

TELEFUNKEN

A135MT

MODEL

SERVICE MANUAL

THOMSON CONSUMER ELECTRONICS

NORDMENDE
THOMSON TECHNOLOGY

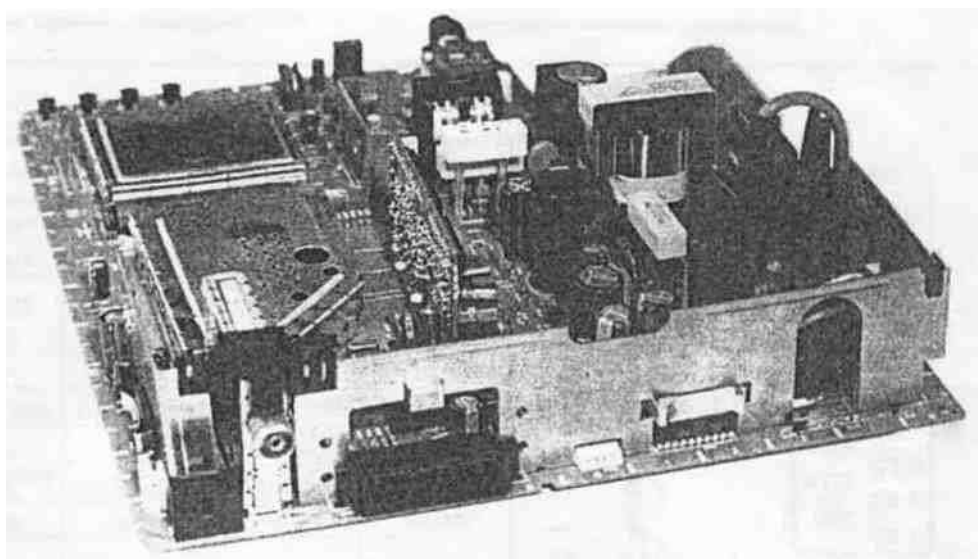
SABA

TELEFUNKEN

THOMSON

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

Chassis TX91



/f/ Indicates specially selected or critical safety components and identical components should be used for their replacement. This is necessary in order to maintain the operational safety of the receiver.

Le remplacement des éléments de sécurité (reperes avec le symbole /f/) par des composants non homologues selon la Norme CEI 65 entraîne la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol /f/ gekennzeichnet) nicht durch Original-Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marchi con il segno/f/) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio. In tal caso è "esclusa la responsabilità" del costruttore.

La substitucion de elementos de seguridad (marcados con el símbolo ZfX) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

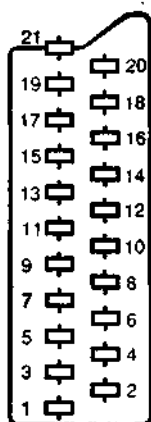
RECEIVER: UHF Input level: 1 mV test bar pattern.
RM: 1 standard, 100% white
Scan input level: 1.0 Vpp test bar pattern.
Programme PR01: Customer controls,
Contrast, brightness and colour set at mid point
and sound at minimum.
All DC Voltages are measured with a digital meter
between ground and the reference point.

MCEVnORE InUHF: Mbd'enntalm'monosoxiopwbatre:
PAL, nonnaG.bBncollj0%.
Pei la piessa SCART. Inw/d'emata 1 Vcc: moniscok pM barn:
Cokse. CwrasB. Luc's a mea area. Suoni minio.
Proyanilla designat PR 01
Tensiau continue ntevatie nspelo aia massa con ulivnametro nullivica.

RECEITEUR: E", "F" mau c'entee i mV mire de banes
SECOil Noun L Bane IW.
Par a yse PssSmm. mw0Htee I Vcc: aurede tons.
ca^ srtasle. tonwe a m-owx. son mimin.
Ptcwi->a«eaePRjI).
ascrecsranuesretaieespattrapnralaiTasstMciiin
icawie tunarime

EMPFANGER: Be UHF Encasospegel 1 mV. Faltoken:
PAL: Norm 6 WMS 100%.
unel y Sca."uc'sx": Encasospegel 1 Vss Faaattn:
Falte Koriaa Heidkm in to Mite des teachs Ton auf Mimm
ZugewonresPicramnPROI.
a«icfB(a)OrWjIn«teintindiolalM*llivw>artles<gk>sstii

RECEPTOR: En UHF, ml de frntada 1 mV, m A banas:
PAL, norma G. fanco 1011%.
Pa b tana Penleleisoi. nvel ae emndil 1 Vet roa * tiara.
Cola. Contaste. uz a miud de emu Smdo mmu.
PfairamaafectaooPROI,
TensioiescontinuasmarcadasafinlaQona*masa conunilfmetrodigital.



NOTE : (MAIN) ... etc. identifies each
pcb module.

NOTE : (MAIN)... etc. reperes des
platinas constituant l'appareil.

HINWEIS : (MAIN) ... usw.
Kennzeichnungen der Platinen, aus
denen das Gerät zusammengesetzt ist.

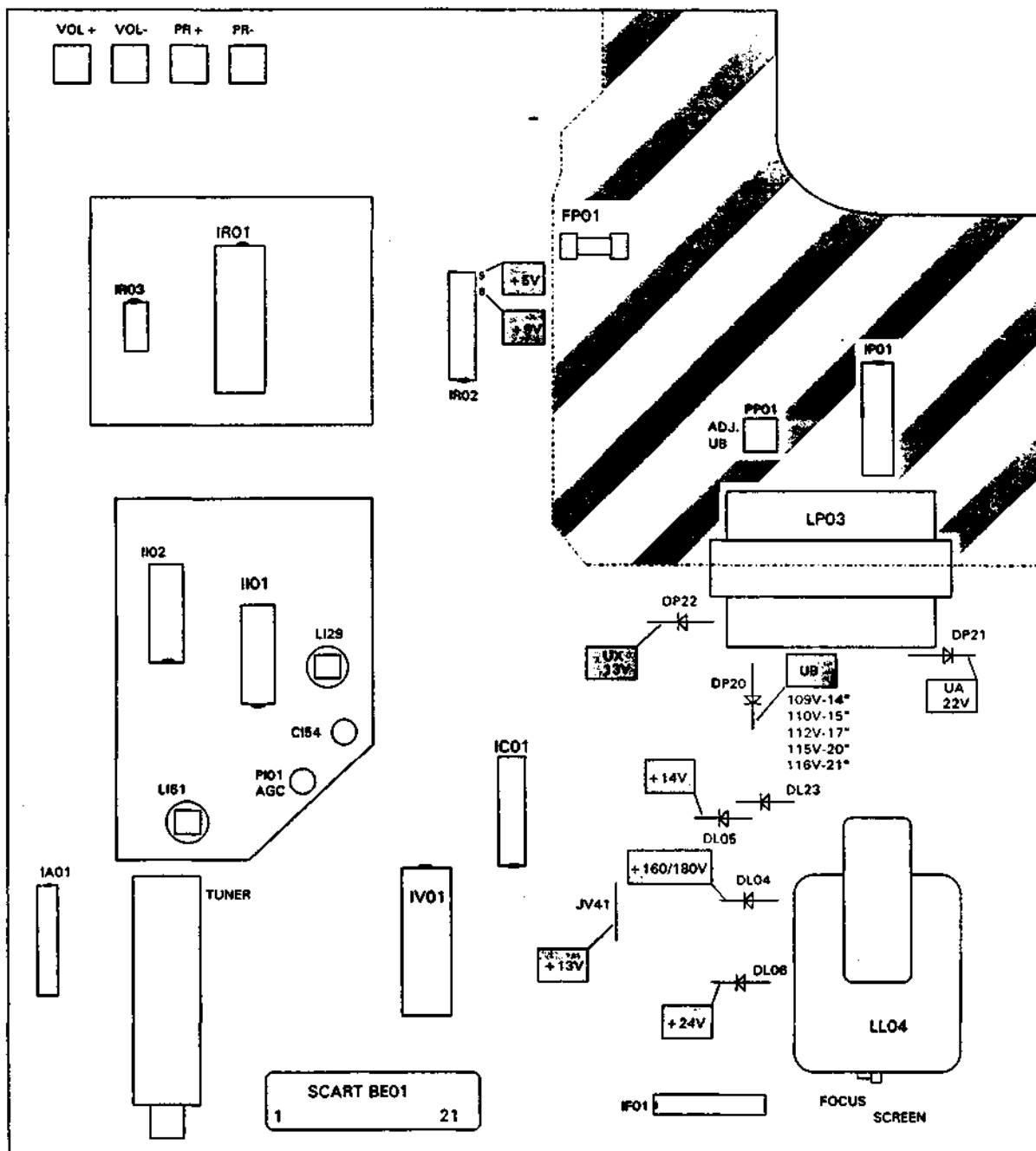
NOTA : (MAIN)... ecc. indicazioni
delle piastre che costituiscono
l'apparecchio.

NOTA : (MAIN)... etc. marcas de las
placas que constituyen el aparato.

	ENGLISH	FRANCAIS	DEUTSCH	ITALIANO	ESPAÑOL
1 G»	AUDIO "R"	AUDIO "D"	AUDIO -R"	AUDIO "O"	AUDIO "D"
2 ^)	AUDIO "R"	AUDIO "D-	AUDIO "R"	AUDIO "D"	AUDIO "D"
3 G»	AUDIO "L"	AUDIO -G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4 —	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5 —	• BLUE"	• BLEU -	"BLAU"	"BLU"	"AZUL"
6 -(R)	AUDIO •L' MONO	AUDIO -G- MONO	AUDIO •L' MONO	AUDIO •S' MONO	AUDIO •L' MONO
7 ^)	• BLUE •	"BLEU •	•BLAU"	BLU	AZUL
8 -(R)	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	•COMMUTAZIONE LENTA-	•CONMUTACION LENTA-
9 -.	• GREEN"	"VERT"	•GRUN"	"VERDE"	"VERDE"
10 NC					
11 -(R)	"GREEN"	"VERT™	"GRUN"	"VERDE"	"VERDE-
12 NC					
13 —	• RED"	"ROUGE"	"ROT"	•ROSSO"	"ROJA"
14 NC					
15 -^	• RED-	"ROUGE-	"ROT"	"ROSSO"	"ROJA"
16 ^)	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	•COMMUTAZIONE RAPIDA-	•CONMUTACION RAPIDA-
17 —	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18 —	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	•COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19 O»	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20 -©	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEOODER SYNCHRO	VIDEO OSINCRO	VIDEO 0 SINCRO
21 O»	PLUGSCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	ARMATURA DELLA SPINA	BLINDAJE DEL ENCHUFE

 : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA
 : INPUT - ENTREE - EINGANG - ENTRATA - ENTRADA
 : EARTH - MASSE - MASSE - MASSA - MASA

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



ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

UB	PP 01	Contrast, brightness and volume to minimum		14" : 109 V 15" : 110V 17" : 112V 20" : 115V 21" : 116V
U G2	SCREEN	AV (no Signal, black screen)	 highest output	 130V-14" 140V-17" 160V-20"
Focus	FOCUS	Test pattern (standard values)		Sharp picture

SERVICE MODE

It is necessary to enter the Service Mode in order to carry out alignment of the TV set. Most adjustments can be made with the RCU, except the Ussystem, Focus and Screen voltages.

1. Service Mode Access

- 1.1 With the RCU, switch the TV set into the "Standby" mode.
- 1.2 Switch "Off" the TV set using the mains supply switch.
- 1.3 Whilst depressing the RCU "Blue(VT)" button, switch "On" the TV set using the mains supply switch.
- 1.4 Release and press once again the RCU "Blue(VT)" button, the following "Set-Up" menu should be displayed.

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Important: The Service Mode cannot be entered if any equipment is connected to the Scart socket, i.e. pin 8 switching voltage present.

2. Function Selection

- 2.1 With the Volume "+" and "-" RCU buttons, highlight the menu containing the function to be aligned.
- 2.2 Press the RCU "Blue(VT)" button to highlight the function to be aligned.

3. Switching between Service and TV modes

- 3.1 Whilst in the Service Mode, normal TV controls are disabled, to enable these controls whilst in the Service mode (i.e. for channel changing etc.) press the "TV" button on the RCU. To return to the Service mode, press the "Blue(VT)" button on the RCU

4. Alignment and storing new function value

- 4.1 The current value of the selected function is displayed in an hexadecimal form to the right of the functions name. This value is adjusted by means of the Volume "+" and "-" RCU buttons.
- 4.2 To STORE the functions new value, highlight MEMO and press the Volume "+" RCU button.
- 4.3 To RESTORE the functions original value, highlight R-STO(RE) and press the Volume "+" RCU button.
- 4.4 Selecting the ROM function downloads the production software default values, these are not very accurate and should only be used in very special cases.

