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**Service Manual**

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**Model**

**DS-8**

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**DIGITAL AUDIO SELECTOR**

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**Fostex®**

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FOSTEX CORPORATION 3-2-35 Musashino, Akishima, Tokyo, Japan 196-0021  
FOSTEX CORPORATION OF AMERICA 15431 Blackburn Ave., Norwalk, CA 90650, U.S.A.

© PRINTED IN JAPAN OCT. 1999 8288786000




**CAUTION**


RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER (OR BACK).  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**CAUTION:**  
TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION:**  
POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

**"WARNING"**  
"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

**SAFETY INSTRUCTIONS**

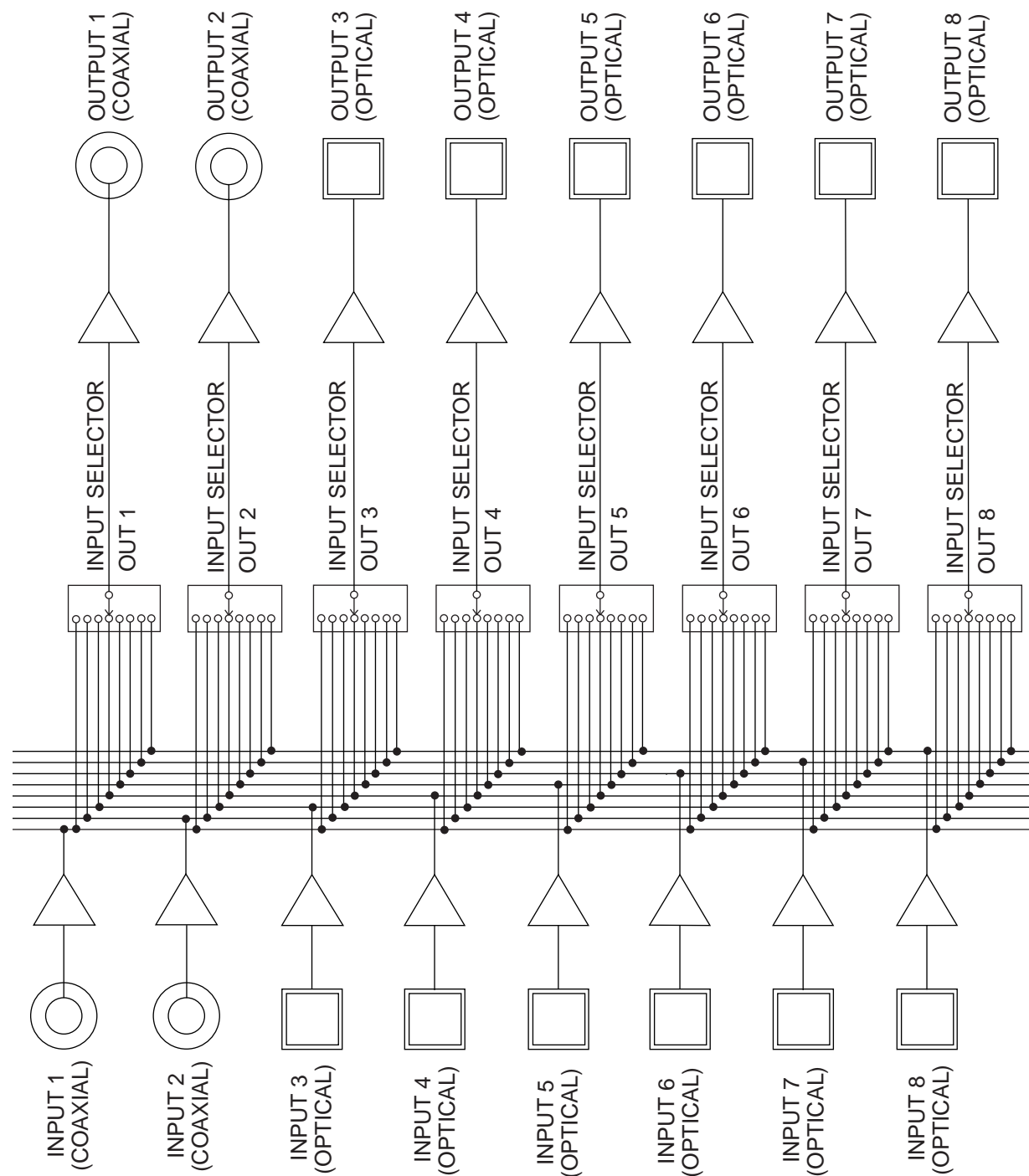
1. Read instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions - The safety and operating instructions should be retained for future reference.
3. Heed warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.



