

LC86332B - 52Z6, 53L1**Specification**

PCB		
Chassis	TV2KY	
μComp	LC863328A-52Z6, -53L1	IC001
Memory	24C08	IC002
Video	LA76810A, (LA76818) ALA7642A	IC201, IC202
SAW	F3826C	SAW201
Vert	STV9302	IC301
FBT	BSC24-01N40TA5	T302
HOT	ST1803DH1	Q302
SMPS	ST1802HI	Q613
Tuner	TDC-3H3-5VL-S (5V, 2w)	A101
Voice	TDA1905	IC401
IR IC	LC7461	

B+ ADJUSTMENT

Перед регулировкой установить напряжение, B+ равным 107V+/-0.5V.

Сервисный Режим

Возможно два способа входа

1. Нажать кнопку **FACTORY** сервисного пульта.

2. Нажать **MENU** key и пока на дисплее отображены иконки, набрать **8 6 3 3**. В некоторых источниках указан код **6 4 8 3**.

По умолчанию ENG.OPTION=0, при этом доступны только первые 4 группы опций (menu 00...03), для просмотра и редактирования всех 16-ти групп (а в случае LA76818 – 20 групп) установите ENG.OPTION=1. Эта опция сохраняется и при последующих входах в сервисное меню.

White Balance Adjust

Enter Option Menu mode press **MUTE** key to enter the white balance adjust mode, there is only one bright line displayed on the screen, then

press digit key 0 enter sub brightness adjust mode press VOL+/- to adjust

press digit key 1 enter red bias adjust mode press VOL+/- to adjust

press digit key 2 enter green bias adjust mode press VOL+/- to adjust

press digit key 3 enter blue bias adjust mode press VOL+/- to adjust

press digit key 4 enter red drive adjust mode press VOL+/- to adjust

press digit key 5 enter green drive adjust mode press VOL+/- to adjust

press digit key 6 enter blue drive adjust mode press VOL+/- to adjust

Lock Chanel

Enable chanel lock press LOCK key you will find a "lock" finger appear beside the icon TUNING . It means that chanel lock function is enabled. At this time

1 Cant enter the "Tuning" function menu, and only press PRO+/- to change channel

2 When press digit key to select the locked channel, the screen is covered with blue.

Select lock program set SKIP/LOCK to "ON" in the normal TUNING function menu and the color of the channel NO. is changed to Red. And when press PRO+/- to change TV channel, the locked channel will be skipped. If you want to change to the locked channel, you have to use digit key.

		Options Byte		
Item	Description	Vol	Range	
MENU 00				
H-PAHSE	Horizontal center	11	13	0...31
V-POS	Vertical center	34	40	0...127
V-SIZE	Vertical size	17	40	0...127
V-LINE	Vertical linearity	18	14	0...31
V-SC	Vertical S- Correction	2	16	0...31
OSD-V	Osd Vertical position adjust	5	10	0...63
MENU 01				
RB	Red bias	135	30	0...255
GB	Green bias	217	192	0...255
BB	Blue bias	165	160	0...255
RD	Red drive	98	63	0...127
GD	Green drive	15	7	0...15
BD	Blue drive	96	63	0...127
SUB-BRIGHT	Sub brightness (hardware)	96	100	0...127
CROSS-B/W	Internal test signal off/black/white/cross	0	0	0...3
MENU 02				
SUB-SHARP	Sub sharpness (software)	20	30	0...63
SUB-CONT	Sub contrast (software)	99	100	0...127
SUB-COLOR	Sub color (software)	34	50	0...63
SUB-TINT	Sub Tint (software)	41	32	0...127
OSD-H-POS.	OSD Horizontal position	22	14	0...63
H-BLK-R	Right blanking adjust	4	—	0...7
H-BLK-L	Left blanking adjust	4	—	0...7
MENU 03				
AGC-DELAY	RF AGC delay	13	8	0...63
B-Y DC	SECAM B-Y DC level	8	4	0...15

