

TELEFUNKEN

A-114MC

MODEL

SERVICE MANUAL

NORDMENDE
THOMSON TECHNOLOGY

SABA

TELEFUNKEN

THOMSON

FERNSEHEN
TELEVISION
TÉLÉVISION

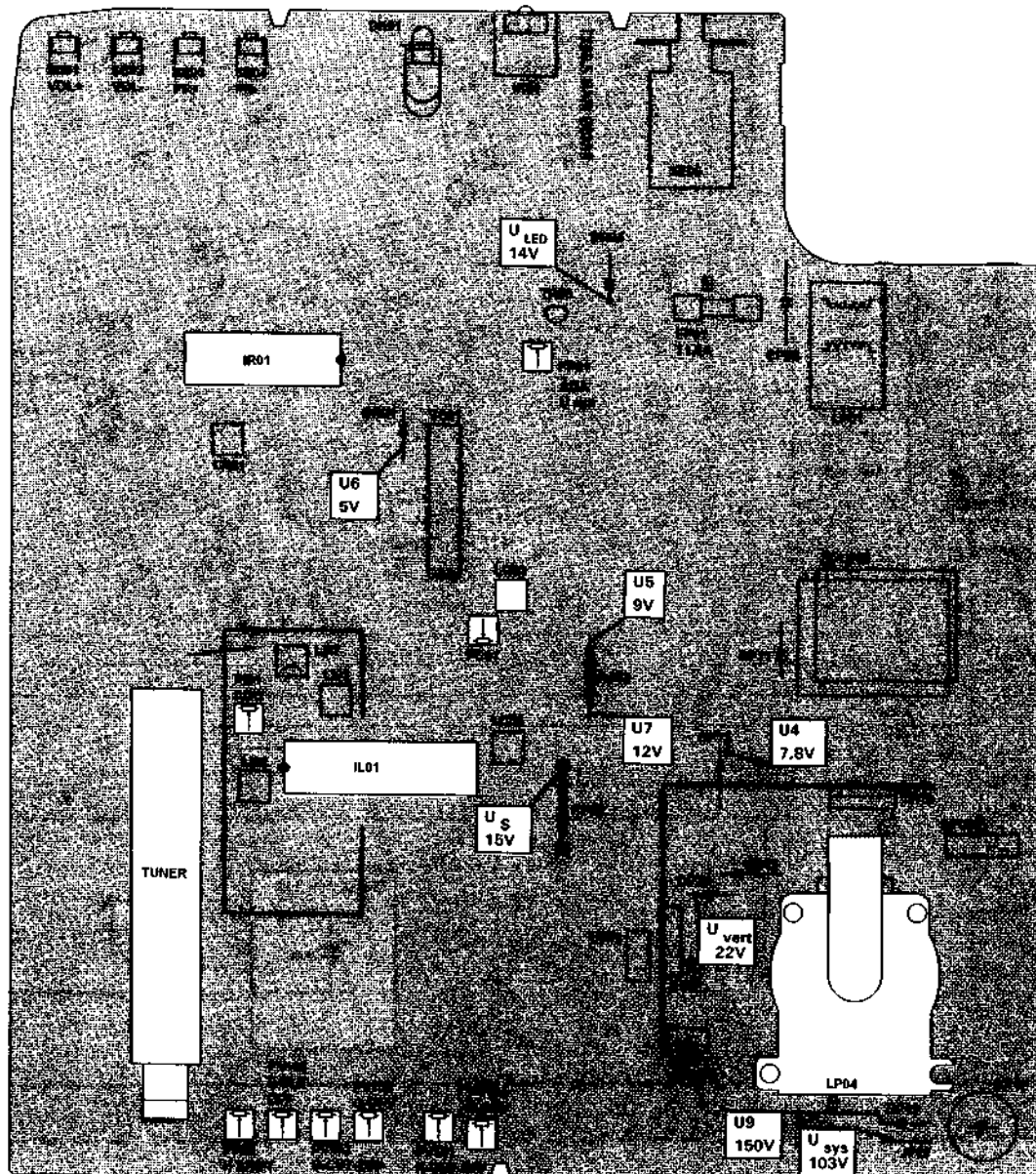
Bestell-Nr. 102.368.50

Chassis TX 805


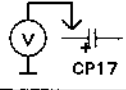



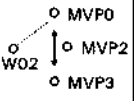













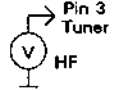


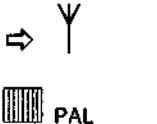
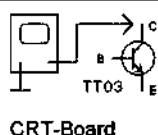
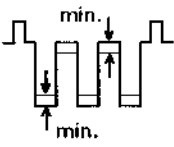





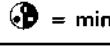






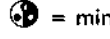


ACHTUNG! Ersatzteilbestellungen
sind schneller und kostengünstiger über

Fax 05 11 / 4 18-12 60

Service-Lageplan · Layout diagram · Disposition des réglages
Posizione regolatori di servizio · Situation de los ajustes



Service Einstellungen · Adjustments · Réglages · Regolazioni · Ajustes de servicio

U system	PP01 	--		14" : 103V
H.-Pos.	PF02 	---		
V.-Pos.		---		
V.-Ampl.	PF01 	--		
U G2	G2 SCREEN 	 = min.		dunkel ⇔ gerade sichtbar dark ⇔ just visible
Schärfe Focus	Focus 			optimale Auflösung optimal resolution
AGC	PI01 	3mV  Ch 9 BG		1. max. 2. max. - 8dB
PAL Chroma Delay	LC03  PC01 			
Graubgleich grey alignment	PV101  PV102  PV103 	  = ¼  = min.		 Grau, grey
Weißabgleich white alignment	PV104  PV105 	  = standard  = min.		 Weiß, white

Achtung:

Servicearbeiten nur über Regeltrenntrafo durchführen!
Sicherheitsbauteile nur gegen Original-Ersatzteile austauschen.

Attention:

Repairs are to be carried out only with isolating transformer!
Replace safety components only with original spare parts.

