# SERVICE NOTES Issued by RJA

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<b>y</b>	

### **Revice Infomation** July. 14. 2008 Corrected errors in the "10: IN/OUT TEST." (p. 19)



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### **Cautionary Notes**

Before beginning the procedure, please read through this document. The matters described may differ according to the model.

### **Back Up User Data!**

User data may be lost during the course of the procedure. Refer to **Saving and Loading Data**(p. 16) in the Service Notes and save the data. After completing the procedure, restore the backed-up data to the product.

### **Part Replacement**

When replacing components near the power-supply circuit or a heatgenerating circuit (such as a circuit provided with a heat sink or including a cement resistor), carry out the procedure according to the instructions with respect to the part number, direction, and attachment position (mounting so as to leave an air gap between the component and the circuit board, etc.).

### **Parts List**

A component whose part code is \*\*\*\*\*\*\* cannot be supplied as a service part because one of the following reasons applies.

- Because it is supplied as an assembled part (under a different part code).
- Because a number of circuit boards are grouped together and supplied as a single circuit board (under a different part code).
- Because supply is prohibited due to copyright restrictions.
- Because reissuance is restricted.
- Because the part is made to order (at current market price).

## **Circuit Diagram**

In the circuit diagram, "NIU" is an abbreviation for "Not in Use," and "UnPop" is an abbreviation for "Unpopulated." They both mean non-mounted components. The circuit board and circuit board diagram show silk-screened indications, but no components are mounted.

## **Main Specifications**

#### V-8: 8-Channel Video Mixer

#### Video Format

Video	NTSC or PAL (ITU601)
PC-RGB	640x480/120 Hz, 800x600/120 Hz, 832x624/75 Hz,
	$1024x768/80~{\rm Hz}, 1152x864/80~{\rm Hz}, 1152x870/75~{\rm Hz},$
	1280x1024/75 Hz, 1600x1200/60 Hz
	(RGB VH: positive/negative logic)

- \* VESA DMT Version 1.0 Revision 10 conform.
- \* The refresh rate is the maximum value of each resolution.

4:2:2 (Y:B-Y:R-Y), 8 bits, 13.5 MHz

#### Video Sampling Rate

Video

Frame Synchronizer

### 2 systems

#### Input Level and Impedance

Video (composite)		1.0 Vp-p, 75 ohms
S-vio	deo	
•	Luminance signal:	1.0 Vp-p, 75 ohms
•	Chrominance signal:	0.286 mVp-p, 75 ohms (NTSC)/
		0.3 mVp-p, 75 ohms (PAL)
PC-I	RGB	0.7 Vp-p, 75 ohms (H, V: 5 V TTL)

#### Output Level and Impedance

Video (composite)	1.0 Vp-p, 75 ohms
S-video	
<ul> <li>Luminance signal:</li> </ul>	1.0 Vp-p, 75 ohms
Chrominance signal:	0.286 mVp-p, 75 ohms (NTSC)/
	0.3 mVp-p, 75 ohms (PAL)

### Connectors

#### Input

Video (composite): BNC type x 7 jacks (Ch 1-7) S-video: 4-pin mini DIN type x 4 jacks (Ch 5-8) PC-RGB: D-SUB 15pin Shrink Type x 2 jacks (Ch 8: PC1 / PC2)

\* Inputs 5-8; however if S-video is simultaneously input to 5-8, S-video takes priority

#### Output

Video (composite): BNC type x 2 jacks

S-video:

4-pin mini DIN type x 1 jacks Preview Output Video (composite): BNC type x 1 jack (OSD Menu) Monitor Output Video (composite): BNC type x 8 jacks (Ch 1-8)

#### **Remote Control Interfaces**

MIDI IN: 5-pin DIN type x 1 jack MIDI OUT/THRU: 5-pin DIN type x 1 jack

#### Transition effects

Dissolve: Mix, Nam, Fam Hard edge wipe, Soft edge wipe, Key, Slide, Stretch, Wipe: User Transition (more than 200 types)

#### Video effects

Still, Strobe, Afterimage, Feedback, Shake, Negative, Colorize, Findedge, Silhouette, Monocolor, Emboss, Posterize, Colorpass, Luminance key, Chroma key, Flip, Multi, Mirror, Picture-in-picture

### **Power Supply**

DC9V (AC Adaptor: PSB-1U)

#### Current Draw

2A (AC Adaptor: PSB-1U)

#### Dimensions

238 (W) x 315 (D) x 134 (H) mm 9-3/8 (W) x 12-7/16 (D) x 5-5/16 (H) inches

#### Weight

3.2 kg 7 lbs 1 oz

#### Accessories

Ownerís Manual English (#73895934) AC Adaptor (PSB-1U) (#04236101) Power Code for 120 V (#02562456) for 230 V (#01903356) for 240 V A (#03785590) Euro Converter Plug ECP01-5A for 230 V E (#00905234) BNC to RCA video adapter (#03459390) x 4 Mount screw for video fader (#40560534) x 4

#### Options

Crossfader: V-4CF

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

## **Location of Controsls**





## Location of Controls Parts List

No.	Part Code	Parts Name	Description	Q'ty
1	02450201	Y C-KEYTOP	MX4H CLR	2
	01787045	LED (ORANGE)	SLR-325DCT31	8
	02781634	TACT SWITCH	SKRGAED010	8
2	02450190	Ү С-КЕҮТОР	MX1H CLR	1
	01787045	LED (ORANGE)	SLR-325DCT31	1
	02781634	TACT SWITCH	SKRGAED010	1
3	04903634	SLIDE SWITCH SSSU012200		2
4	00785856	LED (RED)	SLR-342VR3F	1
5	05010723	ZH S-KNOB L BLK/LCG		1
	05010745	ESCUTCHEON	ZH S-ESCT LX1H BLK L=30	1
	04903856	SLIDE POT. RS30111A4019		1
6	02450201	Ү С-КЕҮТОР	MX4H CLR	1
	00348490	LED (RED)	SLR-325VCT31	1
	04907256	LED SLR-325YCT31		2
	01787045	LED (ORANGE)	SLR-325DCT31	1
	02781634	TACT SWITCH	SKRGAED010	4
7	04909423	CORD BUSHING EDS-2323U		1
	03565234	J R-KNOB	SF-ELA BLK/SLV	1
8	02784578	Y S-KEYTOP	LD4H LCG	2
	01787045	LED (ORANGE)	SLR-325DCT31	16
	00125590	TACT SWITCH	EVO OJI 050	16
9	03126867	D S-KEYTOP	SX1H-B CLR	2
	00348490	LED (RED)	SLR-325VCT31	2
	02781634	TACT SWITCH	SKRGAED010	2
10	02450201	Y C-KEYTOP	MX4H CLR	2
	04907256	LED SLR-325YCT31		8
	02781634	TACT SWITCH	SKRGAED010	8
11	04906767	Y S-KEYTOP LX1H MCG		2
	00125590	TACT SWITCH	EVQ QJJ 05Q	2
12	05010723	ZH S-KNOB L BLK/LCG	~ ~, ~	2
	05010734	ESCUTCHEON	ZH S-ESCT LX1H BLK L=45	2
	03898578	SLIDE POT. RS4511SA4A02		2
13	02450201	Y C-KEYTOP	MX4H CLR	1
	04907256	LED SLR-325YCT31		3
	00348490	LED (RED)	SLR-325VCT31	1
	02781634	TACT SWITCH	SKRGAED010	3
14	03780389	T-BAR ESCUTCHEON		1
15	*****	T-BAR ASSY	Serial No.: Å`ZW90699	1
	71789367	T-BAR ASSY	Serial No.: ZX00700Å`	1
16	73895656	T-BAR PANEL ASSY		1
17	04903745	DISPLAY COVER		1
	04676401	LED	BA56-11EWA	1
18	02016478	Y S-KEYTOP	LD1H MCG	1
	00348490	LED (RED)	SLR-325VCT31	1
	00125590	TACT SWITCH	EVQ QJJ 05Q	1
19	04909423	CORD BUSHING EDS-2323U		1
	03565234	J R-KNOB	SF-ELA BLK/SLV	1
20	01235378	FOOT		4
21	13429676	MIDI CONNECTOR	YKF51-5048N (TWIN)	1
22	04903401	BOTTOM COVER		1
23	03459023	DIN CONNECTOR	YKF51-5508	5
24	32490595	P S-KEY	MX BLK	1
25	13449720	DC JACK	HEC2305-01-250	1
26	04349201	JACK	YKC31-0193	19
27	73895667	TOP CASE ASSY		1
28	01238856	CONNECTOR	YKF42-8020 (TO PC DISPLAY OUT)	2
29	22365714	CORD HOOK		1

## **Exploded** View









## Important Notes When Replacing the T-Bar

The T-bar Assembly (#71789367) is available as an older type (**1-A** in the figure) and a new type (**1-B**). The older type has a back fitting attached. Similarly, the Shield Cover (#05121512) is also available as an older type (**11-A**) and a new type (**11-B**). The older type has a wider opening.

