



Television

Chassis

ETC210 / ETC210 - PTV

Section :

Power supply

H_Deflection circuit

V_Deflection circuit

HF-IF circuit

Input / Output - Scart

Mechanical

Control panel

Data processing

Audio processing

Video processing

Picture Tube - Display

General





Television

Chassis ETC210 / ETC210 - PTV 

Power supply

Symptom description

ETC210

After having switch OFF, it is impossible to switch ON again.





H_Deflection circuit

Symptom description

ETC210

Evolution of DST (28"- 16/9).

Evolution of DST (29"- 4/3).





Television

Chassis ETC210 / ETC210 - PTV 

Data processing

Symptom description

ETC210

The tone line in the sound menu (menu user) is not stored.





Television

Chassis ETC210 / ETC210 - PTV 

Picture Tube - Display

Symptom description

ETC210 - PTV

Evolution projection tube (1).

Evolution projection tube (2).





Television

Chassis ETC210 / ETC210 - PTV 

General

Symptom description

ETC210 / ETC210 - PTV

Correction PART N° of capacitor CP110.



TECHNICAL INFORMATION N°2003 - 49

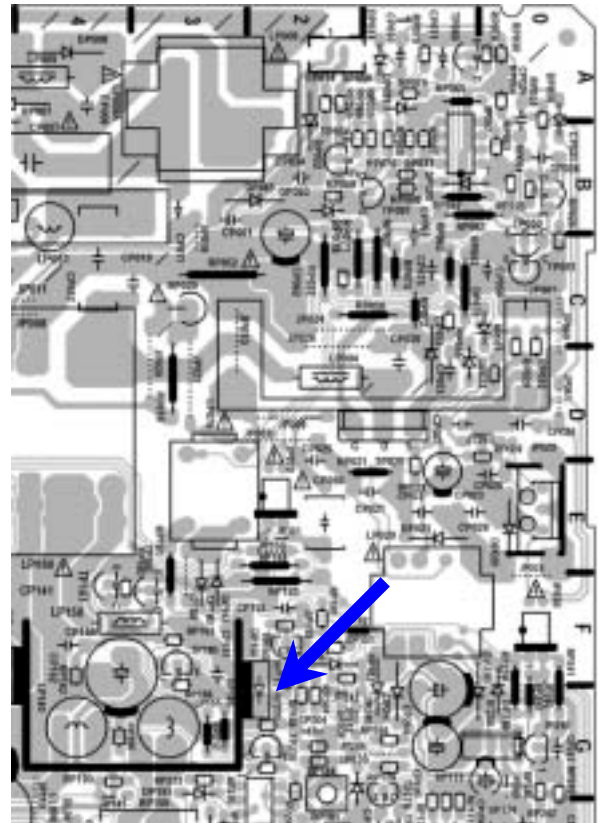
Chassis : ETC210

Symptom / Problem observed :

After having switch OFF the TV by the mains switch, it is impossible to switch it ON again.

Solution :

Change DP150 diode RGP15G by the model MUR120 (**PART No 25474830**).



IRIS Code : The code mentioned below must be used to report the failure on the warrantee claims form; we have included it to make fault report easier and the data more reliable.

Symptom	Part code number	Qty	Position	Section	D.Code	R.Code
1 1 1 X	2 5 4 7 4 8 3 0	0 1	D P 1 5 0	P S U	Y	A

You do not need to write anything in the white boxes.



TECHNICAL INFORMATION N°2003 - 52

Châssis : ETC210 (28" - 16/9 - With TFT Tube Videocolor)

Subject : Evolution of DST

The chassis have been equipped with 2 different versions of DST (position LL008).

- 1st Version **PART No 10825850.**
- 2nd Version **PART No 10855120.**

Before placing your order, check the version used in your set.

For the replacement of the 1st version by the 2nd version, change following parts :

- Change CL130 and CL131 capacitor from 2nF to 1.3nF 2.5% 1.6KV
- Change RL044 from 280K Ω to 178K Ω 1% 0.250W.

Nota : A kit including all parts is proposed under the PART No 35753670.



TECHNICAL INFORMATION N°2003 - 53

Chassis : ETC210 (29" - 4/3 - with TFT Tube Videocolor)

Subject : Evolution of DST

The chassis have been equipped with 2 different versions of DST (position LL008).

- 1st Version **PART No 10775830.**
- 2nd Version **PART No 10829180.**

Before placing your order, check the version used in your set.

For the replacement of the 1st version by the 2nd version, change following parts :

- Change CL130 and CL131 capacitor from 3.8nF to 3.2nF 2.5% 1.6KV.
- Change RL044 from 549K Ω to 464K Ω 1% 0.250W.

Nota : A kit including all parts is proposed under the PART No 35753680.



TECHNICAL INFORMATION N°2004 - 14

Chassis : ETC210

Symptom / Problem Observed :

The tone line in the sound menu (menu user) is not stored after main switch OFF or Stand-by.

Solution :

Replace the software (IR002) by the new V3.02-0 version **PART No 25743360.**

IRIS Code : The code mentioned below must be used to report the failure on the warrantee claims form; we have included it to make fault report easier and the data more reliable.

Symptom	Part code number	Qty	Position	Section	D.Code	R.Code
1 7 2 X	2 5 7 4 3 3 6 0	0 1	I R 0 0 2	S F T	1	2

You do not need to write anything in the white boxes.

TECHNICAL INFORMATION N°2004 - 09

**Chassis : ETC210 - PTV
42KH412GR - 42KH413S - 46KH412S - 46KH413S**

Subject : Evolution projection tube

The set have been equipped with two models of optical lens, associated with projection tube, aren't interchangeable (optical lens DELTA 40 or SEKINOS).

For maintenance, the codes of the projection tube, associated each model of optical lens, are indicated in the table below.

Optical lens with projectlon tube	PART N° (projection tube)		
	Green	Blue	Red
Hitachi Projection Tube With Optical Lens DELTA 40	25578480	25578470	25578460
Hitachi Projection Tube With Optical Lens SEKINOS	25733540	25733550	25733530



TECHNICAL INFORMATION N°2004 - 10

Chassis : 42KH412S (ETC210 - PTV)

Subject : Evolution projection tube

The set have been equipped with three models of optical lens, associated with several projection tube, aren't interchangeable.

For maintenance, the PART N° of the projection tube, associated each model of optical lens, are indicated in the table below.

Tubes Cathodique	Code des tubes cathodique		
	Vert	Bleu	Rouge
Tube Hitachi Avec la lentille DELTA 40	25578480	25578470	25578460
Tube Panasonic Avec la lentille DELTA 40	25735130	25735150	25735140
Tube Panasonic Avec la lentille SEKINOS	25738080	25738090	25738070
Tube Hitachi Avec la lentille SEKINOS	25733540	25733550	25733530
Tube Hitachi Avec la lentille ENPLAS	25729560	25729570	25729550



INFORMATION - INFORMATIONS - INFORMATIONEN - INFORMAZIONE - INFORMACIONES

EN OUT OF PRODUCTION MODE :

To set TV into "out of production mode" (letter **P** at the screen):

- Press the **VOL** - button on the TV keyboard until the letter "P" disappears.

FR SORTIE DE MODE PRODUCTION

Pour sortir le téléviseur du mode production (lettre P à l'écran):

- Appuyer sur la touche **VOL**- du clavier du téléviseur jusqu'à la disparition de la lettre "**P**".

DE VERLASSEN DES PRODUKTIONSMODE:

"Lautstärke -" am Nahbedienfeld drücken bis der Cursor am linken Anschlag ist und dann noch weitere ca. 10 s halten bis das eingeblendete "**P**" verschwindet.

IT USCITA DA PRODUCTION MODE:

Per uscire dalla condizione " **Production mode**" (lettera P presente sullo schermo)

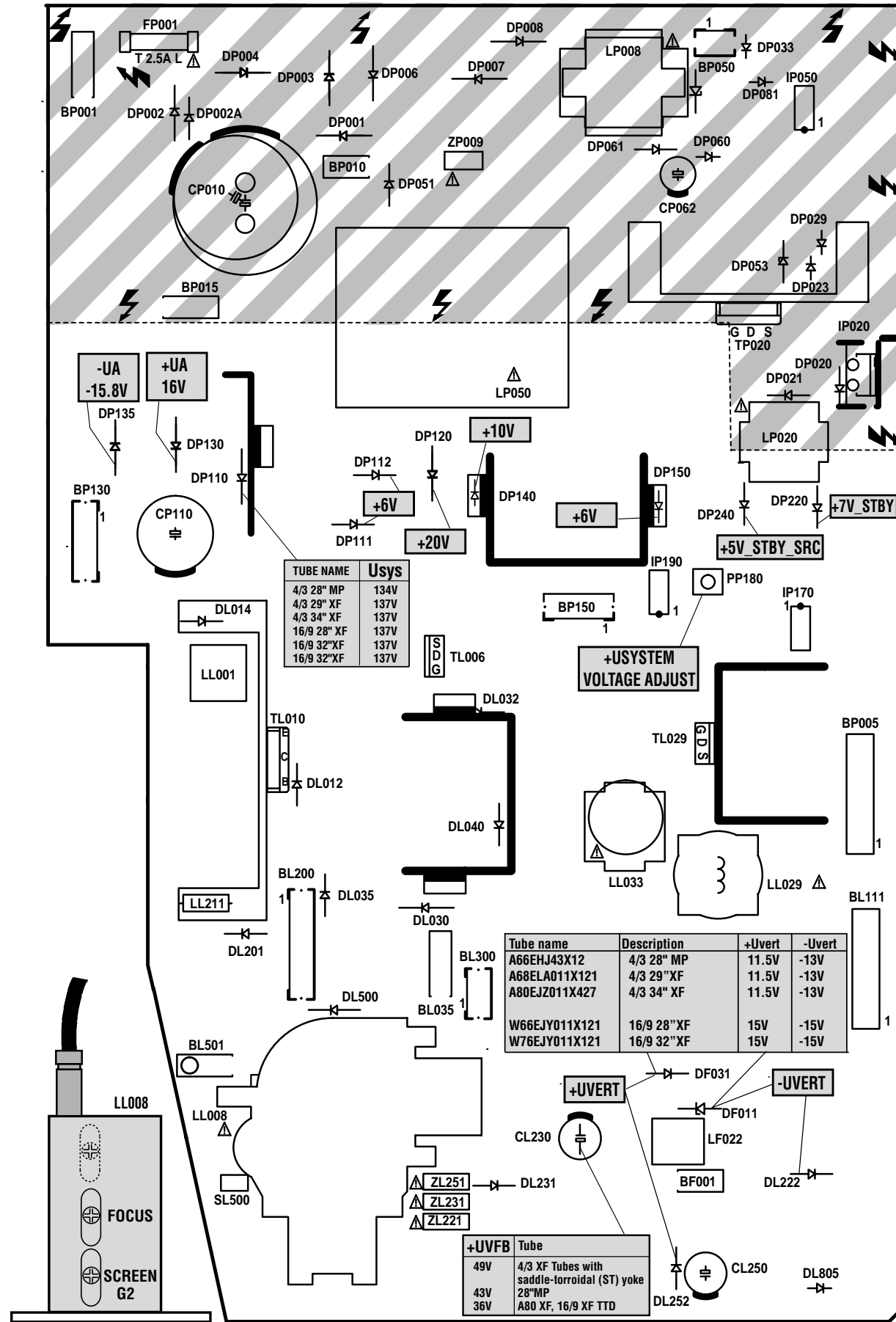
- Premere il tasto-volume sulla tastiera comandi del TV fino a che la lettera "**P**" scompare.


ES SALIDA DEL MODO PRODUCCION.


Para salir del 'modo producción', (aparece una letra **P** en la pantalla):

- Mantener pulsada la tecla "**Volumen** -" del teclado hasta que la letra "**P**" desaparezca.

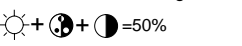



LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES -
SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO -
SITUACIÓN DE LOS AJUSTES



 Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chasis conectada a la red

 Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

U Sys	PP180	Standard TV - Settings : TV to AV1 : Black test pattern 	 DP 110	<table border="1"> <thead> <tr> <th>Tube name</th> <th>Description</th> <th>Usys jumper</th> <th>RP900 Usys divid.</th> <th>Usys</th> </tr> </thead> <tbody> <tr> <td>A66EHJ13X12</td> <td>4/3 28"MP</td> <td>JP911</td> <td>33K2</td> <td>134V</td> </tr> <tr> <td>A68ELA011X121</td> <td>4/3 29"XF</td> <td>JP912</td> <td>33K2</td> <td>137V</td> </tr> <tr> <td>A80EJZ011X427</td> <td>4/3 34"XF</td> <td>JP912</td> <td>33K2</td> <td>137V</td> </tr> <tr> <td>W66EJY011X122</td> <td>16/9 28"XF</td> <td>JP912</td> <td>33K2</td> <td>137V</td> </tr> <tr> <td>W76EJY011X122</td> <td>16/9 32"XF</td> <td>JP912</td> <td>33K2</td> <td>137V</td> </tr> </tbody> </table>	Tube name	Description	Usys jumper	RP900 Usys divid.	Usys	A66EHJ13X12	4/3 28"MP	JP911	33K2	134V	A68ELA011X121	4/3 29"XF	JP912	33K2	137V	A80EJZ011X427	4/3 34"XF	JP912	33K2	137V	W66EJY011X122	16/9 28"XF	JP912	33K2	137V	W76EJY011X122	16/9 32"XF	JP912	33K2	137V
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U G2 SERVICE MODE	SERVICE MODE G2 potentiometer : SCREEN	<p>-Select and enable the "G2 Alignment" item in VIDEO menu of the Service Mode : the displayed will change to a full black OSD screen. The following adjustment is best carried in semi-darkness: - Adjust the SCREEN potentiometer (LL008) so that the retrace lines are just visible. - Now carefully adjust the SCREEN potentiometer until the retrace lines just become invisible. - Press any RCU key to leave the G2 alignment. Note : If the G2 value is set too low, the chassis will display error code 36 (tube does not get warm in time).</p> <p>- Sélectionner et valider le réglage "G2 Alignment" dans le menu Vidéo de Service Mode: l'écran devient totalement noir. En obscurité: - Régler le potentiomètre "SCREEN" (LL008) pour apercevoir le retour des lignes. - Régler ensuite le potentiomètre "SCREEN" pour rendre juste invisible les lignes de retour. - Appuyer sur une des touches de la télécommande utilisateur pour sortir du mode G2 Alignment. Note : En cas de réglage G2 trop faible le chassis passe en code panne 36 (absence de l'information tube chaud.</p> <p>- Wählen Sie im Service-Mode im Menü VIDEO die Funktion "G2 Alignment" an: der Bildschirm wird schwarz. Die folgenden Einstellungen sollten in einem abgedunkelten Raum vorgenommen werden. - Stellen Sie den Einsteller SCREEN (am DST LL008) so ein, dass Rücklaufstreifen sichtbar werden. - Stellen Sie den Einsteller SCREEN so ein, dass die Rücklaufstreifen gerade unsichtbar werden. - Drücken Sie irgendeine Taste auf der Fernbedienung um den G2-Abgleich zu verlassen. Achtung: Wenn die Schirmgitter- (G2-) Einstellung zu niedrig ist, kann der Fehlercode 36 (Bildrohr nicht rechtzeitig aufgeheizt) angezeigt werden.</p> <p>Selezionare e abilitare "G2 Alignment" interno al menu VIDEO del Service Mode: Verrà visualizzato uno schermo nero. In condizione con ambiente scuro. Regolare il potenziometro SCREEN (LL008) per rendere visibili le ritraccie sullo schermo Regolare il potenziometro SCREEN per eliminare le ritraccie sullo schermo Premere un tasto del telecomando per abbandonare G2 alignment. NOTA: se la regolazione della tensione G2 è troppo bassa il telaio visualizzerà il codice 36 (il tubo non raggiunge la temperatura nel tempo richiesto)</p> <p>- Seleccionar y validar la línea del "ajuste G2" en el menú VIDEO del Modo Servicio : La pantalla se pondrá oscura y el OSD pasará a color negro. Cuando esté oscura: - Ajustar el potenciómetro SCREEN (LL008) hasta hacer visibles las líneas de retrazado. - Ajustar el potenciómetro SCREEN justo, hasta hacer invisibles las líneas de retrazado. - Pulsar cualquier tecla del telemando para salir del ajuste de G2. Nota: Si el valor del ajuste de G2 es muy bajo, el chasis puede indicar el código de error 36 (TRC no se calienta en el tiempo establecido)</p>																																
FOCUS	FOCUS	Standard TV - Settings : TV to AV1 Test pattern 	 Sharp picture																															

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE - ENTRADA/SALIDA MODO SERVICIO

1 ACCESSING SERVICE MODE

1 ACCES AU MODE SERVICE

1 EINSTIEG IN DEN SERVICE MODE

1 ACCESSO AL SERVICE MODE

1 ACCESO AL MODO SERVICIO

TV Control Panel Access

Accès avec le clavier du téléviseur

Zugriff über die Tastatur des Fernsehgeräts

tramite i comandi del televisore

Acceso panel control TV

- Switch the TV into "Standby" mode by pressing the Standby button on the RCU.
- Wait till the TV goes into the standby.
- Press the VOL- button and then the PR- button on the TV keyboard.
- Hold them down for more than 8 seconds.
- After the normal switch on time, when the 8 seconds have elapsed, the main service menu appears on the screen.

- Mettre le téléviseur en position "veille" avec la télécommande utilisateur.
- Appuyer sur la touche VOL- puis sur la touche PR- du clavier du téléviseur.
- Maintenir enfoncées ces touches ensemble plus de 8 secondes.
- Après le temps normal de mise en fonctionnement et lorsque les 8 secondes sont écoulées, le menu principal du Mode Service apparaît.

- Schalten Sie das Gerät mit der Fernbedienung in Standby.
- Drücken Sie die VOL- Taste und dann die PR-Taste am Nahbedienteil des Gerätes. Halten Sie beide Tasten für länger als 8 Sekunden gedrückt.
- Nach der normalen Einschaltzeit erscheint auf dem Bildschirm das Menü des Service-Modes.

- Posizionare il TV nel modo "Standby" usando il tasto standby del telecomando. Attendere che il TV si posizioni in standby.
- Premere prima il tasto VOL- e poi il tasto PR- sulla tastiera del TV. Mantenere premuto i due tasti per più di 8 secondi.
- Dopo circa 8 secondi il TV si accenderà mostrando sullo schermo il menu service.