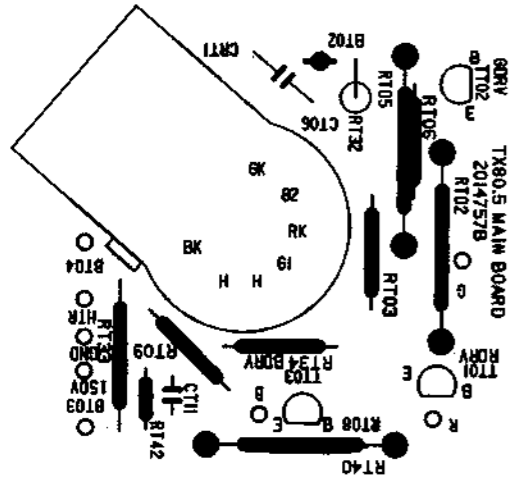
Attention:

N'effectuer les travaux de maintenance qu'avec un transformateur d'isolement!
Ne remplacer les composants de sécurité que par des composants originaux.

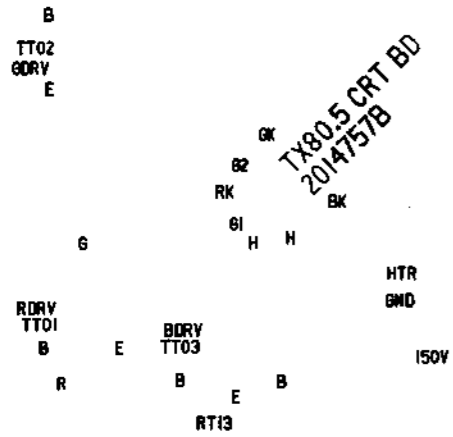
Attenzione:

In caso di riparazione usare trasformatore con separazione di rete!
Componenti di sicurezza devono essere sostituiti solamente con ricambi originali.

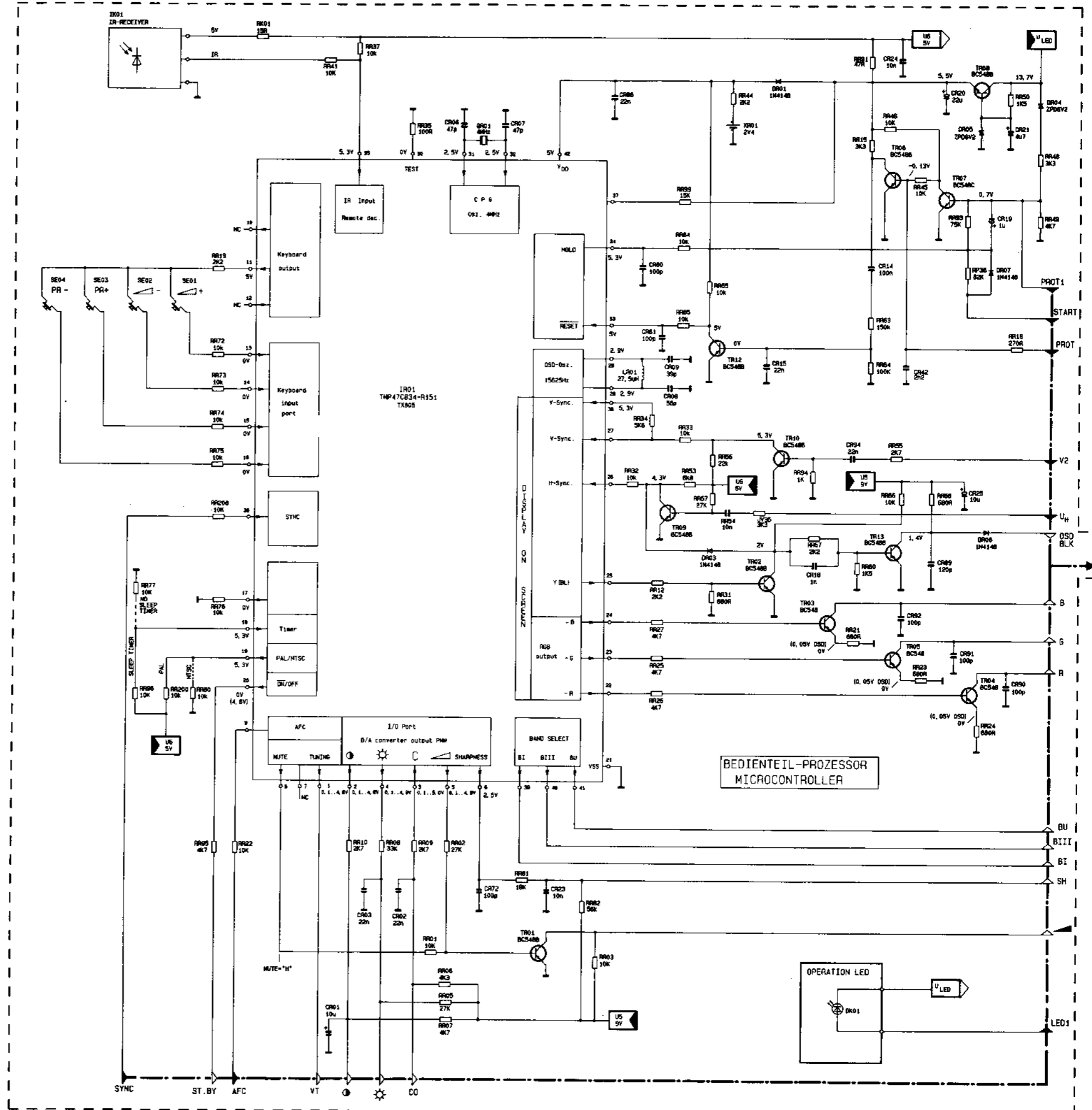
Bildröhrenplatte
 Picture tube board
 Platine tube image
 Basetta Cinescopio
 Placa zocalo TRC



