

ADJUSTMENT ITEMS (1 OF 8)

DEVICE "DEF"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	HSIZ	H SIZE(EW DC)	00-63	25	38
2	HPOS	H POSITION	00-63	41	30
3	VSIZ	V RAMP SIZE	00-63	25	33
4	VPOS	V POSITION(RAMP DC)not useful	00-63	34	28
5	VLIN	V LINEARITY	00-63	36	44
6	SCOR	S CORRECTION	00-63	39	40
7	VBOW	BOW	00-63	36	31
8	VANG	ANGLE	00-63	35	33
9	TRAP	EW TRAPESIUM	00-63	29	32
10	PAMP	EW PIN	00-63	39	41
11	UPIN	UPPER PIN	00-63	28	29
12	LPIN	LOWER PIN	00-63	29	29
13	TROT	TROT	00-255	128	128
14	HBLK	H BLK mode select	00-01	0	0
15	LBLK	HBLK front timing	00-63	11	11
16	RBLK	HBLK rear timing	00-15	35	34
17	VBLK	V BLK width	00-03	0	0
18	HMSK	TOP VEND(when MACROVISION)prevent OFF	00-01	0	0
19	HDW	H PULSE WIDTH(25u/19u)	00-01	1	1
20	AFC	AFC GAIN	00-01	0	0
21	AFC1	AFC1 TIME CONSTANT	00-07	3	3
22	AFCW	AFC1 PULL IN WIDE	00-01	1	1
23	CDMD	V DET WINDOW SW TIMING	00-03	1	1
24	HSS	SYNC SLICE LEVEL(H sepa)	00-03	0	0
25	VSS	SYNC SLICE LEVEL(V sepa)	00-03	3	3
26	SLDN	Auto Slice level DOWN	00-03	0	0
27	SLUP	Auto Slicelevel UP	00-01	0	0
28	JPSW	Jump SW	00-01	0	0
29	HOSC	H VCO fo ADJUST	00-255	5	5
30	EHT	EHT	00-15	6	6
31	EHTG	EHT MODE	00-01	0	0

DEVICE "16:9"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	PAMP	EW PIN	00-63	59	59
2	UPIN	UPPER PIN	00-63	15	15
3	LPIN	LOWER PIN	00-63	21	21
4	ACLV	ACL VTH	00-03	0	0
5	ABLV	ABL VTH	63-00	58	58

DEVICE "VP1"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	RDRV	R DRIVE	00-127	55	75
2	GDRV	G DRIVE when Color Temp. is "Cool" and "Neutral"	00-127	38	65
3	BDRV	B DRIVE when Color Temp. is "Cool" and "Neutral"	00-127	47	63
4	RCUT		00-1023	130	130
5	GCUT		00-1023	90	90
6	BCUT		00-1023	72	72
7	SCON	CONTRAST LEVEL	00-127	20	20
8	SHUE	TINT	00-127	8	8
9	SCOL	COLOR LEVEL	00-127	17	17
10	SBRT	BRIGHT	00-255	40	40
11	RON	R OUTPUT MUTE	00-01	1	1
12	GON	G OUTPUT MUTE	00-01	1	1
13	BON	B OUTPUT MUTE	00-01	1	1
14	BLLV	BLUE STRETCH(00:no <-> 11:deep)	00-03	1	1
15	MTRX	MATRIX RATIO SELECT	00-03	2	2
16	AXIS	R-Y PHASE OFFSET	00-63	48	48
17	SSHO	SHARPNESS GAIN(OVER)	00-63	17	17
18	SSHP	SHARPNESS GAIN(PRE)	00-63	26	26
19	SHPF	SHRPNES fo(00:2 CLK <-> 11:5 CLK)	00-03	1	1

ADJUSTMENT ITEMS (2 OF 8)

DEVICE "VP1"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
20	SHCL	SHARPNESS CPRING LEVEL	00-15	0	0
21	SHMX	SHARPNESS LIMITER LEVEL	00-15	15	15
22	ACLV	ACL VTH	00-03	0	0
23	ABLV	ABL VTH	00-63	0	0
24	AKBD	AKB Self Diagnostic Counter(@1sec)	00-07	0	0
25	AKBS	AKB H/W S/W Switch	00-02	1	1
26	REFP	AKB REFPLS timing	00-01	1	1
27	YNRC	YNR LIMITER LEVEL	00-15	15	15
28	BKON	BLACK STRETCH ON	00-01	1	1
29	BKTH	BLACK STRETCH DETECTOR TRESH LEVEL	00-255	22	22
30	BKAR	BLACK STRETCH DETECTOR TRESH AREA	00-03	1	1
31	BKSP	BLACK STRETCH START POINT	00-03	3	3

