

HD SERIES

TECHNICAL INFORMATION

COUNTING SCALES

HD-12KA/B

HD-30KA/B

HD-60KA/B

OP-03/04/05



HD-A SERIES

MAIN BOARD(PZ:2767A) PARTS LIST

CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
U1	UC:D78063GF-048	CPU	1
U2	UC:HC02	NOR GATE	1
U4	UC:RP93C46	EEPROM	1
U5	UA:S-8054ALB	VOLTAGE COMPARATOR	1
Q3,4	QT:BA1A4P	TRANSISTER	2
D1~5,9,21	DI:1SS270	DIODE	7
X	XT:KBR4.91MKSTF	OSCILATOR	1
S1~5,9,21	SK:SKHHAK	TACT SWITCH	7
BZ	ET:MEB-12C-5	BUZZER	1
	PC:2767B	PRINT BOARD	1
R7	RC:NAT5.6K	CARBON RESISTOR	1
R11	RC:NAT56K	CARBON RESISTOR	1
R5,6	RC:NAT4.7K	CARBON RESISTOR	2
R8,9,10	RC:NAT10K	CARBON RESISTOR	3
C16	CK:SME16VB47	CHEMICAL CAPACITOR	1
C10,11,13,14,15	CC:0.1U25V	CERAMIC CAPACITOR	5
J4,8	J1:07P-S2L2-EF	CONNECTOR	2
J9	J1:06P-S2L2-EF	CONNECTOR	1

HD-B SERIES

MAIN BOARD(PZ:2767B) PARTS LIST

CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
U1	UC:D78063GF-048	CPU	1
U2	UC:HC02	NOR GATE	1
U4	UC:RP93C46	EEPROM	1
U5	UA:S-8054ALB	VOLTAGE COMPARATOR	1
Q3,4	QT:BA1A4P	TRANSISTER	2
D1~21	DI:1SS270	DIODE	21
X	XT:KBR4.91MKSTF	OSCILATOR	1
S1~21	SK:SKHHAK	TACT SWITCH	21
BZ	ET:MEB-12C-5	BUZZER	1
	PC:2767B	PRINT BOARD	1
R7	RC:NAT5.6K	CARBON RESISTOR	1
R11	RC:NAT56K	CARBON RESISTOR	1
R5,6	RC:NAT4.7K	CARBON RESISTOR	2
R8,9,10	RC:NAT10K	CARBON RESISTOR	3
C16	CK:SME16VB47	CHEMICAL CAPACITOR	1
C10,11,13,14,15	CC:0.1U25V	CERAMIC CAPACITOR	5
J4,8	J1:07P-S2L2-EF	CONNECTOR	2
J9	J1:06P-S2L2-EF	CONNECTOR	1

HD SERIES

POWER SUPPLY/ANALOG BOARD(PZ:2768) PARTS LIST

CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
U6	UR:24M05HF	REGULATOR	1
Q1	QT:A1020Y	TRANSISTER	1
Q2	QT:A1015Y	TRANSISTER	1
NF3	NF:D-42C	NOISE FILTER	1
NF1,2	LL:LHL06NB470K	INDUCTOR	2
S22	SK:SKHHAK	TACT SWITCH	1
	BLE:AMZ41	ANALOG MODULE	1
	04:4000186	BOARD LOCK PLATE	1
	PC:2768B	PRINT BOARD	1
R1	RC:NAT1.5K	CARBON RESISTOR	1
R2	RC:NAT5.6K	CARBON RESISTOR	1
R3	RC:NAT56K	CARBON RESISTOR	1
C1	CK:SME25VB470	CHEMICAL CAPACITOR	1
C6	CK:SME16VB100	CHEMICAL CAPACITOR	1
C3,4,20	CT:1V010	TANTALUM CAPACITOR	3
C2,5,7,8,9,21~24	CC:0.1U25V	CERAMIC CAPACITOR	9
J1	EJ:0470-01-230	JACK	1
J3	JT:171825-5	CONNECTOR	1
J8	J1:07P-S2L2-EF	CONNECTOR	1
J9	J1:06P-S2L2-EF	CONNECTOR	1
J2	J1:2P-S2L2-EF	CONNECTOR	1

HC/HD-03

RS-232C INTERFACE BOARD(PZ:2770) PARTS LIST

CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
U1	UC:MAX232CPE		1
C1,2,3,4,5	CK:SME16VB47	CHEMICAL CAPACITOR	5
C6	CC:0.1U25V	CERAMIC CAPACITOR	1
NF1	NF:D-42C	NOISE FILTER	1
J4	J1:07P-S2L2-EF	CONNECTOR	1
J11	JA:17LE-13250	D-Sub	1
	PC:2770	PRINT BOARD	1

