410552J	SW TACT SKHVBE T05
SW713	ES-410552J	SW TACT SKHVBE T05
SW714	ES-410552J	SW TACT SKHVBE T05
SW715	ES-410552J	SW TACT SKHVBE T05
SW716	ES-410552J	SW TACT SKHVBE T05
SW717	ES-410552J	SW TACT SKHVBE T05
TR711	ET-362209	TR 2SC3330 S,T,U T05
TR712	ET-362847	TR 2SA1317 S,T,U T05
W414	EW-820720X	WIRE ASSY L3056 W414 2P

P.C. LCD-DIST BLK

IC551	EI-382537J1	IC TC74HC253AP
IC552	EI-382537J1	IC TC74HC253AP
J418	EJ-811062J	SOCKET 12FMZ-ST 12P
J419	EJ-820813X	SOCKET 34FE-ST-VK-N 34P
J420	EJ-812764J	SOCKET 13FE-ST-VK-N 13P
J421	EJ-820810X	SOCKET 12FE-ST-VK-N 12P
RP551	ER-820824X	COMP R RKC1/8B12 223J

P.C. FILTER BLK

C551	△ EC-430824J	C MMY V CUT MKP3362 683M 275AC
C556	△ EC-427562J	C MMY V CUT MKP3362 103M 275AC
C557	△ EC-427562J	C MMY V CUT MKP3362 103M 275AC
L551	△ EO-427223J	COIL LF HR-24-562

P.C. Q-LINK BLK

J420	EJ-812764J	SOCKET 13FE-ST-VK-N 13P
SW601	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW602	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW603	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW604	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW605	ES-812749J	SW ROTARY ENCORDER EC12E24204
SW606	ES-812749J	SW ROTARY ENCORDER EC12E24204

P.C. METER BLK

D631	ED-820752X	IND LE TOA-B10AA2MRMYMG6-B4-LC
D632	ED-820753X	IND LE TOA-B10AAMG8-B4-LC
D633	ED-820752X	IND LE TOA-B10AA2MRMYMG6-B4-LC
D634	ED-820753X	IND LE TOA-B10AAMG8-B4-LC
J421	EJ-820810X	SOCKET 12FE-ST-VK-N 12P

P.C. MIC BLK

MC741	EY-820803X	MIC KUC4023-040235
-------	------------	--------------------

6. P.C. (#) OPERATION L BLK

P.C. LED PAN BLK

Ref.No	Part No.	Description
D401	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D402	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D403	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D404	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D405	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D406	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC
D407	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC

Ref.No	Part No.	Description	Ref.No	Part No.	Description
D408	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC	D307	ED-820779X	D LED VRPG3312X RED/GREEN
D409	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC	D308	ED-820779X	D LED VRPG3312X RED/GREEN
D410	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC	D309	ED-820779X	D LED VRPG3312X RED/GREEN
D411	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC	D310	ED-820779X	D LED VRPG3312X RED/GREEN
D412	ED-820751X	IND LE TOA-L23ZMYMR-91B-LC	D311	ED-820779X	D LED VRPG3312X RED/GREEN
D421	ED-820665X	D LED SEL5955A ORANGE	D312	ED-820779X	D LED VRPG3312X RED/GREEN
D422	ED-820665X	D LED SEL5955A ORANGE	D315	ED-820776X	D LED MAA3372X ORANGE
D423	ED-820665X	D LED SEL5955A ORANGE	D321	ED-820778X	D LED SML72755C YELLOW/RED
D424	ED-820665X	D LED SEL5955A ORANGE	D322	ED-820778X	D LED SML72755C YELLOW/RED
D425	ED-820665X	D LED SEL5955A ORANGE	D323	ED-820778X	D LED SML72755C YELLOW/RED
D426	ED-820665X	D LED SEL5955A ORANGE	D324	ED-820778X	D LED SML72755C YELLOW/RED
D427	ED-820665X	D LED SEL5955A ORANGE	D325	ED-820778X	D LED SML72755C YELLOW/RED
D428	ED-820665X	D LED SEL5955A ORANGE	D326	ED-820778X	D LED SML72755C YELLOW/RED
D429	ED-820665X	D LED SEL5955A ORANGE	D327	ED-820778X	D LED SML72755C YELLOW/RED
D430	ED-820665X	D LED SEL5955A ORANGE	D328	ED-820778X	D LED SML72755C YELLOW/RED
D431	ED-820665X	D LED SEL5955A ORANGE	D329	ED-820778X	D LED SML72755C YELLOW/RED
D432	ED-820665X	D LED SEL5955A ORANGE	D330	ED-820778X	D LED SML72755C YELLOW/RED
D435	ED-820636X	D LED SEL5755C YELLOW	D331	ED-820778X	D LED SML72755C YELLOW/RED
D441	ED-820636X	D LED SEL5755C YELLOW	D332	ED-820778X	D LED SML72755C YELLOW/RED
D442	ED-820636X	D LED SEL5755C YELLOW	D335	ED-820636X	D LED SEL5755C YELLOW
D443	ED-820636X	D LED SEL5755C YELLOW	D341	ED-820778X	D LED SML72755C YELLOW/RED
D444	ED-820636X	D LED SEL5755C YELLOW	D342	ED-820778X	D LED SML72755C YELLOW/RED
D445	ED-820636X	D LED SEL5755C YELLOW	D343	ED-820778X	D LED SML72755C YELLOW/RED
D446	ED-820636X	D LED SEL5755C YELLOW	D344	ED-820778X	D LED SML72755C YELLOW/RED
D447	ED-820636X	D LED SEL5755C YELLOW	D345	ED-820778X	D LED SML72755C YELLOW/RED
D448	ED-820636X	D LED SEL5755C YELLOW	D346	ED-820778X	D LED SML72755C YELLOW/RED
D449	ED-820636X	D LED SEL5755C YELLOW	D347	ED-820778X	D LED SML72755C YELLOW/RED
D450	ED-820636X	D LED SEL5755C YELLOW	D348	ED-820778X	D LED SML72755C YELLOW/RED
D451	ED-820636X	D LED SEL5755C YELLOW	D349	ED-820778X	D LED SML72755C YELLOW/RED
D452	ED-820636X	D LED SEL5755C YELLOW	D350	ED-820778X	D LED SML72755C YELLOW/RED
D455	ED-820665X	D LED SEL5955A ORANGE	D351	ED-820778X	D LED SML72755C YELLOW/RED
J401	EJ-820812X	SOCKET 26FE-ST-VK-N 26P	D352	ED-820778X	D LED SML72755C YELLOW/RED
SW415	ES-410552J	SW TACT SKHVBE T05	D355	ED-820636X	D LED SEL5755C YELLOW
SW421	ES-410552J	SW TACT SKHVBE T05	D361	ED-820636X	D LED SEL5755C YELLOW
SW422	ES-410552J	SW TACT SKHVBE T05	D362	ED-820636X	D LED SEL5755C YELLOW
SW423	ES-410552J	SW TACT SKHVBE T05	D363	ED-820636X	D LED SEL5755C YELLOW
SW424	ES-410552J	SW TACT SKHVBE T05	D364	ED-820636X	D LED SEL5755C YELLOW
SW425	ES-410552J	SW TACT SKHVBE T05	D365	ED-820636X	D LED SEL5755C YELLOW
SW426	ES-410552J	SW TACT SKHVBE T05	D366	ED-820665X	D LED SEL5955A ORANGE
SW427	ES-410552J	SW TACT SKHVBE T05	D368	ED-820636X	D LED SEL5755C YELLOW
SW428	ES-410552J	SW TACT SKHVBE T05	D369	ED-820636X	D LED SEL5755C YELLOW
SW429	ES-410552J	SW TACT SKHVBE T05	D370	ED-820636X	D LED SEL5755C YELLOW
SW430	ES-410552J	SW TACT SKHVBE T05	D371	ED-820636X	D LED SEL5755C YELLOW
SW431	ES-410552J	SW TACT SKHVBE T05	D372	ED-820636X	D LED SEL5755C YELLOW
SW432	ES-410552J	SW TACT SKHVBE T05	D375	ED-820636X	D LED SEL5755C YELLOW
SW435	ES-410552J	SW TACT SKHVBE T05	J402	EJ-820811X	SOCKET 20FE-ST-VK-N 20P
SW441	ES-410552J	SW TACT SKHVBE T05	SW321	ES-410552J	SW TACT SKHVBE T05
SW442	ES-410552J	SW TACT SKHVBE T05	SW322	ES-410552J	SW TACT SKHVBE T05
SW443	ES-410552J	SW TACT SKHVBE T05	SW323	ES-410552J	SW TACT SKHVBE T05
SW444	ES-410552J	SW TACT SKHVBE T05	SW324	ES-410552J	SW TACT SKHVBE T05
SW445	ES-410552J	SW TACT SKHVBE T05	SW325	ES-410552J	SW TACT SKHVBE T05
SW446	ES-410552J	SW TACT SKHVBE T05	SW326	ES-410552J	SW TACT SKHVBE T05
SW447	ES-410552J	SW TACT SKHVBE T05	SW327	ES-410552J	SW TACT SKHVBE T05
SW448	ES-410552J	SW TACT SKHVBE T05	SW328	ES-410552J	SW TACT SKHVBE T05
SW449	ES-410552J	SW TACT SKHVBE T05	SW329	ES-410552J	SW TACT SKHVBE T05
SW450	ES-410552J	SW TACT SKHVBE T05	SW330	ES-410552J	SW TACT SKHVBE T05
SW451	ES-410552J	SW TACT SKHVBE T05	SW331	ES-410552J	SW TACT SKHVBE T05
SW452	ES-410552J	SW TACT SKHVBE T05	SW332	ES-410552J	SW TACT SKHVBE T05
SW455	ES-410552J	SW TACT SKHVBE T05	SW335	ES-410552J	SW TACT SKHVBE T05
P.C OPERATION L BLK			SW341	ES-410552J	SW TACT SKHVBE T05
D301	ED-820779X	D LED VRPG3312X RED/GREEN	SW342	ES-410552J	SW TACT SKHVBE T05
D302	ED-820779X	D LED VRPG3312X RED/GREEN	SW343	ES-410552J	SW TACT SKHVBE T05
D303	ED-820779X	D LED VRPG3312X RED/GREEN	SW344	ES-410552J	SW TACT SKHVBE T05
D304	ED-820779X	D LED VRPG3312X RED/GREEN	SW345	ES-410552J	SW TACT SKHVBE T05
D305	ED-820779X	D LED VRPG3312X RED/GREEN	SW346	ES-410552J	SW TACT SKHVBE T05
D306	ED-820779X	D LED VRPG3312X RED/GREEN	SW347	ES-410552J	SW TACT SKHVBE T05
			SW348	ES-410552J	SW TACT SKHVBE T05

Ref.No	Part No.	Description
SW349	ES-410552J	SW TACT SKHVB T05
SW350	ES-410552J	SW TACT SKHVB T05
SW351	ES-410552J	SW TACT SKHVB T05
SW352	ES-410552J	SW TACT SKHVB T05
SW355	ES-410552J	SW TACT SKHVB T05
SW361	ES-410552J	SW TACT SKHVB T05
SW362	ES-410552J	SW TACT SKHVB T05
SW363	ES-410552J	SW TACT SKHVB T05
SW364	ES-410552J	SW TACT SKHVB T05
SW365	ES-410552J	SW TACT SKHVB T05
SW366	ES-410552J	SW TACT SKHVB T05
SW368	ES-410552J	SW TACT SKHVB T05
SW369	ES-410552J	SW TACT SKHVB T05
SW370	ES-410552J	SW TACT SKHVB T05
SW371	ES-410552J	SW TACT SKHVB T05
SW372	ES-410552J	SW TACT SKHVB T05
SW375	ES-410552J	SW TACT SKHVB T05

P.C. AUX-IN BLK

J1	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J2	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J3	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J4	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J5	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J6	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J7	EJ-821484X	PIN J YKC21-4133 2P
J305	EJ-821169X	SOCKET 13FMZ-BT 13P
J306	EJ-820812X	SOCKET 26FE-ST-VK-N 26P

P.C. OPE-DIST BLK

D451	ED-820774X	D SCHOT.H EK16 V0 T26 60/1.5A
IC451	EI-821215X	IC NJM2360AD
J419	EJ-820813X	SOCKET 34FE-ST-VK-N 34P
L451	EO-820705X	COIL FIX 1 LHL10NB 102J
SE8	△ EF-376821	FUSE ICP-N15 50V 0.6A
TR451	ET-362209	TR 2SC3330 S,T,U T05
TR452	ET-364291	TR DTA144ES T05
TR453	ET-361961	TR DTC144ES T05
W408	EW-820717X	WIRE ASSY L3056 W408 8P

P.C. JOG BLK

IC201	EI-386315J	IC HD74HC14P
W412	EW-820718X	WIRE ASSY L3056 W412 8P

7. P.C. (#) IO BLK

P.C. INPUT A BLK

Ref.No	Part No.	Description
J1	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J2	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J3	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J4	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J5	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J6	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J7	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J8	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J9	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J10	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J11	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J12	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0
J308	EJ-820809X	SOCKET 40FE-BT-VK-N 40P
J309	EJ-820809X	SOCKET 40FE-BT-VK-N 40P
J310	EJ-820808X	SOCKET 20FE-BT-VK-N 20P
J311	EJ-820808X	SOCKET 20FE-BT-VK-N 20P

P.C. INPUT B BLK

J101	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
------	------------	------------------------------

Ref.No	Part No.	Description
J102	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J103	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J104	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J105	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J106	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J107	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J108	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J109	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J110	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J111	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J112	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3
J310	EJ-820808X	SOCKET 20FE-BT-VK-N 20P
J311	EJ-820808X	SOCKET 20FE-BT-VK-N 20P

