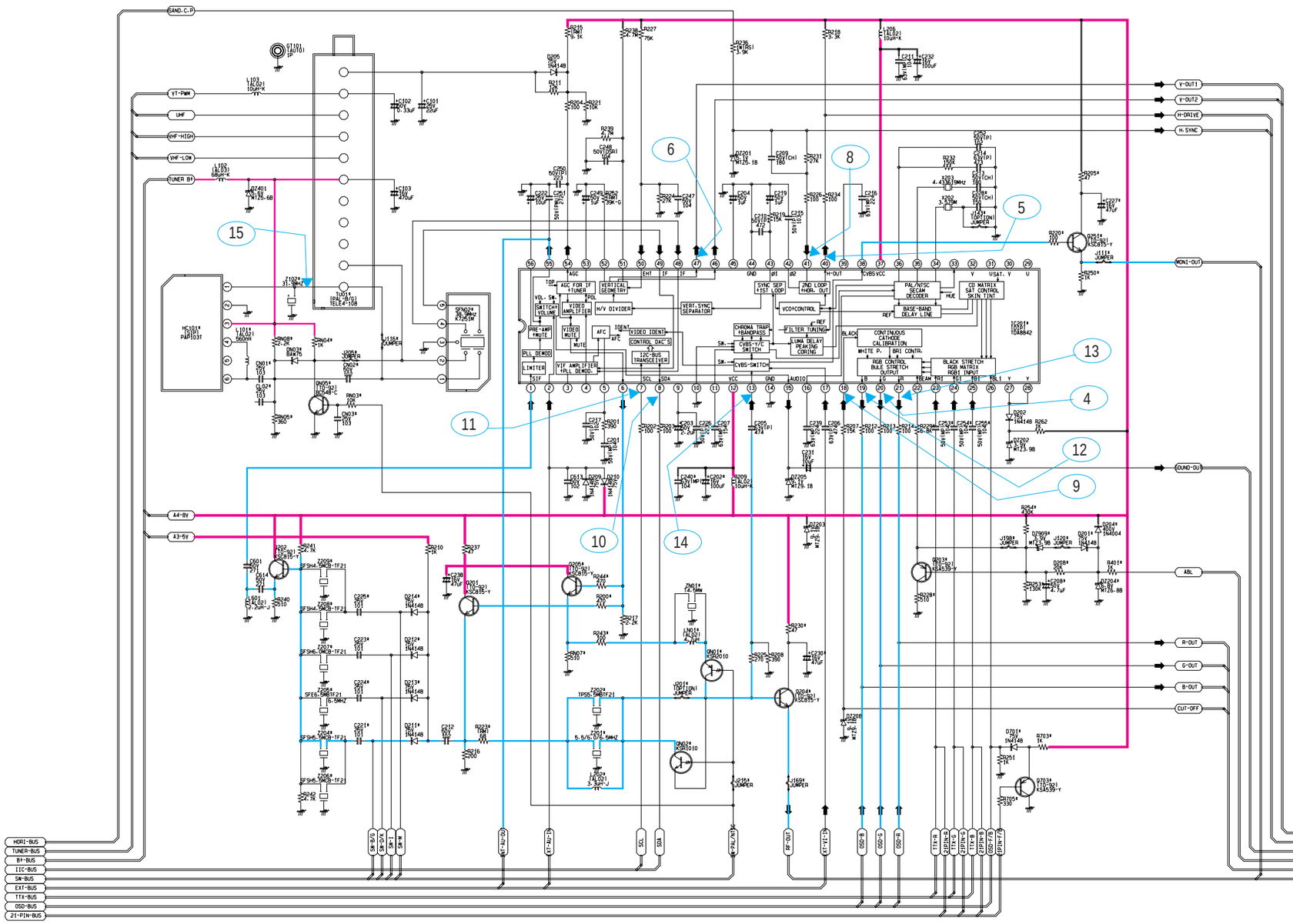
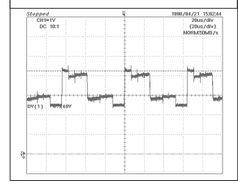
11. Schematic Diagrams

11-1 ONECHIP



PIN 4



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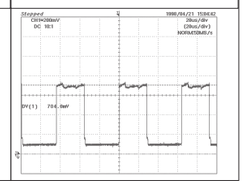
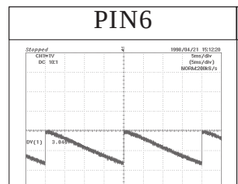
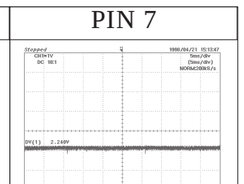


