

# **BRAUN**

**Technische Information  
Stromlaufplan**

**Service Manual  
Circuit Diagram**

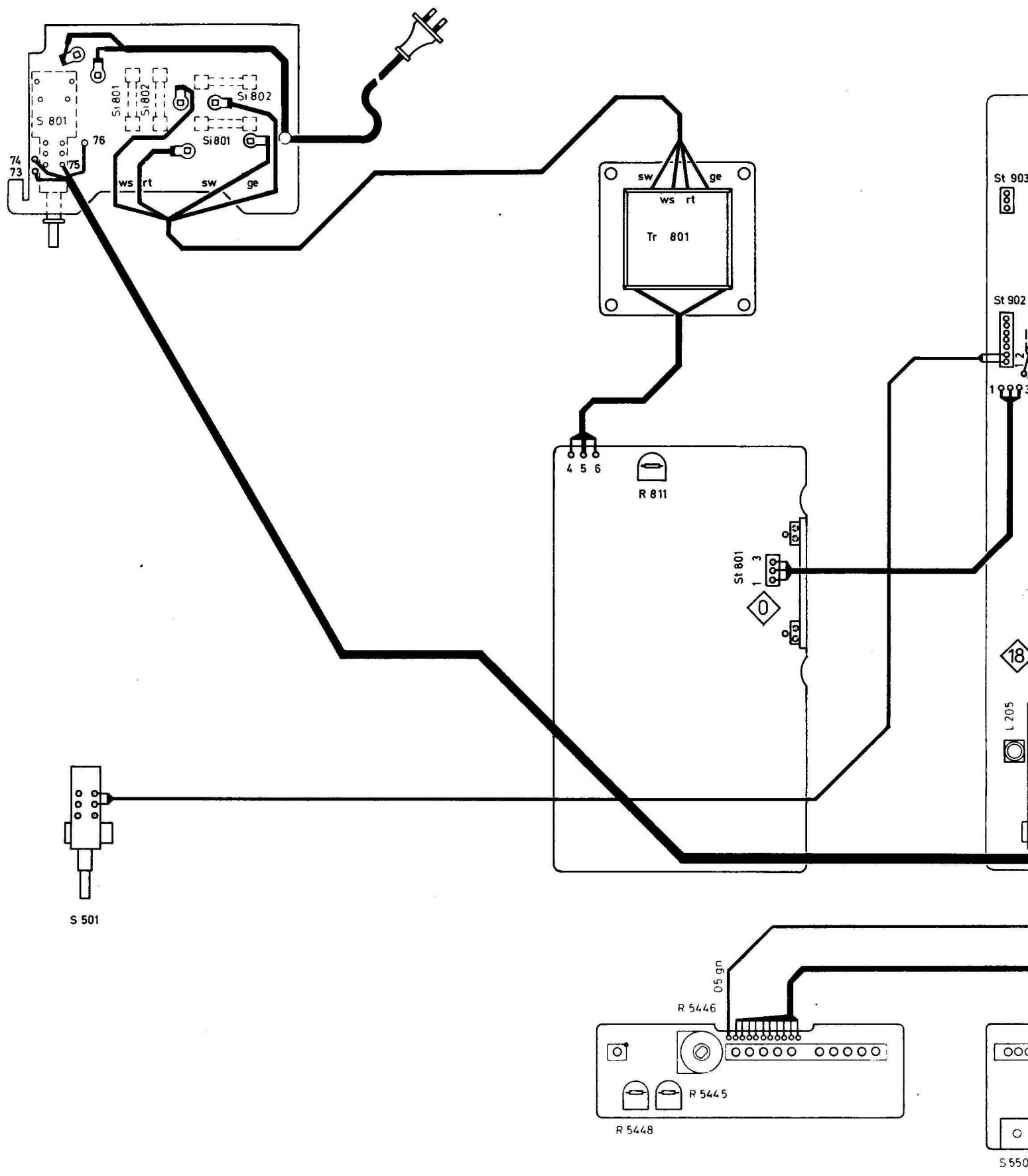