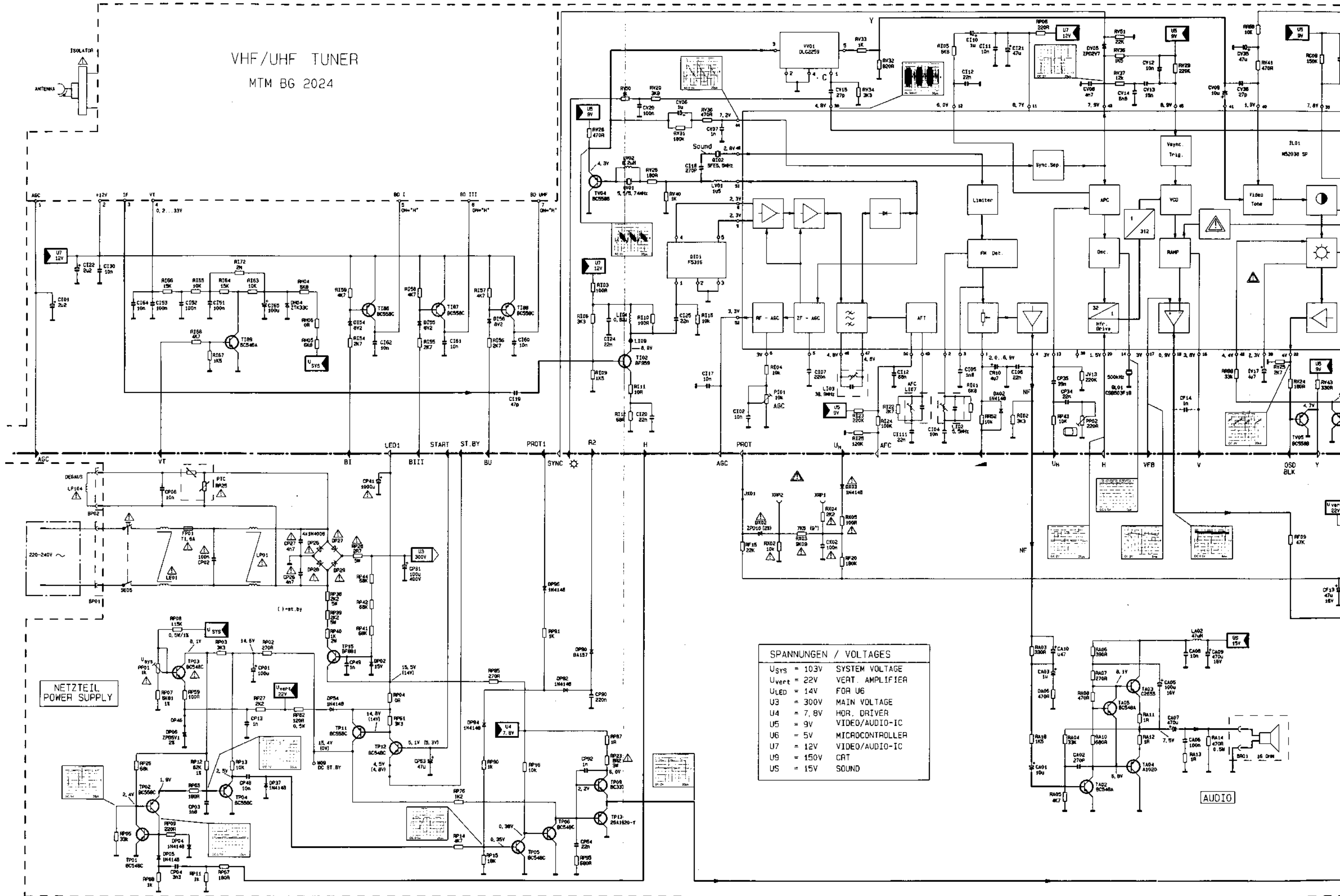
Lötseite · solder side · côté soudure
 lato saldature · lado soldaduras