DEVICE "VP2"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VMLO	VM LEVEL at "Low" Setting	00-15	10	10
2	VMHI	VM LEVEL at "High" Setting	00-15	15	15
3	VMDL	VM DELAY	00-15	6	6
4	VMPL	VM PORALITY	00-01	0	0
5	VMWD	VM WIDTH	00-03	0	0
6	VMCL	VM CORING LEVEL	00-15	0	0
7	VMMX	VM LIMITER LEVEL	00-15	15	15
8	CKLV	COLOR KILLER VTH	00-127	1/YUV:0	1/YUV:0
9	CKON	FORCE KILLER	00-01	0	0
10	ALFA	ADAPTIVE DET SENSITIVITY	00-03	2	2
11	YCMD	YC SEPA FORCE SELECT(00:ADAPTIVE 01:H 10:V 11:HV)	00-03	0	0
12	VACL	V APERTURE CORING LEVEL	00-15	0	0
13	VAGA	V APERTURE GAIN LEVEL	00-15	Soft Cont'l	Soft Cont'l
14	VAMX	V APERTURE LIMITER LEVEL	00-15	3	3
15	GAMM	GANMA(00:no <-->11:deep)	00-03	Soft Cont'l	Soft Cont'l
16	YDLY	Y DELAY TIME	00-03	3/YUV:3	3/YUV:3
17	CDLY	C DELAY	00-03	2/YUV:2	2/YUV:2
18	YOFF	Y OUTPUT MUTE	00-01	0	0
19	CBPF	C BPF fo HI	00-01	0/YUV:0	0/YUV:0
20	CLIM	C OUTPUT LIMITER	00-15	15	15
21	YFSL	Y BAND WIDTH	00-03	0	0
22	CFSL	C BAND WIDTH	00-03	0	0
23	BGPP	BGP(for C DECODER)TIMING	00-31	8	8
24	NRCH	NOISE DET TIME CONSTANT	00-03	0	0
25	NRCL	NOISE DET TIME CONSTANT	00-255	8	8
26	NRVL	NOISE DET VTH	00-255	16	16
27	NRVH	NOISE DET VTH	00-255	0	0
28	GDOF	G DRIVE	00-31	18	18
29	BDOF	B DRIVE	00-31	31	31
30	GCOF	G CUTOFF	00-31	02	02
31	BCOF	B CUTOFF	00-31	00	00
32	DCTV	DCTTRANSFER VTH	00-127	5	5
33	DCTG	DCTTRANSFER GAIN	00-31	Soft Cont'l	Soft Cont'l

ADJUSTMENT ITEMS (3 OF 8)

DEVICE "VIVID"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VPIC	Picture(VIVID)	00-63	63	63
2	VBRI	Brightness(VIVID)	00-63	31	31
3	VCOL	Color(VIVID)	00-63	31	31
4	VHUE	Hue(VIVID)	00-63	31	31
5	VSHA	Sharpness(VIVID)	00-63	31	31
6	VVM	VM(VIVID)	00-02	2	2
7	VTRI	Color Temp(VIVID)	00-02	0	0
8	VAPA	Aperture G(VIVID)	00-15	7	7
9	VGMA	Gamma(VIVID)	00-03	3	3
10	DCTG	DCT LV(VIVID)	00-03	16	16

DEVICE "STD"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VPIC	Picture(STANDARD)	00-63	50/FEFS:63	50/FEFS:63
2	VBRI	Brightness(STANDARD)	00-63	37/FEFS:31	37/FEFS:31
3	VCOL	Color(STANDARD)	00-63	28/FEFS:31	28/FEFS:31
4	VHUE	Hue(STANDARD)	00-63	31/FEFS:31	31/FEFS:31
5	VSHA	Sharpness(STANDARD)	00-63	31/FEFS:31	31/FEFS:31
6	VVM	VM(STANDARD)	00-02	1/FEFS:2	1/FEFS:2
7	VTRI	Color Temp(STANDARD)	00-02	1/FEFS:0	1/FEFS:0
8	VAPA	Aperture G(STANDARD)	00-15	7/FEFS:7	7/FEFS:7
9	VGMA	Gamma(STANDARD)	00-03	3/FEFS:3	3/FEFS:3
10	DCTG	DCT LV(STANDARD)	00-03	16/FEFS:16	16/FEFS:16