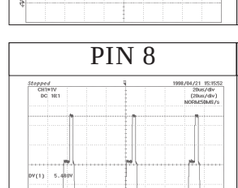
PIN6



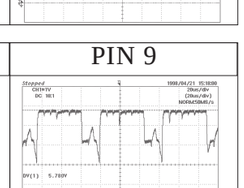
PIN 7



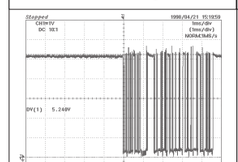
PIN 8



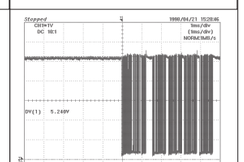
PIN 9



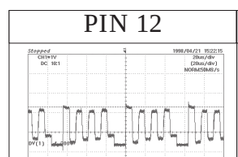
PIN 10



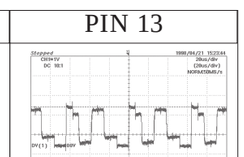
PIN 11



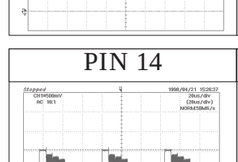
PIN 12



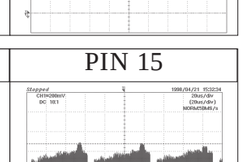
PIN 13



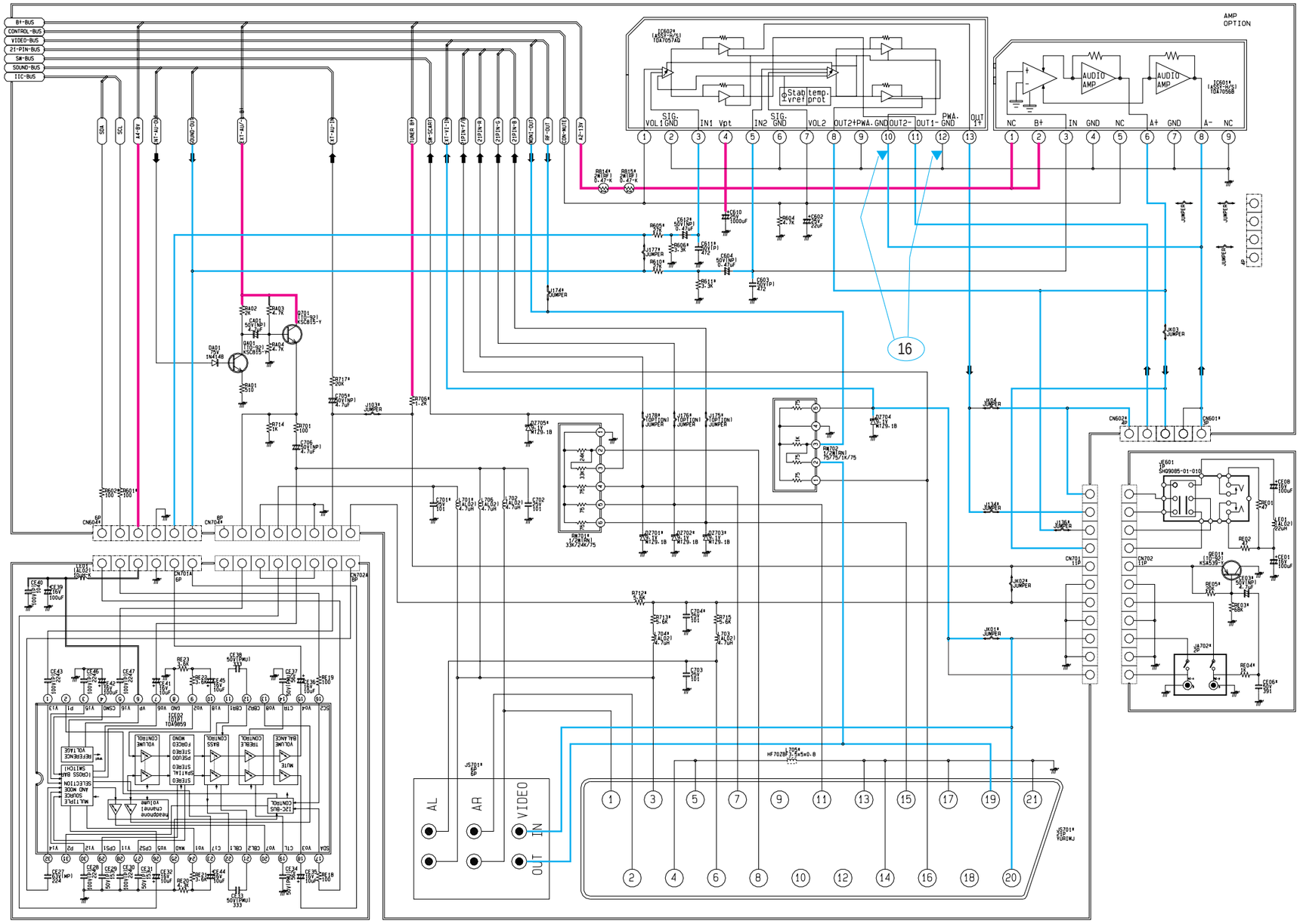
PIN 14



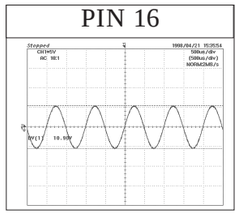
PIN 15



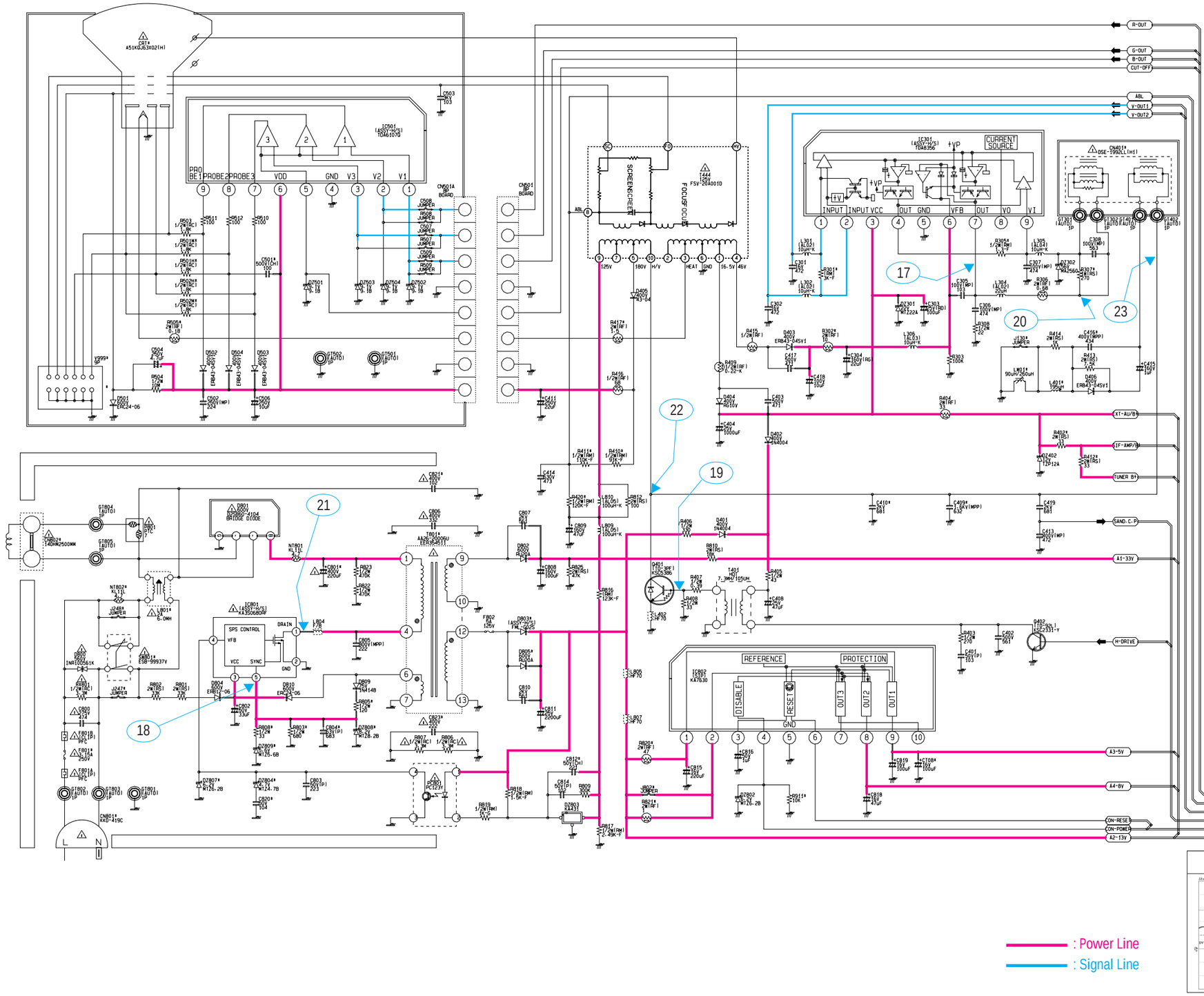
11-2 SOUND, EXT-A/V



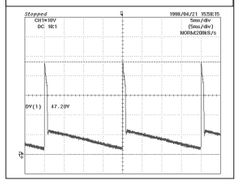
PIN 16



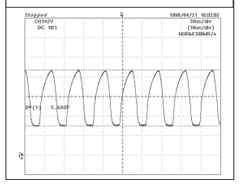
11-3 POWER / CRT / VERICAL / HORZIONTAL



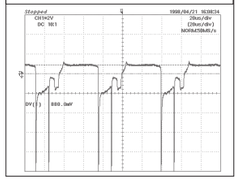
PIN 17



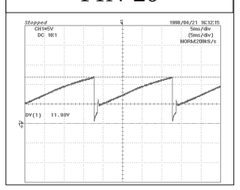
PIN 18



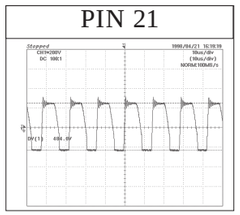
PIN 19



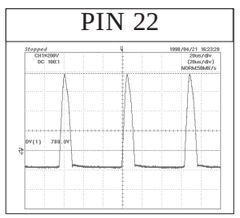
PIN 20



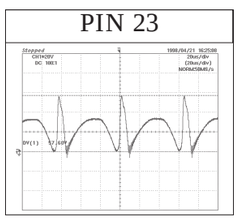
PIN 21