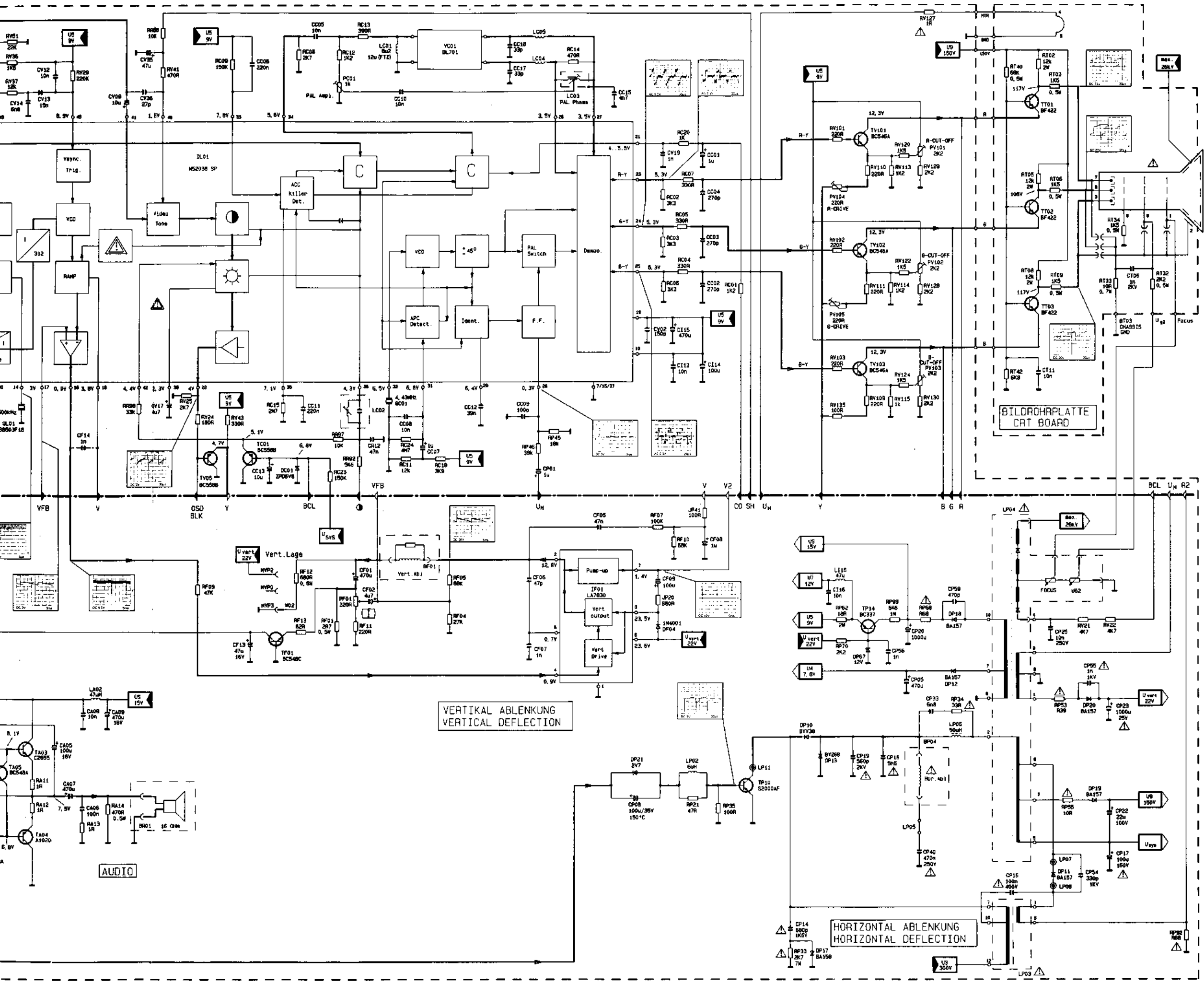
Chassis TX 805

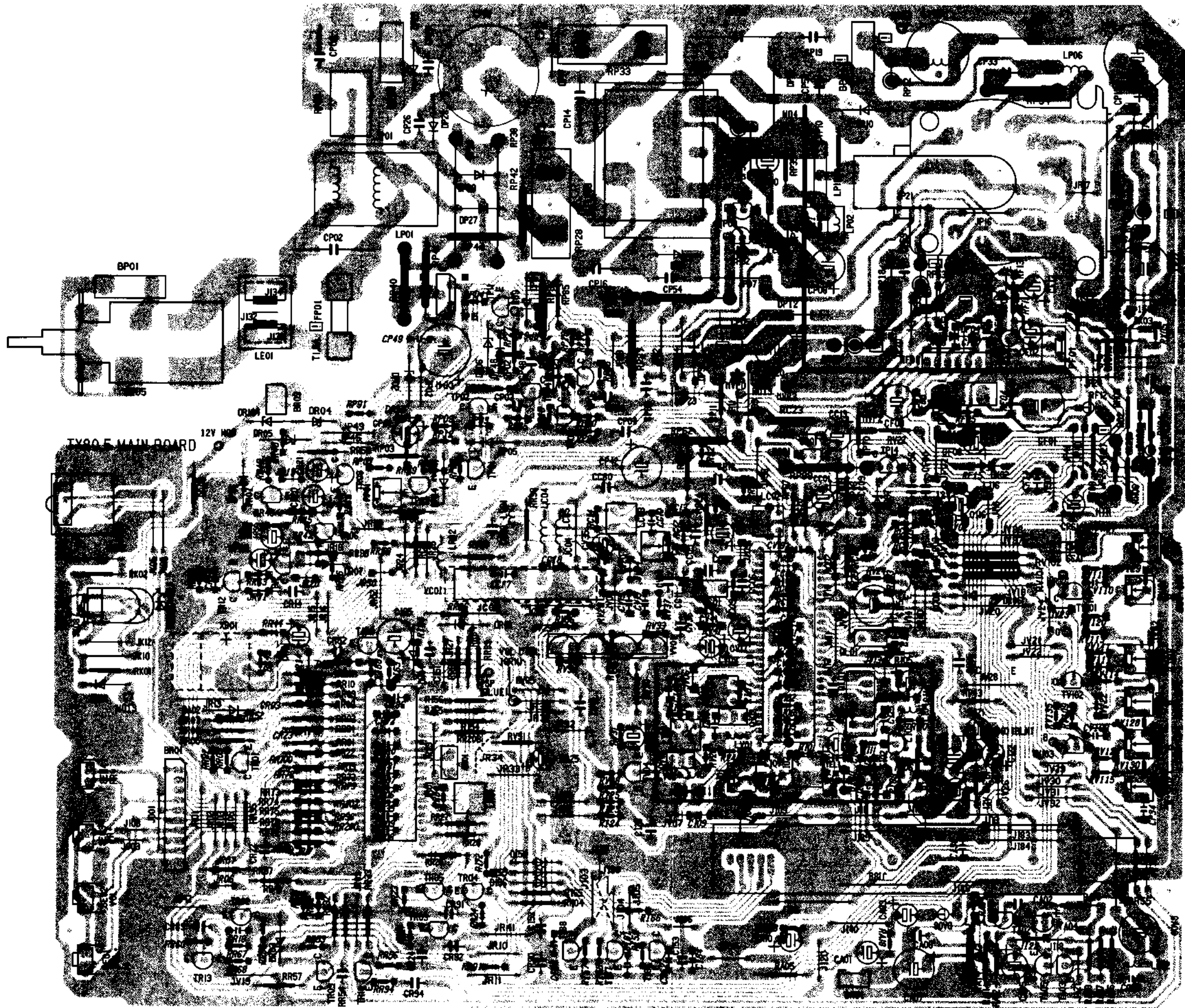


VHF/UHF TUNER
MTM BG 2024



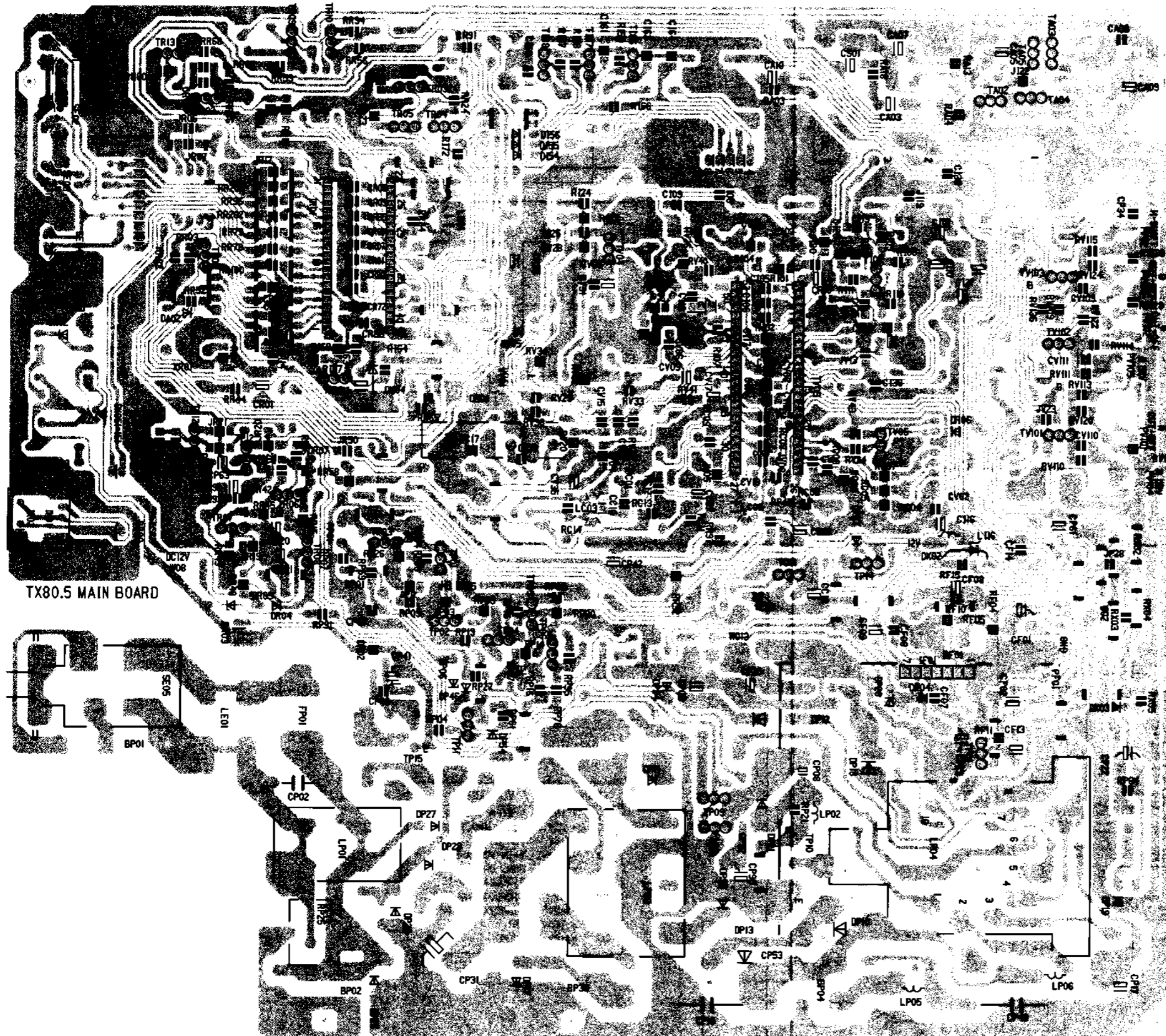
SPANNUNGEN / VOLTAGES	
U _{sys} = 103V	SYSTEM VOLTAGE
U _{vert} = 22V	VERT. AMPLIFIER
U _{LED} = 14V	FOR U6
U3 = 300V	MAIN VOLTAGE
U4 = 7,8V	HOR. DRIVER
U5 = 9V	VIDEO/AUDIO-IC
U6 = 5V	MICROCONTROLLER
U7 = 12V	VIDEO/AUDIO-IC
U9 = 150V	CRT
US = 15V	SOUND





Chassis-Grundplatte · Chassis base board · Plaque de base du chassis · Piastra base telaio · Chasis placa base

Lötseite · solder side · côté soudure · lato saldature · lado soldaduras



Um die VDE-Sicherheit zu gewährleisten, ist nach einer Reparatur sicherzustellen:

1. Auf Luft- und Kriechstrecken achten!
Z. B. durchstehende Drähte ausgewechselter Bauelemente kurz abschneiden.
2. Sicherheitsbauteile Δ nur gegen Original-Ersatzteile austauschen (siehe Stromlaufplan).

In order to insure safety as per VDE requirements, the following must be checked after any repairs:

1. Check for air gap and leakage paths! For example, protruding ends of wires passing through the board must be cut off short.
2. Components with an essential safety function Δ are to be replaced only with original-equipment parts (see circuit diagram).

Pour assurer la sécurité au regard des normes VDE, après une réparation, il convient de veiller à

1. Prévenir des formations de circuits aériens ou rampants. Par ex. couper court les fils qui dépassent ou les éléments de construction échangés.
2. N'échanger les éléments de sécurité Δ que contre des pièces de rechange d'origine (cf. plan de passage du courant).

Per garantire la sicurezza VDE a riparazione effettuata deve essere assicurato che:

1. Tenere conto delle distanze dei componenti e dei percorsi! p.e. i terminali in passaggio dei componenti sostituiti devono essere tagliati corti.
2. Componenti di sicurezza Δ devono essere sostituiti solamente con ricambi originali (vedere schema).

Para garantizar la seguridad en cumplimiento de las normas VDE, después de una reparación, asegurarse de lo siguiente.

1. Mantener la distancia entre componentes. Por ejemplo, cortando todo lo posible los hilos y terminales que sobresalgan de las pistas del circuito impreso.
2. Los componentes marcados en el esquema con el símbolo Δ deben ser substituidos por repuestos originales (ver esquema).

