



Service-Anleitung
Service Manual
Instructions de Service

112010

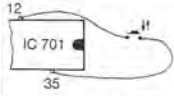
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Technische Daten (typische Werte)	Technical data (typical value)	Caractéristiques techniques (valeur caractéristique)	CT 7030
Empfangsbereiche FM (UKW) MW LW	Wave bands FM (VHF) MW LW	Gammes d'ondes FM (O.U.C.) P.O. G.O.	87,5– 108 MHz 520 – 1619 kHz 150 – 283 kHz
Empfindlichkeit FM-Mono (75 Ohm, 26 dB Rauschabstand) FM-Stereo (75 Ohm, 46 dB Rauschabstand)	Sensitivity FM-Mono (75 Ohm, signal-to-noise ratio 26 dB) FM-Stereo (75 Ohm, signal-to-noise ratio 46 dB)	Sensibilité FM-mono (75 ohms, rapport signal/bruit de 26 dB) FM-stéréo (75 ohms, rapport signal/bruit de 46 dB)	1,0 μ V 32 μ V
Geräuschspannungsabstand (IHF) Stereo (1 kHz/46 kHz Hub)	Signal-to-noise ratio, weighted (IHF) Stereo (1 kHz/46 kHz)	Rapport signal/bruit (IHF) Stéréo (1 kHz/46 kHz)	70 dB
Klirrfaktor Stereo (1 kHz/46 kHz Hub)	Harmonic distortion Stereo (1 kHz/46 kHz)	Taux de distorsion Stéréo (1 kHz/46 kHz)	0,25 %
Übersprechdämpfung bei 1 kHz	Channel separation at 1,000 Hz	Diaphonie stéréo (à 1 kHz)	45 dB
NF-Frequenzgang für Preemphasis 50 μ s – 3 dB	AF frequency response for 50 μ s pre-emphasis – 3 dB	Bande passante BF pour pré-emphasis 50 μ s à 3 dB	10 Hz – 16 kHz
Trennschärfe	Selectivity	Sélectivité	70 dB
NF-Ausgangsspannung	AF output level	Tension de sortie BF	ca. 500 mV
Netzspannung	Line voltage	Tension secteur	230 V
Leistungsaufnahme	Power requirement	Consommation	12 Watt

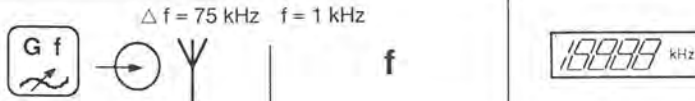

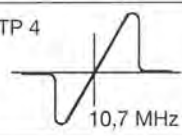

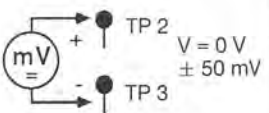

	(D) Zeichenerklärung	(GB) Legend	(F) Légende	(E) Leyenda	(I) Leggènda
	Ein	On	Marche	Encendido	Acceso
	Aus	Off	Arrêt	Apagado	Spento
	Ein-Aus	On-Off	Marche-Arrêt	Encendido-Apagado	Acceso-Spento
	Bereitschaft	Stand-by	Attente (veille)	Espera	Disponibile
	Lautstärke	Volume	Volume	Volumen	Volumen
	Balance	Balance	Balance	Balance	Balance
	Höhen	Treble	Aiguës	Agudos	Alti
	Bässe	Bass	Graves	Graves	Bassi
	Lautsprecher	Loudspeaker	Haut-Parleur	Altavoz	Alto parlante
	Kopfhörer	Headphones	Casque	Auriculares	Cuffia
	Hörkapsel	Earphones	Ecouteur	Auricular	Cuffia
	Stummschaltung	Muting	Silencieux	Circuito silencioso	Sintonia Silenziosa
	Abstimmen	Tuning	Syntonisation	Sintonía	Sintonia
	Empfangsfrequenz- Regelung	Automatic frequency control	Contrôle automatique de fréquence	Control automático de frecuencia	Controllo automatico delle frequenza
	Normal-Lauf	Normal-run	Défilement normal	Velocidad normal	Sfilamento normale
	Schnell-Lauf	Fast-run	Défilement rapide	Velocidad rapida	Sfilamento rapido
	Pause	Pause	Pause	Pausa	Pause
	Auswurf	Eject	Ejection	Expulsión	Eiezione
	Stop	Stop	Stop	Stop	Stop
	Stop / Eject	Stop / Eject	Stop / Eject	Stop / Eject	Stop / Eject
	Microphon	Microphone	Microphone	Micrófono	Microfono
	Tonbandgerät	Tape recorder	Magnétophone	Magnetófono	Magnetofono
	Aufnahme	Recording	Enregistrement	Grabación	Registrazione
	Wiedergabe	Play-back	Lecture	Reproducción	Riproduzione
	Antenne	Aerial	Antenne	Antena	Antenne
	Dipole	Dipole	Dipôle	Dipole	Dipole
	Tuner	Tuner	Radio-récepteur	Sintonizador	Tuner
	Plattenspieler	Pick-up	Lecteur de disques	Giradiscos	Giradischi
	Mono	Mono	Mono	Mono	Mono
	Stereo	Stereo	Stereo	Estereo	Stereo
	Uhr, Timer	Clock, Timer	Horloge, minuterie	Reloj, Timer	Orologio, Timer
	Output	Output	Sortie d'un signal	Salida de señales	Uscita di segnale
	Input	Input	Entrée d'un signal	Entrada de señales	Ingresso di segnale
	Trimmer	Trimmer	Trimmer	Trimmer	Trimmer
	Einstellregler	Adjuster	Potentiomètre ajustable	Potenciometro ajustable	Trimmer ohmico
	Abgleichbarer Kreis	Circuit can be aligned	Circuit à aligner	Circuito ajustable	Circuito a alineare
	L. E. D.	L. E. D.	L. E. D.	L. E. D.	L. E. D.
	Photodiode	Photodiode	Photodiode	Fotodiodo	Photodiodo
	Messpunkt	Test point	Point test	Punto de prueba	Punto di riferimento