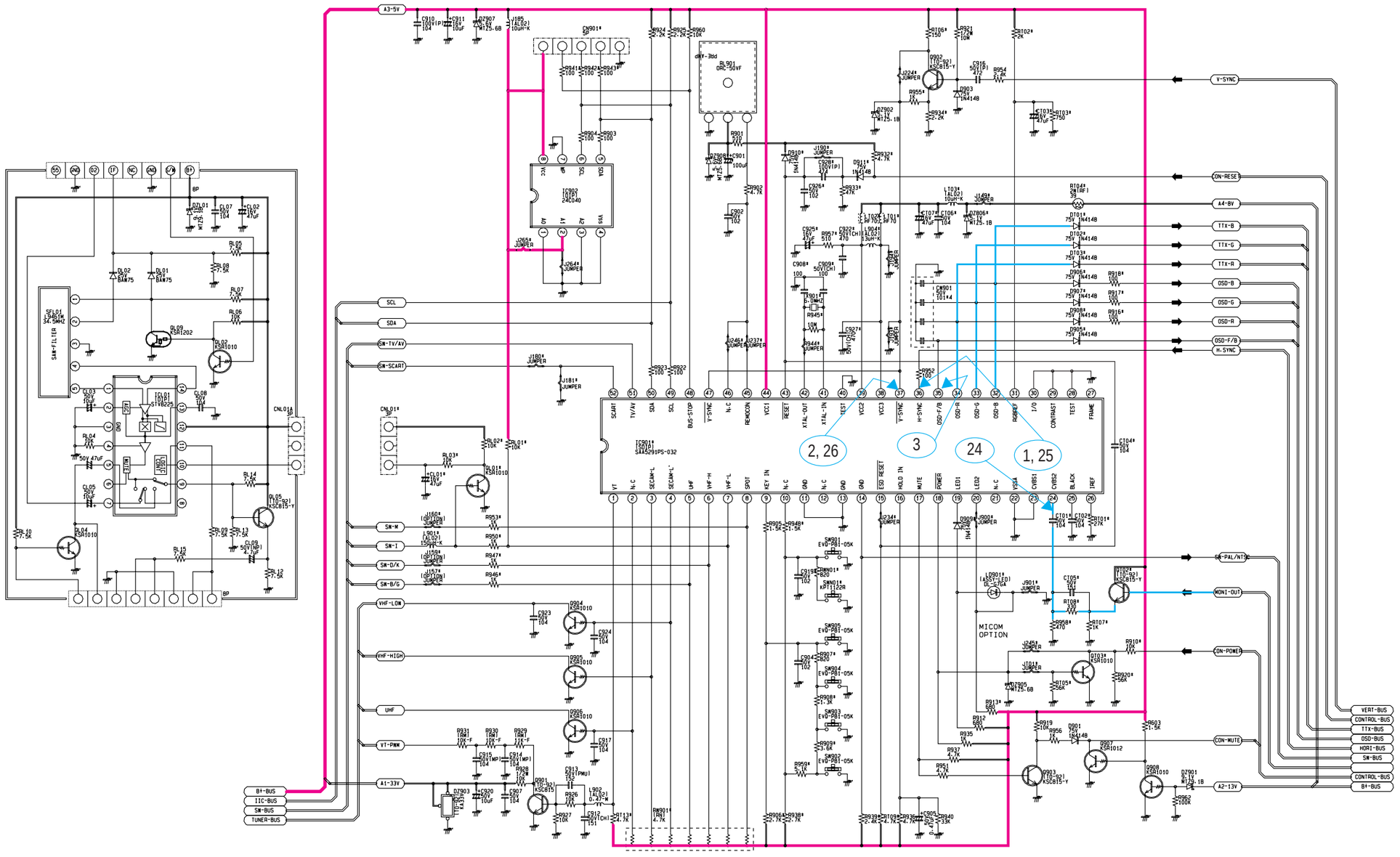
PIN 22



PIN 23



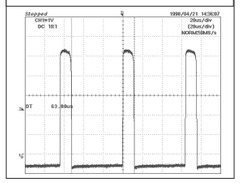
11-4 MICOM (NON-TTX,TTX)



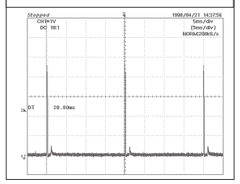
: Power Line

: Signal Line

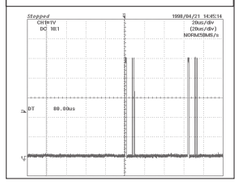
NON-TTX PIN 1



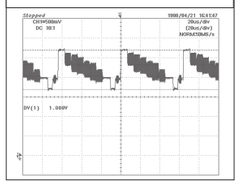
NON-TTX PIN 2



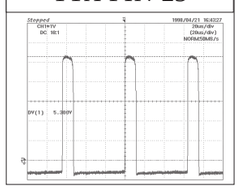
NON-TTX PIN 3



TTX PIN 24



TTX PIN 25



TTX PIN 26

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.

2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.

3. Do not tamper with the “Adjustment” screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.

2. After IC902 is replaced, warm up the TV for 10 seconds.

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence :

   White Balance
   Sub-Brightness
   Vertical Center
   Vertical Size
   Horizontal Size
   Fail Safe (This adjustment must be the last step).

2. If the EEPROM or CRT is replaced, set PVA to 45 (factory mode) and set SC as follows.

   14, 16 inch : 0
   20 inch : 10
   21 inch : 12

4-2 Factory/Service Mode

4-2-1 Procedure for the “Adjustment” Mode

1. This mode uses the standard remote control. The Service Mode is activated by entering the following remote-control sequence :

   (1) SLEEP→FACTORY.

   (2) STAND-BY→ DISPLAY→ P.STD→ MUTE →POWER ON.

2. The “SERVICE (FACTORY)” message will be displayed. The Service Mode has four components: Adjustment, Test Pattern, Option Bytes and Reset.

3. Access the Adjustment Mode by pressing the “VOLUME” keys (Up or Down). The adjustment parameters are listed in the accompanying table, and selected by pressing the CHANNEL keys (▲ ,▼).

4. Selection sequences for the all system:

   DOWN or UP key:
   AGC>VCO>SBT>SCT>SCR>SC>RG>GG>
   BG>CDL>BLU>PSL>PVS>PVA>PHS>NSR>
   STT

5. The VOLUME keys increase or decrease the adjustment values (stored in the non-volatile memory) when Adjustment Mode is cancelled.