**Information Technique  
Schéma**

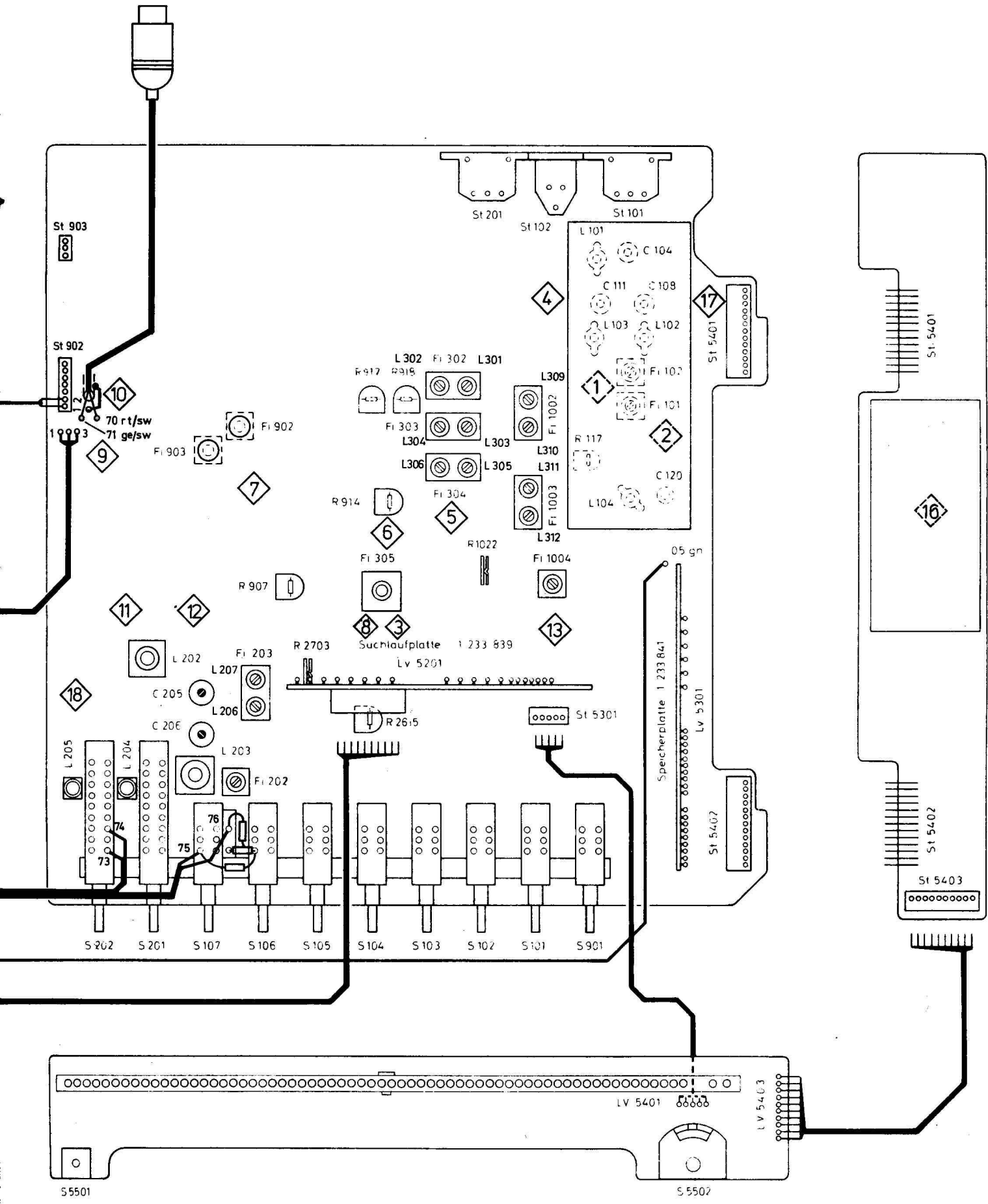
**Typ/Type: Synthesizer Tuner  
TS 501**