Abgleich / Alignment / Reglages

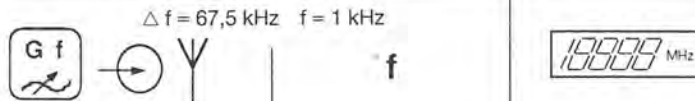
µP nach FM- und AM-Filter justieren (nur bei gelöschtem IC 701) · Adjust µP to FM- and AM filter (only with erased IC 701)

1	 (kurzschließen 1 s) · Short circuit longer then 1 s				
2	FM-Taste drücken Press FM key	z. B. Keramikfilter „rot“ e.g. Ceramic filter „red“	10,70 MHz	⟨ man. tuning ⟩ - +	
3	AM-Taste drücken Press AM key		455 kHz		
4	Netzschalter aus/ein Power switch off/on				

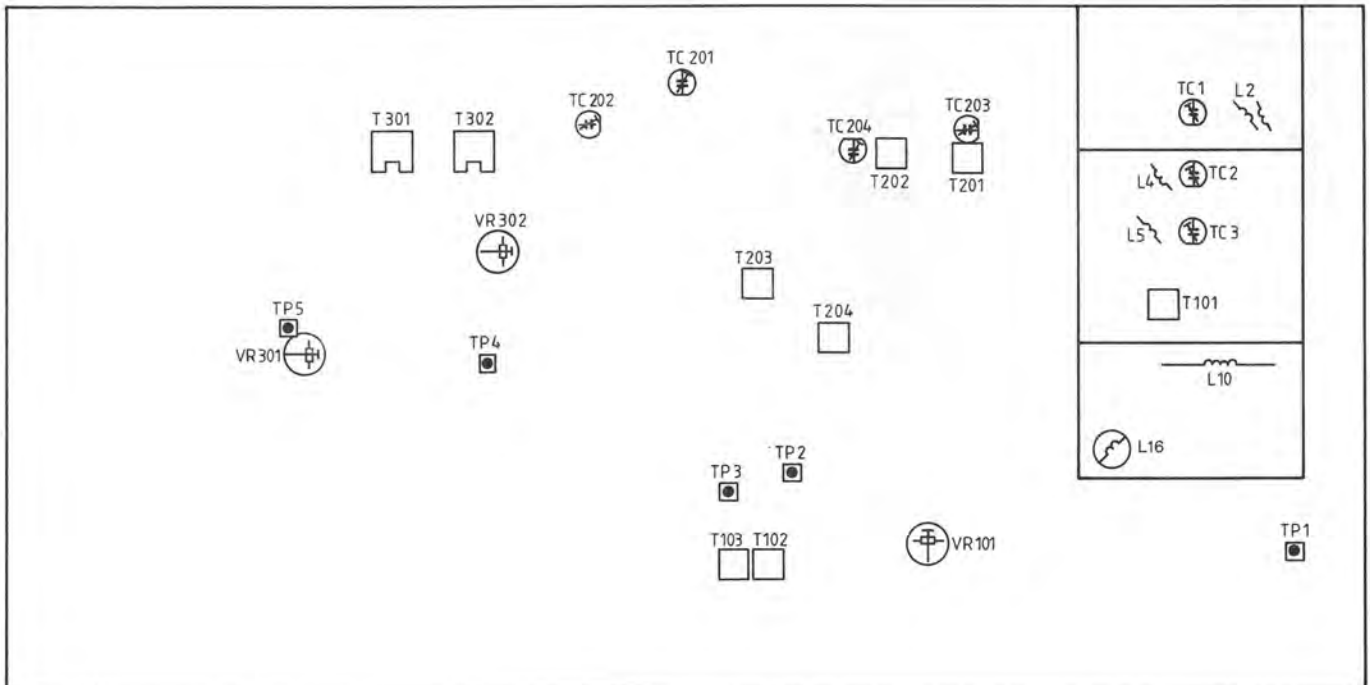
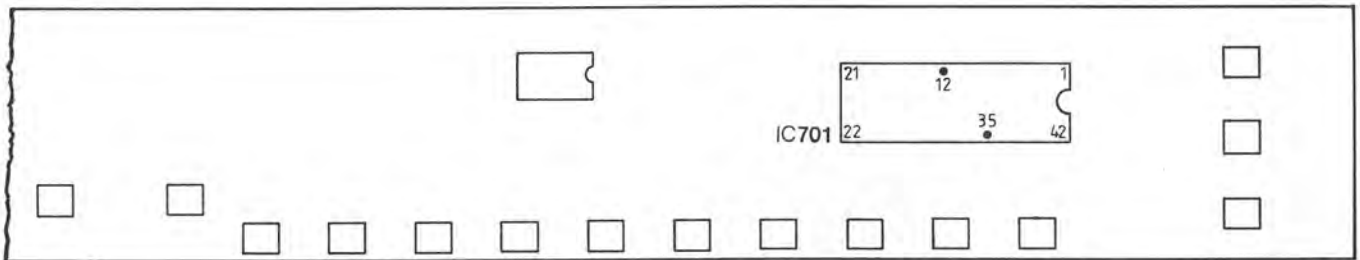
FM