T-bar Assembly	Shield Cover	Production numbers of products where used
1-A	11-A	Through ZW90699
1-B	11-B	ZX00700 and after

When replacing the older-type T-bar Assembly (1-A) with the new type (1-B), be sure to also replace the older-type Shield Cover (11-A) with the new type (11-B).

That is to say, the new type of T-bar Assembly (**1-B**) must not be used in combination with the older type of Shield Cover (**11-A**). Refer to the following chart for the specific combinations that are acceptable.

T-bar Assembly	Shield Cover	Combination possible
1-A	11-A	Good
1-A	11-B	Good
1-B	11-A	Not good
1-B	11-B	Good

\* Only the new types (1-B and 11-B) are suppled as service parts.

# **Exploded View Parts List**

1-A       ********       T-BAR ASSY       Serial No.: A'ZW90699       1         1-B       71789567       T-BAR ASSY       Serial No.: ZX00700Å'       1         3       73895601       SCAN CNV BOARD ASSY       1         4       73895656       TABR PANEL ASSY       1         5       03565234       J R-KNOB       SF-ELA BLK/SLV       2         6       04903423       BOARD ANGLE       1         7       04909423       CORD BUSHING EDS-2323U       1         10       0389501       COLLAR       2         7       04903412       SUB CHASSIS       1         9       22365714       CORD HOOK       1         11-4       *******       SHIELD COVER       Serial No.: Å'ZW90699       1         11-4       *******       SHIELD COVER       Serial No.: ZX00700Å'       1         12       04903745       DISPLAY COVER       Serial No.: ZX0070Å'       1         13       04903745       DISPLAY COVER       Serial No.: ZX0070Å'       1         14       0570899       T-BAR ESCUTCHEON       1       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16	No.	Part Code	Part Name	Description	Q'ty
1-B71789367T-BAR ASSYSerial No.: ZX00700Å'1373895645SCAN CNV BOARD ASSY1473895656T-BAR PANEL ASSY1503565234J R-KNOBSF-ELA BLK/SLV2604903423BOARD ANGLE2704909423CORD BUSHING EDS-2323U1804903423SUB CHASSIS1922365714CORD BUSHING EDS-2323U1100389501COLLAR211-A*******SHELD COVERSerial No.: Å'ZW90699111-B05121512SHIELD COVERSerial No.: ZX00700Å'1120490341BOTTOM COVER11304903745DISPLAY COVER11403730899T-BAR ESCUTCHEONZH S-ESCT LX1H BLK L=4521605010734ESCUTCHEONZH S-ESCT LX1H BLK L=452170123578FOOT441803126867D S-KEYTOPMX1H CLR11932490595P S-KEYMX BLK1210245010Y C-KEYTOPMX1H CLR2220216478Y S-KEYTOPLD4H LCG42404906767Y S-KEYTOPLD4H LCG42505010723ZH S-KORD ASSY12605014934INSULATINC SHEET12773895589JACKI BOARD ASSY1287389567JACKI BOARD ASSY12973895589JACKI BOARD ASSY1 <td>1-A</td> <td>*****</td> <td>T-BAR ASSY</td> <td>Serial No.: Å`ZW90699</td> <td>1</td>	1-A	*****	T-BAR ASSY	Serial No.: Å`ZW90699	1
2       73895601       SCAN CNV BOARD ASSY       1         3       73895655       MANR BOARD ASSY       1         4       73895656       T-BAR PANEL ASSY       1         5       03565234       J.R.KNOB       SF-ELA BLK/SLV       2         6       04903423       BOARD ANGLE       2       1         7       04909423       CORD BUSHING EDS-2323U       1       1         8       04903412       SUB CHASSIS       1       1         9       23265714       CORD HOOK       1       1         10       03895301       COLLAR       2       1         11-4       *******       SHIELD COVER       Serial No.: Å'ZW90699       1         11-8       05121512       SHIELD COVER       Serial No.: ZX00700Å'       1         12       04903401       BOTTOM COVER       1       1         14       03780389       T-BAR ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05100734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       1         17       01235378       FOOT       4       2         18       03126867       D S-KEYOP       MXH BLK       1 <td< td=""><td>1-B</td><td>71789367</td><td>T-BAR ASSY</td><td>Serial No.: ZX00700Å`</td><td>1</td></td<>	1-B	71789367	T-BAR ASSY	Serial No.: ZX00700Å`	1
3       73895645       MAIN BOARD ASSY       1         4       73895656       T-BAR PANEL ASSY       1         5       0356224       JR-KNOB       SF-ELA BLK/SLV       2         6       04903423       BOARD ANGLE       2         7       04909423       CORD BUSHING EDS-2323U       1         8       04903412       SUB CHASSIS       1         9       22365714       CORD HOOK       1         10       0389501       COLLAR       2         11-A       *******       SHIELD COVER       Serial No.: Å'ZW90699       1         11-B       05121512       SHIELD COVER       Serial No.: ZX00700Å'       1         12       04903745       DISPLAY COVER       1       1         13       04903745       DISPLAY COVER       1       1         14       03780389       T-BAR ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         15       0510745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       0510745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       0123578       FOOT       XIH-B CLR       2         18       03126867       D S-KEYTOP	2	73895601	SCAN CNV BOARD ASSY		1
473895656T-BAR PANEL ASSY1503565234J R-KNOBSF-ELA BLK/SLV2604903423BOARD ANGLE2704909423CORD BUSHING EDS-2323U1804903412SUB CHASSIS1922365714CORD HOOK11003895301COLLAR211-A*******SHIELD COVERSerial No: Å'ZW90699111-B05121512SHIELD COVERSerial No: Å'ZW9069911204903401BOTTOM COVER11304903745DISPLAY COVER11403780389T-BAR ESCUTCHEON11505010734ESCUTCHEONZH S-ESCT LX1H BLK L=4521605010745ESCUTCHEONZH S-ESCT LX1H BLK L=4521803126867D S-KEY MX BLK11200245090Y C-KEYTOPXXIH CLR12102450201Y C-KEYTOPMXH LLR12202016478Y S-KEYTOPMXH CLR22302784578Y S-KEYTOPLDH MCG12404906767Y S-KEYTOPLDH MCG12505010723ZH S-KNOB L BLK/LCG32605014934INSULATING SHEET12873895578JACK3 BOARD ASSY13073895589JACK2 BOARD ASSY13173895512PANEL SHEET ASSY13173895512PANEL SHEET ASSY132	3	73895645	MAIN BOARD ASSY		1
5       03563234       J.K.NOB       SF-ELA BLK/SLV       2         6       04903423       BOARD ANGLE       2         7       04909423       CORD BUSHING EDS-2323U       1         8       04903412       SUB CHASSIS       1         9       22365714       CORD HOOK       1         10       03895301       COLLAR       2         11-A       ********       SHIELD COVER       Serial No.: Å'ZW90699       1         12       04903425       DISPLAY COVER       Serial No.: ZX00700Å'       1         13       04903745       DISPLAY COVER       1       1         14       03780389       T-BAR ESCUTCHEON       1       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010735       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4       1         18       03126867       D S-KEYTOP       MX1H CLR       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       LD4H LCG       2         23       0274878	4	73895656	T-BAR PANEL ASSY		1
6     04903423     BOARD ANGLE     2       7     04909423     CORD BUSHING EDS-2323U     1       8     04903412     SUB CHASSIS     1       9     22365714     CORD HOOK     1       10     03895301     COLLAR     2       11-A     #SHELD COVER     Serial No.: Å'ZW90699     1       11-B     05121512     SHIELD COVER     Serial No.: ZX00700Å'     1       12     04903401     BOTTOM COVER     Serial No.: ZX00700Å'     1       13     04903401     BOTTOM COVER     1     1       14     03780389     T-BAR ESCUTCHEON     1     1       15     05010734     ESCUTCHEON     ZH S-ESCT LX1H BLK L=45     2       16     05010735     FOOT     4     1       17     01235378     FOOT     4     1       18     03126867     D S-KEYTOP     XIH-B CLR     1       20     02450190     Y C-KEYTOP     MXH CLR     1       21     0216478     Y S-KEYTOP     LDH MCG     1       22     0216478     Y S-KEYTOP     LDH MCG     1       23     02784578     Y S-KEYTOP     LDH MCG     2       24     04906767     Y S-KEYTOP     LDH MCG	5	03565234	J R-KNOB	SF-ELA BLK/SLV	2
7       04909412       CORD BUSHING EDS-2323U       1         8       04903412       SUB CHASSIS       1         9       22365714       CORD HOOK       1         10       03895301       COLLAR       2         11-A       *******       SHIELD COVER       Serial No.: Å'ZW90699       1         11-B       05121512       SHIELD COVER       Serial No.: ZX00700Å'       1         12       04903401       BOTTOM COVER       1       1         13       04903745       DISPLAY COVER       1       1         14       03780389       T-BAR ESCUTCHEON       1       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05101745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4       1         18       03126867       D S-KEYTOP       XI H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MXH CLR       2         21       02450190       Y S-KEYTOP       LD4H LCG       4         24       0490	6	04903423	BOARD ANGLE		2
8         04903412         SUB CHASSIS         1           9         22365714         CORD HOOK         1           10         03895301         COLLAR         2           11-A         ********         SHIELD COVER         Serial No.: Å'ZW90699         1           12         04903745         DISPLAY COVER         Serial No.: ZX00700Å'         1           13         04903745         DISPLAY COVER         1         1           14         03780389         T-BAR ESCUTCHEON         1         1           15         05010734         ESCUTCHEON         ZH S-ESCT LX1H BLK L=45         2           16         05010745         ESCUTCHEON         ZH S-ESCT LX1H BLK L=30         1           17         01235378         FOOT         4         1           18         03126867         D S-KEYTOP         SX1H-B CLR         2           20         02450190         Y C-KEYTOP         MXH CLR         1           21         02450201         Y C-KEYTOP         LD4H LCG         4           24         04906767         Y S-KEYTOP         LD4H LCG         3           25         05010723         ZH S-KNOB L BLK/LCG         3         3	7	04909423	CORD BUSHING EDS-2323U		1