HC/HD-04

COMPARATOR BOARD(PZ:2771A) PARTS LIST

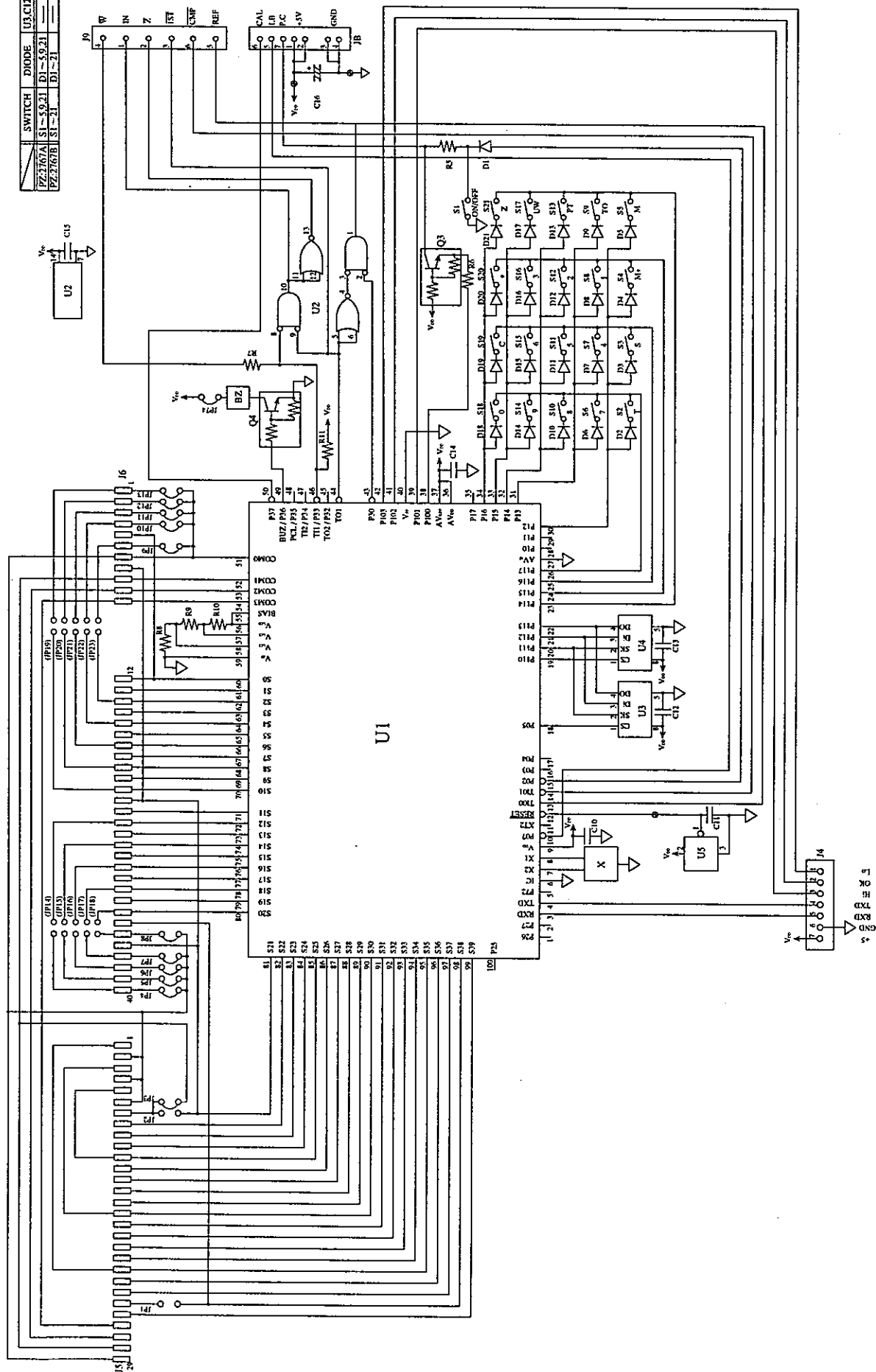
CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
Q1,2,3	QT:BA1A4P	TRANSISTER	3
DF1,2,3	DF:AQV253	RELAY	3
C1	CK:SME16VB47	CHEMICAL CAPACITOR	1
J4	J1:07P-S2L2-EF	CONNECTOR	1
J12	JA:4470-01-1111	DIN CONNECTOR	1
R1,2,3	RC:NAT680R	CARBON RESISTOR	3
	PC:2771	PRINT BOARD	1

