

■CIRCUIT BOARDS (シート基板図)

●DM Circuit Board

DM CN1

Pin No.	Pin Name	Wire Color	Destination
1	Vss	RE	LCD-CN1-1
2	Vcc	WH	LCD-CN1-2
3	Vo	WH	LCD-CN1-3
4	Rs	WH	LCD-CN1-4
5	R/W	WH	LCD-CN1-5
6	E	WH	LCD-CN1-6
7	D0	WH	LCD-CN1-7
8	D1	WH	LCD-CN1-8
9	D2	WH	LCD-CN1-9
10	D3	WH	LCD-CN1-10
1	D4	WH	LCD-CN1-11
2	D5	WH	LCD-CN1-12
3	D6	WH	LCD-CN1-13
4	D7	WH	LCD-CN1-14
5	K	WH	LCD-CN1-15

DM CN2

Pin No.	Pin Name	Wire Color	Destination
1	GND	RE	PN-CN2-1
2	NC	WH	PN-CN2-2
3	EDT	WH	PN-CN2-3
4	SEQ	WH	PN-CN2-4
5	MLT	WH	PN-CN2-5
6	VOC	WH	PN-CN2-6
7	RUG	WH	PN-CN2-7
8	RUR	WH	PN-CN2-8
9	REC	WH	PN-CN2-9

DM CN3

Pin No.	Pin Name	Wire Color	Destination
1	+5V	RE	PS-CN3-1
2	+5V	WH	PS-CN3-2
3	DG	WH	PS-CN3-3
4	DG	WH	PS-CN3-4
5	+12V	WH	PS-CN3-5
6	AG	WH	PS-CN3-6
7	-12V	WH	PS-CN3-7
8	MUTE	WH	PS-CN3-8

DM CN4

Pin No.	Pin Name	Wire Color	Destination
1	MI-	RE	JK-CN3-1
2	MI+	WH	JK-CN3-2
3	MO-	WH	JK-CN3-3
4	MO+	WH	JK-CN3-4
5	MT+	WH	JK-CN3-5
6	MT+	WH	JK-CN3-6

DM CN5

Pin No.	Pin Name	Wire Color	Destination
1	B2	GY	MK-CN1-1
2	B3	GY	MK-CN1-2
3	B4	GY	MK-CN1-3
4	B5	GY	MK-CN1-4
5	B6	GY	MK-CN1-5
6	B7	GY	MK-CN1-6
7	B8	GY	MK-CN1-7
8	B9	GY	MK-CN1-8
9	B10	GY	MK-CN1-9
11	B11	GY	MK-CN1-10
1	B12	GY	MK-CN1-11

DM CN6

Pin No.	Pin Name	Wire Color	Destination
1	N15	BL	MK-CN2-1
2	N14	BL	MK-CN2-2
3	N13	BL	MK-CN2-3
4	N12	BL	MK-CN2-4
5	N11	BL	MK-CN2-5
6	N10	BL	MK-CN2-6
7	N5	BL	MK-CN2-7
8	N4	BL	MK-CN2-8
9	N3	BL	MK-CN2-9
10	N2	BL	MK-CN2-10
1	N1	BL	MK-CN2-11
2	NO	BL	MK-CN2-12

DM CN7

Pin No.	Pin Name	Wire Color	Destination
1	SC	RE	PN-CN1-1
2	SB	WH	PN-CN1-2
3	SA	WH	PN-CN1-3
4	S0	WH	PN-CN1-4
5	S1	WH	PN-CN1-5
6	S2	WH	PN-CN1-6
7	S3	WH	PN-CN1-7
8	S4	WH	PN-CN1-8

DM CN8

Pin No.	Pin Name	Wire Color	Destination
1	S12	RE	PN-CN4-1
2	S11	WH	PN-CN4-2
3	S10	WH	PN-CN4-3
4	S9	WH	PN-CN4-4
5	S8	WH	PN-CN4-5
6	S7	WH	PN-CN4-6
7	S5	WH	PN-CN4-7
8	GND	WH	PN-CN4-8
9	+5V	WH	PN-CN4-9
10	D.E	WH	PN-CN4-10

DM CN9

Pin No.	Pin Name	Wire Color	Destination
1	+5V	RE	Wheel Assembly
2	PB	OR	Wheel Assembly
3	MW	YE	Wheel Assembly
4	+2.5	WH	Wheel Assembly
5	GND	BL	Wheel Assembly