DEVICE "MOVIE"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VPIC	Picture(MOVIE)	00-63	31	31
2	VBRI	Brightness(MOVIE)	00-63	54	54
3	VCOL	Color(MOVIE)	00-63	25	25
4	VHUE	Hue(MOVIE)	00-63	31	31
5	VSHA	Sharpness(MOVIE)	00-63	31	31
6	VVM	VM(MOVIE)	00-02	0	0
7	VTRI	Color Temp(MOVIE)	00-02	2	2
8	VAPA	Aperture G(MOVIE)	00-15	7	7
9	VGMA	Gamma(MOVIE)	00-03	3	3
10	DCTG	DCT LV(MOVIE)	00-03	16	16

DEVICE "SPORTS"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VPIC	Picture(SPORTS)	00-63	63	63
2	VBRI	Brightness(SPORTS)	00-63	31	31
3	VCOL	Color(SPORTS)	00-63	34	34
4	VHUE	Hue(SPORTS)	00-63	31	31
5	VSHA	Sharpness(SPORTS)	00-63	31	31
6	VVM	VM(SPORTS)	00-02	2	2
7	VTRI	Color Temp(SPORTS)	00-02	0	0
8	VAPA	Aperture G(SPORTS)	00-15	7	7
9	VGMA	Gamma(SPORTS)	00-03	3	3
10	DCTG	DCT LV(SPORTS)	00-03	16	16

ADJUSTMENT ITEMS (4 OF 8)

DEVICE "Y"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	COFI	0:4 Linedelaies 1:2 Linedelaies	00-01	0	0
2	YNRS	YNR ON	00-01	0	0
3	YTHR	Y SIGNAL GENERATE from 2DYCS	00-01	0	0
4	Y2D	Y SIGNAL GENERATE from 2DYCS	00-01	0	0
5	2DFX	C SIGNAL GENELATE from H/V BPF only	00-01	1	1
6	CLPS	Y CLAMP TIME CONSTANT	00-01	1	1
7	VLPF	Y_LPF(ANALOG) fo Ajust	00-03	3	3
8	CLPF	C_LPF(ANALOG) fo Ajust	00-03	3	3
9	BKHS	BLACK STRETCH HYSTERISYS	00-31	1	1
10	BPFB	YCS HBPF SELECT(BACK)	00-03	1	1
11	BPFF	YCS HBPF SELECT(FRONT)	00-01	1	1

DEVICE "C"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	FORG	CHROMA DECODER PHASE SELECT	00-03	0	0
2	FSEL	CHROMA DECODER CLK SELECT	00-01	0/YUV:0	0/YUV:0
3	ACTL	ANALOG ACC AMP MAX GAIN	00-03	3	3
4	A1FL	ANALOG ACC hysteresis	00-255	34	34
5	A1FH		00-01	0	0
6	A1ON	ANALOG ACC AMP ON LEVEL	00-127	12	12
7	MV	MACROVISION(BURST) DET TRESH	00-15	0	0
8	MV1S	MACROVISION(BURST) DET ON	00-01	1	1
9	MV2S	MACROVISION(BURST) DET POSITION	00-01	1	1
10	ACCS	ACC ON/OFF	00-01	0/YUV:1	0/YUV:1
11	KILS	KILLER DET SELECT	00-01	0/YUV:1	0/YUV:1
12	AASL	C DECODER TIME CONSTANT(32,16,8,1H)	00-03	3	3
13	BASL	ACC TIME CONSTANT	00-03	0	0
14	ATIM	ANALOG ACC HISTERISYS SELECT	00-03	0	0
15	VMSK	ACC V BLK OFF WIDTH	00-07	0	0
16	A3ON	ACC MAX GAIN	00-01	0	0
17	INTE	C DECODER INTRGRATOR ENABLE	00-01	0	0
18	SIN	C DECODER PHASE V ENABLE	00-01	0	0
19	CKVT	PLL STOP BURST LEVEL	00-03	1	1
20	XFFR	VCXO FORCE FREERUN	00-01	0/YUV:1	0/YUV:1
21	ACCV	C DECODER PHASE V ENABLE	00-01	1	1
22	BWSL	KILLER DET SELECT	00-01	1/YUV:1	1/YUV:1
23	BWDT	PLL KILLER VTH	00-03	0/YUV:3	0/YUV:3
24	A23E	AMP2,3 ON/OFF ENABLE(0 FIX)	00-01	1	1
25	A2ON	ABL VTH	00-127	12	12
26	A3ON	ACL VTH	00-127	12	12
27	A2FL	AMP2 OFF LEVEL lower	00-255	34	34
28	A2FH	AMP2 OFF LEVEL upper	00-01	0	0
29	A3FL	AMP3 OFF LEVEL lower	00-255	34	34
30	A3FH	AMP3 OFF LEVEL upper	00-01	0	0
31	AXTH	AXS HYS	00-63	30	30
32	ACTH	ROM HYS	00-63	10	10
33	AVAV	AVE SEL AV	00-03	3	3
34	B2TH	B2COMP	00-127	0	0