5. Leaving the Service Mode

- 5.1 To leave the Service mode either, switch the TV set into "Standby" or switch "Off" the mains supply.

SERVICE-MODE

Der Service-Mode wird für den Geräteabgleich benötigt. Alle Einstellungen erfolgen mit der Fernbedienung (bis auf Systemspannung, Fokuseinstellung und Schirmgitterspannung).

1. Service-Mode einschalten

- 1.1 Mit der Fernbedienung das Fernsehgerät in Stand-by schalten.
- 1.2 Das Gerät mit dem Netzschalter ausschalten.
- 1.3 Die blaue Taste der Fernbedienung gedrückt halten und gleichzeitig das Gerät mit dem Netzschalter einschalten.
- 1.4 Das folgende Menü erscheint nach erneutem Drücken der blauen Taste

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Achtung: Der Service-Mode läßt sich nicht einschalten, wenn an einer Euro-AV-Buchse ein Gerät aktiviert ist. d.h. die Schaltspannung anliegt.

2. Funktionswahl

Mit den Tasten +/- wird das entsprechende Menü gewählt, welches mit der blauen Taste "durchgeblättert" wird.

3. Umschalten zwischen Service- und TV-Betrieb

Im Service-Mode sind die normalen Fernsehfunktionen nicht bedienbar. Werden diese im Service-Mode benötigt (z.B. Programmwechsel), kann mit der Taste (TV) in den normalen TV-Betrieb geschaltet werden. Durch Drücken der blauen Taste gelangt man zurück zum Service Mode.

4. Abgleich der gewählten Funktion und Speichern

Der momentane Wert der gewählten Funktion wird hexadezimal rechts neben der abzugleichenden Position angegeben und kann mit der Taste + bzw. - auf der Fernbedienung verändert werden.

Die Änderungen des jeweiligen Menüs können unter MEMO mit def *Taste gespeichert. bzw. unter R-STO(RE) rückgängig gemacht werden.

Im Menüpunkt ROM kann man die Software-Defaultwerte laden. Sie sind aber nur eine grobe Annäherung an den noch vorzunehmenden Abgleich und sollten nur im Notfall verwendet werden.

5. Service-Mode verlassen

Zum Verlassen des Service-Mode das Gerät in Stand By schalten Oder mit dem Netzschalter ausschalten.

MODE SERVICE

Le mode service sert au réglage de l'appareil. Toutes les opérations de réglage s'effectuent à l'aide de la télécommande (sauf la tension de système, les mises au point et les tensions de grille-écran).

1. Accès du mode service

- 1.1 Commuter le téléviseur en position de veille avec la télécommande
- 1.2 Mettre le téléviseur hors service par l'interrupteur secteur.
- 1.3 -Maintenir la touche bleue enfoncée et mettre simultanément le téléviseur en marche avec l'interrupteur secteur.
- 1.4 Le menu suivant apparaît après avoir appuyé à nouveau sur la touche bleue

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Attention : Le mode service n'est pas accessible si un appareil est connecté à la prise peritélévision.

2. Selection de la fonction

Par les touches +/- de la télécommande vous pouvez choisir le menu correspondant (SET UP, VIDEO ou GEOM) et le "feuilleter" avec la touche bleue(VT).

3. Inversion entre modes service et TV

Les fonctions télévision normales ne sont pas utilisables en mode service. Si elles sont nécessaires en mode service (p. ex. changement de programme), la touche (TV) permet de commuter en mode TV. Vous pouvez revenir au mode service en appuyant sur la touche bleue.

4. Réglage des fonctions sélectionnées et mémorisation

La valeur momentanée de la fonction sélectionnée est indiquée sous forme hexadécimale à droite, à côté de la position à régler et peut être modifiée avec la télécommande par la touche + ou -.

La ligne MEMO permet de mémoriser les nouvelles valeurs de réglage avec la touche +. La ligne R-STO(RE) permet de rappeler les valeurs mémorisées en NVM. Les valeurs par défaut du logiciel peuvent être chargées en sélectionnant la ligne ROM. Elles ne constituent cependant qu'une approximation du réglage et ne doivent être utilisées qu'en cas de nécessité.

5. Abandon du mode service

Pour abandonner le mode service, commuter le téléviseur en position de veille ou le mettre hors service par l'interrupteur secteur.

SERVICE-MODE

Il Service-Mode è necessario per l'allineamento dell'apparecchio. Tutte le regolazioni si effettuano con il telecomando. (a parte la tensione del sistema, la regolazione del fuoco e le tensioni della griglia schermo).

1. Attivazione del Service-Mode

- 1.1 Commutare il televisore in stand-by con il telecomando.
- 1.2 Spegner l'apparecchio con l'interruttore di rete.
- 1.3 Tenere premuto il pulsante blu e accendere contemporaneamente l'apparecchio con l'interruttore di rete.
- 1.4 Il seguente menu appare non appena si aziona nuovamente il pulsante blu

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Attenzione: Il Service-Mode non si può attivare se è attivato un apparecchio collegato alla presa di peritelerivisione AV, dove se è presente la tensione ausiliaria.

2. Scelta della funzione

Con i tasti +/- si seleziona il relativo menu che può "essere sfogliato" con il pulsante blu.

3. Commutazione fra funzione Service-Mode e TV

Nella modalità Service-Mode non si possono attivare le normali funzioni televisive. Se occorre richiamarle in Service-Mode (ad es. se si vuole cambiare il programma), si può attivare la normale modalità TV con il pulsante (TV). Premendo il pulsante blu si riattiva il Service-Mode.

4. Taratura della funzione scelta e memorizzazione

Il valore momentaneo della funzione scelta viene indicato in formato esadecimale a destra, accanto alla posizione da allineare e può essere cambiato con il pulsante + o - del telecomando.

Le modifiche effettuate nei relativi menu si possono memorizzare in MEMO con il pulsante + oppure annullare in R-STO(RE).

Nell'opzione di menu ROM si possono caricare i valori di default del software. Essi rappresentano però una taratura approssimativa prima di eseguire quella definitiva e si dovrebbero usare solo in caso di emergenza.

5. Disattivazione del Service-Mode

Per disattivare il Service-Mode, commutare l'apparecchio in stand-by o spegnerlo con l'interruttore di rete.

MODO SERVICIO ©

Se necesita el MODO SERVICIO para ajustar el aparato. Todos los ajustes se hacen con el mando a distancia (a excepción de la tensión del sistema, los ajustes del tico y las tensiones de la rejilla de pantalla).

1. AJUSTAR el MODO SERVICIO

- 1.1 Con el mando a distancia conectar a STANDBY el televisor.
- 1.2 Desconectar el aparato con el interruptor de la red.
- 1.3 Mantener pulsada la tecla azul y conectar el aparato simultáneamente con el interruptor de red.
- 1.4 El menú siguiente aparece volviendo a pulsar la tecla azul.

S E T - U P | V I D E O | G E O M |
xxx 123456789 Configuration |

Atención: No se puede conectar el MODO SERVICIO cuando en Eurotoma-AV está activado un aparato, es decir, cuando existe tensión de corriente.

2. Selección de las funciones

Con las teclas +/- se selecciona el menú correspondiente que "hojea" con la tecla azul.

3. Conmutar entre funcionamiento Servicio y TV

En el MODO SERVICIO las funciones de televisión normales no pueden operarse. Si se necesitan estas en MODO SERVICIO (p.ej., cambio de programa), con la tecla (TV) puede conmutarse a la operación TV normal. Pulsando la tecla azul se vuelve al MODO SERVICIO.

4. Ajuste de la función elegida y almacenamiento

El valor momentáneo de la función elegida es indicado de modo hexadecimal a la derecha, al lado de la posición a ajustar, y puede cambiarse con la tecla + o bien - en el mando a distancia. Los cambios del menú respectivo pueden almacenarse bajo MEMO con la tecla + o bien anular bajo RESTORE.

En el primer menú ROM se pueden cargar los valores por defecto del software. Sin embargo, son solo una aproximación basta al ajuste aun a realizar y deben usarse solo en caso de emergencia.

5. Salir del MODO SERVICIO

Conmute el aparato a STANDBY a fin de salir del MODO SERVICIO o desconectar con el interruptor de la red.

Example

SET-UP				
Software code and configuration				
NORM	B	BD	BLD	BIL L I
VT LANG	0	1	2	
- R-STO	+	MEMO	0	ROM

Example

VIDEO		
R-DC	00-3F	23
G-DC	00-3F	24
R-DRV	00-3F	1D
G-DRV	00-3F	21
B-DRV	00-3F	1F
PEAK	(-/+)	
+ MEMO		
+ R-STORE		- ROM

Example

GEOM		
H-PHA	00-3F	26
V-POS	00-07	02
V-AMP 50Hz	00-3F	25
V-AMP 60Hz	00-3F	1C
- R-STO	+	MEMO 0 ROM

SET-UP	
NORM	Standards: B = BG PAL-SECAM L = L SECAM(F) D = DKK SECAM I = I PAL (UK / IRELAND)
VT-LANG.	Video Text Language 0: GB, D, SF, I, F, E, CZ, GB 1: PL, D, SF, I, F, YU, SZ, R 2: GB, D, SF, I, F, E, TR, GB

VIDEO		
R-DC*		grau grey
G-DC*		grau grey
R-DRV		weiß white
G-DRV		weiß white
B-DRV		weiß white
PEAK		14" : 60V 15" : 70V 17" : 80V 20" : 90V 21" : 95V CRT Pin 3,7,9 (6,8,11)

GEOM		
H-PHA		
V-Pos		
V-Amp 50 Hz		
V-Amp 60 Hz		

TV configuration

T	TEXT MODULE
S	STEREO MODULE
M	MONO

- * adjust separate for PAL and SECAM
- * régler séparément pour PAL et SECAM
- * für PAL und SECAM getrennt einstellen
- * regolare separatamente per PAL e SECAM
- * ajustar separadamente para PAL y SECAM

(from Software version EM11 onward)

TABLE OF DIFFERENT VALUES - TABLE DES DIFFERENTES VALEURS •

** TX 91 TABLE

NORM		BGDKK'		BGHILL'		BGDKK'	BGHILL'
COLOUR		PS		PS		PS(NTSC VIDEO)	
ITEM	SCREEN SIZE	14"	20"	14"	20"	14"	14"
C110 C111 C112 C113 C114 C115 C136 C137 C152 C153 C154 C160 D150 D151 D152 I102 J101 J102 J103 J104 J107 J112 J113 J116 J122 J131 J147 Q102 R111 R133 R135 R138 R147 R150 R151 R152 R153 R154 R155 R156 R157 R120 Y103 Y104 Y120 Y130		DEL	DEL	INSERT	INSERT	DEL	INSERT
C164 J121 J124 J125 J136 J137 J139 J139 J162 R170 R171 R172 T102		INSERT	INSERT	DEL	DEL	INSERT	DEL
C162		DEL	DEL	DEL	DEL	DEL	DEL
C160		23P	18P	18P	18P	23P	18P
C167		0P0	2P2	2P2	2P2	0P0	2P2
C160		0P0	2P2	2P2	2P2	0P0	2P2
D123	STRAP	STRAP	BA262	BA262	STRAP	BA262	BA262
D124	STRAP	STRAP	BA262	BA262	STRAP	BA262	BA262
R104	50R	50R	100R	100R	50R	100R	100R
R122	10R	10R	1R	1R	10R	1R	1R
R101	STV2112	STV2112	STV2112	STV2112	STV2112	STV2112	STV2112
Q102	DEL	DEL	DEL	DEL	DEL	DEL	DEL
Q101	FILSW	FILSW	-	-	FILSW	-	-
Q101	CP205M	CP205M	-	-	CP205M	-	-
Q101	FILC	FILC	FILC	FILC	FILC	FILC	FILC
Q101	8.500HZ	8.500HZ	8.500HZ	8.500HZ	8.500HZ	8.500HZ	8.500HZ
Q101	FILS	FILS	FILS	FILS	FILS	FILS	FILS
Q101	60MSHZ	60MSHZ	60MSHZ	60MSHZ	60MSHZ	60MSHZ	60MSHZ
TO BE DEFINE		TO BE DEFINE					
R100		2K2	2K2	2K2	2K2	2K2	2K2
R101 PM 12		2K2	2K2	2K2	2K2	2K2	2K2
R101 PM 12 - 0R20 (SOUND SW)		OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
D12	DEL	DEL	DEL	DEL	DEL	DEL	DEL
R174	50R	50R	50R	50R	50R	50R	50R
C101	100R	100R	100R	100R	100R	100R	100R
L101	29.550HZ	29.550HZ	32.400HZ	32.400HZ	29.550HZ	32.400HZ	32.400HZ
L102	8.50R	8.50R	4.70H	4.70H	8.50R	4.70H	4.70H
C107	330p	330p	470p	470p	330p	470p	470p
C100	330p	330p	390p	390p	330p	390p	390p
R123	50R	50R	50R	50R	50R	50R	50R
R112	50R	50R	50R	50R	50R	50R	50R
R113	50R	50R	50R	50R	50R	50R	50R