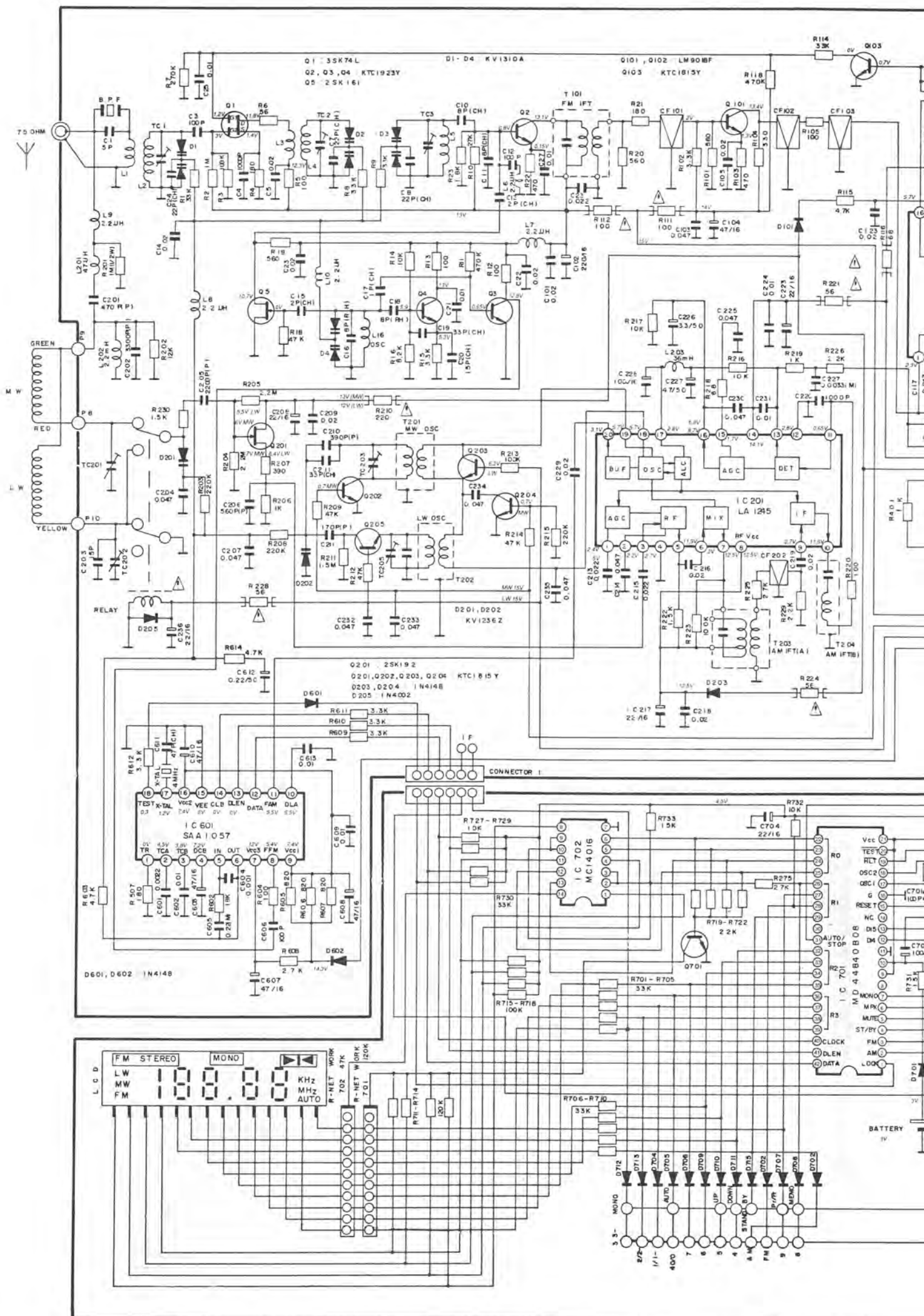
	 $\Delta f = 75 \text{ kHz}$ $f = 1 \text{ kHz}$					
ZF	1	 $V_e \sim 1 \text{ mV}$	z. B. Keramikfilter „rot“ e.g. Ceramic filter „red“ 10,70 MHz	Senderfreie Frequenz Transmitting-free frequency z. B. 98 MHz	T 101, T 102, T 103	TP 4  10,7 MHz
	2	$V_e \sim 1 \text{ mV}$	98 MHz	98 MHz 	T 103	Klirrfaktor: Minimum distortion: minimum
IF	3	Antenne an 75 Ohm Antenneneingang Antenna to 75 ohms antenna input		Starken FM-Sender auf seiner Sollfrequenz empfangen tune noise free station to nom. transmitting frequency	T 102	 TP 2 $V = 0 \text{ V}$ TP 3 $\pm 50 \text{ mV}$
	4			108 MHz	L 10	TP 1 $8,5 \text{ V} \pm 0,1$
	5			87,5 MHz	Check	TP 1 $2,5 \text{ V} \pm 0,1$
	6	$V_e \sim 1,5 \mu\text{V}$	90 MHz	90 MHz	L2-L4-L5	max.
	7		106 MHz	106 MHz	TC 1-TC 2-TC 3	
	8	$V_e \sim 35 \mu\text{V}$	98 MHz	98 MHz	VR 101	Display 