- Con el TV encendido, apagarlo con la tecla "Standby" del telemando. Asegurarse de que el aparato ha pasado a "Standby".
- Pulsar primero, la tecla VOL- y después PR- del teclado del TV. Mantenerlas pulsadas al mismo tiempo durante unos 8 segundos
- Después del arranque normal, cuando hayan pasado los 8 segundos, aparecerá el menú principal del Modo Servicio

```
Soft-Ver. V1.00-5
Config. W5Z--V AB7F
Serial-No. AHN456789

I> QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF
SOUND SETTINGS
ERROR CODES
CONVERGENCE
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```

- Note :**
In service mode :
- The child lock function is re-initialized
 - Clear any wake-up/sleep timers
 - Pin 8 of the scart plug has to be ignored.
 - AV- Link WSS detection and letterbox detection (autoformat) have to be disabled.
 - Automatic standby functions, in case of no antenna signal have to be disabled.
 - Adjust sharpness to middle (nominal)
 - Installation Mode disabled.
 - Default format and zoom.

- Note :**
En mode service:
- Le verrouillage parental est effacé (réinitialisé).
 - La programmation des heures "veille/matin" est annulée.
 - Pin 8 de la prise SCART ignorée.
 - AV- Link , la détection WSS et la détection letterbox ne sont pas validées.
 - La fonction de veille automatique en cas d'absence de signal d'antenne n'est pas validée.
 - Contour en valeur médiane (nominal)
 - Le mode d'installation n'est pas valide.
 - Zoom et format ignorés.

- Anmerkung:**
Im SERVICE MODE :
- wird die Kindersicherung gelöscht.
 - werden alle Weck-, Schlummer-Timer gelöscht.
 - wird die SCART - Schaltspannung nicht ausgewertet.
 - AV-Link, WSS- und Letterbox-Detektion (Autoformat) sind abgeschaltet.
 - wird die Automatische Abschaltung bei fehlendem Antennensignal gesperrt.
 - Stellen Sie den Schärfe regler in Mittelstellung.
 - wird der Installations-Modus gesperrt.
 - wird das Standardformat bzw. der Standard-Zoom-modus gewählt.

- Nota :**
Nel service mode:
- La funzione Blocco Bambini è reinizializzata.
 - Cancella qualsiasi wake-up/sleep timers.
 - Il piedino 8 della scart è ignorato.
 - La rilevazione AV-Link WSS e rilevazione letterbox (formato) è stata disabilitata.
 - Funzione automatica di standby, nel caso di mancanza del segnale d'antenna è disabilitata.
 - Forzare Sharpness al centro (nominal)
 - Il Modo Install disabilitato.
 - Formato ignorati e zoom.

- Nota :**
En modo servicio:
- La función "Bloqueo niños" es reinicializada.
 - Borrar despertador/función sleep
 - La patilla 8 del SCART es ignorada
 - La detección de AV- Link, WSS y "modo buzón" (autoformato) se desactiva.
 - El apagado automático en caso de ausencia de señal de antena es desactivado.
 - Situar la NITIDEZ en el punto medio (nominal)
 - El Modo Instalación es desactivado.
 - Zoom y formato ignorados.

2 TEMPORARY EXIT FROM SERVICE MODE

2 SORTIE TEMPORAIRE DU MODE SERVICE

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

2 USCITA TEMPORANEA DAL SERVICE MODE

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Press Exit on the Remote control.
- Everyday use menu can be accessed via Menu button. (Text and EPG not available)

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche "Menu". (Télétexte et EPG non valides).

- Auf der Fernbedienung EXIT drücken
- Mit der Taste MENÜ gelangen Sie zum Menü ÜBERSICHT (Videotext und EPG sind nicht verfügbar)

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu. (Text and EPG disabilitati).

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano. (Teletexto y EPG no disponibles).

- Field Service Menu can be re-entered via Blue button.

- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

- Mit der blauen Taste gelangen Sie zurück in den Service-Mode.

- È possibile rientrate nel Menu Service tramite il pulsante Blue.

- Puede entrar al Menú Servicio con el botón azul.

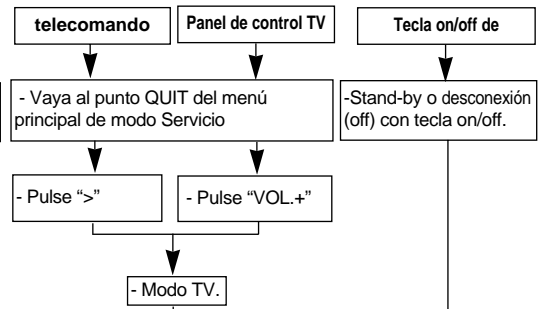
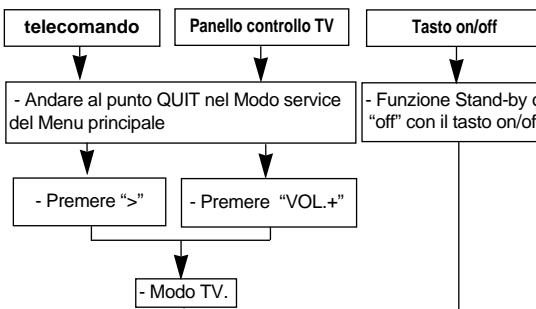
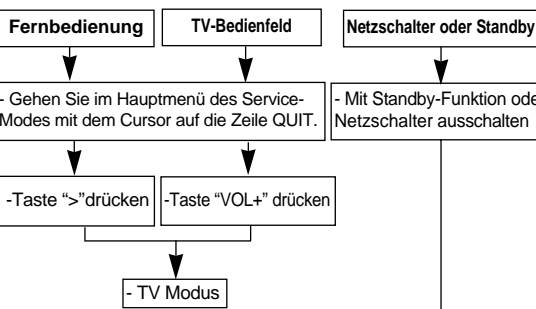
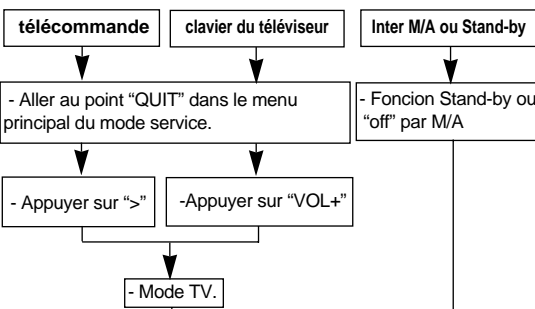
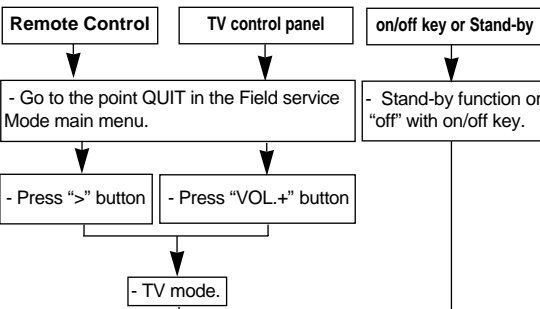
3 EXITING FROM SERVICE MODE

3 SORTIE DEFINITIVE DU MODE SERVICE

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODES

3 USCIRE DAL SERVICE MODE

3 SALIDA DEL MODO SERVICIO



Values or adjustments are no stored before exiting from service mode will not be written into the NVM

Les valeurs ou réglages non mémorisés avant la sortie ne seront pas écrites en NVM.

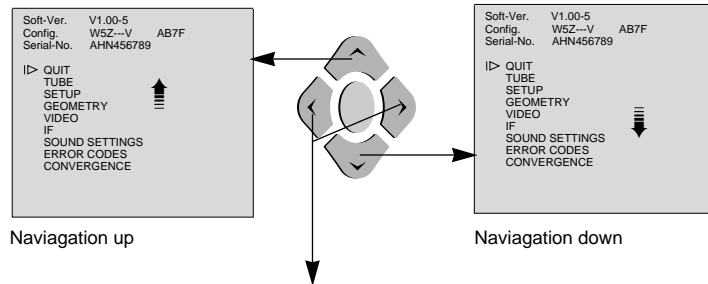
Werte und Einstellungen, die nicht vor dem Verlassen des Service-Modes gespeichert wurden, werden nicht in den Permenentspeicher (EEPROM) übernommen.

Valori e regolazioni non memorizzati prima di uscire dal Modo service e non vengono scritti nell'NVM

Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en el NVM

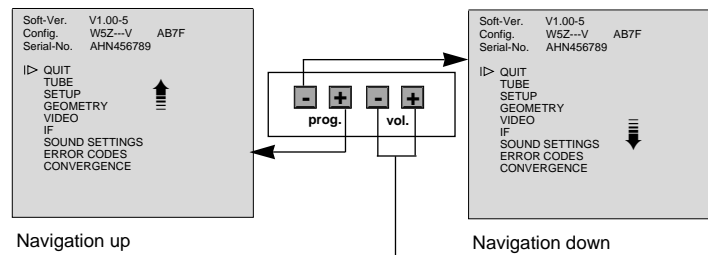
**II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE
SUCHE IN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO**

**1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG
TELECOMANDO - MANDO A DISTANCIA**



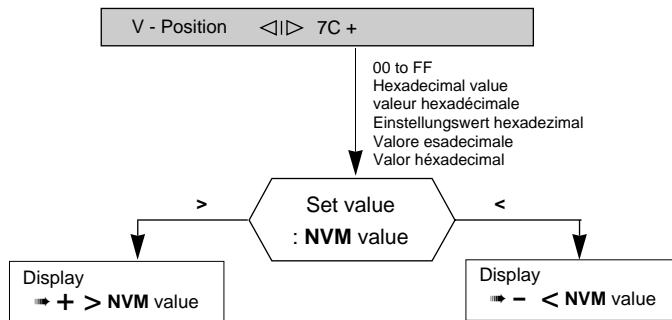
- Select option
 - Option anwählen
 - Selezionare l'opzione
 - Seleccionar opción
- "Change" value } > → VALUE ↗
 "Wert "ändern" }
 "Cambiare" valore } < → VALUE ↘
 "Cambiar" valor }

**2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES
FERNSEHGERÄTS - COMANDI DEL TELEVISORE -**



- Select option
 - Option anwählen
 - Selezionare l'opzione
 - Seleccionar opción
- "Change" value } Vol. + → VALUE ↗
 "Wert "ändern" } Vol. - → VALUE ↘
 "Cambiare" valore }
 "Cambiar" valor }

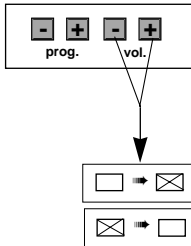
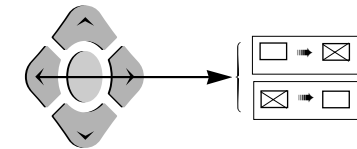
**3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES
VALEURS - ANZEIGE DES EINSTELLUNGSWERTES
VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE -
VISUALIZACION DEL VALOR DE AJUSTE**



**4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS
EIN-UND AUSSCHALTFUNKTIONEN - FUNZIONI DI
COMMUTAZIONE - FUNCION CONMUTACION**

To enable a function check (tick) the box.
 Pour valider une fonction cocher la case correspondante
 Zum Implementieren einer Funktion das Kontrollkästchen aktivieren (ankreuzen)
 Per implementare una funzione di verifica, (vistare) la casella
 Para poner en fucionamiento una función verifique (señale) la casilla

: Implemented function : No implemented function



**5 STORING VALUES IN MEMORY - MEMORISATION DES
VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I
VALORI - VALORES ALMACENADOS EN LA MEMORIA**

After setting, the values are stored in NVM.
 Après réglages les valeurs sont mémorisées en NVM.
 Nach dem Einstellen werden die Werte im NVM gespeichert.
 Dopo la regolazione i valori vengono memorizzati in NVM.
 Después del ajuste, los valores son almacenados en NVM

The box becomes
 During alignment, values are temporarily stored in RAM.
 En cours d'alignement les valeurs sont mémorisées temporairement en RAM
 Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
 Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
 Durante el alineamento, los valores son almacenados temporalmente en RAM

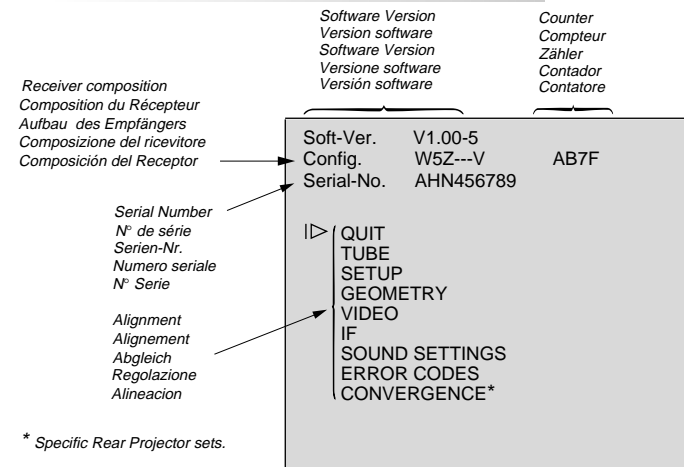
Store ➡ Copies RAM values into NVM
 Copie la valeur RAM en NVM
 Kopieren des Wertes von RAM nach NVM
 Copiare i valori RAM in NVM
 Copiar valores RAM en NVM

Restore ➡ Copies all values from NVM into RAM.
 Copie toutes les valeurs des données NVM en RAM
 Kopiert alle NVM-Datenwerte in des RAM
 Copiare tutti i valori da NVM sulla RAM
 Copia todos los valores de NVM a RAM

Default ➡ All the default values of a page in use are stored in RAM.
 L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
 Sämtliche Standardwerte der aktuellen Seite werden ins RAM geladen
 Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
 Todos los valores por defecto de la página en curso están almacenados en RAM.

**III - LITE-MENU FOR FIELD SERVICE MODE -
MENUS DU MODE SERVICE**

I MAIN MENU - MENU PRINCIPAL - HAUPTMENÜ



* Specific Rear Projector sets.

**TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION -
CONFIGURAZIONE DEL TV - CONFIGURACIÓN Y TV**

Config. W5Z.....V

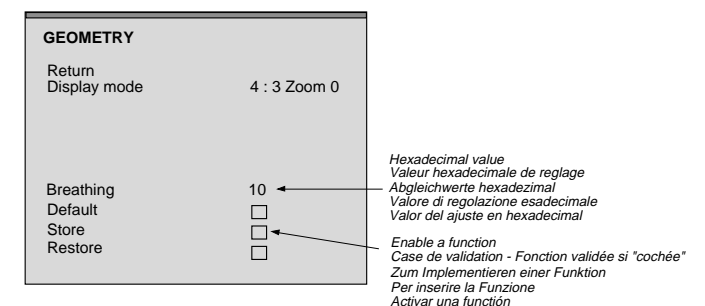
Character 1 : Tube type : "A"= 4:3 , "W" =16:9
 Character 2 : Teletext external memory detected: "T"=128 page memory; "-" = not (only internal memory)
 Character 3 : Ambient Sensor : "S"= detected, "-" = not (ETC210).
 Character 4 : Chassis variant : "N"=Nicam, "V" =Virtual Dolby, "D"=Dolby prologic
 Character 5 : Noise reduction upconversion memory detected : "N"= detected; "-" = not
 Character 6 : Not used / spare
 Character 7 : Not used / spare

SERIAL-N° A15...

Character 1 : Factory, A= Angers, B= Tarancon, Z= Zyrardow
 Character 2 : Year : , H= 1996, J= 1997 etc. (International code UTEC90511)
 Character 3 : Month, from 1= January to 9=September.... D=December.
 Character 4-9 : Serial N° in the month (from 000000 to 999999)
 Character 10-18 : Factory reserved

TIME COUNTER - COMPTEUR DE TEMPS - ZÄHLER - CONTATORE - CONTADOR
 The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
 The display is hexadecimal.
 Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
 Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadezimal.
 Il contatore indica il numero di ore di servizio del TV. Puo' contare da 0 a 65535. La visualizzazione è esadecimale.
 El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU - UNTERMENÜ



Hexadecimal value
 Valeur hexadécimale de réglage
 Abgleichwerte hexadécimal
 Valore di regolazione esadecimale
 Valor del ajuste en hexadecimal

Enable a function
 Case de validation - Fonction validée si "cochée"
 Zum Implementieren einer Funktion
 Per inserire la Funzione
 Activar una función

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

TUBE

Return

Tube type W66EGV

Store

Restore

SETUP

Return

Clear Progs.

Std. Sound Preset

Brand Thomson

Kbd. Config. Default...

Subwoofer

Feature Pack

Pict. Rotate

Bus Quiet

WSS

Cyrillic Version

Default

Store

Restore

TUBE

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenü. El menü Field Service Mode aparece.

Press </>: remote control or Vol+/- TV key.

SETUP

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenü. El menü Field Service Mode aparece.

Press </>: remote control or Vol+/- TV key.

Tube type

After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default values are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected. See below the tube type number list. Définit le tube exact après changement de NVM Les nouvelles valeurs de tubes (avec video et géométrie) sont actives de suite. Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Clear Prog.

Clears all programs stored in memory and resets all Picture and Sound settings to the factory values and returns the TV to the "Out of factory" mode. The selection is a long press action (2.5 seconds). Efface tous les programmes mémorisés, initialise les valeurs SON et IMAGES aux valeurs usines et retourne le TV en mode "sortie usine". Fonction valide par une longue pression (>2.5s.) sur la touche de sélection </>.

Nach dem Tausch des NVM (EEPROM) muß der richtige Bildrohrtyp eingegeben werden. Es werden dann sofort die entsprechenden Geometrie-und Video-Defaultwerte aktiviert. Variable Geometrie-und Videowerte müssen mit "STORE" in das NVM geschrieben werden. Liste der Röhren: siehe unten.