** TX91 COMPONENTS MATCHING FOR FBT ACCORDING TO SCREEN
14" 15" 17" 20"&21"

SCREEN SIZE	14" (EU/TTT)	15" (TTT)	17" (EUROPE)	20" (EUROPE)	20" (EUROPE)
TUBE	CHUNG HWA	TOSHIBA	PHILIPS	POLKOLOR	POLKOLOR
TUBE REF.	370KR822-TC38	A36JAR40X01	A41EAM40X01	A44EEV13X01	A44EEV13X01
LP03	20264960	20264960	20264960	20349930	20349930
RP03	RMF R27 3W	RMF R27 3W	RMF R27 3W	RMF R22 3W	RMF R22 3W
RP06	STRAP 10MM	STRAP 10MM		STRAP 10MM	STRAP 10MM
RP07			STRAP 15MM		
LL05	FCV-1410-E10	FCV-1410-E10	FCV-1410-E10	FCV-2010E07	203832 10 P1
LL03(LIN COIL)	LL90uH	LL90uH	LL90uH	LL50uH	LL50uH
CL04(TUN CAP)	CFS 6N5 1K6	CFS 6N5 1K6	CFS 6N3 1K6	CFS 6M3 1K6	CFS 7N6 1K6
CL10	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV
CL05(S.CAP)	CFS 390N 250V	CFS 390N 250V	CFS 390N 250V	CFS 470N 250V	CFS 470N 250V
RL22	RMOF 82K 1W	RMOF 82K 1W	RMOF 82K 1W	RMOF 82K 1W	RMOF 82K 1W
RL13	RCFF 0.56R 0.5WJ	RCFF 2R7 0.5WJ	RCFF 2R7 0.5WJ	RCFF 1.5R 0.5WJ	RCFF 1.5R 0.5WJ
RL14/RL12	RCF 1R5 0.5W	RCF 2R2 0.5WJ	RCF 2R2 0.5WJ	RCF 2.2R 0.5WJ	RCF 2.2R 0.5WJ
JL07/L07	STRAP 10MM	STRAP 10MM	LF100UF	STRAP 10MM	STRAP 10MM
RF07	RMFMN 121R 1%	RMFMN 121R 1%	RMFMN 127R 1%	RMFMN 121R 1%	RMFMN 121R 1%
RF08	RMFMN 909R 1%	RMFMN 968R 1%	RMFMN 909R 1%	RMFMN 056R 1%	RMFMN 068R 1%
RF15	RCFMN 330K 0.1WJ	RCFMN 350K 0.1WJ	RCFMN 390K 0.1WJ	RCFMN 330K 0.1WJ	RCFMN 330K 0.1WJ
CRT(INTEGRATED)	7 TR VERSION	7 TR VERSION	IC VERSION	IC VERSION	IC VERSION
MAIN PCB (A908)	2026155A	2026155A	2035015A	2035015A	2035015A
UB MIN BEAM CURRENT	+100V	+110V	+112V	+115V	+116V
JP12/JP5	STRAP 10mm	STRAP 10mm	STRAP 10mm	STRAP 10mm	STRAP 10mm
CF05	CE1000UF	CE600UF	CE600UF	CE1000UF	CE1000UF
RL12	RCFF 0.56R	RCFF 1R5	RCFF 1R5	RCFF 0.56R	RCFF 0.56R
DP21	IS1834	IS1834	IS1834	PFR052	PFR052
CL08	CPM 6N2 100V	CPN 6N2 100V	CPM 6N2 100V	CPM 6N2 107V	CPM 6N2 100V
RL04	RMOF 33R 1W	RMOF 33R 1W	RMOF 33R 1W	RMOF 18R 1W	RMOF 18R 1W

TABLE OF DIFFERENT VALUES - TABLE DES DIFFERENTES VALEURS •

** TX 91 TABLE

NORM	800K	BGHILL	800K	BGHILL
COLOUR	PS	PS	PS	PS
SCREEN SIZE	14"	20"	14"	20"
CR81		FOR DC-DC CONVERTER		
CH8A/CH14/CH16/CH18/CH20/CH22		TO BE DEFINE		
CA28/CA21/PA17/L104		FOR STEREO BOARD		
L107		FOR CMCN BOARD ONLY		
CH17/CH18/CH19/CH20		TO BE DEFINE		
TKT BOARD		OPTION TOCOM 20351450(4 PAGE)		
STEREO MODULE		OPTION STEREO MODEL TOCOM : 20420570 NCMN/STEREO TOCOM : 20335240		
BA04/JA05		WITH BA04 DELETED JA05		
ST01/ST1A	20174620	20174650 20174650 20174650 20174650		
CR19/CR20/CR21/CR22		TO BE DEFINE		
BR01		OPTION FOR DOUBLE SCART		
BR00		OPTION FOR PSN LED INDICATOR		
CA20 CA21 CC21 CC23 CC25 CF01 NF02		TO BE DEFINE		
NR60		INSERTED 1K0 FOR CLK/RADIO OPTION.		
NR72		INSERTED 1K0 FOR CLK/RADIO OPTION.		
RT06 RT76 CT06 CT76		TO BE DEFINE		
BR09		INSERTED FOR CLK/RADIO OPTION.		
DR06 JR09 JA25 RA07 TA04 TA05 DA04 DA05 CA14 CA08		DELETED WITH CLK/RADIO OPTION		
DK01		OPTION FOR ATTACHED KEY BOARD ONLY		
CP10		TO BE DEFINE		
BR07, NR04		TO BE DEFINE		
RV25		RCFMM 20K FOR 14"		
LP01, JP08, JP11		DELETED LP01 & REPLACE BY STRAP 10 MM (JP08, JP11) (POWER CORE MUST USED 2 X 300MM SUPPRESSION CHOKES) (FOR BGHILL SET ONLY)		
RI17/L104		FOR STEREO BOARD		

DIFFERENCE BETWEEN PSN BGDKK', PAL BG AND PAL I

PSN BGDKK' (NTSC VIDEO)	PAL BG (NTSC VIDEO)	PAL I (NTSC VIDEO)
POS	DESCRIPTION	STRUCTURED NAME
CJ63	CCMM INF 50VK	RCFMM 0 OHM
CJ64	CCMM 4N7 16V M	DELETED
CJ65	CCMM 47P0 50VJ	DELETED
CJ66	CCMM 30P0 50VJ	DELETED
CJ67	CCMM 8P0 50VK	DELETED
CJ68	CCMM 8P0 50VK	DELETED
DI33	STRAP 0.6X4.5X12.5	STRAP 0.6X4.5X12.5
DI34	STRAP 0.6X4.5X12.5	DELETED
DI60	DIODE BA262	DELETED
L161	LATX7 29.65MHz	DELETED
QD01	FILSW K2955M	FILSW Q1962M
QI31	FILC 6.5MHz	DELETED
QI32	FILC 5.5MHz	FILC 5.5MHz
QI33	FILC 6.5MHz	DELETED
QI34	FILCTRP 5M74	FILCTRP 5M74
RI04	RCFMM 60R 0.1WJ	RCFMM 0 OHM
RI27	RCFMM 60R 0.1WJ	RCFMM 56R 0.1WJ
RI60	RCFMM 0R	DELETED
RI62	RCFMM 2K7R 0.1WJ	DELETED
RI63	RCFMM 150KR 0.1WJ	DELETED
RI70	RCFMM 2K7R 0.1WJ	DELETED
RI71	RCFMM 2K7R 0.1WJ	DELETED
RI72	RCFMM 3K9R 0.1WJ	DELETED
TM02	SMD BC848B	DELETED
JA12	STRAP 0.6X4.5X10	DELETED
JR39	RCFMM 0 OHM	DELETED

MICROPROCESSOR

RF NORM / SOUND	L,AM	BG,FM5.5	I,FM6.0	DKK',FM6.5
PIN 12 (BG TRAP)	0	1	0	0
PIN 31 (SOUND SW)	1	1	0	1

DIFFERENCE BETWEEN MONO & STEREO 20" (BGHILL')

POS.	MONO	STEREO	POS.	MONO	STEREO	POS.	MONO	STEREO	POS.	MONO	STEREO
BA03	2 WAY	DEL	CI70	33P	DEL	JA24	12.5MM	10H0	RI17	DEL	2K7
BA05	DEL	7 WAY	CI71	1H	DEL	JA25	12.5MM	DEL	RI27	100R	110R
BA06	DEL	9 WAY				JA30	DEL	0R	RI32	1K	DEL
						JI12	12.5MM	DEL	RI33	1K0	DEL
CA02	470U	DEL				JI13	12.5MM	DEL	RI35	4K7	DEL
CA03	100N	DEL				JI16	100MM	DEL	RI38	1K0	DEL
CA04	1U	DEL	DA04	BZ15502V7	DEL	JR22	DEL	0R	RI47	5K7	DEL
CA05	22H	DEL	DA05	BZ15502V7	DEL	JR36	DEL	0R	RR20	100R	DEL
CA06	22H	DEL	DA06	E7290	DEL				RR22	1K0	DEL
CA07	150P	DEL	DA07	E7290	DEL	LA04	DEL	22H	TA04	BC848B	DEL
CA08	2N2	DEL	DA08		DEL	LA02	12V	DEL	TA05	BC848B	DEL
CA09	150P	DEL	IR01	STR201J0B1	STR201J7	LA03	4U7	50K	TI39	DTIC1495K	DEL
CA13	47U	DEL									
CA14	220U	DEL	QI01	G1965M	NFWG3965M	NA01	IC-MONO	DEL			
CA15	47U	DEL	QI32	5.5MHz	DEL						
CA16	220H	DEL	QI33	6MHz	DEL	RA07	2K2	DEL			
CA17	4N7	DEL				RA08	50K	DEL			
CA19	470U	DEL				RA09	4K7	DEL			
CI14	10U	DEL	JA07	DEL	0R	RA10	50K	DEL			
CI15	10U	DEL	JA08	0R	DEL	RA11	10K	DEL			
CI16	22U	DEL	JA09	10MM	DEL	RA21	150R	DEL			
CI17	22U	DEL	JA08	DEL	12.5MM	RA22	220K	DEL			
CI19	60W	DEL	JA10	DEL	10MM	RA23	2K7	DEL			
CI22	1U	DEL	JA11	DEL	10MM	RA24	47R	DEL			
CI23	CCMMH	RCFMM	JA15	10MM	DEL	RA25	1R	DEL			
	22N	0R	JA17	0R	DEL	RA26	470R	DEL			
CI24	22N	DEL	JA20	12.5MM	DEL	RA12	5K0	DEL			
CI31	33N	DEL	JA21	DEL	10MM	RI13	5K0	DEL			
CI36	22N	DEL	JA22	DEL	10MM	RI14	220R	DEL			
CI37	22N	DEL				RI15	100K	DEL			

^ BRAND

	PIN9	PIN8
TELEFUNKEN	0	1
BRANDT / SABA / FERGUSON	1	0
THOMSON / MMD	1	1

* CRT IC VERSION

	14"	17"	20"	21"
RT06	62R	62R	220R	220R
CT06, RT10 RT26, RT46	TO BE DEFINE			

@ VOLTAGE FOR CRT

14"	20"	21"
160V	180V	180V

Solder side - Cote soudure - Lotseite - Lato saldature - Lado soldaduras

[illegible]