HC/HD-05

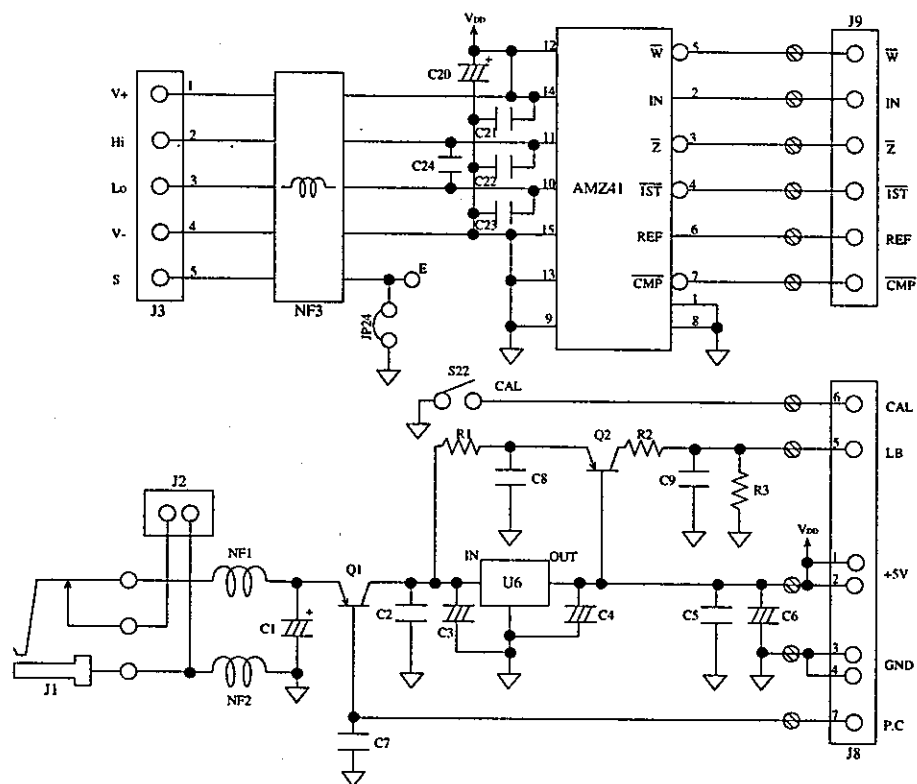
CURRENT LOOP BOARD(PZ:2771B) PARTS LIST

CIRCUIT SYMBOL or DRWG. NO.	PARTS NAME	DESCRIPTION	Q'TY
Q4	QT:BA1A4P	TRANSISTER	1
Q5	QT:C1815Y	TRANSISTER	1
DF4	DF:PS2501-1L/K	PHOTO COUPLER	1
C1	CK:SME16VB47	CHEMICAL CAPACITOR	1
R4	RC:NAT5.6K	CARBON RESISTOR	1
R5	RC:NAT1K	CARBON RESISTOR	1
D1	DI:1B4B42	DIODE	1
J4	J1:07P-S2L2-EF	CONNECTOR	1
J12	JA:4470-01-1111	DIN CONNECTOR	1
	PC:2771	PRINT BOARD	1

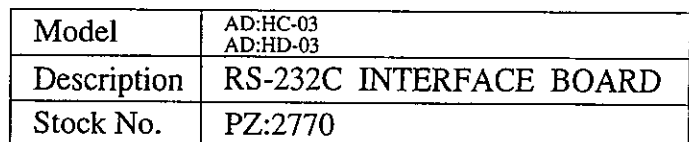
SWITCH	DIODE	U1, C12	JP1	JP2	JP3
PZ-2767A	S1-S9, 21	D1-D21	---	---	---
PZ-2767B	S1-S9, 21	D1-D21	---	---	---