Std. Sound Preset

Sets the default value for the Standard Sound Preset. Selection is a long press action (2.5 seconds). Initialise les valeurs par défaut du son. Fonction valide par une longue pression (>2.5s.) sur la touche de sélection </>.

Definire il tubo appropriato dopo aver cambiato la NVM; I valori per il nuovo tipo di tubo (con video e geometria) sono immediatamente attivi. I parametri per video e geometria variabili vengono immessi nella NVM quando viene selezionata la funzione Store. Si veda la lista dei tubi riportata sotto.

Brand

Set the "Brand": Thomson, Telefunken, Other Factory adjusted

Definir el tubo correcto después de haber cambiado el NVM. Los nuevos valores de tipo de tubo (con la video y la geometría por defecto) se activan inmediatamente. Los parámetros variables de geometría y vídeo se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

Kbd. Config.

Specifies the type of the local keyboard. (Horizontal or Vertical type) in the chassis. Spécifie le type de clavier monté sur un chassis (type Horizontal ou Vertical)

TUBE NAME	LIST	DESCRIPTION
A66EHJ 43X12	A66EHJ	4/3 28"MP (1)
A68EGD 038X322	A68EGD	4/3 29"SF (2)
A68EJV 038X322	A68EJV	4/3 29"SF AK (3)
A68EJZ 011X121	A68EJZ	4/3 29"XF (4)
A68ELA 011X121	A68ELA	4/3 29"XF (5)
A68QCP 893X007	A68QCP	4/3 29"XF (4)
A80EJZ 011X427	A80EJZ	4/3 34"XF (4)
4X3 NW	4X3 NW	
W66EGV 023X122	W66EGV	16/9 28"SF (2)
W66EJY 011X121	W66EJY	16/9 28"XF (2)
W66EJU 011X121	W66EJU	16/9 28"SF (6)
W66 Gen2	W66Gen2	16/9 28"XF (7)
W66QDE 993X214	W66QDE	16/9 28"XF (2)
W76EGV 023X122	W76EGV	16/9 32"SF (2)
W76EJY 011X121	W76EJY	16/9 32"SF (2)
16X9 NW	16X9NW	
RP 4X3	RP 4X3	4/3 42", 46"

(1) : AK, Coty M (5) : Invar, static focus, BSVM Gen2
 (2) : Invar vector gun, BSVM (6) : AK, vector gun, BSVM
 (3) : AK, vector gun (7) : Invar, vector gun, BSVM
 (4) : Invar, static focus, BSVM

➔ After setting ➔ Store (+)

SETUP

Subwoofer

Enable the subwoofer on equipped set.

Validation du Subwoofer sur les appareils équipés.

Einschalten des Subwoofers (wenn vorhanden).

Abilita il subwoofer negli apparecchi equipaggiati.

Validación de que existe el subwoofer.

Subwoofer enable Subwoofer disable

Feature Pack

Enables or disables the option to decode and display EPG program data, the Graphic Equalizer, Picture Presets and Sound Presets features (in user menu).

Validation ou inhibition du décodage/affichage des données du programme EPG, de l'équalizer graphique, des pré-réglages son et image dans le menu utilisateur.

Ein- und Abschalten der Optionen Decodierung und Anzeige der EPG Programmdateien, Grafischer Equalizer, Bildvoreinstellungen und Tonvoreinstellungen (in den Benutzermenüs).

Abilita l'EPG, l'equalizzatore grafico, l'preset Video e preset suono (in menu suono)

Valida las funciones EPG, Ecuilizador gráfico y predeterminados para imagen y sonido (en el menú "Ajustes personales")

Enable Disable

Picture Rot

Enables the "Earth Field Correction" function (EFC) on ETC210 16/9 and some large screen 4/3 by adding a special bargraph in the "personal settings" menu (user menus). It is necessary to validate this function if the EFC correction circuit is inserted.

Valide la fonction "correction de champ magnétique terrestre" (EFC) sur les chassis ETC210 16/9 et les appareils 4/3 grand écran par addition d'un bargraphe spécifique dans le menu "réglages personnels" (menu utilisateur). Cette fonction doit être validée lorsque les circuits de correction "EFC" sont insérés.

Freigabe der Erdfeldkorrektur (EFC) bei ETC210 16/9 und einigen 4/3 Geräten. Im Menü "Eigene Einstellungen" (Menü "Installation") wird ein zusätzlicher Anzeigebalken eingeblendet Nach dem Einbau des EFC-Moduls ist diese Funktion zu aktivieren.

Attiva la funzione "Correzione del campo magnetico terrestre" (EFC) sul telaio ETC210 16/9 e alcuni grandi schermi 4/3 , aggiungendo una speciale barra grafica nel menu di "Menu Principale". Se il circuito di correzione è montato, è necessario convalidare questa funzione.

Valida la función "corrección del campo magnético terrestre" (EFC) en los chasis ETC210 and some large screen 4/3 añadiendo una barra gráfica en el menú "Ajustes personales". Es necesario validar esta función si el circuito de corrección EFC está montado.

Rotation bargraph available menu, EFC function active.
 Rotation bargraph suppressed from personal settings, EFC circuit disactivated

➔ After setting ➔ Store (+)

SETUP

Bus Quiet

In "Bus Quiet", the NVM can be read, modified and reprogrammed by means of a NVM Programmer. To access "Bus Quiet" : Long press ">". The TV should remain in "Bus Quiet" mode until either Exit, Left, Right, Up, Down or Standby keys on the RCU or local keyboard are pressed; at which point the TV should carry out a warmstart in order to prevent differences between the NVM and RAM contents. After returning from Bus Quiet, the software checks the NVM content. If it is not valid, the software perform a new default writing of the NVM content.

En mode bus quiet la NVM peut être lue, modifiée et reprogrammée. Accès au mode Bus quiet : Longue pression ">".

Utiliser l'une des touches Exit, Gauche, Droite Haut, Bas, standby ou une des touches du clavier pour sortir le téléviseur du mode bus quiet. À partir de ce point de sortie le démarrage du téléviseur s'effectue à chaud pour éviter toute différence des contenus RAM et NVM. En sortie de mode bus quiet, le logiciel contrôle le contenu de la NVM. S'il n'est pas correct le logiciel exécute une nouvelle écriture par défaut de celle-ci.

Im "Bus Quiet"-Modus kann der Inhalt des NVM mittels eines externen NVM-Programmiergerätes ausgelesen, geändert oder neu programmiert werden. "Bus Quiet" wird durch einem längeren Druck auf ">" aktiviert. Das Gerät bleibt solange im "Bus Quiet"- Mode, bis durch Druck auf die EXIT-, LINKS-, RECHTS-, HOCH-, RUNTER- oder STANDBY-Taste (am Gerät oder auf der Fernbedienung) ein Warmstart des Gerätes veranlaßt wird, um unterschiedliche Daten in RAM und NVM zu vermeiden. Es folgt ein Software-Check des NVM-Inhaltes. Sollte dieser nicht gültig sein, wird der Inhalt mit Default-Werten überschrieben.

In Modo Bus Quiet, la memoria NVM può essere letta, modificata o riprogrammata. Per accedere al modo Bus Quiet premere a lungo il tasto ">". Il TV rimane in modo Bus Quiet fino a che vengono premuti i tasti Exit, o Destro Sinistro, Su o Giù o Standby dal telecomando o dalla tastiera locale; a questo punto il TV riparte per evitare interferenze tra i contenuti della memoria NVM e della RAM. All'uscita dal modo Bus Quiet, il software controlla il contenuto della memoria NVM. Se tale contenuto non è valido, il software provvede a una nuova programmazione della NVM con l'inserimento dei dati di default.

En bus quieto, la NVM puede ser leída, modificada y reprogramada. Acceso a bus quieto : Larga presión en ">". El TV permanecerá en bus quieto hasta que se pulse cualquiera de las teclas siguientes: Exit, "<", "A", "V", ">" o Standby del telemando o del teclado. En este momento el TV arrancará para evitar cualquier diferencia entre los contenidos de la RAM y NVM. Al salir del modo bus quieto, el software comprueba el contenido de la NVM. Si no coincide, el software ejecuta la escritura de los datos en la NVM.

Bus quiet enable Bus quiet disable

➔ After setting ➔ Store (+)

SETUP

WSS

Automatic detection of DOLBY surround sound and 16/9 format pictures via Teletext line number 23. WSS is valid on all programmes. Détection automatique du son surround DOLBY et du format 16/9 via la ligne 23 du Teletexte. Valide pour tous programmes.

WSS (nur bei 16:9 oder Dolby) Auswertung der Zeile 23 zur automatischen Format- und Dolbyumschaltung. Identificazione "auto-Dolby" e "format 16/9" via televideo alla riga 23. La selezione di WSS Processing vale per tutti i programmi.

Détection "auto-surround" y "format" a través de la línea 23 de Teletext. La selección del procesamiento WSS es válida para todos los programas.

Detection enable Detection disable

Cyrillic Version

The status of this check box depends on the type of microcomputer (uC) used in the TV set (Cyrillic or greek) . It must be ticked if a cyrillic microcomputer (uC) is used and unticked if a greek version is used. The status of this check box defines the languages available in the language selection menu. The slovacian, czech and russian languages are available with the cyrillic version and the turkish and greek languages with the other one. It is possible to identify which uC is used to properly set this feature in the service menu by watching special (cyrillic) VT pages.

Version Cyrillique

Cette case de validation depend de la version du microprocesseur (uP) équipé au TV (Cyrillique ou grec) . Elle doit être cochée si le microprocesseur (uP) est une version cyrillique et vide s'il s'agit d'une version grecque. L'état de cette case définit les langues disponibles dans le menu de sélection . La version cyrillique offre les langues slovaque, tchèque et russe tandis que la version grecque offre les langues turque et grecque. Il est possible d'identifier le type de uP dans le mode service en sélectionnant les pages télétextes.

Kyrillische Version

Der Status dieser Check-Box ist abhängig von der Sprachversion des eingebauten Microcontrollers. Bei der Verwendung der kyrillischen Version muss die Box aktiviert werden, bei Verwendung der griechischen Version muss die Box gelöscht sein. Der Status der Box legt die zur Verfügung stehenden Sprachen im Sprachmenü fest. Die kyrillische Version unterstützt Slowakisch, Tschechisch und Russisch. Die griechische Version unterstützt Griechisch und Türkisch. Eine Identifizierung der eingebauten Microcontroller-Version kann durch Aufrufen von Videotextseiten mit kyrillischem Inhalt vorgenommen werden.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

➔ After setting ➔ Store (+)

SETUP

Versione Cirillica

Lo stato del controllo di queta casella dipende dal tipo di microprocessore (uP) utilizzato dal TV (Cirillico o Greco). Tale casella deve essere selezionata se viene utilizzato un microprocessore Cirillico e non selezionata se utilizzato un microprocessore Greco. Lo stato di questa selezione definisce l'abilitazione della selezione del linguaggio nel menu. I linguaggi per la Slovacchia, la Repubblica Ceca e la Russia sono disponibili nella versione microprocessore Cirillico, mentre il linguaggio Turco e Greco sono disponibili nella versione Greca. E' possibile identificare quale uC è presente nel TV e correttamente abilitato nel menu di service mode analizzando una speciale pagina televideo (Cirillica)

Versión Cirílico

El estado de esta casilla depende del tipo del microprocesador (uP) utilizado en el TV (Cirílico o Griego). Debe ser marcada si se utiliza un uP cirílico y desmarcada si se utiliza el griego. El estado de esta casilla define los idiomas disponibles en el menú de selección de idiomas. Los idiomas Eslovaco, Checo y Ruso están disponibles en la versión cirílico. El Griego y el Turco en la versión Griego. Es posible identificar el uP utilizado para seleccionar el adecuado, en modo servicio mirando en las páginas especiales (cirílico) del teletexto.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

uC ST92R195B JAM