ABL	AVARAGE BEAM LIMITATION REGULATION DU SOURANT DE FAISCEAU
AF	AUDIO FREQUENCY FREQUENCE AUDIO
BCL	BEAM CURRENT LIMITATION LIMITATION DU COURANT DE FAISCEAU
DEG. COIL	DEGAUSSING COIL BOBINE DE DEMAGNETISATION
FB	FAST BLANKING COMMUTATION RAPIDE
H	HORIZONTAL DEFLECTION SIGNAL SIGNAL DE COMMANDE BALAYAGE HORIZONTAL
HTR	HEATER TENSION DE FILAMENT
I CUT	CUTOFF CURRENT COURANT DE CUTOFF
IP	DATA FROM INFRARED RECEIVER DONNEES ISSUES DU RECEPTEUR INFRAROUGE
SCL	SERIAL CLOCK SIGNAL HORLOGE SERIE
SDA	SERIAL DATA DONNEE SERIE
SIF	SOUND IF FISON
VAMP	VERTICAL AMPLITUDE AMPLITUDE VERTICALE
V POS	VERTICAL POSITION POSITION VERTICALE ,
VT	TUNING VOLTAGE TENSION DU TUNER
-V	VERTICAL DEFLECTION SIGNAL SIGNAL DE COMMANDE BALAYAGE VERTICAL

Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellungen bitte unbedingt die entsprechende Bestellnummer angeben!
N. B.: When demanding Spare Parts it is absolutely necessary to quote the corresponding part number!
Important: Lors d'une commande de pieces de rechange, priere d'indiquer et tout cas le numero de la piece!
Importante: Ordinare sempre con il numero corrispondenti di codice!
Importante: Pedir siempre los recambios con el numero correspondiente **codigo!**

Pos.	Art.-Nr. Part No.	Bezeichnung	Part	Pos."	Art.-Nr. Part No.	Bezeichnung	Part
MTM4045	202.413.WI	MOOULE/AUSTAUSCHTEILE: MTM4045 TUNER	EXCHANGE PARTS: MTM404S TUNER	DP09	309.325.927	1N4141 DiOd*	1N414«04od»
				DP10	309.325.927	1N4146 D>Od»	1N4148 Diode
				DP11	309.325.951	1N4001 D>Od»	1N4001 Diode
				DP12	309.325.951	1N4001 Diode	1N4001 Diode
				OP13	309.325.951	1N4001 Diode	1N4001 Diode
				DP20	490.007.6951	BYT13-800 Dtpd*	BYT13-800 Diod*
BA01	231.0—	CHASSIS-TEILE Sinnsf 2polig. UP	CHASSIS PARTS 2 pin contact housing	DP21	204.037.70	BYT52G Diode	BYT52G Diode
BE01	3m.6St.001	ScartbuchZlpokg	Scan local	DP21	490.006.0461	PFR852 D.ode	PFR852 Diode
BT01	201.746.20	BikjronrHhung	Caitiod* ray tub* sockt	DP22	204.037.70	BYT52G D.ode	9YT52G Diode
BT01	353.902.1000	BildroDraxung	Camoda ry tub« lock*1				
BT02	905.903.50	Stilleiste lOpolig RD UF	Contxct strip 10-pol*	DR04	464.358	ZPD0.2 0.5W 2-Diode	ZPD8.2 0.5W Z-OiOd*
				OR0S	309325.927	1N4149 Diode	1N4148 Diode
				OR06	309.325.927	1N4146 OiOd*	1N4148 DiOd*
BV01	309.650.064	Stitttiisr lOpolig UF	Confct striki l0*pol«	DT0t	464.358	ZPDB.2 0.5W Z-Olod*	ZPD8.20.5W-Z-O.Od*
BV02	905.903.50	S(t111«rt» lOpolig RD UF	Conud «trik} 10-pol*	OT21	309.325.927	1N4148 Diode	1N4148 Diode
BV03	309.650.092	Stittti«iat*. 4polk} Lf*grnd	Conlct triip. 4-pol*	OT22	309325.927	1N4148 D>Od»	1N4148 Diode
BX01	309.650.087	Stittti«isle, lQpOtg. Natuf U	Contact triki. 10-pot*	DT23	464.879	BAV21 Diode	BAV21 Diode
CH12	490.006.0607	10NF 250V 20% Keramik-Konden««tor	10NP 250V 20% Ccap	DT41	309.325.927	1N4148 Diode	1N4148 Diode
CL04	101.857.70	ON3F 1K6V 3.5% Filmkond*ne«tor	6N3F 1K6V 3.5% Film e«p	DT42	309.325.927	1N414Q Diode	1N4148 Diode
CL04	256.909	7N6F 1K6V 3.5% Filmkond*wtot	7N6F 1K6V 3.5% Film C«P	OT43	464.879	BAV21 Diod*	BAV21 Diode
CL04	490.007.6232	7NOF 1K5V3.5% Filmkondenselot	7NOF 1K5V 3.5% Film Clp	DT50	309.325.927	1N414aOode	1N4148 Diode
CL05	309.433.766	390NF 250V 10% MKP-Kondenflor	39CNF 250V 10% Film cap	OTS1	462.299	BAV21 Diode	BAV21 Diode
CL05				OT52	309325.927	1N414B D'oda	1N4148 Diode
CLIO	266.243	330PF 1KV 10% Kenmik-Kondanutor	33CPF 1KV 10% Cop	DT60	309.325.927	1N4148 Diode	1N4148 DiOd*
CL12	490.006.0607	10NF 250V 20% K*fmik-Kond«n»itor	10NF 250V 20% Cctp	OT6	309.325.927	1N414a Diode	1N4148 OiOd*
CL15	266243	330PF 1KV 10% Keremik-Konden—tor	33CPF 1KV 10% C Clp	OT61	462.299	SAV21 Diode	BAV21 Diode
CL17	243879	330PF 400V 20% Kefamik-Kondensator	330F 400V 20% C cap	OT62	309.325.927	1N414B Diode	1N4148 Diode
CL18	242272	680PF 2KV 10% K*ramik-Kond*ns*lor	66CPF 2KV 10% C cap	DT63	464.679	BAV21 Diode	BAV21 Diode
CP01	252320	OU1F 27SV20%MP-Kono*n—tor	OU1F 275V 20% MPoly cap	OT70	309.325.927	1N4148 Diode	1N4148 Diode
CP04	203.867.60	1NF 1KV 10% K*ramik-Kond*n»tor	1NF 1KV 10% Ccap	DT71	462.299	BAV21 Diode	BAV21 Diode
CP05	309.442.972	1NSF 1KV K»famik-KondTT«tOf	1NSF1KV Ccap	OT72	309.325.927	1N414B Diode	1N4148 Diode
CP06	309.440.660	1NF 1KV 50% KerTDik-Kondensator	1NF KV 50% C cap	DT65	464.358	ZP08.2 0.5W Z-DlodW	ZPDB.2 0.5W Z-Dkt*
CP07	490.007.2242	100UF 400V Elko	100UF 400V E cap	DT66	309.325.927	1N4148 Diode*	1N4146 Diode*
CP09	203.687.60	1NF 1KV 10% Keremik-Konden««tor	1NF 1KV 10% C cap	DV01	309.325.927	1N4148 D>Od»	1N4148 Diode
CPU	243.879	330PF 400V 20% K*ramik-Kondenietor	330PF 400V 20% Ccap	OV02	309.325.927	1N4148 Diode	1N4148 Diode
CP16	309.440.660	1NF 1KV 50% K*ramik-Kondensil«tor	1NF 1KV 50% C cap	OV03	309.325.927	1N4148 Diode	1N4148 Diode
CP21	101.09960	4N7F 400V 20% Ker«mik-KondensHor	4N7F 400V 20% C cap	OV04	309.325.127	BZX558Bv22-D>00*	BZX558Bv2 Z-Diod*
CP21	309.951.997	Schutzkappe P.CP21/49/50	Profclion cap	OX01	309.325.927	1N4148 Ood*	1N4148 Diode
CP29	490.006.0601	270PF 2KV 10% Kef-mik-Kondenstlof	27CPF2KV10% Ccap	OX02	309.325.927	1N4148 Diode	1N4148 Diode
CP35	266.243	330PF 1KV 10% KerTHik-Konden—lor	330PF 1KV 10% C cap	OX04	309.325.927	1N4148 D'OOf	1N4146 DiOd*
CP35	309.419.426	150UF 200V Elto	150UF 200V E cap				
CP40	243.879	330PF 400V 20% K*ramik-Kond*nutor	330PF 400V 20% Ccap	FP01	309.627.506	1.6AT Sicherung	1.6AT FUM
CT03	140.360.20	2N2F 2KV 50% K*rimik-Kond*n»tor	2N2P 2KV 50% C cap	IA01	202.031.20	TDA7253 1C	TOA725S 1C
CT82	246.746	2U2F 250V Elko	2U2F 250V E cap	IA01	202.992.40	Morrfgectip	Chp
CT«4	238.221	10NF 250VAC 400V Kenmik-Kondensetof	10NF C cap	IC01	203.357.50	TDA4685 1C	TDA4MS 1C
CT85	309.442.978	1NF2KV20%KTBrnik-Kondensator	1NF2KV20»CC«P	IF01	309.368.733	TDA1771 1C	TDA1771 1C
DA05	3M.12f.111	BZX55B2V7 Z-DiOd*	BZX55B2V7 Z-Dioda	IF01	309.903.644	Montagecltp	Clip m*tl
DC01	464.371	ZPD5.1 Z-DKf	2PD5.1 Z-Olod*	1101	201.eS2.80	STV224A 1C	STV8224A 1C
DFOt	309.325.951	1N4001 OiOd*	1N4001 DiCK	IK01	101.324.10	TFMK1330T 1C IR-Vorvrefrkf	TFMK1330T 1C
OF02	309.325.927	1N4148 Diode	1N414«010<1«	IP01	309.368549	TEA2261 1C	TEA2261 1C
OF21	309.325.927	1N4148 DiOd*	1N4141 DiOm	IR01	203.735.40	ST9291J6B11Cprog. o. S.	ST9291J6B1 1C
OF22	309.325.927	1N4148 OiOd*	1N4148 Diode*	IB01	251.230.90	ST9291J6B1 1C prog. m. S.	ST9291J6B1 1C
OH01	353.111.2001	ZTK33C 1C	ZTK33C 1C	IR01	309.669966	IC-Fllssung 42pOlig	(C socket 42pol*
OK01	202.185.20	LTL-4263 OiOd* LED rot	LTL-4263 Dioca LED r«d	IR02	309368734	TDA81391C	TDA81391C
DK01	239.018	Hairr. LED	LED licolcll	IR02	309.903.644	Montageclip	Clip melal
OK03	202.985.20	LTL-4263 DiOd* LEO rot	LTL-4283 Diode LEO lad	IR03	243.022	IC-Faassung flpolig	1C socket 8pol*
MK03	203.820.60	H-litr LED	LED ncolcll	IR03	490.008.0379	X24C04 1C	X24C041C
OL01	309.325.927	1N4146 Diode*	1N4i4goioid«	IT01	202.992.40	Montgeclip	Chp
DL02	204.037.70	BYT52G Diode*	BYT520 Diode*	IT01	309.36f.606	TEA5101A1C	TEA5101A1C
DL04	204.037.70	BYT52G DiOd*	BYT52G Diode	IV01	201.656.10	STV21181C	STV21181C
OL0S	204.037.70	BYT52G DiOd*	BYT52G Diode	IV01	309.669.966	IC-Fassung 4,00<tg	1C socket42pol*
DLM	204.037.70	BYT52G OiOd*	BYT52Q Diode	1X01	203.061.50	CF70204 1C	CF70204 1C
OL07	309.325.951	1N4001 DiOd*	1N4001 Diode	1X02	203.061.60	CP72306 1C	CF72306 1C
DLM	309.325.951	1N4001 Olod*	1N4001 Diode	1X03	309.368.470	UA7805CSP/1C7605 1C	UA7805CSP 1C
DL12	309.325.927	1N4148 Diode	1N4146 Diode	LH01	339349512	47UH Drosiel	47UH RP choke coil
OL13	243.375	BZX55B13V Z-Diode	BZX55813V Z-OK3da	LH02	339349512	47UH Dfooeel	47UH RF choke coil
DL20	309.325.927	1N4148 Diode*	1N4148D.OO*				
OL21	309.325.927	1N41480K)jd*	1N4146 Olod*				
DL23	309.325.927	1N414a Olod*	1N4148 Diode	LI01	309.250.968	OU56H Orotsei	OU56H RF choke00)1
DP01	102.661.30	M100M Olod*	M100M OWH	LI03	266.716	22UM Oroaasel	22UH Choke
DP02	102.661.30	M100M Diode*	M100M Olode	LI20	150.401.10	3U3H 10% Dros«*l	3U3H 10% Chok*Coil
DP03	102.661.30	M100M Diode*	M100U Diode	LI29	203.109.30	38M9HZ Fillef LA7x7	38M9HZ Filter
DP04	102.661.30	M100M DiOd*	M100U Diode	LI62	004.710.3676	12UH 10% DfclclJ	12UH 10% Choke coil
DP08	490.001.1567	BYT11-600 Olod*	BYT11-600 Olode	LI63	130.206.00	5U6H 10% Orossel	5U6H 10% Choke coil
DPW	204.037.70	BYT52Q Diode*	BYT52G Diode	LL01	243.866	Tteibertnifolm.Hof	H-Drivr transformer
OP07	204.037.70	BYT52G Diode*	BYT52Q Olod*	LL03	309.249.377	S8UH Spul*. H-Limritkt	S8UH H-Linearity coll
DPO»	204.037.70	BYT920 Diode*	BYT520 Diode*				

Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio Lista de piezas de recambio

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Importante: Ordinare sempre con il numero corrispondente! di codice!
Importante: Pedir siempre los recambios con el numero correspondiente **codigo!**

Pos.	Art.-Nr. Part No.	Bezeichnung	Part	Pos~	Art.-Nr. Part No.	Bezeichnung	Part
MTM4045	202.483.90	MODULE/AUSTAUSCHTEILE:	EXCHANGE PARTS:	DP09	309325.927	1N4148 DiOd*	1N4148D100*
		MTM4045 TUNER	MTM4045 TUNER	DP10	309.325.927	1N4148 Diod*	1N4148 Diod*
				OP11	309.325.951	1N4001 D*Od*	1N4001 Diode
				OP12	309.325.951	1N4001 Diode	1N4001 Diode
				DP13	309.325.951	1N4001 DioOe	1N4001 Diode
				OP20	490.007.6951	BYT13-800 Diod*	BYT13-800 Diod*
BA01	21>.OM	Stiftfrri ipolig. UP	2 pin contact flouting	DP21	204.037.70	BYT52G Diod*	BYT52G Diode
BE01	309«51 001	Scartbichse21polfg	Scan *ocke(	DP21	490.008.0461	PFR852 Dioda	PFR852 Diode
BT01	201.746.20	Bikronfassung	Cathode ray tub* sockt	OP22	204.037.70	BYT52G DiOO*	BYT52G Diode
BT01	353.902.1000	Bildrohrfassung	Ca-noae riy tube >ocke(				
BT02	905.903.50	Simi*ist* IQpoliffr RD UF	Concrct *trip 10-pol*				
BV01	309.650.0e4	StilUeisle iOpolig UF	Contact itrip 10-por				
BV02	905.903.50	Stiftlierte iOpolig RD UF	Confci *trip 10-pol*				
BV03	309.950.092	Stiftl*if. 4polig Uegend	Contact atrip, 4-pole				
8X01	309.650.087	Stiftlelele. iOpohg. NaturU	Contact «trip, 10-pot<				
CH12	490.008.0607	10NF 250V 20% K*ramik-Kond*naator	10NF 250V 20% C cap	DR04	464.358	ZPD8.2 0.5W Z-Diod*	ZPD8.2 0.5W Z-DiOd*
CL04	101.657.70	6N3F 1K6V 3.5% Filmkondenaator	6N3F 1K6V 3.5% Film c>p	DB05	309.325.927	1N4148 DiOd*	1N4148 Diod*
CL04	258.909	7N6F 1K6V 3.5% FilmkondenaatOf	7N6F 1K6V 3.5% Film dp	OR06	309.325.927	1N4148 OiOd*	1N4148 Diode
CL04	490.007.8232		7NOF 1K5V 3.5% Film cap				
CL05	309.433.786	390NF 250V 10% MKP-Kond*n«ator	39CNF250V 10%Fitmc«p				
CL05	309433.775	470NF 250V 5% MKP-KondenaaiOf	47CNP 250V 5% Capacitor				
CL10							
CL12	490008.0607	10NF 250V 20% Keramik-Kondensator	10NF 250V 20% Ccap	DT01	464.358	ZPD8.2 0.5W Z-OiOd*	ZPD8.2 0.5WZ-Oied*
CH5	266.243	330PF 1KV 10% Keramik-Kond*nutor	33CPF 1KV 10% C cap	OT21	309325.927	1N4148 D>Od*	1N4148 Diod*
CL17	243.879	330PF 400V 20% Karamik-Kondensator	330PF 400V 20% C cap	OT22	309.325.927	1N4148 D<Od*	1N4148 Diode
CL1a	242.272	660PF 2KV 10% K*ramik-Kond*nsator	66CPF 2KV 10% C cap	DT23	464.879	BAV21 D.od*	BAV21 Diode
CPOI	252.120	OU1F 276V 20% MP-Kond*n—tor	OUF 275V 20% MPoty cap	DT41	309.325.927	1N4148 Diode	1N4148 Diode
CP04	203.887.60	1NF 1KV 10% K*ramik-Kondenaator	1NP 1KV 10% C cap	DT42	309.325.927	1N4148 Diod*	1N4148 Diode
			1NSP 1KV Ccap	OT43	464.879	BAV21 DiOd*	BAV21 Diode
CP06	309.440.680			DT50	309.325.927	1N4148 DiOd*	1N4148 Diode
CP07	490.007.2242	100UF 400V Elho	100UF 400V E cap	OT51	462.299	BAV21 DiOd*	BAV21 Diode
CP08	203.867.80	1NF 1KV 10% Kef«mik-Konden»«tOf	1NF 1KV 10% C cap	DT52	309.325.927	1N4146 D<oda	1N4148 Diode
CPU	243.679	330PF 400V 20% Ker*(nik-Konden*alor	330PF 400V 20% Ccap	DT60	309.325.927	1N4148 Diode	1N4148 Diode
CP16	309.440.660	1NF 1KV 50%Kefmtk-Kondenaator	1NF 1KV 50% C cap	DT6<	309.325.927	1N4148 OiOde	1N4148 Diode
CP21	101.09980	4N7F 400V 20% Kefmik-Kondenattor	4N7F 400V 20% Ccap	OT61	462.299	8AV21 Diode	BAV21 Diode
CP21			Profcton cap	OT62	309.325.927	1N4146 Diode	1N4148 Diode
CP29	490.008.0601	270PF 2KV 10% Kfamik-Kondansator	27CPP2KV10% Ccap	DT63	464.679	BAV21 Diod*	BAV21 Diode
CP35	266.243	330PF 1KV 10% K*ramik-Kond*naator	330PP 1KV 10% C cap	DT70	309.325.927	1N4148Oode	1N4148 Diode
CP36	309.419.428	150UP 200V Eiko	15OUF 200V E cap	OT71	462.299	BAV21 Diode	BAV21 Diode
CP40	243.679	330PF 400V 20% K*famik-Kond«n—tor	330PP 400V 20% C cap	OT72	309.325.927	1N4148 Diode	1N4148 Diode
CT03	140.360.20	2N2F 2KV 50% Kftramik-KondTrator	2N2F 2KV 50% Ccap	DT85	464.358	ZPD8.2 0.5W Z-Diod*	ZP09.20.5WZ-DiOd*
CT82	248.746	2U2F 250V Eiko	2U2F 250V E cap	DT86	309.325.927	1N4148 DiOd*	1N4148 Diode
CT84	23(221	10NF 250VAC 400V Keramik-Kondensator	10NF C cap				
CT85	309.442.978	1NF 2KV20% Keramik-Kondenaator	1NF2KV20»CC«p				
DA05	31M.32i.UI	BZX55B2V7 ZChod*	8ZX55B2V7 Z-Ooda	DV01	309.325.927	1N4148 Diode	1N4148 Diode
OC01	464371	ZPD5.1 Z-Dtod*	ZPD5.1 Z-DiodW	DV02	309.325.927	1N4148 Diode	1N4148 Diode
DFOI	309.325.951	1N4001 Diod*	1N4001 Diod*	OV03	309.325.927	1N4148 Diode	1N4148 DiOde
DF02	309.325.927	1N4148 DiOd*	1N4148 Diod*	DV04	309.325.127	BZX5568V; Z.D.od*	BZX55B8V2 Z-Dode
DF21	309.325.927	1N4148 Dod*	1N4149 OiOd*	OX01	309.325.927	1N4148D.ode	1N4148 Diode
DF22	309.325.927	1N4148 DiOdtd	1N4148 DiOd*	OX02	309.325.927	1N4148 Diode	1N4148 Diode
OH01	353.111.2001	ZTK33C IC	ZTK33C IC	OX03	309.325.927	1N4148 DioOe	1N4148 Diode
DK01	202.9(6.20	LTL-4263 Diode LED rot	LTL-4263 DiOd* LED r«d	OX04	309.325.927	1N4148 Diode	1N4146 Diode
DK01	239.018	Halter. LED	LEO moldw				
DK03	202.966.20	LTL-4263 DiOd* LED rot	LTL-4263 OiOd* LED r«d	FP01	309627.508	1.6AT SchTung	1.6ATFuee
MK03	203.820.60	Halfr LEO	LEO holdw	IA01	202.031.20	TDA72531C	TDA72531C
				IA01	202.992.40	Monlagedclip	Chp
DL01	309.325.927	1N4148DiOd*	1N4148 DiOd*	IC01	203.357.50	TDA46651C	TOA46651C
DL02	204.037.70	BYT52Q DiOd*	BYTS2G OiOd*	IF01	309.368.733	TDA1771 1C	TOA177t 1C
DL04	204.037.70	BYT52G DiOd*	BYTS2Q Diod*	IF01	309.903.844	Montag*clip	Clip mfl
DL0t	204.037.70	8YT52G OiOd*	BYTS2G DiOd*	1101	201.ef2.10	STVB224A 1C	STVB224A 1C
0106	204.037.70	BYT52G DiOd*	B<T52G DiOd*	IK01	101.324.10	TFMK1330T 1C IH-VorvratBrker	TFMK1330T 1C
DL07	309.325.951	1N4001 DiOd*	1N4001 DiOd*	IP01	309.368.549	TEA22611C	TEA22611C
DL06	309.325.951	1N4001 DiOd*	1N4001 DiOd*	IR01	203.735.40	ST9291J6B1 1C prog.0. S.	ST9291J6B1 1C
DL12	309.325.927	1N4148 DiOda	1N4148 DiOdtd	IR0t	251.230.90	ST9291J6B1 1C prog. m. S.	ST9291J6B1 1C
DL13	243.375	BZX55B13VZ. DiOd*	BZXSSB13VZ-Diod*	IR01	309.689.966	IC-Fassung 42oolig	(C socket 42pol*
01-20	309.325.927	1N4148 Diode	1N4148 Diod*	IR02	309.368.734	TD A81391C	TDA81391C
OL21	309.325.927	1N4148 DiOd*	1N4146 OiOd*	IR02	309.903.844	Montageclip	Clip metal
DL23	309.325.927	1N4148 DiOd*	1 N4148Di00*	IR03	243.022	IC-Fassung Bpolig	1C socket 8pol*
				IR03	490.0080379	X24C041C	X24C041C
DP01	102.661.30	M100M DiOd*	M100M DiOd*	IT01	202.992.40	Monlagedclip	Clip
OP02	102.661.30	M100M OiOd*	M100M DiOd*	IT01	309368606	TEA5101AIC	TEA5101A IC
DP03	102.661.30	M100M DiOdtd	M100M DiOd*				
DP04	102.661.30	M100M DiOdtd	M100M DiOdtd	IV01	201.658.10	STV21181C	STV21181C
OP0»	490.001.1567	BYT11-600 OiOd4	BYT11-600 DiOd*	IV01	309.689.966	IC-Fassung 42ooltg	1C socket42por
OPM	204.037.70	BYT52G DiOd«	BrT52G OiOd*	1X01	203.061.50	CP70204 1C	CF70204 1C
OP07	204.037.70	6YT52G DiOd*	BYT52G DiOd*	1X02	203.061.60	CP72306 1C	CF72306 1C
OPW	204.037.70	BYT52Q OiOd*	BYTS2Q DiOd*	1X03	309.368.470	UA7605CSP/MC7M5 1C	UA7605CSP 1C
				LM01	339.349.512	47UH Dro*—I	47UH RF chok* COIL
				LH02	339.349.512	47UH DiOfael	47UH RF Chok* COIL
				LI01	309.250.988	0(J56H Drossef	OU56H RF chok* 60U
				LI03	266716	22UH Diossel	22UM Choke
				L120	150.401.10	3U3H 10% Dror*1	3U3H 10% Chok* coil
				L129	203.109.30	36U9HZ Filfr LA717	38M9HZ Fie*r
				L162	004.710.3876	12UH 10% Drosa*)	12UH 10% Cflok* coil
				L163	130.206.00	SU6H 10% Drosael	5U6H 10% Chok* coil
				LL01	243.888	Treibertranxfomator	M-Driver transformer
				11.03	309.249.377	5BUH Sdu*. H-Lirrarift	58UH H-Linealfiy coil