**Synthesizer Tuner  
TS 501**

**Syntisateur  
TS 501**

Lageplan  
Component location  
Schéma





St 903

St 902

St 201

St 102

St 101

70 rt/sw  
71 ge/sw

1 999 3

Fi 903

Fi 902

L 302 Fi 302 L 301

R 912 R 919

Fi 303

L 304

L 306

R 914

Fi 305

R 907

L 202

Fi 203

C 205

L 207

L 206

C 20E

L 203

Fi 202

L 205

L 204

74

75

76

77

S 202

S 201

S 107

S 106

S 105

S 104

S 103

S 102

S 101

S 901

St 201

St 102

St 101

L 101  
C 104  
C 111  
C 108  
L 103  
L 102  
Fi 102  
Fi 101  
R 117  
C 120  
L 104

L 309

Fi 1002

L 310

Fi 1003

L 311

Fi 1004

L 312

R 1022

05 gn

Suchtaufplatte 1 233 839

Lv 5201

R 26.5

St 5301

Speicherplatte 1 233 841

Lv 5301

St 5407

St 5401

St 5402

St 5403

LV 5401

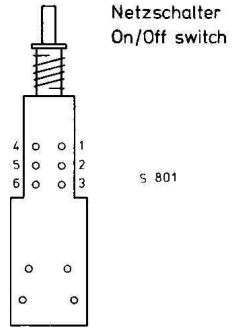
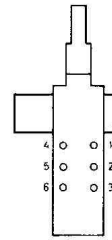
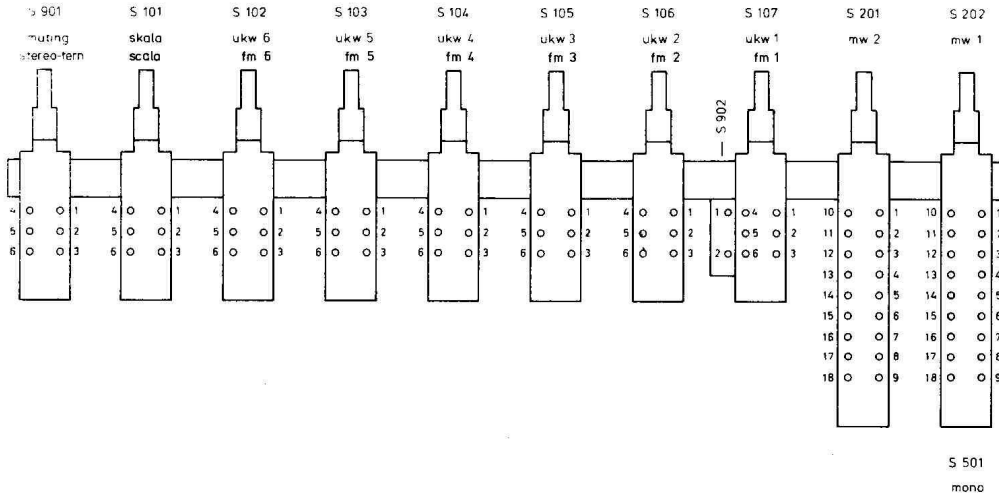
LV 5403

S 5501

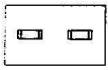
S 5502

# Anschlußcode Connection Code Code de connexion

## Tastatur p.-b. switches



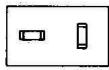
## Steckverbindungen pluggable connections



St 101  
antenne fm 2kΩ

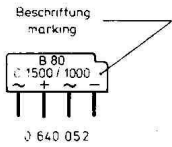


St 102  
antenne 75Ω

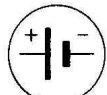


St 201  
antenne an

## Gleichrichter rectifiers



## Batterie Battery



0 690 050

Lithium-Batterie: Li 440 FS  
Lithium-battery: Li 440 FS

## Transistoren transistors



B C E  
BD 234  
BD 238



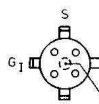
E B C  
BF 198  
BF 199  
BF 450



S D G  
BF 245



B E C  
BF 324  
BC 547  
BC 548  
BC 550  
BC 557  
BC 558  
BC 560



S G<sub>I</sub> D G<sub>II</sub>  
BF 900  
gelber Punkt auf der Oberseite  
yellow mark on topside

