

# SERVICE MENU

The service menu is entered by pressing a special 4-digit code if the feature menu is displayed and TV is in FE -mode. While TV isn't in AV Mode and feature menu is displayed, pressing sequence of digits 1923 will enter the TV to service mode and service menu will be displayed.

## PT90 Option Tables

### PT90 ST92195DS01-V1

#### Option 1

B0	1	B/G Available
	0	not available
B1	1	D/K Available
	0	not available
B2	1	I Available
	0	not available
B3	1	L Available
	0	not available
B4-B5	0	TTX GROUP 1 (ENG, GER, SWE, ITA, FRA, SPA, CZH, RUM)
	1	TTX GROUP 2 (POL, GER, SWE, ITA, YUV, CZH, RUM)
FRA,	10	TTX GROUP 3 (ENG, GER, SWE, ITA, FRA, SPA, TUR, RUM)
	11	TTX GROUP 4 (ENG, GER, SWE, ITA, FRA, SPA, TUR, RUM)
B6-B7	0	Samsung
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

#### Option 2

B0	1	AV2 mode available
	0	not available
B1	1	SVHS mode available
	0	not available
B2	1	Volume Linear
	0	Volume Logarithmic
B3	1	Ecoswitch available
	0	not available
B4	1	Child Lock available
	0	not available
B5	1	Headphone available
	0	not available
B6	1	No Subwoofer
	0	Subwoofer available
B7	1	4/3 Picture tube
	0	16/9 Picture tube

#### Option 3

B0	1	One Crystal application (4.43 Mhz)
	0	2 crystal application (for NTSC play back)
B1	1	Intercarrier application
	0	QSS application
B2	1	APR available
	0	not available

B3	1	OSD contrast control ON
	0	OSD contrast control OFF
B4	1	disable
	0	Blue screen enable
B5	1	AVC Automatic Volume Correction (Stereo) AVL(Mono),
	0	not available
B6	1	DVD available
	0	not available
B7	1	Standby after power on
	0	No Standby after power on

### PT90 ST92195DS01-V2

#### Option 1

B0	1	B/G Available
	0	not available
B1	1	D/K Available
	0	not available
B2	1	I Available
	0	not available
B3	1	L Available
	0	not available
B4	1	Keyboard with menu
	0	Keyboard without menu
B5	1	Farsi Available
	0	not available
B6-B7	0	Samsung
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

#### Option 2

B0	1	AV2 mode available
	0	not available
B1	1	SVHS mode available
	0	not available
B2	1	Volume Linear
	0	Volume Logarithmic
B3	1	Ecoswitch available
	0	not available
B4	1	Reduce tone
	0	Reduce Volume (MSP Sound mode)
B5	1	Headphone available
	0	not available
B6	1	No Subwoofer
	0	Subwoofer available
B7	1	4/3 Picture tube
	0	16/9 Picture tube

**Option 3**

B0	1	One Crystal application (4.43 Mhz)
	0	2 crystal application (for NTSC playback)
B1	1	Intercarrier application
	0	QSS application
B2	1	MSP Carrier Mute On
	0	MSP Carrier Mute Off
B3	1	OSD contrast control ON
	0	OSD contrast control OFF
B4	1	disable
	0	Blue screen enable
B5	1	AVC Automatic Volume Correction (Stereo) AVL(Mono)
	0	not available
B6	1	DVD available
	0	not available
B7	1	Standby after power on
	0	No Standby after power on

**PT90 ST92195DS01-V3****Option 1**

B0	1	B/G Available
	0	not available
B1	1	D/K Available
	0	not available
B2	1	I Available
	0	not available
B3	1	L Available
	0	not available
B4	1	Keyboard with menu
	0	Keyboard without menu
B5	1	Brightness full range available
	0	Brightness 75% range available (manual cut off)
B6-B7	0	Samsung
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

**Option 2**

B0	1	AV2 mode available
	0	not available
B1	1	SVHS mode available
	0	not available
B2	1	2248 Volume register max (DVD and Stereo chassis)
	0	Volume Logarithmic (mono chassis)
B3	1	Search mono audio ident available (auto ident for BG & DK)
	0	not available
B4	1	DVS Loader (Y/C)
	0	ESS and Zoran Loaders (RGB,CVBS)
B5	1	Headphone available
	0	not available
B6	1	No Subwoofer
	0	Subwoofer available
B7	1	4/3 Picture tube

0 16/9 Picture tube

**Option 3**

B0	1	One Crystal application (4.43 Mhz)
	0	2 crystal application (for NTSC playback)
B1	1	Intercarrier application
	0	QSS application
B2	1	STV224XE (Uses extra features as RGB Peak limitation)
	0	The other video IC's (ST2248E included)
B3	1	OSD contrast control ON
	0	OSD contrast control OFF
B4	1	disable
	0	Blue screen enable
B5	1	AVC Automatic Volume Correction (Stereo) AVL(Mono),
	0	not available
B6	1	DVD available
	0	not available
B7	1	Standby after power on
	0	No Standby after power on