P.C. POWER BLK

D901	ED-820774X	D SCHOT.H EK16 V0 T26 60/1.5A
D902	ED-811455J	D SILICON H 1SS133T-77 T26
D903	ED-379309	D ZENER H HZ9A2 T26
D904	ED-379309	D ZENER H HZ9A2 T26
D905	ED-820773X	D SCHOT. FMB-G14L 40/5.0A
IC901	EI-396659J	IC NJM2360D
IC902	EI-820785X	IC NJM2367TLA2050
IC903	EI-820783X	IC EZ1587CT-3.3
IC904	EI-821227X	IC SI-3051N
L901	△ EO-812744J	COIL FIX 1 LHL13NB 221K
L902	△ EO-820704X	COIL FIX 1 GLA-05-0140 141X
SF1	△ EF-373143	FUSE ICP-N38 50V 1.5A
SF2	△ EF-373142	FUSE ICP-N25 50V 1.0A
SF3	△ EF-373143	FUSE ICP-N38 50V 1.5A
SF4	△ EF-373143	FUSE ICP-N38 50V 1.5A
SF5	△ EF-373143	FUSE ICP-N38 50V 1.5A
SF6	△ EF-373143	FUSE ICP-N38 50V 1.5A
TH901	812845J	THERMISTOR M5R107CS CUT
TR901	ET-812777J	TR 2SC3255
TR902	ET-368834	TR DTA144TS T05
TR903	ET-416589J	TR 2SB1375
TR904	ET-364023	TR DTC114ES T05
TR905	ET-362209	TR 2SC3330 S,T,U T05
TR906	ET-362209	TR 2SC3330 S,T,U T05

P.C. HP-HIZ BLK

IC401	EI-812779J	IC.NJM4556AD
IC411	EI-812779J	IC.NJM4556AD
IC501	EI-820784X	IC NJM2082L
J401	EJ-821000X	PHONE J YKB26-5264 S.NUT 6.3
J402	EJ-821000X	PHONE J YKB26-5264 S.NUT 6.3
J501	EJ-821392X	PHONE J YKB26-5328 S.NUT 6.3
VR401	EV-810500J	VR ROTARY RK0971220 L=20 B203X

8. P.C. FADER BLK

Ref.No	Part No.	Description
D802	ED-439573J	D SILI.H 1SS244T-77T26 250/0.2
D803	ED-402189J	D ZENER H HZS5B1
TR801	ET-363953	TR DTA114TS
VR801	EV-820767X	VR SLIDE RSA0N11J9

9. IB-24ADT (OPTION P. C. BOARD)

Ref.No	Part No.	Description
100	EJ-820568X	SOCKET IC IC110-99-320 20P
IC1	EI-820941X	IC XC2S50-5TQ144C
IC2	EI-821193X	IC GAL16V8D-15QP L5266
IC3	EI-820780X	IC AIC1117-33CE

Ref.No	Part No.	Description
IC4	EI-820781X	IC AIC1117CE
IC5	EI-355888	IC HD74LS08P
J1	EJ-413146J	SOCKET 128D-064S2C-L14A 64P
J2	EJ-427870J	SOCKET DELC-J9SAF-10L9 9P
J3	EJ-394459J	SOCKET OPTICAL GP1F32R
J4	EJ-394459J	SOCKET OPTICAL GP1F32R
J5	EJ-394490J	SOCKET OPTICAL GP1F32T
J6	EJ-394490J	SOCKET OPTICAL GP1F32T
PH1	ET-821189X	DETECTOR HCPL2601N
X1	EI-820827X	OSC X'TAL C.SG8002JAPCB 50MHZ

10. IB-24SCSI (OPTION P. C. BOARD)

Ref.No	Part No.	Description
D1	ED-353374	D SILICON DS135E-FA3 100/1.0A
J1	EJ-821194X	SOCKET 128A-050S2C-L14A 50P
J2	EJ-821198X	SOCKET FCN-235D068-G/HA 68P
J3	EJ-413156J	SOCKET FCN-234J068-G/0 68P
SF1	△ EF-811786J	FUSE RUE110 30V 1.10A

11. IB-24LTC (OPTION P. C. BOARD)

Ref.No	Part No.	Description
200	EJ-429984J	SOCKET IC113-0444-004 44P
IC1	EI-430810J	IC ICS2008AV
IC2	EI-812954J	IC.TC74HCT139AP
IC3	EI-821190X	IC AIC1660CN
IC4	EI-380145J	IC LF353
J1	EJ-413146J	SOCKET 128D-064S2C-L14A 64P
J2	EJ-821221X	PHONE J YKB22-5312 NUT 6.3
J3	EJ-821220X	PHONE J YKB22-5257 NUT 6.3
X1	EI-410263J	OSC X'TAL HC-49/U 14.318180MHZ

12. JOG BLK (Refer to 25 pages)

13. LCD BLK

Ref.No	Part No.	Description
1	SP-820887X	PANEL LCD FRONT
2	MH-821456X	PROP F.SCREW PANEL LCD
3	EM-811115J	IND LCD GMF32024HFTW
4	ZS-331182	BT BID30X08STL BNI
5	EW-820744X	CORD FFC P1.25 L140 12P
6	EW-820747X	CORD FFC P1.25 L210 34P
7	EW-820745X	CORD FFC P1.25 L160 13P
8	BA-810408J	INVERTER 13585A-CFL-INV
9	SE-820890X	WINDOW LCD
10	EW-820736X	CORD FFC P1.00 L 90 12P
11	MB-820882X	CUSHION PANEL LCD
12	ZS-428277J	PAN30X06STL CMT POLY WAVE
13	MH-820879X	PROP F.SCREW SUPPORT
14	SP-820888X	PANEL LCD BOTTOM
15	GH-820873X	HOLDER PANEL (R)
16	MS-821026X	CHUCK BOTTOM
17	BL-820877X	CHUCK LCD LEVER PART
18	MS-821025X	SPACER CHUCK
19	ZG-820880X	SP PUSH LCD LEVER
20	BL-820878X	CAM LCD LEVER
21	ZS-821482X	PAN20X06STL CMT SW
22	BL-820875X	COLLAR LCD LEVER
23	BL-820874X	SHAFT LCD LEVER
24	ZG-820881X	SP TORSION PANEL LCD
25	ZW-259694	PW41X130X050STL CMT
26	ZW-270123	RING E 400SUP CMT

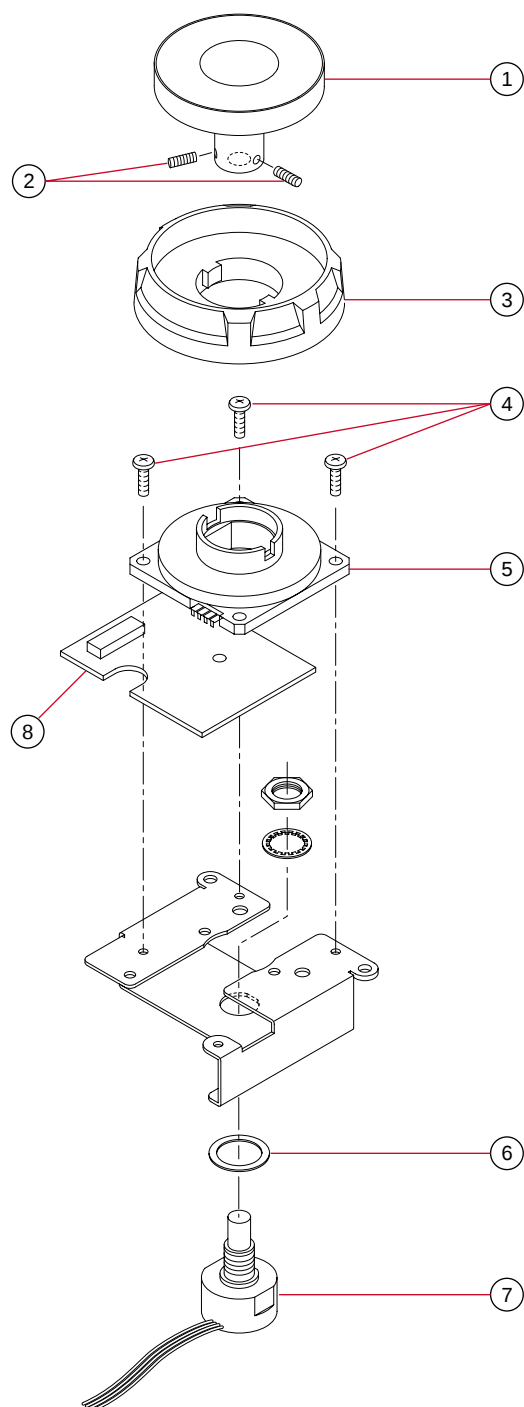
Ref.No	Part No.	Description
27	ZW-270101	RING E 300SUP CMT
28	ML-820895X	LEVER LOCK LCD
29	ZS-411232	BID40X10STL BNI
30	SP-820891X	PANEL FUNCTION
31	SE-820804X	MIC ACC.KCU2011-50-0010
32	EW-820748X	CORD FFC P1.25 L350 26P
33	SP-820900X	WINDOW SEGMENT
34	ZS-821449X	6RB30X080STL BNI
35	SK-820594X	KNOB ENCODER (B) YELLOW
SW	ES-812749J	SW ROTARY ENCORDER EC12E24204
36	SE-820871X	COVER LCD BOTTOM
37	SB-820588X	BUTTON PUSH LED (B) [BLACK]
SW	ES-410552J	SW TACT SKHVB T05
39	ZS-321298	BID30X08STL CMT
40	EV-820764X	VR ROTARY RK09K113 L20 B203 [CONTRAST]
41	EV-820763X	VR ROTARY RK09K113 L20 B103 [TB-LEVEL]
42	BA-L3056A504E	PC Q-LINK BLK
43	BA-L3056A504F	PC METER BLK
44	BA-L3056A504C	PC LCD-DIST BLK
45	BA-L3056A504B	PC 7 SEG BLK

14. FINAL ASSEMBLY BLK

Ref.No	Part No.	Description
1	SP-820883X	PANEL MAIN (F) DPS24
2	SP-820884X	PANEL MAIN (R) DPS24
3	SE-820912X	ESCUTCHEON REC
4	KNOB SB-820587X	BUTTON PUSH LED (A) [WHITE]
SW	ES-410552J	SW TACT SKHVB T05
5	KNOB SB-820588X	BUTTON PUSH LED (B) [BLACK]
SW	ES-410552J	SW TACT SKHVB T05
6	KNOB SB-820589X	BUTTON PUSH LED (C) [ORANGE]
S W	ES-410552J	SW TACT SKHVB T05
7	KNOB SB-820590X	BUTTON PUSH SMALL (A) [BLUE]
SW	ES-410552J	SW TACT SKHVB T05
8	KNOB SB-820591X	BUTTON PUSH SMALL (B) [BLACK]
SW	ES-410552J	SW TACT SKHVB T05
9	KNOB SB-820902X	BUTTON PUSH TRA PLAY [PLAY]
SW	ES-415015J	SW TACT SKQEAD
10	KNOB SB-820903X	BUTTON PUSH TRA STOP [STOP]
SW	ES-415015J	SW TACT SKQEAD
11	KNOB SB-820904X	BUTTON PUSH TRA FF [FF]
SW	ES-415015J	SW TACT SKQEAD
12	KNOB SB-820905X	BUTTON PUSH TRA REW [REW]
SW	ES-415015J	SW TACT SKQEAD
13	KNOB SB-820906X	BUTTON PUSH TRA GOTO [GOTO]
SW	ES-415015J	SW TACT SKQEAD
14	KNOB SB-820907X	BUTTON PUSH TRA MEM [MEMORY]
SW	ES-415015J	SW TACT SKQEAD
15	KNOB SB-820908X	BUTTON PUSH TRA TO [TO]
SW	ES-415015J	SW TACT SKQEAD
16	KNOB SB-820909X	BUTTON PUSH TRA FROM [FROM]
SW	ES-415015J	SW TACT SKQEAD
17	KNOB SB-820910X	BUTTON PUSH TRA I/O [IN/OUT]
SW	ES-415015J	SW TACT SKQEAD
18	KNOB SB-820911X	BUTTON PUSH TRA REC [REC]
SW	ES-415015J	SW TACT SKQEAD
19	KNOB SB-811562J	BUTTON CURSOR(3) [CURSOR]
SW	ES-410552J	SW TACT SKHVB T05
20	SE-820892X	ESCUTCHEON FADER
21	ZS-377929	BID30X03STL BNI
22	SP-820886X	PANEL SIDE
23	KNOB SK-820595X	KNOB VOL. [BLUE]
VR	EV-820766X	VR ROTARY RK09K113 L30 DCUT RD203 [TRIM]