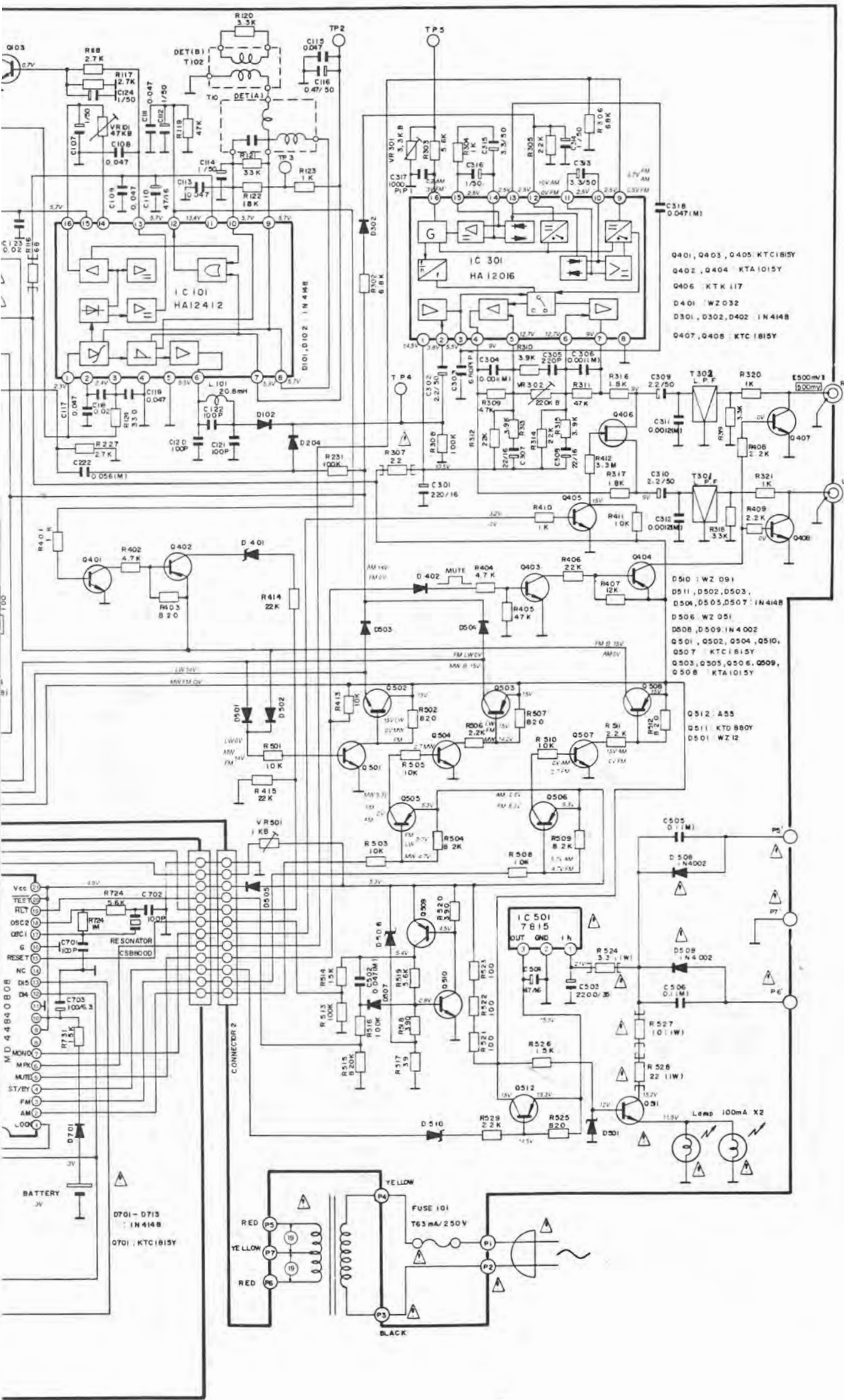
Decoder

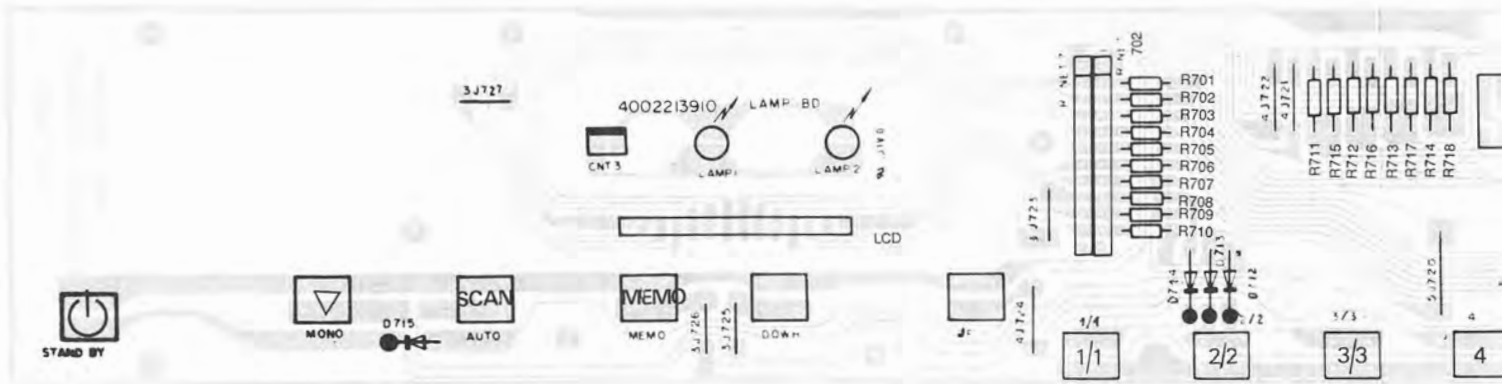
	 $\Delta f = 67,5 \text{ kHz}$ $f = 1 \text{ kHz}$					
	1	with. Pilot $V_e \sim 1 \text{ mV}$	98 MHz	98 MHz	VR 301	f = 76 kHz TP 5
	2	$V_e \approx 1 \text{ mV}$ $\Delta f = 40 \text{ kHz} + 19 \text{ kHz Pil.}$ R. Kanal modul. r. channel modul.	98 MHz	98 MHz	VR 302	l. ch. minimum
	3	$V_e \approx 1 \text{ mV}$ 19 kHz Pilot ohne Mod. 19 kHz Pilot without mod.	98 MHz	98 MHz	T 301	l. ch. minimum
					T 302	r. ch. minimum

AM							
			f				