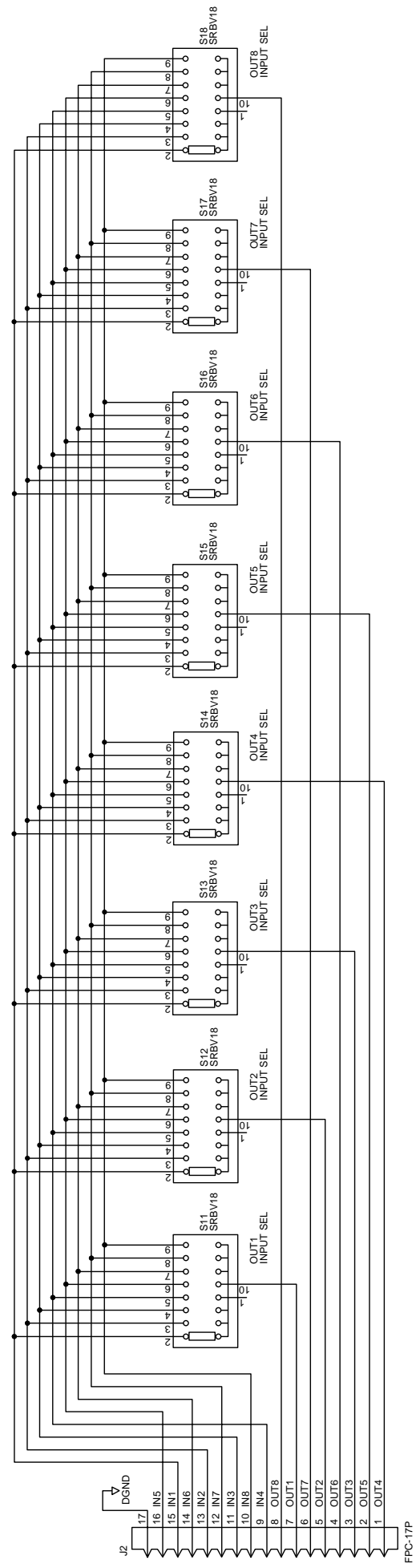
An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
12. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
16. Damage requiring Service - The appliance should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.



● BLOCK DIAGRAM



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### NOTES

- \* Parts List and circuit diagrams are given in this manual to assist the service technician in maintaining the Model DS-8.
- \* The following accessories are supplied with DS-8 as the standard accessories.
 

Owner's manual	: 8288449000 (for export model)
	: 8288450000 (for domestic model)
△ AC adaptor AD-12A	: 8270727003 (for USA/CND)
	: 8270727006 (for EUR)
	: 8270727007 (for UK)
	: 8270727010 (for JPN)
- \* Following is the packing material for the Model DS-8.
 

Carton, inner, DS-8	: 8228734000
Packing side, DS-8	: 8228436000
Packing, AC, DS-8	: 8228437000

### CAUTION

△ Parts marked with this sign are safety critical components. They must always be replaced with identical components. Refer to the Fostex Parts List and ensure exact replacement.

### 1. SPECIFICATIONS

#### INPUT 1, 2 (COAXIAL IN)

Connector	RCA pin jack
Input Impedance	75 Ω
Normal Input Level	0.5 Vp-p
Format	S/P DIF (IEC60958 part 3)

#### INPUT 3 - 8 (OPTICAL IN)

Connector	Square shape optical
Format	S/P DIF (IEC60958 part 3)

#### OUTPUT 1, 2 (COAXIAL OUT)

Connector	RCA pin jack
Input Impedance	75 Ω
Normal Input Level	0.5 Vp-p
Format	S/P DIF (IEC60958 part 3)

#### OUTPUT 3 - 8 (OPTICAL OUT)

Connector	Square shape optical
Format	S/P DIF (IEC60958 part 3)

DC IN 12 V (Inner: Plus, Outer: Minus)

SAMPLING FREQUENCY 32 kHz ~ 96 kHz

DIMENSIONS 44 (H) x 482 (W) x 113 (D) mm

WEIGHT 1.4 kg (excluding accessories)