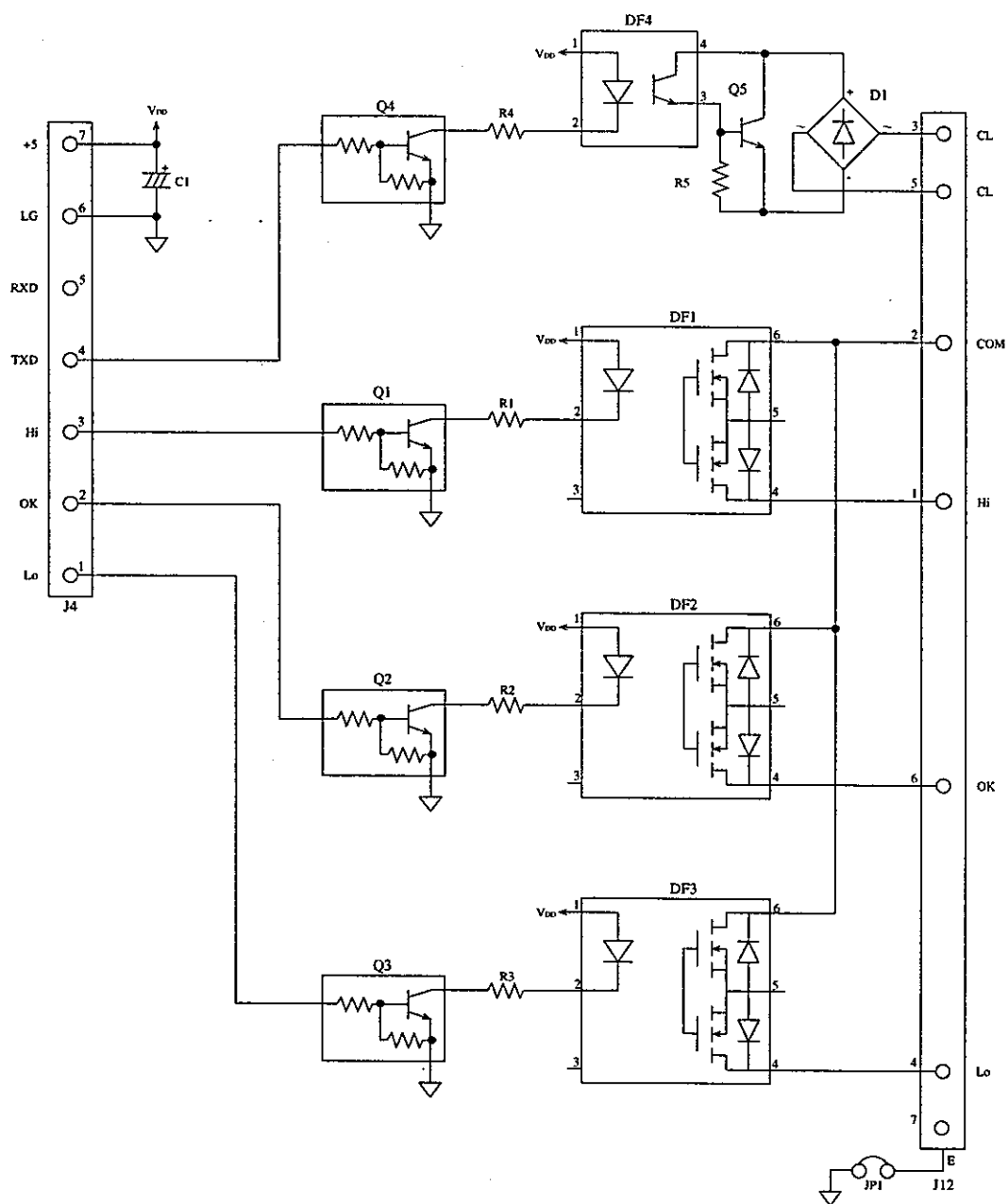


Model	AD:HD SERIES
Description	MAIN BOARD
Stock No.	PZ-2767A/PZ-2767B



Model	HD SERIES
Description	POWER SUPPLY/ANALOG BOARD
Stock No.	PZ:2768

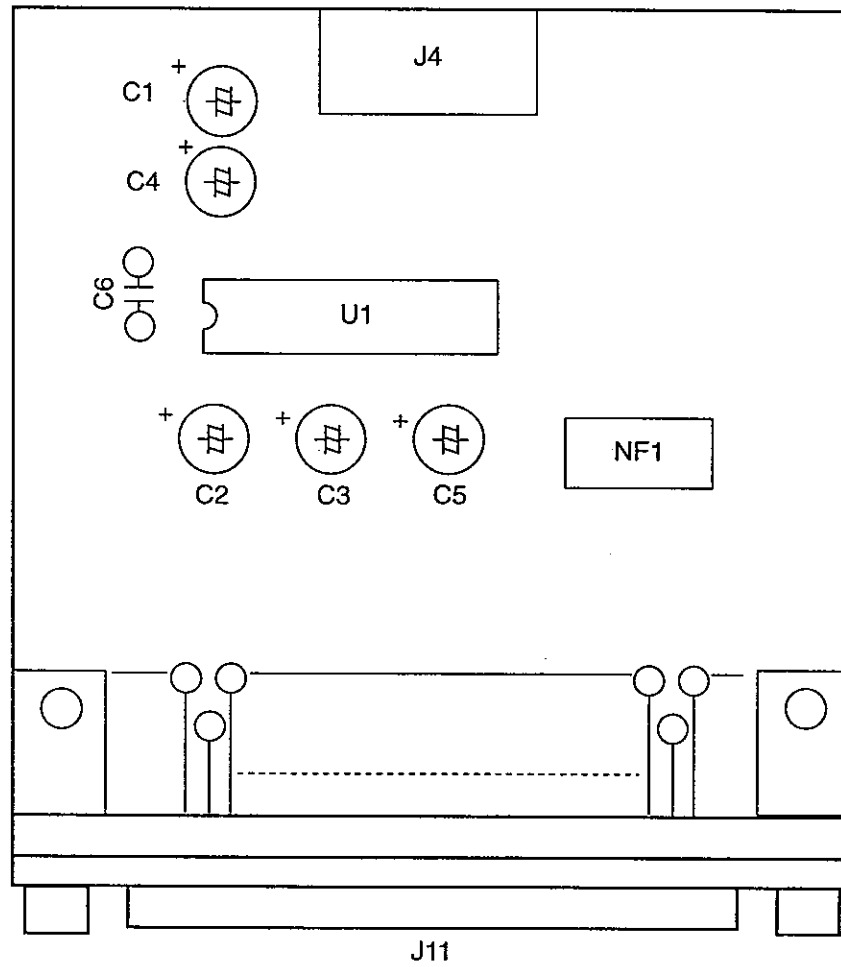