ZF	1	10 – 100 mV			T 203	max.	
	IF	2	455 kHz	455 kHz	T 204		
MW	3			520 kHz	T 201	0,6 V – 0,3 V	TP 1
	4			1619 kHz	TC 203	8,5 V + 1 V	
	5	Ve ~ 500 mV/m		600 kHz	600 kHz		max.
	6			1400 kHz	1400 kHz		
LW	7			150 kHz	T 202	1,5 V ± 0,1 V	TP 1
	8			283 kHz	TC 204	5,5 V ± 0,1 V	
	9	Ve ~ 1000 mV/m		150 kHz	150 kHz		max.
	10			250 kHz	250 kHz		

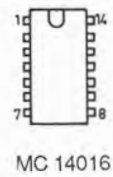
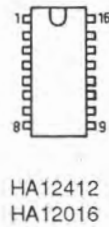
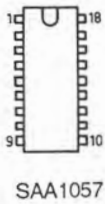
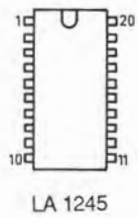
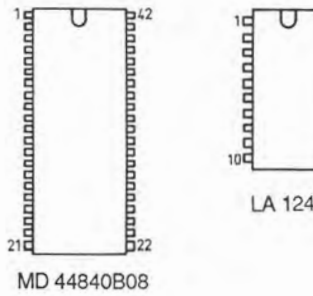