Ref.No	Part No.	Description	Ref.No	Part No.	Description
	VR EV-820765J	VR ROTARY RK09K113 L30 DCUT B103 [MONITOR]	74	EJ-821236X	SOCKET CONNECTER YKF45-0020 4P [USB-B]
24	KNOB SK-820593X	KNOB ENCODER (A) [ORANGE]	75	EJ-810323J	SOCKET TCS7927-56 [ASCII-KEYBOARD]
	SW ES-812749J	SW ROTARY ENCORDER EC12E24204	76	EJ-820150J	SOCKET COAX. BNC-LNRD-BPAA [WORD CLOCK]
25	SE-820899X	WINDOW PAN	77	EJ-394490J	SOCKET OPTICAL GP1F32T [DIGI OUT]
26	KNOB SB-820901X	BUTTON P PUSH-2 [BLACK]	78	EJ-394459J	SOCKET OPTICAL GP1F32R [DIGI IN]
	SW ES-820707X	SW PUSH SPPH43-W	79	EJ-820754X	PIN J YKC21-3079 P2P [DIGI I/O]
27	SC-821040X	COVER REST	81	ZS-322570	ST BID40X08STL NI3
28	SC-820918X	COVER 5 INCH BLANK	80	ZS-378447	ST BID40X10STL BNI
29	SP-820885X	PANEL REAR DPS24	82	ZW-413267	N FRANGE 40STL CMT
30	△ ES-405438J	SW SEESAW SDDTA3 TV5 01-1 [POWER SW]			
31	△ EJ-358632J2	SOCKET INLET SOT-16 3P [AC INLET]			
32	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P			
33	KNOB SK-377733	KNOB VOL B			
	VR EV-810500J	VR ROTARY RK0971220 L=20 B203X [H.Phone]			
34	ZS-331182	BT BID30X08STL BNI			
35	ZS-355511	BID30X06STL BNI			
36	ZS-820481X	BT PAN30X08STL BZN C080			
37	△ BA-821441X	SW POW ZWQ130-5222/AP			
38	EW-820741X	CORD FFC P1.00 L340 20P			
39	EW-821180X	CORD FFC P1.00 L340 26P			
40	EW-821181X	CORD FFC P1.00 L340 28P			
41	EW-820740X	CORD FFC P1.00 L150 20P			
42	EW-820743X	CORD FFC P1.25 L110 26P			
43	EW-820749X	CORD FFC P1.25 L400 20P			
44	EW-820739X	CORD FFC P1.00 L290 13P			
45	EW-820738X	CORD FFC P1.00 L180 13P			
46	EW-820746X	CORD FFC P1.25 L190 40P			
47	EW-820742X	CORD FFC P1.25 L100 20P			
48	EW-820748X	CORD FFC P1.25 L350 26P			
49	EW-821418X	CORD FFC P1.00 L110 10P			
50	EW-820750X	CORD FFC P1.25 L490 26P			
51	EW-820747X	CORD FFC P1.25 L210 34P			
52	EW-820714X	WIRE ASSY L3056 W312 7P			
53	EW-820715X	WIRE ASSY L3056 W313 6P			
54	SK-820896X	KNOB FADER			
	VR EV-820767X	VR SLIDE RSA0N11J9			
55	SK-820897X	INDEX FADER (A) [BLUE]			
56	SK-820898X	INDEX FADER (B) [ORANGE]			
57	△ EJ-405424J	PLUG ADAPTOR KPR-25 (J)			
58-A	△ EW-380905J	AC CORD 250S KP300 KS16A H B J (J)			
58-B	△ EW-403993J	AC CORD200SKP4819DKS31A B E (E, V)			
58-C	△ EW-419170J	AC CORD200S KP610 KS31A B (B)			
58-D	△ EW-821485X	AC CORD200SKP30KS31 B AC (A)			
59	EW-820710X	WIRE ASSY L3056 W101 40P [ATA40pin]			
60	EW-820735X	WIRE ASSY L3056 W911 4P [HD-Power]			
61	△ EF-821407X	FUSE ET T 250V 6.30A			
62	HM-820925X	PROP6 M.SCREW L=10			
63	MH-384700J1	PROP 2 F.SCREW L=10			
64	MH-820655X	PROP 1 F.SCREW L=27			
65	SA-311742	FOOT ROUND SHAPED			
66	EJ-820762X	SOCKET RECEPTACLE NCJ9FI-H-0 [INPUT1]			
67	EJ-821223X	PHONE J YKB26-5312 S.NUT 6.3 [INPUT2/AUX IN etc]			
68	EJ-821392X	PHONE J YKB26-5328 S.NUT 6.3 [HI-Z]			
69	EJ-821000X	PHONE J YKB26-5264 S.NUT 6.3 [H-Phone]			
70	EJ-821484X	PIN J YKC21-4133 2P [2TRACK IN]			
71	EJ-821222X	PHONE J YKB26-5257 S.NUT 6.3 [STEREO OUT etc]			
72	EJ-821219X	PHONE J YKB22-5244 NUT 6.3 [FOOT SW]			
73	EJ-403478J	DIN J YKF51-5040 5P [MIDI IN/OUT/THRU]			

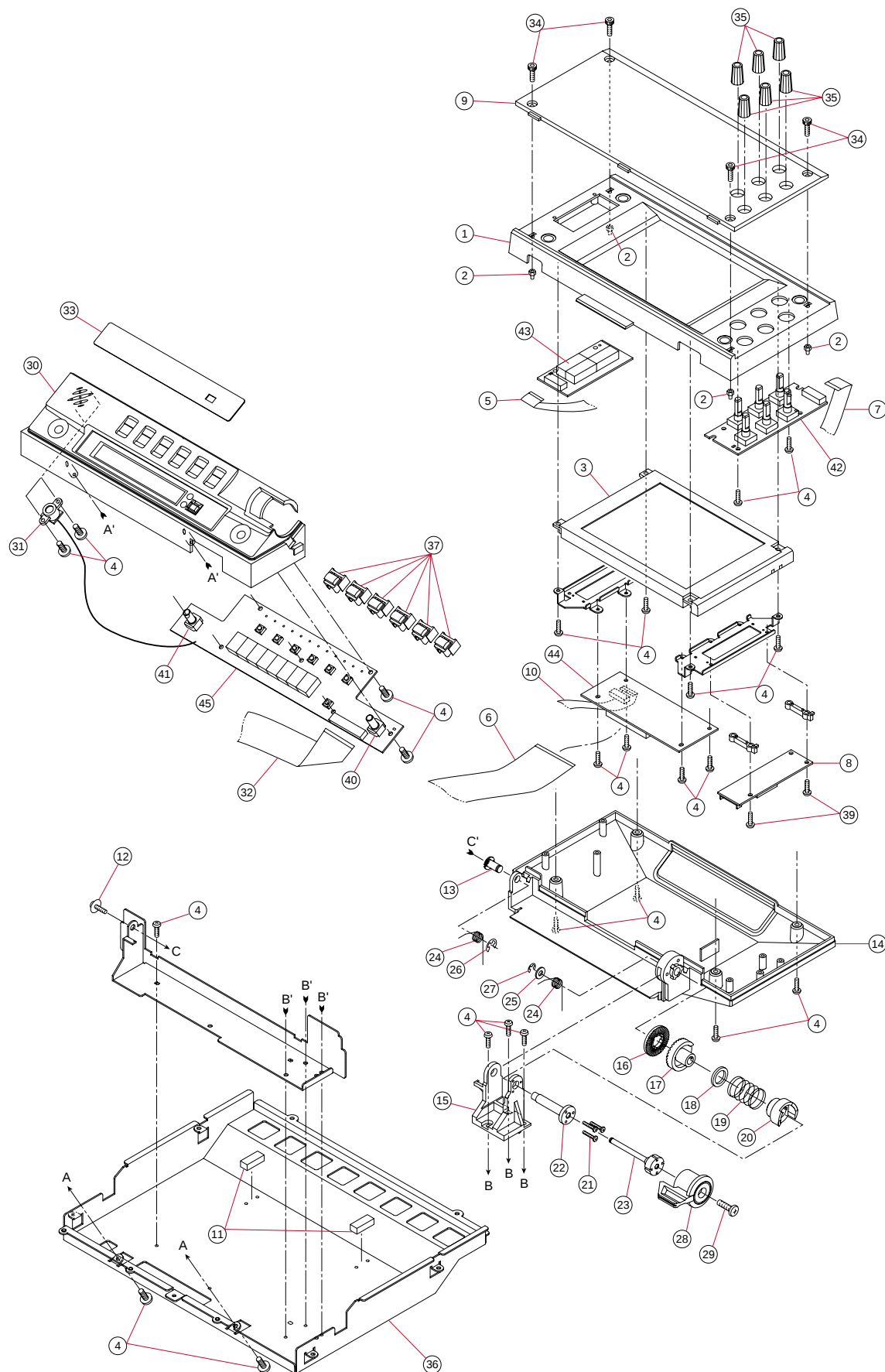
JOG BLK



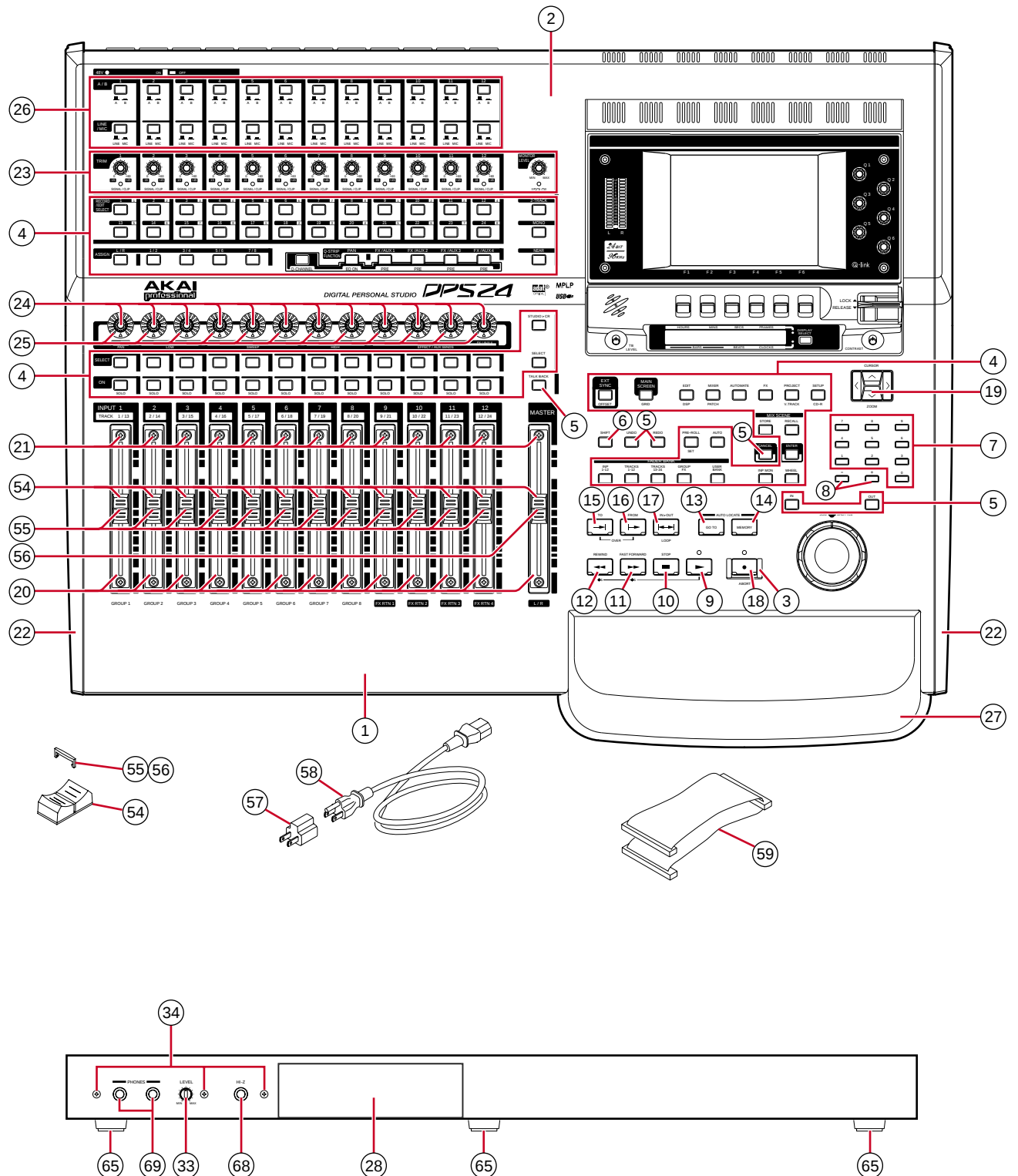
JOG BLK

Ref.No	Part No.	Description
1	SK-820893X	KNOB JOG
2	ZS-821450X	6SET30X040SCM PKR WP
3	SK-820894X	KNOB SHUTTLE
4	ZS-331182	BT BID30X08STL BNI
5	ZW-820709X	SW SHUTTLE SRGPVJ
6	ZW-812440J	PW122X160X050STL NI3
7	ES-820708X	SW R.ENCORDER RES20D-50-201-1
8	BA-L3056A505E	PC JOG BLK