	Q	DF	D	R
PZ:2771A	Q1~3	DF1~3	—	R1~3
PZ:2771B	Q4,5	DF4	D1	R4,5

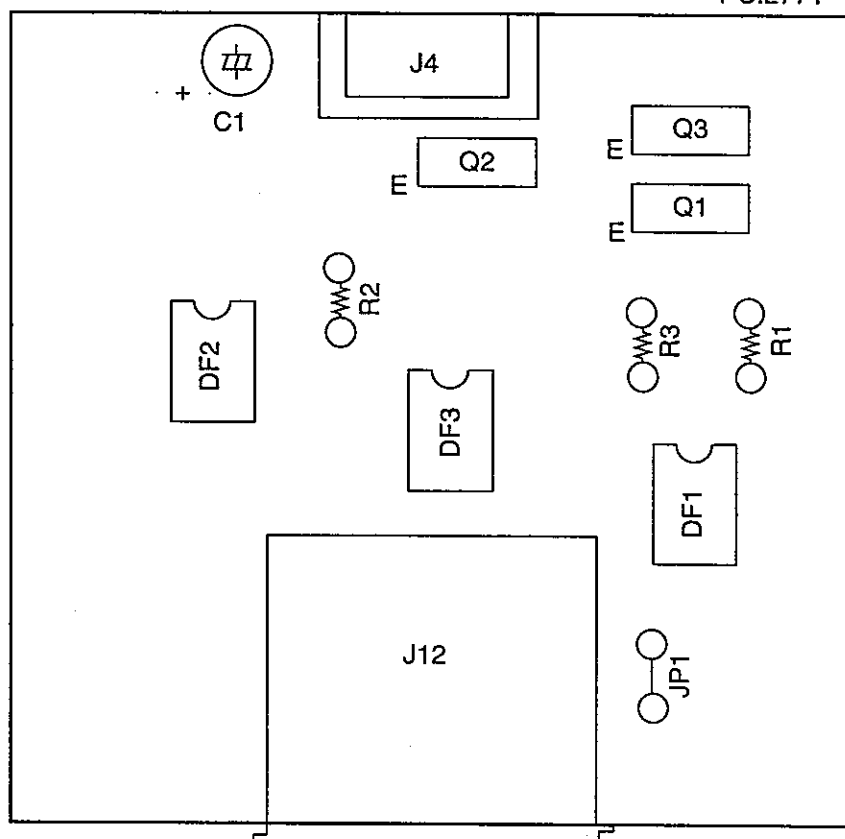
Model	AD:HC-04/05 AD:HD-04/05
Description	COMPARATOR/CURRENT LOOP BOARD
Stock No.	PZ:2771A/PZ:2771B