6. Cancel the Adjustment Mode by re-pressing the “FACTORY” or “Power OFF” keys.

4-2-2 Main Adjustment Parameter

Table 4-1 Main Adjustment Parameter (Zilog, Phlips μ-com)				
FUNCTION	OSD ABBREVIATION	RANGE	INITIAL DATA	REMARK
AUTO GAIN CONTROL	AGC	0 ~ 63 STEP	10	TDA8842 TDA8841
VOLTAGE CONTROL OSCILLATOR	VCO	0 ~ 128 STEP	80	
		0 ~ 1 STEP	1 (For East Europe)	
SUB BRIGHT	SBT	0 ~ 23 STEP	8	
SUB CONTRAST	SCT	0 ~ 23 STEP	10	
SUB COLOR	SCR	0 ~ 23 STEP	10	
S-CORRECTION	SC	0 ~ 63 STEP	12	
RED DRIVE GAIN	RG	0 ~ 63 STEP	47	
GREEN DRIVE GAIN	GG	0 ~ 63 STEP	32	
BLUE DRIVE GAIN	BG	0 ~ 63 STEP	34	
CATHODE DRIVE LEVEL	CDL	0 ~ 7 STEP	4	
BLUE STRETCH MODE	BLU	0 ~ 3 STEP	0	
PAL VERTICAL SLOPE	PSL	0 ~ 63 STEP	32	
PAL VERTICAL SHIFT	PVS	0 ~ 63 STEP	32	
PAL VERTICAL AMPLITUDE	PVA	0 ~ 63 STEP	42	
PAL HORIZONTAL SHIFT	PHS	0 ~ 63 STEP	40	
NTSC SUB COLOR	NSR	0 ~ 23 STEP	7	
SUB TINT	STT	1 ~ 13 STEP	0	
TTX SUB-CONTRAST	TSS	0 ~ 63 STEP	16 (Only TTX Model)	

NOTE : PVS,PVA, PHS, parameters must be aligned using the 50Hz vertical-field rates.

4-2-3 Test Pattern (Aging Mode)

1. This mode can be used during servicing, or for confirming that the convergence and purity adjustments are correct.

2. Access the Test Pattern parameters by pressing a CHANNEL keys (▲ ,▼) while the Service Mode is on. The cursor will move to the test pattern. Press the VOLUME keys. On-screen display:

   • WHITE —— NON -TTX MICOM ONLY

   • AGING —— TTX MICOM

3. AGING Mode (Reference Only)

   This pattern is used for pre-heating the CRT during manufacturing —it is accessed in the factory by twice pressing the "SLEEP → FACTORY→FACTORY " key, then white pattern will be displayed.

   Even if the TV power is cut off, the Aging Mode is not cancelled, The aging mode is cancelled by repressing the "FACTORY" key or pressing the local "CH UP/DOWN" keys.

4-2-4 Option Bytes

In the Service Mode, various can be selected via the Option Bytes (8 bits each). Example:

SYSTEM OSD DISPLAY	BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT 1	BIT 0
BYTE 0 : 8 -			L (BIT : 0)	H (BIT : 8)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)
BYTE 1 : 0 -	L (BIT :0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)	L (BIT : 0)

TDA8842, CK SYSTEM, RCA JACK SYSTEM OSD DISPLAY

BYTE 0 : 11			L (BIT : 1)	H (BIT : 0)	L (BIT : 0)	H (BIT : 0)	L (BIT : 1)

4-2-4 (A) NON-TTX MICOM (SZM-173EC) OPTION BYTE (FOR CHINA/SINGAPORE/GERMAN ARMY)

	Destination	BYTE 0	BYTE 1
MP (Massproduction) OPTION BYTE	China	15	D8
	Singapore	57	58
	German Army	57	18

BYTE	BIT	LOW (0)	HIGH (1)	Application MICOM
BYTE 0	D7	NOT USED		MUST LOW
	D6	TV : NORMAL → ZOOM A/V :NORMAL → ZOOM	TV: NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	MUST = LOW : China (only) 16 : 9 (Delete)
	D5	NOT USED		MUST = LOW
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Mode (RCA Jack)	MUST = HIGH
	D3	Sound-I System Used	Sound-I System Not Used	
	D2 / D1	(see table below)		
	D0	TDA8374A	TDA8842	IC201 (ONE-CHIP) OPTION

D2	D1	COLOR SYSTEM	SOUND SYSTEM	Remark
0	0	● CK : AUTO (NO OSD)	"?" →B/G →D/K	China MP : CD German Army : CS
0	1	● CW : ■ RF : AUTO → PAL → SECAM → NT4.43 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58	"?" →B/G → D/K→ I	
1	0	● CD : ■ RF : AUTO → PAL → NT4.43 ■ A/V : AUTO → PAL → NT4.43 → NT3.58	"?" →D/K ↔ I	
1	1	● CS : ■ RF: AUTO →PAL →SECAM →NT4.43 →NT3.58 ■ A/V: AUTO →PAL →SECAM→NT4.43→NT3.58	"?" → B/G→D/K→ (I) → NT- M	D3 BIT OPTION

BYTE	BIT	LOW (0)	HIGH (1)	Application MICOM
BYTE 1	D7	TV OUT	MONITOR OUT	HIGH (For China)
	D6	English ONLY	English/Chinese	MUST = HIGH
	D5	AFT ON (always)	AFT OFF (after fine tuning)	BASIC = LOW
	D4	Existing Sharpness level (when using the TDA6108 RGB AMP)	Sharpness level up (when using the TDA6107Q RGB AMP)	BASIC = HIGH
	D3	No Auto Power On	Auto Power On	BASIC = HIGH
	D2	NTSC : 25KHz (NTSC TABLE) PAL : 50KHz (PAL TABLE)	NTSC : 25KHz (NTSC TABLE) PAL : 27KHz (NTSC TABLE)	
	D1 / D0	NOT USED (D1 D0 = MUST 00)		

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal
2. AUDIO MUTE during no signal
3. BLUE SCREEN ON/OFF
4. TIMER CLOCK ON/OFF
5. No CHILD LOCK

4-2-4 (B) NON-TTX MICOM (SZM-173EW/EE) OPTION BYTE (FOR EUROPE)

	Destination	BYTE 0	BYTE 1
MP OPTION BYTE	United Kingdom	C3	98
	France/Swiss	41	9E
	Western Europe (except UK)	45	98
	Eastern Europe	41	58