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Slovakian/Czech, Russian Cyrillic.

uC ST92R195B JAL

English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Swedish, Norwegian, Polish, Hungarian, Turkish, Greek.

➔ After setting ➔ Store (+)

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

GEOMETRY SUBMENUS : 4:3 TUBES

GEOMETRY	
Return	
Display Mode	◀▶ 4 : 3 Zoom 0
V-Slope	1F+
V-Amplitude	3C-
V-Position	25-
V-Linearity	08+
H-Position	1F+
H-Amplitude	2F
EW-Amplitude	3C
EW-Trapezium	0C+
EW-Corner	0D
H-Parallel	10-
EW-Symmetry	1F
Breathing	10
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

4 : 3 Zoom 0

GEOMETRY SUBMENUS : 16:9 TUBES

GEOMETRY	
Return	
Display Mode	◀▶ 16:9 Zoom 0
V-Slope	1F+
V-Amplitude	3C-
V-Position	25-
V-Linearity	08+
H-Position	1F+
H-Amplitude	2F
EW-Amplitude	3C
EW-Trapezium	0C+
EW-Corner	0D+
H-Parallel	10-
EW-Symmetry	1F
Breathing	10
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

16/9 picture tube, 16 : 9 Zoom 0

GEOMETRY	
Return	
Display mode	4 : 3 Zoom 0
Breathing	10
Default	<input type="checkbox"/>
Store	<input type="checkbox"/>
Restore	<input type="checkbox"/>

16/9 picture tube, 4 : 3 Zoom 0

GEOMETRY	
Return	
Closes the sub-menu and returns to the "Main Service Menu"	
Retourne au menu principal.	
Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint.	
Chiude il sottomenù e fa apparire il menu principale Service Mode.	
Cierra el submenú. El menú Field Service Mode aparece.	
Press </>: remote control or Vol+/- TV keyb. .	

Display Mode	
Complete geometry adjustment is done according to chassis tube format : 4/3 zoom 0 mode for 4/3 tubes, 16/9 zoom 0 mode for 16/9 tubes.	
In all other modes it is only necessary to adjust some few registers.	
The actual format mode has to be displayed in the Geometry Service mode.	
It has to be possible to change the format during the geometry alignment without leaving the Service mode.	
The available display modes depend on the picture tube format.	
4/3 tube : 2 modes 4/3 standard and 16/9	
16/9 tube : 2 modes 16/9 standard, 4/3 zoom 0.	
The menu shows only the registers which have to be aligned for the actual picture format currently displayed.	

Les réglages complets de géométrie sont faits dans le format du tube équipant l'appareil. Mode **4/3 zoom 0** pour les tubes **4/3, 16/9 zoom 0** pour les tubes **16/9**.
 Dans les autres modes seuls quelques registres nécessitent un réglage. Le format de réglage doit être affiché dans le menu de géométrie du mode service. Il est possible de changer le format sans quitter le mode service.

Différents types d'affichage disponibles :
 tube 4/3 : 2 modes 4/3 standard et 16/9
 tube 16/9 : 2 modes 16/9 standard, 4/3 zoom 0.

Le menu correspondant affiche seulement les registres spécifiques du format sélectionné à régler.

Ein vollständiger Geometrie-Abgleich ist bei **4/3-Röhren** nur in der Zoomstufe **4/3 Zoom 0** und bei **16/9-Röhren** nur in der Zoomstufe **16/9 Zoom 0** notwendig.
 In allen anderen Zoomstufen sind eine geringere Anzahl von Einstellungen vorzunehmen. Während des Geometrie-Abgleiches wird zur Kontrolle ständig das aktuelle Bildformat eingeblendet. Während des Geometrie-Abgleiches ist es möglich, das Bildformat zu ändern, ohne den Service Mode zu verlassen.

Die verfügbaren Bildformate sind abhängig vom Bildrohr-Format.
 4/3-Röhre : 2 Bildformate 4/3 Standard und 16/9
 16/9-Röhre : 2 Bildformate 16/9 Standard, 4/3 Zoom 0.

Das Abgleich-Menü zeigt immer nur die Funktionen an, die im aktuellen Bildformat eingestellt werden müssen.

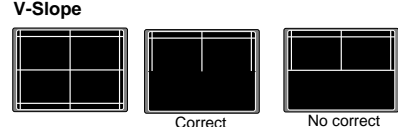
GEOMETRY	
Display Mode	
La disponibilité dei modi display dipende dal formato del tubo: tubo 4/3 : 2 modi 4/3 Standard, 16/9 tubo 16/9 : 2 modi 16/9 standard, 4/3 Zoom 0. Il corrispondente menu mostra solo i registri di regolazione.	
Le regolazioni complete di geometria vengono fare in base al tubo. per tubi 4/3 - 4/3 zoom 0 per tubi 16/9 - 16/9 zoom 0	
In tutti gli altri modi è necessario regolare solo alcuni registri. Il formato di regolazione deve essere selezionato nel menu di geometria nel modo service. E' possibile cambiare formato senza uscire da service mode	

Los ajustes completos de geometría se harán de acuerdo al formato del tubo montado: **modo 4/3** para tubos de **4/3 zoom 0, modo 16/9 zoom 0** para tubos de **16/9**. En todos los otros modos, sólo será necesario ajustar unos pocos registros. El modo de formato actual debe ser accedido desde el Modo Servicio. Es posible cambiar el formato sin salir del Modo Servicio.

Los formatos que se pueden visualizar, dependen del tipo de tubo.
 Tubos de 4/3 : 2 modos, 4/3 estándar, 16/9
 Tubos de 16/9: 2 modos, 16/9 estándar, 4/3 zoom 0.
 El menú correspondiente mostrará sólo los ajustes a efectuar.

V-Slope
 - Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.
 - Select the "VS" line of the menu. The bottom half of the screen will go black.
 - Adjust VS until the centre line of the pattern is just invisible.
 - Leave the line "V Slope".
 - Switch the test pattern signal to the crosshatch geometry pattern.
 - Perform the geometry adjustments described below.

- Appliquer une mire de barres avec seulement une ligne blanche horizontale en milieu de l'écran.
 - Sélectionner la ligne "V-Slope". La moitié basse de l'écran devient noire.
 - Aligner "V-Slope" pour que la ligne médiane soit à peine non visible.
 - Commuter la mire en mode de réglage de géométrie (quadrillage).
 - Effectuer les réglages de géométrie.
 - Speisen Sie ein Testbild mit einem horizontalen Strich in der Bildmitte ein.
 - Wählen Sie im Menü die Funktion "V-Slope" an.
 - Die untere Bildhälfte wird dunkel.
 - Stellen Sie "V-Slope" so ein, daß die Mittellinie fast verschwindet.
 - Verlassen Sie die Funktion "V-Slope".
 - Speisen Sie ein Gittertestbild ein.
 - Nehmen Sie die Geometrieinstellungen wie nebenstehend beschrieben vor.



GEOMETRY	
V-Slope	
- Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo	
- Selezionare la riga "V slope" del menu. La parte bassa dello schermo viene oscurata.	
- Allineare la "Vertical Slope" in modo che la linea centrale sia appena visibile	
- Abbandonare la riga "V slope".	
- Posizionare il monoscopio	
- Effettuare le regolazioni di geometria descritte in precedenza	
- Memorizzare.	
- Aplique una carta de ajuste con sólo una línea blanca horizontal y una vertical en el centro de la pantalla.	
- Seleccionar en el menú, la línea "V-Slope". La mitad inferior de la pantalla se pondrá oscura.	
- Ajuste "V-Slope" justo hasta que la línea horizontal sea invisible.	
- Cambiar la carta de ajuste a "cuadrícula" y efectuar los ajustes de geometría descritos a continuación	
- Antes de salir, memorizar con "Store"	

V-Amplitude		
V-Position		
V-Linearity		
H-Position		
H-Amplitude		
EW - Amplitude		
EW - Trapezium		
EW -Corner		
H-Parallel		
EW-Symmetry		

Breathing EHT compensation
 Factory adjusted
 Réservé au réglage usine
 Reserviert für Fabrikeinstellungen
 Riservato alla regolazione di fabbrica
 Ajuste reservado fábricas



GEOMETRY MODE ALIGNMENT

Test Bar pattern used : 4/3 with a geometric circle. Complete geometry Adjustment is done according to chassis tube format : 4/3 zoom 0 mode for 4/3 tubes; 16/9 zoom 0 mode for 16/9 tubes.

Mire de barre utilisée : 4/3 avec cercle de géométrie. les réglages complets de géométrie sont faits dans le format du tube équipant l'appareil : mode 4/3 zoom 0 pour les tubes 4/3; 16/9 zoom 0 pour les appareils équipés de tubes 16/9.

Verwendetes Testbild : 4/3 mit geometrischem Kreis. Ein vollständiger Geometrie-Abgleich ist nur notwendig bei: 4/3-Röhren Zoomstufe 4/3 Zoom 0 und 16/9-Röhren Zoomstufe 16/9 Zoom 0 (siehe unten).

Formato Testo utilizzato: 4/3 con cerchio geometrico. La regolazione viene effettuata nel formato del telaio del cinescopio: 4/3 zoom 0 :tubo 4/3; 16/9 zoom 0: tubo 16/9.

Carta de ajuste utilizada : 4/3 con círculo geométrico. El ajuste completo de la geometría hay que hacerlo de acuerdo con el tipo de chasis y el formato del tubo : Modo 4/3 zoom 0 para tubos de 4/3; modo 16/9 zoom 0 para tubos de 16/9.

4/3 picture tube

A ETC210 4/3 set needs a geometry alignment only in the 4/3 Zoom 0. All other formats and zoom mode are calculated.

Un chassis ETC210 4/3 ne nécessite des réglages de géométrie que dans le mode 4/3 zoom 0. La géométrie des autres formats et zoom est calculée.

Beim Chassis ETC210 ist ein Geometrie-Abgleich nur im Bildformat 4:3 Zoom 0 . Alle anderen Formate und Zoomstufen werden berechnet.

I telai ETC210 4/3 richiedono la regolazione di geometria solo in formato 4/3 zoom 0. Tutti gli altri formati e modo zoom vengono calcolati.

Un TV ETC210 4/3 necesita ajuste de geometría sólo en el modo 4/3 Zoom 0. Todos los demás formatos y modos de zoom se calculan automáticamente.

Signal : 4/3 test pattern

<p>4 / 3 standard mode zoom 0</p>	<p>Overscan V=107% , H=107%</p> <p>1- Adjust Vertical Slope.</p> <p>2- Adjust Vertical position and Vertical amplitude</p> <p>3- Adjust Vertical linearity</p>
	<p>4- Adjust Horizontal Delay, Horizontal Position and Horizontal amplitude</p>
	<p>5-Adjust EW Amplitude ,EW Shape and Trapezium, EW Corner,</p>
	<p>6-Adjust EW Symmetry and Horizontal parallelogram</p>

16/9 picture tube

A ETC210 16/9 set needs a geometry alignment only in the 16/9 Zoom 0 mode. All other formats and zoom mode are calculated.

Un chassis ETC210 16/9 ne nécessite des réglages de géométrie que dans le mode 16/9 zoom 0. La géométrie des autres formats et zoom est calculée.

Beim Chassis ETC210 16:9 ist ein Geometrie-Abgleich nur im Bildformat 16:9 Zoom 0. Alle anderen Formate und Zoomstufen werden berechnet.

I telai ETC210 16/9 richiedono una regolazione di geometria solo nel formato 16/9 e modo zoom 0. tutti gli altri formati e modo zoom vengono calcolati.

Un TV ETC210 16/9 necesita ajuste de geometría sólo en 16/9 modo Zoom 0. Todos los demás formatos y modos de zoom se calculan automáticamente.

Signal : 4/3 test pattern

<p>16 / 9 standard mode zoom 0</p>	<p>Overscan V=107%, H =104%</p> <p>1- Adjust Vertical Slope.</p> <p>2- Adjust Vertical position and Vertical amplitude</p> <p>3- Adjust Vertical linearity</p>
	<p>4- Adjust Horizontal Delay, Horizontal Position and Horizontal amplitude</p>
	<p>5-Adjust EW Amplitude ,EW Shape and Trapezium, EW Corner,</p>
	<p>6-Adjust EW Symmetry and Horizontal parallelogram</p>

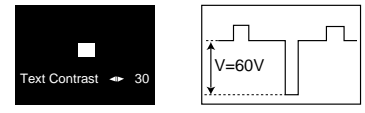
VIDEO	PAL	BG
Return		
Whitepoint R	◀▶	9D+
Whitepoint G		8A-
Whitepoint B		8A
Peak White		
G2 Alignment		<input type="checkbox"/>
Scale Brightness		84+
Scale Colour		90-
Full White 4/3		
Black Offset R		DC+
Black Offset G		
Drive Level		90
Scale Contrast		E0
Text Contrast		9D+
Default		<input type="checkbox"/>
Store		<input type="checkbox"/>
Restore		<input type="checkbox"/>

Color standard or RGB is autodetected and displayed opposite the displayed opposite the menu title.

IF	PAL	BG
Return		
FFI - Bit		<input type="checkbox"/>
Default		<input type="checkbox"/>
Store		<input type="checkbox"/>
Restore		<input type="checkbox"/>

ERROR CODES	
Return	
Erase Error Codes	▶
Code	Time Stamp
11	00125:30
24	00090:10
78	00043:54
51	00001:43
00	00000:00

VIDEO	PAL								
Return Closes the sub-menu and returns to the "Main Service Menu" Retourne au menu principal. Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint. Chiude il sottomenu e fa apparire il menu principale Service Mode. Cierra el submenü. El menü Field Service Mode aparece. Press </>: remote control.									