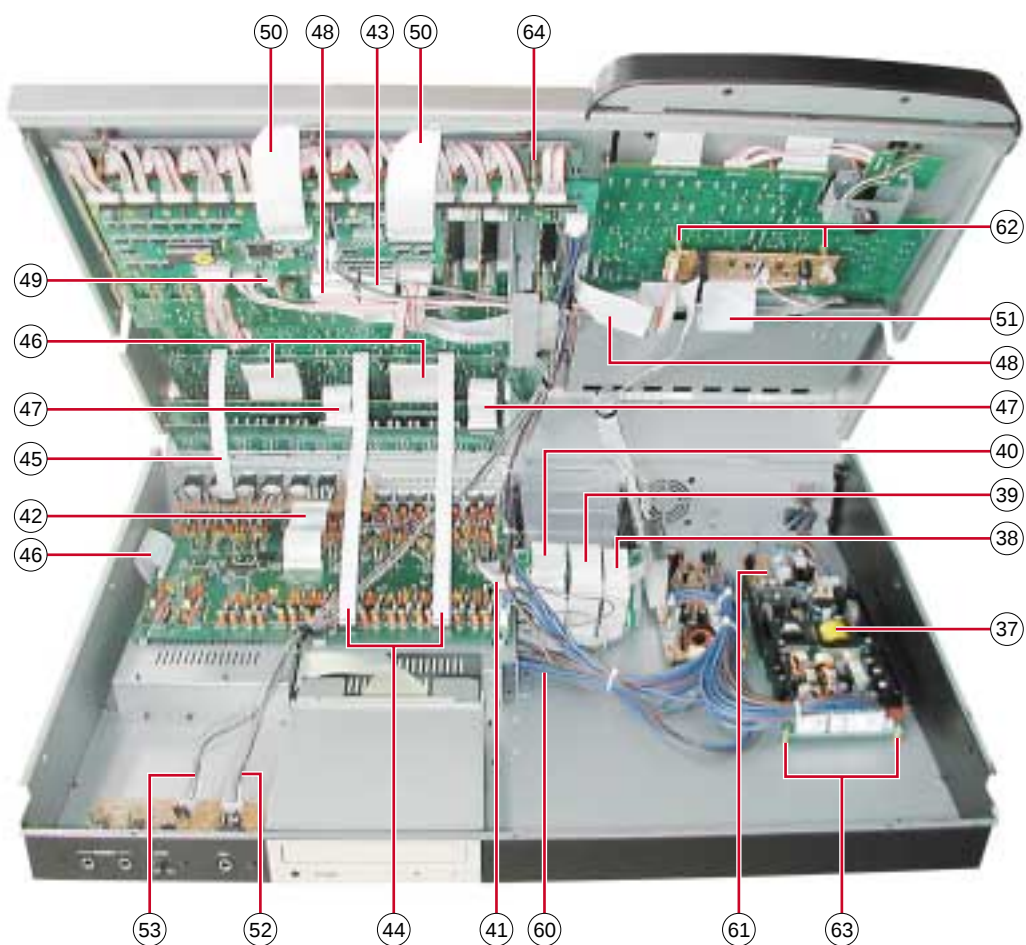
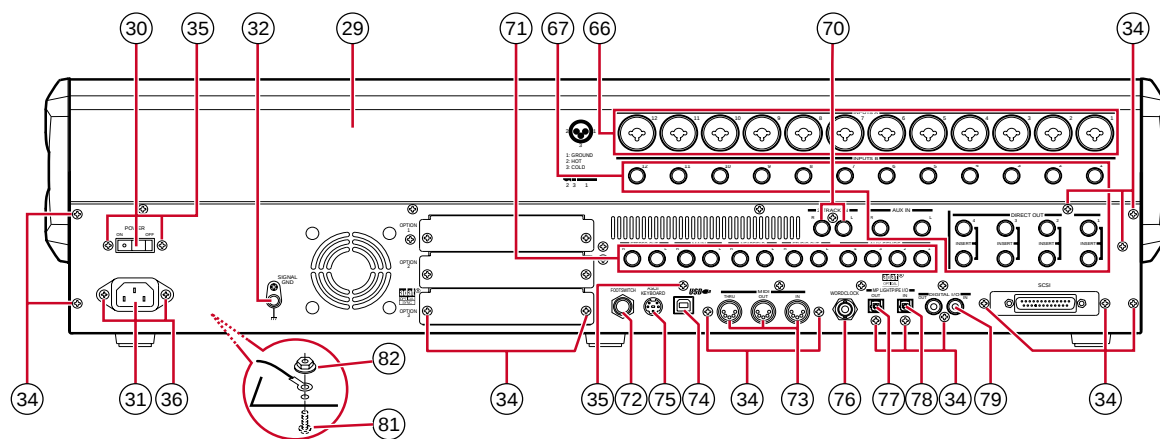
LCD BLK DPS24



FINAL ASSEMBLY BLK DPS24



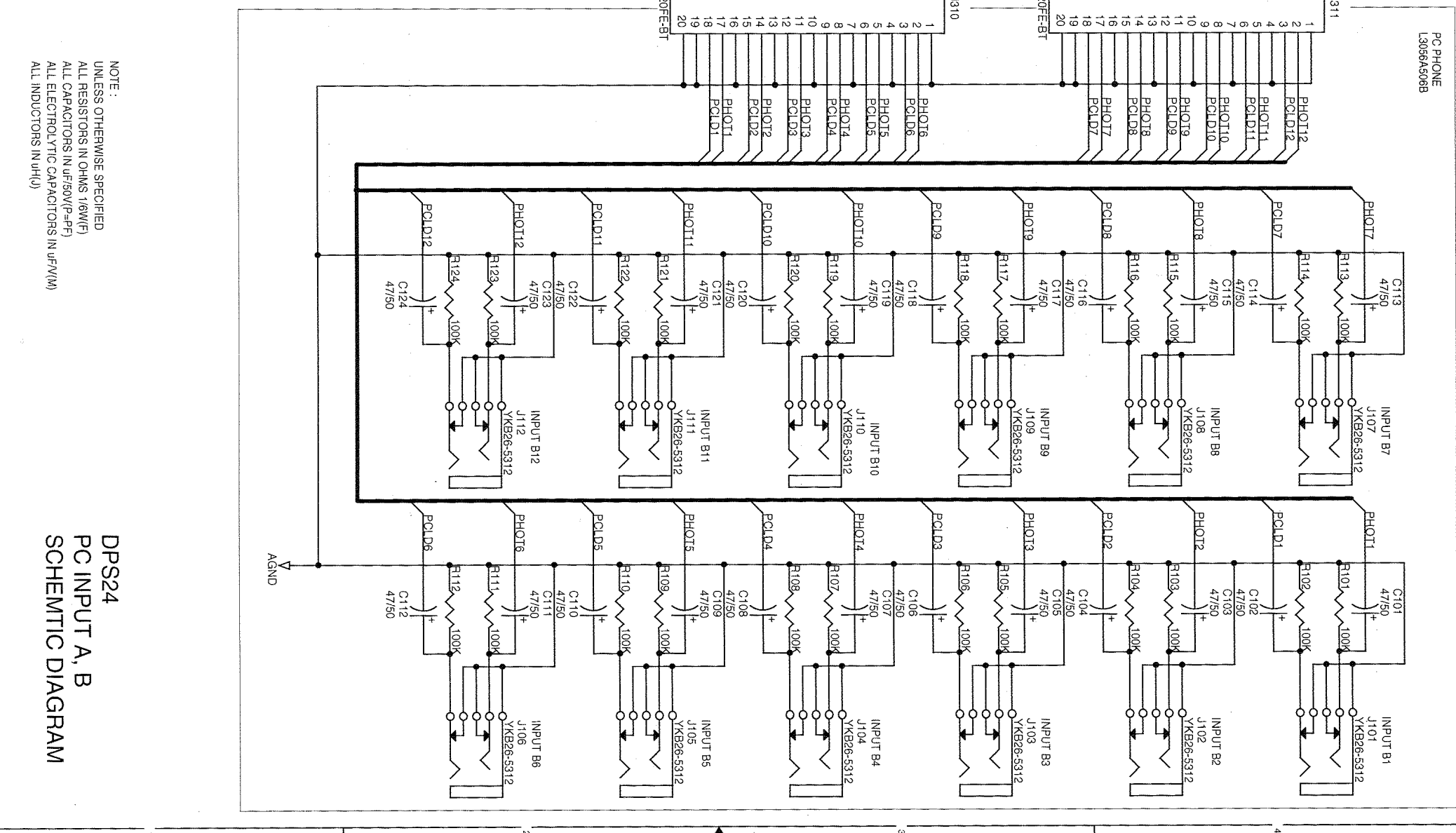
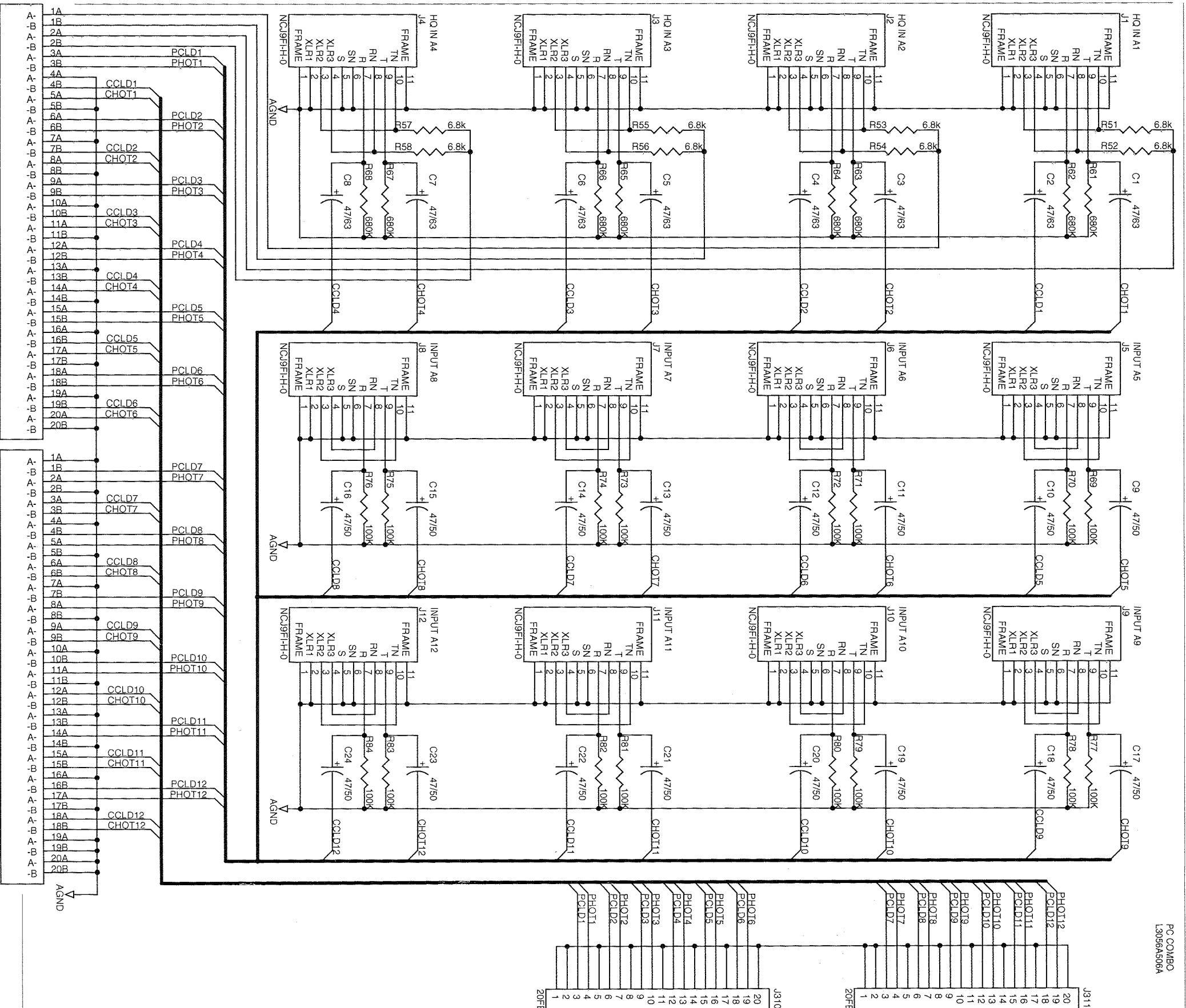
FINAL ASSEMBLY BLK DPS24



AKAI professional M.I. Corp.

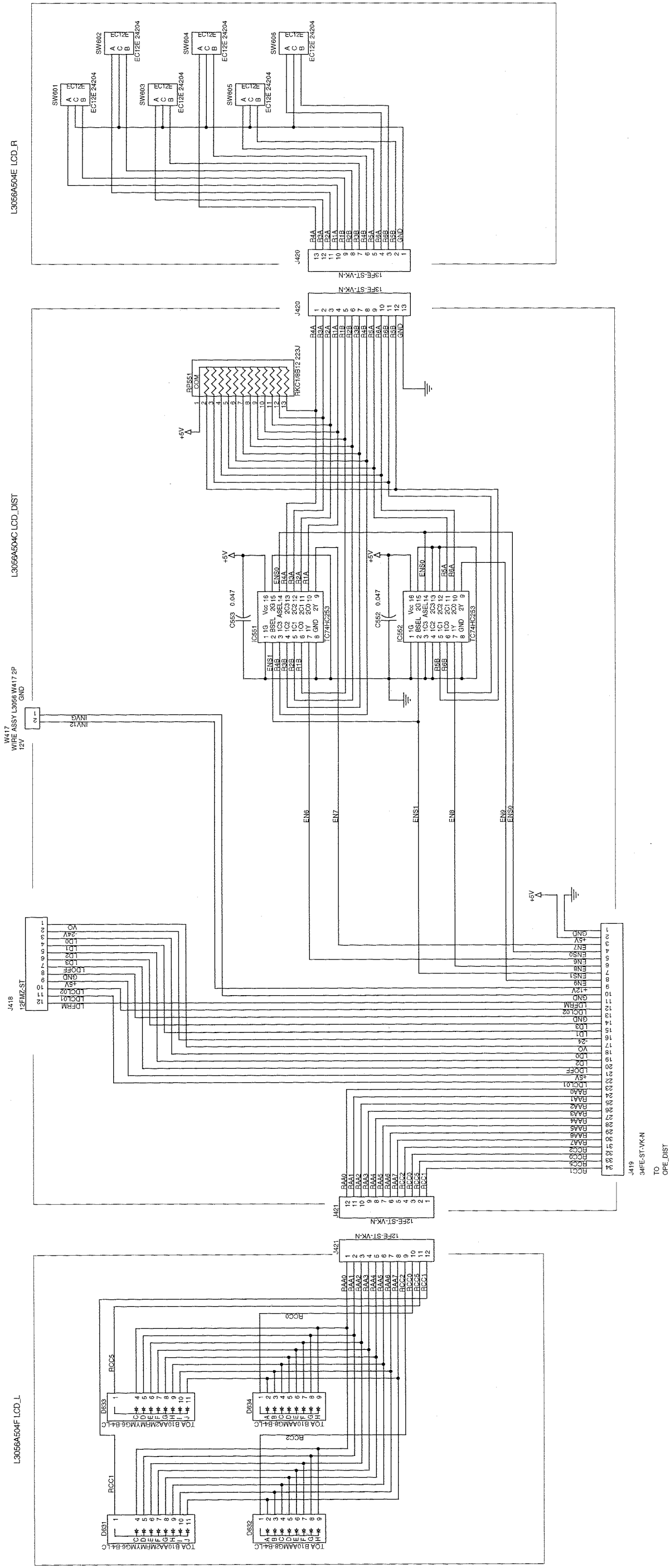
1-3, Hiranuma 1-Chome, Nishi-Ku, Yokohama, Japan