BYTE	BIT	LOW(0)	HIGH(1)	Remark
BYTE 0	D7	3 BAND	UHF ONLY	HIGH (UK only)
	D6	TV : NORMAL → ZOOM A/ : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	MUST = HIGH
	D5	MUST LOW		POLAND OPTION - R913 : 680Ω added - J901 :
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Mode (RCA Jack)	MUST = LOW
	D3	NOT USED		MUST = LOW
	D2 / D1	(see table below)		
	D0	TDA8374A	TDA8842	IC201 (ONE-CHIP) OPTION

D2	D1	SOUND SYSTEM	COLOR SYSTEM	Destination
0	0	(?) → B/G ↔ D/K : CK MODEL	AUTO : NO OSD	Eastern Europe/France/Swiss
0	1	I ONLY (NO OSD) : CI,CII MDL		United Kingdom
1	0	B/G ONLY (NO OSD) : CB,CX MDL		Western Europe
1	1	NOT USED		

BYTE	BIT	LOW(0)	HIGH(1)	Remark
BYTE 1	D7		English/German/Dutch/Italian/Spnish/ Swedish/Croatian/Yugo/Greek	Western Europe (SZM-173EW)
	D6		English/Romanian/Hungarian/Polish/ Czech/Bulgarian	Eastern Europe (SZM-173EE)
	D5	AFT ON (always)	AFT OFF (after fine tuning)	MUST = LOW
	D4	Existing sharpness level : TDA6108	Sharpness level up : TDA6107Q	MUST = HIGH
	D3	No Auto Power On	Auto Power On	MUST = HIGH
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)	NTSC : 25KHz(NTSC TABLE) PAL : 27KHz(NTSC TABLE)	- France/ Swiss : HIGH - Others : LOW
	D1	PAL / SECAM	SECAM - L	- France/Swiss (only) : HIGH - SZM-173EW (only)
	D0	MUST : LOW		

● P-STD Classification (CON./BRI./SHAR./COL)

STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
90/50/50/50	100/50/75/50	90/50/75/50	60/50/50/50	90/50/50/50

● Function Required: 1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE during no signal.
3. No BLUE SCREEN during no RF signal (Blue Screen during AV).
4. No TIMER. 5. No CHILD LOCK. 6. See "Detailed functions of CF".

4-2-4 C) NON-TTX MICOM (SZM-173ER) OPTION BYTE (FOR RUSSIA)

Destination	BYTE 0	BYTE 1
Russia,CIS	49	58
Australia	5D	18

<table>
<tr><th>BYTE</th><th>BIT</th><th>LOW(0)</th><th>HIGH(1)</th><th>Remark</th></tr>
<tr><td rowspan="8">BYTE 0</td><td>D7</td><td></td><td></td><td>MUST = LOW</td></tr>
<tr><td>D6</td><td>TV : NORMAL → ZOOM
A/V : NORMAL → ZOOM</td><td>TV : NORMAL → ZOOM → 16:9
A/V : NORMAL → ZOOM</td><td>MUST = HIGH</td></tr>
<tr><td>D5</td><td></td><td></td><td>MUST = LOW</td></tr>
<tr><td>D4</td><td>CH Up/down functional in the A/V Mode (SCART Jack)</td><td>CH Up/down not functional in the A/V Model (RCA Jack)</td><td></td></tr>
<tr><td>D3</td><td>PAL-I Used</td><td>PAL-I Not Used</td><td>MUST = HIGH</td></tr>
<tr><td>D2
D1</td><td colspan="2"><table>
<tr><th>D2</th><th>D1</th><th>SOUND SYSTEM</th><th>COLOR SYSTEM</th></tr>
<tr><td>0</td><td>0</td><td>(?) → B/G ↔ D/K : CK MODEL</td><td>AUTO : NO OSD</td></tr>
<tr><td>0</td><td>1</td><td>I ONLY (NO OSD) : CI,CII MDL</td><td></td></tr>
<tr><td>1</td><td>0</td><td>B/G ONLY (NO OSD) : CB,CX MDL</td><td></td></tr>
<tr><td>1</td><td>1</td><td>NOT USED</td><td></td></tr>
</table></td><td></td></tr>
<tr><td>D0</td><td>TDA8374A</td><td>TDA8842</td><td>IC201 (ONE-CHIP) OPTION</td></tr>
<tr><td rowspan="8">BYTE 1</td><td>D7</td><td></td><td></td><td>MUST = LOW</td></tr>
<tr><td>D6</td><td>English</td><td>English/Russian</td><td></td></tr>
<tr><td>D5</td><td>AFT ON (always)</td><td>AFT OFF (after fine tuning)</td><td>MUST = LOW</td></tr>
<tr><td>D4</td><td>Existing sharpness level (when using the TDA6108 RG AMP)</td><td>Sharpness level up (when using the TDA6107Q AMP)</td><td>MUST = HIGH</td></tr>
<tr><td>D3</td><td>No Auto Power On</td><td>Auto Power On</td><td>BASIC = HIGH</td></tr>
<tr><td>D2</td><td>NTSC: 25 KHz (NTSC TABLE)
PAL : 50 KHz (PAL TABLE)</td><td>NTSC : 25 KHz (NTSC TABLE)
PAL : 27 KHz (NTSC TABLE)</td><td></td></tr>
<tr><td>D1</td><td colspan="2" rowspan="2">NOT USED (MUST = LOW)</td><td rowspan="2"></td></tr>
<tr><td>D0</td></tr>
</table>

● P-STD Classification (CON/BRI/SHAR/COL)

STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
90/50/50/50	100/50/75/50	90/50/75/50	60/50/50/50	90/50/50/50