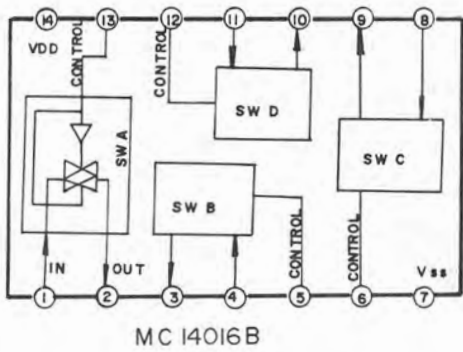




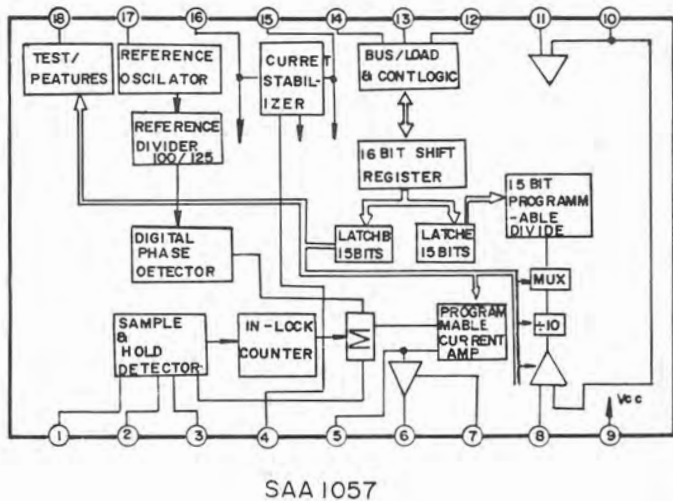
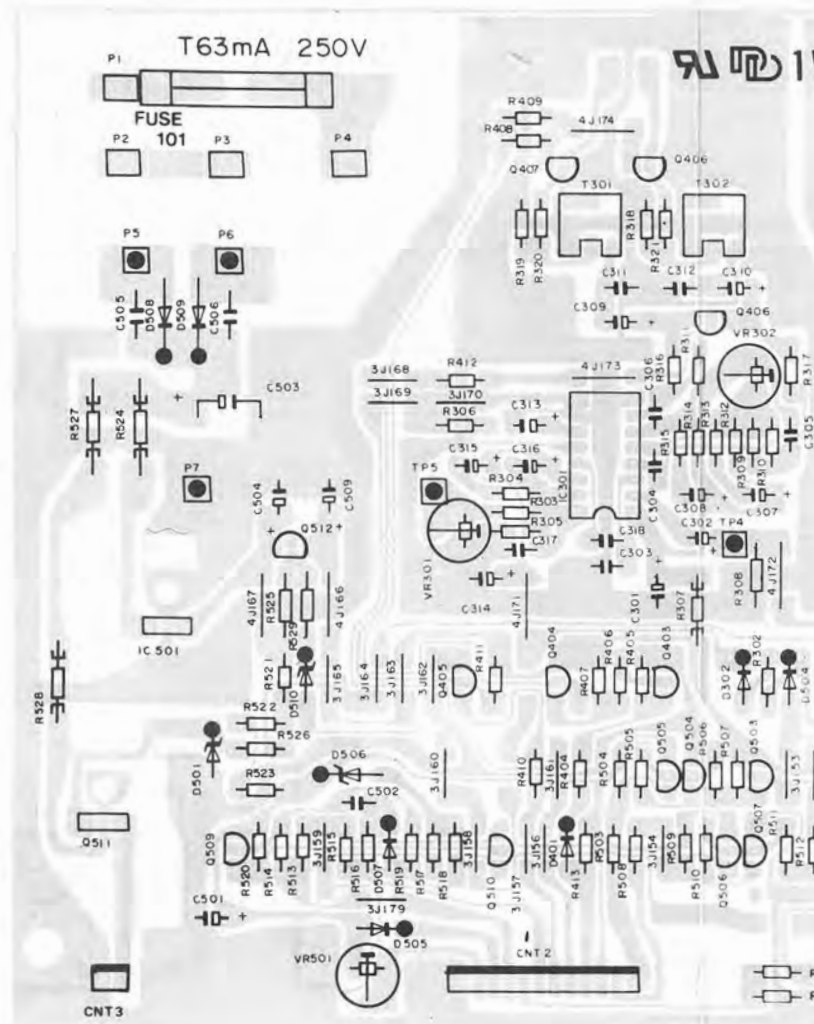
Frontplatte
PCB board front
Platine frontale

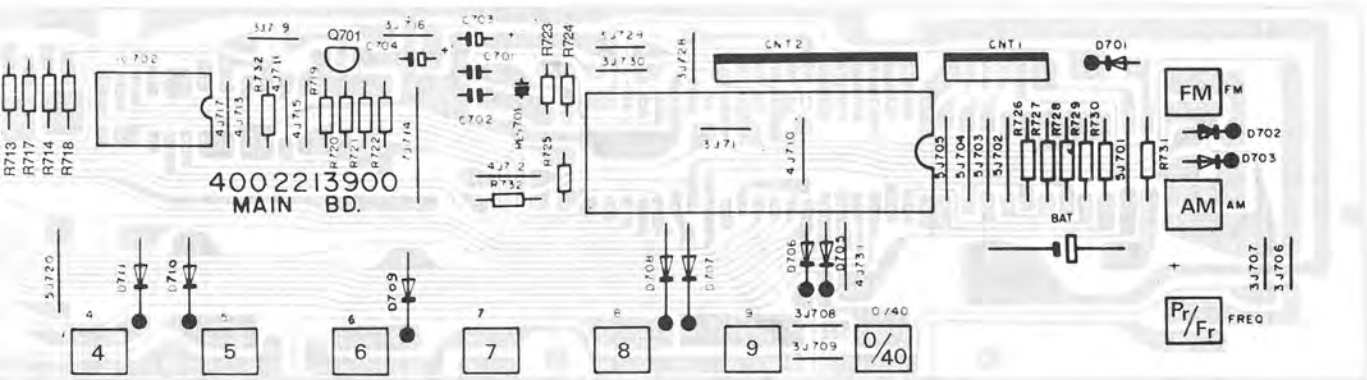





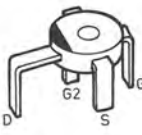
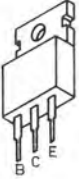