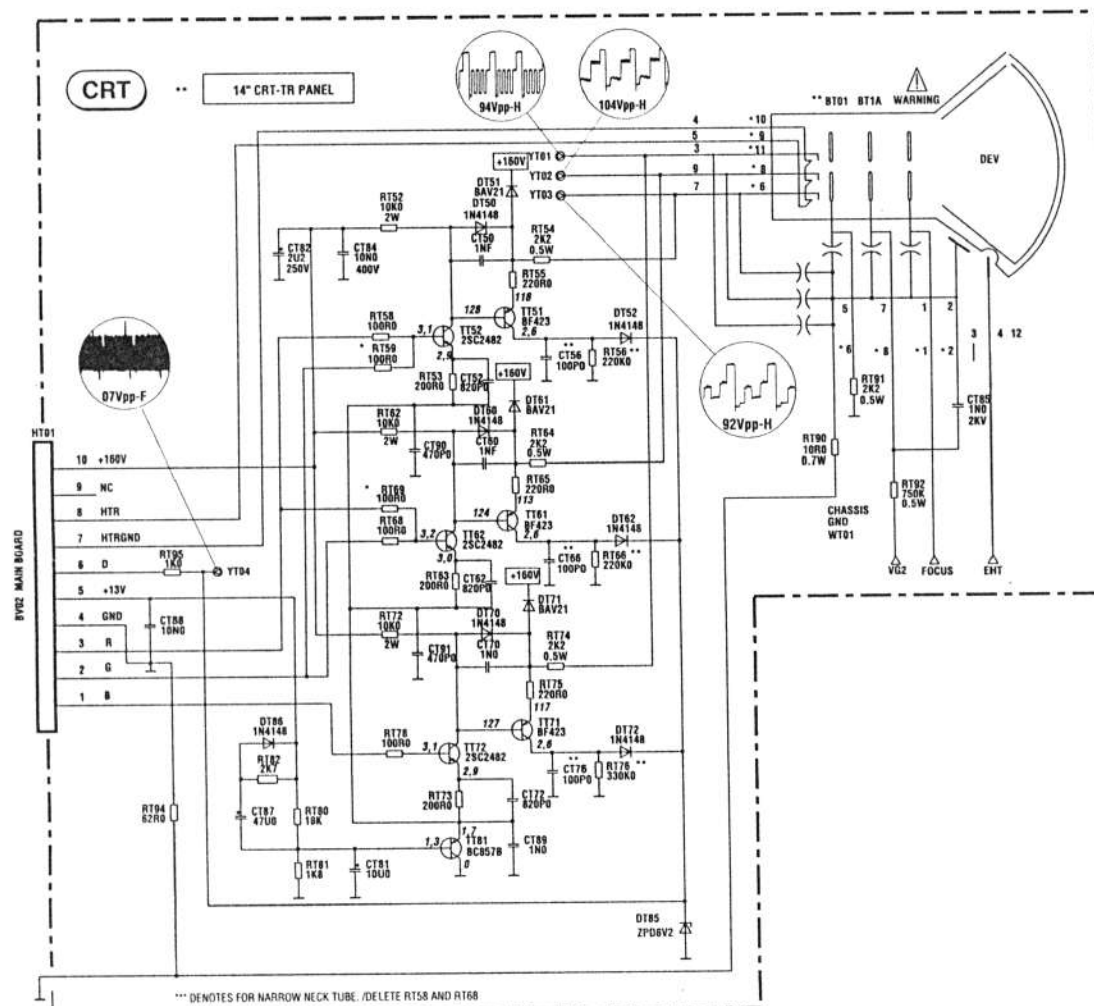
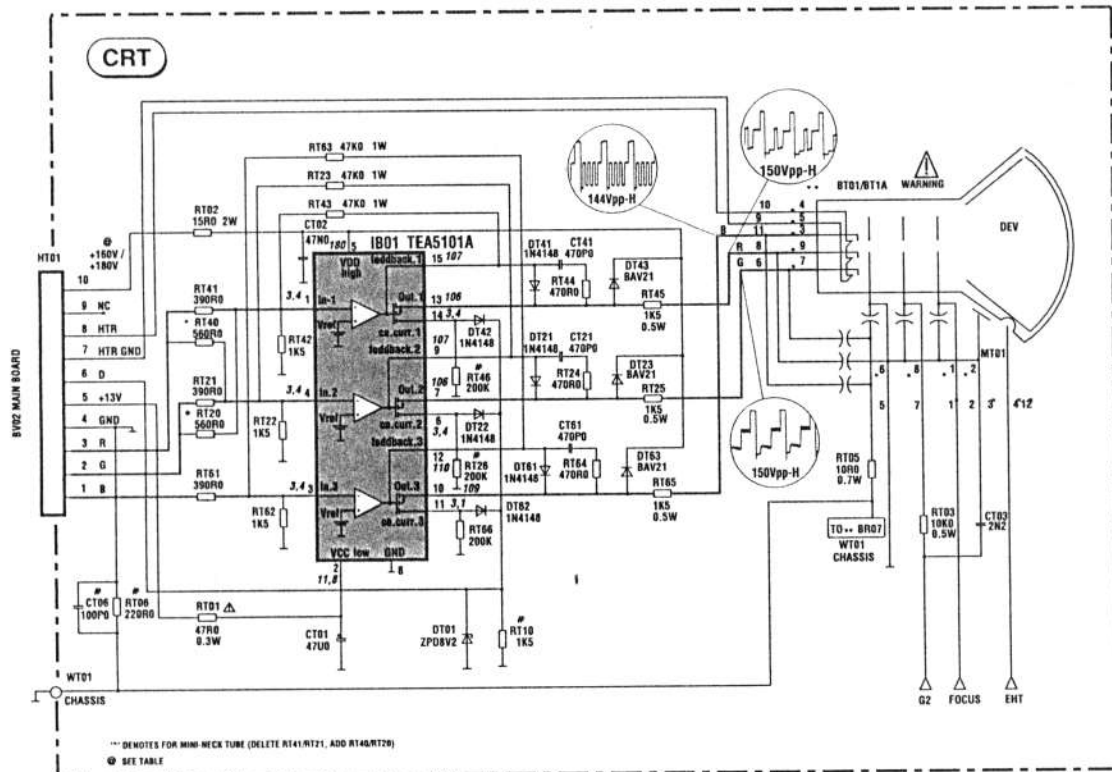
Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellungen bitte unbedingt die entsprechende Bestellnummer angeben!
N. B.: When demanding Spare Parts it is absolutely necessary to quote the corresponding part number!
Important: Lors d'une commande de pieces de rechange, priere d'indiquer et tout cas le numero de la piece!
Importante: Ordinare sempre con il numero corrispondenti di codice!
Importante: Pedir siempre los recambios con el numero correspondiente codigo!

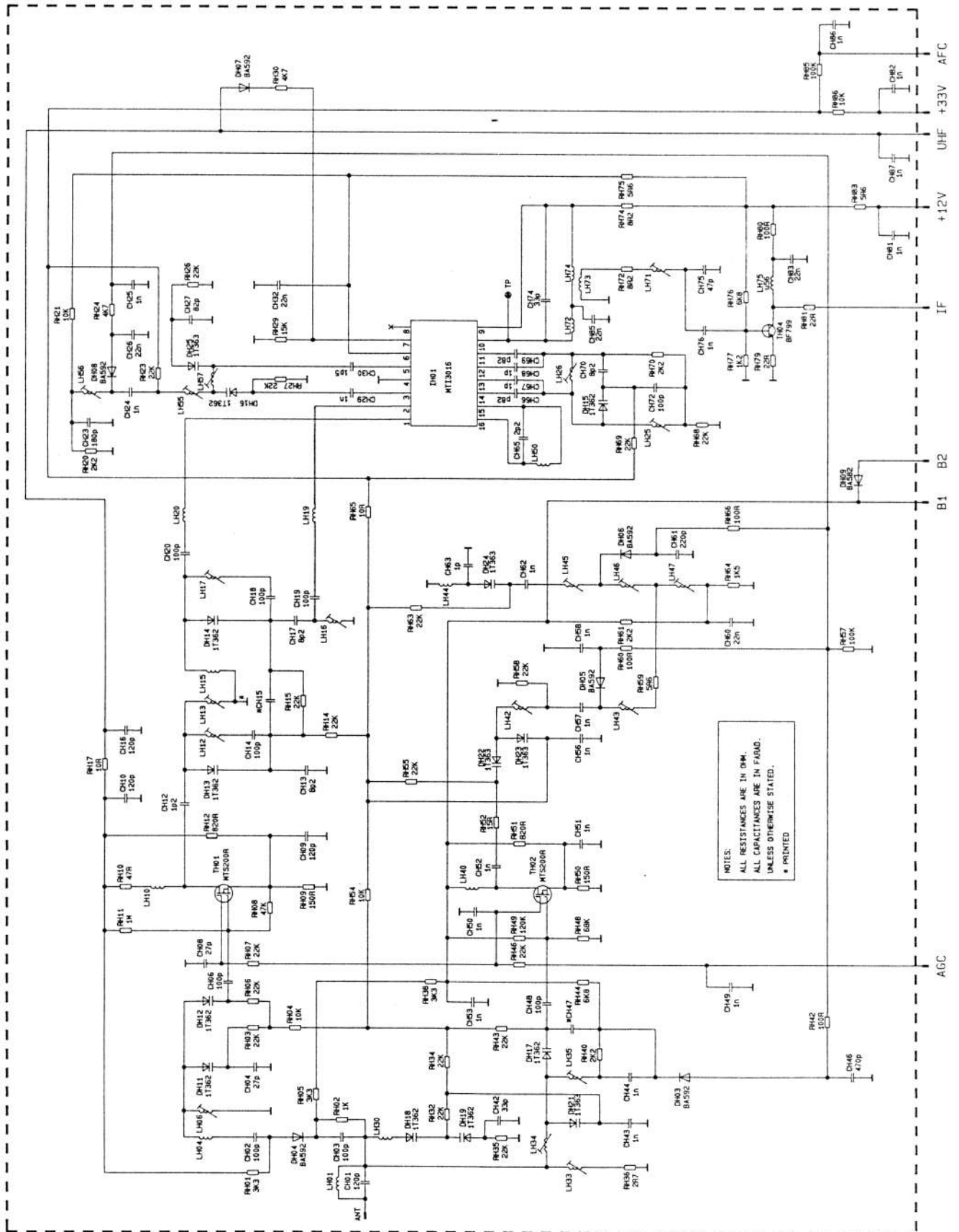
Pos.	Art.-Nr. Part No.	Bezeichnung	Part
LL03 LL04 LL05 LL05 LLOS	490.007.8459 309.250984 20202880 203.832 80 251.233.40	90UH Spule H-Lirwaht 50UH 1.5% Oroirfl Diodenapil-Trafo TX91 14' FCV-1410E18 OroDefspil-Trafo TX91 20* D>od>nsplH.TrafoTX91 20' FCV-2010E07	SOUH H-Linearity coil 50UH 15% Choke Diode split transtoftTTf Diodfl split tranforTiM Diod* split trinsformw
LPOJ LPO2 LP02 LP03 LP03 LP04 LPO* LPW LPW1	339 349.566 203 979.40 490.0060542 203774.10 203.425.90 203.264 60 203.264 50 203.264.50 150397.50	2X4QOUH NBZeingangUro—l 30MH Siebarosssel 33MOH Stftbdrossel Trafo Schaltnetzfl Trafo SchaHnetzteil ETS42A2-116ND 2U2H 10% Drossel 4UH 10% Orossel 4UH 10% Drossol 15UH 10% Orossel	2X400UH Poww chok« 30MH Piller choke Pillfr choke Swicifldf mode power (rinxformw Switcrfd nod* power tfinomw 2U2H 10%Chok«coil 4UH 10% Chokacoil 4UH 10% Choke coil 15UH 10% Choke coil
LR01	266406	10UM DroeIwt	IOUHChokccoU
MTOJ	402.002.00	Cineh BucltM	Cineh ockct
P101	203.513.20	10KR 30% Tnmnwider>land (legend	10KR 30% Trimmer r—iator
PP01	309 509.204	470R Tnmnwiderstand. liegend	470R Trimmer reirtor
QC01 QC02	100.877.10 100.877.20	4M433616HZQuirz 3M579545HZQuarz	4M433G19HZ Crystal 3M579545HZ Crysfll
0101 0132 0114	404.03749 278.341 203.381.70	OFWVG1962M Obertlachenwlrfilter SFT5.5MA Keramikfltr 70KHZ Kenmiklitr Trap	Surfac* eoulic w w tlftr SFTS.6MA Cennic lflfr 70KHZ Certmic filter trip
QR01	3C9.335.731	BMOHZ Quarz	8MOHZ Crytial
QV01	309.180.840	CSB503B Keramikflfr	CS95039 CTmic mlf
QX01	261.323	13M875HZ Quarz	13M875HZCfyst>l
RA25 RA21	339 537.717 246.406	1R 0.3W 5% Sicerneltswiderstand 470R 0.3W 5% Sicherheitswiderland	1 R 0,3W 5% Fusible resistor 470R 0.3W 5% FusDle resistor
RF01 RF04	150.0M.70 150.144.10	2R2 0.3W 5% Sicherheifwldarafrnd 22R 0.4W 2% Melaflmwiderstand	2R2 0.3W 5% Fus>ible resistor 22R0.4W 2% Mefflrm auxtor
RHie RM17	339.537.717 253.747	1R 0.3W 5% Sichemeitswider stand 5R6 0.3W 5% Sicherheitwiderstand	1R 0.3W 5% Fusible resistor 5R6 0.3W 5% Fusible resistor
BL01 RL07 RL08 RLM RLO« RLM	130.838.20 309 580.952 101.513.20 309 536 942 490 006 7871 203521.70	390R 1W 5% Metalloxydwiderland 1KR 0.5W 10% Sicherheitswiderland ieR 2W 5% Metalloxydwderstand 33R 1W 5% Metalloxydwiderstand 33R 2W 5% Metalloxydwiderstand 8R2 5W 10% Drahtwid erst and	390R 1W 5% Mfttal oxide resistor 1KR 0.5W 10% Fusible resistor 1BR 2W 5% Oxide metal resistor 33R 1W 5% Men oxida resistor 33R 2W 5% Metal oxide realsIOF 8R25W 10% Wiferes. slof
RL11 RL12 RL13 RL13 RL13 RL22	103.131.10 103.054.50 103.131.10 243743 103.321.70	OR560 0.5W 5% Sicherheitswiderstand OR220 0.5W 5% Sicherheitswiderstand OR560 0.5W 5% Sicherheitswiderstand 1R5 0.5W 5% Sicherheitswiderstand 75KR 1W 5% Metalloxydwiderstand	15R 0.5W 5% Fusible resistor OR560 0.5W 5% Fusible resistor OR220 0.5W 5% Fusible resistor OR560 0.5W 5% Fusibf restisor 1R5 0,5W 5% Fusible resistor 75KR 1W 5% Metal oxide resistor 82KR 1W 5% Metal oxide resistor
RP01 RP02 RP03 RP06 RP07 RP10 RP20 RP20 RP21 RP31 RP31 HP32 RP32	203.696.40 110.651.00 203 102.40 2C3.695.90 41344301 204 704 60 130.498.80 130.85530 309 530 716 103.054.50 243903 103054.50 243 903	5R1 5W 10% Drshlwid er stand 25R 220V PTC-Widerstand 1K 7W 5% Drahtwiderstand 18KR5W 5% Mitlatorydwardstand 4K75 0.25W 1% Metallflmwiderstand 33R 3W 5% MetalloxydwidTstand OR220 3W 5% Metallflmwiderstand OR270 3W 5% Metallflmwiderstand TOM 0.7W 5% Schichtwider aland OR220 0.5W 5% Sicherheitswiderstand OR22 0.5W 5% Sicherheitswiderstand	5R1 5W 10% Wire resistor 25R 220V PTC resistor 1K 7W 5% Wire resistor 18KR 5W 5% Metal oxida resistor 4K75 0.25W 1% Melal film resistor 33R 3W 5% Meffl oxide resistor OR220 3W 5% Meial film resistor OR270 3W 5% Metal flm r«s>sior 10M 0.7W 5% Film resistor OR220 0.5W 5% Fusible resistor OR22 0.5W 5% Fusible resistor
RR01	100.376.00	BR2 0.5W 5% Sich-hellswidTStand	8R2 O.5W 5% Fusible resistor