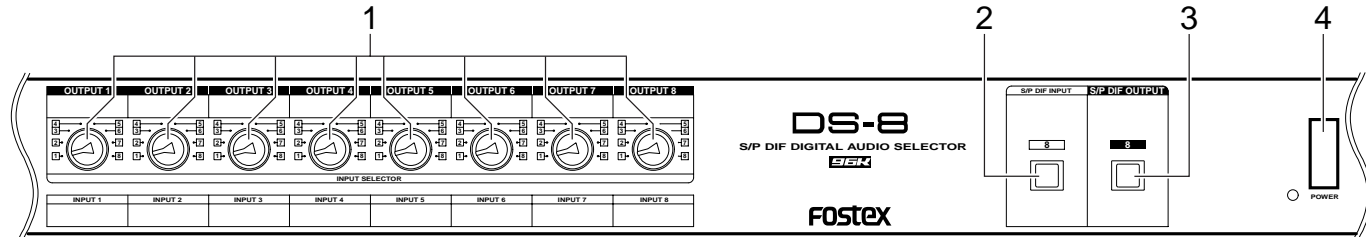
POWER REQUIREMENT	JPN : 100 V AC
	USA/CND : 120 V AC
	UK/EUR : 230 V AC

POWER SUPPLY Fostex AC adaptor AD-12A

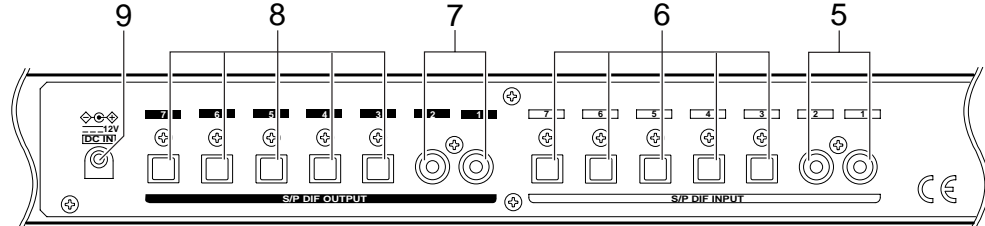
Specifications and appearance are subject to change without notice for product improvement.