PC:2770



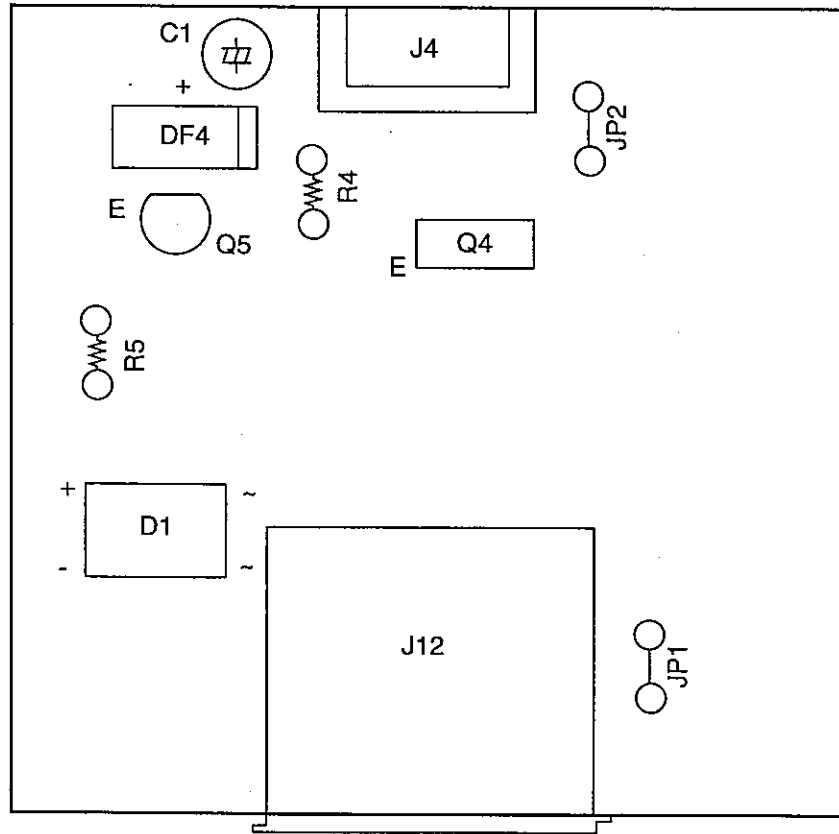
Model	HC-03/HD-03
Description	
Stock No.	PZ:2770
Drwg. No.	QD-KZ4-000007