R-Y DC	SECAM R-Y DC level	8	4	0...15
AC. HIGH	AC Power safety HIGH voltage	0	0	0...63
AC. LOW	AC Power safety LOW voltage	63	0	0...63
PROD. MODE	Production mode	1	0	0,1
ENG OPTION	Enable engineer options (menu 04 ... 15)	0	0	0,1
MENU 04				
OPT 810/818	0:LA76810; 1:LA76818	0	0	0, 1
NO-V-MUTE	Mute picture when change channel	0	1	X
CURTAIN	Эффект жалюзи при включении/выключении. 0 - нет, 1 - при включении, 2 - при выключении, 3 - в обоих случаях	3	3	0...3
CURT-DELAY	Power on mute delay (seconds)	0	2	0...7
LAST-POWER	Power on standby/memory/on	1	1	0...2
LAST-TV/ AV	Power on enter TV / last TV/AV	0	1	0, 1
TUNER-TYPE	Tuner type select see Port control	0	0	0...3
P-OFF-MUTE	Mute screen when power off	1	1	0, 1
MENU 05				
AV-SYSTEM	AV numbers none / 1 AV/2 AV/3AV	2	1	0...3
OPT-DVD	DVD YCrCb port no/yes	0	0	0,1
DVD PORT	DVD attach AV number	0	0	0...3
HVV-DECODE	DVD decode / Video	0	0	0,1
OPT-SVIDEO	S-VIDEO port no/yer	0	0	0,1
S-V DETECT	S-VIDEO plug-in auto detect on/off	0	0	0,1
S-V PORT	S-VIDEO attach AV number	0	0	0...3
O-DVD-TV		0	—	0,1
MENU 06				
O-LOGO	LOGO off/on	0	1	0,1
LOGO-EDIT	Normal / active LOGO edit mode	0	0	0,1
O-BALANCE	Volume PWM balance off/on	0	0	0,1
O-WOOFER	WOOFER channel off/on	0	0	0,1
O-BLU.-BACK	Full screen black/blue background	1	1	0,1
O-PRO.NUM	Max. Program 100/255/512	1	1	0...2
O-SCART	SCART port no/yes	1	0	0,1
O-RT-IR	Normal / RTC remote controller	0	0	0,1
MENU 07				
O-HALFTONE	OSD half-tone background off/on	1	0	0,1
O-NO SCRL	Menu scrolling off/on	1	0	0,1
O-A2/LNA	Pin32 function A2/LNA	0	0	0,1
O-K7 POWER	Front panel K7 :Search/Power	0	0	0,1
O-FM	FM module control off/on	0	0	0,1
O-CUSTOM	Custom option	0	0	0,1
O-COL.TEMP	Colour temperature	1	—	0,1
O-ZOOM	Zoom option 4:3/16:9	0	—	0,1
MENU 08				
O-AC-DT	AC power protection off/on	0	0	0,1
O-FIX-PWM	Volume PWM active/fix	0	0	0,1
O-FIX-VOL	LA76810 volume control fix	0	1	0,1
FIX VOL	Fix volume value	127	63	0...127
OSD-CONT	OSD contrast	60	60	0...127
VIF-SYS	VIF freq.:38/38.9/45.75/49.5MHz	0	0	0...3
TUNE SPEED	Auto search speed (recommend 1)	0	1	0...3
LV 1116/17	LV1116 / LV1117 option	0	0	0,1
MENU 09				
GRAY -MODE	Internal test white signal /gray (60%)	0	0	0, 1
AV-AGC	AV mode: TV output switch	1	0	0, 1
CD MODE	Vertical scan mode: 50Hz/60Hz etc.	0	0	0...7
VS-SEP-UP	Sensitivity of Vertical separation switch	1	0	0, 1
V-SIZE-CMP	Compensate vertical size	7	7	0...7
BR-ABL-DEF	Brightness ABL defeat 0: enable/ 1 : disable	0	1	0, 1
MD-STP-DEF	Bright mid stop defeat 0:enable/1:disable	0	1	0, 1
BRT-ABL-TH	Bright ABL threshold	0	4	0...7
MENU 10				
SYNC-KILL	Force H.OSC. free run mode	0	0	0, 1
AFC-GAIN	AFC gain & gate 0:auto/1:high gain	1	1	0, 1
FBP-BK-SW	FBP blanking "OR" switch 0:internal /1:internal"OR"FBP	0	1	0, 1
H-FREQ	Hor. Frequency (only for ES Sample)	34	34	0...63
H-BLK-L	Left blinking adjust	—	7	0...7
H-BLK-R	Right blinking adjust	—	2	0...7
FILT-SYS	Y/C filter select	2	6	0...15
TRAP.TEST	Sound trap control (testing)	4	4	0...7