### 2. CONTROLS, INDICATORS & CONNECTORS

#### < FRONT PANEL >

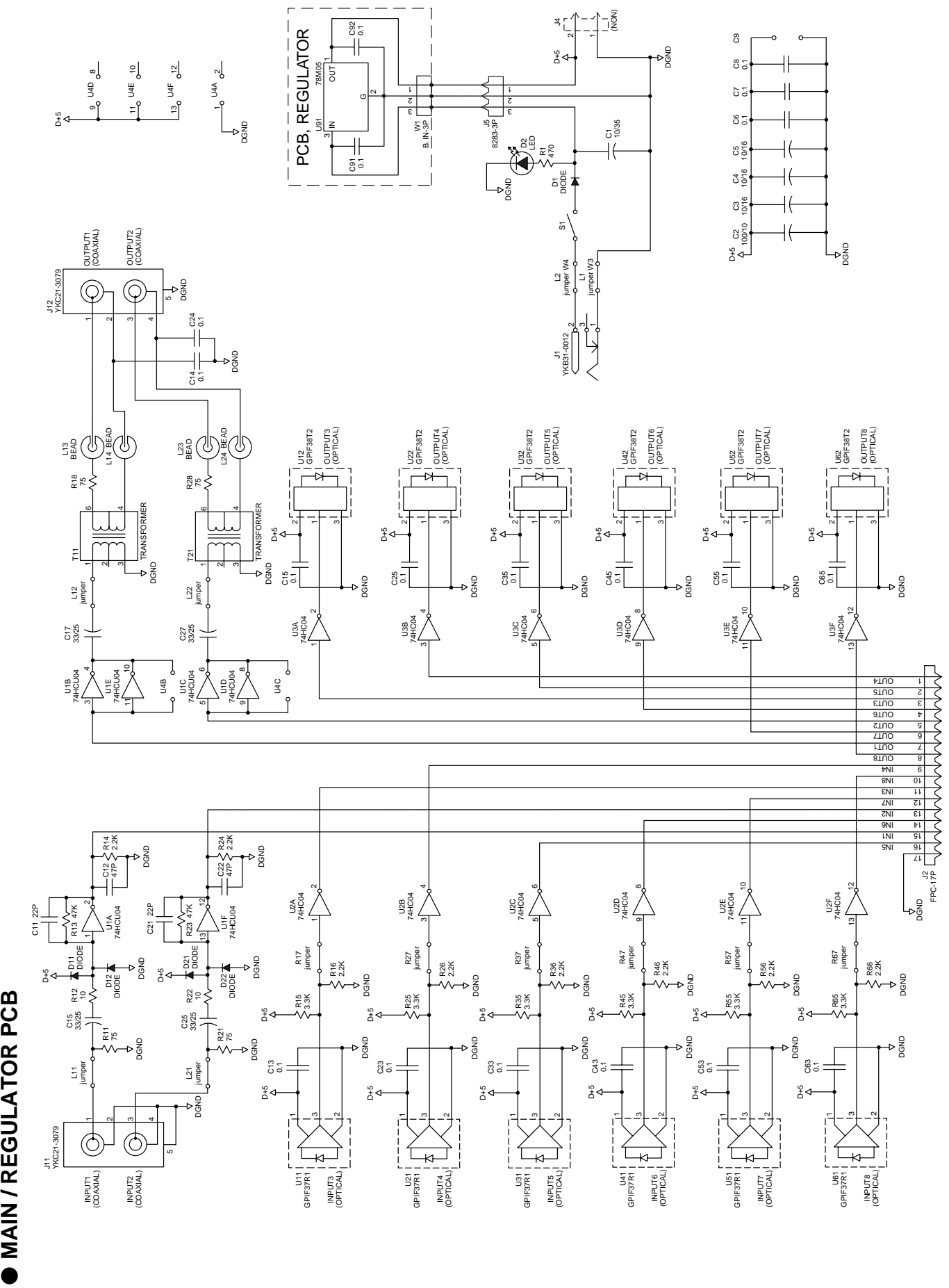


#### < REAR PANEL >



- |                                          |                                                  |
|------------------------------------------|--------------------------------------------------|
| 1. INPUT SELECTOR [INPUT SELECTOR 1 - 8] | 5. Input connector 1, 2 [S/P DIF INPUT 1, 2]     |
| 2. Input connector 8 [S/P DIF INPUT 8]   | 6. Input connector 3 - 7 [S/P DIF INPUT 3 - 7]   |
| 3. Output connector 8 [S/P DIF OUTPUT 8] | 7. Output connector 1, 2 [S/P DIF OUTPUT 1, 2]   |
| 4. Power switch / POWER LED [POWER]      | 8. Output connector 3 - 7 [S/P DIF OUTPUT 3 - 7] |
|                                          | 9. DC IN connector [DC IN 12V]                   |

### 4. CIRCUIT & BLOCK DIAGRAMS



● MAIN / REGULATOR PCB

● DS-8 Parts List

● MAIN PCB assy

Ref. No.	Part No.	Description
	8274 2430 00	PCB Assy, Main, DS-8
	8251 9661 01	Plain PCB, Main, DS-8

ICs

Ref. No.	Part No.	Description
U001	8236 0074 01	DIP, DG, CMOS, 74HCU04
U002, 003	8236 0812 00	DIP, DG, CMOS, 74HC04
U004		N/A
U011~061	8245 5530 10	Connector, opt, GPIF37R1
U012~062	8245 5520 10	Connector, opt, GPIF38T2

DIODES

Ref. No.	Part No.	Description
D001	8234 0196 02	HT, DSK10C-BT
D002	8234 0201 00	Opt, V, LED, green, GLK3KG8
D011, 021	8234 5007 00	HT, 1SS136
D012, 022	8234 5007 00	HT, 1SS136

RESISTORS

Ref. No.	Part No.	Description
R001	8230 1384 71	HT, Carbon, 1/4W, 470Ω, 5%
R011, 021	8230 1387 50	HT, Carbon, 1/4W, 75Ω, 5%
R012, 022	8230 1381 00	HT, Carbon, 1/4W, 10Ω, 5%
R013, 023	8230 1384 73	HT, Carbon, 1/4W, 47kΩ, 5%
R014, 024	8230 1382 22	HT, Carbon, 1/4W, 2.2kΩ, 5%
R015~065	8230 1383 32	HT, Carbon, 1/4W, 3.3kΩ, 5%
R016~066	8230 1382 22	HT, Carbon, 1/4W, 2.2kΩ, 5%
R017~067		Jumper, F5
R018, 028	8230 1387 50	HT, Carbon, 1/4W, 75Ω, 5%