ADJUSTMENT ITEMS (5 OF 8)

DEVICE "RGB"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	AMUT	RGB POWER ON MUTE	00-01	0	0
2	PMUT	RGB MUTE(EXCEPT OSD)	00-01	1	1
3	VBLK		00-01	0	0
4	CORL	R CUTOFF lower	00-255	200	200
5	CORH	R CUTOFF upper	00-01	0	0
6	COGL	G CUTOFF lower when Color Temp. is "Cool" and "Neutral"	00-255	200	200
7	COGH	G CUTOFF upper when Color Temp. is "Cool" and "Neutral"	00-01	0	0
8	COBL	B CUTOFF lower when Color Temp. is "Cool" and "Neutral"	00-255	200	200
9	COBH	B CUTOFF upper when Color Temp. is "Cool" and "Neutral"	00-01	0	0
10	ABLS	ABL SELECT (ON:00, OFF:01)	00-01	0	0
11	ACLS	ACL ON (ON:00, OFF:01)	00-01	1	1
12	ALSP	ACL SPEED	00-03	1	1
13	ALRS	ACL RECOVER SPEED	00-15	2	2
14	ALAS	ACL ATTACK SPEED	00-15	9	9
15	ABLG	ABL GAIN	00-15	15	6
16	ALS2	ACL ATTACK SPEED(2)	00-03	2	2
17	AKBS	AKB MODE	00-01	1	1
18	AKBP	AKB PULSE HEIGHT	00-63	55	55
19	OSDL	OSD LIMMIT SELECT	00-01	0	0
20	MPXS	UV MULTIPLEX ON	00-01	0/YUV:0	0/YUV:0
21	CXUV	YC/YUV SELECT	00-01	0/YUV:1	0/YUV:1
22	UVIN	U/V INVERT	00-01	0/YUV:0	0/YUV:0
23	UVOS	UV OFFSET CANCELER ON	00-01	0/YUV:0	0/YUV:0
24	ACL	SOFT ACL CONTROLE	00-63	63	63
25	HBLS	H BLK OFF	00-01	0	0
26	VENS	V-latch OFF	00-01	0	0
27	UOFS	U IN OFFSET	00-15	4	4
28	VOFS	V IN OFFSET	00-15	9	9
29	AABL	ANALOG ABL THRESHOLD LEVEL CONTROL	00-15	0	0
30	AABG	ANALOG ABL GAIN CONTROL	00-01	0	0
31	AALG	ANALOG ACL GAIN CONTROL	00-01	0	0
32	AABS	ANALOG ABL ON/OFF CONTROL (ON:01, OFF:00)	00-01	0	0
33	AALS	ANALOG ACL ON/OFF CONTROL (ON:01, OFF:00)	00-01	1	1

ADJUSTMENT ITEMS (6 OF 8)

