

## 6. SERVICE mode

### 6.1 To enter the DESIGN/SERVICE mode

Set the volume to 0. Then press and hold the MUTE button on the remote control, and press the MENU button on the TV to enter the SERVICE mode. In this case, red “ S ” is displayed on the upper center of the screen. To exit from the S mode, turn off the TV set by the POWER button on the remote control.

*Caution: The user service mode adjustment can be changed only when service personnel adjust the whole set data during servicing. As the control data have dramatic effects on functions and performance of the TV, service personnel should not tell user how to enter the SERVICE mode to avoid improper data settings.*

### 6.2 Adjustments and bus data (CH08T0606)

Table 4 Function Description for Bus Data

	Bit	Function Description	Status
MODE0	Bit7.6	Audio system options (available during auto search and use of AUTO button)	00: B/G      01: I 10: D/K      11: M
	Bit5	SECAM INHIBIT	00: SECAM gate pulse width, 2.2 usec
	Bit4		01: 2.0 usec 10: 1.8 usec 11: SECAM demodulation inhibit
	Bit3	V MUTE	When changing channels: 0: Y-MUTE      1: RGB MUTE
	Bit2	SECAM	0: No      1: Yes
	Bit1	AUTO2	0: PAL      1: Without PAL
	Bit0	Power-on modes	0: Memory on      1: Soft on

(continued)

MODE1	Bit7	Write-in LOGO	0: No	1: Yes
	Bit6	Refresh AV terminals in main cycle	0: Yes (Recommended)	1: No
	Bit5	RF NTSC options	0: No	1: Yes
	Bit4	Screen saver	0: No	1: Yes
	Bit3	M	0: No	1: Yes
	Bit2	D/K	0: No	1: Yes
	Bit1	I	0: No	1: Yes
	Bit0	B/G	0: No	1: Yes
MODE2	Bit7	With Channel Lock, horizontal AFC is off?	0: Yes (Recommended)	1: No
	Bit6	Mono system	1: Yes	0 : No
	Bit5	Single language	1: Yes	0 : No
	Bit4	TA1343 woofer or MDB output mode options	0: Mono output	1: Overlapped to main channel ( Recommended )
	Bit 3	Pull down sub menus?	1: Yes	0 : No
	Bit 2	Auto language options	0 0 0	ENGLISH
	Bit 1		0 0 1	FRENCH
	Bit.0		0 1 0	GERMAN
0 1 1			RUSSIAN	
1 0 0			INDONE	
		1 0 1	MALAY	
		1 1 0	FARSI	
		1 1 1	ARABIC	
MODE3	BIT 7	Small character processor	1: Old (Recommended)	0: New

(continued)

	BIT 6	Waiting time when changing channels with 0-9 buttons	1: Fast (1 sec.)      0: Slow (2 sec.) (Recommended)
	BIT 5	DVD option	1: No                      0: Yes (Recommended)
	BIT.4	Step length setting for lighting up gradually during power-on	1: Large step (Recommended)    0 : Small step
	BIT 3	Numeral in Arabic indicated in local language?	0: No                      1: Yes
	BIT 2	PWM output option	0: No                      1: Yes
	BIT 1	Instant on	1: Yes                      0 : No
	BIT 0	AV Switch 4053 option	0: No                      1: Yes
MODE4	BIT 7	Audio processing IC (SOUND menu)	0: No                      1: Yes
	BIT 6	Woofer option in SOUND menu	0: No                      1: Yes
	BIT 5	TA1343 option	0: No                      1: Yes
	BIT 4	No use	0: No                      1: Yes
	BIT 3	NJW1161 option (SRS IC)	0: No                      1: Yes
	BIT 2	NJW1160 option (BBE IC & SRS IC)	0: No                      1: Yes
	BIT 1	NJW1137 option (BBE IC)	0: No                      1: Yes
	BIT 0	Soft IIC option	0: No                      1: Yes
OPT	Bit 7	No use	
	Bit 6	VCO adjustments	0: PIF VCO functions (PIFVCO = 10) during auto search and search ; 1: PIFVCO = 10 during turn-on , and PIFVCO = 00 in Normal mode