DM CN10

Pin No.	Pin Name	Wire Color	Destination
1	-12V	RE	JK-CN2-1
2	+5V	WH	JK-CN2-2
3	BC	WH	JK-CN2-3
4	FV	WH	JK-CN2-4
5	+5V	WH	JK-CN2-5
6	GND	WH	JK-CN2-6
7	+5V	WH	JK-CN2-7
8	SUS	WH	JK-CN2-8
9	NC	WH	JK-CN2-9

DM CN11

Pin No.	Pin Name	Wire Color	Destination
1	HPL	SRE	DM-CN1-1
2	S.G	SRES	
3	HPR	SOR	JK-CN1-3
4	S.G	SORS	
5	A.G.	WH	JK-CN1-5
6	LNL	SYE	JK-CN1-6
7	SG	SYES	JK-CN1-7
8	LNR	SGR	JK-CN1-8
9	SG	SGRS	JK-CN1-9
10	AG	WH	JK-CN1-10
11	CT	WH	JK-CN1-11
12	CR	WH	JK-CN1-12
13	GND	WH	JK-CN1-13

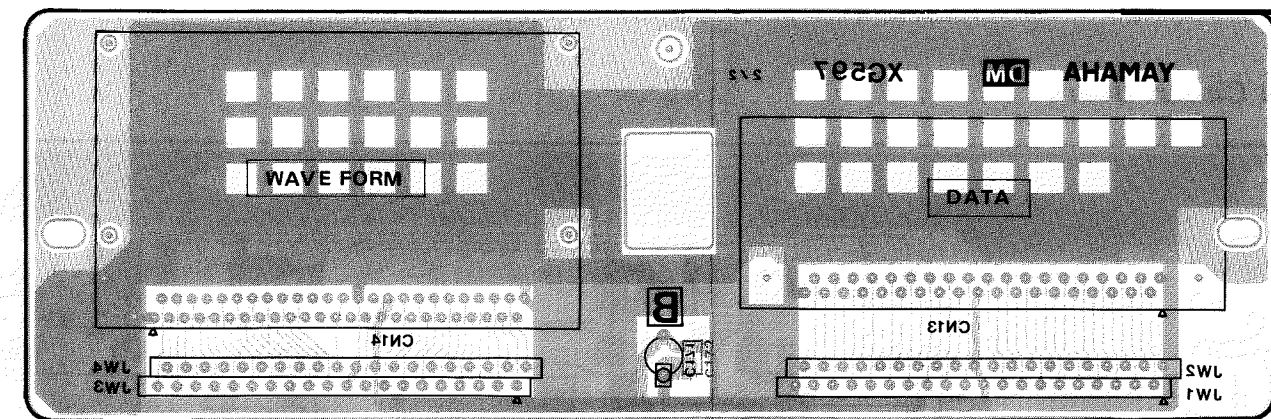
DM CN12

Pin No.	Pin Name	Wire Color	Destination
1	TL	SREW	PN-CN3-1
2	RL	SRER	PN-CN3-2
3	SG	SRES	
4	SG	SORS	
5	TR	SORW	PN-CN3-3
6	RR	SORR	PN-CN3-4
7	AG	BL	PN-CN3-5

DM CN15

Pin No.	Pin Name	Wire Color	Destination
1	AT	RE	KS-CN1-1
2	GND	WH	KS-CN1-2
3	+12	WH	KS-CN1-3
4	-12	WH	KS-CN1-4

- DM2/2



Pattern side (パターン側)