DEVICE "DEFD"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	VSTP	V OUTPUT STOP	00-01	0	0
2	HFFR	AFC1 FORCE FREERUN	00-01	0	0
3	HFUP	H FREERUN FREQUENCY UP(700Hz)	00-01	0	0
4	VPHA	V PHASE(V POSITION ADJUST)	00-15	0	0
5	JSWW	Jump Pulse Width	00-01	0	0
6	EWG	EWV AD OUTPUT LEVEL(6db)	00-01	0	0
7	EWCL	EW/VRAMP DA CLOCK SELECT	00-03	2/YUV:2	2/YUV:2
8	EWDI	EW/VRAMP DA DITHER	00-01	0	0
9	XF0A	VCXO FREERUN ADJUST	00-15	0	0
10	BGST	BGP(for PLL) TIMING	00-63	17	17
11	SKWI	Skew correcter refernce phase	00-01	0/YUV:0	0/YUV:0
12	XPHA	VCXO PHASE ADJUST	00-15	10	10
13	SKEW	Skew correcterphase controle	00-07	0/YUV:3	0/YUV:3
14	HRMP	AFC2 TIME CONSTANT	00-03	0	0
15	RPLU	REF PLL TIME CONSTANT	00-07	3	3
16	RPLB	REF PLL TIME CONSTANT	00-01	1	1
17	XF0B	VCXO Fo ADJUST	00-03	0	0
18	RPLS	REF VCO FB LOOP SELECT	00-01	0	0
19	SSM	SyncSepaMasking CONTROL	00-01	0	0
20	VSAG	V-SAG prevent ON	00-01	0	0
21	AFC2	AFC2 GAIN CONTROL	00-03	0	0
22	VRFL	V RAMP FILTER SWITCHING OFF	00-01	0	0
23	SSLP	LPF pre SYNC SEPA ON/OFF	00-01	0	0
24	IMTS	I.M. TEST	00-01	0	0
25	XPLU	ACP TIME CONSTANT	00-01	1	1
26	8FSC	8fscCLK Skew OFF	00-01	1/YUV:1	1/YUV:1
27	4FS2	4fscCLK Skew OFF	00-01	1/YUV:1	1/YUV:1
28	EWVR	DSDAC V RESET Enable	00-01	0	0
29	VLOF	IIC V Latch OFF(for TEST)	00-01	0	0
30	1WIN	FORCE 1Window	00-01	1	1
31	BGPC	ANGLE Return current up	00-01	0	0
32	MHDL	ANGLE Return current up timing	00-01	1	1
33	BFRE	force V FREERUN	00-01	0	0
34	ANGG	ANGLE Retun current up	00-01	1	1
35	ANGT	ANGLE Retun current up timing	00-01	0	0
36	DOSD	Digital OSD ON	00-01	0	0
37	ANGS	AFC2 ANGLE/BOW INHIBIT	00-01	0	0
38	HRPP	FRAMP RRAMP H OUT CONTROL RANGE	00-15	8	8
39	VF50	FORCE V FREERUN 50Hz	00-01	0	0
40	CLKS	TBC clock system select	00-03	0	0
41	VBHK	V BLK HALF KILL	00-01	0	0
42	DSYC	CVBS INPUT CONTROL	00-01	0	0
43	VPW	V Pulse Wide	00-01	1	1
44	QSW	MODULATOR FEEDBACK GAIN CONTROL	00-01	0	0
45	ADTY	CLOCK DUTY CONTROL at IIC QSWITCH=ON	00-01	0	0
46	DTH	DITHER THRESHOLD LEVEL CONTROL at IIC AUTOD=ON	00-03	1	1
47	HBSW	HBLK REFERENCE AFC1/AFC2	00-01	0	0
48	DSCS	•DAC CLOCK ON/OFF CONTROL	00-01	0	0

ADJUSTMENT ITEMS (7 OF 8)

DEVICE "OTHER"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	PCLP	SYNC TIP/PEDESTAL CLAMP SELECT	00-01	0	0
2	VRT	ADC REFERENCE (00:1.15Vpp 01:1.25Vpp 10:1.35Vpp 11:1.45Vpp)	00-03	1/YUV:1	1/YUV:1
3	AM	INTERIGENT MONITOR OUTPUT SELECT(analog)	00-15	0	0
4	DME	INTERIGENT MONITOR OUTPUT SELECT(degital)	00-01	0	0
5	DM	INTERIGENT MONITOR OUTPUT SELECT(degital)	00-31	0	0
6	14HI	4fsc(Skew)CLK POLARITY	00-01	0	0
7	14HD	4fscCLK(Skew)CLK DELAY ADJUST	00-03	1	1
8	28I	8fscCLK POLARITY	00-01	1	1
9	28D	8fscCLK DELAY ADJUST	00-03	1	1
10	ADCD	ADC CLK DELAY ADJUST	00-03	1/YUV:0	1/YVV:2
11	CLKS	AD/LOGIC CLK SWAP	00-01	0/YUV:0	0/YUV:0
12	HDSL	HD OUT(for MCU)SELECT	00-01	1	1
13	CPSL	PLL CP LATCH ON	00-01	0	0
14	CPCL	PLL CP LATCH CLOCK	00-01	0	0
15	CPCP	PLL CP LATCH POLARTY	00-01	0	0
16	DUMY	DUMMY	00-0F	1	1

DEVICE "OSD"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	HT	HALF TONE LEVEL	00-03	0	0
2	OSLR	R OSD LEVEL	00-63	27	27
3	OSLG	G OSD LEVEL	00-63	27	27
4	OSDC		00-03	0	0
5	OSDB	B OSD LEVEL	00-63	27	27

