

# SERVICE MANUAL

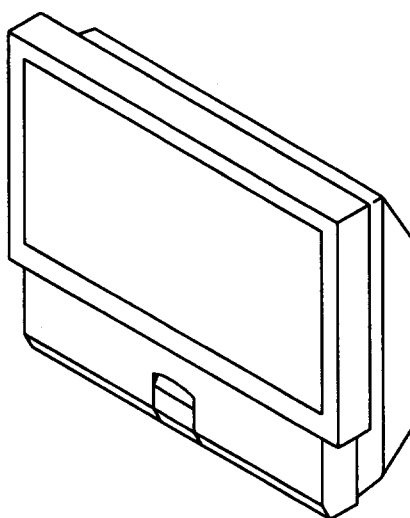
## LE-2 CHASSIS

MODEL	COMMANDER	DEST.
KL-40WA1	RM-862	AEP
KL-40WA1K	RM-862	OIRT
KL-40WA1U	RM-862	UK

MODEL	COMMANDER	DEST.
-------	-----------	-------



RM-862



KL-40WA1/40WA1K/40WA1U



※Please file according to model size... ※

LCD PROJECTION TV  
**SONY®**

## SECTION 4

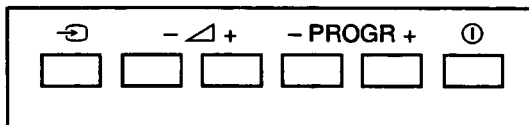
### CIRCUIT ADJUSTMENTS

#### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-862.

##### HOT TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing the PROG + (plus) and PROG - (minus) buttons on the front panel.



2. "TT" will appear on the upper right corner of the screen.
3. Press "MENU" on the commander to get the service menu on screen.

DEVICES	
- IO-Expander	CUT OFF
- Col Dec Main	TDA 9143
- RGB Driver	C-Board
- AI	TDA 9170
- Timing Gen.	CXD 2443
- MID 2	
- MCP	CXA 2101
- Sound	

4. Push the joystick up (green) or down (blue) on the remote commander to select the adjustment item.
5. Press the center button to proceed to the next menu.
6. If the adjustment item is 'Video Proc.', push the down button to move to "Video Proc.".
7. The Menu as indicated in Fig. will appear on the screen.
8. Move the joystick up or down to move to the adjustment item and press the center (OK) button.
9. Change the data in order to comply with each standard.

#### IO-Expander CUT OFF

Item No.	Adjustment Item	Data Amount
1	R Cut off	255
2	G Cut off	255
3	B Cut off	255

#### TDA9143

Item No.	Adjustment Item	Data Amount
1	SOURCE	2
2	Trap bypass	off
3	Comb filter	on
4	Loop closed	on
5	Time const	1
6	Xtal	3
7	Field frq	3
8	Output A	off
9	Output B	off
10	Standard	0
11	Forced RGB	off
12	Enable FS	off
13	Ext. RGB clamp	off
14	Hue	32
15	Line lock HA	on
16	Forced window	off
17	Ext. MACP chroma	off
18	Pal+Helper demod	off
19	Pal+Helper blank	0
20	Lumi to Helper delay	0
21	Blanked sync on Yout	off
22	Baseband delay bypass	off
23	Low power Standby	off
24	Macrovision gating	on
25	Lumi delay control	12

**RGB DRIVER (CXA1853, C BOARD)**

Item No.	Adjustment Item	Data Amount
1	RGB GAIN	128
2	RGB BIAS	128
3	R GAIN	128
4	B GAIN	128
5	R BIAS	128
6	B BIAS	128
7	RGBrGAIN1	255
8	RGBrCTR1	255
9	RrGAIN1	128
10	BrGAIN1	128
11	RrCRT1	128
12	BrCRT1	128
13	RGBrGAIN2	0
14	RGBrCRT2	0
15	RrGAIN2	128
16	BrGAIN2	128
17	RrCRT2	128
18	BrCRT2	128
19	V COM	128
20	BRT	128
21	G1	off

**CXD2443**

Item No.	Adjustment Item	Data Amount
1	H-Pos	127
2	V-Pos	7
3	SH-Pos	4
4	XCLP-Pos	1
5	PCG-Pos	3
6	VWA Up-Pos	0000h
7	VWA Down-Pos	0001h
8	2H Scan	on
9	PAL Line Conv	on
10	Scan Direct H	off
11	Scan Direct V	off
12	SLFR	on
13	HPOL	off
14	VPOL	off
15	SL3B	on
16	SLEG	on
17	SLVWB	on
18	NT-PAL	off
19	XWID	off
20	HD	on
21	SNSL	on