Pos.	Art.-Nr. Part No.	Bezeichnung	Part
RT01 RT02 RT03 RT23 RT25 RT43 RT45 RT52 RT62 RT63 RT65 RT72	253.081 130.013.50 404.349.80 101.337.80 101.218.80 101.337.60 101.218.80 490007.8228 490 007.8228 101-337.80 101.218.80 490.007.8228	47R 0.3W StCherh cits wider stand 15R 2W 5% Meffloxydwiderstand 10K0.5W5%W«afsiano 1K5R 0.5W 5% Widersfnd 1K5R 0.5W 5% Widersund 10KR 2W 10% Meialloxyaw.dersfnd 10KR 2W 10% MeffloxydwidelfSiand 47KR 1W 5% M«flkxyOw>derstand 1K5R 0.5W 5% Widerstand 10KR 2W 10% Meulioxydwidersiand	47R 0.3W Fusible resistor 15R 2W 5% Motal oxide resistor 10K 0.5W 5% Resistor agglom. 1 K5R 0.5W 5% Resisior affflom. 1K5R 0.5W 5% Resistor aoglom. 10KR 2W 10% Metal oxide resistor 10KR 2W 10% Metal oxide resistor 47KR iw 5% Metal oxide resistor 1K5R 0.5W 5% Resistor agglom. 10KR 2W 10% Metal oxide resistor
RV02 RV41	258863 150.099.70	3R9 0.3W 5% SicherheitswtdTslend	3R9 0.3W 5% Fusible resistor
RX01	309.580 955	22R 0.3W 5% Storwh*ttwidJntend	22R Q.3W B« Fuabile restior
SK01 SK01 SK02	105.106.00 404.474.1A 105.106.00	TaKtschaner Taktswitcher Taktscrmier	Tact twitch Tact switch Tact switch
SK03 SK03 SK04 SK04 SK05 SK05	105.106.00 404.474.1A 105.106.00 404.474.1A 101.759.10 201.260.10	Taktscha'ier Taktscrmier Taktecherr Takischalter Neizschalter Netzschalterf. 4A 250V	Tact switch Tad switch Tad twitch Tact twitch Taci switch Mama switch Main« switch
TA05 TAOC	339.555.241 339555.241	BC9488 Transistor SMD BC848B Transistor SMD	BC848B Transistor BC848B Tranaiator
TP21 TF31 TF31	339.555241 102.762.40 339.555.241	BC548B Tranartor SMD 8C&4BA Transistor BC&48B Tranritor SMO	BCa48B Transielor BC84BA Transistor BC648B Transistor
TH01 TH02 TH03 TH04	249.0(3 242.012 242.012 242.012	BC647B Transioior SMO BC658/C Trenstisor SMD BC858/C Tranaisor SMO BCa56/C Transistor SMD	BC847B Transistor BC85a/C Transistor BC858/C Transistor BC858/C Transistor
T101 T131 T132	242857 249.250 339.555.241	MMBTHIOLTI Transfstor SMO BC858B Transistor SMO BC848B Transistor SMD	MMBTHIOLTI TransHtOf BC858B Transiator BC848B Transistor
TK02	33t.S55.241	BCB48B Truuilfor SMD	RC848B Trin—ur
TL01 TL02 TL02 TL13	339.556.787 261.825 309.005.026 339 556.767	BC337-40 Tranarlor Montageclip 1 S2055AF Tren»>tor BC337-40 Tranaistor	BC337-40 TranaCtor ClIpl S2055AF Transistor BC337-40 Transistor
TP01 TP01	102.067.60 281.825	BUL310XI Translftof Montageclip 1	BUL310XI Transistor ClIpl
TR01 TR08 TR03	339.555.241 339.555.241 339.555.241	BC848B Transistor SMD BC648B Transistor SMD BC848B Transistor SMO	BC848B Transistor BC846B Transistor BC848B Tranaiator
TT51 TT52 TT61 TT62 TT7J TT72 TT81	309.001.310 160 037.60 309001.310 160.037.60 309.001.310 160.037.60 352.875.5000	BF423 Transisior 2SC2482N Transistor BF423 Transistor 2SC2482N Transistor BF423 Transistor 2SC2482N Transistor BC857B Trannitor SMO	BF423 Translator 2SC2482N Transistor 2SC2482N Transistor 8P423 Transistor 2SC2482N Transistor BC857B Transistor
TV01 TV02	249.250 249250	BC858B Tranxnstof SMD BC858B Tran—tor SMO	BC858B Tran«>lor BC858B Tr.nsrfor
TX01	309001 228	BC558B Transitor	BC558B Transistor
	103.381.90	Laitung mrt Sleekef IOpolig 420mm Chassis BV82 an CRT HT81	Cable with socket 10-pol* 420mm

VIDEO AMPLIFIER - AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKER AMPLIFICATORE VIDEO - AMPLIFICADOR VIDEO

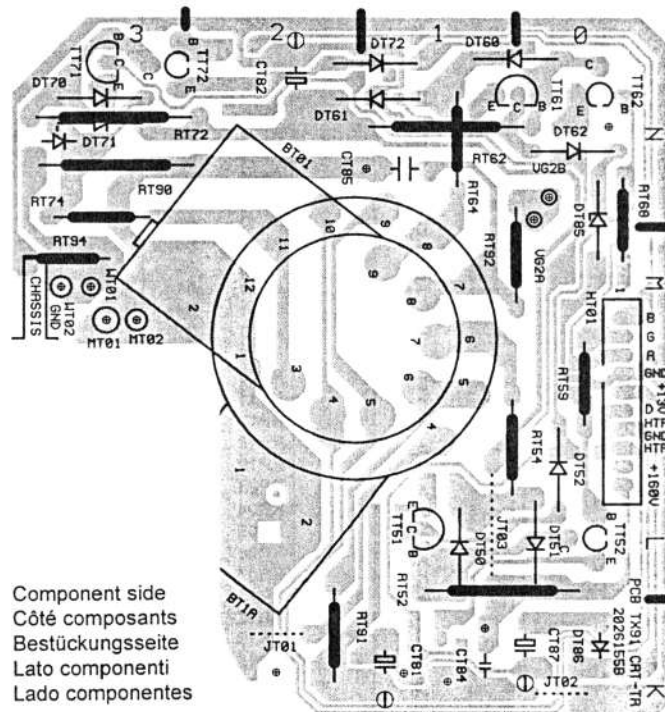
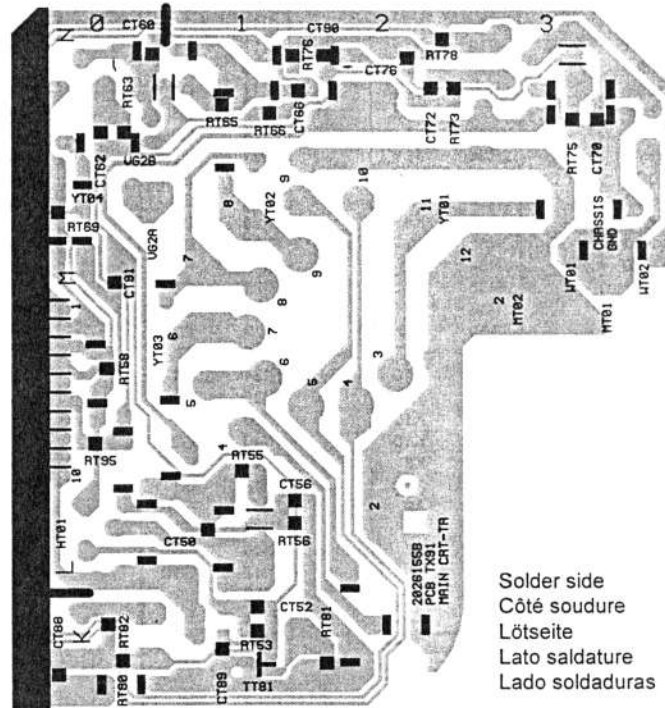


VHF / UHF TUNER MTM 4045

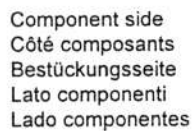
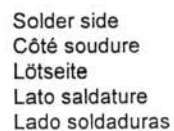


(For information only)

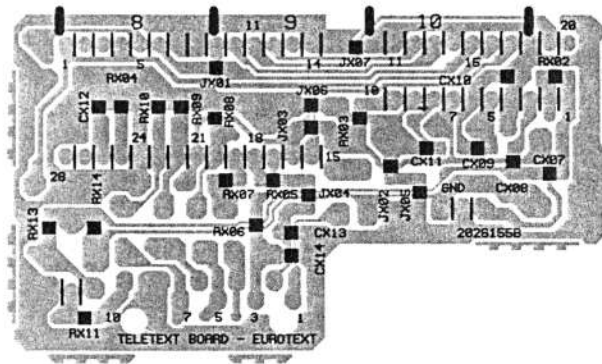
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PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO
- TRANSISTOR VERSION -



