7.REPLACEMENT OF MEMORY IC

1. MEMORY IC.

This TV uses memory IC. In the memory IC are memorized data for correctly operating the video and deflection circuits.

When replacing memory IC, be sure to use IC written with the initial value of data.

2. PROCEDURE FOR REPLACING MEMORY IC

(1) Power off

Switch the power off and unplug the power cord from AC outlet.

(2) Replace IC

Be sure to use memory IC written with the initial data values.

(3) Power On

Plug the power cord into the AC outlet and switch the power On.

(4) Check and set SYSTEM default value:

1) Press "QV" key holding about 4 second and then press "MENU1" key on the Remote control unit. Or Press "TEST" key on the Remote control unit for factory used.

2) The "TEST" will be displayed on the screen.

3) Press digital key, (Mkey) and corresponding on-screen display will be appeared.
Some time "PASSWORD" on-screen display will be appeared, you need to input 828.

4) Check the setting value of the SYSTEM default value of Table below. If the value is different, select items by [CH+]/[CH-] keys and set value by [VOL+]/[VOL-] keys.

5) Press "STANDBY" key again and return to the normal screen.

8.SERVICE ADJUSTMENT

B1 POWER SUPPLY

1. **Receive normal colour bar signal.**
2. **Connect DC voltmeter to VD541- and isolated ground.**
3. **Adjust potentiometer in power unit to get the voltage as 110V ±1.0V for 21 inch hereinafter,**

130 ±1.0V for 25 inch upwards.

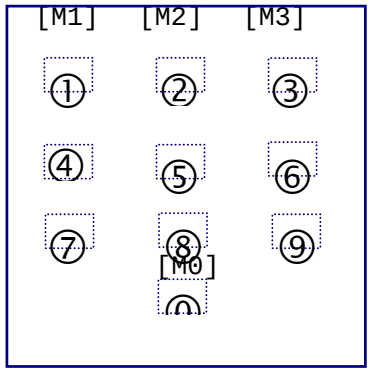
FOCUS ADJUSTMENT

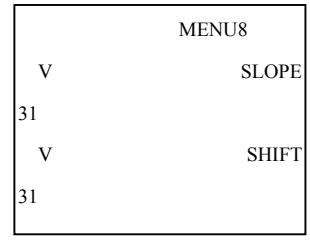
1. **Receive a crosshatch signal.**
2. **While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible.**

BUS CONTROL ADJUSTMENT

To enter BUS control mode, Press "TEST" key on the Remote control unit of factory.
Press "0" to "9" key, (Mkey) and corresponding on-screen display will be appeared.
On TV screen "TEST" will be indicated, this means entered bus control mode.
And press following key, each function will be available.

Remote Hand Unit keys





[M8] menu

MENU0 Geometrical adjustment

Receive PAL standard Complete pattern signal.

Adjustment steps：

a) Adjust V. SLOPE, to the center horizontal line just appeare from half bottom shadow.

b) Adjust V. SIZE, to get 90% of vertical picture contents would be displayed on CRT.

c) Adjust V. SHIFT, the center horizontal line correspond to CRT vertical center.

d) Adjust H.SHIFT, to get the picture horizontal center correspond to CRT horizontal center.

Receive NTSC signal and repeat above [M0] and [M1] adjustment.

[M7] Menu

AGC Adjustment.

Receive 60dBμ(1mV)V_H colour bar pattern signal, adjust AGC value（voltage from high to low）, to noise reduce gradually and just disappeared point.

[M9] Menu

CRTcut off and white balance adjustment.

Receive white signal.

a) CRT cut off adjustment.

1. **Select "SC", then automatically vertical scan will be stopped.**
2. **Adjust SCREEN control on Flyback transformer to get the darkest single horizontal line (red, green, or blue, sometimes shows more yellow, more purple or more white).**

b) White balance adjustment.

1. **Select RD/BD menu.**
2. **Adjust RD/BD to get colour temperature as x=281, y=311**

c) Sub-Brightness adjustment. (Use stair case signal)