PC:2771

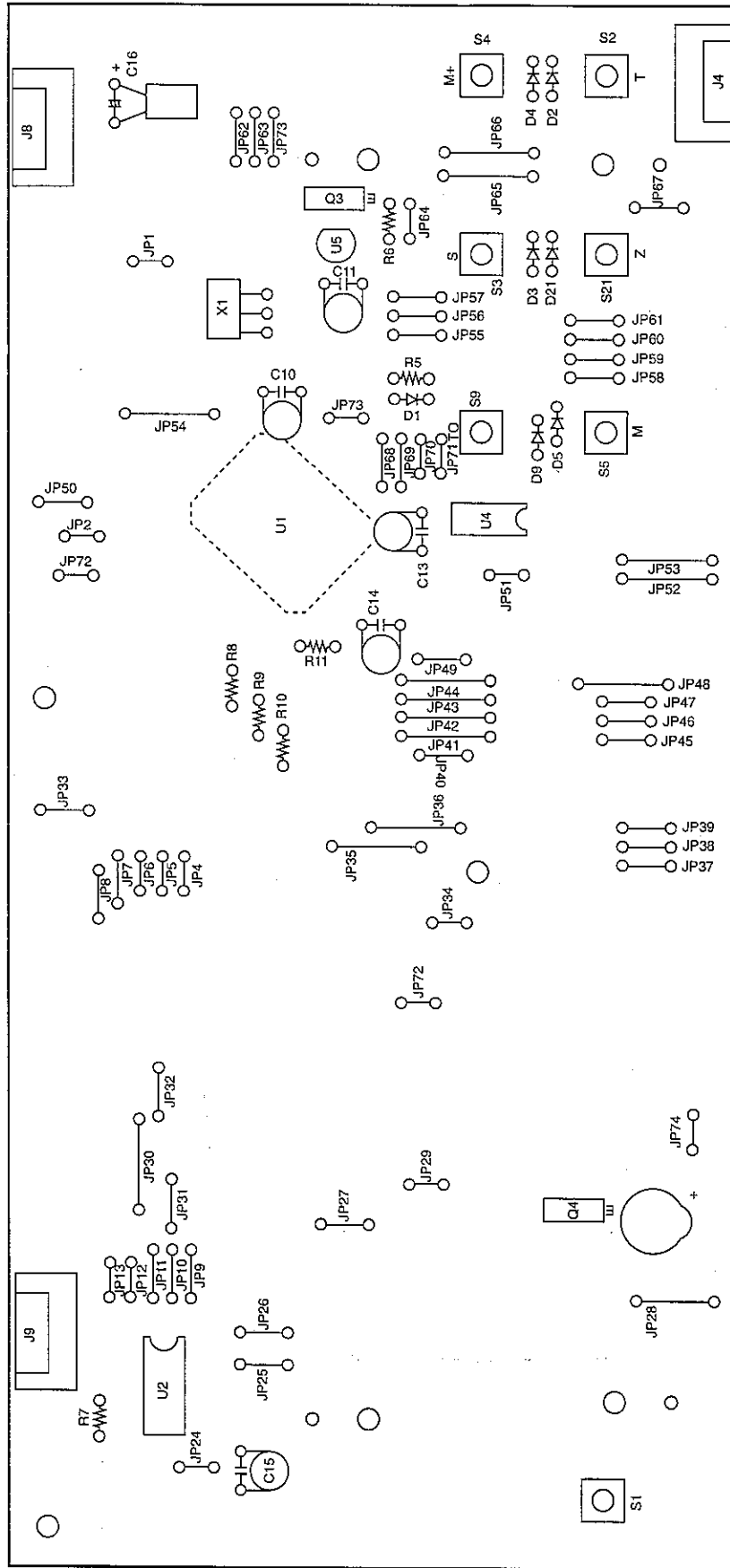


Model	HC-04/HD-04
Description	
Stock No.	PZ:2771A
Drwg. No.	QD-KZ4-000008

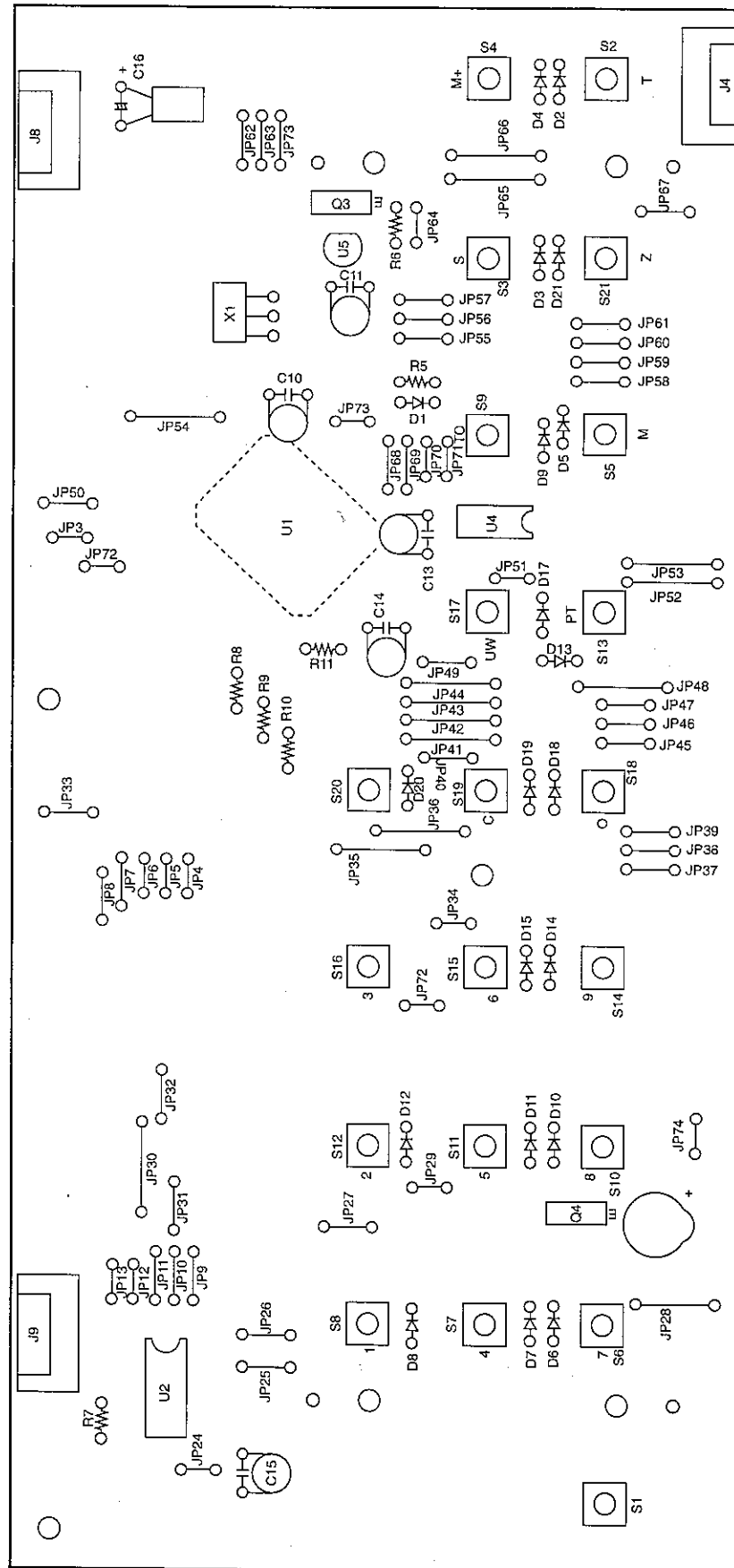
PC:2771



Model	HC-05/HD-05
Description	
Stock No.	PZ:2771B
Drwg. No.	QD-KZ4-000009



Model	HD-A Series
Description	Main Board
Stock No.	PZ-2767A
Dwg. No.	QD-KZ3-000027C



Model	HD-B Series
Description	Main Board
Stock No.	PZ2767B
Drwg. No.	QD-KZ3-000028C

H D S E R I E S

NO.	PARTS NAME	DESCRIPTION
1	09:B30091	WEIGHING PAN UNIT
2		
3		HEXAGON BOLT M6×40
4		WASHER ϕ 6
5	06:B49565	CENTER CUSHON RUBBER
6	03:A21451	WEIGHING PAN SUPPORT
7	LC:118-12K	LOAD CELL FOR 12K
7	LC:118-30K	LOAD CELL FOR 30K
7	LC:118-60K	LOAD CELL FOR 60K
8	10:13C	LEVEL VIAL
9	03:A10204-1	LOWER CASE
10	02:B49823	BLANK PANEL
11		PAN HEAD WITH WASHER AND SPRING WASHER M3×6
12	10:NG-79-A	RUBBER GROMMET
13	07:B49929	FOOT
14		NAT M8
15		CONTINUOUS-THREAD STUD M8×30
16		PAN HEAD WITH WASHRE AND SPRING WASHER M6×12
17	10:BS-DR-CS-NI-3	SCREW
18	04:3000009	DISPLAY BRACKET
19	07:C40250	CABLE CLAMP
20		HEXAGON BOLT M6×30
21		WASHER M6
22	ET:SR-6P-4	CABLE CLAMP
23	07:2000001	CAL PANEL
24	07:C40250	CABLE CLAMP
25	10:NK-2N	CABLE CLAMP
26		TRUSS HEAD SCREW M4×8
27	PZ:2768	POWER SUPPLY BOARD