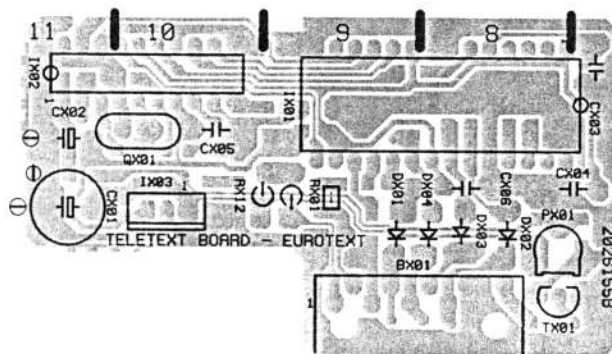
- IC VERSION -



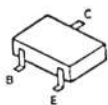
TELETEXT MODULE - MODULE TELETEXTE - VIDEOTEXT MODUL MODULO TELEVIDEO - MODULO TELETETO



Solder side
Côté soudure
Lötseite
Lato soldature
Lado soldaduras



Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



BC 847 B
BC 848 A /B /C
BC 857 B
BC 858 B /C
DTC 144 EK
MMBTH10L



BF 423



2 SC 2482



BC 337
BC 558 B

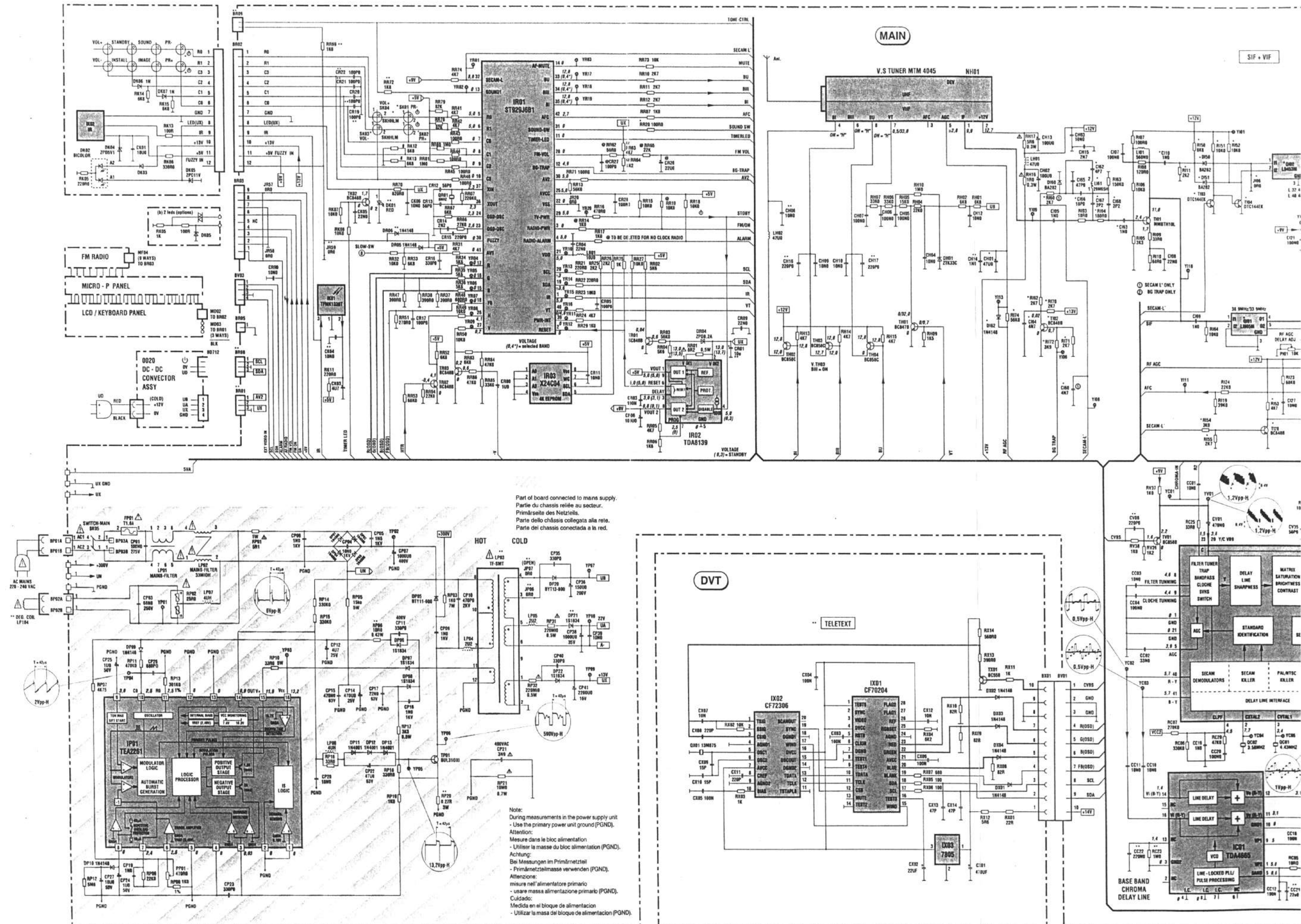


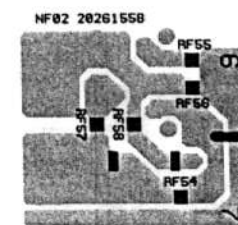
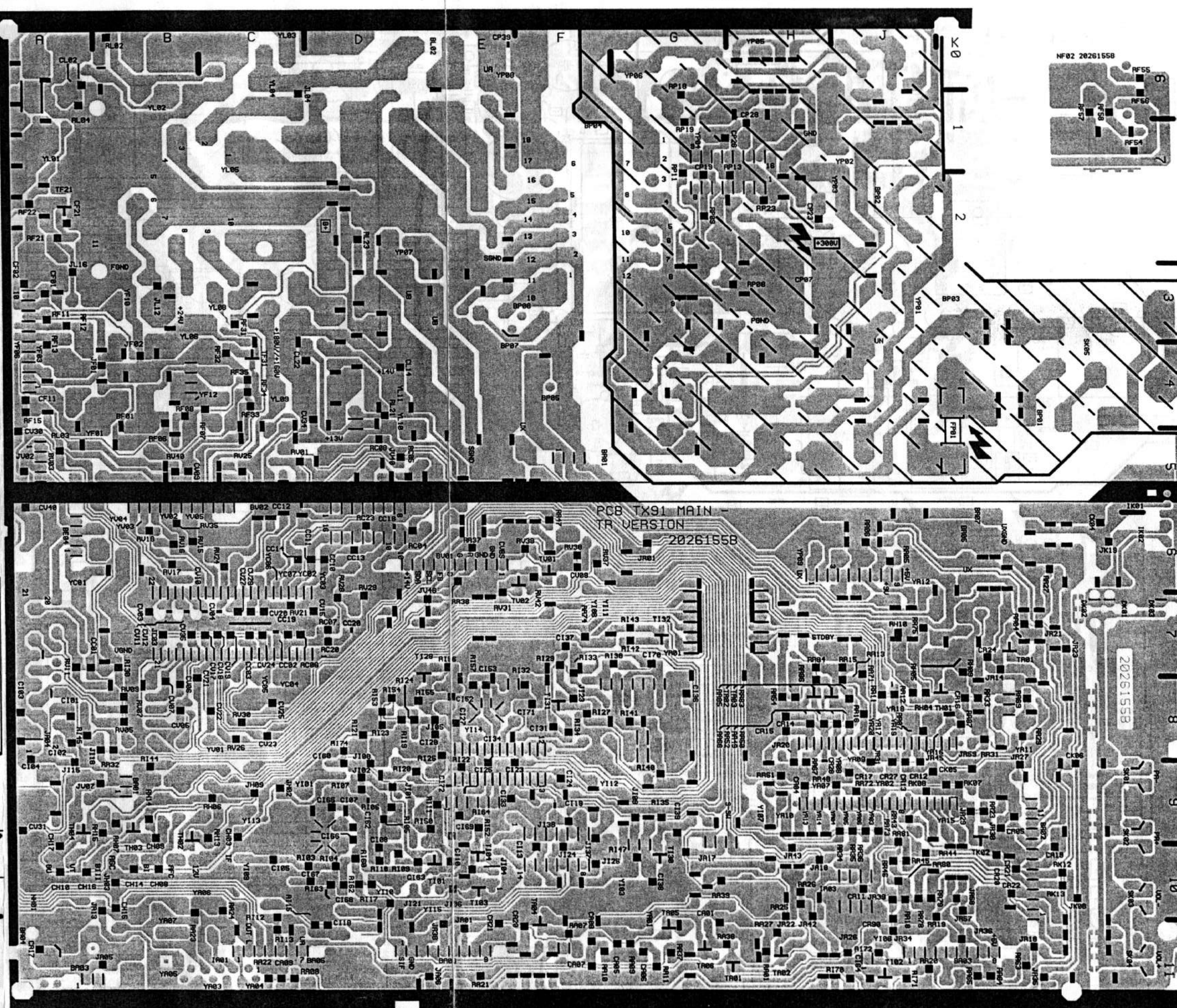
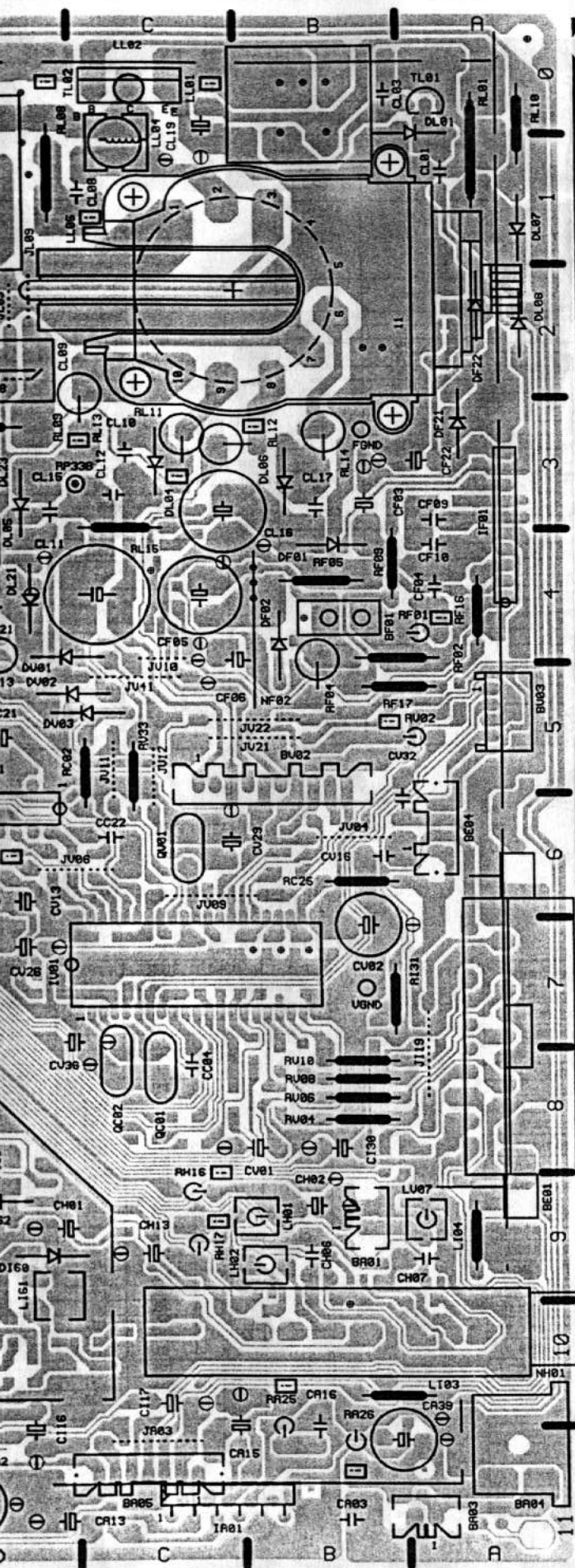
BUL 310 XI



S 2055 AF

MAIN SCHEMATIC DIAGRAM - SCHEMA PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE SCHALTBILD - SCHEMA PIASTRA PRINCIPALE - ESQUEMA PLATINA PRINCIPAL





Component side - Côté composants - Bestückungsseite - Lato componenti - Lado componentes