Whitepoint R*	◀▶ standard Grey scale test pattern white =50%								
Whitepoint G*	◀▶ Amplitude: 350mVBW RF-PAL (BG) RF-SECAM (L) AV1- RGB								
Whitepoint B*	◀▶ grey								
Peak-White**	☀ + ◐ + ◑ = standard Peak white test pattern white =100% RF-BG; RF-L; AV1 RGB AUX (TAK, DVD, Digital Mode) Colourimeter <table border="1"> <tr> <td>Tube Type</td> <td>[Nits]</td> </tr> <tr> <td>28"XF 16/9 TTD Gen.2</td> <td>350</td> </tr> <tr> <td>29"XF 4/3 TTD Gen.2</td> <td>300</td> </tr> <tr> <td>32"XF 16/9 TTD</td> <td>310</td> </tr> </table>	Tube Type	[Nits]	28"XF 16/9 TTD Gen.2	350	29"XF 4/3 TTD Gen.2	300	32"XF 16/9 TTD	310
Tube Type	[Nits]								
28"XF 16/9 TTD Gen.2	350								
29"XF 4/3 TTD Gen.2	300								
32"XF 16/9 TTD	310								
G2 Alignment	Display a full screen black OSD Adjust G2 with SCREEN potentiometer: see adjust table Ecran totalement noir. Régler G2 avec le potentiomètre SCREEN : voir tableau des réglages.(p.12). Das Bild wird dunkelgetastet Gleichen Sie G2 mit dem SCREEN-Potentiometer wie auf seite 12. beschrieben ab. Visualizzare uno schermo nero e regolare il potenziometro G2 riferendosi alla tabella regolazione (p.12) Pantalla totalmente oscura sin OSD. Ajustar la G2 con el potenciómetro SCREEN: ver tabla (p.12). <input checked="" type="checkbox"/> G2_adjust on <input type="checkbox"/> Reset G2-adjust and restores the video menu.								

VIDEO	PAL
Scale Brightness	☀ + ◐ + ◑ = standard Grey scale test pattern white =100% black
Scale Colour*	☀ + ◐ + ◑ = standard PAL, SECAM, AV1_RGB, 75% Colour bar test pattern via RF. Blue Cathode CRT F-H
Full White 4/3 (16/9)	
Black Offset R	Factory adjusted Réservé au réglage usine Reserviert für Fabrikeinstellungen Riservato alla regolazione di fabbrica Ajuste reservado fábricas
Black Offset G	
Drive Level	
Scale Contrast	
Text Contrast	☀ + ◐ + ◑ = standard Adjust Text contrast for V=60V at pin 11 (Blue) of the CRT : 40% V peak white Ajuster Text Contrast pour obtenir un niveau de sortie V=60V sur la cathode Bleue du tube (point 11 de la CRT): 40% V peak white. Stellen Sie mit Text Contrast V=60V an der Blau-Kathode (Pin 11) der Bildröhre ein: 40% Vpeak white Regolare il guadagno contrasto televisivo per ottenere al catodo del blu un livello pari a V=60V (CRT pin 11): 40% Vpeak white. Ajuste Text Gain para dejar V=60V en azul del TRC (CRT Patilla 11): 40% Vpeak white 

IF																												
Return Closes the sub-menu and returns to the "Main Service Menu" Retourne au menu principal. Schließt das Untermenü, und das Haupt-Menü des Servic e-Modus erscheint. Chiude il sottomenu e fa apparire il menu principale Service Mode. Cierra el submenü. El menü Field Service Mode aparece. Press </>: remote control.																												
FFI - Bit Fast Filter (IF / PLL) Filtre rapide (F1 / PLL) Schnelles filter (ZF / PLL) Filtro /rapido (IF / PLL) <input checked="" type="checkbox"/> Asia <input type="checkbox"/> Europ																												
SOUND SETTINGS Return Subwoofer Freq. Medium ◀▶ 0F Low Pass Freq. Medium 0B+ High Pass Freq. Medium 08- Effect Strength Medium 32- Harmonic Content Medium 00- Amplitude Limit Medium FD+ Subwoofer Freq. High 0D Low Pass Freq. High 0B High Pass Freq. High 08+ Effect Strength High 38 Harmonic Content High FD Amplitud LimitHigh Store Restore																												
SOUND SETTINGS Adjust "Sound settings" registers according to the TV environments (refer to the below table) when the NVM memory has been replaced. Règle le contenu des registres "Sound settings" selon l'environnement du TV en cas de remplacement de la NVM. (voir table ci-dessous) Wurde das NVM (EEPROM) erneuert, müssen im Menü "SOUND SETTINGS" die Werte entsprechend der unten stehenden Tabelle eingestellt werden. Quando viene sostituita la memoria NVM regolare i registri "Sound setting" in funzione all'ambientazione TV (riferirsi alla tabella sottoindicata). Ajustar los "Parámetros de Sonido" de acuerdo a las características del modelo de TV (ver tabla),después de sustituir la memoria NVM. <table border="1"> <tr> <td>TV Cabinet</td> <td></td> </tr> <tr> <td>28WH..., 32WH..., 34DC...</td> <td></td> </tr> <tr> <td>Subwoofer Freq. Medium</td> <td>05</td> </tr> <tr> <td>Low Pass Freq. Medium</td> <td>0A</td> </tr> <tr> <td>High Pass Freq. Medium</td> <td>07</td> </tr> <tr> <td>Effect Strength Medium</td> <td>28</td> </tr> <tr> <td>Harmonic Content Medium</td> <td>00</td> </tr> <tr> <td>Amplitude Limit Medium</td> <td>04</td> </tr> <tr> <td>Subwoofer Freq. High</td> <td>0C</td> </tr> <tr> <td>Low Pass Freq. High</td> <td>0A</td> </tr> <tr> <td>High Pass Freq. High</td> <td>07</td> </tr> <tr> <td>Effect Strength High</td> <td>36</td> </tr> <tr> <td>Harmonic Content High</td> <td>00</td> </tr> <tr> <td>Amplitud LimitHigh</td> <td>04</td> </tr> </table>	TV Cabinet		28WH..., 32WH..., 34DC...		Subwoofer Freq. Medium	05	Low Pass Freq. Medium	0A	High Pass Freq. Medium	07	Effect Strength Medium	28	Harmonic Content Medium	00	Amplitude Limit Medium	04	Subwoofer Freq. High	0C	Low Pass Freq. High	0A	High Pass Freq. High	07	Effect Strength High	36	Harmonic Content High	00	Amplitud LimitHigh	04
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ERROR CODE
Clear Error Codes To clear all error codes stored in the NVM. Action: Long press (> 2.5sec.). Press </>OK: remote control.
CODE LED Error Codes 1- The last five error codes are stored and displayed with a time stamp from the run time counter 2- If an error occurs that is already in the list the time stamp is updated . 3- The errors are displayed with the most recent error on top of the list. The others follow with descending time stamps. Displaying Error Codes with LED: 1- In addition to storing an error code it must also be displayed with the TV's Standby LED. Only the last error that occurred is displayed. 2- Decimal error codes from 11 to 99 (with second digit not being 0) are signalled. 3- The error code is displayed as two separate digits separated by a suitable pause, this is repeated until the either the TV fixes the fault or the TV is repaired. For example Error-code : 23 will be displayed thus : 2 flashes and a short pause 3 flashes and a long pause List of Errors Codes : see table 1- Mémorise les cinq derniers codes erreurs. Le cumul du temps de fonctionnement entre le démarrage initial du chassis en usine et le moment où s'est produit l'erreur est indiquée en colonne "Time stamp". 2- Si une erreur qui est déjà dans la liste survient de nouveau le temps cumulé (Time stamp) est mis à jour. 3- Les erreurs les plus récentes sont affichées en tête de liste. Les autres suivent en descendant. Affichage des Codes Erreurs par LED: 1- Les Codes erreur sont signalés par le clignotement de la LED Standby du TV .Seulement la dernière erreur survenue est affichée. 2- Les codes Erreurs décimaux vont de 11 à 99. (le second digit n'est jamais égal à 0) . 3- Le code Erreurs est signalé par deux digits selon une séquence spécifique Exemple : Code Erreurs : 23 affiché 2 flashes, courte pause 3 flashes : longue pause Voir ci-après la liste des codes erreurs 1. Es werden die letzten 5 Fehlercodes mit der Laufzeit des Auftretens angezeigt. 2. Tritt ein Fehler auf, der schon in der Liste steht, wird nur die Laufzeitanzeige aktualisiert. 3. Der zuletzt aufgetretene Fehler steht an erster Stelle. Die vorhergegangenen Fehler werden nach abnehmender Laufzeit gelistet. Anzeige des Fehlercodes über die Standby-LED 1- Der Fehlercode wird nach dem Auftreten des Fehlers zusätzlich über die Standby-LED des TV-Gerätes durch Blinken angezeigt. 2- Es können die Fehlercodes 11 bis 99 (ohne diejenigen , die eine Null als zweite Stelle haben) dargestellt werden. 3- Die beiden Dezimalstellen des Code werden durch Blinken, getrennt von einer Pause angezeigt. Dies wird wiederholt, bis der Fehler nicht mehr auftritt oder das Gerät repariert wird. Beispiel der Anzeige für den Fehlercode 23: Zweimaliges Blinken der LED, kurze Pause Dreimaliges Blinken der LED, lange Pause. Aufstellung der Fehlercodes: siehe Tabelle

ERROR CODE
CODE LED Error Codes 1- Gli ultimi cinque codici errore vengono memorizzati e visualizzati con un time stamp dal run time counter. 2- Se si manifesta un errore già presente nella lista il time stamp viene aggiornato 3- Gli errori vengono visualizzati con l'errore più recente in cima alla lista. Gli altri errori seguono con sequenza discendente del time stamp Lampeggi LED: Trasmissione messaggi 1 Oltre alla memorizzazione il codice errore, deve anche essere visualizzato dal LED di standby. 2 Gli errori vengono segnalati con codici decimali da 11 a 99 (non con 0 al secondo digit) 3 Il codice errore viene visualizzato da due digit separati da una pausa, questo viene ripetuto finchè il difetto è presente o il TV viene riparato Per esempio il codice errore 23 sarà visualizzato: 2 lampeggi e una breve pausa 3 lampeggi lampeggi e una lunga pausa Lista Codici Errore: segue tabella 1- Los últimos 5 códigos de error son almacenados desde el contador de tiempo de vida y mostrados en la columna "time stamp" 2- Si ocurre un error que ya existe en la lista, éste se actualizará al último "time stamp" 3- Los errores más recientes son los mostrados en la parte superior de la lista. Los demás siguen en orden descendiente de "time stamp" Códigos de error mostrados con el LED: 1- Además del almacenamiento, los códigos de error también se muestran con el LED de standby del TV. Sólo se muestra el último error ocurrido. 2- Sólo se muestran los códigos de error decimales del 11 al 99 (dígito de las decenas empezando por cero, no) 3- El código de error es mostrado como 2 dígitos separados por una pausa corta. Se repite hasta que se recupere el fallo o el TV sea reparado. Por ejemplo, el código de error 23 se mostrará como: 2 destellos seguidos de una pausa corta 3 destellos seguidos de una pausa larga Lista de códigos de error: ver tabla

Note :
* Adjust separate for PAL RF / SECAM RF, RGB
** After PEAK white adjustment control white points setting. Repeat the adjustments if necessary.

→ After setting → Store (+) ✓

→ After setting → Store (+) ✓

ERROR CODES

- 10 Used to display child lock mode
- 11 Used to display timer mode
- 12 Audio MSP341X doesn't answer anymore
- 13 The tuner doesn't answer anymore
- 14 TDA9330 (HOP) doesn't answer anymore or +8V not available
- 15 FI tuner doesn't answer anymore
- 16 VSP 9402 (IU100) doesn't answer anymore
- 17 I2C Bus_1 data line held low
- 18 I2C Bus_1 clock line held low
- 20 Bus access is prohibited for SW
- 21 I2C Bus_2 data line held low
- 23 I2C Bus 2 clock line held low
- 25 Switched 5V not available
- 26 Tube gets not warm in time (Icut signal no correct)
- 27 Deflection problem. Deflection detects >3 times prot.
- 31 Keyboard decoder problem (SW pointer problem)
- 32 Keyboard decoder problem (A SW- timer has been request but isn't available yet)
- 34 The NVM chip doesn't answer anymore
- 35 The voltage +5V not available
- 36 Wrong address passed to the bus-handler
- 37 Unexpected level on NMI line found
- 38 There is no RAM for the requested operation
- 42 The POR bit of the Primus can't be reset
- 43 Power down detection TDA9330 (HOP)
- 44 NRF bit problem. TDA9330 (HOP) oscillator not locked