**TDA9170**

Item No.	Adjustment Item	Data Amount
1	Sleep mode	on
2	Amplitude selection	on
3	Window selection	0
4	Black offset enable	on
5	User variable gamma	3
6	Adaptive gamma	32
7	Non-linear ampl.	11
8	Line start	0
9	Line stop	0
10	Field start	0
11	Field stop	0

## MID2 (CXD2072Q)

PAL 50 Hz

SMARTMODE

Item No.	Adjustment Item	Data Amount
1	H Size	180
2	H Pos	49
3	V Size	0
4	V Pos	27
5	HYLA	0
6	HCLA	0
7	VSCA	on
8	VPCA	off
9	HSEL	off
10	MDA	on
11	H Phase	37
12	V Phase	6
13	WONA	off
14	LBOXA	off
15	INSA	0
16	PTA	off
17	OSCA	on
18	WKCA	off
19	IPHA	off
20	IPVA	off
21	OSVA	on
22	WRTA	off
23	PLLA	off
24	DELAYA	4
25	INTLA	0
26	XINTA	off
27	DINPC	off
28	XDIN	off
29	ASPM	5
30	OUTSG	3
31	BTEST	off
32	PLL1	1
33	CRY	1
34	HVSW	2
35	BKGC	0
36	YSDY	1
37	DELAY	3
38	MEM	off
39	YUV	0
40	REF	0
41	ADSW	off
42	RRST	off
43	PLLC	off
44	VGA HS	0
45	HBLK	220
46	VBLK	50

Item No.	Adjustment Item	Data Amount
47	TIMOUT	1
48	XRFLD	off
49	FHSW	on
50	VJITTA	0
51	HSMA	off
52	VSMA	off
53	CLPDA	40
54	CLPPA	on
55	OFFSET	0

## MCP (CXA2101)

Item No.	Adjustment Item	Data Amount
1	ALL BLK	on
2	R OFF	on
3	G OFF	on
4	B OFF	on
5	CBLK OFF	off
6	AKB T	off
7	BLK SW	off
8	DATEST	off
9	INPUT SEL	1
10	MAT OUT	0
11	YCBCR/MAT	off
12	HYSW	on
13	PICTURE	55
14	LIMIT LEVEL	0
15	HUE	32
16	SYSTEM (FIX H	1
17	COLOR	32
18	AGING1	off
19	AGING2	off
20	BRIGHT	32
21	YSMSW	off
22	YM VM	off
23	SHARPNESS	44
24	R DRIVE	32
25	D COL	off
26	G DRIVE	32
27	B DRIVE	32
28	CLP MSK	0
29	R CUTOFF	32
30	ABL MODE	0
31	G CUTOFF	32
32	ABL TH	0
33	B CUTOFF	32
34	SUB BRIGHT	32
35	HSEP SEL	on
36	FIX SYNC	0
37	V TC	2
38	H WIDTH	0
39	HD TC	1
40	HS MASK	1
41	CB OFFSET1	7
42	CR OFFSET1	7
43	CB OFFSET2	7
44	CR OFFSET2	7
45	SUB CON	7
46	SUB COL	7

Item No.	Adjustment Item	Data Amount
47	SUB HUE	7
48	CEC LEV	1
49	R-Y/R	9
50	R-Y/B	15
51	G-Y/R	0
52	G-Y/B	15
53	LRGB2 LEVEL	15
54	GAMMA	15
55	PABL LEVEL	15
56	BLK BOTTOM	0
57	SUB SHP	3
58	SHP FO	0
59	PRE/OVER	2
60	LEC LEV	1
61	VM LEV	0
62	VM DEL	0
63	DC TRAN	1
64	D PIC	2

## SOUND

Menu:

## Service/Sound/MSP 3400/10 ADJUSTMENTS

	Default Value
● SCART Prescale	(1Bh)
○ FM Prescale	(1Bh)
○ NICAM Prescale B/G	(35h)
○ NICAM Prescale L	(3Bh)
○ NICAM Prescale I	(61h)
○ NICAM Prescale D/K	(35h)
○ Volume SCART Ch.	(4Fh)
○ Treble-Offset	(0)
○ Bass-Offset	(+2)
○ Loudness-Offset	(+3)
○ ANA Input 1/2	(0)
○ Beeper	(off)
○ Beeper Volume	(06h)
○ HP PAP Volume-Off	(-1)