SERVICE SECT. PHONE : +81-45-412-2373 FAX : +81-45-412-2372

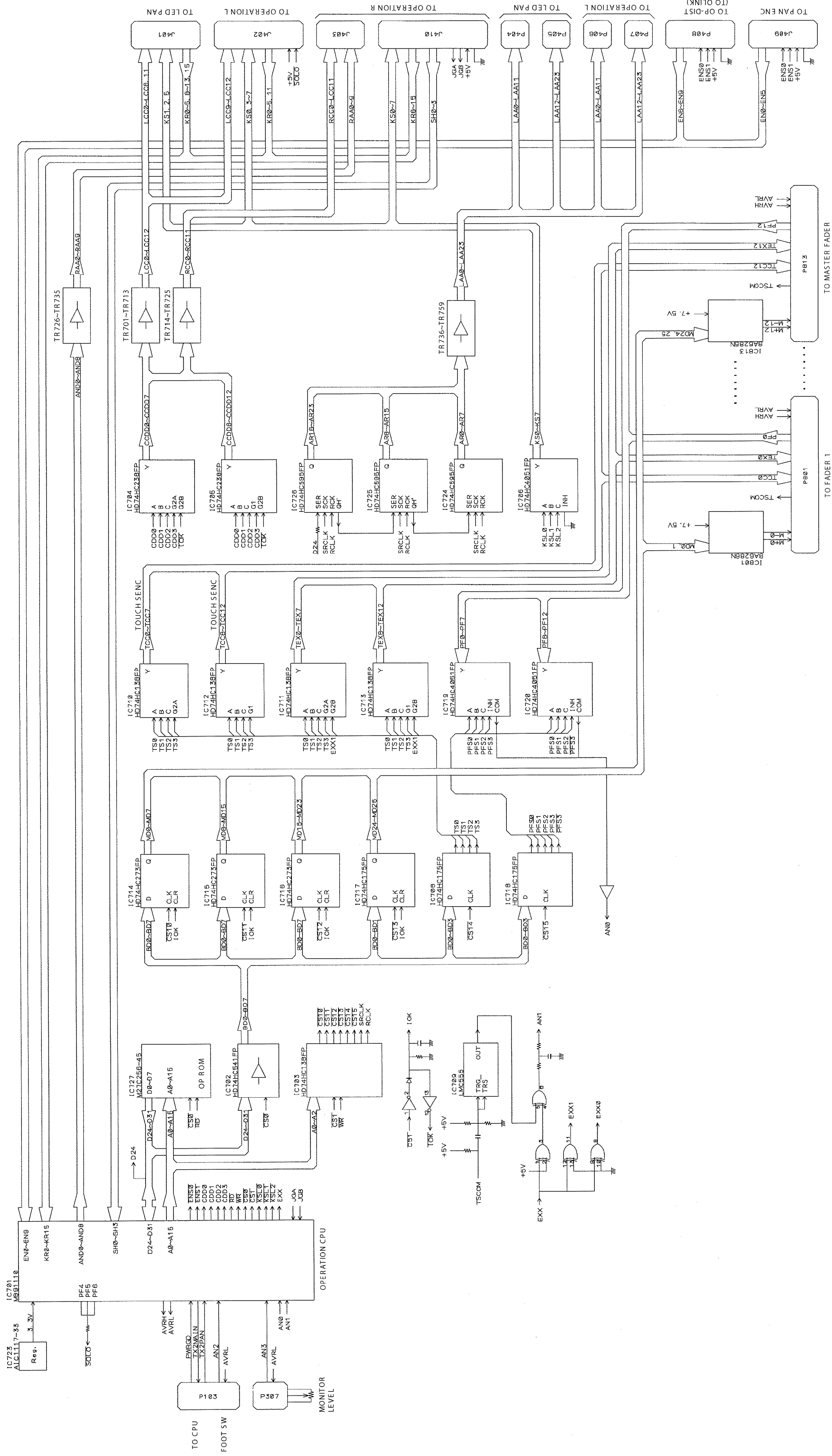


NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS (W/WF)
ALL CAPACITORS IN uF/50V (P-PF)
ALL ELECTROLYTIC CAPACITORS IN uF(V/V)
ALL INDUCTORS IN uH(U)

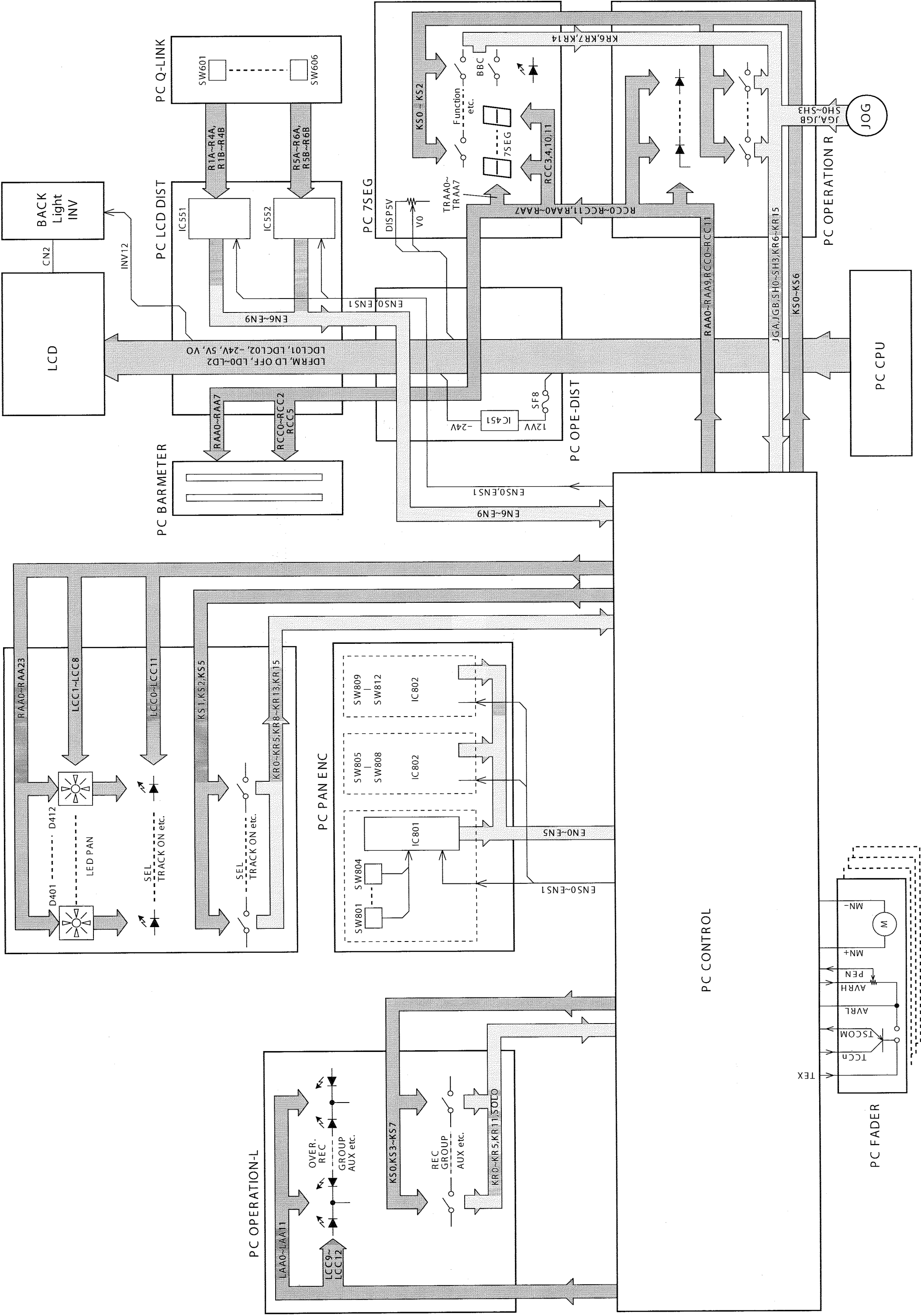
DPS24
PC INPUT A, B
SCHEMATIC DIAGRAM



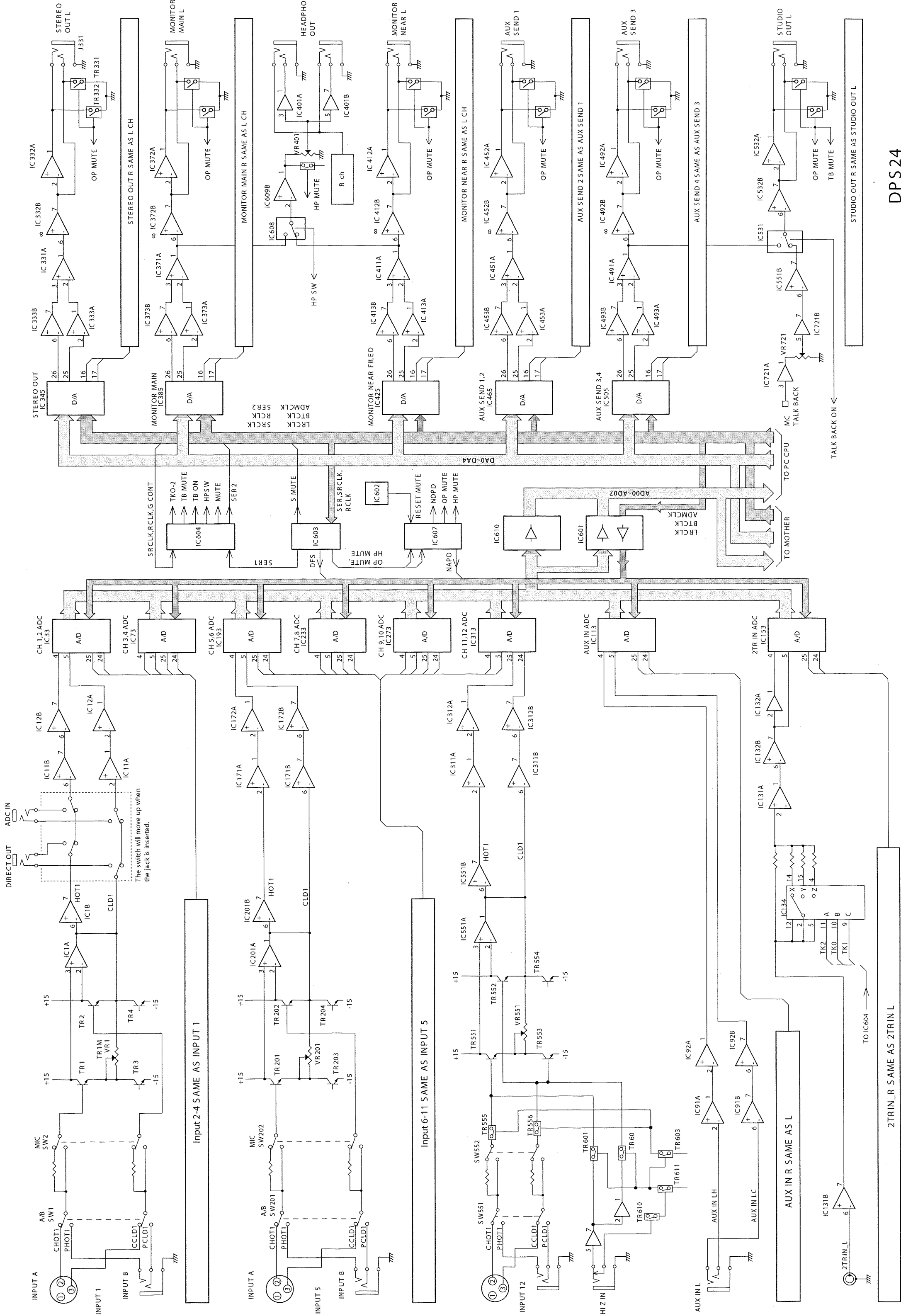
DPS24
PC LCD-DIST, Q-LINK
SCHEMATIC DIAGRAM