- 45 FLS bit problem on safety circuits of TDA9330 (HOP)
- 46 NHF bit problem (horizontal flyback) on the PHI2_REF of TDA9330 (HOP)
- 47 NDF bit problem on the vertical part of TDA9330 (HOP)

EN

- 10 Utilisation de la clef enfant
- 11 Utilisation du mode réveil
- 12 Audio MSP341X ne répond pas
- 13 Le tuner ne répond pas
- 14 Déviation: TDA9330 (HOP) ne répond pas ou le +8V n'est pas présent.
- 15 FI tuner ne répond pas
- 16 VSP 9402 ne répond pas (IU100)
- 17 I2C bus_1 data est au niveau bas
- 18 I2C bus_1 clock est au niveau bas
- 20 Pas d'accès au bus
- 21 I2C bus_2 data est au niveau bas
- 23 I2C bus 2 clock est au niveau bas
- 25 5V commuté absent
- 26 Tube froid (signal Icut non conforme)
- 27 Problème de balayage (après 3 tentatives)
- 31 Problème de décodage clavier
- 32 Problème de décodage clavier
- 34 La mémoire NVRAM ne répond pas
- 35 La tension 5V n'est pas disponible
- 36 Problème d'adressage sur le bus
- 37 Anomalie sur interruption non masquable
- 38 Pas de mémoire RAM disponible pour effectuer les opérations
- 42 Problème de Reset sur le Primus
- 43 Le HOP (TDA9330) détecte un arrêt
- 44 Problème sur l'oscillateur du TDA9330 (HOP)
- 45 Problème sur les circuits de sécurité du TDA9330 (HOP)
- 46 Problème sur le PHI2_REF du TDA9330 (HOP)
- 47 Problème sur la partie trame du TDA9330 (HOP)

FR

- 10 Kindersicherung aktiv (Kein Fehlercode!)
- 11 Weckerfunktion aktiv (Kein Fehlercode !)
- 12 Audio-MSP 341x antwortet nicht
- 13 Tuner antwortet nicht
- 14 TDA9330H antwortet nicht (oder +8V fehlen)
- 15 FI-Tuner antwortet nicht
- 16 VSP9402 (IU100) antwortet nicht
- 17 I2C Bus_1 Data ist immer L
- 18 I2C Bus_1 Clock ist immer L
- 20 I2C Bus ist blockiert
- 21 I2C Bus_2 Data ist immer L
- 23 I2C Bus_2 Clock ist immer L
- 25 Geschaltete 5V nicht vorhanden
- 26 Bildrohr ist nicht rechtzeitig aufgeheizt (Signal Icut nicht korrekt)
- 27 Schutzschaltung Ablenkung hat dreimal ausgelöst
- 31 Softwarefehler Tastatur-Decoder (nur für Produktionsstätten)
- 32 Softwarefehler Tastatur-Decoder (nur für Produktionsstätten)
- 34 NVM (EEPROM) antwortet nicht
- 35 5V nicht vorhanden (Netzspannung zu niedrig/Power-Fail-Schaltung)
- 36 Softwarefehler (nur für Produktionsstätten)
- 37 Unerwarteter Zustand auf NMI-Leitung (z.B. durch Überschlag im Bildrohr)
- 38 Softwarefehler (nur für Produktionsstätten)
- 42 POR (Power On Reset) Flag VSP9402 wird nicht zurückgesetzt (zu geringe Betriebsspannung)
- 43 Power Down Detection TDA9330H (zu geringe Betriebsspannung)
- 44 NRF Flag TDA9330H Referenz-PLL (Clock) nicht eingerastet
- 45 FLS Flag TDA9330H Pin 5 ('FLASH')>2V, Ablenkschutzschaltung aktiv
- 46 NHF Flag TDA9330H Pin 13 H-Rückschlagimpuls fehlt
- 47 NDF Flag TDA9330H Pin 9 V_GUARD fehlt oder dauert zu lange

DE

- 10 Usato per visualizzare la sicurezza bambini
- 11 Usato per visualizzare il modo timer
- 12 L'integrato audio MSP341X non risponde
- 13 Il tuner non risponde
- 14 Il TDA9330 (HOP) non risponde oppure +8V non disponibili
- 15 La FI tuner non risponde
- 16 Il VSP9402 (IU100) non risponde
- 17 IICBus_1 con linea data a livello basso
- 18 IICBus_1 con linea clock a livello basso
- 20 Accesso Bus è vietato dal software
- 21 IICBus_2 linea data a livello basso
- 23 IICBus_2 linea clock a livello basso
- 25 5V commutati non disponibili
- 26 Il tubo non raggiunge la temperatura nel tempo stabilito (segnale Icut non corretto)
- 27 Problema di deflessione. Deflessione rlieva > 3 volte prot.
- 31 Problema decoder tastiera (problema SW pointer)
- 32 Problema decoder tastiera (A SW- timer è stato richiesto ma non ancora disponibile)
- 34 L'NVM chip non risponde
- 35 Tensione +5V non disponibile
- 36 Indirizzo errato trasmesso al sistema bus
- 37 Livello incorretto sulla linea MNI
- 38 Non disponibilità della RAM per l'operazione richiesta
- 42 IL bit POR del Primus non può essere resettato
- 43 Caduta di tensione di alimentazione del TDA9330(HOP)
- 44 Problema con il bit NRF. TDA9330 (HOP) con problema sull'oscillatore
- 45 Problema con il bit FLS sul circuito protezione del TDA9330(HOP)
- 46 Problema con il bit NHF (Horizontal flyback) sulla PHI2_REF del TDA9330 (HOP)
- 47 Problema con il bit NDF della parte verticale del TDA9330 (HOP).

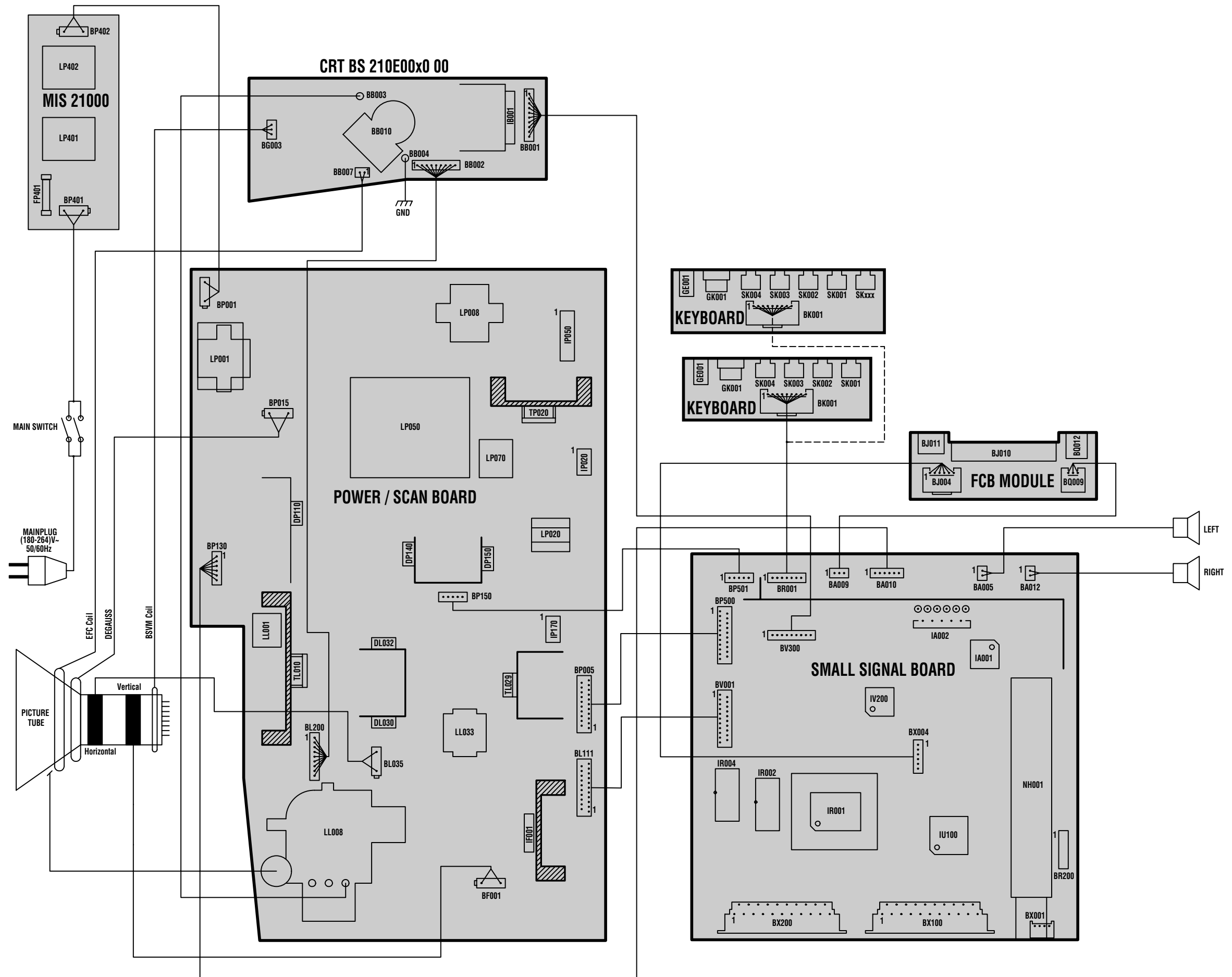
IT

- 10 Utilizado para indicar el modo "seguro niños"
- 11 Utilizado para indicar el modo "timer"
- 12 El circuito de audio MSP341X no responde
- 13 El sintonizador no responde
- 14 TDA9330 (HOP) no responde o faltan los +8V
- 15 La F.I. no responde
- 16 VSP 9402 (IU100) no responde
- 17 La línea de datos de I2C Bus_1 forzada a nivel bajo
- 18 La línea de clock de I2C Bus_1 forzada a nivel bajo
- 20 Acceso al Bus prohibido para el software
- 21 La línea de datos de I2C Bus_2 forzada a nivel bajo
- 23 La línea de clock de I2C Bus_2 forzada a nivel bajo
- 25 Los 5V conmutados no disponibles
- 26 El TRC no se calienta en el tiempo establecido (señal Icut incorrecta)
- 27 Problema de deflexión. Disparada la protección más de 3 veces
- 28 STV2050 no responde

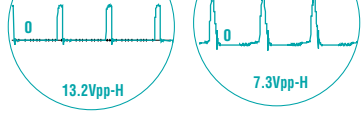
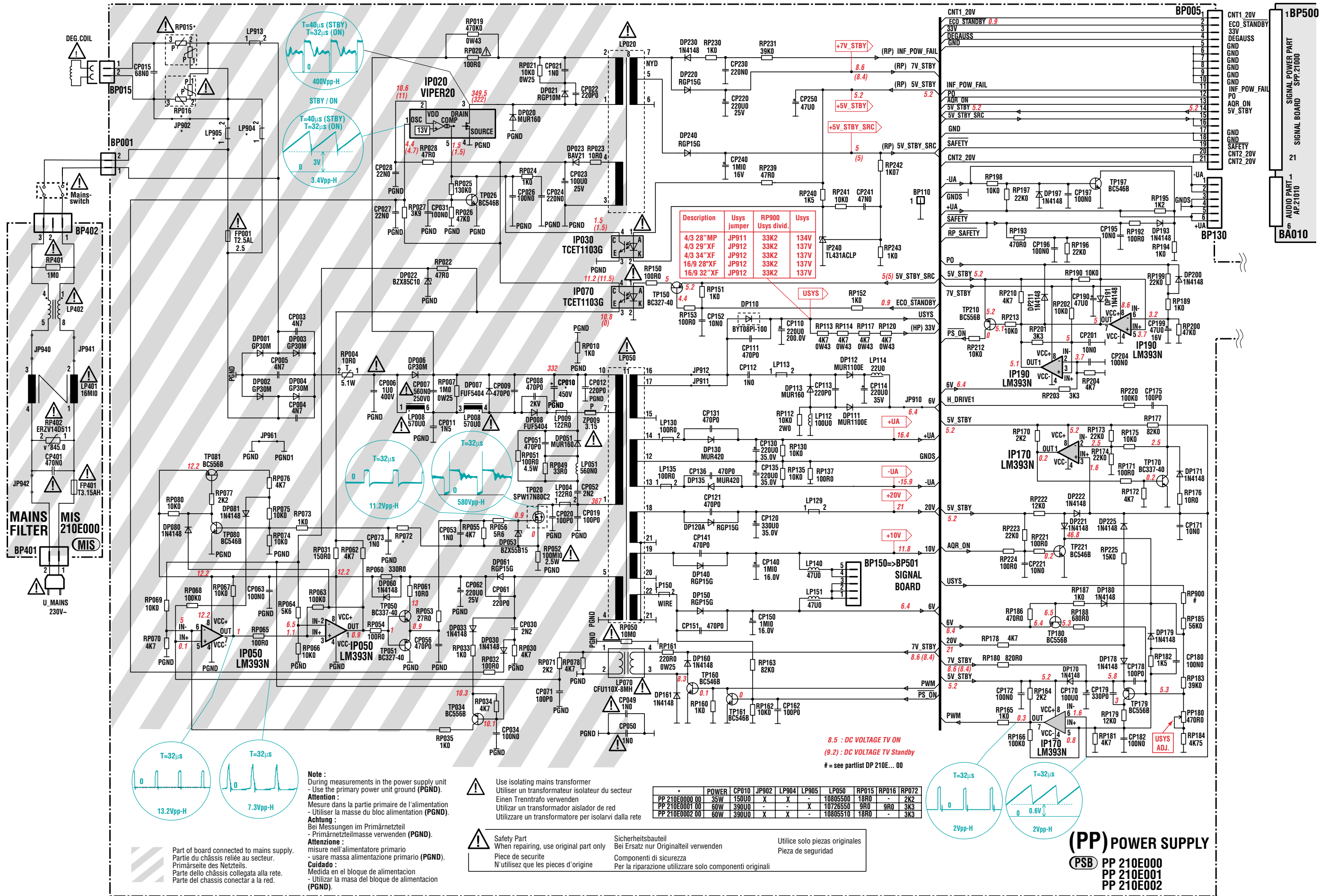
- 29 Fallo de convergencia. NVM24C32 no responde
- 31 Problema de teclado (problema de SW, puntero)
- 32 Problema de teclado (un timer ha sido solicitado pero no está disponible)
- 34 La NVM no responde
- 35 La tensión de +5V no existe
- 36 Dirección incorrecta al controlador de bus
- 37 Encontrado un nivel inesperado en la línea NMI
- 38 No RAM para la operación solicitada
- 42 El bit POR del Primus no puede ser inicializado
- 43 TDA9330 (HOP) detecta "apagado"
- 44 Problema del bit NRF. TDA9330 (HOP) oscilador no fijado
- 45 Problema con el bit FLS en los circuitos de seguridad de TDA9330 (HOP)
- 46 Problema con el bit NHF (horizontal flyback) en PHI2_REF de TDA9330 (HOP)
- 47 Problema en el bit NDF en la parte del vertical de TDA9330 (HOP)

ES

WIRING DIAGRAM - SCHEMA D'INTERCONNESSIONI - VERDRÄHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES



COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA
 POWER SUPPLY PART - PARTIE ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN



Note:
 During measurements in the power supply unit - Use the primary power unit ground (PGND).
Attention:
 Mesure dans la partie primaire de l'alimentation - Utiliser la masse du bloc alimentation (PGND).
Achtung:
 Bei Messungen im Primärnetzteil - Primärnetzteilmasse verwenden (PGND).
Attenzione:
 misure nell'alimentatore primario - usare massa alimentazione primario (PGND).
Cuidado:
 Medida en el bloque de alimentación - Utilizar la masa del bloque de alimentación (PGND).

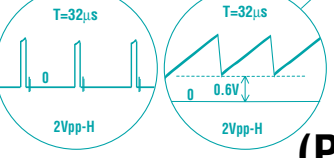
Use isolating mains transformer
 Utiliser un transformateur isolateur du secteur
 Einen Trenntrafo verwenden
 Utilizar un transformador aislador de red
 Utilizzare un trasformatore per isolarvi dalla rete

Safety Part
 When repairing, use original part only
 Piece de securite
 N'utilisez que les pieces d'origine

Sicherheitsbauteil
 Bei Ersatz nur Originalteil verwenden
 Componenti di sicurezza
 Per la riparazione utilizzare solo componenti originali

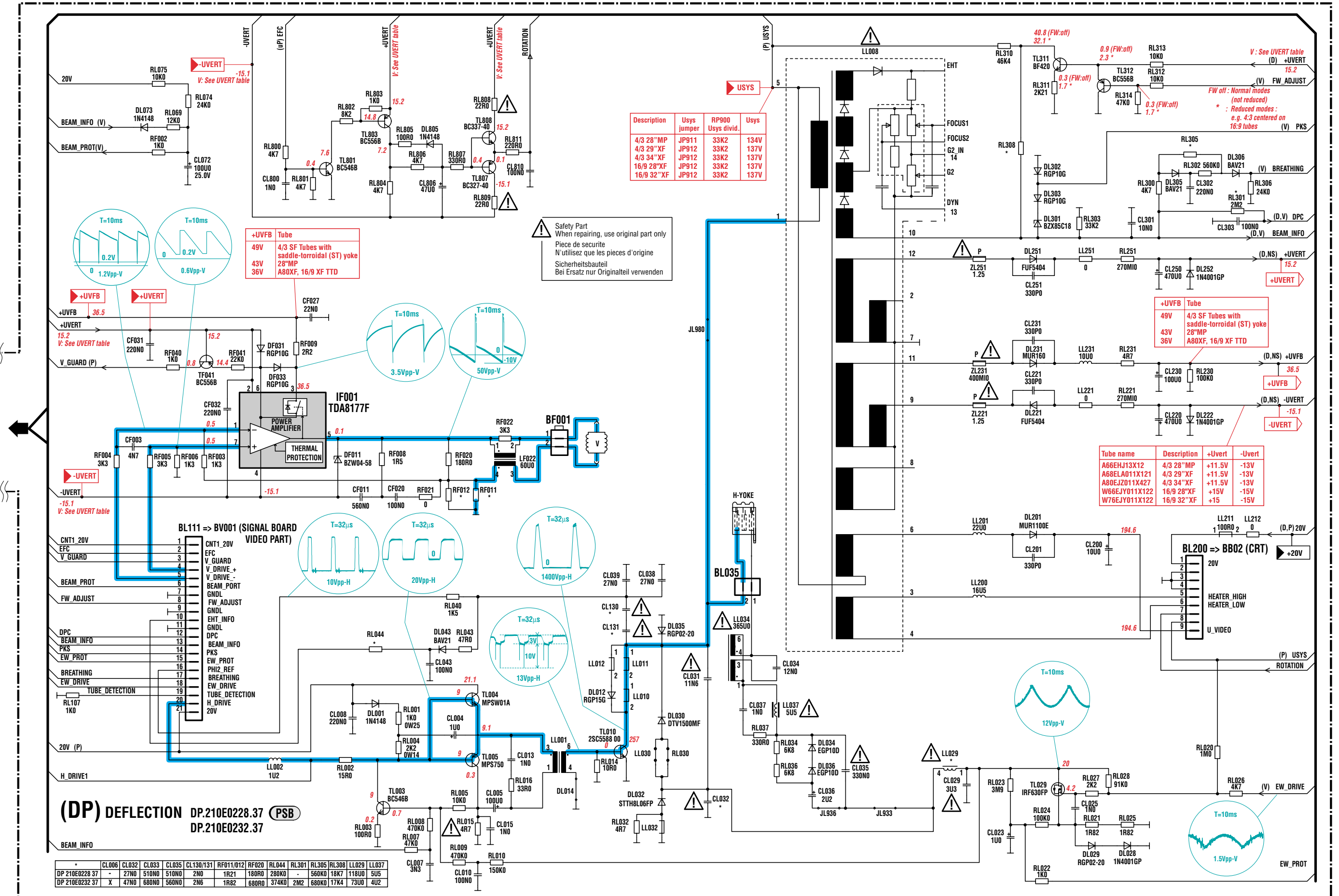
Utilice solo piezas originales
 Pieza de seguridad

8.5 : DC VOLTAGE TV ON
 (9.2) : DC VOLTAGE TV Standby
 # = see partlist DP 210E... 00

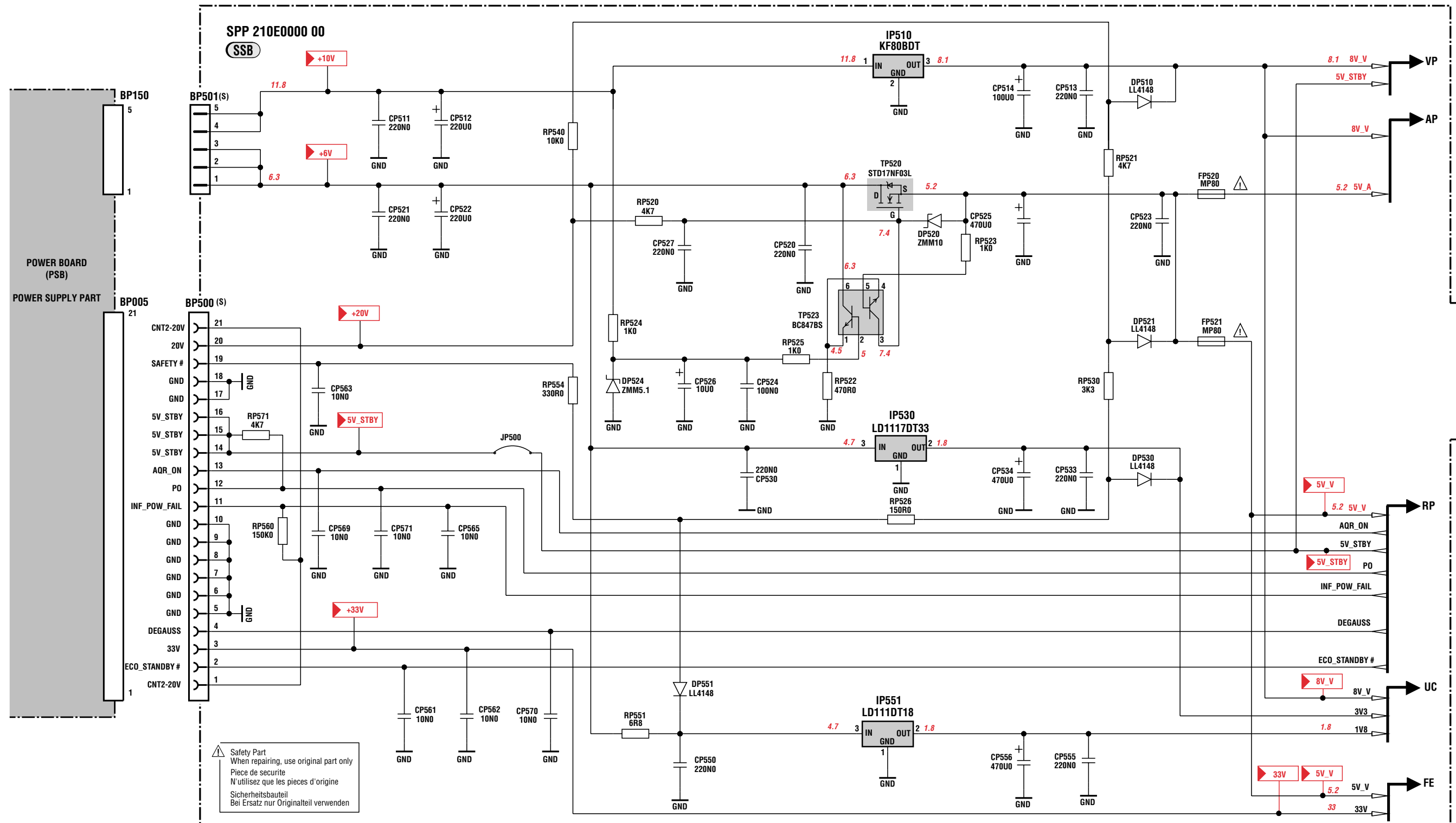


(PP) POWER SUPPLY
(PSB) PP 210E000
PP 210E001
PP 210E002

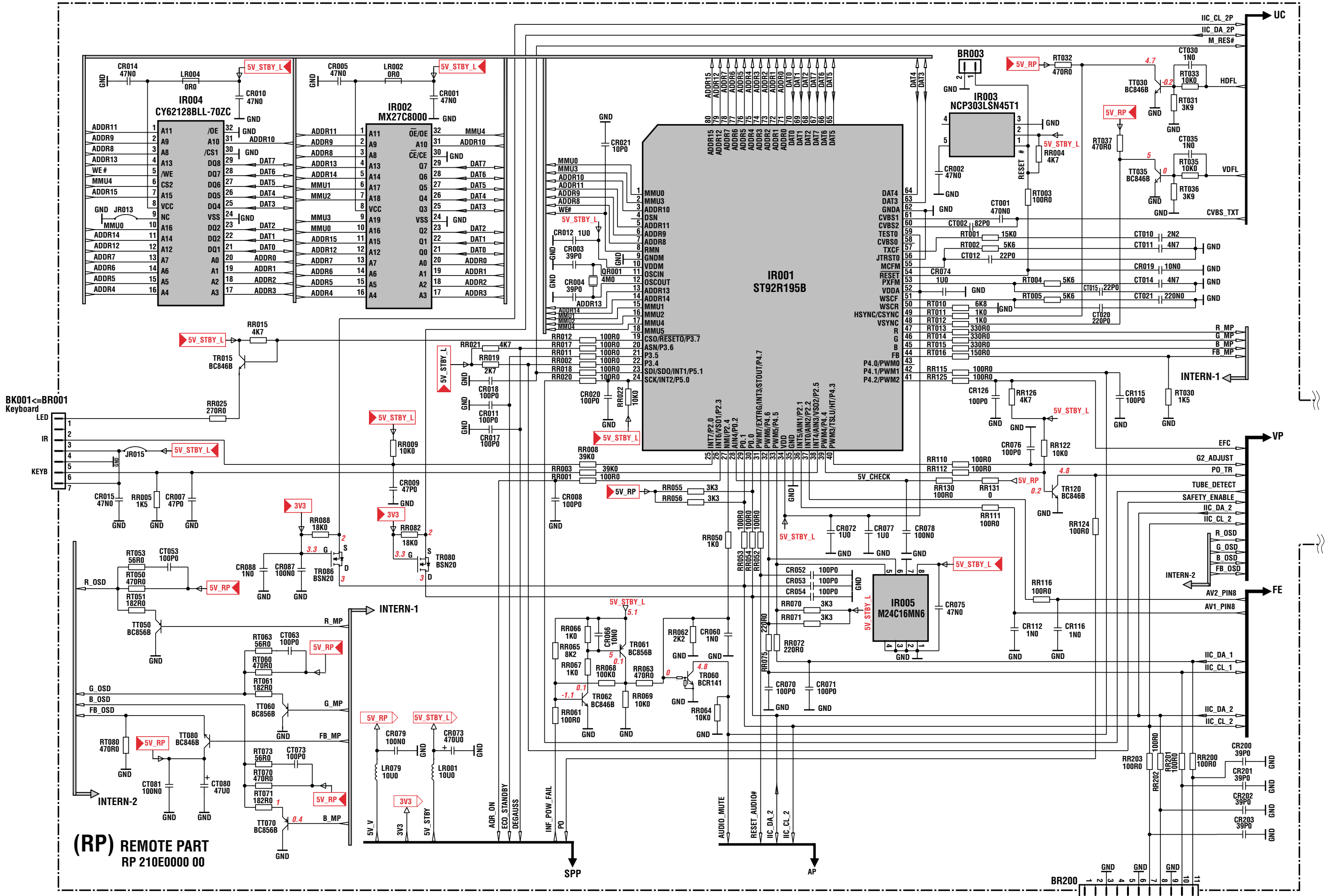
COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADADA
 SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE - DP 210E0228 (28" XF 16:9 TTD TUBES / Gen 2) - DP 210E0232.37 (32" XF 16:9 TUBES / Gen 2)



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
 SIGNAL BOARD POWER PART - PARTIE ALIMENTATION DE LA PLATINE PETITES SIGNAUX - BETRIEBSSPANNUNGSERZEUGUNG SIGNAL PLATINE -
 PARTE ALIMENTAZIOEN PIASTRA SEGNALI - PARTE ALIMENTACIÓN PLACA SEÑAL

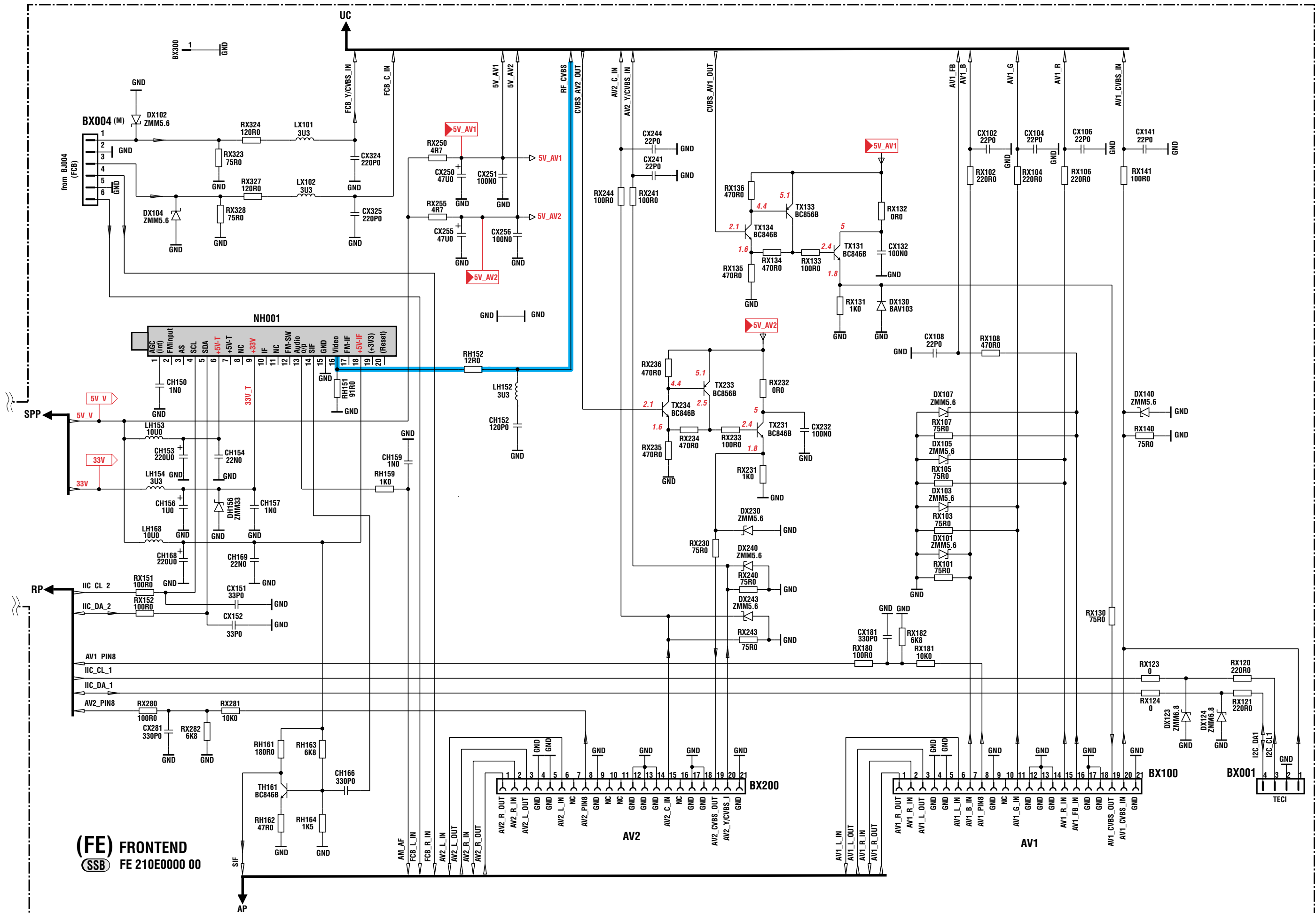


SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
 REMOTE / MICROCONTROLLER - GESTION / MICROCONTROLEUR - FERNBEDIENUNGS- UND MICROCONTROLLERSTUFEN - MICROPROCESSORE - REMOTO / MICROCONTROLADOR



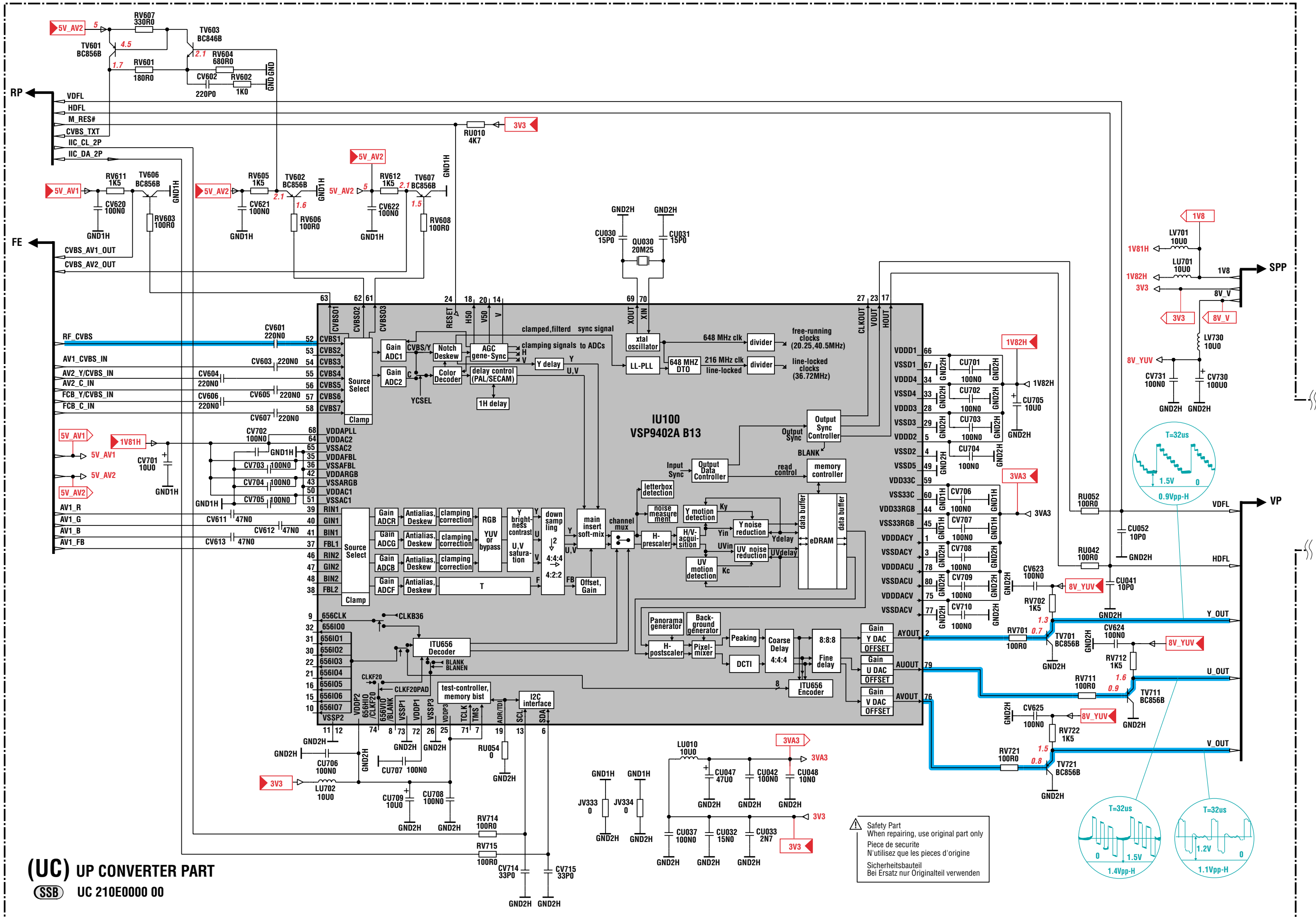
(RP) REMOTE PART
 RP 210E0000 00

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
FRONTEND PART - PARTIE SIGNAUX D'ENTREE - EINGANGSSTUFEN - PRESE FRONTALI - FRONT END PART



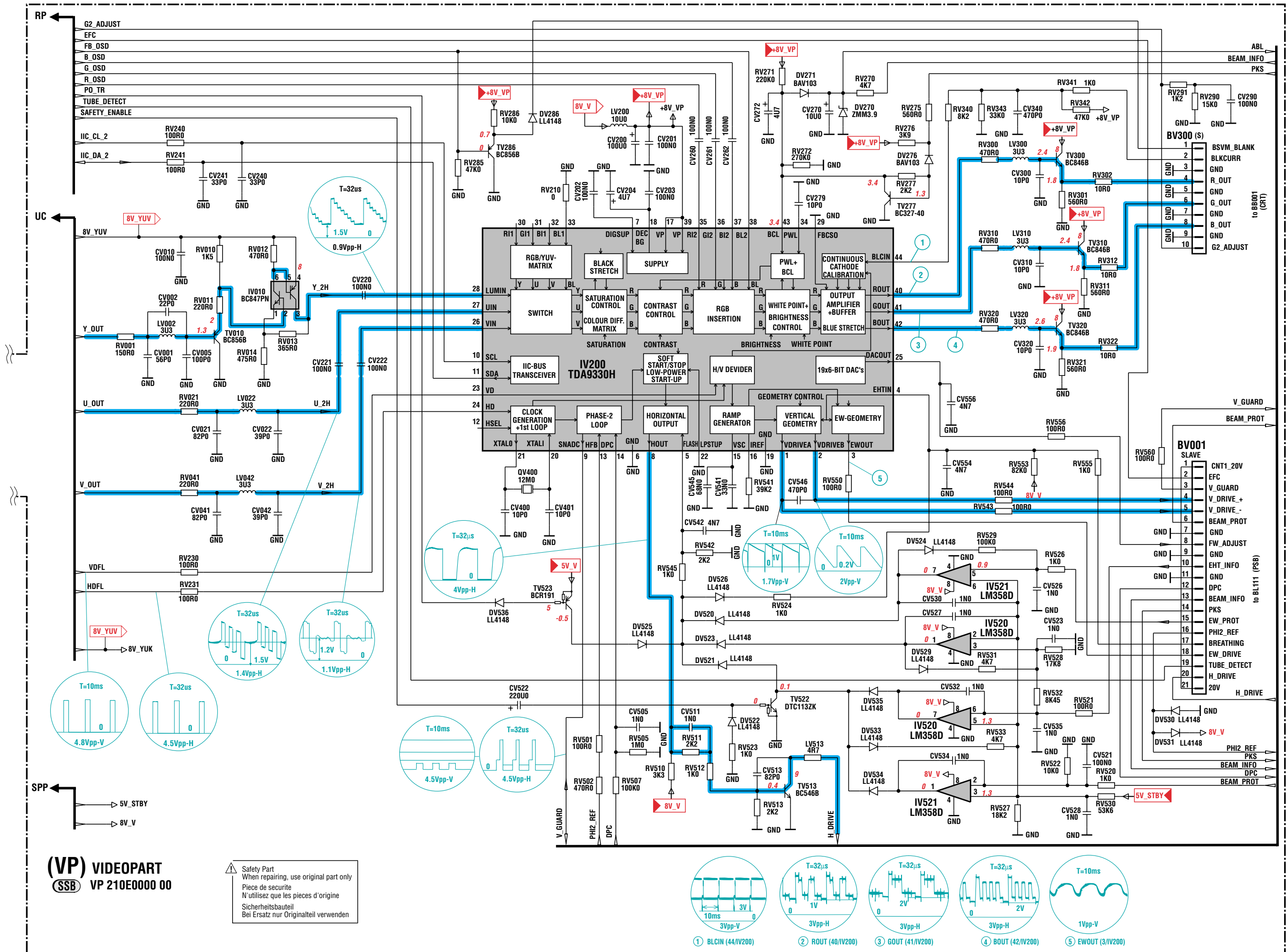
(FE) FRONTEND
(SSB) FE 210E0000 00

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
 UPCONVERTER PART - PARTIE CONVERSION - UPCONVERTER STUFEN - CIRCUITO UPCONVERTER - SUPRACONVERTOR



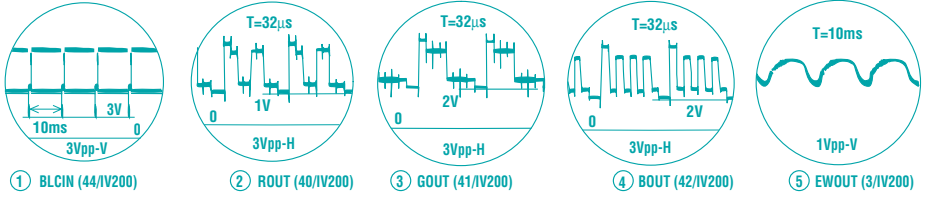
(UC) UP CONVERTER PART
 (SSB) UC 210E0000 00

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNAI - PLACA PEQUEÑA SEÑAL
 VIDEO PART - PARTIE VIDEO - VIDEO-SIGNALVERARBEITUNG - ELABORAZIONE VIDEO - TRATAMIENTO VIDEO

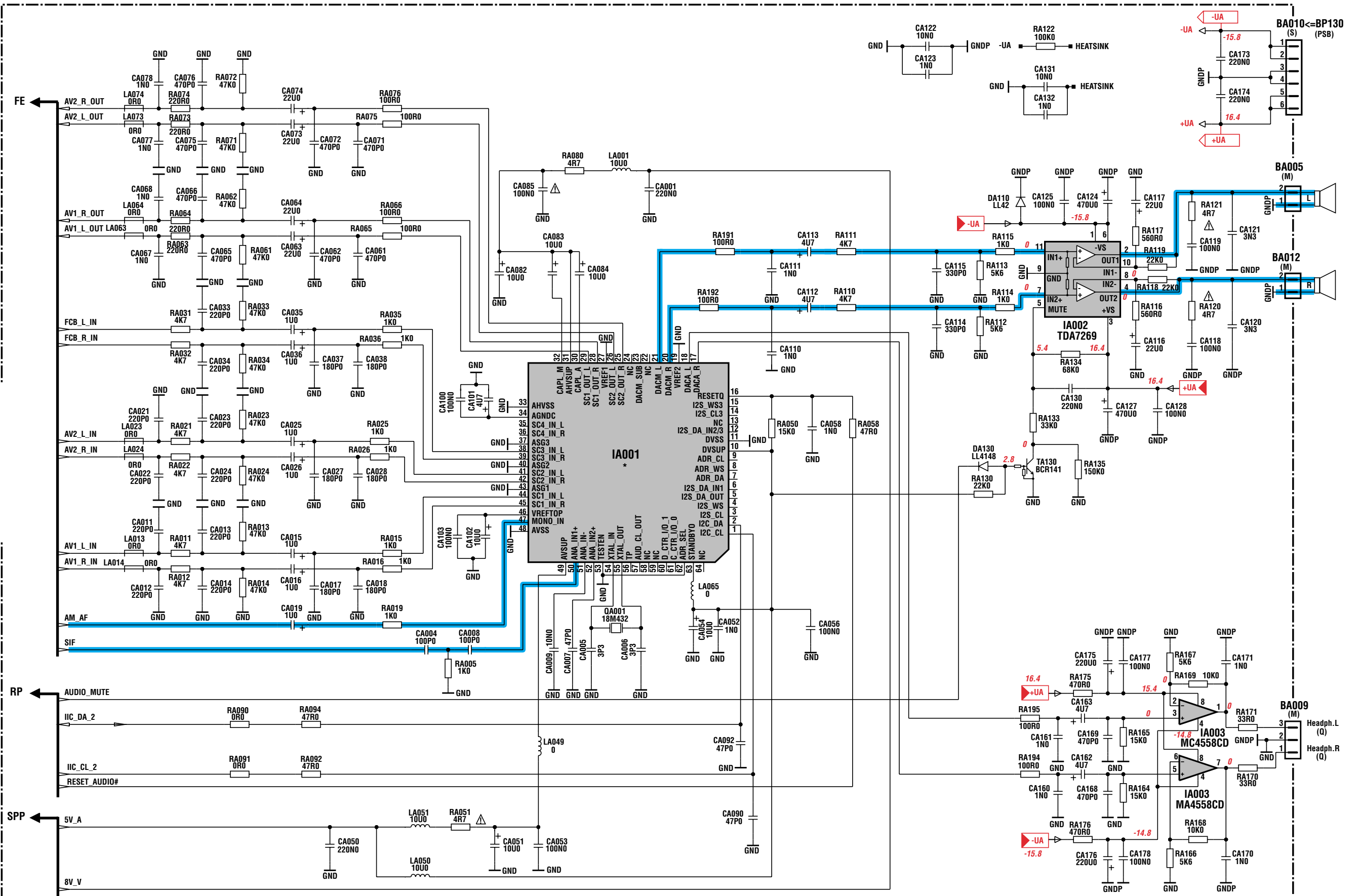


(VP) VIDEOPART
(SSB) VP 210E0000 00

Safety Part
 When repairing, use original part only
 Pièce de sécurité
 N'utilisez que les pièces d'origine
 Sicherheitsbauteil
 Bei Ersatz nur Originalteil verwenden



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
 AUDIO PART - PARTIE AUDIO - AUDIOSTUFEN - CIRCUITO AUDIO - AUDIO

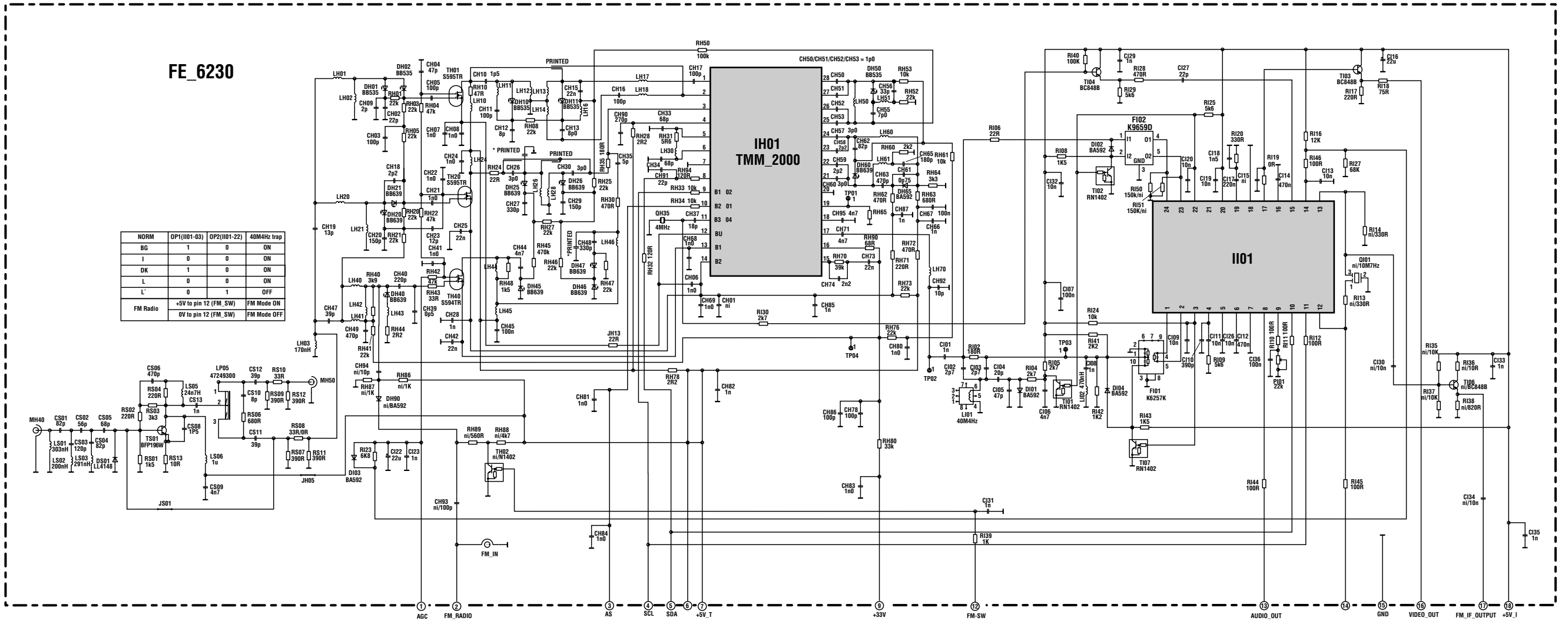


(AP) AUDIO PART
(SSB) AP 210E0000 00
AP 210E0001 00

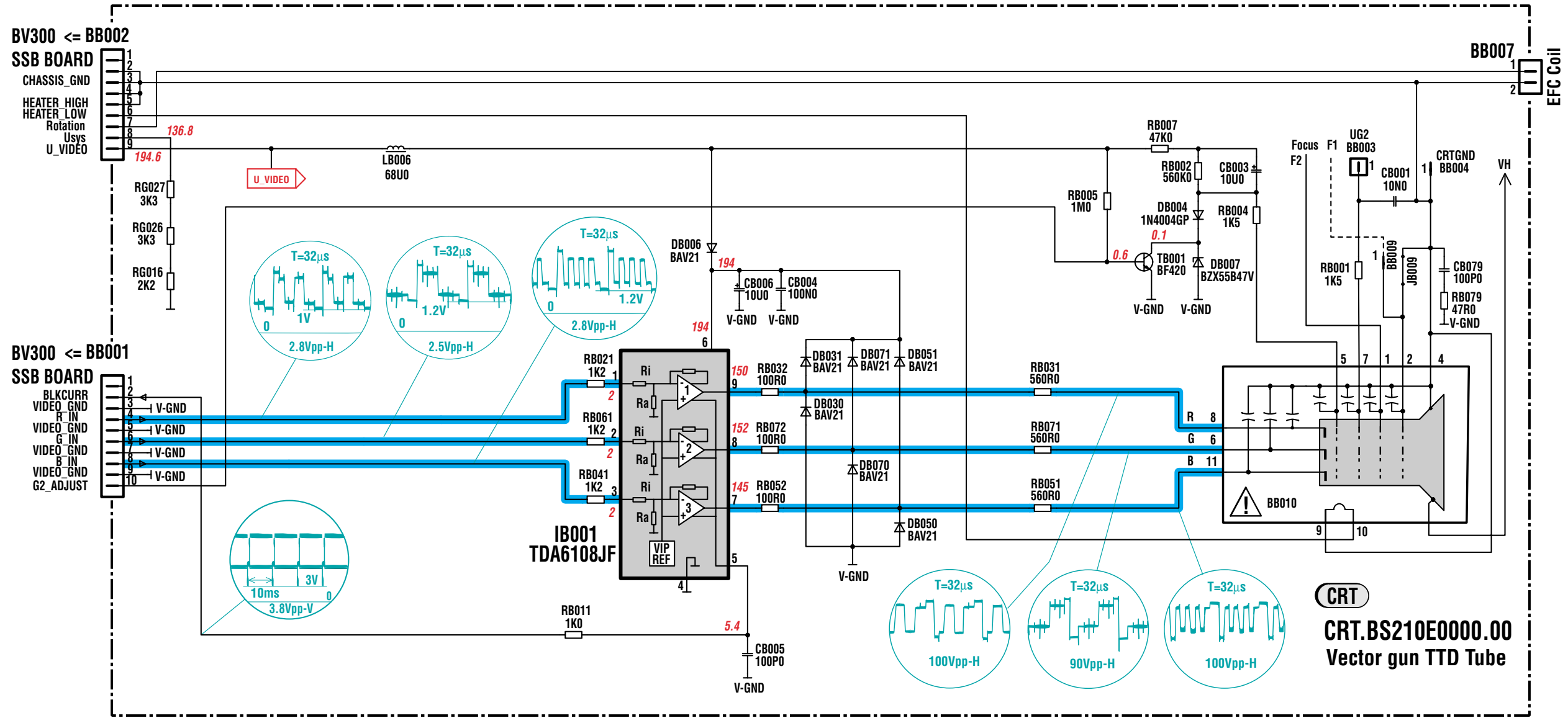
Safety Part
 When repairing, use original part only
 Pièce de sécurité
 N'utilisez que les pièces d'origine
 Sicherheitsbauteil
 Bei Ersatz nur Originalteil verwenden

* Reference	TOCOM	IA001
AP 210E0000 00 Stereo/Nicam 2X10W rms Virtual Dolby	10784540	MSP3411G-QI-B8-V3
AP 210E0001 00 Stereo/Nicam 2X10W rms	10800990	MSP3410G-QI-B8-V3

VHF / UHF TUNER FE6230 (For information only)

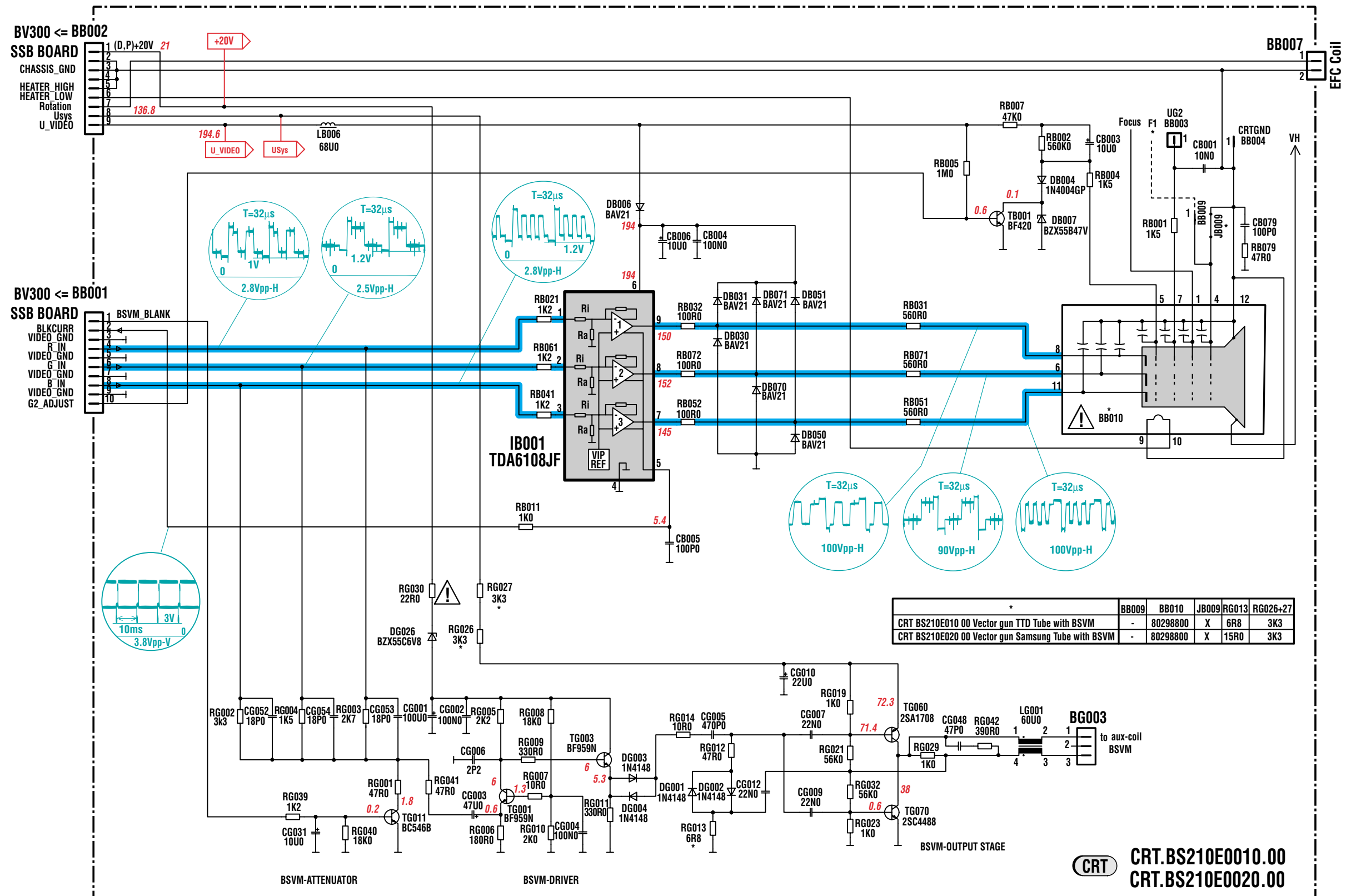


VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO
 CRT.BS210E0000.00



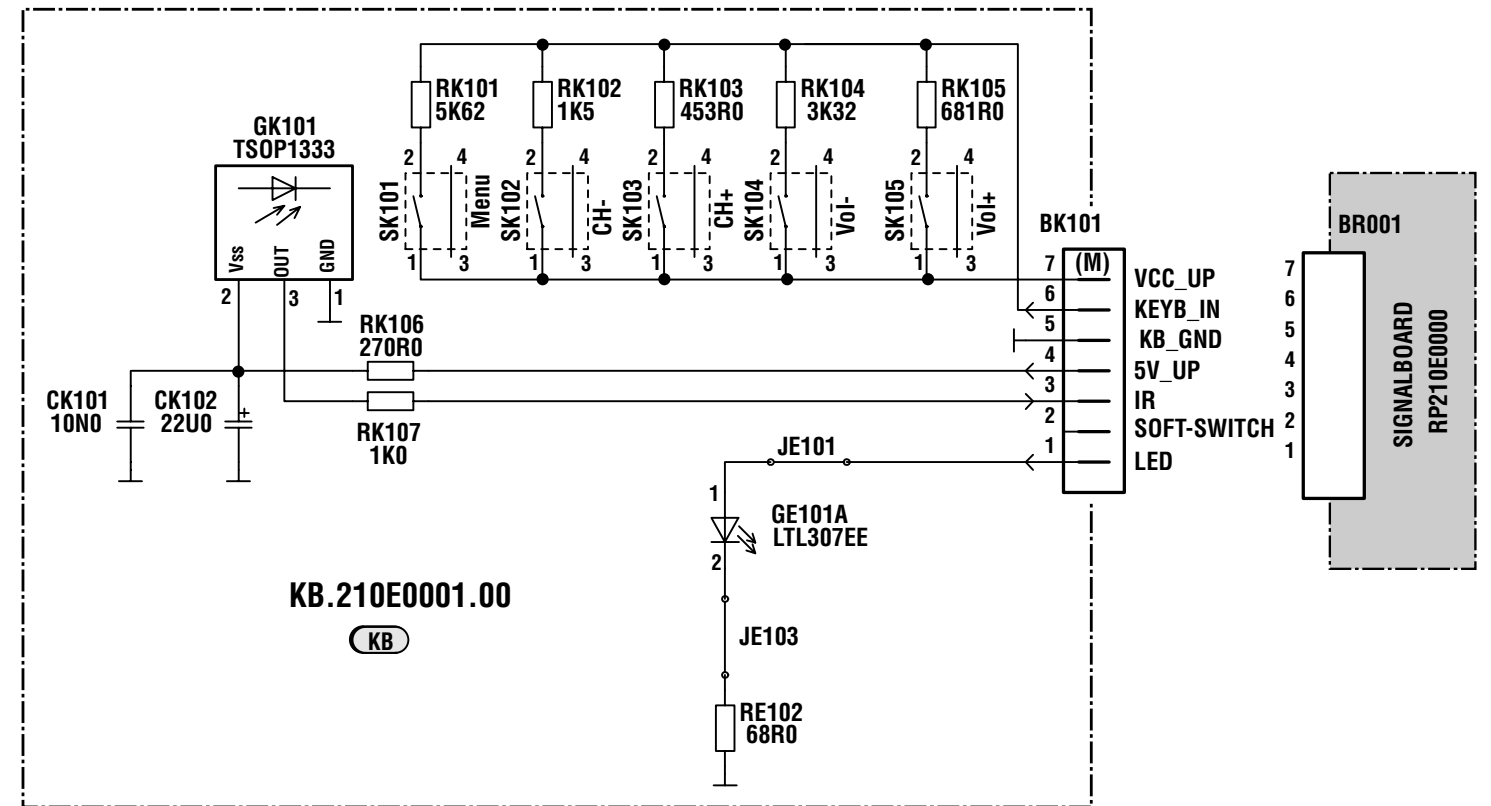
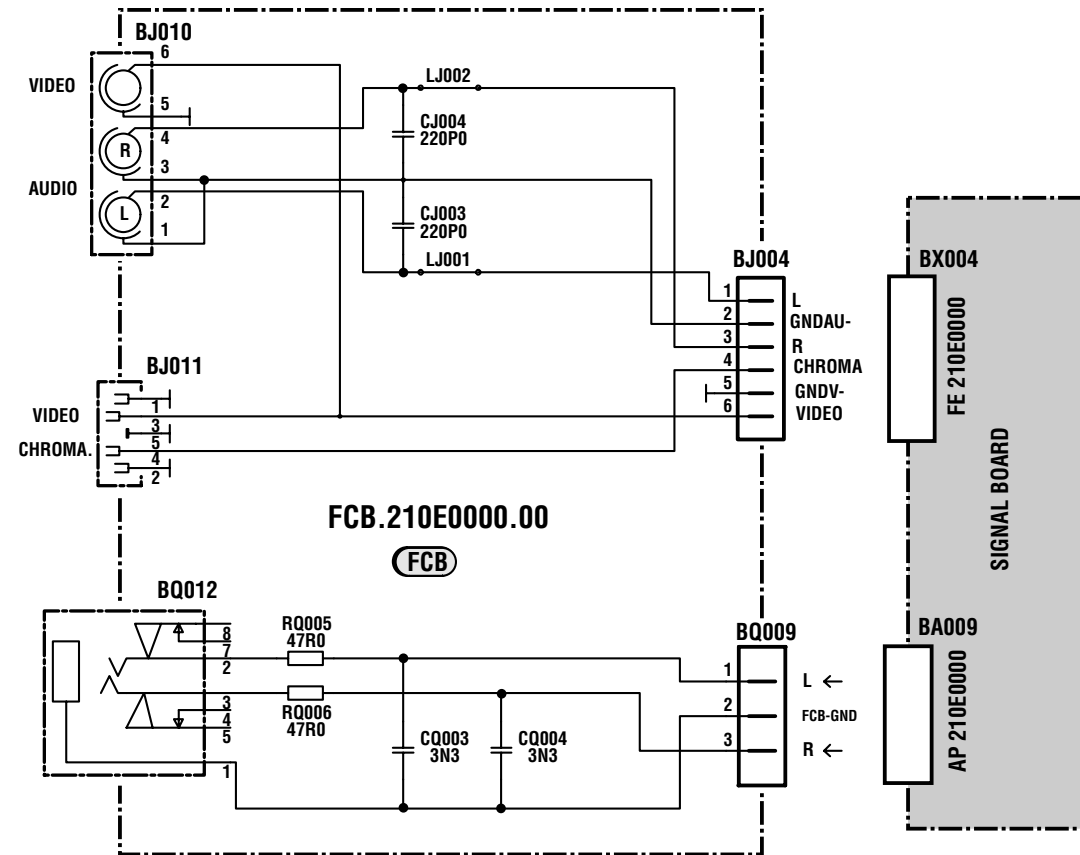
CRT
CRT.BS210E0000.00
Vector gun TTD Tube

VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO
 CRT.BS210E0010.00 - CRT.BS210E0020.00



FCB.210E0000

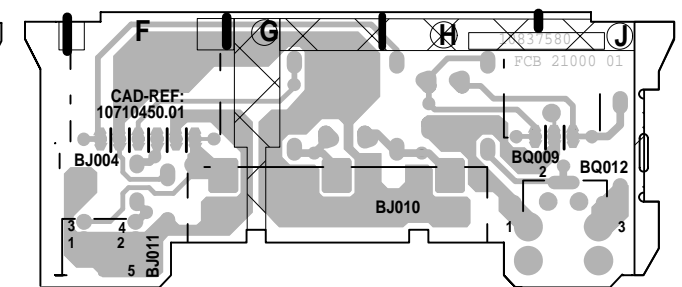
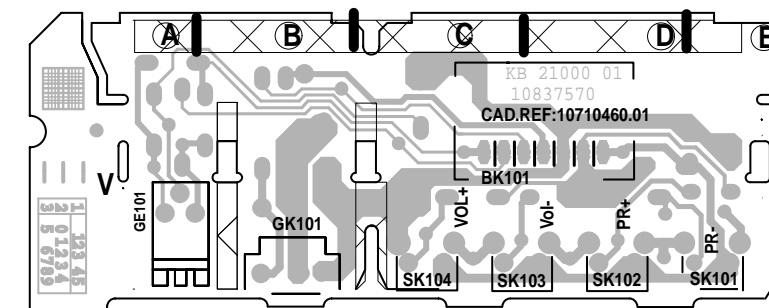
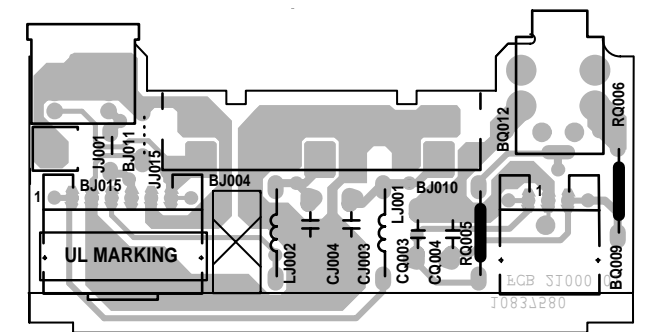
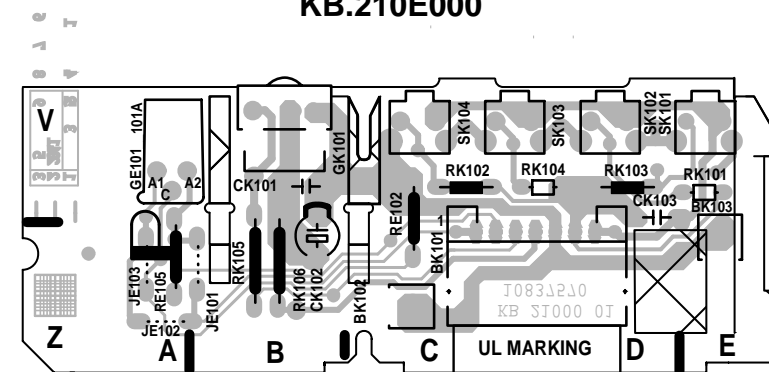
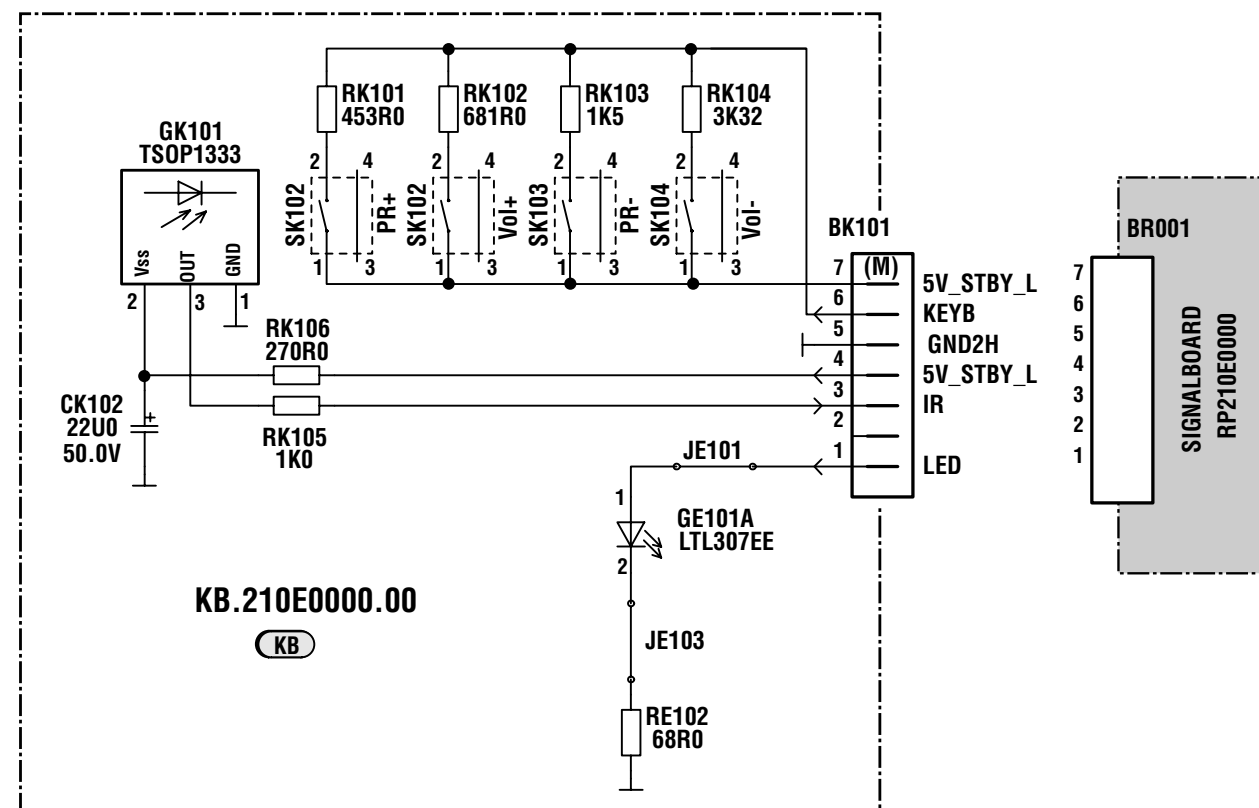
KB.210E0000 - KEYBOARD 5 Key



KB.210E0000 - KEYBOARD 4 Key

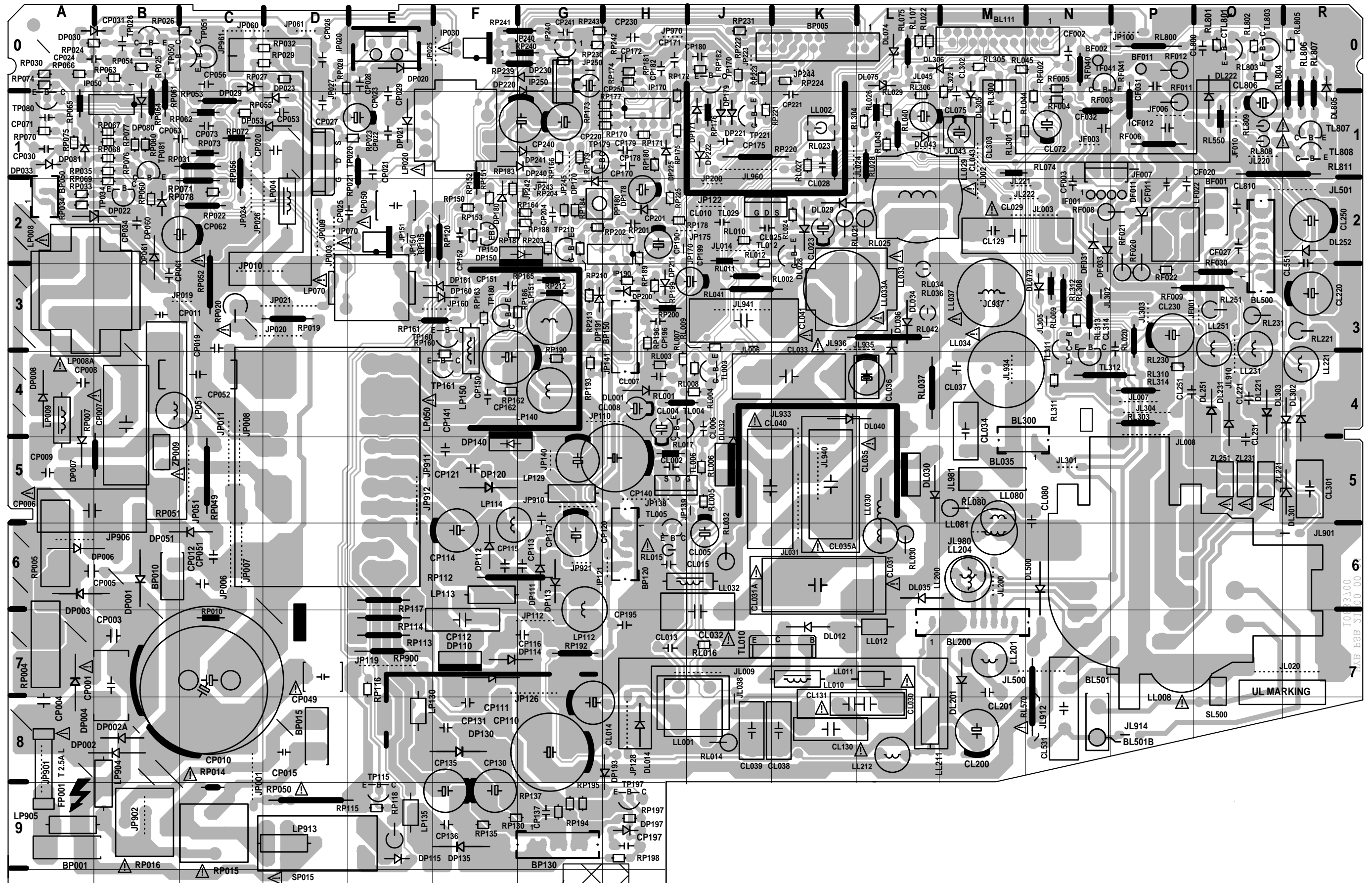
KB.210E000

FCB.210E000



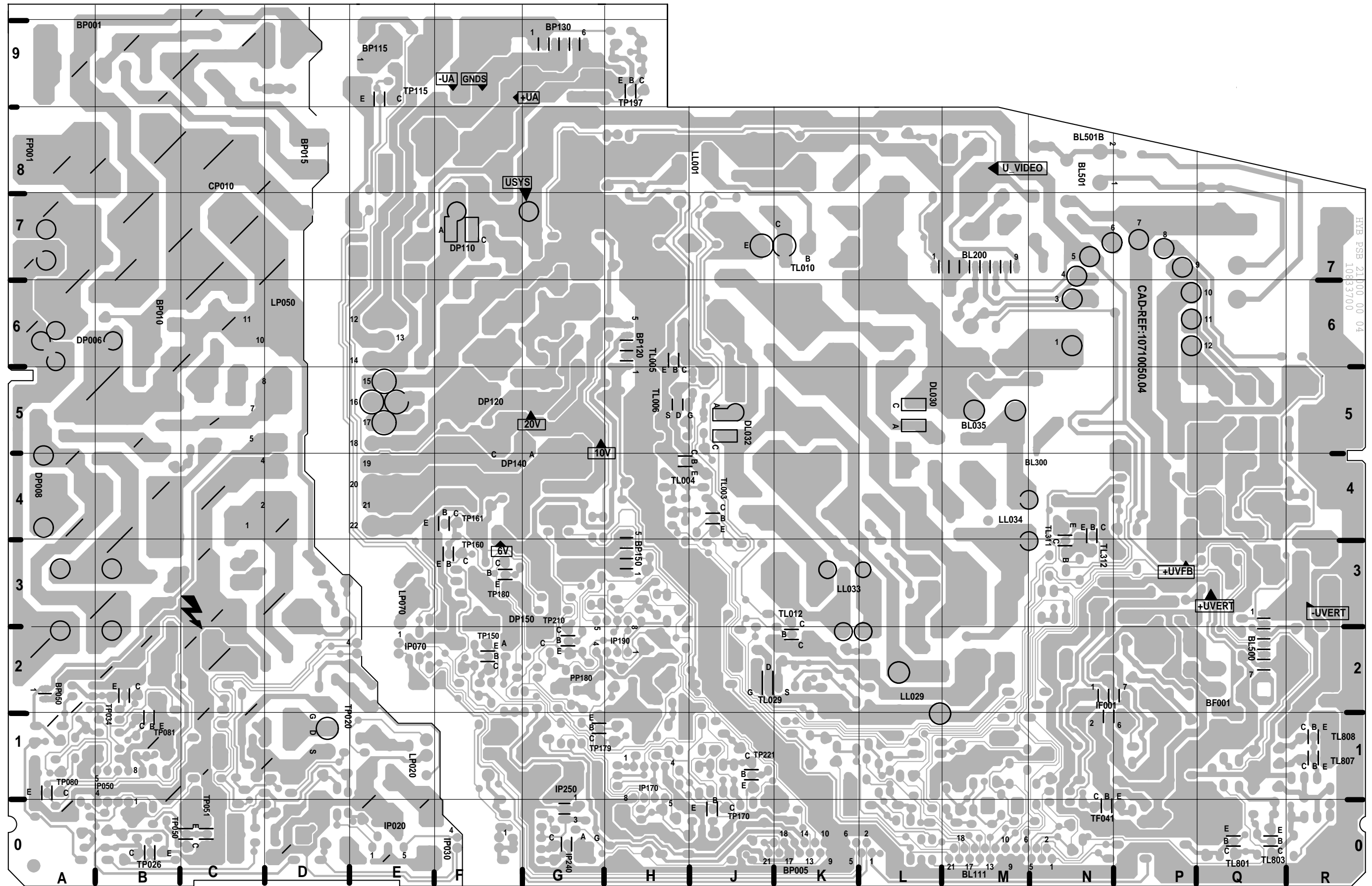
POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



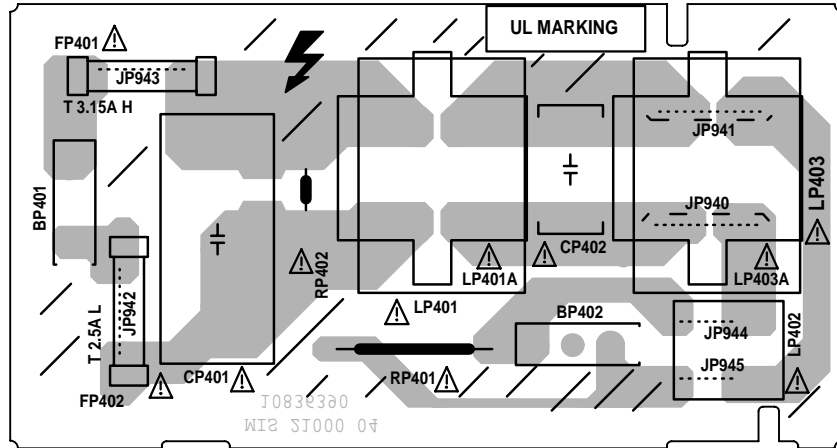
1093100
TAB E2B ST 00 00

UL MARKING

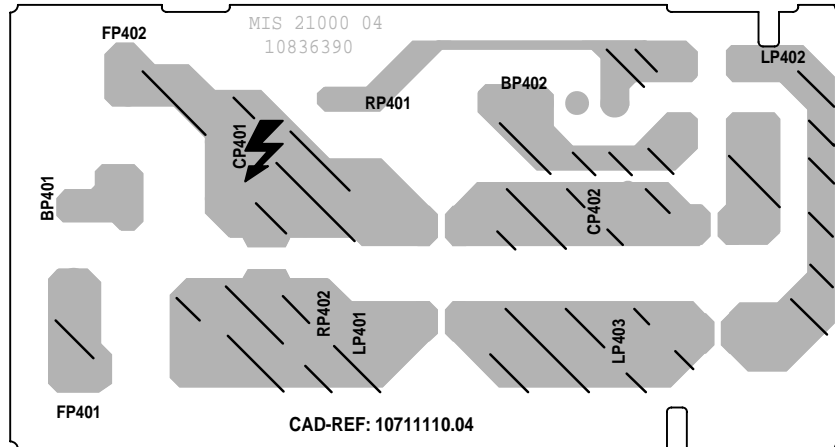


MAINS FILTER - FILTRE SECTEUR MIS210E0000

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES

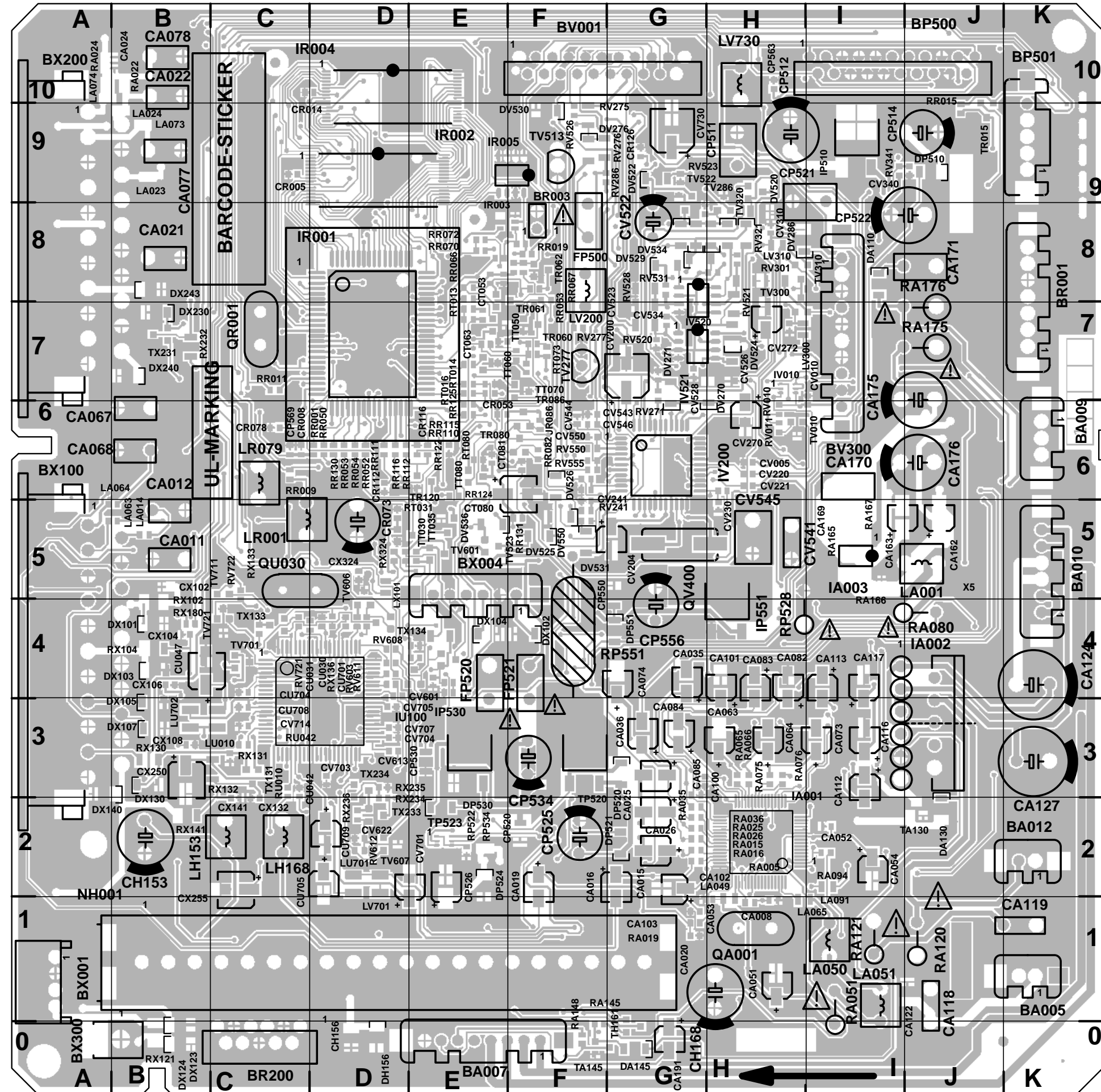


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



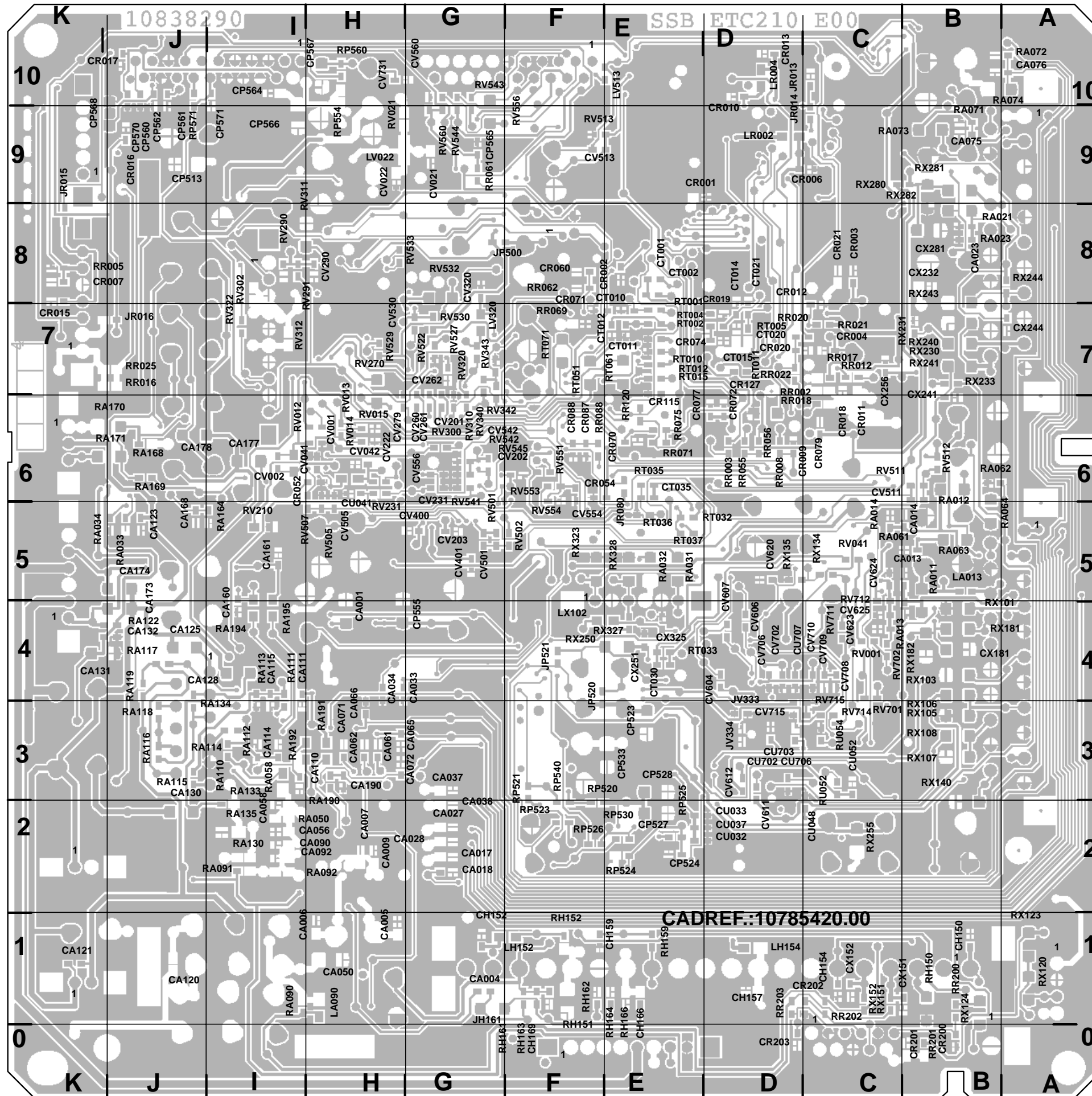
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



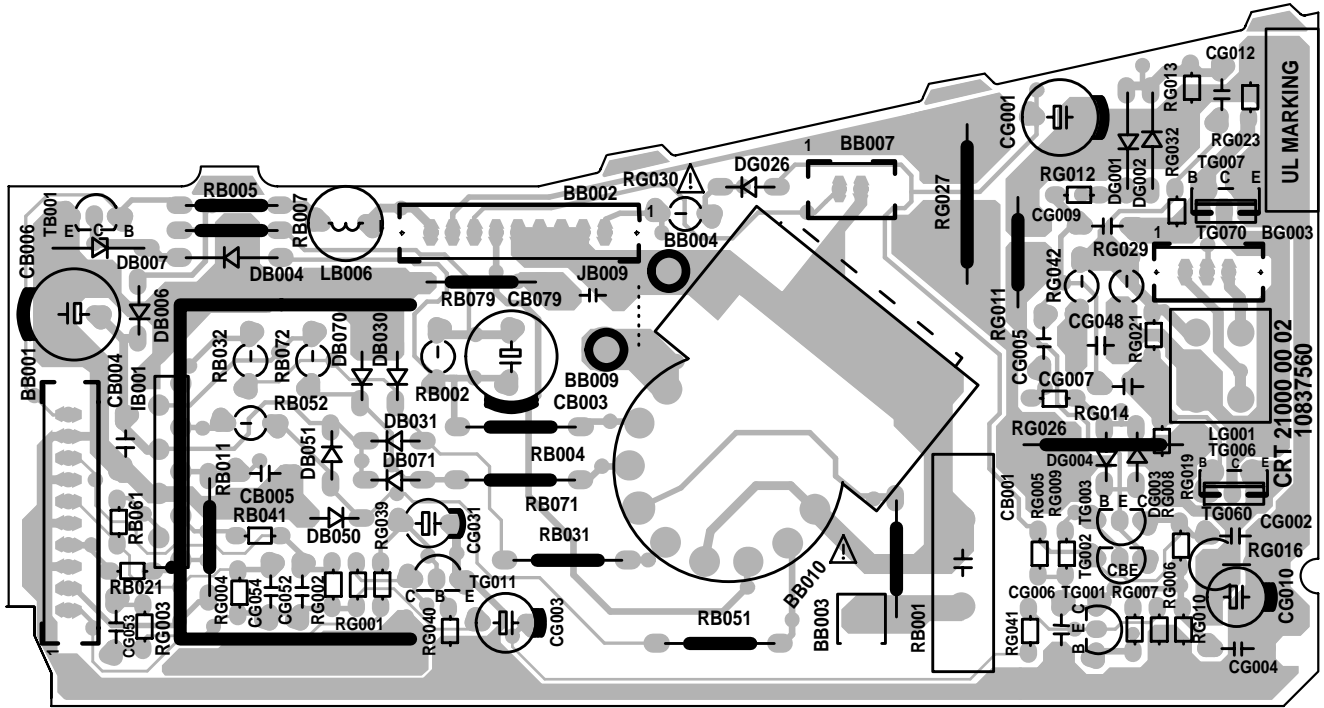
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

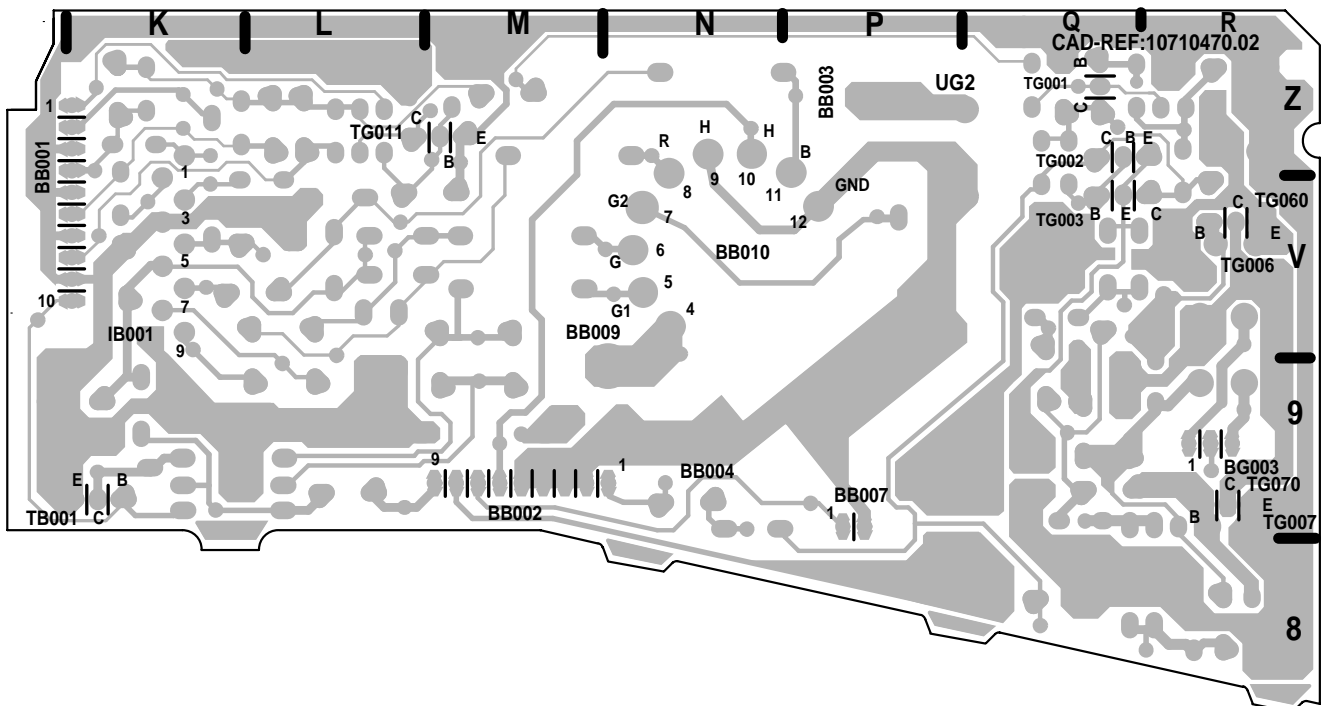


**VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE -
PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO**

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE -
LATO COMPONENTI - LADO COMPONENTES