Ersatzteilliste · Spare parts list · Liste de pièces de rechange · Lista parti di ricambio · Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellung 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 pièces de rechange, prière d'indiquer en tout cas le numéro de la pièce!
Importante: Ordinare sempre con il numero corrispondenti di codice!
Importante: Pedir siempre los recambios con el numero correspondiente de código!

Pos.	Art-Nr Part No. No.articolo	Bezeichnung	Part
		MODULE:	MODULES:
NTM2024	201.487.30	MTM BG2024 Tuner	MTM BG2024 U/V tuner
		CHASSIS-TEILE	CHASSIS PARTS
BA01	404.080.81	Stiftgehäuse, 2polig, natur	2 pin contact housing
BR01	249.475	Stiftleiste, 10polig	Contact strip, 10-pole
BR02	804.085.85	Stiftgehäuse, 3polig, natur	3 pin contact housing
BR03	249.477	Stiftleiste, 2polig	Contact strip, 2-pole
CC80	490.006.8270	4N7F 1KV Keramik-Kondensator	4N7F 1KV C cap
CP02	252.320	0U1F 275V 20% MP-Kondensator	0U1F 275V 20% MPoly cap
CP06	490.006.0607	10NF 250V 20% Keramik-Kondensator	10NF 250V 20% C cap
CP14	309.430.473	680PF 1KV 5% MPP-Kondensator	680PF 1KV 5% MPoly cap
CP16	400.001.1194	100NF 400V 10% MKP-Kondensator	100NF 400V 10% MKPoly cap
CP17	249.481	100UF 160V Elko	100UF 160V E cap
CP18	200.896.90	5N8F 1KV 3,5% Filmkondensator	5N8F 1KV 3,5% Film cap
CP19	702.619.00	580PF 2KV 20% Keramik-Kondensator	580PF 2KV 20% C cap
CP25	490.006.0607	10NF 250V 20% Keramik-Kondensator	10NF 250V 20% C cap
CP26	490.006.8270	4N7F 1KV Keramik-Kondensator	4N7F 1KV C cap
CP27	490.006.8270	4N7F 1KV Keramik-Kondensator	4N7F 1KV C cap
CP31	280.909	100UF 365V 20% Elko	100UF 365V 20% E cap
CP33	239.333	6N8F 400V 5% Keramik-Kondensator	6N8F 400V 5% C cap
CP40	800.433.775	470NF 250V 5% Kondensator	470NF 250V 5% Capacitor
CP54	256.867	330PF 1KV 10% Keramik-Kondensator	330PF 1KV 10% C cap
CP54	309.442.977	1NF 1KV Keramik-Kondensator	1NF 1KV C cap
CP56	309.442.977	1NF 1KV Keramik-Kondensator	1NF 1KV C cap
CP58	246.079	470PF 500V 20% Keramik-Kondensator	470PF 500V 20% C cap
CT06	309.442.978	1NF 2KV 20% Keramik-Kondensator	1NF 2KV 20% C cap
DA02	309.325.927	1N4148 Diode	1N4148 Diode
DC01	256.417	BZX55C6V8 Diode	BZX55C6V8 Diode
DE02	490.007.5420	HLMP-D150 LED Diode	HLMP-D150 LED Diode
DP04	273TX0025	1N4001 Diode	1N4001 Diode
DH04	339.529.768	ZTK33C ZENER Diode	ZTK33C ZENER Diode
DI54	484.358	ZPD8,2 0,5W ZENER Diode	ZPD8,2 0,5W ZENER Diode
DI55	484.358	ZPD8,2 0,5W ZENER Diode	ZPD8,2 0,5W ZENER Diode
DI58	484.358	ZPD8,2 0,5W ZENER Diode	ZPD8,2 0,5W ZENER Diode
DK05	490.007.5420	HLMP-D180 LED Diode	HLMP-D180 LED Diode
DP02	252.640	ZPD15 0,5W 2% ZENER Diode	ZPD15 0,5W 2% ZENER Diode
DP04	309.325.927	1N4148 Diode	1N4148 Diode
DP05	309.325.927	1N4148 Diode	1N4148 Diode
DP06	309.327.103	ZPD5,1 2% ZENER Diode	ZPD5,1 2% ZENER Diode
DP10	309.327.131	BYV38 Diode	BYV38 Diode
DP11	309.325.056	BA157 Diode SSW	BA157 Diode
DP12	309.325.056	BA157 Diode SSW	BA157 Diode
DP13	276.160	BY228 Diode	BY228 Diode
DP17	309.325.112	BA158 Diode	BA158 Diode
DP18	309.325.056	BA157 Diode SSW	BA157 Diode
DP19	309.325.056	BA157 Diode SSW	BA157 Diode
DP20	309.325.056	BA157 Diode SSW	BA157 Diode
DP21	273TX5027	ZPY2,7 2% ZENER Diode	ZPY2,7 2% ZENER Diode
DP26	482.288	1N4006 Diode	1N4006 Diode
DP27	482.288	1N4006 Diode	1N4006 Diode
DP28	482.288	1N4006 Diode	1N4006 Diode
DP29	482.288	1N4006 Diode	1N4006 Diode
DP37	309.325.927	1N4148 Diode	1N4148 Diode
DP54	309.325.927	1N4148 Diode	1N4148 Diode
DP57	309.325.195	ZPD12 2% ZENER Diode	ZPD12 2% ZENER Diode
DP90	309.325.056	BA157 Diode SSW	BA157 Diode
DP82	309.325.927	1N4148 Diode	1N4148 Diode
DP84	309.325.927	1N4148 Diode	1N4148 Diode
DP86	309.325.927	1N4148 Diode	1N4148 Diode
DR01	309.325.927	1N4148 Diode	1N4148 Diode
DR03	309.325.927	1N4148 Diode	1N4148 Diode
DR04	276.975	ZPD6,2 2% ZENER Diode	ZPD6,2 2% ZENER Diode
DR05	276.975	ZPD6,2 2% ZENER Diode	ZPD6,2 2% ZENER Diode
DR06	309.325.927	1N4148 Diode	1N4148 Diode
DR07	309.325.927	1N4148 Diode	1N4148 Diode
OV05	273TX5032	ZPD4,7 5% ZENER Diode	ZPD4,7 5% ZENER Diode
OX02	249.628	ZPD10 0,5W 2% ZENER Diode	ZPD10 0,5W 2% ZENER Diode
OX03	309.325.927	1N4148 Diode	1N4148 Diode
FP01	309.825.610	G.-Schmelzeinsatz, T 1,6A III	Glass fuse, T 1,6A