				MENU 11
C-KILL-ON	Color Kill mode 0:auto/1:force ON	0	0	0, 1
C-KILL-OFF	Disable killer circuit 0:normal/1:test	0	0	0, 1
AUTO-FRESH	NTSC auto flesh switch 0:off/1:on	0	1	0, 1
BLANK-DEF	Disable RGB output blanking 0:on/1:off	0	0	0, 1
R/B G BAL	R-Y/B-Y gain balance	8	8	0...15
R/B ANGLE	R-Y/B-Y angle	8	8	0...15
VIDEO-MUTE	RGB output switch 0:normal/1:mute	0	0	0, 1
VIDEO-LVL	Align IF video level	7	7	0...7
				MENU 12
C-EXT	Select C in switch 0:internal/1:external	0	0	0, 1
C-BYPASS	Select chroma BPF bypass 0:BPF/1:bypass	0	0	0, 1
DIG-OSD	Analog / Digital OSD	0	0	0, 1
FM-GAIN	FM gain:±50KHz /±25KHz	0	0	0, 1
DE-EMP-TC	FM de-emphasis TC 0:50µs/1:75µs	0	0	0, 1
FM-LEVEL	FM level adjust (1000mV 20mV)	17	31	0...31
				MENU 13
ENGLISH	OSD English option 0:off/1:on	1	1	0, 1
ARABIC	OSD Arabic option 0:off/1:on	1	0	0, 1
RUSSIAN	OSD Russian option 0:off/1:on	1	1	0, 1
TURKISH	OSD Turkish option 0:off/1:on	1	0	0, 1
PERSIAN	OSD Persian option 0:off/1:on	1	0	0, 1
FRENCH	OSD Franch option 0:off/1: on	1	0	0, 1
				MENU 14
COL-PAL	Color system PAL 0:off/1:on	1	1	0, 1
COL-NT3.58	Color system NTSC3.58 0:off/1:on	0	1	0, 1
COL-SECAM	Color system SECAM 0:off/1:on	1	1	0, 1
COL-NT4.43	Color system NTSC4.43 0:off/1:on	0	0	0, 1
SND-D/K	Sound system D/K 0:off/1:on	1	1	0, 1
SND-B/G	Sound system B/G 0:off/1:on	1	1	0, 1
SND-I	Sound system I 0:off/1:on	0	0	0, 1
SND-M/N	Sound system M/N 0:off/1:on	0	0	0, 1
				MENU 15
EM-ABL	Emergency ABL defeat enable/disable	0	0	0, 1
CORING EN.	Coring switch 0:enable/1:disable	1	1	0, 1
BLK-STR-DF	Black stretch defeat 0:on/1:off	1	1	0, 1
B-GAMMA	B γ correction	3	3	0...3
RG-GAMMA	R G γ correction switch 0:off/1:on	0	1	0, 1
				MENU 16
DVD B-Y DC	Cb input DC shift	8		0...15
DVD R-Y DC	Cr input DC shift	8		0...15
V.RS TIME	Vertical Reset timing	0		0,1
A2.SW	A2 off/on	0		0,1
A.MONI.SW	Pin2 Audio out FM/Audio after Seitch	1		0,1
S.TRAP.SW	Sound trap off/on (testing)	1		0,1
				MENU 17
CORE GAIN	Coring gain select off/1/2/3	1		0...3
G-Y ANGEL	G-Y demodulation angle 240/253 deg.	0		0,1
C.KILL OP.	Color killer operational level	0		0...7
RGB TMP.SW	RGB DC output color temp. -1VBE/Flat	0		0,1
PRE/OV.SW	Select Pre/Over-shoot adjustment	0		0,1
P/O. SHOOT	Pre/Over-shoot width :Narrow...Wide	1		0...3
FSC/CSYNC	Pin22 output FSC/Composite sync	1		0,1
				MENU 18
WPL OPE.	White peak limiter off/1/2/3	1		0...3
VBLANK SW	Vertical blanking normal/wide	0		0,1
BLK. GAIN	Black stretch gain	2		0...3
BLK. START	Black stretch start point	3		0...3
DC. RESET	Select luma. DC restoration	0		0...3
Y GAMMA	Y Gamma start point:off/1/2/3	0		0...3
C.VCO SW	C.VCO adjust plus/minus	0		0,1
C.VCO ADJ.	Free run C.VCO frequency	0		0...3
				MENU 19
OVERMOD. SW	Over modulation test	0		0,1
OV.MOD LVL	Over modulation operation point	10		0...15
V.LVL OFFS	IF video output amplitude	2		0...3
HF TONE-DEF	Half-tone on/off	0		0,1
HALF TONE	Adjust half-tone level	3		0...3