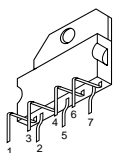
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



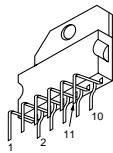
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

● AQR_ON	DISABLE AQUISITION MODE REGUL. ENABLE PWM PULSE	● INF_POW_FAIL	POWER FAIL INFORMATION
● AUDIO_MUTE	MUTES AUDIO AMPLIFIERS	● IR	INFRARED RECEIVER
● AV1_8	PIN_8 DETECTOR	● LED	LED DISPLAY
● AV_LINK	AV_LINK DATAS VCR/TV	● M_RES#	MAIN RESET SIGNAL
● AV_R_OUT	AUDIO RIGHT-OUT	● NMI	NON MASKABLE INTERRUPT
● AV_L_OUT	AUDIO LEFT-OUT	● PHI2_REF	PHI2 REFERENCE SIGNAL
● AV_R_IN	AUDIO RIGHT-IN	● PKS	PEAK SENSING
● AV_L_IN	AUDIO LEFT-IN	● PO	POWER ON
● AV_B	BLUE SIGNAL FROM AV	● PWM	PULSE WIDTH MODULATION
● AV_G	GREEN SIGNAL FROM AV	● RESET	RESET TO MICROPROCESSOR
● AV_R	RED SIGNAL FROM AV	● RF_CVBS	DEMODULATED TERRESTRIAL TUNER SIGNAL
● AV_C_IN	CHROMA-IN	● ROTATION	OUTPUT OF EARTH FIELD CORRECTION STAGE
● AV_FB	FAST BLANK SIGNAL FROM AV SCART	● R_OUT	RED SIGNAL TO VIDEO AMPLIFIER
● AV_Y_IN	VIDEO-IN	● R_TXT	RED SIGNAL OUTPUT (TEXT)
● BEAM_INFO	BEAM CURRENT INFORMATION	● SIF	SOUND IF OUTPUT
● BLKCURR	CUT OFF CURRENT	● SSC_V_GUARD	SAFETY DATA GENERATED BY THE VERTICAL AMPLIFIER TDA8177F
● B_TXT	BLUE SIGNAL OUTPUT (TEXT)	● +USYS	SYSTEM VOLTAGE
● B_OUT	BLUE SIGNAL TO VIDEO AMPLIFIER	● +/- UA	SOUND VOLTAGE
● BREATHING	COMPENSATE BREATHING PICTURE SIGNAL	● +UVERT	POSITIVE SUPPLY VERTICAL VOLTAGE
● BSVM	BEAM SCAN VELOCITY MODULATION	● -UVERT	NEGATIVE SUPPLY VERTICAL VOLTAGE
● CNT1_20V	SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BV001- BL111)	● +UVFB	POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER STAGE
● CNT2_20V	SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BP500- BP005)	● +UVIDEO	VIDEO VOLTAGE FOR THE CRT BOARD
● CRT	CATHODE RAY TUBE	● U_OUT	U TO VIDEO PART
● CVBS	VIDEO	● V_OUT	V TO VIDEO PART
● CVBS_TXT	TEXT VIDEO	● V_DRIVE	VERTICAL DEFLECTION DRIVE SIGNAL
● DEGAUSS	DEGAUSS SIGNAL	● Y_OUT	Y TO VIDEO PART
● DPC	DYNAMIC PHASE COMPENSATION SIGNAL	● +UVFB	POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER STAGE
● EFC	EARTH FIELD CORRECTION	● 1V8	SUPPLIES 1V81H / 1V82H POWER SUPPLY UP CONVERTER PART OF SIGNAL BOARD
● EHT	EXTREMELY HIGH TENSION	● 3V3	3V3 POWER SUPPLY UP CONVERTER PART OF SIGNAL BOARD
● EHT INFO	HORIZONTAL DEFLECTION PROTECTION	● 5 V_A / 5V_V	5V POWER SUPPLY SIGNAL BOARD
● E.W_DRIVE	EAST - WEST DRIVE SIGNAL	● 5V_STBYL / 5V_PR	MICROPROCESSOR SUPPLY VOLTAGE
● EW_PROT	SAFETY SIGNAL FROM DIODE MODULATOR	● 5V_STBY	5V STANDBY
● FB DETEC	FAST BLANKING DETECT	● 6 V	SUPPLIES THE 5V REGULATION AND 3V3 AND 1V8 REGULATORS ON THE SIGNAL BOARD.
● FB_TXT	FAST BLANKING (TEXT)	● 10 V	SUPPLIES THE 8V_V REGULATORS ON SIGNAL BOARD
● FW ADJ.	FULL WHITE ADJUSTMENT	● 8 V_V	8V SUPPLY SIGNAL BOARD
● G_OUT	GREEN SIGNAL TO VIDEO AMPLIFIER	● 7V_STBY	7V STANDBY
● G_TXT	GREEN SIGNAL OUTPUT (TEXT)	● 33V	SUPPLY VOLTAGE TUNER
● H_DRIVE	DRIVE SIGNAL FOR HORIZONTAL DEFLECTION	● 20V	SUPPLY VOLTAGE HORIZONTAL DRIVER AND BSVM CRT
● HEATER	HEATER OUTPUT FROM THE DST TO CRT		
● IIC-CL-1	I2C CLOCK BUS 1		
● IIC-CL-2	I2C CLOCK BUS 2		

INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR - CIRCUITOS INTEGRADOS Y TRANSISTORES



TDA 8177F



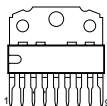
TDA7269



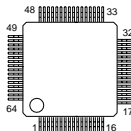
LM393
 NJM2903D
 VIPER20DIP



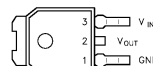
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 LM358D
 TL431ACLP
 M24C16MN6



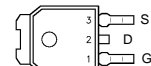
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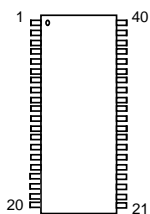
MSP3410G



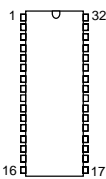
LF85CDT
 KF80BDT
 LD1117DT33
 LD1117DT18



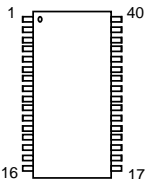
STD17NF03L



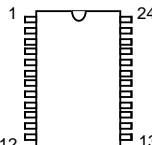
SAA4956TJ



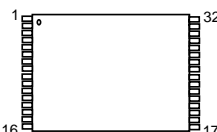
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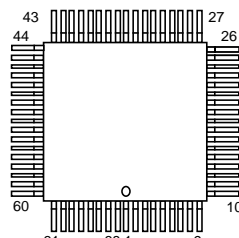
MX27C4000MC-90



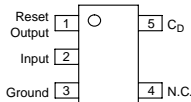
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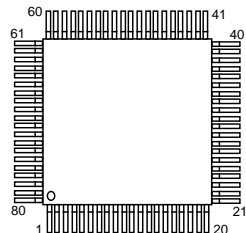
OTP THOMSON :
 M27C801



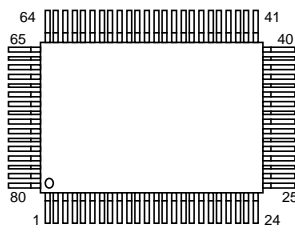
DMU0 CUT 2.1



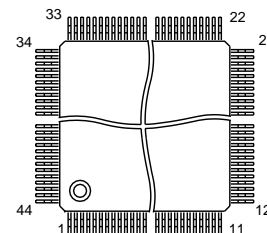
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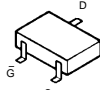
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TDA9330



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 BC 847B-BC856B
 BC857B-BF 799
 BC 848 A/B/C
 BCR141-BCR141N
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BSN20



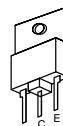
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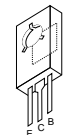
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ON4977N
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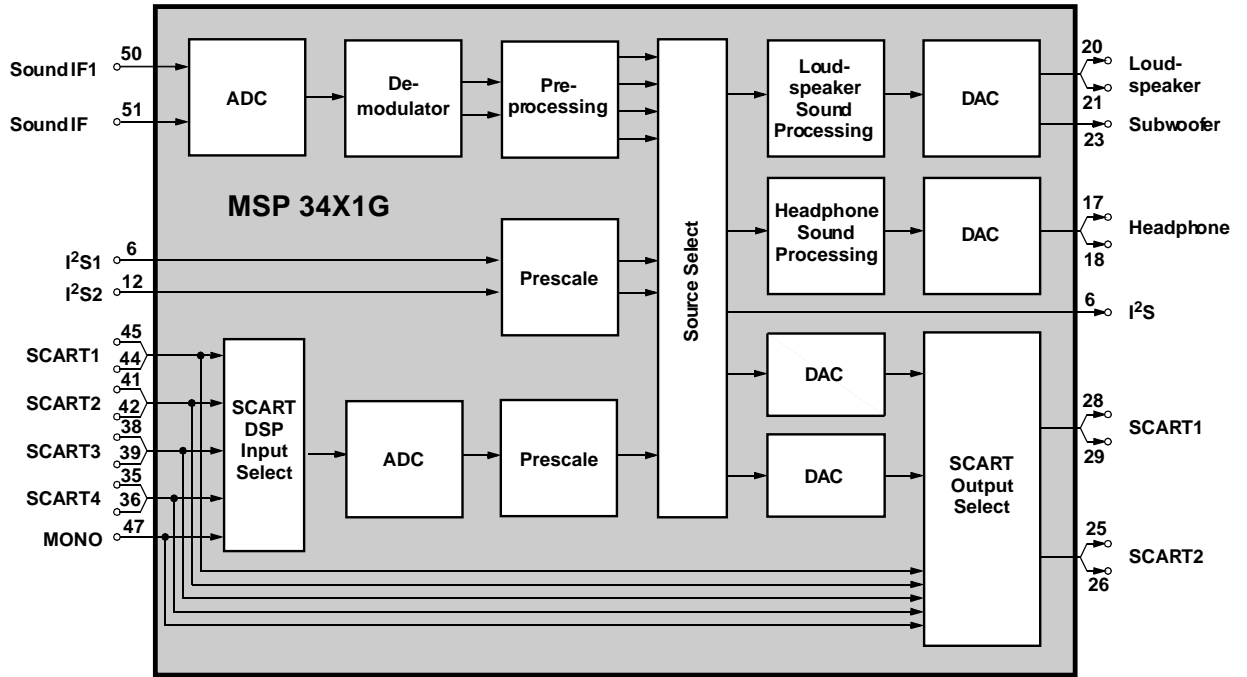
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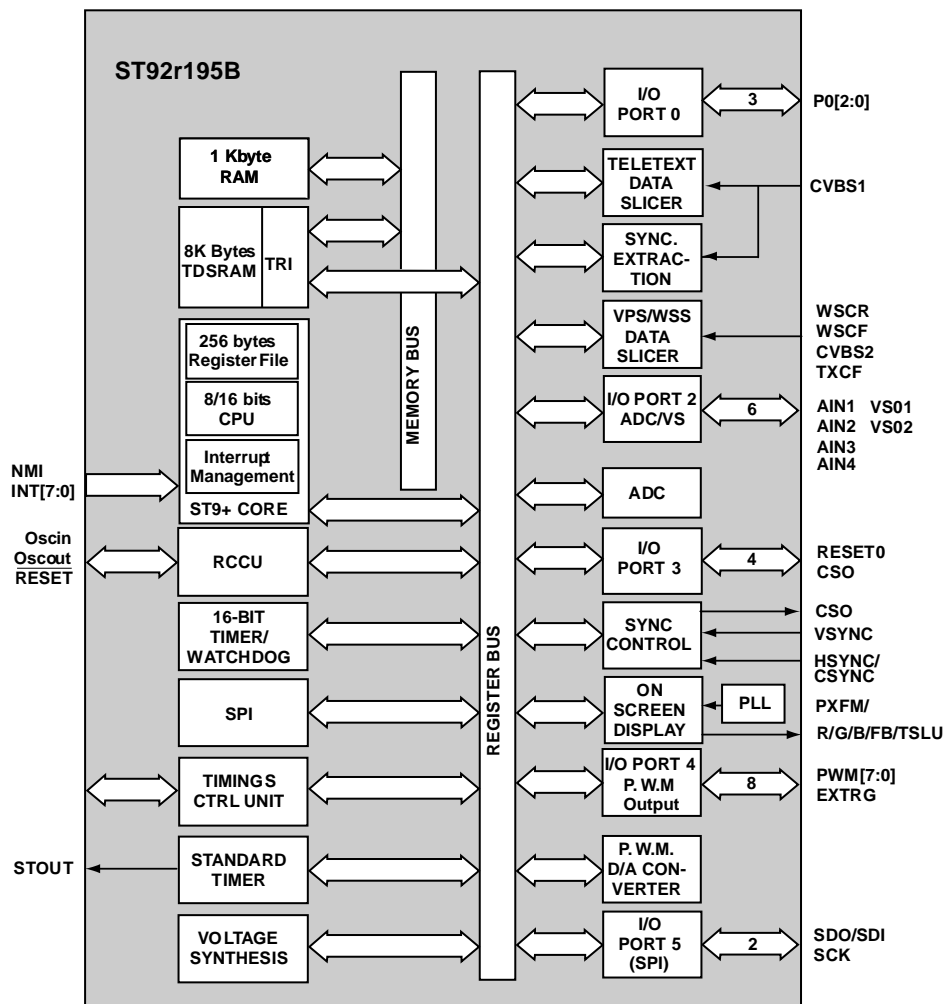
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 IRF630FP

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS
 INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBILDER - SCHEMA A
 BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

IA001- MSP34X0 / X1G



IR001- ST92R195B





EACEM-IRIS REPAIR CODING SYSTEM

SYMPTOM CODE TABLE



CONDITION CODE	MAIN SYMPTOM CODE	EXTENDED SYMPTOM CODE (*1)
1	1	NO ACTION
2	2	LEVEL
3	3	QUALITY
4	4	NOISE
5	5	UNSTABLE
6	6	RECORDING & PHYSICAL PROBLEMS
7	7	SPECIAL FUNCTIONS
8	8	OTHER CONDITIONS
1	GENERAL	110 POWER PROBLEM OR NOT OPERATING 111 NO POWER 112 NO POWER WHEN USING AC-ADAPTER 113 NO POWER WHEN USING DRY BATTERIES 114 NO POWER WHEN USING RECHARGEABLE BATTERIES 115 NO POWER FROM SOLAR CELL 116 NO POWER WHEN USING A CAR BATTERY 117 SHORT OPERATION TIME/SHORT BATTERY LIFE 118 POWER-OFF FUNCTION NOT WORKING 119 NO SWITCH-ON FROM STANDBY 11A POWERS UP, BUT NO OPERATION 11B CYCLIC POWER OFF 11C BLOWING EXTERNAL (MAINS) FUSE 11D SET SWITCHES OFF BY ITSELF 11E BACKUP BATTERY PROBLEM 11F NOT OPERATING 11G NO AUTOMATIC SWITCH ON/OFF 11H PROTECTION SWITCH/FUSE IN SET TRIGGERS 11J RECHARGEABLE BATTERY NOT RECOGNIZED 11X OTHER 'POWER' PROBLEM
1	COMMUNICATION	210 NO RECEPTION OR CONNECTION 211 NO AM RECEPTION 212 NO FM RECEPTION 213 NO SW RECEPTION 214 NO UHF RECEPTION 215 NO UHF RECEPTION 216 NO BS RECEPTION 217 NO CS RECEPTION 218 NO HDTV RECEPTION 219 NO GPS/OPS RECEPTION 21A NO RECEPTION OF DIGITAL BROADCASTING 21B NO IR RECEPTION 21C NO DIAL TONE 21D NO MODEM/FAX CONNECTION 21E MODEM NOT ANSWERING/NO CARRIER 21F NO NETWORK CONNECTION/NETWORK INITIALIZATION FAILS 21X OTHER 'NO RECEPTION' PROBLEM
2	PICTURE	310 NO PICTURE 311 NO PICTURE IN E TO E MODE 312 NO PICTURE IN PLAYBACK MODE 313 NO PICTURE IN VIEWFINDER 314 NO PICTURE, ONLY RASTER 315 NO RASTER, BLACK PICTURE 316 ONLY HORIZONTAL LINE 317 ONLY VERTICAL LINE 318 NO PICTURE IN LCD 319 NO 2nd (OR HIGHER) MONITOR DISPLAY 31X OTHER 'NO PICTURE' PROBLEM
3	COLOUR	410 NO COLOUR 411 NO COLOUR IN E TO E MODE 412 NO COLOUR IN PLAYBACK MODE 413 NO COLOUR IN VIEWFINDER 414 NO COLOUR IN PART OF PICTURE 41X OTHER 'NO COLOUR' PROBLEM
4	AUDIO	510 NO AUDIO 511 NO SOUND IN E TO E MODE 512 NO PLAYBACK OF OUTGOING MESSAGE(S) 513 NO PLAYBACK OF INCOMING MESSAGE(S) 514 NO AUDIO PLAYBACK 515 NO SOUND FROM HANDSET 516 NO SOUND FROM SPEAKER 517 NO SOUND FROM EARPHONE/HEADPHONE 518 NO MICROPHONE SOUND 519 NO SOUND FROM DIGITAL OUTPUT 51X OTHER 'NO AUDIO' PROBLEM
5	MECHANISM	610 NO MECHANICAL OPERATION 611 NO ROTATION OF MOTOR/DISC 612 NO FORWARD OPERATION 613 NO OPERATION FROM PCK MODE 614 NO FAST FORWARD OR REWIND FUNCTION 615 NO LOADING 616 NO UNLOADING OR EJECTING 617 NO AUTO SHUT-OFF OPERATION 618 TONERARM DOES NOT MOVE 619 DISC NOT BEING EJECTED 61A MAGAZINE OR MODULE LOADING/UNLOADING 61B CONTROL/SWITCH NOT WORKING 61X OTHER 'NO MECHANICAL OPERATION' PROBLEM
6	DATA PROCESSING	710 NO DATA PROCESSING OPERATION 711 NO INITIAL SCREEN 712 SYSTEM DOES NOT RESET 713 SYSTEM DOES NOT BOOT UP 714 NO OPERATION FROM PLUG-IN MODULE/PERIPHERAL 715 NO KEYBOARD OPERATION 716 NO OPERATION FROM OTHER INPUT/OUTPUT DEVICE 717 NO DATA STORAGE OPERATION 718 NO DATA COMMUNICATION 719 ERROR MESSAGE DISPLAY 71A HDD BOOT FAILURE 71B FDD BOOT FAILURE 71X OTHER 'NO DATA PROCESSING' PROBLEM
7	PRINT/COPY/SCAN	810 NO PRINT/COPY/SCAN OPERATION 811 NOT PRINTING 812 NO COMMUNICATION WITH PRINTER 813 PAPER NOT LOADING 814 NO PAPER FEED 815 NO IMAGE FIXATION 816 NO DOCUMENT FEEDING 817 SCANNER NOT WORKING 81X OTHER 'NO PRINT/COPY/SCAN OPERATION' PROBLEM

BROWN GOODS
REV 03 - 2000/02

150	REMOTE CONTROL PROBLEM 151 NO REMOTE CONTROL OPERATION 152 INCORRECT REMOTE CONTROL OPERATION 153 REMOTE CONTROL PROGRAMMING/LEARNING MODE PROBLEM 154 POOR REMOTE CONTROL SENSITIVITY 15X OTHER 'REMOTE CONTROL' PROBLEM	160	PHYSICAL DAMAGE 161 DAMAGED/DEFORMED CABINET/PANEL 162 DAMAGED HANDLE/CLIP 163 DAMAGED CONTROL KNOB(S)/BUTTON(S)/KEYPAD 164 DAMAGED DOOR/COVER 165 DAMAGED SEAL 166 DAMAGED PLUG/SOCKET/TERMINAL/CONNECTOR 167 DAMAGED LENS 168 DAMAGED CARTRIDGE OR STYLUS 169 DAMAGED ANTENNA 16A DAMAGED CRT OR VIEWFINDER/LCD DISPLAY 16B MISSING COMPONENT(S) OR ORNAMENTAL PARTS 16C PRINTED MARKINGS ERASED/PEELED OFF 16D SET BURNING/EMITS SMOKE 16E EXTERNAL SURFACE DAMAGE (BUBBLING/PEELING/RUSTING/SCRATCHED) 16F SMELL 16G WEAK/DAMAGED STAND 16H DAMAGED SPEAKER 16J SET GETS VERY HOT / PARTS MELTING 16K FOREIGN SUBSTANCE ON/IN UNIT 16L BURNING MARKS 16M INTERNAL SURFACE DAMAGE (BUBBLING/PEELING/RUSTING/SCRATCHED) 16N DAMAGED POWER CABLE 16P DAMAGED ACCESSORY 16R DISCOLOURATION 16X OTHER 'PHYSICAL DAMAGE' PROBLEM	170	GENERAL FUNCTION PROBLEM 171 FAULTY CLOCK FUNCTION 172 FAULTY DISPLAY 173 FAULTY TIMER PROGRAMMING 174 FAULTY TIMER OPERATION 175 PROGRAMMING/USER ADJUSTMENT PROBLEM 176 FAULTY RECORD MUTE OPERATION 177 FAULTY PROGRAMMED/CYCLEBACK OPERATION 178 FAULTY MEMORY FUNCTION 179 FAULTY INPUT SWITCHING 17A FAULTY OUTPUT SWITCHING 17B ELECTRIC SHOCK/STATIC DISCHARGE 17C FAULTY SEARCH FUNCTION 17D (INDEX/VIEW/TITLE/CHAPTER/TRACK...) INDEX/VIEW/TITLE/CHAPTER/TRACK... 17E WRONG LANGUAGE/CHARACTER SET 17F ERROR CODE APPEARS IN DISPLAY 17G SWITCH NOT OPERATING 17H PEDAL NOT OPERATING 17I FAULTY STANDBY MODE 17J FAULTY HIBERNATION MODE 17K NO AUDIBLE WARNING SIGNAL 17L FAULTY OPERATION OF PARENTAL LOCK/KEYLOCK FUNCTION 17M FAULTY MODE SWITCHING 17N MENU FUNCTION PROBLEM 17X OTHER 'GENERAL FUNCTION' PROBLEM	180	SPECIAL REQUIREMENTS 181 TEST AND CHECK 182 GENERAL OVERHAUL 183 SYSTEM/FREQUENCY CONVERSION 184 INITIAL SETUP/INSTALLATION REQUESTED 185 MODIFICATION/CIRCUIT/INSTALLATION CHANGE 186 WRONG PRODUCT IN CARTON 187 ACCESSORY MISSING 188 UNABLE TO CONNECT PARTS-TO-ASSEMBLE 189 WRONG COLOUR 18B BATTERY MOUNTING PROBLEM 18C OTHER 'SPECIAL REQUIREMENTS' SYMPTOM NOT AVAILABLE