Pos.	Art-Nr Part No. No.articolo	Bezeichnung	Part
IE01	309.327.160	GP1U73RF IR-Vorverstärker, stehend	IR PRE-AMPLIFIER
IF01	276TX3655	LA7830 IC	LA7830 IC
IF01	339.872.711	Montageclip	Clip
IK01	490.007.8242	GP1U73QF IR-VORVERSTÄRKER	INFRA-RED PRE-AMPLIFIER
IL01	309.368.543	M52038SP IC	M52038SP IC
IR01	201.682.40	TMP47C834NR151 IC TX8051	TMP47C834NR151 IC TX8051
IR01	202.041.10	TMP47C834NR161 IC TX8052	TMP47C834NR161 IC TX8052
JR27	286.702	47UH 10% Drossel	47UH 10% Choke coil
LA02	257.256	47UH Drossel	47UH Choke coil
LC01	249.220	12UH Drossel	12UH Choke coil
LC02	490.007.1465	Filter	Filter
LC03	309.249.379	Filter	Filter
LI02	249.494	Filter	Filter
LI03	249.495	Filter	Filter
LI04	276.184	0UH Drossel	0UH Choke coil
LI07	804.059.38	38MHz Filter 7x7	38MHz Filter 7x7
LI16	267.256	47UH Drossel	47UH Choke coil
LP01	490.008.0542	Siebrossel	Filter choke
LP02	249.496	6UH Drossel	6UH Choke coil
LP03	201.495.40	Wassel 220V Transformator	Wessel 220V transformer
LP04	201.679.40	Diodenapfri-Trafo, FCV-1410E12 (TX805)	Diode split transformer
LP06	309.250.964	50UH Drossel	50UH Choke
LR01	490.007.8251	Filter	Filter
LV01	470.543.75	1UH 10% Drossel	1UH 10% Choke coil
LV02	809.249.345	6U2H 10% Drossel	6U2H 10% Choke coil
MI01	490.007.1452	Anlennenbuchse, kpl.	Antenna socket, cpl.
MK01	201.258.7A	Halter, LED	LED holder
PC01	309.509.182	1KR Trimmwiderstand	1KR Trimmer resistor
PF01	201.860.40	220R 0,2W 20% Trimmwiderstand, V	220R 0,2W 20% Trimmer resistor
PI01	309.509.184	10KR Trimmwiderstand, H	10KR Trimmer resistor
PP01	309.509.182	1KR Trimmwiderstand	1KR Trimmer resistor
PP02	201.860.40	220R 0,2W 20% Trimmwiderstand, V	220R 0,2W 20% Trimmer resistor
PV101	201.701.70	2K2R 0,2W 20% Trimmwiderstand, V	2K2R 0,2W 20% Trimmer resistor
PV102	201.701.70	2K2R 0,2W 20% Trimmwiderstand, V	2K2R 0,2W 20% Trimmer resistor
PV103	201.701.70	2K2R 0,2W 20% Trimmwiderstand, V	2K2R 0,2W 20% Trimmer resistor
PV104	201.860.40	220R 0,2W 20% Trimmwiderstand, V	220R 0,2W 20% Trimmer resistor
PV105	201.860.40	220R 0,2W 20% Trimmwiderstand, V	220R 0,2W 20% Trimmer resistor
QC01	309.335.714	4,433619MHz Quarz	4,433619MHz Crystal
QI01	309.229.932	TSP5316 Oberflächenwellenfilter	TSP5316 Surface wave filter
QI02	200.730.50	SFSH5,5MBC Keramikfilter	SFSH5,5MBC Ceramic filter
QI02	309.160.807	SFE5,5MBF Keramikfilter	SFE5,5MBF Ceramic filter
QL01	309.180.850	CS8603F18 Keramikfilter	CS8603F18 Ceramic filter
QR01	309.335.710	CSA4,00MG Keramik-Schwinger	CSA4,00MG Resonator
QV01	309.160.851	TPW04B Keramikfilter 5,74Mhz	TPW04B Ceramic filter
RC23	413.832.02	150KR 0,25W 1% Metallfilmwiderstand	150KR 0,25W 1% Metal film resistor
RF01	603.267.00	2R7 0,5W 1% Metallfilmwiderstand	2R7 0,5W 1% Metal film resistor
RP08	413.804.02	115KR 0,25W 1% Metallfilmwiderstand	115KR 0,25W 1% Metal film resistor
RP23	243.453	8R2 3W 5% Metalloxyd-widerstand	8R2 3W 5% Metal oxide resistor
RP25	110.851.00	22R 220V PTC-Widerstand	22R 220V PTC resistor
RP26	201.108.70	2R7 5W 10% Drahtwiderstand	2R7 5W 10% Wire resistor
RP33	201.888.70	2K7R 5W 5% Metalloxyd-widerstand	2K7R 5W 5% Metal oxide resistor
RP34	249.515	33R 1W 5% Metalloxyd-widerstand	33R 1W 5% Metal oxide resistor
RP36	201.855.20	2K2R 3W 5% Metalloxyd-widerstand	2K2R 3W 5% Metal oxide resistor
RP39	201.853.20	2K2R 3W 5% Metalloxyd-widerstand	2K2R 3W 5% Metal oxide resistor
RP40	249.318	1KR 2W Metalloxyd-widerstand	1KR 2W Metal oxide resistor
RP53	256.961	OR39 0,5W 5% Sicherheitswiderstand	OR39 0,5W 5% Fusible resistor
RP56	309.580.977	10R 0,35W 5% Sicherheitswiderstand	10R 0,35W 5% Fusible resistor
RP62	309.558.312	18R 2W 5% Metalloxyd-widerstand	18R 2W 5% Metal oxide resistor
RP68	246.011	OR68 0,3W 5% Sicherheitswiderstand	OR68 0,3W 5% Fusible resistor
RP92	249.517	OR68 0,5W 5% Sicherheitswiderstand	OR68 0,5W 5% Fusible resistor
RP99	804.093.38	6R8 1W 5% Metalloxyd-widerstand	6R8 1W 5% Metal oxide resistor
RT02	309.531.930	12KR 2W 5% Metalloxyd-widerstand	12KR 2W 5% Metal oxide resistor
RT05	309.531.930	12KR 2W 5% Metalloxyd-widerstand	12KR 2W 5% Metal oxide resistor
RT06	309.531.930	12KR 2W 5% Metalloxyd-widerstand	12KR 2W 5% Metal oxide resistor
RV127	409.189	1R 0,5W 5% Sicherheitswiderstand	1R 0,5W 5% Fusible resistor
RX02	266.590	10KR 0,4W 1% Metallfilmwiderstand	10KR 0,4W 1% Metal film resistor