1. **Select SB menu.**
2. **Adjust SB to get the darkest step being cutoff.**

ICs Default Settings

1. TDA9381(1.0) EK cord=NTDA9381-----NG

MI	Items	Variable	Preset	MI	Items	Variable	Preset	
M0	AVL	ON/OFF	ON	M4	SUBCON	0~63	63	
	FSL	ON/OFF	ON		SUBCOL	0~63	63	
	FMWS	ON/OFF	OFF		SUBSHP	0~63	63	
	FFI	ON/OFF	OFF		SUBTINT	0~15	15	
	OSO	ON/OFF	ON		YDLY PAL	0~15	12	
	FCO	ON/OFF	OFF		YDLY NTSC	0~15	12	
	WOOFER	ON/OFF	OFF		YDLY SEC	0~15	12	
	DUAL OUT	0~1	0		YDLY AV	0~15	12	
	Volume mode	0~1	1		UOC VOL	ON/OFF	Off	
					CATHODE	0~15	15	
M1	BAND	0~2	2		SC BRI	0~63	10	
	AV CFG*	0~8	3					
	NTSC MX		USA	M5	OSD VPOS	0~63	53	
	VIDEO OUT		CVBS		OSD HPOS	0~59	15	
	PIN5		NTSC		WIDE	0~63	15	
	PRO	0~3	0		ZOOM	0~63	59	
					NENU TITLE	0~6	3	
M2	VISION IF		38.9M		E2PROM ADRESS	0~33		
	DK	ON/OFF	OFF		E2PROM VALUE	0~95		
	BG	ON/OFF	ON		E2PROM WRITE			
	I	ON/OFF	OFF					
	M	ON/OFF	OFF	M8	FREQUENCY		50HZ	60HZ
	SIF PREFER		BG		VSLOPE	0~63	31	31
	AUTO SOUND	ON/OFF	ON		VSHIFT	0~63	31	31
					VAMP	0~63	31	31
M3	START ON	0~2	0		VSCOR	0~63	31	31
	ENGLISH	ON/OFF	ON		HSHIFT	0~63	31	31
	ARABIC	ON/OFF	OFF					
	PERSIAN	ON/OFF	OFF	M9	BT	0~63	48	
	TURKISH	ON/OFF	OFF		CT	0~63	48	
	FRANCE	ON/OFF	OFF		SC		OFF	
	RUSSIA	ON/OFF	OFF		RB	0~63	32	
					GB	0~63	32	
M6	SHIPMODE				RD	0~63	32	
	SEARCH SPEED	0~3	0		GD	0~63	32	
M7	AGC-TOP	0~63	25		BD	0~63	32	
	AGC-SPEED	0~3	2		SB	0~63	40	

2. TDA9361(1.1) EK cord=NTDA9361-----NF

MI	Items	Variable	Preset	MI	Items	Variable	Preset	
M0	AVL	ON/OFF	ON	M4	SUBCON	0~63	63	
	FSL	ON/OFF	ON		SUBCOL	0~63	63	
	FMWS	ON/OFF	OFF		SUBSHP	0~63	63	
	FFI	ON/OFF	OFF		SUBTINT	0~15	15	
	OSO	ON/OFF	ON		YDLY PAL	0~15	12	
	FCO	ON/OFF	OFF		YDLY NTSC	0~15	12	
	WOOFER	ON/OFF	OFF		YDLY SEC	0~15	12	
	DUAL OUT	0~1	0		YDLY AV	0~15	12	
	Volume mode	0~1	1		UOC VOL	ON/OFF	Off	
					CATHODE	0~15	15	
M1	BAND	0~2	2		SC BRI	0~63	10	
	AV CFG*	0~8	9					
	NTSC MX		USA	M6	LOGO	ON/OFF	ON	
	VIDEO OUT		CVBS		LOGO COLUR	0~7	0	
	PIN5		NTSC		LOGO POSITION	0~11	0	
	PRO	0~3	0		LOGO CHAR			
					SHIPMODE			
M2	VISION IF		38.9M		SEARCH SPEED	0~3	0	
	DK	ON/OFF	OFF					
	BG	ON/OFF	ON	M7	AGC-TOP	0~63	25	
	I	ON/OFF	OFF		AGC-SPEED	0~3	2	
	M	ON/OFF	OFF					
	SIF PREFER		BG	M8	FREQUENCY		50HZ	60HZ
	AUTO SOUND	ON/OFF	ON		VSLOPE	0~63	31	31
					VSHIFT	0~63	31	31
M3	START ON	0~2	0		VAMP	0~63	31	31
	ENGLISH	ON/OFF	ON		VSCOR	0~63	31	31
	ARABIC	ON/OFF	OFF		HSHIFT	0~63	31	31
	PERSIAN	ON/OFF	OFF					
	TURKISH	ON/OFF	OFF	M9	BT	0~63	48	
	FRANCE	ON/OFF	OFF		CT	0~63	48	
	RUSSIA	ON/OFF	OFF		SC		OFF	
	Spanish bit	0~1	0		RB	0~63	32	
	TXT DEF	0~3	0		GB	0~63	32	
					RD	0~63	32	
M5	OSD VPOS	0~63	53		GD	0~63	32	
	OSD HPOS	0~59	15		BD	0~63	32	
	WIDE	0~63	15		SB	0~63	40	
	ZOOM	0~63	59					
	NENU TITLE	0~6	3					