CAPACITORS

ALU = Electrolytic type

CER = Ceramic type

Ref. No.	Part No.	Description
C001	8232 1451 06	VT, ALU, 35V, 10μF, 20%, SME-VB
C002	8232 1421 07	VT, ALU, 10V, 100μF, 20%, SME-VB
C003~005	8232 1431 06	VT, ALU, 16V, 10μF, 20%, SME-VB
C006, 007	8232 8181 04	VT, CER, 25V, 0.1μF, +80-20%, YF
C008, 009		N/A
C011, 021	8232 8012 20	VT, CER, 50V, 22pF, 5%, SL
C012, 022	8232 8014 70	VT, CER, 50V, 47pF, 5%, SL
C013~063	8232 8181 04	VT, CER, 25V, 0.1μF, +80-20%, YF
C014, 024	8232 8181 04	VT, CER, 25V, 0.1μF, +80-20%, YF
C015~065	8232 8181 04	VT, CER, 25V, 0.1μF, +80-20%, YF
C016, 026	8232 1443 36	VT, ALU, 25V, 33μF, 20%, SME-VB
C017, 027	8232 1443 36	VT, ALU, 25V, 33μF, 20%, SME-VB

MISCELLANEOUS

Ref. No.	Part No.	Description
Y201	8276 8730 02	Tube, UL, black, 1, L05
E201		Jumper, F5
E202		Jumper, F10
J001	8245 5410 00	Connector, jack, DC inlet, YKB31-0012

Ref. No.	Part No.	Description
J002	8245 2720 17	Connector, PI, jack, FPC, 17P
J004		N/A
J005	8245 1711 03	Connector, PI, jack, 8283, 3P, WHT
J011, 012	8245 3130 01	Connector, PL, jack, RCA, 2P, BLK, WS
L001, 002		N/A
L011, 021		N/A
L012, 022		N/A
L013, 023	8242 1860 13	Filter, T, EMI, LFW7B-M3R2T
L014, 024	8242 1860 13	Filter, T, EMI, LFW7B-M3R2T
S001	8253 4610 01	Switch, P, push, power, SDDL
T011, 021	8242 2350 00	Transformer, digital out, K7-T
W003, 004		Jumper, F5
W401	8276 8396 05	Cable, flat, FFC, 17P, L50

● REGULATOR PCB assy

Ref. No.	Part No.	Description
	8274 2440 00	PCB Assy, Regulator, DS-8
	8251 9660 02	Plain PCB, Regulator, DS-8

Ref. No.	Part No.	Description
U091	8236 0320 01	IC, 220, AN, regulator, NJM78M05FA
C091, 092	8232 8181 04	Capacitor, VT, CER, 25V, 0.1μF, +80-20%, YF
W001	8276 7730 10	Cable assy, 3P, WHTMT/F-MT/BS, L100
E101, 102		N/A

● SW PCB assys

Ref. No.	Part No.	Description
	8274 2450 00	PCB Assy, SW, DS-8
	8251 9660 03	Plain PCB, SW, DS-8

Ref. No.	Part No.	Description
S011~081	8253 4600 01	SW, P, rotary, 1-8, non-shortening, SRBV18
J003	8245 2721 17	Connector, PL, jack, FPC, 17P
W002		N/A
E101, 102		N/A