DEVICE "S/W ADKB"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	SRIL	S/W AKB RED OUTPUT Lower	00-255	Soft Cont'l	Soft Cont'l
2	SRIH	S/W AKB RED OUTPUT Upper	00-01	Soft Cont'l	Soft Cont'l
3	SGIL	S/W AKB GREEN OUTPUT Lower	00-255	Soft Cont'l	Soft Cont'l
4	SGIH	S/W AKB GREEN OUTPUT Upper	00-01	Soft Cont'l	Soft Cont'l
5	SBIL	S/W AKB BLUE OUTPUT Lower	00-255	Soft Cont'l	Soft Cont'l
6	SBIH	S/W AKB BLUE OUTPUT Upper	00-01	Soft Cont'l	Soft Cont'l
7	SLM1	S/W AKB LIMIT DATA 1	00-255	4	4
8	SLM2	S/W AKB LIMIT DATA 2	00-255	29	29
9	SLM3	S/W AKB LIMIT DATA 3	00-255	130	130
10	SAD1	S/W AKB ADD DATA 1	00-255	1	1
11	SAD2	S/W AKB ADD DATA 2	00-255	1	1
12	SBIT	S/W AKB BIT SHIFT DATA	00-05	0	0
13	SNOP	S/W AKB POWER ON NOP TIMER COUNTER DATA	00-FF	1	1
14	SERL	S/W AKB BIT ERROR JUDGE LEVEL	01-80	124	124
15	SPWC	S/W AKB ERROR JUDGE COUNTER DATA	01-FF	2	2
16	SLMC	S/W AKB LIM2/LIM3 JUDGE COUNTER DATA	01-FF	10	10
17	SPWL	S/W AKB POWER ON MUTE OFF JUDGE LEVEL	01-80	30	30
18	SPMT	S/W AKB POWER ON MUTE EXIT TIMER DATA(@100ms)	00-FF	120	120
19	SEEP	S/W AKB INITIAL DATA EEPROM WRITE TIMER(@1sec)	00-FF	20	20

ADJUSTMENT ITEMS (8 OF 8)

DEVICE "AUDIO PROCESSOR"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	SBAL	Sub Balance	00-07	4	4
2	SBAS	Sub Bass	00-07	0	0
3	STRE	Sub Treble	00-07	0	0
4	SRL	Surround Level	00-01	0	0
5	BBOL	Surround Off-BBE Low	00-15	0	4
6	BBOH	Surround Off-BBE High	00-15	3	5
7	BBSL	Simulate BBE Low	00-15	0	0
8	BBSH	Simulate BBE High	00-15	0	0
9	BBGL	WOW Game BBE Low	00-15	7	8
10	BBGH	WOW Game BBE High	00-15	3	3
11	BBTL	SRS BBE Low	00-15	0	0
12	BBTH	SRS BBE High	00-15	2	2
13	VFIX	Audio output fix data	00-255	240	240
14	AGCL	AGC level	00-03	2	2

DEVICE "MICROPROCESSOR"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
1	DISP	OSD horizontal offset	00-127	53	53
2	CCHP	Closed Caption Horizontal Position	00-7E	73	73
3	HRLW	Low limit of H-pulse counting window (RF)	00-255	16	16
4	HRHG	High limit of H-pulse counting window (RF)	00-255	64	64
5	HSLW	Low limit of H-pulse counting window (S-Video)	00-255	16	16
6	HS HG	High limit of H-pulse counting window (S-Video)	00-255	64	64
7	HSDT	H-pulse Detection(S-Video)	00-255	8	8

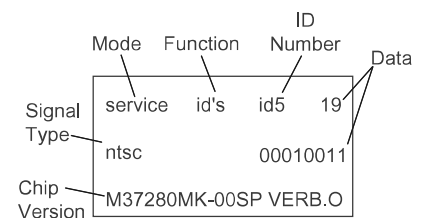
DEVICE "FEATURE"

Item#	OSD	DETAIL	Range (DEC)	Initial Data 20/21"	Initial Data 24/25"
	ID0	Language related	00-255	SEE ID MAP	SEE ID MAP
	ID1	Video related	00-255	SEE ID MAP	SEE ID MAP
	ID2	Audio related	00-255	SEE ID MAP	SEE ID MAP
	ID3	Miscellaneous	00-255	SEE ID MAP	SEE ID MAP
	ID4	Miscellaneous	00-255	SEE ID MAP	SEE ID MAP
	ID5	Miscellaneous	00-255	SEE ID MAP	SEE ID MAP
	ID6	Miscellaneous	00-255	SEE ID MAP	SEE ID MAP
	ID7	Miscellaneous	00-255	SEE ID MAP	SEE ID MAP

Notes:

Range (DEC) shows the range of possible setting for each Adjustment Mode.