Circuit Board: DM (V1547500) XG597B0

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|-----------------------------|--|--------------------------------|------------------------------------|
| IC 1: | HD6475328CP-10 (XHO17C00) CPU | 5. Resistor Array | 33Ω 1W J (VC729600) |
| IC 2, 5, 31, 32: | SN74ALS245AN (IG144900) TRANSCIVER | RA 7, 8: | RGLD8X473J (VE445600) |
| IC 3, 4, 12, 28-30, 51, 52: | TC74HC245AP (IR024500) BUFFER | RA 1-6, 9, 12, 13, 17-23: | RGLD8X103J (VE445200) |
| IC 6: | PST518B-2 (IG116200) SYSTEM RESET | RA10, 11: | RGLD10X103J (VH564300) |
| IC 7: | SN74HC14N (IR001450) INVERTER | 10. Trimmer Potentiometer | |
| IC 8: | SN74HC04N (IR000450) INVERTER | R191: | B100K (VB593200) DAC adj. |
| IC 9: | SN74HC367N (IR036750) BUS DRIVER | 11. Chip Monolithic Cera. Cap. | |
| IC10: | TC74AC32P (XG658A00) OR | C9-11, 13, 14, 18-20, 22, | |
| IC11: | TC74AC08P (XG656A00) AND | 25, 28, 41-45, 47-49, | |
| IC13: | SN74HC374N (IR037450) D. FF | 55-68, 60, 62, 75, 76, | |
| IC14, 17: | SN74HC138N (IR013850) DECODER | 78, 82, 85, 88, 94, 95, | |
| IC15, 16: | TC74AC138P (XG659A00) DECODER | 97-101, 104, 105, | |
| IC18, 20, 21: | μPD43257AC12LL (XF914A00) SRAM 256K or
M5M5255BP-10LL (XH08A00) SRAM 256K | 110-113, 117, 118 | |
| IC22: | 103BV106 (XH035E00) EPROM | 120, 133, 148, 153, 166, | |
| IC23: | 103AV106 (XG933E00) EPROM | 169, 172: | 0.1μ 25 F (VD499400) |
| IC24: | HD637B01Y (XG950B00) CPU | 12. Tantalum Capacitor | |
| IC25, 48: | RC4558D-V (IG001390) OP AMP. | C 7: | 2.2μ 16V M (FP736220) |
| IC26: | YM7119 (XG995A00) M3 | 13. Semiconductive Cera. Cap. | |
| IC27: | SN74HC139N (IR013950) DECODER 2-4 | C34-38: | 0.1μ 25V Z (VC694800) |
| IC33: | TC534000P-H050 (XG951B00) ROM-1 4M | 14. Coil | |
| IC34: | TC534000P-H051 (XG952B00) ROM-2 4M | L 1, 2: | 20μ FL5R200QNT (VB835000) |
| IC35: | TC534000P-H052 (XG953B00) ROM-3 4M | 15. EMI Filter | |
| IC36: | TC534000P-H053 (XG954B00) ROM-4 4M | EMI 1-3, 9-11: | LS MT Y2238B (FZ006970) |
| IC37: | HD6B350P (IG147300) ACIA | 16. Ceramic Resonator | |
| IC38: | NJM78L05A (IG065510) REGULATOR +5V | X 2: | 8.00M C238.00MT (VB657100) |
| IC39: | NJM79L05 (IG130500) REGULATOR -5V | 17. Quartz Crystal Unit | |
| IC40: | PCM56P-Y (XH690A00) DAC | X 1: | 16M AT-51 (VE804600) |
| IC41: | YM3413 (XG449A00) LDSP | X 3: | 6.144M AT-49 (VH499900) |
| IC42: | HM65256BLP-10 (XH116A00) PSRAM 256K or
Y51832PL-10 (XG628A00) PSRAM 256K | 18. Connector | |
| IC43: | Y51832PL-10 (XG628A00) PSRAM 256K | CN13: | IC3A-38PS-1.27D (VF821100) DATA |
| IC44: | Y51832PL-10 (XG628A00) PSRAM 256K | CN14: | 264D-550V-28DB (VH985300) WAVEFORM |
| IC45: | Y51832PL-10 (XG628A00) PSRAM 256K | 19. Lithium Battery | |
| IC46: | Y51832PL-10 (XG628A00) PSRAM 256K | BT 1: | SONY/CR2032 (VE338400) |
| IC47: | Y51832PL-10 (XG628A00) PSRAM 256K | 20. | |
| IC50: | NJM4556 (IG042500) OP AMP. | | |

You should perform the following inspection and adjustment after replacing DM circuit board.

- 1 When the DM circuit board version number is "B":
If the voltage at pin 9 of IC40 is not within $\pm 20\text{mV}$, you must perform the following;
When the voltage at pin 9 of IC40 is higher than $+20\text{mV}$, connect 2.7 Megaohm load across pin 13 and pin 16 of IC40.

When the voltage at pin 9 of IC40 is lower than -20mV , connect 2.7 Megaohm load across pin 1 and pin 13 of IC40.

2 When the DM circuit board version is "C":
Adjust R191 so that the voltage should be $\pm 0V$ at pin 9 of IC40.