250	UNSTABLE RECEPTION/TRANSMISSION 251 TUNING DRIFT 252 FADING 253 INTERMITTENT LINE/LINE BREAKING OFF 254 NO OR UNSTABLE CONNECTION COMBINED WITH 'WEAK SIGNAL STRENGTH' INDICATION 25X OTHER 'UNSTABLE RECEPTION/TRANSMISSION' PROBLEM	260	TUNING PROBLEM 261 MANUAL TUNING PROBLEM 262 AUTOMATIC TUNING PROBLEM 263 INCORRECT TUNING CHANNEL 264 TUNING MEMORY PROBLEM 26X OTHER 'TUNING' PROBLEM	270	SPECIAL COMMUNICATION PROBLEM 271 FAULTY DIALLING 272 FAULTY CHANNEL SELECTION 273 FAULTY AUTO-ANSWER OPERATION 274 FAULTY MESSAGE READ-OUT FUNCTION 275 FAULTY AUTODIAL/REDIAL MEMORY 276 FAULTY SPEECH PROCESSING 277 NO RINGING TONE 278 LOUD/WEAK RINGING TONE 279 MODEM STUCK OFF HOOK 27A FAX DOES NOT WORK PROPERLY 27B MODEM CAUSES PROBLEM WITH PHONE 27C NO MODEM DIAL TONE 27X OTHER 'SPECIAL COMMUNICATION' PROBLEM	280	SPECIAL RECEPTION PROBLEM 281 FAULTY STEREO RECEPTION 282 FAULTY MAIN CHANNEL (A) FUNCTION 283 FAULTY SUB-CHANNEL (B) FUNCTION 284 FAULTY MESSAGE READ-OUT FUNCTION 285 FAULTY RDS/VPS/PDC/XDS OPERATION 286 FAULTY TELETEXT/CLOSE CAPTION/EPG RECEPTION 287 FAULTY SATELLITE/RTTY RECEPTION 288 FAULTY FAX OPERATION 289 MODEM NOT RECOGNIZED BY SYSTEM 28A FAULTY CALL CHARGE DISPLAY 28B FAULTY HANDS-FREE OPERATION 28C SET LOCKED 28X OTHER 'SPECIAL RECEPTION' PROBLEM
350	UNSTABLE PICTURE 351 SYNC PROBLEM 352 PICTURE PUMPING 353 PICTURE JITTER 354 PICTURE SHAKING (HORIZONTAL OR VERTICAL) 355 FLICKERING PICTURE 356 FLASHING PICTURE 357 CYCLIC PICTURE MUTING 358 HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE 359 VCR SKEW/H-SHIFT ERROR 35A FROZEN PICTURE 35B LUMPING/REPEATING PICTURE 35X OTHER 'UNSTABLE PICTURE' PROBLEM	360	POOR PICTURE RECORDING 361 NO PICTURE RECORDING 362 NO ERASURE PROTECTION FOR VIDEO 363 PREVIOUS VIDEO RECORDING NOT BEING ERASED 364 UNWANTED ERASURE OF PICTURE 365 NO CAMERA RECORDING 366 ONLY ONE FIELD PER FRAME BEING RECORDED 367 RECORDS ONLY A FEW PICTURES 36X OTHER 'PICTURE RECORDING' PROBLEM	370	SPECIAL PICTURE FUNCTION PROBLEM 371 EDITING FUNCTION 372 FAULTY FADING/WIPER OPERATION 373 FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION 374 FAULTY SUPERIMPOSE/TELOP OPERATION 375 FAULTY PICTURE IN PICTURE/DIGITAL PICTURE OPERATION 376 FAULTY PICTURE TRANSMISSION 377 FAULTY AUTO-ANSWER OPERATION 378 FAULTY GENLOCK FUNCTION 379 FAULTY FLASH/STROBE FUNCTION 37A FAULTY DIGITAL PICTURE/ZOOMING FUNCTION 37B FAULTY AUTO-EDIT FUNCTION 37C FAULTY PICTURE STABILIZER FUNCTION 37D FAULTY AUTO-INDEX FUNCTION 37E FAULTY SUBTITLING FUNCTION 37F FAULTY VARIABLE SPEED PLAYBACK 37G FAULTY VIEW-MULTI-ANGLE SWITCHING 37H FAULTY ASPECT RATIO SWITCHING 37I THUMBNAIL OR INDEX PICTURE PROBLEM 37K NO BLANKING SCREEN 37X OTHER 'SPECIAL PICTURE FUNCTION' PROBLEM	380	PICTURE DISPLAY/PICKUP PROBLEM 381 BURN MARK ON DISPLAY/PICKUP 382 SCRATCH ON DISPLAY/PICKUP 383 DUST/DIRT ON DISPLAY/PICKUP 384 PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP 385 BRIGHT POINT(S) IN PHOSPHOR/PIXEL LINES ACROSS/DOWN IMAGE 386 OUT OF SPECS PIXEL DEFAULTS 387 BACKGROUND BURN IN 388 OTHER 'PICTURE DISPLAY/PICKUP' PROBLEM
450	UNSTABLE COLOUR 451 COLOUR FLASHING 452 HUE CONSTANTLY CHANGING 453 FLICKERING COLOUR 454 COLOUR NOT LOCKED 45X OTHER 'UNSTABLE COLOUR' PROBLEM	460	POOR COLOUR RECORDING 461 NO COLOUR RECORDING 462 NOISY COLOUR RECORDING 46X OTHER 'COLOUR RECORDING' PROBLEM	470	SPECIAL COLOUR FUNCTION PROBLEM 471 FAULTY AUTOMATIC WHITE BALANCE 472 FAULTY WHITE BALANCE FUNCTION 47X OTHER 'SPECIAL COLOUR FUNCTION' PROBLEM	480	
550	UNSTABLE AUDIO 551 JUMPING OR REPEATING AUDIO 552 AUDIO PUMPING OR BREATHING 553 AUDIO DROPOUTS 554 CYCLIC AUDIO MUTING 555 WOW AND FLUTTER 556 HOWLING/ACOUSTIC FEEDBACK 557 ECHO IN SOUND 55X OTHER 'UNSTABLE AUDIO' PROBLEM	560	POOR AUDIO RECORDING 561 AUDIO NOT BEING RECORDED 562 NO ERASURE PROTECTION FOR AUDIO 563 PREVIOUS AUDIO RECORDING NOT BEING ERASED 564 UNWANTED ERASURE OF AUDIO 565 MESSAGE NOT BEING RECORDED 566 DISTORTED AUDIO RECORDING 56X OTHER 'AUDIO RECORDING' PROBLEM	570	POOR SPECIAL AUDIO FUNCTION 571 FAULTY FADE OPERATION 572 FAULTY ECHO OPERATION 573 FAULTY MIXING OPERATION 574 FAULTY REPEAT MODE OPERATION 575 FAULTY AUDIO PROCESSING 576 FAULTY SYNC RECORDING OPERATION 577 FAULTY DBB/DOL OPERATION 578 FAULTY NOISE REDUCTION OPERATION 579 FAULTY AUDIO DUB FUNCTION 57A FAULTY TITLE PROGRAMMING 57B FAULTY MIC CONTROL 57C FAULTY FITCH CONTROL 57X OTHER 'SPECIAL AUDIO FUNCTION' PROBLEM	580	STEREO/MULTI MODE OPERATION PROBLEM 581 NO STEREO OPERATION 582 POOR CHANNEL SEPARATION 583 DIFFERENCE IN PHASE BETWEEN CHANNELS 584 PROBLEM WITH SURROUND SOUND MODE 585 PROBLEM WITH PCM AUDIO MODE 58X OTHER 'STEREO/MULTI MODE' PROBLEM
650	MECHANICAL INSTABILITY 651 UNEVEN FEET 652 FAULTY HINGE 653 VIBRATING/JUMPING 654 PARTS LOOSE 655 DAMAGED WHEEL(S) 65X OTHER 'MECHANICAL INSTABILITY' PROBLEM	660	DAMAGE TO MEDIA 661 TAPE GETS SCRATCHED 662 DISC GETS SCRATCHED 663 TAPE GETS CHEWED/WRINKLED 664 TAPE JAMMED OR BROKEN 665 TAPE GETS CURLED 666 SLACK TAPE 667 TAPE STICKING 66X OTHER 'SOFTWARE DAMAGE' PROBLEM	670	MECHANICAL OPERATION PROBLEM 671 FAULTY START/STOP OPERATION 672 FAULTY PAUSE OPERATION 673 FAULTY AUTOMATIC PROGRAM SEARCH 674 FAULTY CUE/REVIEW MODE 675 FAULTY SLOW MOTION OPERATION 676 FAULTY HIGH-SPEED SCANNING MODE 677 FAULTY SPEED COPY FUNCTION 678 FAULTY REPEAT OPERATION 679 FAULTY RECORD REVIEW MODE 67A FAULTY AMS OPERATION 67B AUTO-REVERSE MALFUNCTION 67C FAULTY END DETECTION 67D FAULTY DISC DISC (A-B SELECT) SWITCHING 67X OTHER 'MECHANICAL OPERATION' PROBLEM	680	LENS PROBLEM 681 FOCUS PROBLEM 682 ZOOM PROBLEM 683 IRIS PROBLEM 684 MACRO PROBLEM 68X OTHER 'LENS' PROBLEM
750	PERIPHERAL PROBLEM (NON-STORAGE) 751 PERIPHERAL DOES NOT INITIALISE 752 COMMUNICATION FAILURE WITH PERIPHERAL 753 INTERNAL PERIPHERALS FAILURE 754 EXTERNAL PERIPHERALS FAILURE 755 NETWORK CARD ERROR 756 PERIPHERAL FAILS SELF TEST 75X OTHER PERIPHERAL PROBLEM	760	DATA STORAGE PROBLEM 761 FORMATTING PROBLEM 762 DATA ON STORAGE MEDIUM BEING LOST 763 FRAME MEMORY PROBLEM 764 READ/WRITE ERRORS 765 HARD-OR OPTICAL DRIVE PROBLEM 766 FLOPPY DRIVE PROBLEM 767 CD/DVD-ROM DRIVE PROBLEM 768 TAPE PROBLEM 769 DRIVE WILL NOT MOUNT/CANNOT ACCESS DRIVE 76A DISCS EXCHANGE PROBLEM 76B READ/WRITE OPERATION VERY SLOW 76X OTHER 'DATA READ/WRITE' PROBLEM	770	SPECIAL DATA PROCESSING FUNCTION PROBLEM 771 FAULTY SELF-DIAGNOSTIC MODE 772 FAULTY WORD PROCESSING FUNCTION 773 FAULTY GRAPHIC EDIT FUNCTION 774 PROGRAM CANNOT BE INSTALLED 775 PRE-LOADED PROGRAM CANNOT BE STARTED UP 776 NOT PRE-LOADED PROGRAM CANNOT BE STARTED UP 777 VIRUS ALARM 77X OTHER 'SPECIAL DATA FUNCTION' PROBLEM	780	INTERFACE PROBLEM 781 USB INTERFACE PROBLEM 782 PARALLEL INTERFACE PROBLEM 783 SCSI INTERFACE PROBLEM 784 SERIAL INTERFACE PROBLEM 785 INCOMPATIBLE WITH OTHER SYSTEMS 786 AUDIO/VIDEO INTERFACE PROBLEM 787 I/LINK/FIREWIRE/IEEE1394 INTERFACE PROBLEM 78X OTHER 'INTERFACE' PROBLEM
850	UNSTABLE PRINTER OPERATION 851 UNSTABLE PAPER LOADING 852 UNSTABLE MULTI-PAPER LOADING 853 INCORRECT LINE-UP OF CHARACTERS 85X OTHER 'UNSTABLE PRINTER OPERATION' PROBLEM	860	RIBBON/PAPER PROBLEMS 861 RIBBON BROKEN 862 RIBBON STUCK/STICKING 863 RIBBON DERAILED 864 PAPER STUCK/STICKING TO MECHANISM 865 PAPER JAM 866 DOCUMENT JAM 867 ERONEOUS 'NO INK/TONER' MESSAGE 86X OTHER 'RIBBON/PAPER' PROBLEM	870		880	FAULTY FONT/CHARACTER FUNCTIONS 881 INCORRECT CHARACTERS OR IMAGE 882 INCORRECT CHARACTER SIZE 883 FONT LOADING PROBLEM 88X OTHER 'FAULTY FONT/CHARACTER FUNCTION' PROBLEM

EACEM - SECTION CODES

COMMON	
ANT	ANTENNA SECTION
APR	SIGNAL PROCESSING (ANALOG)
BCH	BATTERY CHARGE
CLK	CLOCK/TIMER SECTION
CPA	COLOUR PROCESSING/ANALOG
CTR	CONTROL PANEL
DPR	SIGNAL PROCESSING (DIGITAL)
ERA	ERASE CIRCUIT
FLX	FLEXIBLE PRINTED CIRCUIT BOARD
HFS	HIGH FREQUENCY SECTION (RF)
IDS	INFORMATION DISPLAY SECTION
IFC	IF-CIRCUIT
ILN	i.LINK (IEEE1394) SECTION
INP	SIGNAL INPUT SECTION
IRD	INFRARED (IrDA) SECTION
MEM	MEMORY CIRCUIT
OUT	SIGNAL OUTPUT SECTION
PRG	PROGRAMMING SECTION
PRT	PROTECTION CIRCUIT
PSU	POWER SUPPLY
PWA	POWER AMP SECTION
REM	REMOTE CONTROL SECTION
RFU	BOOSTER, RF UNIT
SFT	SOFTWARE (TAPE, DISC, ETC.)
SNS	SENSOR UNIT
SVO	SERVO SECTION
SYS	SYSTEM CONTROL SECTION
TUN	TUNING SECTION
TXT	TEXT PROCESSING
SOUND-RELATED	
APA	AUDIO PROCESSING/ANALOG
APD	AUDIO PROCESSING/DIGITAL
CDC	CD CHANGER SECTION
CDS	CD SECTION
MDC	MD CHANGER SECTION
MDS	MINIDISC SECTION
MIC	MICROPHONE SECTION
PUD	PICK-UP DEVICE
SHD	STATIONARY HEAD(S)
SPK	SPEAKER
PICTURE-RELATED	
CAM	CAMERA CIRCUIT
CPD	COLOUR PROCESSING/DIGITAL
CRT	PICTURE TUBE
DFL	DEFLECTION CIRCUIT
DVD	DVD SECTION
FPK	FOCUS PACK
IMG	IMAGE DISPLAY UNIT

PICTURE-RELATED	
LCD	LCD SECTION
LMP	LAMP/FLASH SECTION
VPA	VIDEO PROCESSING/ANALOG
VPD	VIDEO PROCESSING/DIGITAL
VWF	VIEWFINDER
PC-RELATED	
FDD	FLOPPY DISC DRIVE
FMW	FIRMWARE
HDD	HARD DISC DRIVE
ISA	ISA SECTION
JST	JOYSTICK
KBD	KEYBOARD (SEPARATE)
MDM	MODEM SECTION
NIF	NETWORK INTERFACE
PAR	PARALLEL PORT
PCC	PC CARD
PCI	PCI SECTION
SCS	SCSI PORT
SER	SERIAL PORT
USB	USB PORT
MECHANICAL	
ARM	ARM MECHANISM
BZL	BEZEL
CBT	CABINET
CHA	CHASSIS
DDM	DISC DRIVE MECHANISM
EXC	EXTERNAL CONNECTOR
HCM	HEAD CARRIAGE MECHANISM
HOL	CASSETTE HOLDER
INC	INTERNAL CONNECTOR
LDG	LOADING MECHANISM
LMN	LENS MECHANISM
PFM	PAPER FEED MECHANISM
PIN	PINCH ROLLER/LEVER
PRI	PRINT BLOCK
RFM	RIBBON FEED MECHANISM
RHD	ROTARY HEAD(S)
SLD	SLED MECHANISM
SRS	SUPPLY REEL SECTION
STA	STATIC BLOCK
TDM	TAPE DRIVE MECHANISM
THR	THREADING MECHANISM
TNR	TENSION REGULATOR
TPT	TAPE PATH
TRS	TAKE-UP REEL SECTION
WIR	LEAD WIRE
XXX	CABINET/COSMETIC PARTS

DEFECT CODES			
MECHANICAL		ELECTRICAL	
A	WORN OUT (OR GENERAL MECHANICAL DEFECT)	N	DEFECTIVE ELECTRICAL COMPONENT/MODULE
A1	MISOPERATING	O	BURNT, ARCING, MISSING PIXELS
B	DIRTY, CLOGGED	P	ELECTRICALLY MISALIGNED/WRONG SETTING
C	MECHANICALLY MISALIGNED	Q	SHORT CIRCUIT
D	CUT, BROKEN	R	OPEN CIRCUIT
E	DEFORMED	S	LEAKING (ELECTRICAL)
F	SNAPPED	T	BAD CONTACT, CONNECTION
G	SCRATCHED, DENTED, SHARP EDGES	T1	BAD EARTH CONNECTION
H	CRACKED, PEELED, CORRODED, MELTED	U	OPEN PATTERN
I	LOOSE/OFF/STRIPPED	V	CRACKED PRINTED CIRCUIT BOARD
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING (MECHANICAL)	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT/MODULE
M	FOREIGN OBJECT	Z	MISSING COMPONENT/MODULE
		1	SOFTWARE PROBLEM
		11	LOSING DATA FROM MEMORY
		12	FAULTY PROGRAM SETTING/INSTALLATION
		13	SOFTWARE DEFECTIVE OR INCOMPLETE
		14	SOFTWARE SETUP PROBLEM
		15	NO IDENTIFICATION / AUTHENTICATION OF PRODUCT OR USER
		2	EXHAUSTED, LOW EMISSION
		3	NO PROBLEM FOUND (SET WITHIN SPEC)
		4	NO PROBLEM FOUND - CUSTOMER MISUNDERSTANDING
		5	NO PROBLEM FOUND - LOCAL CONDITIONS
		51	FAULTY MAINS VOLTAGE
		6	UNABLE TO DIAGNOSE FAULT
		7	INCORRECTLY WIRED/ASSEMBLED
		81	INCORRECT EQUIPMENT CONNECTION
		9	CUSTOMER MISUSE
		93	UNAUTHORISED MODIFICATION

REPAIR CODES			
A	REPLACEMENT	Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
B	MECHANICAL ALIGNMENT	U	EXPLANATION FOR CUSTOMER
C	ELECTRICAL ALIGNMENT	V	COST ESTIMATION REFUSED
D	RESOLDERING	W	COST ESTIMATION WITH PARTS
D1	REFITTING, PUT BACK IN POSITION (CONNECTOR, TUBE...)	X	COST ESTIMATION WITHOUT PARTS
E	CLEANING	Y	RETURN WITHOUT REPAIR
F	LUBRICATION	Z	PRODUCT EXCHANGE
G	REPAIRED ELECTRICAL PARTS	Z1	PRODUCT EXCHANGE (REPAIR TOO EXPENSIVE)
H	REPAIRED MECHANICAL PARTS	Z2	PRODUCT EXCHANGE (TOO MANY VISITS/REPAIRS)
I	MODIFICATION REQUESTED BY MANUFACTURER	Z3	PRODUCT EXCHANGE (PARTS NOT AVAILABLE)
J	REMOVED	Z4	PRODUCT EXCHANGE (IMPOSSIBLE TO REPAIR)
K	ADDED	Z5	PRODUCT EXCHANGE (ON REQUEST OF RETAILER)
L	FUNCTIONAL CHECK	Z6	PRODUCT EXCHANGE (ON REQUEST OF MANUFACTURER)
M	SPECIFICATION MEASUREMENT	1	SOFTWARE CORRECTION/RESET
N	MAINTENANCE	2	SOFTWARE UPGRADE
O	REFURBISHING, RECONDITIONING	3	PRODUCT UPGRADE (ON REQUEST)
P	PREVENTIVE PARTS REPLACEMENT		

EXAMPLE OF USE:

FLAG	SYMPTOM CODE	PART NO.	REF. NO.	SECTION	PCB	DEFECT CODE	REPAIR CODE	QTY
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R 1 2 3	T D M	Y A 2 2	C 1	Z 1	1

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'