## Dioden diodes



BB 209

Katode (Farbring)  
cathode (coloured ring)

- N 1
- AA 143
- ZPD 5.1
- ZPD 6.8
- ZPD 15
- 1N 4001



BAX 13

Katode (Farbring)  
cathode (coloured ring)



MVAM 125 M 3



MV 104



CQY 85



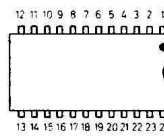
CQY 86



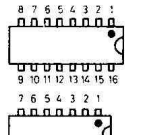
## Kondensatoren capacitors



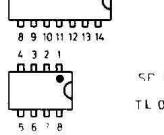
## Integrierte Schaltungen integrated circuits



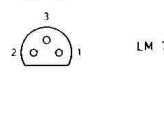
HBF 4039 AE



TCA 4500 A

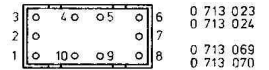


SF 8656 B

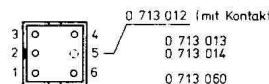


LM 78 L10 ACZ

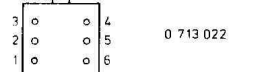
## Filter filters



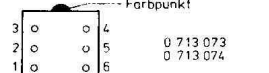
0 713 023  
0 713 024  
0 713 067  
0 713 069  
0 713 070



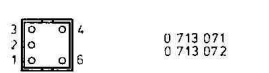
0 713 012 (mit Kontakt 5)  
0 713 013  
0 713 014  
0 713 060