	Bit 5	No use	
	Bit 4	Large-amplitude AFT switch when no signal	1: Off                      0: On
	Bit 3	Audio gain switch in MONO mode	0 : 927mVrms at 25kHz/dev 1 : 500mVrms at 25kHz/dev
	Bit 2	Y-MUTE when changing channels	0: No                      1: Yes
	Bit 1	Turn-on logo display? (Logo write-in function required)	1: Yes                      0: No
	Bit 0	No use	
OSD	Horizontal position of OSD		
RCUT	R cut off		
GCUT	G cut off		
BCUT	B cut off		
GDRV	G drive		
BDRV	B drive		
CNTX	Contrast Max.		
BRTC	Bright center		
CNTC	Contrast center		
CNTN	Contrast Min.		
BRTX	Bright Max.		
BRTN	Bright Min.		
HPOS	50hz horizontal phase	00: -3usec    10:    01F: +3usec	
VP50	V phase (50Hz)	0: V phase delay, 0H	7: 7H
HIT	V size	00: -50%                      20: 0%	3F: 50%

(continued)

HPS	Adjusting difference between horizontal centers in PAL and NTSC		
VP60	V phase (60Hz)	0: V phase delay, 0H	7: 7H
HITS	Adjusting difference between vertical amplitudes in PAL and NTSC		
VLIN	V-linearity	0: -15%	8: 0% F: 15%
VSC	V-S correction	0: -16%	8: 0% F: 16%
VLIS	Adjusting difference between vertical linear in PAL and NTSC		
VSS	Shift data of 50 Hz/ 60 Hz Correction		
HIT69	Vertical amplitude in 16:9 mode (PAL)		
HIT69S	Vertical amplitude in 16:9 mode (NTSC)		
V01	Volume output data at 1%		
V25	Volume output data at 25%		
V50	Volume output data at 50%		
V100	Volume output data at 100%		
STBY	Bit 3.2	VCD standby	00: Normal 01: Normal 10: Normal 11: VCD standby
	Bit 1.0	IF standby	00: Normal 01: Normal 10: Normal 11: IF standby
VCEN	Vertical centering		00: -32% 20: 0% 3F: 30%
LANG	Bit 7	Arabic	1: Yes 0: No
	Bit 6	Farsi	1: Yes 0: No
	Bit 5	Malay	1: Yes 0: No
	Bit 4	Indonesian	1: Yes 0: No
	Bit 3	Russian	1: Yes 0: No
	Bit 2	German	1: Yes 0: No
	Bit 1	French	1: Yes 0: No
	BIT 0	English	1: Yes 0: No

Table 5 Bus Data

Item	Data	Item	Data	Item	Data	Item	Data
*MODE0	84	SCNT	09	HPOS	11	BSNS	00
*MODE1	1F	CNTC	40	VP50	01	MOD	40
*MODE2	1B	CNTN	08	HIT	18	STBY	00
*MODE3	18	BRTX	19	HPS	04	SVM	00
*MODE4	60	BRTN	20	VP60	02	VBLK	00
*LANG	FF	COLX	35	HITS	01	UCOM	00
NOT MENU	9E	COLN	00	VLIN	05	VTST	00
MEUN ICON	FB	TNTX	28	VSC	00	PYNX	26
MAIN MEUN	91	TNTN	28	VLIS	00	PYNN	1B
MEUN CHAR	07	ST3	25	VSS	00	PYXS	22
MEUN CHAR HIGH	02	SV3	30	VCEN	16	PYNS	1E
BBE	9C	ST4	20	HIT69	14	BASC	40
OSDF	64	SV4	30	HIT69S	01	BASX	70
OSD	20	SVD	30	SBY	05	TREC	40
*OPT	60	ASSH	07	SRY	09	BALC	40
RCUT	40	SHPX	3F	BRTS	00	BAS1	64
GCUT	20	SHPN	20	RAGC	20	BAS2	20
BCUT	20	TXCX	3F	HAFC	09	BAS3	50
GDRV	40	RGCN	1F	*V01	15	TRE1	64
BDRV	40	ABL	2C	*V25	4D	TRE2	20
CNTX	7F	DCBS	13	*V50	65	TRE3	50
BRTC	40	CLTO	26	*V100	7F	TA1343-06	6C
COLC	40	CLTM	22	WOOFER	40	NO USE	00
TNTC	48	CLTS	20	STAT	00	NO USE	64
TNTCAV	48	CLVO	24	FLG0	06	WON1	01
COLP	F8	CLVD	20	FLG1	08	WON2	00
COLS	40	DEF	01	REFP	00	NOIS	01
DCOL	20	AKB	00	RSNS	00	VATT	70
SCOL	07	SECD	18	GSNS	00		

**Notes:**

- ① The data sheet may differ dependent on different models.
- ② The data sheet may differ dependent on different CRTs for the same model.
- ③ Refer to table 4 set the data marked with "\*" depending on functions of TVs.