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal
2. AUDIO MUTE during no signal
3. BLUE SCREEN available
4. TIMER available
5. No CHILD LOCK

4-2-4 (D) NON-TTX MICOM (SZM-173AR/EA) OPTION BYTE (FOR MIDDLE RAST/AFRICA)

	Destination	BYTE 0	BYTE 1
MP OPTION BYTE	Middle East (EA or AR)	7F	58
	Africa (EA)	67	D8

BYTE	BIT	LOW (0)	HIGH (1)	Remark
BYTE 0	D7			MUST = LOW
	D6	TV : NORMAL → ZOOM A/V : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	MUST = HIGH
	D5	NOT USED	CHILD LOCK ON	MUST = HIGH
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Model (RCA Jack)	Middle East : HIGH Africa : LOW
	D3	Sound-I System Used	Sound-I System Not Used	Middle East : HIGH Africa : LOW
	D2 D1	(see table below)		
	D0	TDA8374A	TDA8842	IC201 (ONE-CHIP) OPTION

D2	D1	COLOR SYSTEM	SOUND SYSTEM
0	0	● CK : AUTO (NO OSD)	"?" → B/G → D/K
0	1	● CW : -. RF : AUTO → PAL → SECAM → NT4.43 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58	"?" → B/G → D/K → I
1	0	● CB : - RF : PAL ONLY - A/V : AUTO → PAL → NT4.43 → NT3.58	B/G ONLY (NO OSD)
1	1	● CS : -. RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58	"?" → B/G → D/K → I → NT-M →

BYTE	BIT	LOW (0)	HIGH (1)	Remark
BYTE 1	D7 D6	(see table below)		
	D5	AFT ON (always)	AFT OFF after fine tuning	MUST = LOW
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)	Sharpness level up (when using the TDA6107Q RGB AMP)	MUST = HIGH
	D3	No Auto Power On	Auto Power On	MUST = HIGH
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)	NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)	
	D1 D0	MUST : DO D1 = 00		

D7	D6	LANGUAGE	Remark
0	0	-	NOT USED
0	1	ENG / ARAB	Middle East
1	0	-	NOT USED
1	1	ENG / ARAB / FRENCH	EA VERSION (Africa ONLY)

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal
2. AUDIO MUTE during no signal.
3. BLUE SCREEN ON/OFF
4. TIMER (CLOCK ON/OFF)
5. CHILD LOCK ON (always)

4-2-4 (E) NON-TTX MICOM (SZM-173EV/ET) OPTION BYTE (FOR ASIA)

	Destination	BYTE 0	BYTE 1
OPTION BYTE	Vietnam/Malaysia (NO LINE STEREO)	5F	58
	Vietnam (LINE STEREO MODEL)	DF	D8
	Thailand	5D	58
	Indonesia	5D	5A
	India	5D	18

BYTE	BIT	LOW (0)	HIGH (1)	Remark
BYTE 0	D7	LINE STEREO OFF	LINE STEREO ON	SZM-173EV (only)
	D6	TV : NORMAL → ZOOM A/V : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	MUST = HIGH
	D5			MUST = LOW
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Mode (RCA Jack)	BASIC = HIGH
	D3	Sound-I System Used	Sound-I System Not Used	MUST = HIGH
	D2			

D2	D1	COLOR SYSTEM	SOUND SYSTEM	Destination
0	0	● CK :AUTO (NO OSD)	"?" → B/G → D/K	
0	1	● CW : -. RF : AUTO → PAL → SECAM → NT4.43 -. A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58	"?" → B/G → D/K → I	
1	0	● CB : - RF : PAL ONLY - A/V : AUTO → PAL → NT4.43 → NT3.58	B/G ONLY (NO OSD)	Indonesia/Thailand/ India
1	1	● CS: - RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 -A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58	"?" → B/G → D/K → I NT- M →	Vietnam Malaysia

BYTE	BIT	LOW (0)	HIGH (1)	Remark
BYTE 0	D0	TDA8374A	TDA8842	IC201 (ONE-CHIP) OPTION
BYTE 1	D7	TV OUT	MONITOR OUT	
	D6	English ONLY	English/Vietnamese/Indonesian/Malay	SZM-173EV
			English/Thai	SZM-173ET
	D5	AFT ON (always)	AFT OFF (after fine tuning)	
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)	Sharpness level up (when using the TDA6107Q RGB AMP)	MUST = HIGH
	D3	No Auto Power On	Auto Power On	BASIC = HIGH
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)	NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)	MUST = LOW
	D1	CLOCK DISPLAY OFF	CLOCK DISPLAY ON	Indonesia ONLY : HIGH
	D0	MUST = LOW		

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE during no signal.
3. BLUE SCREEN ON/OFF. 4. TIMER (CLOCK ON/OFF). 5. No CHILD LOCK

SZM -173ET (16K) : Z90203 → WITHOUT LINE STEREO
SZM -173EV (24K) : Z90234 → WITH LINE STEREO

4-2-4 (F) TTX MICOM (SZM-175EA/EP) OPTION BYTE (FOR MIDDLE EAST ASIA)

MP OPTION BYTE	Destination	Application MICOM	BYTE0	BYTE1
	Iran (Persian TTX)	SPM-175EP	1F	18
	Middle East (except Iran)	SPM-175EA	1F	18
	Africa		07	18