Initial Data shows the standard settings for each Adjustment Mode.



4-4. ID MAP TABLE

Model	Destination	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6	ID-7
KV-20FS100	US	89	7	65	33	128	48	0	150
KV-20FS100	CND	89	7	65	49	128	48	0	150
KV-20FV300	US	89	23	231	35	128	48	0	150
KV-20FV300	CND	89	23	231	51	128	48	0	150
KV-21FS100	E	81	7	81	129	160	48	0	214
KV-21FM100	E	81	3	64	129	160	16	0	198
KV-21FV300	E	81	23	231	131	160	48	0	214
KV-24FV300	US	89	23	231	35	128	48	0	150
KV-24FV300	CND	89	23	231	51	128	48	0	150
KV-25FV300	E	81	23	231	131	160	48	0	214

4-5. A BOARD ADJUSTMENTS

H. FREQUENCY (FREE RUN) CHECK

1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q502 (TP-25 H. DRIVE) on the A Board.
3. Check H. Frequency for 15735 ± 200 Hz.

V. FREQUENCY (FREE RUN) CHECK

1. Select video 1 with no signal input.
2. Set the conditions for a standard setting.
3. Connect the frequency counter to TP-27 (V OUT) or CN515 pin ⑥ (V DY+) and ground on the A Board .
4. Check that V. Frequency shows 60 ± 4 Hz.

DRIVE (SCON)

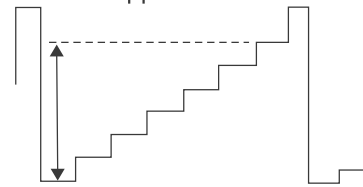
1. Input a color-bar signal and set the level to 75%.
2. Set in Standard mode.
3. Activate the Service Adjustment Mode.
4. Set AALS, ABLs, GON and BON items. Using ③ and ⑥ set each to the following values. Leave RON set to "1".

Mode	Category	Display Item	Item Data
service	video	rdrv	26
Signal Type	ntsc		
vchp			00000000 00000000

AALS: OFF (0)
 ABLs: OFF (1)
 R ON: ON (1)
 G ON: OFF (0)
 B ON: OFF (0)

5. Connect an oscilloscope probe to CV Board, J1751Pin 12 (KR) (Red Out) .
6. Select SCON with ① and ④ .
7. Adjust the value of SCON with ③ and ⑥ for $86 \pm 3V_{pp}$ for 20/21 inch and $96 \pm 3V_{pp}$ for 24/25 inch.

$86 \pm 3V_{pp}$ for 20 inch and
 $96 \pm 3V_{pp}$ for 24 inch.



8. Reset AALS, ABLs, GON and BON values to "1".
 AALS: ON (1)
 ABLs: ON (0)
 R ON: ON (1)
 G ON: ON (1)
 B ON: ON (1)
9. Press **MUTING** then **ENTER** to save into the memory.

DISPLAY POSITION ADJUSTMENT (DISP)

1. Input a color-bar signal.
2. Set to Service Adjustment Mode.
3. Select DISP with ① and ④ .
4. Adjust values of DISP with ③ and ⑥ to adjust characters to the center.
5. Write to memory by pressing **MUTING** then **ENTER** .
6. Check to see if the text is displayed on the screen.

Mode	Category	Display Item	Item Data
service	micro	disp	48
Signal Type	ntsc		
vchp			00000000 00000000

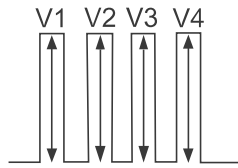
SUB BRIGHT ADJUSTMENT (SBRT)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Set the PICTURE and BRIGHTNESS to minimum.
4. Select the SBRT item with ① and ④ .
5. Adjust the values of SBRT with ③ and ⑥ to obtain a faintly visible crosshatch.
6. Press **MUTING** then **ENTER** to save into the memory.

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1. Input color-bar signal at 75%.
2. Activate the Service Adjustment Mode.
3. Set (PIC) to Max and (COL) to 50%.
4. Connect an oscilloscope probe to CV Board, CN301Pin ④ Blue Out.
5. Select the SHUE and SCOL item with ① and ④ .
6. While showing the SHUE item, adjust the waveform with ① and ④ until the second and third bars show the same level ($V_2 = V_3 < 0.15V_{p-p}$). Set Sub Hue -2 Step.