9         22365714         CORD HOOK         1           10         03895301         COLLAR         2           11-A         ********         SHIELD COVER         Serial No.: Å'ZW90699         1           11-B         05121512         SHIELD COVER         Serial No.: ZX00700Å'         1           12         04903401         BOTTOM COVER         1         1           13         04903745         DISPLAY COVER         1           14         03780389         T-BAR ESCUTCHEON         1         1           15         05010734         ESCUTCHEON         ZH S-ESCT LX1H BLK L=45         2           16         05010745         ESCUTCHEON         ZH S-ESCT LX1H BLK L=30         1           17         01235378         FOOT         4         1           18         03126867         D S-KEYTOP         XIH-B CLR         2           10         02450101         Y C-KEYTOP         MXH CLR         1           21         02450201         Y C-KEYTOP         LD1H MCG         2           22         02016478         Y S-KEYTOP         LD1H MCG         2           25         05010723         ZH S-KNOB L BLK / LCG         3           26 </td <td>8</td> <td>04903412</td> <td>SUB CHASSIS</td> <td></td> <td>1</td>	8	04903412	SUB CHASSIS		1
10         03895301         COLLAR         2           11-A         ********         SHIELD COVER         Serial No.: Å ZW90699         1           11-B         05121512         SHIELD COVER         Serial No.: ZX00700Å`         1           12         04903401         BOTTOM COVER         1         1           13         04903745         DISPLAY COVER         1         1           14         03780389         T-BAR ESCUTCHEON         1         1           15         05010734         ESCUTCHEON         ZH S-ESCT LX1H BLK L=45         2           16         05010745         ESCUTCHEON         ZH S-ESCT LX1H BLK L=30         1           17         01235378         FOOT         4         1           20         02450190         Y C-KEYTOP         MXIH CLR         2           11         02450201         Y C-KEYTOP         MXH CLR         2           22         02016478         Y S-KEYTOP         LD1H MCG         2           23         02784578         Y S-KEYTOP         LD4H LCG         4           24         04906767         Y S-KEYTOP         LD4H LCG         2           25         05010723         ZH S-KNOB L BLK/LCG <t< td=""><td>9</td><td>22365714</td><td>CORD HOOK</td><td></td><td>1</td></t<>	9	22365714	CORD HOOK		1
11-A       *******       SHIELD COVER       Serial No.: Å'ZW90699       1         11-B       05121512       SHIELD COVER       Serial No.: ZX00700Å'       1         12       04903401       BOTTOM COVER       1         13       04903745       DISPLAY COVER       1         14       03780389       T-BAR ESCUTCHEON       1         15       05010734       ESCUTCHEON       2         16       05010734       ESCUTCHEON       2H S-ESCT LX1H BLK L=45       2         17       01235378       FOOT       4       4         18       03126667       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP       1       1         23       02784578       Y S-KEYTOP       1       1         24       04906767       Y S-KEYTOP       1       1         27       05015456 <td< td=""><td>10</td><td>03895301</td><td>COLLAR</td><td></td><td>2</td></td<>	10	03895301	COLLAR		2
11-B       05121512       SHIELD COVER       Serial No: ZX00700Å`       1         12       04903401       BOTTOM COVER       1         13       04903745       DISPLAY COVER       1         14       03780389       T-BAR ESCUTCHEON       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4         18       03126667       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       2         21       02450201       Y C-KEYTOP       MX1H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       3         24       04906767       Y S-KEYTOP       LD4H LCG       3         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         29	11-A	*****	SHIELD COVER	Serial No.: Å`ZW90699	1
12       04903401       BOTTOM COVER       1         13       04903745       DISPLAY COVER       1         14       03780389       T-BAR ESCUTCHEON       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01233378       FOOT       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       2         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP       LD4H LCG       1         25       05010723       Z H S-KNOB L BLK/LCG       3       2         26       05014934       INSULATING SHEET       1       1         29       73895567       JACK1 BOARD ASSY       1       1         30       73895578 <td>11<b>-</b>B</td> <td>05121512</td> <td>SHIELD COVER</td> <td>Serial No.: ZX00700Å`</td> <td>1</td>	11 <b>-</b> B	05121512	SHIELD COVER	Serial No.: ZX00700Å`	1
13       04903745       DISPLAY COVER       1         14       03780389       T-BAR ESCUTCHEON       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MXHH CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP LX1H MCG       2         24       04906767       Y S-KEYTOP LX1H MCG       2         25       0501723       ZH S-KNOB L BLK/LCG       3         26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895578       JACK3 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1	12	04903401	BOTTOM COVER		1
14       03780389       T-BAR ESCUTCHEON       1         15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MXHH CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         30       73895589       JACK1 BOARD ASSY       1       1	13	04903745	DISPLAY COVER		1
15       05010734       ESCUTCHEON       ZH S-ESCT LX1H BLK L=45       2         16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MXHH CLR       1         21       02450201       Y C-KEYTOP       MXHH CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         30       73895589       JACK1 BOARD ASSY       1       1         31       73895612       PANEL SHEET ASSY       1       4	14	03780389	T-BAR ESCUTCHEON		1
16       05010745       ESCUTCHEON       ZH S-ESCT LX1H BLK L=30       1         17       01235378       FOOT       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         30       73895589       JACK1 BOARD ASSY       1       1         31       73895589       JACK1 BOARD ASSY       1       1         32       c       40011056       SCREW M340       BINDING TAPTITE B ZC	15	05010734	ESCUTCHEON	ZH S-ESCT LX1H BLK L=45	2
17       01235378       FOOT       4         18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       MX4H CLR       2         23       02784578       Y S-KEYTOP       LD1H MCG       1         24       04906767       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895577       JACK3 BOARD ASSY       1       1         30       73895589       JACK1 BOARD ASSY       1       1         31       73895612       PANEL SHEET ASSY       1       1         31       73895612       PANEL SHEET ASSY       1       1         31<	16	05010745	ESCUTCHEON	ZH S-ESCT LX1H BLK L=30	1
18       03126867       D S-KEYTOP       SX1H-B CLR       2         19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP       LD4H LCG       3         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         29       73895589       JACK1 BOARD ASSY       1       1         30       73895612       PANEL SHEET ASSY       1       4         c       40344134       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B	17	01235378	FOOT		4
19       32490595       P S-KEY       MX BLK       1         20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD1H MCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895577       JACK3 BOARD ASSY       1       1         29       73895578       JACK2 BOARD ASSY       1       1         30       73895589       JACK1 BOARD ASSY       1       1         31       73895612       PANEL SHEET ASSY       1       1         32       60560534       SCREW M3X6       FLAT MACHINE SUS       4         4       40560534       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B	18	03126867	D S-KEYTOP	SX1H-B CLR	2
20       02450190       Y C-KEYTOP       MX1H CLR       1         21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       Z H S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         29       73895578       JACK1 BOARD ASSY       1       1         30       73895612       PANEL SHEET ASSY       1       1         4       0560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011090       SCREW 3X8       FLAT TAPTITE B BZC       6         g       4001101       SCREW 3X8	19	32490595	P S-KEY	MX BLK	1