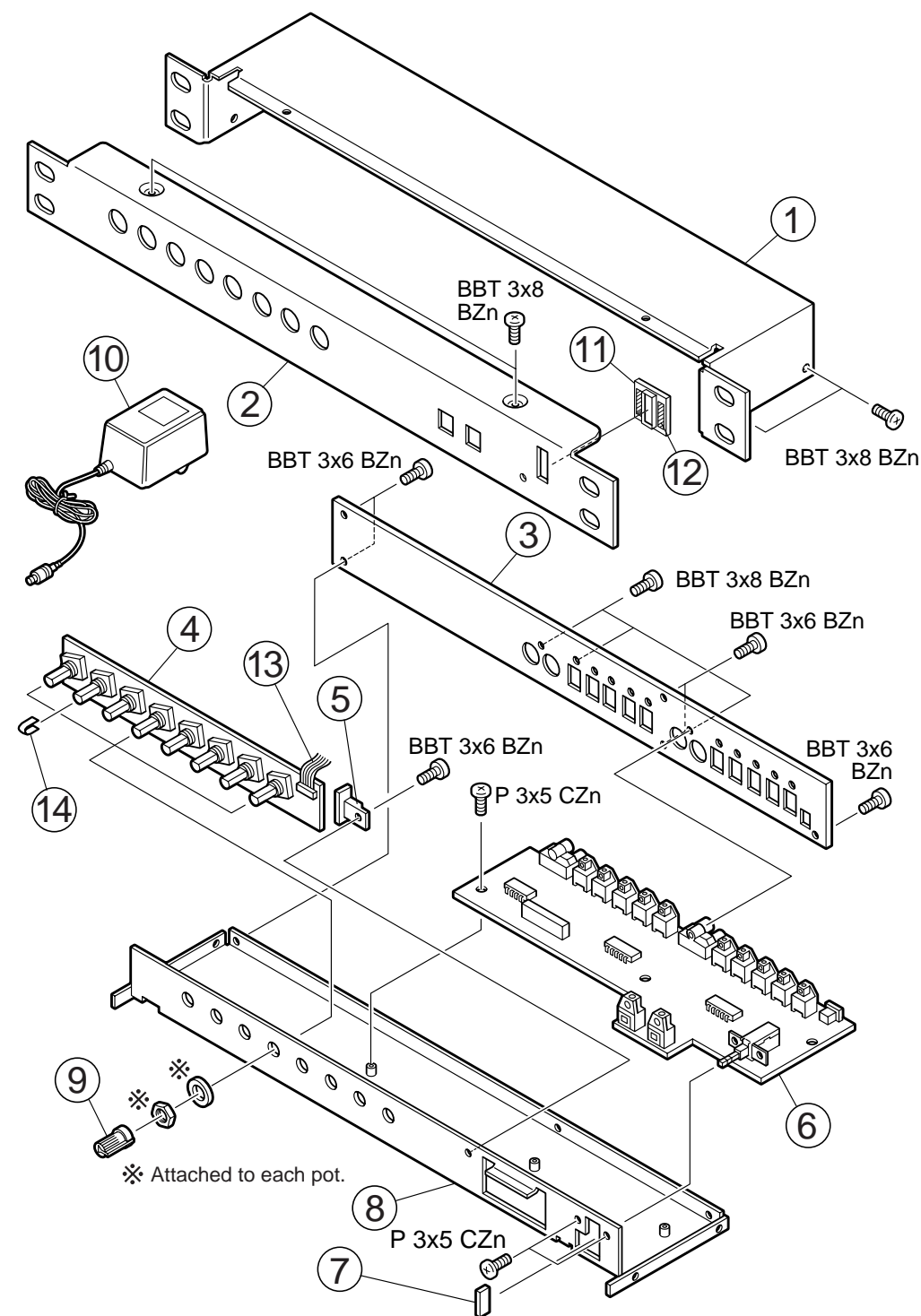
● Abbreviation

- DIP: Dual In Line
- H: Horizontal mount
- V: Vertical mount
- T: Taping device
- PI: Penetrate mount I form (straight)
- PL: Penetrate mount L form (right angle)
- DG: Digital