7. While showing the SCOL item, adjust the waveform with **[3]** and **[6]** until the first and fourth bars show the same level ($V1 = V4 < 0.15Vp-p$). Set Sub Col +2 Step.



8. Press **[MUTING]** then **[ENTER]** to save into the memory.

V. SIZE ADJUSTMENT (VSIZ)

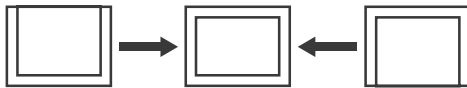
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with **[1]** and **[4]**.
4. Adjust value of VPOS with **[1]** and **[4]** for the best vertical center.
5. Press **[MUTING]** then **[ENTER]** to save into the memory.



V. CENTER ADJUSTMENT (VPOS)

Perform this adjustment after performing H. Frequency (Free Run) Check.

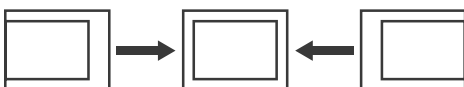
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with **[1]** and **[4]**.
4. Adjust value of VPOS with **[3]** and **[6]** for the best vertical center.
5. Press **[MUTING]** then **[ENTER]** to save into the memory.



H. CENTER ADJUSTMENT (HPOS)

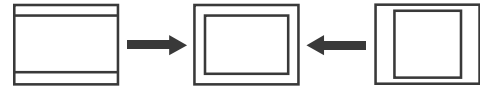
Perform this adjustment after performing H. Frequency (Free Run) Check.

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the HPOS item with **[1]** and **[4]**.
4. Adjust the value of HPOS with **[3]** and **[6]** for the best horizontal center.
5. Press **[MUTING]** then **[ENTER]** to save into the memory.



H. SIZE ADJUSTMENT (HSIZ)

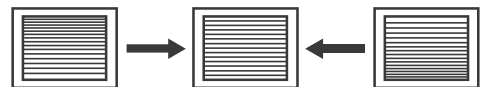
1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Select HSIZ with **[1]** and **[4]**.
4. Adjust with **[3]** and **[6]** for the best horizontal size.
5. Press **[MUTING]** then **[ENTER]** to save into the memory.



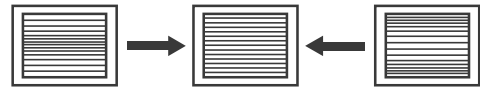
V. LINEARITY (VLIN), V. CORRECTION (SCOR), PIN AMP (PAMP), AND HORIZONTAL TRAPEZOID (HTRP) ADJUSTMENTS

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VLIN, SCOR, PAMP, and HTRP with with **[1]** and **[4]**.
4. Adjust with **[3]** and **[6]** for the best horizontal size.
5. Press **[MUTING]** then **[ENTER]** to save into the memory.

V LINEARITY (VLIN)



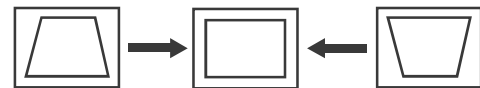
V CORRECTION (SCOR)



PIN AMP (PAMP)

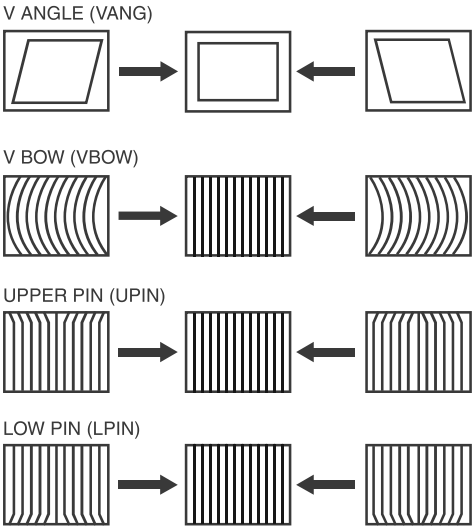


HORIZONTAL TRAPEZOID (HTRP)



**V. ANGLE (VANG), V. BOW (VBOW), UPPER
PIN (UPIN) AND LOW PIN (LPIN)
ADJUSTMENTS**

- 1. Input a crosshatch signal.
- 2. Activate the Service Adjustment Mode.
- 3. Select VANG, VBOW, UPIN, and LPIN with **[1]** and **[4]**.
- 4. Adjust with **[3]** and **[6]** for the best picture.
- 5. Press **[MUTING]** then **[ENTER]** to save into the memory.



SERVICE ADJUSTMENT MODE MEMORY

- 1. After completing all adjustments, press **[0]** then **[ENTER]**.
- Read From Memory