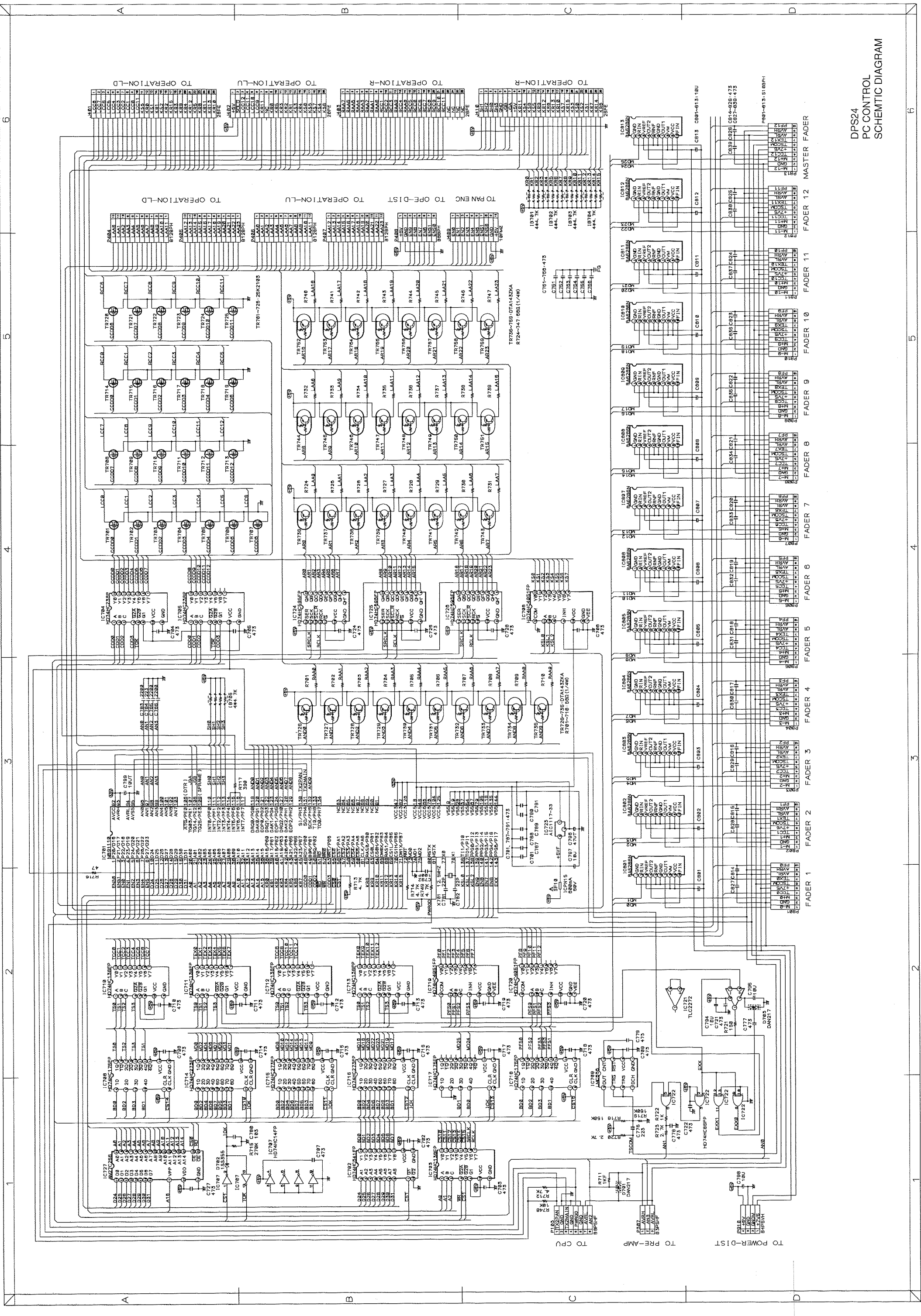


DPS24
CONTROL BLOCK DIAGRAM

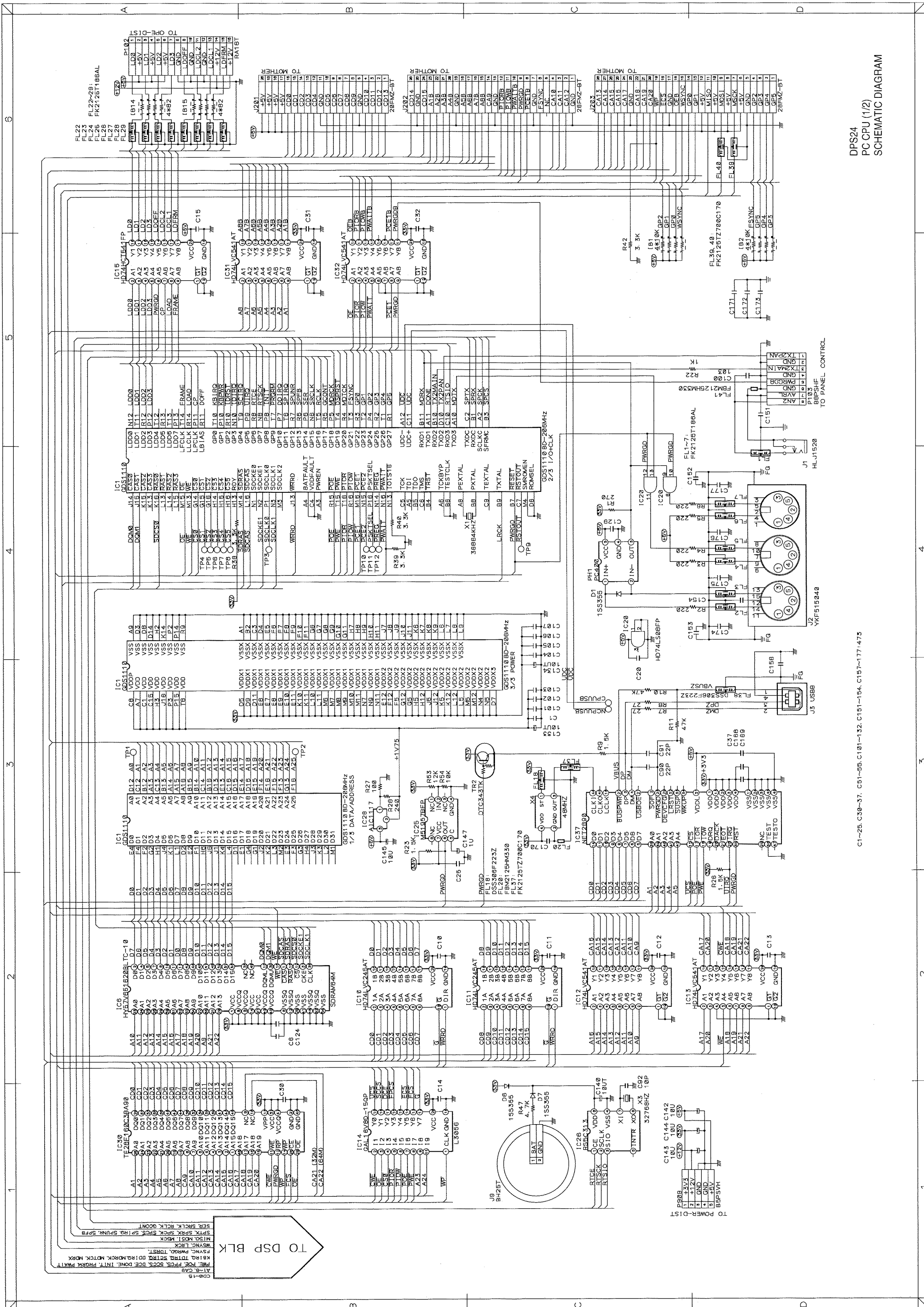


SPFB	J6	J7	J8 IN	J8 OUT
L	ADAT	ADAT	SPDIF	SPDIF
H	SPDIF	SPDIF	DISABLE	SPDIF



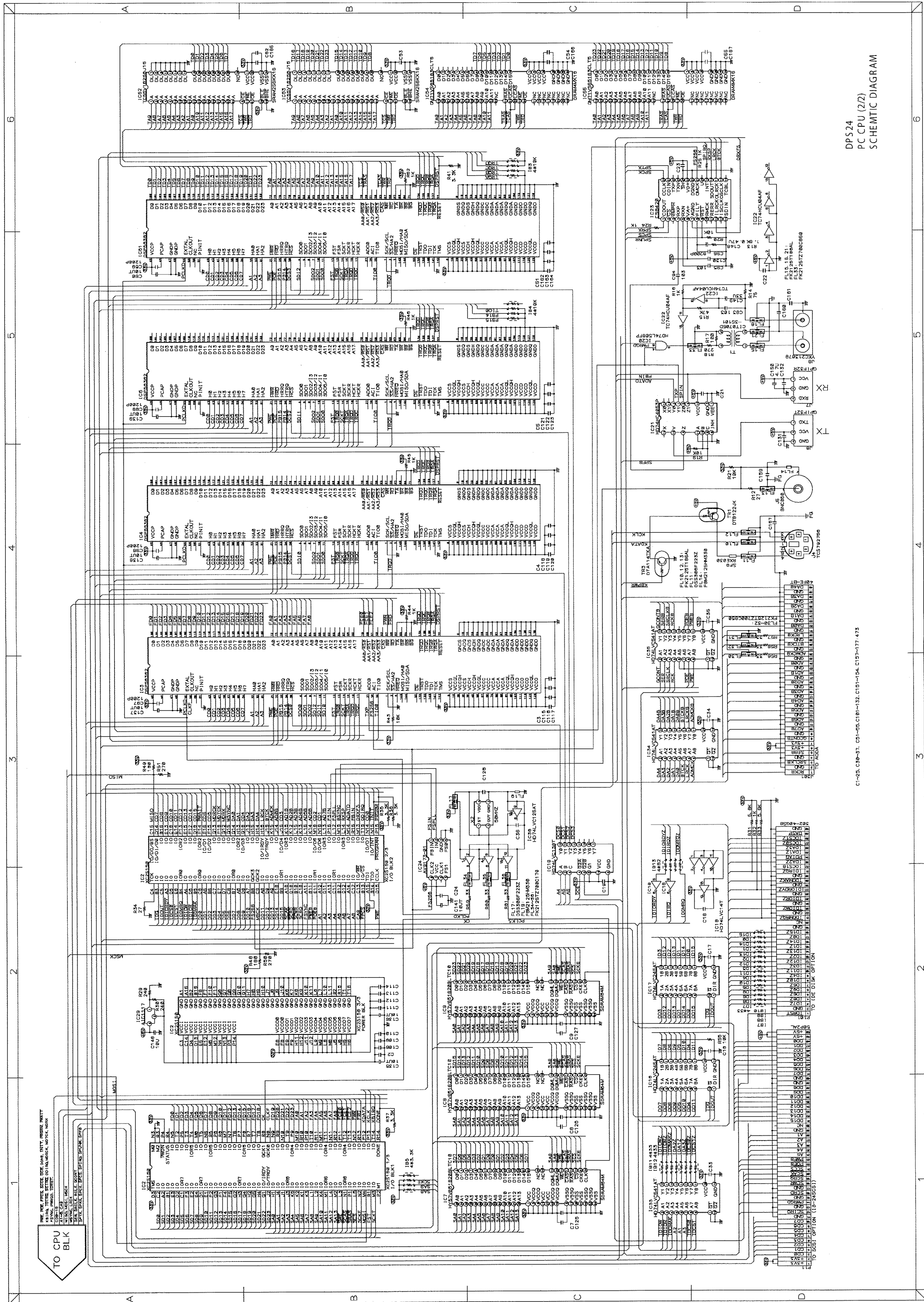


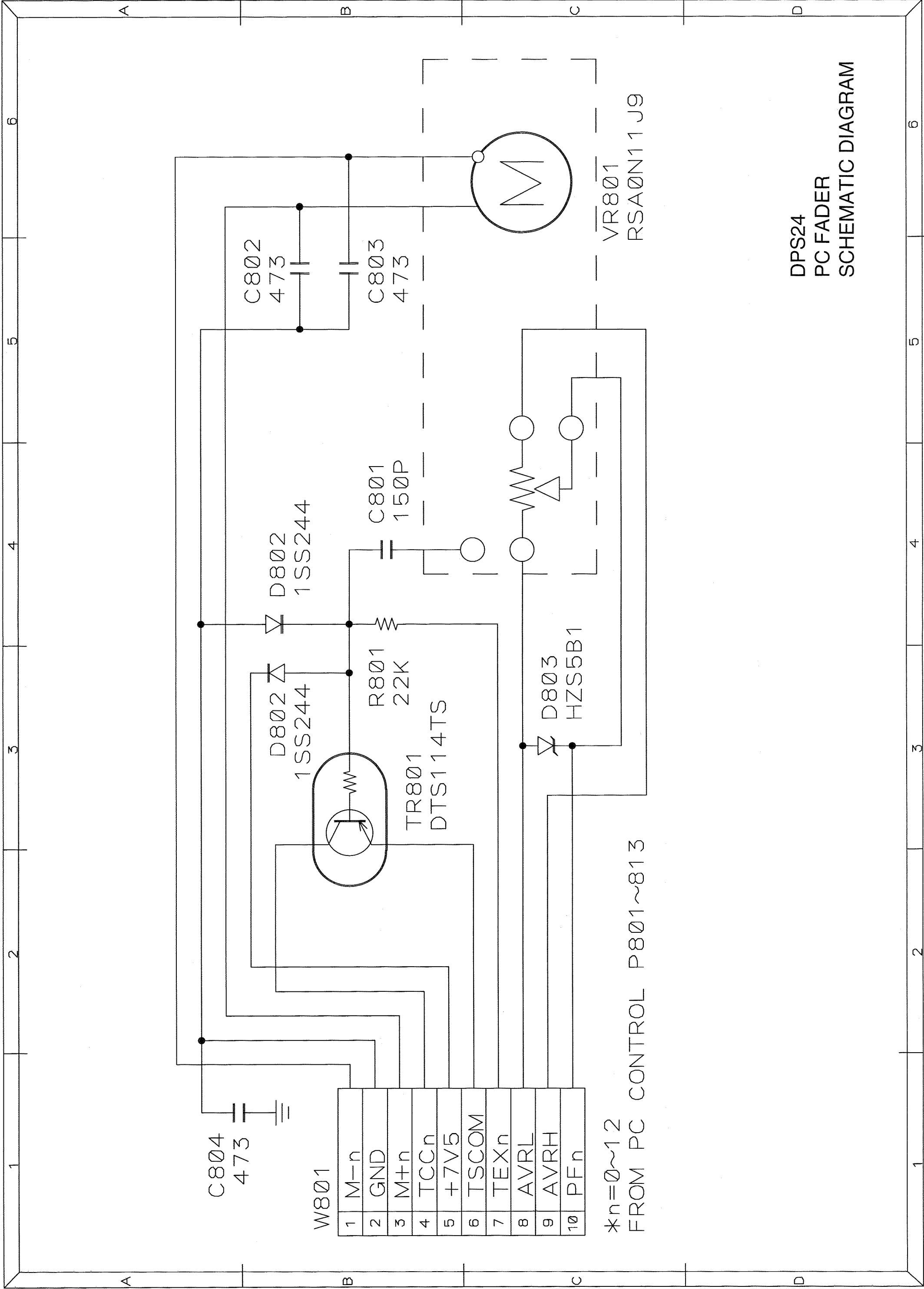
DPS24
PC CONTROL
SCHEMATIC DIAGRAM



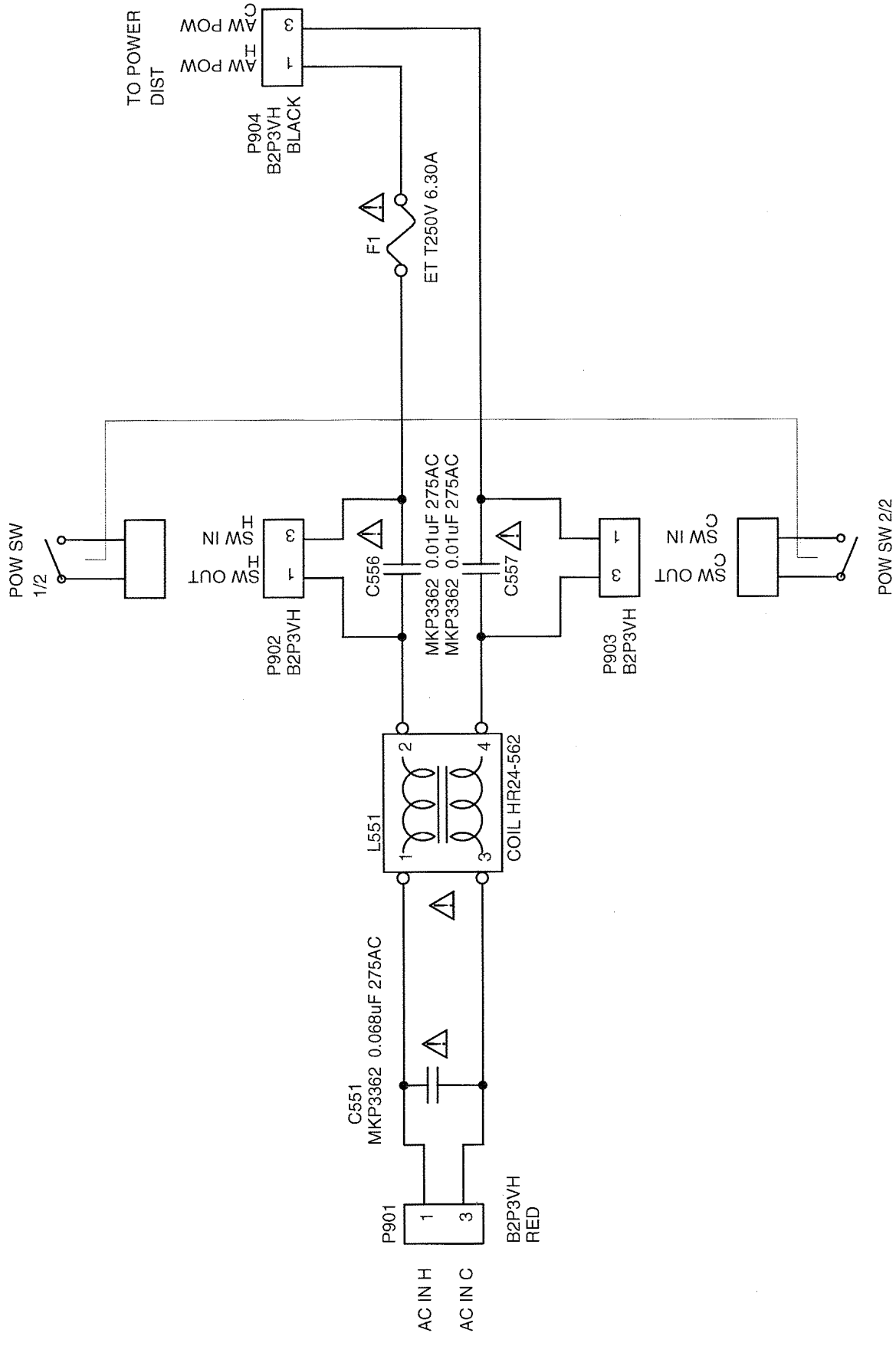
DPS24
PC CPU (1/2)