21       02450201       Y C-KEYTOP       MX4H CLR       2         22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2       2         25       05010723       ZH S-KNOB L BLK/LCG       3       3         26       05014934       INSULATING SHEET       1       1         27       05015456       RADIATING SHEET       1       1         28       73895567       JACK3 BOARD ASSY       1       1         29       73895578       JACK1 BOARD ASSY       1       1         30       73895612       PANEL SHEET ASSY       1       1         4       0560534       SCREW M3X6       FLAT MACHINE SUS       4         a       40560534       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011090       SCREW 3X8       BINDING TAPTITE B BZC       6         g       4001101       SCREW 3X8       PAN MACHINE W/SW+PW(S) ZC       20         b       40013056       S	20	02450190	Y C-KEYTOP	MX1H CLR	1
22       02016478       Y S-KEYTOP       LD1H MCG       1         23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2         25       05010723       ZH S-KNOB L BLK/LCG       3         26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         33       40560534       SCREW M3X6       FLAT MACHINE SUS       4         4       40344134       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011090       SCREW 3X8       BINDING TAPTITE B BZC       30         f       4001101       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW 3X8       PAN MACHINE W/SW+SMALL PW BZC       20	21	02450201	Y C-KEYTOP	MX4H CLR	2
23       02784578       Y S-KEYTOP       LD4H LCG       4         24       04906767       Y S-KEYTOP LX1H MCG       2         25       05010723       ZH S-KNOB L BLK/LCG       3         26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         31       73895612       PANEL SHEET ASSY       1         31       73895612       PANEL SHEET ASSY       1         32       400560534       SCREW M3X6       FLAT MACHINE SUS       4         4       40560534       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       4001100       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+SMALL PW BZC       20	22	02016478	Y S-KEYTOP	LD1H MCG	1
24       04906767       Y S-KEYTOP LX1H MCG       2         25       05010723       ZH S-KNOB L BLK/LCG       3         26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895512       PANEL SHEET ASSY       1         31       73895612       PANEL SHEET ASSY       1         32       73895612       PANEL SHEET ASSY       1         31       73895612       PANEL SHEET ASSY       1         32       73895612       PANEL SHEET ASSY       1         33       73895612       PANEL SHEET ASSY       1         34       0560534       SCREW M3X6       FLAT MACHINE SUS       4         40344134       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       4001101       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+SMAUL PW BZC       20         b	23	02784578	Y S-KEYTOP	LD4H LCG	4
25       05010723       ZH S-KNOB L BLK/LCG       3         26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895589       JACK1 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         32       73895612       PANEL SHEET ASSY       1         31       73895612       PANEL SHEET ASSY       1         32       73895612       PANEL SHEET ASSY       4         40344134       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B BZC       6         e       4001100       SCREW 3X8       FLAT TAPTITE B BZC       6         g       4001101       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+SMALL PW BZC       20	24	04906767	Y S-KEYTOP LX1H MCG		2
26       05014934       INSULATING SHEET       1         27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M440X7.9       HEX SOCKET NI       4         c       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X8       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW 3X6       PAN MACHINE W/SW+FW(S) ZC       20         b       40237101       SCREW M3X6       PAN MACHINE W/SW+SMALL PW BZC       20	25	05010723	ZH S-KNOB L BLK/LCG		3
27       05015456       RADIATING SHEET       1         28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M4-40X7.9       HEX SOCKET NI       4         c       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X8       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+FW(S) ZC       20         b       40237101       SCREW M3X8       PAN MACHINE W/SW+SMALL PW BZC       20	26	05014934	INSULATING SHEET		1
28       73895567       JACK3 BOARD ASSY       1         29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M440X7.9       HEX SOCKET NI       4         c       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       BINDING TAPTITE B BZC       30         f       40011156       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+SMALL PW BZC       20         h       40237101       SCREW M3X8       PAN MACHINE W/SW+SMALL PW BZC       20	27	05015456	RADIATING SHEET		1
29       73895578       JACK2 BOARD ASSY       1         30       73895589       JACK1 BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M440X7.9       HEX SOCKET NI       4         c       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       BINDING TAPTITE B BZC       30         f       40011156       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+FW(S) ZC       20         b       40237101       SCREW M3X8       PAN MACHINE W/SW+SMALL PW BZC       2	28	73895567	JACK3 BOARD ASSY		1
30       73895589       JACKI BOARD ASSY       1         31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M440X7.9       HEX SOCKET NI       4         c       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       BINDING TAPTITE B BZC       30         f       40011156       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+FW(S) ZC       20         b       40237101       SCREW M3X8       PAN MACHINE W/SW+SMALL PW BZC       2	29	73895578	JACK2 BOARD ASSY		1
31       73895612       PANEL SHEET ASSY       1         a       40560534       SCREW M3X6       FLAT MACHINE SUS       4         b       40344134       SCREW M3X6       BINDING TAPTITE B ZC       22         d       40011056       SCREW 3X6       BINDING TAPTITE B ZC       22         d       40011090       SCREW 3X6       BINDING TAPTITE B BZC       6         e       40011101       SCREW 3X8       BINDING TAPTITE B BZC       30         f       40011156       SCREW 3X8       FLAT TAPTITE B BZC       6         g       40013056       SCREW M3X6       PAN MACHINE W/SW+FW(S) ZC       20         b       40237101       SCREW M3X8       PAN MACHINE W/SW+SMALL PW BZC       2	30	73895589	JACK1 BOARD ASSY		1
a         40560534         SCREW M3X6         FLAT MACHINE SUS         4           b         40344134         SCREW M4-40X7.9         HEX SOCKET NI         4           c         40011056         SCREW 3X6         BINDING TAPTITE B ZC         22           d         40011090         SCREW 3X6         BINDING TAPTITE B BZC         6           e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+FW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	31	73895612	PANEL SHEET ASSY		1
a         40560534         SCREW M3X6         FLAT MACHINE SUS         4           b         40344134         SCREW M3X6         FLAT MACHINE SUS         4           c         40011056         SCREW M4-40X7.9         HEX SOCKET NI         4           c         40011056         SCREW 3X6         BINDING TAPTITE B ZC         22           d         40011090         SCREW 3X6         BINDING TAPTITE B BZC         6           e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+FW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2					
b         40344134         SCREW M4-40X7.9         HEX SOCKET NI         4           c         40011056         SCREW 3X6         BINDING TAPTITE B ZC         22           d         40011090         SCREW 3X6         BINDING TAPTITE B BZC         6           e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+FW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	а	40560534	SCREW M3X6	FLAT MACHINE SUS	4
c         40011056         SCREW 3X6         BINDING TAPTITE B ZC         22           d         40011090         SCREW 3X6         BINDING TAPTITE B BZC         6           e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+PW(S) ZC         20           h         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	b	40344134	SCREW M4-40X7.9	HEX SOCKET NI	4
d         40011090         SCREW 3X6         BINDING TAPTITE B BZC         6           e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+PW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	с	40011056	SCREW 3X6	BINDING TAPTITE B ZC	22
e         40011101         SCREW 3X8         BINDING TAPTITE B BZC         30           f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+PW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	d	40011090	SCREW 3X6	BINDING TAPTITE B BZC	6
f         40011156         SCREW 3X8         FLAT TAPTITE B BZC         6           g         40013056         SCREW M3X6         PAN MACHINE W/SW+PW(S) ZC         20           b         40237101         SCREW M3X8         PAN MACHINE W/SW+SMALL PW BZC         2	e	40011101	SCREW 3X8	BINDING TAPTITE B BZC	30
g 40013056 SCREW M3X6 PAN MACHINE W/SW+PW(S) ZC 20 h 40237101 SCREW M3X8 PAN MACHINE W/SW+SMALL PW BZC 2	f	40011156	SCREW 3X8	FLAT TAPTITE B BZC	6
h 40237101 SCREW M3X8 PAN MACHINE W/SW4SMALL PW BZC 2	g	40013056	SCREW M3X6	PAN MACHINE W/SW+PW(S) ZC	20
	h	40237101	SCREW M3X8	PAN MACHINE W/SW+SMALL PW BZC	2
i 40458345 SCREW M4X8 PAN MACHINE W/SW+SMALL PW NI 1	i	40458345	SCREW M4X8	PAN MACHINE W/SW+SMALL PW NI	1