3. EXPLODED VIEW, PCB ASSEMBLY AND PARTS LIST

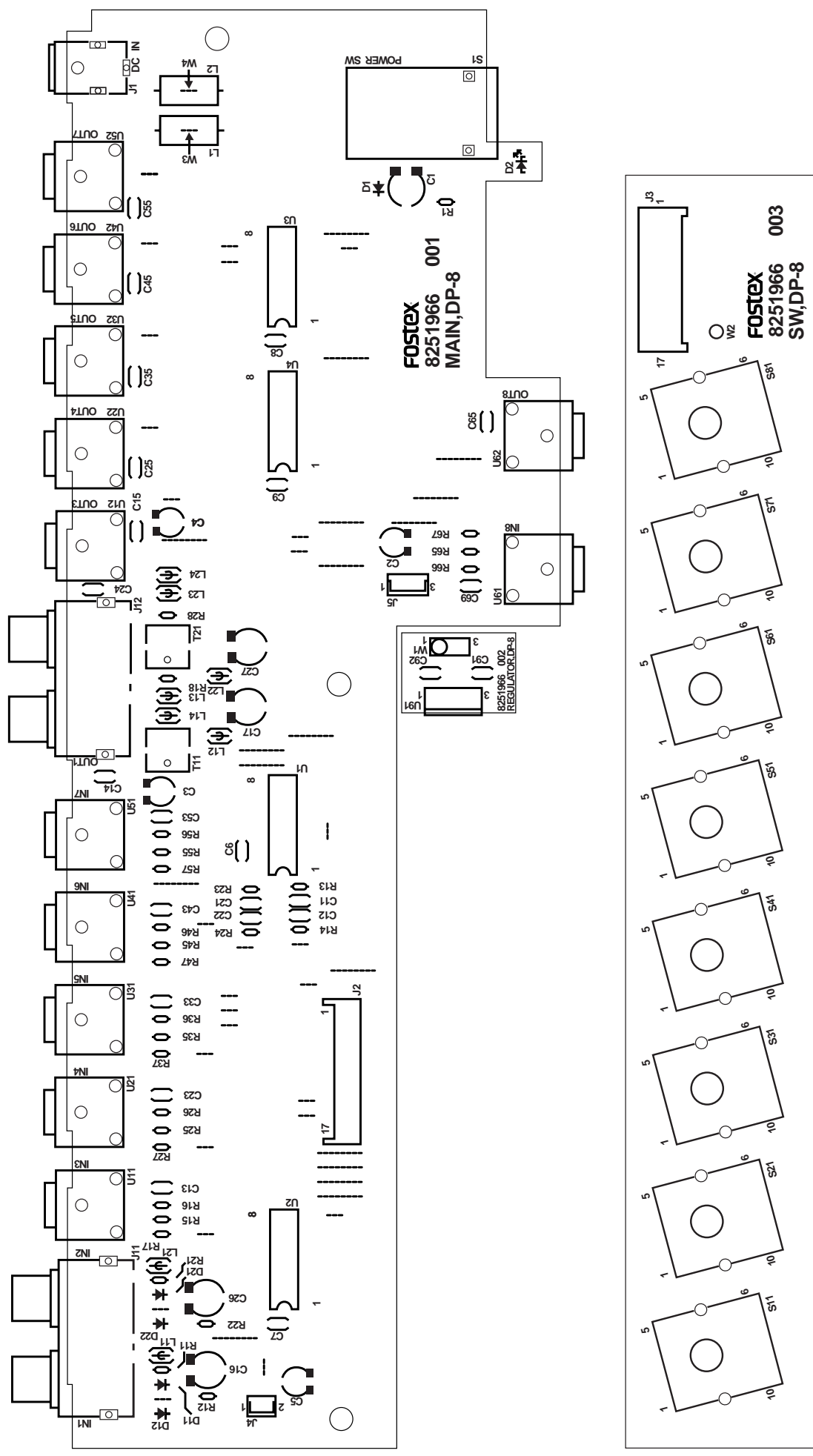
● DS-8 OVERALL EXPLODED VIEW & PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	8221 2230 00	Cover, DS-8/DP-8	10	8270 7270 03	AC adaptor, AD-12A, 120V, USA/CND
2	8221 3090 00	Panel, dress, DS-8		8270 7270 06	AC adaptor, AD-12A, 230V, EUR
3	8221 3100 00	Panel, rear, DS-8		8270 7270 07	AC adaptor, AD-12A, 240V, UK
4	8274 2450 00	PCB assy, SW, DS-8		8270 7270 10	AC adaptor, AD-12A, 100V, JPN
5	8274 2440 00	PCB assy, Regulator, DS-8	11	8226 0191 00	Escutcheon, B
6	8274 2430 00	PCB assy, MAIN, DS-8	12	8216 6570 00	Spacer, escutcheon
7	8226 0130 02	Button, push, B, N08	13	8276 8396 05	Cable, flat, FFC, 17P, L50 (Included in MAIN PCB assy.)
8	8221 2220 00	Chassis, DS-8/DP-8	14	8216 6920 00	Sheet, volume, DS-8/DP-8
9	8226 1870 02	Knob, VR, W, N19			



● DS-8 PCB ASSEMBLIES

- Parts Side of MAIN / REGULATOR / SW PCB assys



- Foil Side of MAIN / REGULATOR / SW PCB assys