SCHEMATIC DIAGRAM

C1~25, C30~37, C51~55, C101~132, C151~154, C157~177, 475

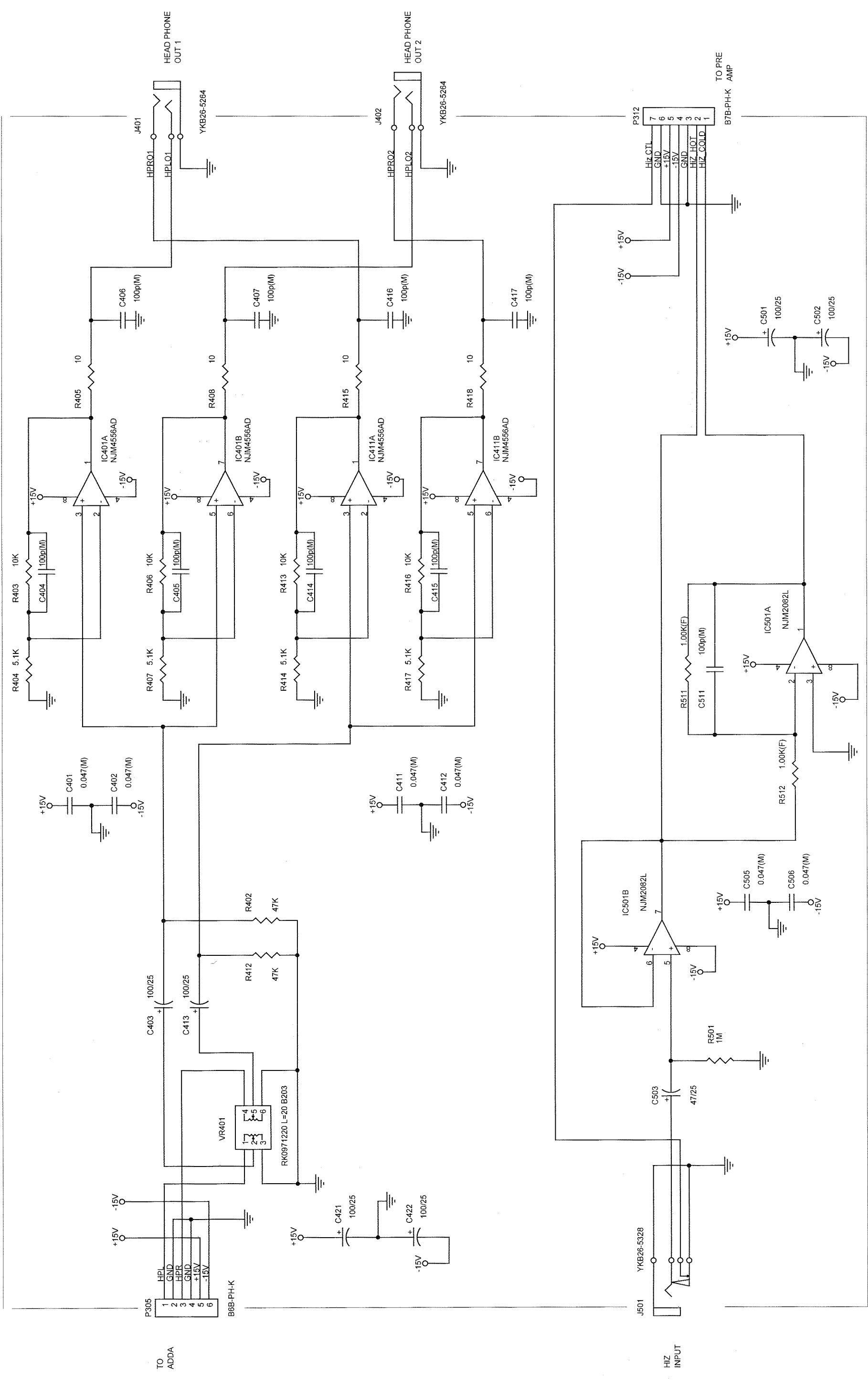




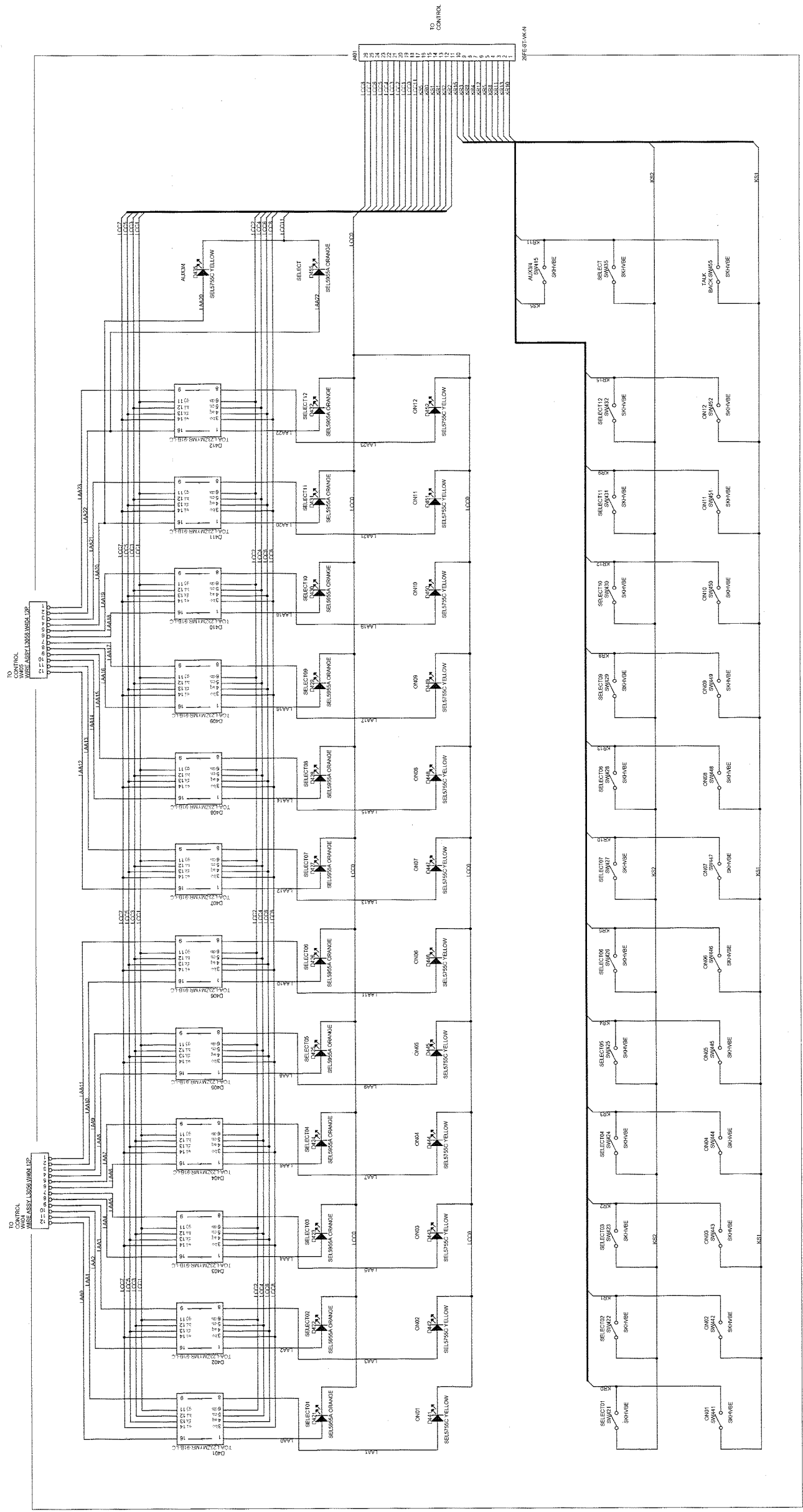
DPS24
PC FADER
SCHEMATIC DIAGRAM



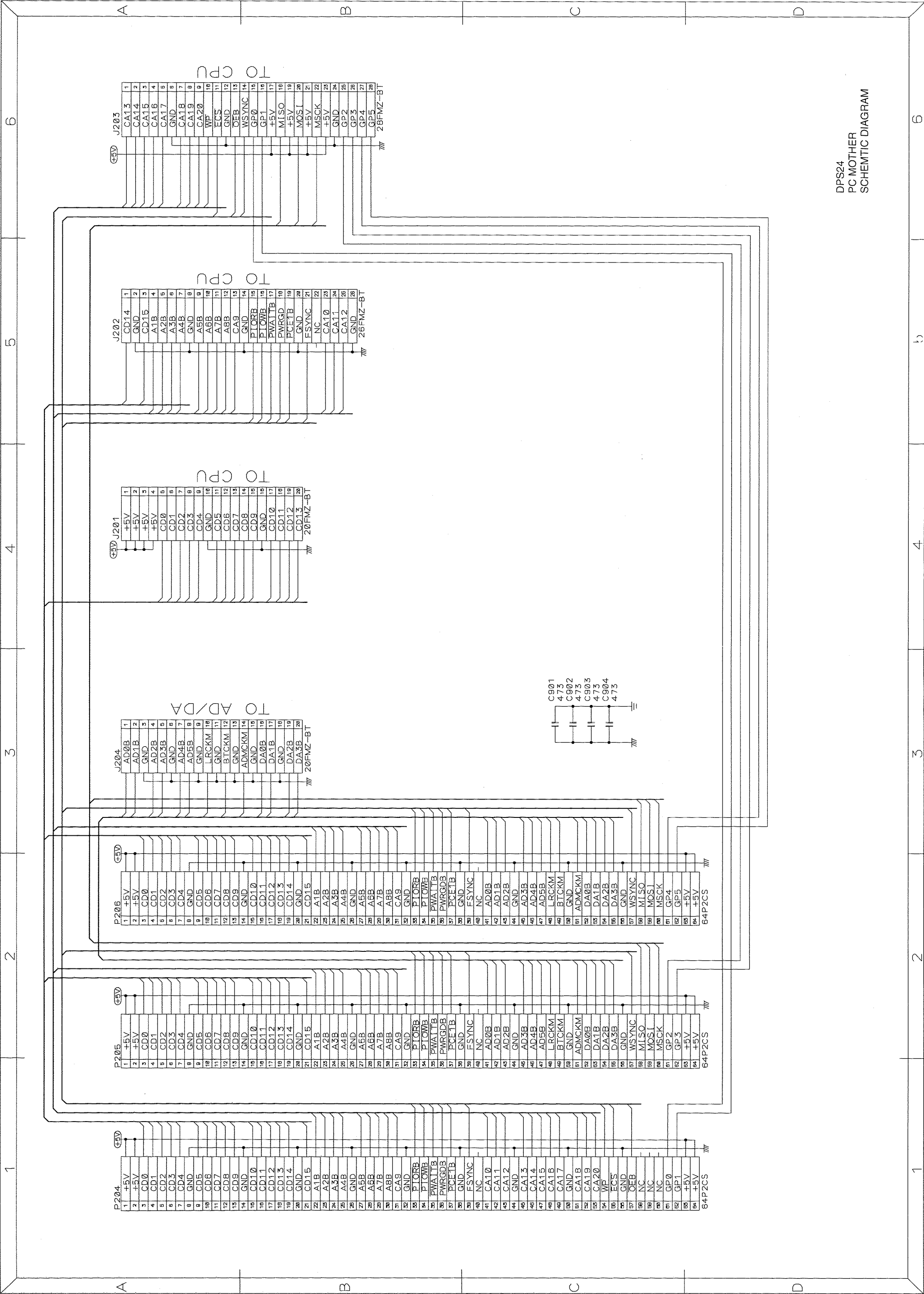
DPS24
PC FILTER
SCHEMATIC DIAGRAM



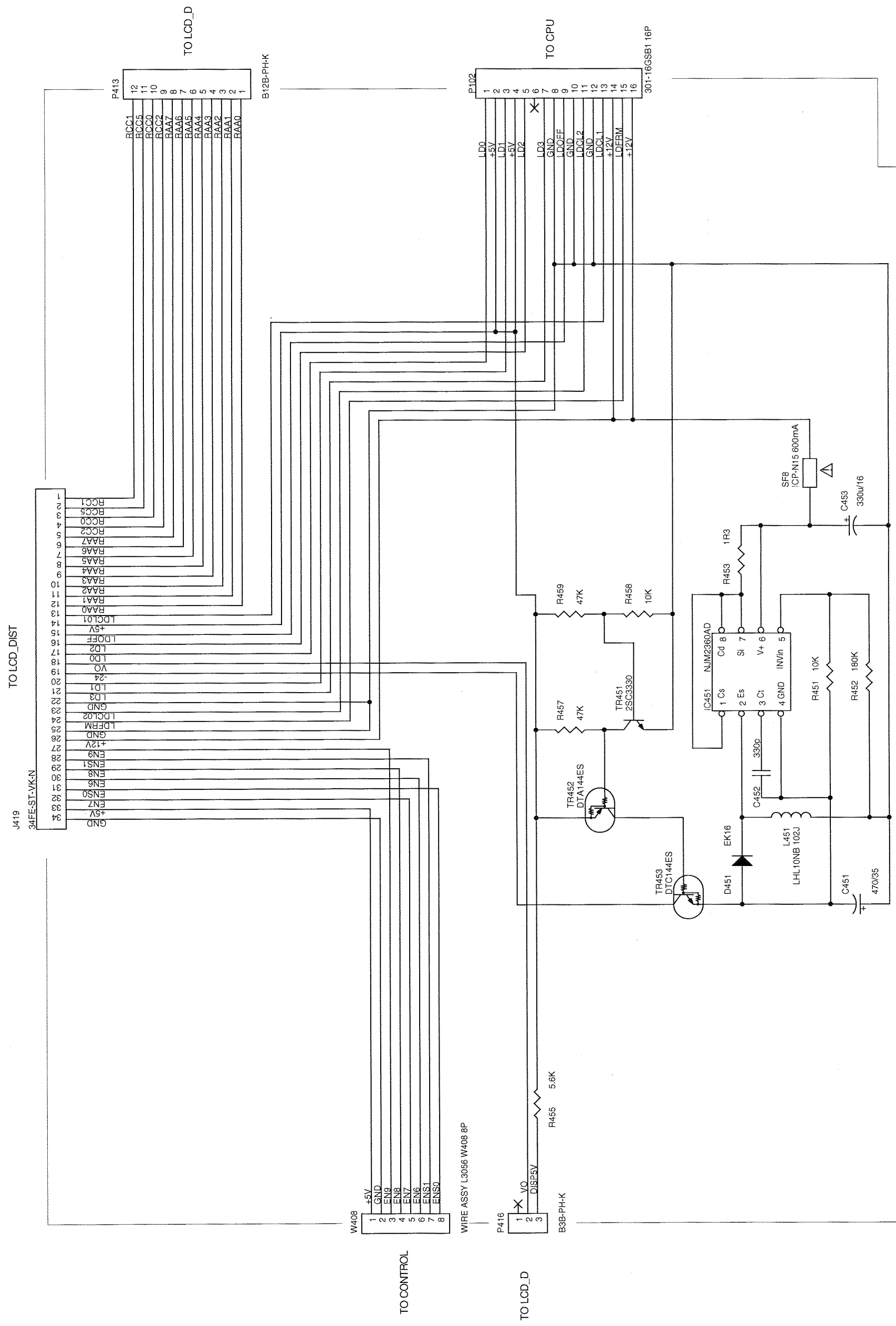
DPS24
PC HP-HIZ
SCHEMATIC DIAGRAM



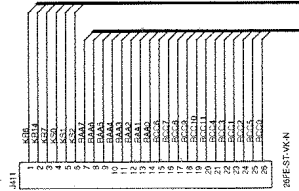