**PT90 ST92195T01-H1 (Home Theatre)****Option 1**

B0	1	B/G Available
	0	not available
B1	1	D/K Available
	0	not available
B2	1	I Available
	0	not available
B3	1	L Available
	0	not available
B4	1	Keyboard with menu
	0	Keyboard without menu
B5	1	Brightness full range available
	0	Brightness 75% range available (manual cut off)
B6-B7	0	Samsung
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

**Option 2**

B0	1	AV2 mode available
	0	not available
B1	1	SVHS mode available
	0	not available
B2	1	APR available
	0	not available
B3	1	DVD mute pin option
	0	not available
B4	1	DVS Loader (Y/C)
	0	ESS and Zoran Loaders (RGB,CVBS)
B5	1	Headphone available
	0	not available
B6	1	No Subwoofer
	0	Subwoofer available
B7	1	4/3 Picture tube
	0	16/9 Picture tube

**Option 3**

B0	1	One Crystal application (4.43 Mhz)
	0	2 crystal application (for NTSC playback)
B1	1	Intercarrier application
	0	QSS application
B2	1	STV224XE (Uses extra features as RGB Peak limitation)
	0	The other video IC's (ST2248E included)
B3	1	OSD contrast control ON
	0	OSD contrast control OFF
B4	1	disable
	0	Blue screen enable
B5	1	AVC Automatic Volume Correction (Stereo) AVL(Mono),
	0	not available
B6	1	DVD available
	0	not available
B7	1	Standby after power on
	0	No Standby after power on

**PT90 ST92195DSPHD1-V4 E****Option 1**

B0	1	L Available
	0	not available
B1	1	not used
	0	not used
B2	1	no Pin 8 16:9 switching mode
	0	Pin 8 16:9 switching mode
B3	1	Turn on from AV enabled
	0	Turn on from AV disabled
B4	1	Keyboard with menu
	0	Keyboard without menu
B5	1	Brightness full range available
	0	Brightness 75% range available (manual cut off)
B6-B7	0	Samsung (TECC2949PS35 B(T), TECC2949PS35 P(T))
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

**Option 2**

B0	1	AV2 mode available
	0	not available
B1	1	SVHS mode available
	0	not available
B2	1	2248 Volume register max (DVD and Stereo chassis)
	0	Volume Logarithmic (mono chassis)
B3	1	not used
	0	not used
B4	1	DVD picture in CVBS mode
	0	DVD picture in RGB mode
B5	1	Headphone available
	0	not available
B6	1	No Subwoofer
	0	Subwoofer available
B7	1	4/3 Picture tube
	0	16/9 Picture tube

**Option 3**

B0	1	One Crystal application (4.43 Mhz)
	0	2 crystal application (for NTSC playback)
B1	1	Intercarrier application
	0	QSS application
B2	1	STV224XE (Uses extra features as RGB Peak limitation)
	0	The other video IC's (ST2248E included)
B3	1	OSD contrast control ON
	0	OSD contrast control OFF
B4	1	disable
	0	Blue screen enable
B5	1	AVC Automatic Volume Correction (Stereo) AVL(Mono),
	0	not available
B6	1	DVD available
	0	not available
B7	1	Standby after power on
	0	No Standby after power on

**Option 4**

B0	1	Home Cinema On
	0	Home Cinema Off
B1	1	Pip On
	0	Pip Off
B2	1	DVB T ON
	0	DVB T OFF
B3	1	TXT ON
	0	TXT OFF
B4	1	Not used
	0	Not used
B5	1	Not used
	0	Not used
B6-B7	0	Samsung (TECC2949PS35 B(T), TECC2949PS35 P(T))
	1	Temic
	10	Philips UV1316
	11	Thomson/Orega

**GEOMETRY...** (90 deg Chasis)

V.SIZE 4/3 50Hz  
V.SIZE 16/9 50Hz  
V.SIZE 4/3 60 Hz  
V.SIZE 16/9 60 Hz  
V. POS  
H.POS

**GEOMETRY...** (110 deg Chasis with STV9306 IC)

V.SIZE  
V.POS  
V.C.CORR  
V.S.CORR  
H.SIZE  
H. PINC.CORR  
H. KEYS.CORR  
H.COR.CORR  
H. POS

**VIDEO...**

R GAIN  
G GAIN  
B GAIN  
R CUTOFF  
G CUTOFF

**TUNER/IF...**

AGC  
PIF COARSE  
PIF FINE  
PIF C OARSE L'  
PIF FINE L'

> : < is the VCO status indicator for adjusting the PIF to 38.9Mhz for BGDKIL and 33.9 for L' standards thru bus controlled VCO.

The VCO status is read from the read register of STV224X and guides whether to Increase / Decrease the VCO registers to attain VCO OK Status. I For doing VCO adjustment, Feed a 38.9MHz Carrier as IF input and adjust PIF Coarse and fine parameters to get VCO OK Status.

For doing VCO L1 adjustment, Feed a 33.9 MHz carrier as IF input and adjust PIF Coarse L' and PIF Fine L' to get VCO OK Status.