Ersatzteilliste · Spare parts list · Liste de pièces de rechange · Lista parti di ricambio · Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellung bitte unbedingt die entsprechende Bestellnummer angeben!
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Important: Lors d'une commande de pièces de rechange, prière d'indiquer en tout cas le numéro de la pièce!
Importante: Ordinare sempre con il numero corrispondenti di codice!
Importante: Pedir siempre los recambios con el numero correspondiente de código!

Pos.	Art.-Nr. Part No. No. articolo	Bezeichnung	Part
SE01	105.106.00	Taktschalter	Tact switch
SE02	105.106.00	Taktschalter	Tact switch
SE03	105.106.00	Taktschalter	Tact switch
SE04	105.106.00	Taktschalter	Tact switch
SE05	201.260.10	Netzschalter, 4A 250V	Main switch
TA02	261.791	BC548A Transistor	BC548A Transistor
TA03	339.656.399	2SC2655Y Transistor	2SC2655Y Transistor
TA04	242.066	2SA1020Y Transistor	2SA1020Y Transistor
TA05	261.791	BC548A Transistor	BC548A Transistor
TC01	309.001.329	BC558A Transistor	BC558A Transistor
TF01	463.223	BC548C Transistor	BC548C Transistor
TI02	270TX1087	BP959 Transistor	BP959 Transistor
TI06	309.001.226	BC558B Transistor	BC558B Transistor
TI07	309.001.226	BC558B Transistor	BC558B Transistor
TI08	309.001.226	BC558B Transistor	BC558B Transistor
TI09	309.001.347	BC546A Transistor	BC546A Transistor
TP01	463.223	BC548C Transistor	BC548C Transistor
TP02	309.001.292	BC558C Transistor	BC558C Transistor
TP03	463.223	BC548C Transistor	BC548C Transistor
TP04	309.001.292	BC558C Transistor	BC558C Transistor
TP05	463.223	BC548C Transistor	BC548C Transistor
TP06	463.223	BC548C Transistor	BC548C Transistor
TP09	352.839.7000	BC337-16 Transistor	BC337-16 Transistor
TP10	256.341	S2000AF Transistor	S2000AF Transistor
TP10	261.825	Montageclip 1	Clip 1
TP11	309.001.292	BC558C Transistor	BC558C Transistor
TP12	463.223	BC548C Transistor	BC548C Transistor
TP13	242.066	2SA1020Y Transistor	2SA1020Y Transistor
TP14	352.839.7000	BC337-16 Transistor	BC337-16 Transistor
TP15	489.007.4147	MJF18004 Transistor	MJF18004 Transistor
TR01	309.001.293	BC548B Transistor	BC548B Transistor
TR02	309.001.293	BC548B Transistor	BC548B Transistor
TR03	309.001.293	BC548B Transistor	BC548B Transistor
TR04	309.001.293	BC548B Transistor	BC548B Transistor
TR05	309.001.293	BC548B Transistor	BC548B Transistor
TR06	309.001.293	BC548B Transistor	BC548B Transistor
TR07	463.223	BC548C Transistor	BC548C Transistor
TR08	309.001.293	BC548B Transistor	BC548B Transistor
TR09	309.001.293	BC548B Transistor	BC548B Transistor
TR10	309.001.293	BC548B Transistor	BC548B Transistor
TR12	309.001.293	BC548B Transistor	BC548B Transistor
TR13	309.001.293	BC548B Transistor	BC548B Transistor
TT01	465.913	BF422 Transistor	BF422 Transistor
TT02	465.913	BF422 Transistor	BF422 Transistor
TT03	465.913	BF422 Transistor	BF422 Transistor
TV04	309.001.226	BC558B Transistor	BC558B Transistor
TV05	309.001.226	BC558B Transistor	BC558B Transistor
TV101	309.001.347	BC546A Transistor	BC546A Transistor
TV102	309.001.347	BC546A Transistor	BC546A Transistor
TV103	309.001.347	BC546A Transistor	BC546A Transistor
VC01	309.899.483	DL701S/SDL145 Verzögerungsleitung	DL701S/SDL145 Delay line

Pos.	Art.-Nr. Part No. No. articolo	Bezeichnung	Part
VV01	200.338.10	DLC2259 LC-Modul	DLC2259 LC Module
XR01	309.339.013	2U4 60MY Akku	2U4 60MY Battery
	201.746.20	Bildrohrfassung, TX90 10"	Cathode ray tube socket
		Weitere gerätespezifische Ersatzteile lieferbar.	Further spare parts are available.