BYTE	BIT	LOW (0)	HIGH (1)	Application MICOM
BYTE 0	D7	NOT USED		ALL = LOW
	D6	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM → 16:9	MUST = LOW
	D5	NOT USED		ALL = LOW
	D4	CH Up/down functional in the A/V Mode (SCART Jack)	CH Up/down not functional in the A/V Mode (RCA Jack)	– Africa : SCART – Others : RCA
	D3	Sound-I System Used	Sound-I System Not Used	SOUND-I : Africa (only)
	D2 / D1	D2 D1 = 0 0 : ● CK : AUTO (NO OSD) — "?" → B/G → D/K 0 1 : ● CW : ■ RF : AUTO → PAL → SECAM → NT4.43 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58 — "?" → B/G → D/K → I 1 0 : ● CB : ■ RF : PAL ONLY (NO OSD) ■ A/V : AUTO → PAL → NT4.43 → NT3.58 — B/G ONLY (NO OSD) 1 1 : ● CS : ■ RF : AUTO → PAL → SECAM → NT4.43 → NT3.58 ■ A/V : AUTO → PAL → SECAM → NT4.43 → NT3.58 — "?" → B/G → D/K → I → NT → M		Remark: No sound system in the A/V MODE
	D0	TDA8374A	TDA 8842	
BYTE 1	D7 / D6 / D5	NOT USED		ALL = LOW
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)	Sharpness level up (when using the TDA6107Q RGB AMP)	ALL (BASIC = HIGH) → TEST Unnecessary
	D3	No Auto Power On	Auto Power On	ALL (BASIC = HIGH)
	D2	NTSC : 25 KHz (NTSC TABLE) PAL : 50 KHz (PAL TABLE)	NTSC : 25 KHz (NTSC TABLE) PAL : 27 KHz (NTSC TABLE)	
	D1 / D0	D1 D0 = MUST 00		MUST = LOW

● OSD language by micom

1. Persian (for Iran) : SPM-175EP : English/Persian (Iranian)
2. Arab (Middle East, Africa) : SPM-175EA : English/French/Arabian

● Function Required : 1. PICTURE OFF (after 15 minutes) during no signal
2. AUDIO MUTE (during no signal)
3. No BLUE
4. No TIMER SCREEN
5. No CHILD LOCK

4-2-4 (G) TTX MICOM (SPM-175EE/ER/EG) OPTION BYTE (FOR EUROPE)

	Destination	Application MICOM	BYTE 0	BYTE 1	LANGUAGE
MP OPTION BYTE	United Kingdom	SPM-175EE	83	18	See BYTE 1 D5
	Other Western Europe		05	18	
	Eastern Europe		01	38	
	France/Swiss	SPM-175E	01	5C	
	Yugo/Greece	SPM-175EG	05	18	English/Yugo/Greek
	Russia/Bulgaria	SPM-175ER	01	18	English/Russian/Bulgarian

BYTE	BIT	LOW(0)	HIGH(1)	Remark
BYTE 0	D7	3 BAND	UHF DNLY (UK only)	
	D6	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM	TV : NORMAL → ZOOM → 16:9 A/V : NORMAL → ZOOM → 16:9	
	D5	MUST = LOW	<POLAND OPTION> R913 : 680W added. J901 : Delete	
	D4	CH Up/Down functional in the A/V Mode (SCART Jack)	CH Up/Down not functional in the A/V Model (RCA Jack)	MUST = LOW
	D3	P-STD NORMAL	P-STD MAX	MUST = LOW
	D2, D1	see table below		
	D0	TDA8374A	TDA8842	ALL = LOW
BYTE 1	D7	NOT USED		
	D6	PAL/SECAM	SECAM - L	HIGH (CF only)
	D5	English/German/French/Dutch/ Italian/Spanish/Swedish	English/Croatian/Romanian/ Hungarian/Polish/Czech	This bit is only appied to SPM-175EE
	D4	Existing sharpness level (when using the TDA6108 RGB AMP)	Sharpness level up (when using the TDA6107Q AMP)	ALL BASIC = HIGH → TEST Unnecessary
	D3	No Auto Power On	Auto Power On	ALL BASIC = HIGH
	D2	NTSC : 25KHz (NTSC TABLE) PAL : 50KHz (PAL TABLE)	NTSC : 25KHz (NTSC TABLE) PAL : 27KHz (NTSC TABLE)	ALL (RF VOL. CURVE) BASIC :LOW
	D1	MUST = LOW		
	D0	MUST = LOW		

BYTE 0, D2 / D1:

D2	D1	SOUND SYSTEM	COLOR SYSTEM	Remark
0	0	(?) → B/G ↔ D/K : CK MODEL	AUTO (NO OSD)	No SOUND SYSTEM in the A/V Mode
0	1	I ONLY (NO OSD) : CI,CII MODEL		
1	0	B/G ONLY (NO OSD): CB,CX MODEL		
1	1	NOT USED		

● P-STD Classification (CON/BRI/SHRP/COL)

D3 BIT	STANDARD MODE	DYNAMIC MODE	MOVIE MODE	MILD MODE	CUSTOM MODE
0	90/50/50/50	100/50/50/50	75/55/50/50	60/50/50/50	90/55/25/50

● Function Required :1. PICTURE OFF (after 15 minutes) during no signal. 2. AUDIO MUTE (during no signal).
3. No BLUE SCREEN. 4. No TIMER (CLOCK /OFF). 5. No CHILD LOCK

4-2-5 RESET

The Reset Mode is used during factory inspection.
Function Reset:

1.	Channels	Add/Erase
2.	Sort	Non
3.	System	Auto
4.	Timer	off
5.	Blue Screen	off
6.	Child Lock	off
7.	Picture	standard
8.	Volume	10
9.	CH. Skip	Erased

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.

2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.

3. Use the specified test equipment or its equivalent.

4. Correct impedance matching is essential.

5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.

6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.

7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.

8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 30 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.