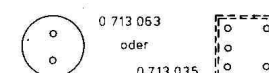
0 713 022



0 713 073  
0 713 074



0 713 071  
0 713 072

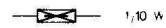


0 713 053  
oder  
0 713 035

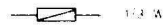
## Widerstände resistors



1/4 W



1/10 W



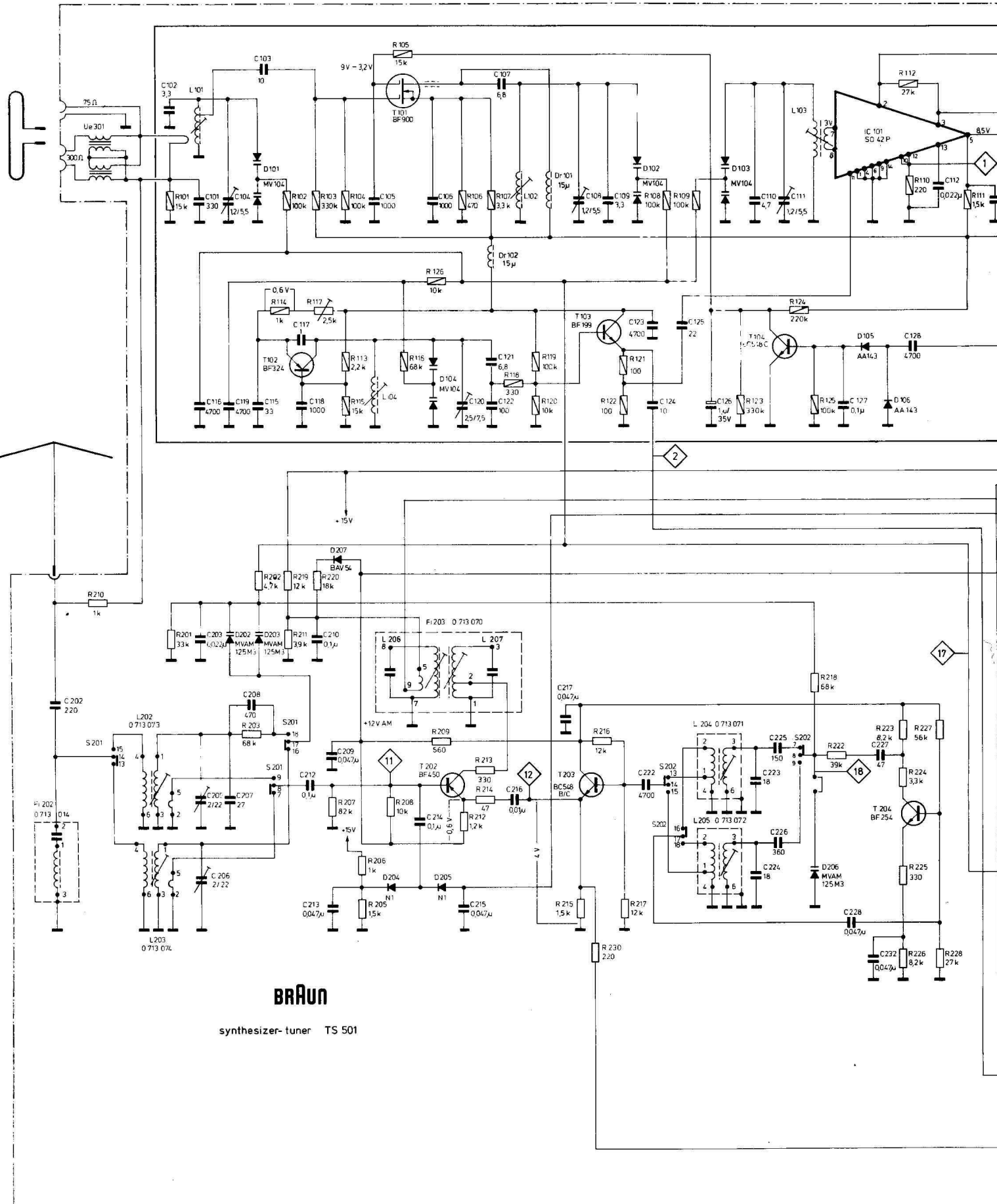
1/2 W

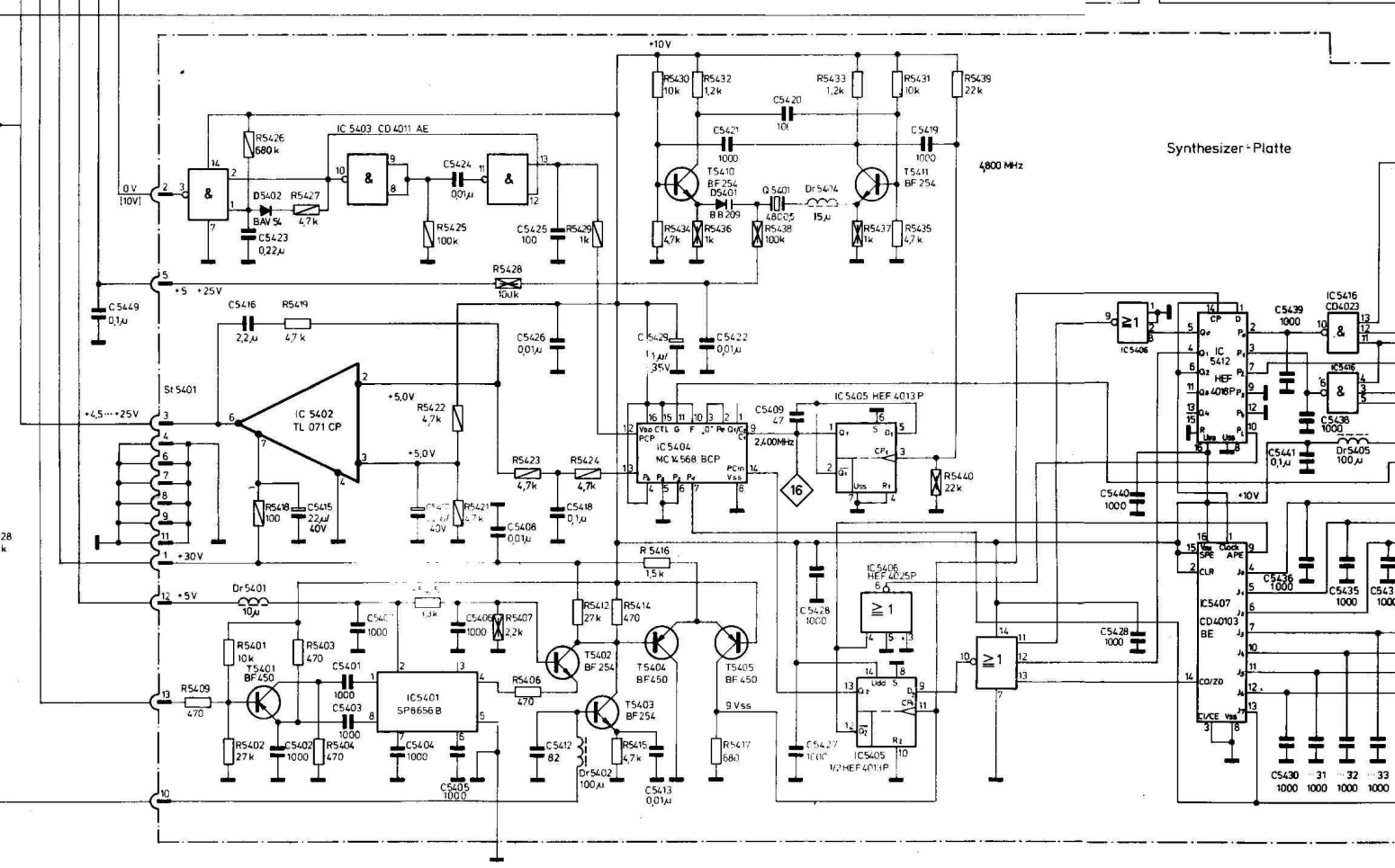
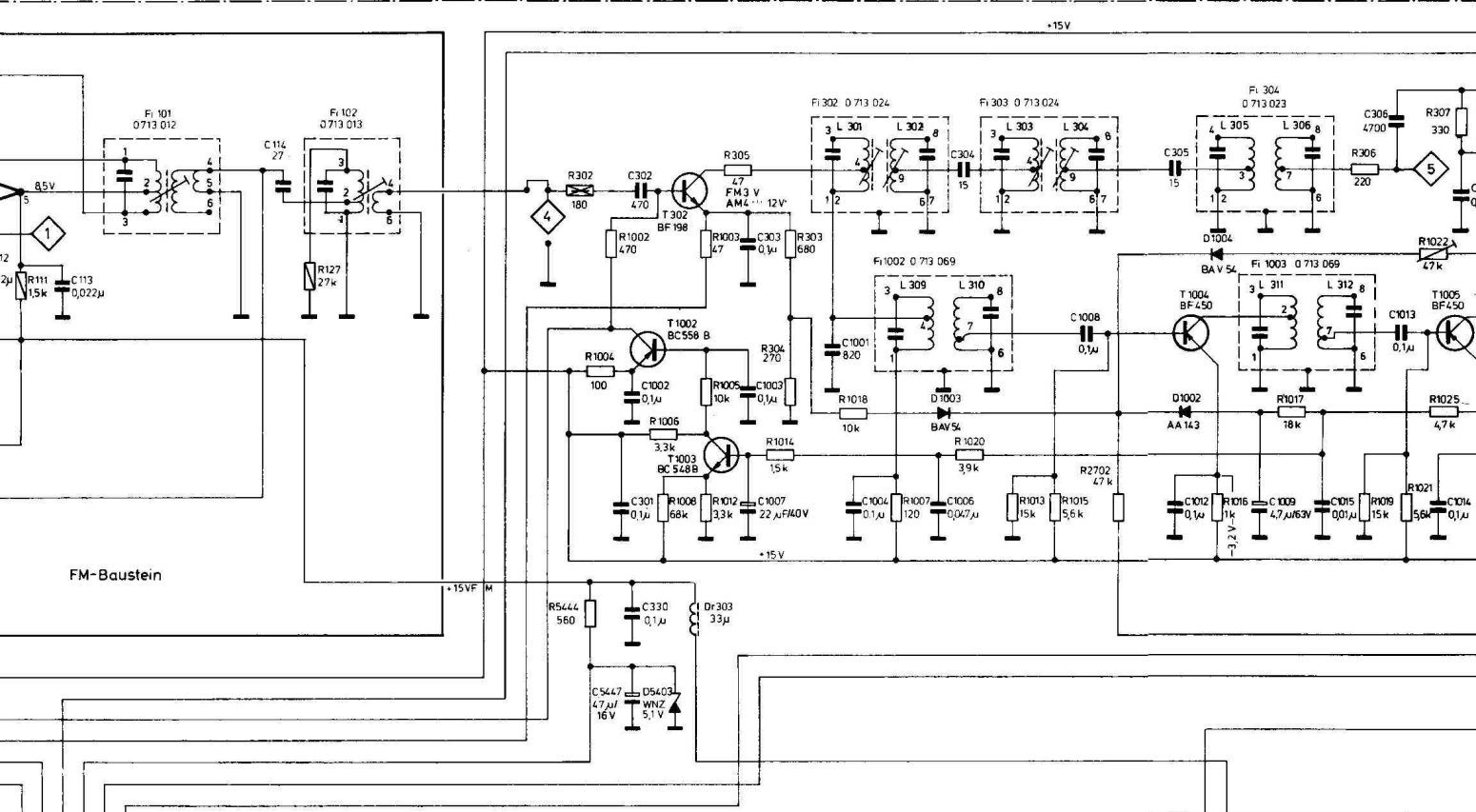