DPS24
PC LED PAN
SCHEMATIC DIAGRAM



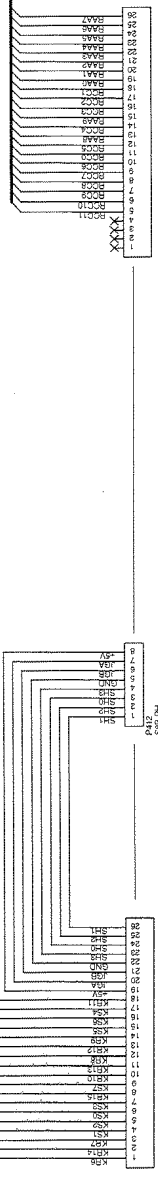
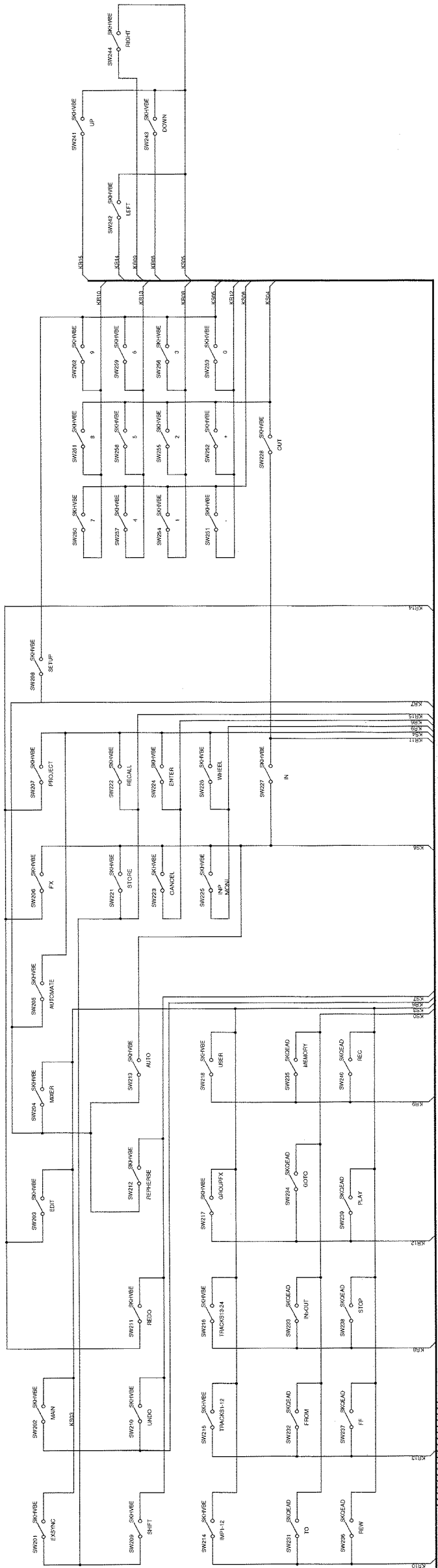
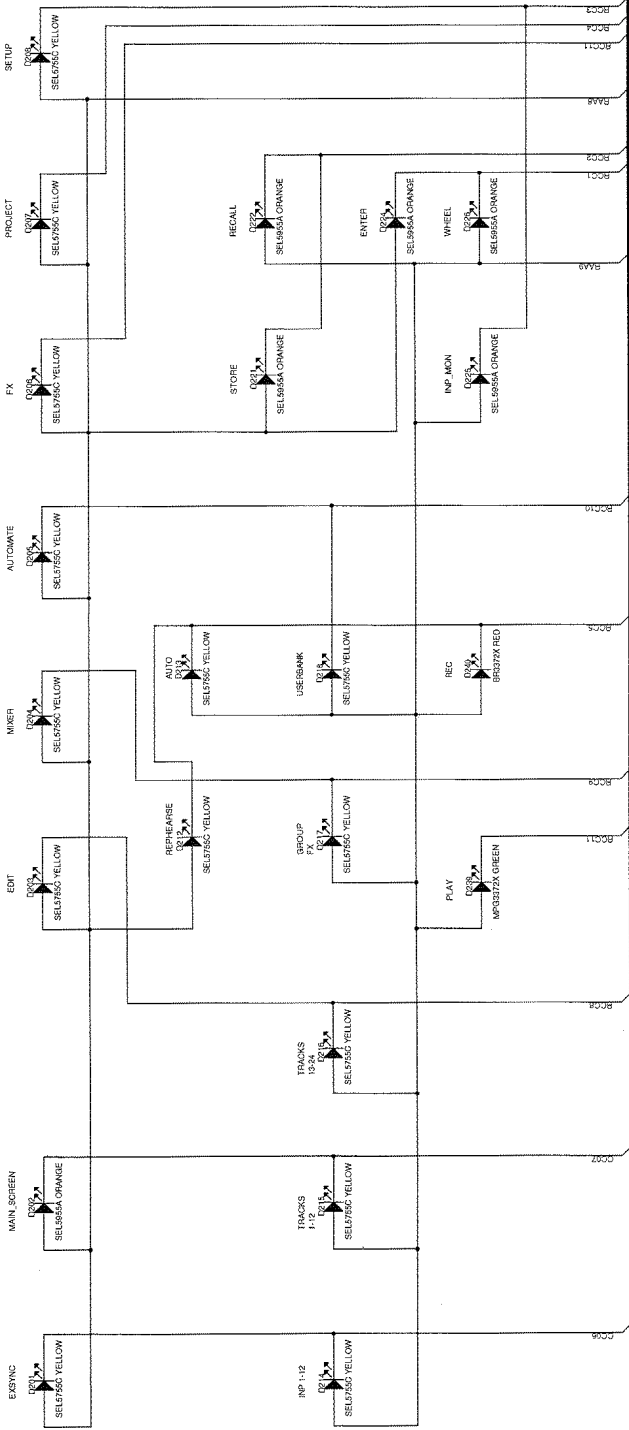
DPS24
PC MOTHER
SCHEMITIC DIAGRAM



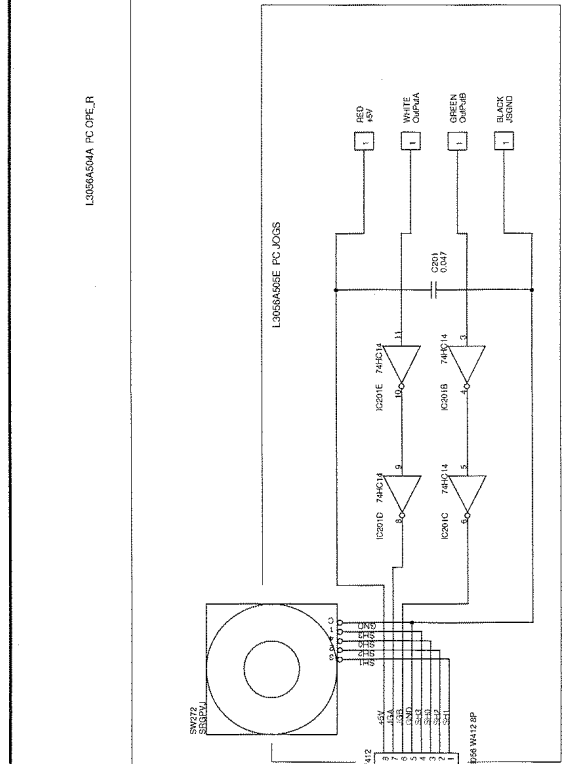
DPS24
PC OPE-DIST
SCHEMATIC DIAGRAM



TO
LCD.D



28P ST-MAN
TO
CONTROL



DPS24
PC OPERATION R, JOG
SCHEMATIC DIAGRAM