# Wiring Parts List

No.	Part Code	Part Name	Connection	Туре	Q'ty
А	05010601	WIRING	WH 6X150-PHR-SAN-S	WIRE	1
В	05010590	WIRING	WH 10X200-PHR-SAN	WIRE	1
С	04120545	WIRING	2X100-P2.5-XHP-SCN	WIRE	1
D	05010578	WIRING	WH 8X90-PHR-SAN-S	WIRE	1
Е	05010612	WIRING	WH 4X150-PHR-SAN-S	WIRE	1
F	05010712	WIRING	WH 8X200-XHP-SCN	WIRE	1
G	05010589	WIRING	WH 6X200-PHR-SAN	WIRE	1
Н	05010690	WIRING	WH 16X80-PHR-SAN-S	WIRE	1
Ι	05010701	WIRING	WH 4X300-PHR-SAN	WIRE	1
J	03125978	WIRING W3		WIRE	1
Κ	05010534	WIRING	FWR-P=1.00-K-16-40	FFC	1
L	04451178	BAN CARD	FWR-P=1.00-K-10-60	FFC	1
Μ	04451178	BAN CARD	FWR-P=1.00-K-10-60	FFC	1
Ν	05010523	WIRING	FWR-P=1.00-K-12-40	FFC	1
0	05010556	WIRING	FWR-P=1.00-K-20-60	FFC	1
Р	05010567	WIRING	FWR-P=1.00-K-26-140	FFC	1

# **Parts List**

SAFETY PRECAUTIONS: The parts marked A have safety-related characteristics. Use only listed parts for replacement.	Due to one or more of the following reasons, parts with parts code ******* cannot be supplied as service parts. • Part supplied only as a component in a complete assembly • Copyright does not permit the part to be supplied • Part is sold commercially	
NOTE: The parts marked # are new. (initi	al parts) The description "Q'TY" means a necessary number of the parts per one product.	

### CASING

	05010734	ESCUTCHEON	ZH S-ESCT LX1H BLK L=45		2
	05010745	ESCUTCHEON	ZH S-ESCT LX1H BLK L=30		1
	04903401	BOTTOM COVER			1
	04903745	DISPLAY COVER			1
	05121512	SHIELD COVER			1
	03780389	T-BAR ESCUTCHEON			1
CHASSIS					
	04903423	BOARD ANGLE			2
	04903445	DC JACK HOLDER			1
	04903412	SUB CHASSIS			1
	04125878	T-BAR ANGLE			1
	04125890	VR HOLDER			1
KNOBAABUT	10N				2
	03126867	D S-KEYTOP	SXIH-B CLK		2
	03565234	J R-KNOB	SF-ELA BLK/SLV		2
	02450201	<u> Y C-КЕУТОР</u>	MX4H CLR		6
	02450190	Y C-KEYTOP	MX1H CLR		1
	32490595	PS-KEY	MX BLK		1
	02784578	Y S-KEYTOP	LD4H LCG		4
	02016478	Y S-KEYTOP	LD1H MCG		1
	04906767	Y S-KEYTOP LX1H MCG			2
	05010723	ZH S-KNOB L BLK/LCG			3
SWITCH					
3001011	02784678	POTARY SMITCH	SPBV181000		1
	12120260	DUCH CWITCH	SILD V 101000		1
	13129309		SF 01N192800		1
	02781634	TACT SWITCH	SKRGAED010		27
	00125590	TACT SWITCH	EVQ QJJ 05Q		19
	04903634	SLIDE SWITCH SSSU012200			2
JACKÅAEXT	TERMINAL				
	03459390	PLUG CONNECTOR	YKV11-0322		4
	03459023	DIN CONNECTOR	YKE51-5508		4
	13429676	MIDI CONNECTOR	YKF51-5048N (TWIN)		1
	13449720	DCIACK	HEC2305-01-250		1
	04349201	IACK	VKC31-0193		19
	01238856	CONNECTOR	VKE42-8020 (TO PC DISPLAY		2
	01250050	convector	OUT)		2
			001)		
DISPLAY UNI	т				
	04676401	LED	BA56-11EWA		1
PWBASSY					
#	73895589	JACKI BOARD ASSY			1
#	73895578	JACK2 BOARD ASSY			1
#	73895567	JACK3 BOARD ASSY			1
#	73895645	MAIN BOARD ASSY			1
#	73895612	PANEL SHEET ASSY			1
#	73895601	SCAN CNV BOARD ASSY			1
#	71789367	T-BAR ASSY			1
#	73895656	T-BAR PANEL ASSY			1
#	73895667	TOP CASE ASSY			1
IC					
	05011089	IC(DRAM)	MSM514265E-6013-R1	IC7 on Main Board	1
	00011007			- cr on man Dourd	1

DIODE				
	00785856	LED (RED)	SLR-342VR3F	1
	00348490	LED (RED)	SLR-325VCT31	5
	01787045	LED (ORANGE)	SLR-325DCT31	26
	04907256	LED SLR-325YCT31		13
DOTENTIONS	TED			
POTENTIOME	02455223	9M/M ROTARY POTENTIOM-	EVIJE2KEK4B14	1
	02100220	ETER		-
	04232023	ROTARY POT. RK09Y11L0002		1
	04903856	SLIDE POT. RS30111A4019		1
	03898578	SLIDE POT. RS4511SA4A02		2
INDUCTORA	04564812	CHOKE COIL	SC-02-20C	1
	12449347	FERRITE-BEAD	EXC ELDR35V	2
WIRINGÅACA	BLE			
	05010601	WIRING	WH 6X150-PHR-SAN-S	1
	05010590	WIRING	WH 10X200-PHR-SAN	1
	05010589	WIRING	WH 6X200-PHR-SAN	1
	05010612	WIRING	WH 4X150-PHR-SAN-S	1
	05010578	WIRING	WH 8X90-PHR-SAN-S	1
	05010712	WIRING	WH 8X200-XHP-SCN	1
	05010701	WIRING	WH 4X300-PHR-SAN	1
	05010690	WIRING	WH 16X80-PHR-SAN-S	1
	05010567	WIRING	FWR-P=1.00-K-26-140	1
	05010556	WIRING	FWR-P=1.00-K-20-60	1
	05010534	WIRING	FWR-P=1.00-K-16-40	1
	05010523	WIRING	FWR-P=1.00-K-12-40	1
	04451178	BAN CARD	FWR-P=1.00-K-10-60	2
	04120545	WIRING	2X100-P2 5-XHP-SCN	-
	03125978	WIRING W3		1
SCREWS				
	40458345	SCREW M4X8	PAN MACHINE W/	1
			SW+SMALL PW NI	
	40237101	SCREW M3X8	PAN MACHINE W/	2
	40010057	CODEMI MONG	SW+SMALL PW BZC	20
	40013056	SCREW M3X6	ZC	20
	40344134	SCREW M4-40X7 9	HEX SOCKET NI	4
	40011154	SCREW WH 40/07/	ELATTADTITE B BZC	т 6
	40560524	SCREW 5X6		0
	400000000	SCREW WISAU	PLAT MACHINE 505	4
	40011278	SCREW 3X8	DINDING TAPTITE P ZC	4
	40011056	SCREW 3X6	BINDING TAPTITE D DZC	22
	40011090	SCREW 3X6	BINDING TAPTITE B BZC	6
	40011101	SCREW 3X8	BINDING TAPTITE B BZC	30
PACKING				
	04903712	ACCESSORY PAD	PACKING PAD	1
	05012989	BOTTOM PAD	PACKING PAD	- 1
	04903690	PACKING PAD F	PACKING PAD	1
	04903701	PACKING PAD R	PACKING PAD	1
	05012990	ТОРРАД	PACKING PAD	1
	05012770	OUTEP PACKING CASE	media	2
	04903689	PACKING CASE		2
	04903089	I ACKING CASE		1
MISCELLANE	ous			
	12199584	GROUNDING TERMINAL	M1698	1
	12169406	LED SPACER	LDS-100Y 10MM	- 1
	03895301	COLLAR		1
	04909423	CORD BUSHING FDS-23231		2
	22365714	CORD HOOK		2 1
	01235378	FOOT		1 Л
	05014934	INSULATING SHEET		1
	05014954	RADIATING SHEET		1
	40122430	NITTO ACETATE TADE #5	BLACK WIOMM 30M 20P	1
	40122012	MILLO ACELATE TAPE #3	DLACK VV TUIVIIVI JUIVI ZUF	1