Редактирование LOGO

Для отображения логотипа на синем фоне экрана установите O-LOGO=1. Для редактирования LOGO сначала необходимо установить LOGO-EDIT=1 then exit option menu, then switch to AV (no signal input), it will display log, then you can edit it. You may use the function keys below

Press digit **[8]** key will switch the current edit line; Нажатием **[---]** key изменяется вид редактирования:

CHAR – изменение содержимого, VOL +/- move the edit cursor, POS +/- change

COLOR – изменение цвета, VOL +/- change color POS +/- switch line

SIZE – изменение размера, VOL +/- change size POS +/- switch line

POSITION – изменение расположения на экране, VOL +/- move in horizontal direction "POS +/- move in vertical direction.

Для выхода надо нажать **[MENU]** key.

В меню опций встроена маленькая ловушка. Про изменении любой опции PROD. MODE становится равной 1 и при попытке выхода из сервисного меню вверху экрана возникает надпись *PRODUCT* и из сервисного меню невозможно выйти. Для выхода необходимо установить PROD. MODE=0.

Factory mode addition function

1) Press **[PICTURE]** key, 3 more picture preset mode, F000, F550 and F110 can be selected.

F000: contract = 0, brightness = 0, color = 0

F550: contract = 50, brightness = 50, color = 0

F110: contract = 100, brightness = 100, color = 0.

2) During volume bar display, press **[CALL]** will change volume 0, 25, 50, 75, 100.

3) During picture menu display, select one of BRIGHT, CONTRAST, COLOR, SHARPNESS, press **[CALL]** key will change value 0, 25, 50, 75, 100.

Factory menu operation: In factory mode, press **[SLEEP]** key will display factory menu. Press **[MENU]** key will quit factory menu (still in factory mode, for aging procedure) **[CH+]** / **[CH-]** : select item (up/down) **[V+]** / **[V-]** : change value (when cursor point to first line, select menu page) **[SLEEP]** : loop select next menu page

SUB-BRIGHT : sub-brightness direct key: DIGIT[1] -, DIGIT[2] +

CROSS-B/W : test pattern, 0:normal; 1:black; 2:white; 3:cross

Logo Edit

When "SYSTEM" sub-menu "BACKGROUND" ON, if no signal input, the screen will display full screen blue. If factory "MENU 06": "O-OPT-LOGO" set to "1", LOGO will display on this blue screen. This LOGO can be programmed by engineer:

a) Set factory "MENU 06": "LOGO-EDIT"=1; b) Quit factory mode c) Switch to AV mode (Don't input signal and make sure BACKGROUND is ON) d) Press **[---]** key select edit item CHAR/COLOR/SIZE/POSITION