28		PAN HEAD WITH WASHER M3×6
29		PAN HEAD TAPPING SCREW M3×8
30	06:A39663	CONER CUSHON RUBBER
31	04:C40651	HOLDING WASHER
32		CONTINUOUS-THREAD STUD M8×45
33		NAT M8
34	00:C40145	GROUND SPRING
35		TAPPING SCREW (S TITE) M4×6
36		OVAL COUNTERSUNK HEAD M4×16
37	06:4000006	LCD STOP-2 FOR 12KB/30KB/60KB
38	06:4000005	LCD STOP-1
39		PAN HEAD WITH WASHER AND SPRING WASHER M3×6
40	08:4000187	BLANK SEAL
41	07:2000002	OPTION PANEL
42	07:1000005	DISPLAY LOWER CASE
43		PAN HEAD TAPPING SCREW M3×8
44	04:C42583	TERMINAL
45	07:C42523	BATTERY LOCK
46	10:NRP-345	NYLON RIVET
47	07:3000005	BATTERY PANEL
48	07:1000006	FRAME
49		PAN HEAD TAPPING SCREW M3×8
50	10:DH-26-1-AD	BATTERY CASE
51		PAN HEAD TAPPING SCREW M3×8
52	PZ:2767A	MAIN BOARD FOR HD-A SERIES
52	PZ:2767B	MAIN BOARD FOR HD-B SERIES
53	07:1000004	DISPLAY UPPER CASE
54	07:C41320	KEY TOP
55	07:3000012	DISPLAY FILTER
56	07:4000004	FRONT SHEET FOR 12KA(EX)
56	08:3000098	FRONT SHEET FOR 30KA(EX)
56	08:3000099	FRONT SHEET FOR 60KA(EX)

H D S E R I E S

NO.	PARTS NAME	DESCRIPTION
56	08:3000100	FRONT SHEET FOR 12KB(EX)
56	08:3000101	FRONT SHEET FOR 30KB(EX)
56	08:3000102	FEONT SHEET FOR 60KB(EX)
57	08:2000004A	KEY SHEET FOR 12KA/30KA/60KA
57	08:2000005A	KEY SHEET FOR 12KB/30KB/60KB