ACCESSORIESÅiStandardÅj					
	⚠	04236101	AC ADAPTOR WITHOUT AC CORD	PSB-1U(S) UNIVERSAL	1
	⚠	01903334	AC CORD SET PSE	100V 1.0M FOR PSB-1U	1
	$\triangle$	02562456	AC CORD SET	120V 1.0M (NON POLAR)	1
	⚠	01903356	AC CORD SET	230V 1.0M FOR PSB	4
	⚠	03785590	AC CORD SET	SC-078-NA05 240VA	1
	$\triangle$	00905234	EURO CONVERTER PLUG	ECP01-5A	1
#		73895689	OWNER'S MANUAL SET	JAPANESE	1
#		73895934	OWNER'S MANUAL SET	ENGLISH	1
		40232334	WARRANTY CARD	MOCHIKOMI JAPAN ONLY	1
		40560534	SCREW M3X6	FLAT MACHINE SUS	4

- **1.** Using a video cable, connect the **PREVIEW OUT** jack on the V-8 to the video input jack on the television monitor.
- **2.** Hold down the [MENU] and [ENTER] buttons and press the [POWER] switch.
  - \* Continue to hold down the [MENU] and [ENTER] buttons until the Test Mode menu screen appears.

**V-8 Test Mode** appears on the television monitor, and the version number is displayed on the right side of the top line.

## Saving and Loading Data

## Saving Data

You save the setting data stored on the unit to an external MIDI sequencer or computer installed with a MIDI-sequencing program ("MIDI sequencer") by sending the setting data to it as MIDI data (bulk dump).

- \* When you're using an external MIDI sequencer, set the device IDs for the V-8 and the external MIDI sequencer to the same value. To set the device ID for the V-8, go to the **MIDI Setup** menu and make the setting for **Device ID**.
- **1.** Connect the MIDI OUT/THRU connector on the V-8 and the MIDI IN connector on the MIDI sequencer.
- 2. Operate the MIDI sequencer to enable it to receive MIDI data.
- **3.** Press the [MENU] button to display the menu, choose **MIDI Setup**, then press the [ENTER] button.
- **4.** Use [ ▲ ] or [ ▼ ] to choose **MIDI Bulk Dump**, then press the [ENTER] button.
- 5. Start recording on the MIDI sequencer.
- Use [▲] or [▼] to choose Yes, then press the [ENTER] button. The MIDI data is sent from the V-8.
- \* To cancel, either press the [MENU] button, or select **No** and press the [ENTER] button.
- 7. Stop recording on the MIDI sequencer.
- 8. Press the [MENU] button several times to make the menu disappear.

### Loading Data

This imports setting data saved on a MIDI sequencer into the V-8.

- \* When you're using the V-8 with an external MIDI sequencer, check to make sure that the device IDs for both are using the same setting. To set the device ID for the V-8, go to the **MIDI Setup** menu and make the setting for **Device ID**.
- \* Under Utility, set Memory Protect to OFF.
- 1. Connect the **MIDI IN** connector on the V-8 with the MIDI OUT connector on the MIDI sequencer.
- Start playback on the MIDI sequencer. MIDI data is sent from the MIDI sequencer. When the V-8 receives the MIDI data, the settings are overwritten.
- 3. Stop playback on the MIDI sequencer.

# **Performing a Factory Reset**

Hold down the **EFFECTS-A** [1 FEEDBACK] and [4 MULTI] buttons and press the [POWER] switch.

**FAC** appears on the display and a factory reset is executed. When the factory reset finishes, the V-8 starts up.

\* The Test Mode settings 01: Tbar SET(p. 18) and 02: Contrast SET(p. 18) and the color system (NTSC or PAL) are not initialized. For each, the setting in effect before the factory reset is retained.

## How to Initialize

### MEMO

Unlike a factory reset, performing initialization initializes the Test mode **01: Tbar SET**(p. 18) and **02: Contrast SET**(p. 18) settings. Also, the color system is set to **NTSC**.

\* When the circuit board has been replaced, be sure to execute initialization.

To perform initialization, hold down the [1 MIX], [BPM SYNC], and [TRANSFORMER B] buttons and press the [POWER] switch. **Int** appears on the display for several seconds, after which **ntSC** is displayed, and the V-8 starts up.

\* To ensure correct operation of the V-8is video faders, after initialization, execute the Test Mode's **01: Tbar SET**(p. 18) and **02: Contrast SET**(p. 18).

# **Changing the Color System**

At powerup, the V-8ís display shows the color system. When the color system is NTSC, the characters **ntSC** are displayed, scrolling

from right to left. When the color system is PAL, **PAL** is displayed.

After the color system is displayed, the V-8 starts up.

To change the color system, hold down the **PREVIEW OUTPUT SELECT** [1] and [OUTPUT] buttons and press the [POWER] switch.

If the color system before powerup was NTSC,  $\mbox{\bf PAL}$  is displayed, the color system is set to PAL, and the unit starts up.

If the color system before powerup was PAL,  $\mathbf{ntSC}$  is displayed, the color system is set to NTSC, and the unit starts up.

## How to Update the System

The system can be updated by receiving the update data containing the programming (SMF format) as MIDI data.

#### Items Required

- Computer installed with a MIDI sequencer (UpdSMF, etc.)
- USB-MIDI interface (UM-1EX, etc.)
- MIDI cable and USB cable
- Update data (obtained via Service Net)

#### Procedure

- Copy the update data to the computer. 1. The update data is made up of files like the following. V-8\_01.mid, V-8\_02.mid,..., V-8\_16.mid
- The number of files may vary, depending on the version.
- 2. Connect the computer and the V-8 via the USB-MIDI interface.
- 3. Set the [MEMORY] control on the V-8 to 1.
- Hold down the [TRANSFORMER A], [1 MIX], and [TRANSFORMER B] 4. buttons at the same time and press the [POWER] switch. The [ENTER] button flashes and **nld** is displayed.
- 5. Press the [ENTER] button. Ers is displayed, and after a short while, the display changes to ----.
- 6. On the MIDI sequencer, play back the update files in numerical order (V-8\_01.mid, V-8\_02.mid,..., V-8\_16.mid). The display shows 000, and this value is then incremented. Updating the system takes approximately 6 minutes. When the update finishes, **CnP** is displayed.
- 7. Switch off the power to the V-8.
  - When you have updated the system after replacing the circuit board, be sure to execute initialization. Also, execute the Test Mode and make the settings for **01**: Tbar SET(p. 18) and 02: Contrast SET(p. 18). The color system is set to NTSC after initialization. If necessary, change this to PAL.
  - When only a system update has been performed, carry out only a factory reset, without executing initialization.