KTC
KTA
KTC1



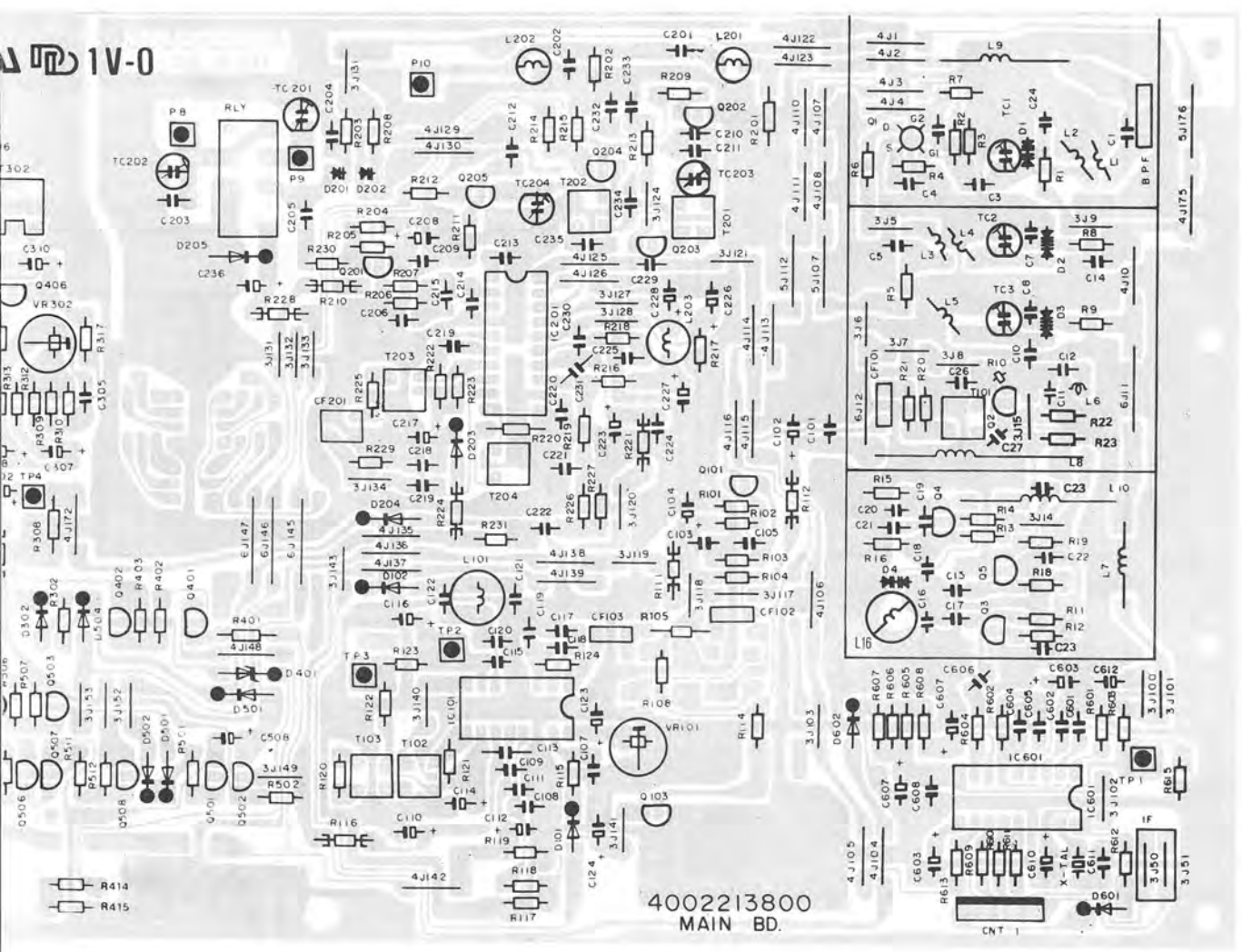
Grundplatte
Main board
Platine principale





- 
 KTC 1815Y
KTA 1015Y
KTC1923Y
- 
 KTK 117
- 
 KTK 161GR
KTK 192GR
- 
 3 SK74L
- 
 KTD 880Y
- 
 7815

Bestückungsseite
Component side
Côté composants



Ersatzteile · Replacement parts · Pièces détachées · CT 7030

Pos.	Art.-Nr.	Stck	Bezeichnung
1	282 331	1	Gehäuseblech
2	282 353	1	Frontblende
3	282 354	1	Fenster
4	282 108	1	Druckknopf Power
5	282 109	1	Druckfeder
6	282 338	1	Taste Man, Tuning / Auto Scan
7	282 356	1	Taste Mono, Scan, Memory
8	282 339	1	Taste Station 1-5
9	282 340	1	Taste Station 6-0
10	282 341	1	Taste FM Stations
11	282 342	1	Taste AM Stations
12	282 343	1	Taste Program Frequency
13	282 215	1	Display
17	282 344	2	Lampe
18	282 345	1	Taster Power
19	282 127	18	Taster
22	282 346	1	Antennenbuchse
27	282 347	1	Cinchbuchse 1-fach
36	282 120	4	Fuß
37	282 121	4	Fußdämpfer
39	282 359	1	Rückwand
40	243 750	1	Netzkabel Europa
42	282 349	1	Antennenhalter
43	282 350	1	MW / LW Antenne
46	282 135	4	Schraube 4×8
50	282 523	12	Schraube 3×8
55	282 216	1	Transformator
56	282 209	1	Grundplatte CT 7030
57	282 357	1	Frontplatte CT 7030
58	282 358	1	Lampenplatte
D 1	282 320	4	Diode KV 1310 A-3
D 4	282 320	4	Diode KV 1310 A-3
D 101	223 906	14	Diode 1 N 4148
D 102	223 906	14	Diode 1 N 4148
D 201	282 223	2	Diode KV 1236
D 202	282 223	2	Diode KV 1236
D 203	223 906	14	Diode 1 N 4148
D 204	223 906	14	Diode 1 N 4148
D 302	223 906	14	Diode 1 N 4148
D 401	282 078	1	Diode DZ 3,3 B
D 402	223 906	14	Diode 1 N 4148
D 501	223 906	14	Diode 1 N 4148
D 501	282 063	1	Diode DZ 12 BM
D 505	223 906	14	Diode 1 N 4148
D 506	282 174	1	Diode DZ 5,1 BM
D 507	223 906	14	Diode 1 N 4148
D 510	282 062	1	Diode DZ 9,1 BM
D 601	223 906	14	Diode 1 N 4148
D 602	223 906	14	Diode 1 N 4148
F 101	242 478	1	Sicherung 0,063 A T
L 1	282 329	1	Spule
L 2	282 221	3	Spule
L 3	282 330	1	Spule
L 4	282 221	3	Spule
L 5	282 221	3	Spule
L 6	282 324	1	Spule 2,2 UH
L 7	282 191	4	Spule 2,2 UH
L 10	282 191	4	Spule 2,2 UH
L 16	282 328	1	Spule
L 101	282 194	1	Spule 20,8 UH
L 201	282 192	1	Spule 47 UH
L 202	282 195	1	Spule 2,2 MH
L 203	282 325	1	Spule 36 MH
L 9997	282 222	1	Filter
L 9998	282 350	1	MW / LW Antenne
L 9999	282 206	1	Quarz CSB 800 D
Q 1	282 210	1	Transistor 3 SK 74 L
Q 2	282 171	3	Transistor KTC 1923 Y
Q 3	282 171	3	Transistor KTC 1923 Y
Q 4	282 171	3	Transistor KTC 1923 Y