3.TDA9384 OR TDA9363 ---2NG UOC

I^2C standard UOC for export bus control adjustment item default setting

MI	Items	Variable	Preset
M0	AVL	ON/OFF	ON
	FSL	ON/OFF	ON
	FMWS	ON/OFF	OFF
	FFI	ON/OFF	OFF
	OSO	ON/OFF	ON
	FCO	ON/OFF	OFF
	WOOFER	ON/OFF	OFF
	DUAL OUT	0~1	1
	VOLPIN	OPEN/DRAIN	OPEN-DRAIN
M1	BAND*	0~2	2
	AV CFG*	0~9	3(9AVMODE) ， 9(SCART MODE)
	NTSC MX		USA
	VIDEO OUT		CVBS
	PIN5*		NTSC
	PRO	0~3	0
	STARTTIME	0～15	10
M2	VISION IF		38.9M
	DK	ON/OFF	ON
	BG	ON/OFF	ON
	I	ON/OFF	OFF
	M	ON/OFF	OFF
	SIF PREFER		DK
	AUTO SOUND	ON/OFF	ON
M3	START ON	0~2	0
	ENGLISH	ON/OFF	ON
	ARABIC	ON/OFF	ON
	PERSIAN	ON/OFF	ON
	TURKISH	ON/OFF	ON
	FRANCE	ON/OFF	ON
	RUSSIA	ON/OFF	ON)
	BULGARIA	ON/OFF	ON
	PORTUGUESE	ON/OFF	ON
MI	Items	Variable	Preset
M4	SUBCON		63

	SUBCOL		63
	SUBSHP		63
	SUBTINT		15
	YDLY PAL		15
	YDLY NTSC		15
	YDLY SEC		15
	YDLY AV		15
	UOC VOL		OFF
	UOCVOL	0~63	50
	TDA9874 GAIN	0~30	15
	CATHODE		4 (14”—21”), 6 (25”), 8 (29”), 10 (34”)
	SC BRI		20
M5	OSD VPOS		53
	OSD HPOS		15
	WIDE		15
	ZOOM		59
	NENU TITLE		3
	E2PROM AORESS		0~33
	E2PROM VALUE		0~95
	E2PROM WRITE		
M6	SHIPMODE		
	Searchspeed		3
M7	AGC-TOP		25(AGC)
	AGCSPEED		1
	SP1		20
	SP25		50
	SP50		75
M8	FREQUENCY		50HZ
	VSLOPE		37
	VSHIFT		32
	VAMP		51
	VSCOR		30
	HSHIFT		36
	RGB HSHIFT	63	8
	RGB HPOS		0
	WIDE		0~63
	HPARA		0~63
	HBOW		0~63
	EWPARA		0~63

	EWUCP		0~63
	EWLCP		0~63
	EWTRAP		0~63
M9	BT		48
	CT		48
	SC		OFF
	RB		32
	GB		32
	RD		32
	BD		32
	SB		40

*2. method of LOGO input:

- when E2PROM ADRESS = 0, to adjust E2PROM VALUE may be changed horizontal position of LOGO.
  It's range is from 10 to 20.
- when E2PROM ADRESS =1, to adjust E2PROM VALUE may be changed vertical position of LOGO.
  It's range is from 1 to 30.
- when E2PROM ADRESS =2, to adjust E2PROM VALUE may be changed color of LOGO.
  It's range is from 0 to 7.

VALUE	0	1	2	3	4	5	6	7
COLOR	RED	BLUE	GREEN	CYAN	ORANGE	PINK	YELLOW	WHITE

- when E2PROM ADRESS =3, to adjust E2PROM VALUE may be changed size of LOGO.
  It's range is from 0 to 3.
- when E2PROM ADRESS =4~33, to adjust E2PROM VALUE may be changed character of LOGO.
  It's range is from 0 to 95.

0	8	16	24	32	40	48	56	64	72	80	88
	(	0	8	@	H	P	X	—	h	p	x
1	9	17	25	33	41	49	57	65	73	81	89
!	)	1	9	A	I	Q	Y	a	i	q	y
2	10	18	26	34	42	50	58	66	74	82	90
”	*	2	:	B	J	R	Z	b	j	r	z
3	11	19	27	35	43	51	59	67	75	83	91
£	+	3	;	C	K	S	←	c	k	s	1/4
4	12	20	28	36	44	52	60	68	76	84	92
$	,	4	<	D	L	T	1/2	d	l	t	| |
5	13	21	29	37	45	53	61	69	77	85	93

%	-	5	=	E	M	U	→	e	m	u	¾
6	14	22	30	38	46	54	62	70	78	86	94
	.	6	>	F	N	V	↑	f	n	v	÷
7	15	23	31	39	47	55	63	71	79	87	95
’	/	7	?	G	O	W	#	g	o	w