# **Test Mode**

#### Items Required

- 1 to 7 (for INPUT use; digital video cameras with Video cameras: S-Video output connectors are recommended)
- Computer:
  - Signal generator: 1 (for INPUT use)
  - Television monitor: 1 (for PREVIEW OUT use)

1

- 1 (for OUTPUT and OUTPUT S-VIDEO use; Television monitor: equipped with an S-Video input connector)
- For the foregoing video cameras and television monitors, use devices compatible with the color system to be used for testing (NTSC or PAL).
- S-connector cables: 4 to 5 •
- Video cables: 7 to 9
- D-Sub 15-pin cable: 1 1
- MIDI cable:

### Starting the Test Program

Using a video cable, connect the **PREVIEW OUT** jack on the V-8 to the 1. video input jack on a television monitor. Using a video cable, connect the output jack on a video camera to the INPUT 1 jack on the V-8.

Using a video cable and S-Video cable, connect the OUTPUT jack and OUTPUT S-VIDEO jack on the V-8 to the input jack and S-VIDEO input jack on the television monitor.

- 2. Hold down the [MENU] and [ENTER] buttons and press the [POWER] switch.
  - Continue to hold down the [MENU] and [ENTER] buttons until the Test Mode menu screen appears.

V-8 Test Mode appears on the television monitor, and the version number is displayed on the right side of the top line.

#### Test Items

01: Tbar SET(p. 18) 02: Contrast SET(p. 18) 03: Sw/LED TEST(p. 18) 04: Volume TEST(p. 18) 05: 4M-DRAM TEST(p. 18) 06: 16Kbit-EEPROM(p. 18) 07: SCAN CNV TEST(p. 19) 08: MIDI-In/Out(p. 19) 09: PREVIEW OUT(p. 19) 10: IN/OUT TEST(p. 19) 11: FPGA LOAD(p. 20)

### Selecting and Executing Test Items

While the Test Mode menu screen is displayed, use the [ ▲ ] and [ ▼ ] buttons to select the test item you want, then press the [ENTER] button.

### Quitting a Test Item

At the screen for executing the test item, hold down the [MENU] button and press the [ENTER] button.

### 01: Tbar SET

- Move the video fader toward A, then press the [Transformer A] button. The value of A is set.
  - \* Move the video fader all the way toward **A**.
- Move the video fader toward B, then press the [Transformer B] button. The value of B is set.
  - \* Move the video fader all the way toward **B**.
- Hold down the [MENU] button and press the [ENTER] button.
   Tbar SET OK is displayed, "Tbar SET" ends, and the Test Mode menu screen appears. Move the cursor to the [Contrast SET] item.

### 02: Contrast SET

- From the signal generator, input a raster (all white) still picture to INPUT
   1.
- **2.** Compare the brightness of the A bus (down from the screen center) and the B bus (up from the screen center).
- Use the [▲] and [▼] buttons to select the brighter of the two buses (the A or B screen), then press the [ENTER] button.
- Use the [▲] and [▼] buttons to increase the parameter value. Increasing the value makes the screen darker. Adjust so that the onscreen wipe can no longer be seen.
- Hold down the [MENU] button and press the [ENTER] button.
   Contrast SET OK is displayed. "Contrast SET" ends, and the Test Mode menu screen appears. Move the cursor to the [Sw/Led TEST] item.

### 03: Sw/LED TEST

 Verify that all LEDs light up correctly.
 PREVIEW OUT SELECT 1 through 8/PC, and OUTPUT: Orange MENU:
 Red

MENO.	Reu
[ ▲ ] and [ ▼ ]	Yellow
ENTER:	Orange
BPM:	Red (three 8-segment LEDs)
TAP:	Red
OUTPUT FADE:	Red
INPUT SELECT A 1 through 8:	Orange
EFFECTS A 1 through 4:	Yellow
INPUT SELECT B 1 through 8:	Orange
EFFECTS B 1 through 4:	Yellow
FADE:	Red
1 MIX, 2 WIPE, and 3 EFX:	Yellow
BPM SYNC:	Red

- Press the switches indicated below and verify that the LEDs go dark.
   PREVIEW OUT SELECT 1 through 8/PC, and OUTPUT
   TAP
   INPUT SELECT A 1 through 8
   EFFECTS A 1 through 4
   INPUT SELECT B 1 through 8
  - EFFECTS B 1 through 4 FADE 1 MIX, 2 WIPE, and 3 EFX BPM SYNC

**3.** Press each of the switches indicated below, and verify that the LED goes dark and the corresponding indication on the monitor flashes.

MENU:	MENU
[ 🔺 ]:	UP
[ 🔻 ]:	DOWN
ENTER:	ENTER
TRANSFORMER A:	TRANA
TRANSFORMER B:	TRANB

Operate each of the slider switches indicated below and verify that the corresponding indication on the monitor flashes.
 PC <> PC

WHITE <-> BLACK

- 5. Turn the [MEMORY] control from 1 to 8, then return it to 1. The BPM display (three 8-segment LEDs) goes dark one segment at a time.(The three characters go dark in the same way.) Also, the [OUTPUT FADE] LED goes dark when the control is turned to 8.
- After the BPM display has gone dark completely, verify that the onscreen [00000000] is flashing.
- Hold down the [MENU] button and press the [ENTER] button.
   Sw/Led TEST OK is displayed, "Sw/LED TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [Volume TEST] item.

### 04: Volume TEST

The A/D values for VR1 through VR5 are displayed.

- VR1 through VR5 correspond respectively to the following controls.
  - VR1: OUTPUT FADE
  - VR2: CONTROL B
  - VR3: BPM/CONTROL
  - VR4: CONTROL A VR5: VIDEO FADER
- 1. Operate each control.

The maximum and minimum values of each control are detected correctly, and "\*" is displayed to the left and right of the A/D values.

 Hold down the [MENU] button and press the [ENTER] button.
 Volume TEST OK is displayed, "Volume TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [4M-DRAM TEST] item.

### 05: 4M-DRAM TEST

 At the Test Mode menu screen, select 4M-DRAM TEST, then press the [ENTER] button.

The test is executed the moment the [ENTER] button is pressed. If  ${\sf OK}$  appears, operation is correct.

 Hold down the [MENU] button and press the [ENTER] button.
 4M-DRAM TEST OK is displayed, "4M-DRAM TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [16Kbit-EEPROM] item.

### 06: 16Kbit-EEPROM

1. At the Test Mode menu screen, select **16Kbit-EEPROM**, then press the [ENTER] button.

The test is executed the moment the [ENTER] button is pressed. If **OK** is displayed after a short while, operation is correct.

 Hold down the [MENU] button and press the [ENTER] button.
 16Kbit EEPROM OK is displayed, "16Kbit EEPROM" ends, and the Test Mode menu screen appears. Move the cursor to the [SCAN CNV TEST] item.

### 07: SCAN CNV TEST

 At the Test Mode menu screen, select SCAN CNV TEST, then press the [ENTER] button.
 The test is executed the moment the [ENTER] button is pressed.

If **OK** appears, operation is correct.

 Hold down the [MENU] button and press the [ENTER] button.
 SCAN CNV TEST OK is displayed, "SCAN CNV TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [Midi-In/Out] item.

#### 08: MIDI-In/Out

- 1. Using a MIDI cable, connect the MIDI IN jack and the MIDI OUT/THRU jack.
- At the Test Mode menu screen, select Midi-In/Out, then press the [ENTER] button.

The test is executed the moment the [ENTER] button is pressed. If **OK** appears, operation is correct.

 Hold down the [MENU] button and press the [ENTER] button.
 Midi-In/Out OK is displayed, "MIDI-In/Out TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [PREVIEW OUT] item.

#### **09: PREVIEW OUT**

- **1.** Input a video signal to **INPUT 1**.
- \* Be sure to input a video signal to **INPUT 1**. When nothing is input to **INPUT 1**, the video output from the **PREVIEW OUT** jack is a black screen.
- Verify that INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, INPUT 6, INPUT 7, INPUT 8, and Master are displayed, and that the picture input to INPUT 1 is displayed.
- **3.** Input a video signal to **INPUT 2**.
- **4.** Press [ ▼ ] and select **INPUT 2** or **PREVIEW OUT SELECT 2**.
- **5.** Verify that the picture input to **INPUT 2** is displayed.
- **6.** In the same way, verify that video input to **INPUT 3** through **INPUT 8** is displayed.
- **7.** Press [ ▼ ] and select **Master**.
- 8. Verify that the V-8ís built-in color bar is displayed.
- Hold down the [MENU] button and press the [ENTER] button.
   PREVIEW OUT OK is displayed, "PREVIEW OUT TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [IN-OUT TEST] item.

#### 10: IN/OUT TEST

At the IN-OUT TEST screen, initially, DecA-Inp1 [C] is selected.