Pos.	Art.-Nr.	Stck	Bezeichnung
Q 5	282 169	1	Transistor KTK 161 Y
Q 101	282 172	1	Transistor LM 9018 F
Q 103	282 076	15	Transistor KTC 1815 Y
Q 201	282 076	1	Transistor KTC 1815 Y
Q 201	282 170	1	Transistor 2 SK 192 GR
Q 202	282 076	15	Transistor KTC 1815 Y
Q 205	282 076	15	Transistor KTC 1815 Y
Q 401	282 076	15	Transistor KTC 1815 Y
Q 402	282 077	7	Transistor KTA 1015 Y
Q 403	282 076	15	Transistor KTC 1815 Y
Q 404	282 077	7	Transistor KTA 1015 Y
Q 405	282 076	15	Transistor KTC 1815 Y
Q 406	282 075	1	Transistor 2 SK 117 Y
Q 407	282 076	15	Transistor KTC 1815 Y
Q 408	282 076	15	Transistor KTC 1815 Y
Q 501	282 076	15	Transistor KTC 1815 Y
Q 502	282 076	15	Transistor KTC 1815 Y
Q 503	282 077	7	Transistor KTA 1015 Y
Q 504	282 076	15	Transistor KTC 1815 Y
Q 505	282 077	7	Transistor KTA 1015 Y
Q 506	282 077	7	Transistor KTA 1015 Y
Q 507	282 076	15	Transistor KTC 1815 Y
Q 508	282 077	7	Transistor KTA 1015 Y
Q 509	282 077	7	Transistor KTA 1015 Y
Q 510	282 076	15	Transistor KTC 1815 Y
Q 511	282 057	1	Transistor KTD 880 Y
Q 512	282 060	1	Transistor MPS A 55
Q 701	223 906	14	Diode 1 N 4148
Q 713	223 906	14	Diode 1 N 4148
Q 715	223 906	14	Diode 1 N 4148
R 205	226 501	3	Diode 1 N 4002
R 508	226 501	3	Diode 1 N 4002
R 509	226 501	3	Diode 1 N 4002
R 701	282 213	1	Netzwerk 11×124 G
R 702	282 214	1	Netzwerk 11×473 G
T 101	282 322	1	Spule
T 102	282 183	1	Spule
T 103	282 184	1	Spule
T 201	282 326	1	Spule
T 202	282 327	1	Spule
T 203	282 189	1	Spule
T 204	282 188	1	Spule
T 302	282 321	2	Spule
T 303	282 321	2	Spule
X 1	282 175	1	Quarz 4 MHz
BA 1	282 207	1	Akku CR 2439-8
CF 101	282 212	3	Keramikfilter SFE 10,7 MS
CF 102	282 212	3	Keramikfilter SFE 10,7 MS
CF 103	282 212	3	Keramikfilter SFE 10,7 MS
CF 202	282 198	1	Keramikfilter SFP 455
IC 101	268 204	1	IC HA 12412
IC 201	282 167	1	IC LA 1245
IC 301	264 541	1	IC HA 12016
IC 501	238 347	1	IC MC 7815
IC 701	281 970	1	IC UP HD 44840 / B 08
IC 702	261 874	1	IC MC 14016 BCP MOS
LD 1	282 215	1	Display
RL 1	282 176	1	Relay RZ 12
TC 1	282 177	4	Trimmer TZ 03 7110 F
TC 2	282 177	4	Trimmer TZ 03 7110 F
TC 3	282 177	4	Trimmer TZ 03 7110 F
TC 201	282 178	2	Trimmer TZ 03 R 200 F
TC 202	282 178	2	Trimmer TZ 03 R 200 F
TC 203	282 177	4	Trimmer TZ 03 7110 F
VR 101	282 201	1	Steller 22 kΩ
VR 301	282 219	1	Steller 3,3 k
VR 401	282 220	1	Steller 220 k
VR 501	282 204	1	Steller 1 kΩ
9900	281 425	1	Bedienungs-Anleitung CT 7030
9901	282 525	1	Verpackung kpl. CT 7030

Änderungen vorbehalten! Subject to change! Sous réserve de modification!