- 1. Input video to INPUT 1.
- Verify that the picture that is input is displayed on the television monitor connected to the MONITOR OUT 1 jack.
- **2.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **3.** Connect a television monitor to the other **OUTPUT** jack, and verify in the same way that the picture is displayed.
- **4.** In the same way, connect the television monitor to the **OUTPUT S-VIDEO** jack, switch the television-monitor input to S-Video, and verify that the picture is displayed.
- 5. Press [ ▼ ] and select DecA-Inp2 [C] or INPUT SELECT A2.
- 6. Input video to INPUT 2.
- **6a.** Verify that the picture that is input is displayed on the television monitor connected to the **MONITOR OUT 2** jack.
- **7.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 8. Press [ ▼ ] and select DecA-Inp3 [C] or INPUT SELECT A3.

- **9.** Input video to **INPUT 3**.
- 9a. Verify that the picture that is input is displayed on the television monitor connected to the MONITOR OUT 3 jack.
- **10.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 11. Press [ ▼ ] and select DecA-Inp4 [C] or INPUT SELECT A4.
- 12. Input video to INPUT 4.
- 12a. Verify that the picture that is input is displayed on the television monitor connected to the MONITOR OUT 4 jack.
- **13.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.

Thereafter, for **INPUT 5** through **INPUT 7**, verify picture display at both the **INPUT S-VIDEO** jack and the **INPUT** jack.

- **14.** Press [ ▼ ] and select **DecA-Inp5 [S/C]** or **INPUT SELECT A5**.
- 15. Input video to INPUT S-VIDEO 5.
- **15a.** Verify that the picture that is input is displayed on the television monitor connected to the **MONITOR OUT 5** jack.
- **16.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 17. Disconnect the S-connector cable connected to INPUT S-VIDEO 5.
- 18. Input video to INPUT 5.
- **19.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **20.** Press [ ▼ ] and select **DecA-Inp6** [S/C] or **INPUT SELECT A6**.
- 21. Input video to INPUT S-VIDEO 6.
- **21a.** Verify that the picture that is input is displayed on the television monitor connected to the **MONITOR OUT 6** jack.
- **22.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 23. Disconnect the S-connector cable connected to INPUT S-VIDEO 6.
- 24. Input video to INPUT 6.
- **25.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **26.** Press [ ▼ ] and select **DecA-Inp7** [S/C] or **INPUT SELECT A7**.
- 27. Input video to INPUT S-VIDEO 7.
- **27a.** Verify that the picture that is input is displayed on the television monitor connected to the **MONITOR OUT 7** jack.
- **28.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 29. Disconnect the S-connector cable connected to INPUT S-VIDEO 7.
- **30.** Input video to **INPUT 7**.
- **31.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **32.** Press [ ▼ ] and select DecA-Inp8 [PC1/S] or INPUT SELECT A8.
- 33. Input video to INPUT S-VIDEO 8.
- 33a. Verify that the picture that is input is displayed on the television monitor connected to the MONITOR OUT PC/8 jack.
- **34.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 35. Disconnect the S-connector cable connected to INPUT S-VIDEO 8.
- 36. Input video to PC1.
- **37.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.

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- **38.** Press [ ▼ ] and select **DecB-Inp1 [C]** or **INPUT SELECT B1**.
- **39.** Input video to **INPUT 1**.
- **40.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.

#### **41.** Press [ ▼ ] and select **DecB-Inp2** [**C**] or **INPUT SELECT B2**.

- 42. Input video to INPUT 2.
- **43.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **44.** Press [ ▼ ] and select **DecB-Inp3 [C]** or **INPUT SELECT B3**.
- 45. Input video to INPUT 3.
- **46.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **47.** Press [  $\blacksquare$  ] and select **DecB-Inp4** [C] or **INPUT SELECT B4**.
- 48. Input video to INPUT 4.
- **49.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.

Thereafter, for  $INPUT\ 5$  through  $INPUT\ 7,$  verify picture display at both the  $INPUT\ S-VIDEO$  jack and the INPUT jack.

#### **50.** Press [ ▼ ] and select **DecB-Inp5** [S/C] or **INPUT SELECT B5**.

- 51. Input video to INPUT S-VIDEO 5.
- **52.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 53. Disconnect the S-connector cable connected to INPUT S-VIDEO 5.
- 54. Input video to INPUT 5.
- **55.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **56.** Press [  $\blacksquare$  ] and select **DecB-Inp6 [S/C]** or **INPUT SELECT B6**.
- 57. Input video to INPUT S-VIDEO 6.
- **58.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 59. Disconnect the S-connector cable connected to INPUT S-VIDEO 6.
- 60. Input video to INPUT 6.
- **61.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **62.** Press [ ▼ ] and select **DecB-Inp7** [S/C] or **INPUT SELECT B7**.
- **63.** Input video to **INPUT S-VIDEO 7**.
- **64.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 65. Disconnect the S-connector cable connected to INPUT S-VIDEO.
- 66. Input video to INPUT 7.
- **67.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- **68.** Press [ ▼ ] and select **DecB-Inp8 [PC2/S]** or **INPUT SELECT B8**.
- 69. Input video to INPUT S-VIDEO 8.
- **70.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 71. Disconnect the S-connector cable connected to INPUT S-VIDEO 8.
- 72. Input video to PC2.

- **73.** Verify that the picture that is input is displayed on the television monitor connected to the **OUTPUT** jack.
- 74. Hold down the [MENU] button and press the [ENTER] button.IN-OUT TEST OK is displayed, "IN/OUT TEST" ends, and the Test Mode menu screen appears. Move the cursor to the [FPGA LOAD] item.

#### 11: FPGA LOAD

- 1. At the Test Mode menu screen, select **FPGA LOAD**, then press the [ENTER] button.
  - The test is executed the moment the [ENTER] button is pressed.
  - \* During the test, the picture output from the V-8 is a black screen.

After a short while, the test ends and  $\mathbf{OK}$  is displayed.

 Hold down the [MENU] button and press the [ENTER] button.
 FPGA LOAD OK is displayed, "FPGA LOAD TEST" ends, and the Test Mode menu screen is displayed again.

# Circuit Board (Main Board: 1/2)



## Circuit Board (Main Board: 2/2)



# Circuit Diagram (Main Board: 1/6)







## Circuit Diagram (Main Board: 2/6)



	CN7		
	26FMN-BTK-A		
$ \begin{array}{c}     1 \\     2 \\     3 \\     4 \\     5 \\     6 \\     7 \\     8 \\     9 \\     10 \\     11 \\     12 \\     13 \\     14 \\     15 \\     16 \\     17 \\     18 \\     19 \\     20 \\     21 \\     22 \\     23 \\     24 \\     25 \\     26 \\   \end{array} $	$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\9\\21\\22\\23\\24\\25\\26\end{array}$	D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 A0 A1 A2 A3 A4 A5 A6 A7 A8 A9	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 XWRH 21 ECS0 22 23 24 25 26 77 D	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 <b>CN12</b>	A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21 RD WRL CS_EXT CS_BOOT BT_SEL RESET VCC VCC VCC XWRH ECS0 GND GND	

26FMN-BTK-A

# Circuit Diagram (Main Board: 3/6)





V-8

# Circuit Diagram (Main Board: 4/6)







## Circuit Diagram (Main Board: 5/6)







## Circuit Diagram (Main Board: 6/6)





# Circuit Board (Jack 1, Jack 2, Jack 3 Board: 1/2)





\* The print wiring board of the Jack 3 Board has two kinds of the old **0490356700** and the new **04903567 01**, but the Jack 3 Board Assy (#73895567) on which parts have been mounted has the same circuits both. (As of April 3, 2008)

## Circuit Diagram (Jack 1 Board)





# Circuit Diagram (Jack 2 Board)





## Circuit Diagram (Jack 3 Board: 1/2)





# Circuit Diagram (Jack 3 Board: 2/2)





## Circuit Board (Panel Board: 1/2)



# Circuit Board (Panel Board: 2/2)





## **Circuit Diagram (Panel Board)**



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**V-8** 

## Circuit Board (Scan Cnv Board: 1/2)



L1 SILK L1 RESIST

## Circuit Board (Scan Cnv Board: 2/2)



L4 SILK L4 RESIST

### **Circuit Diagram (Scan Cnv Board)**