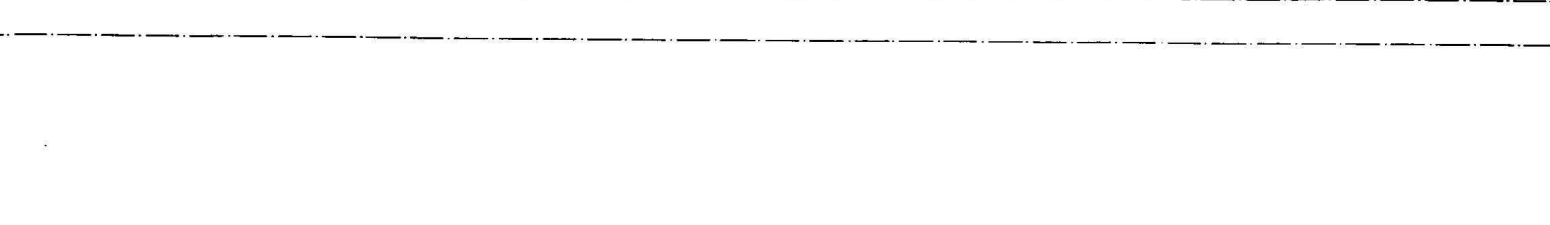
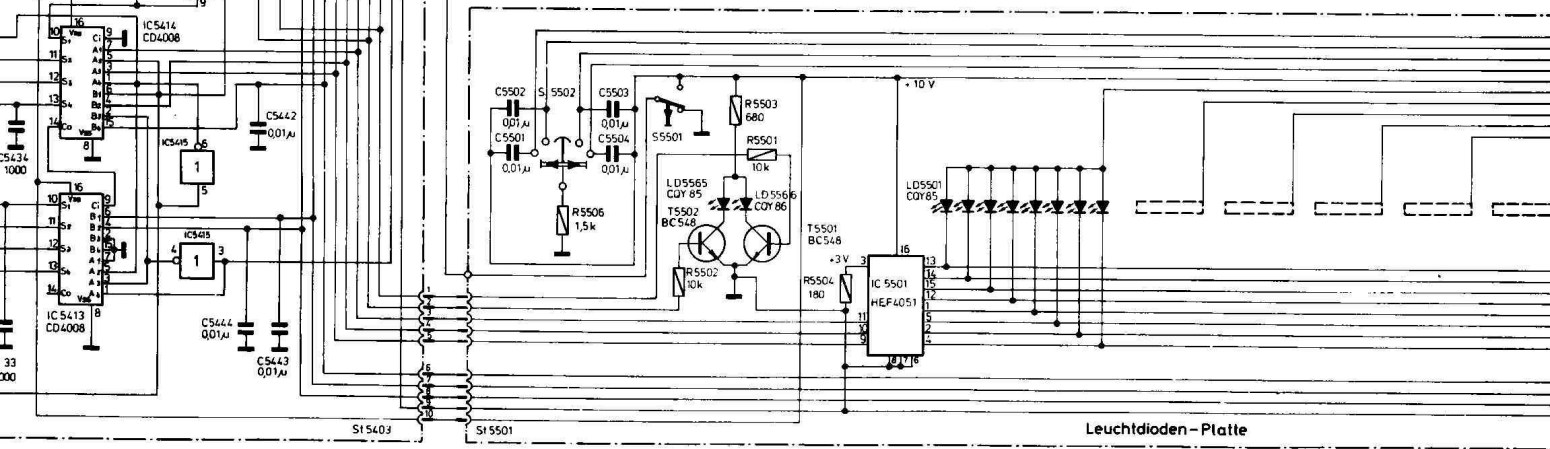
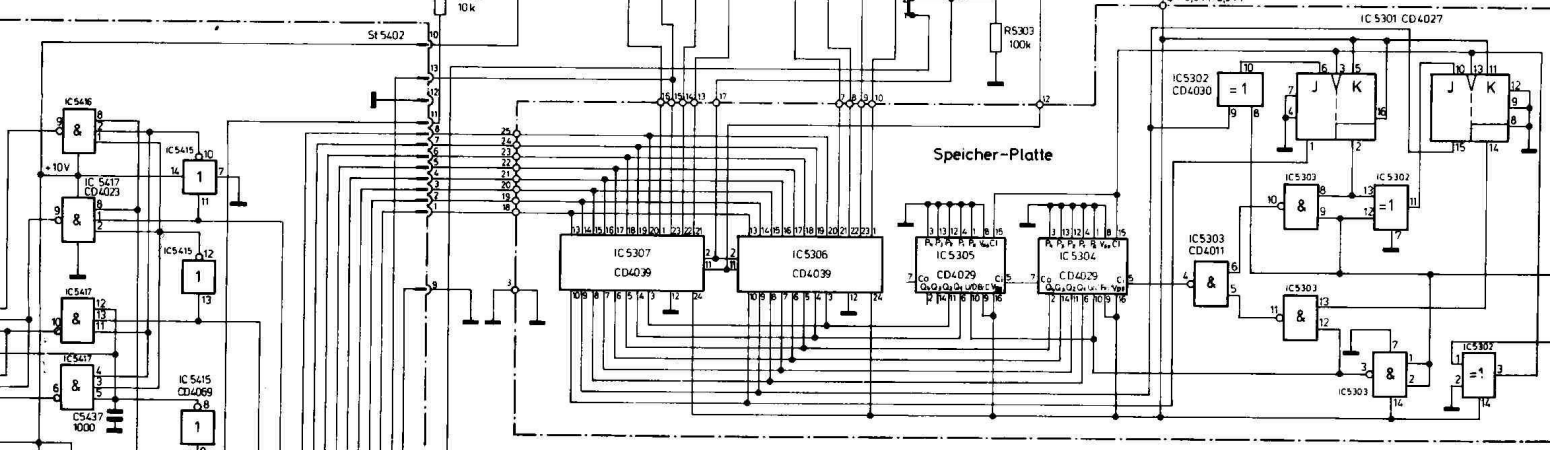
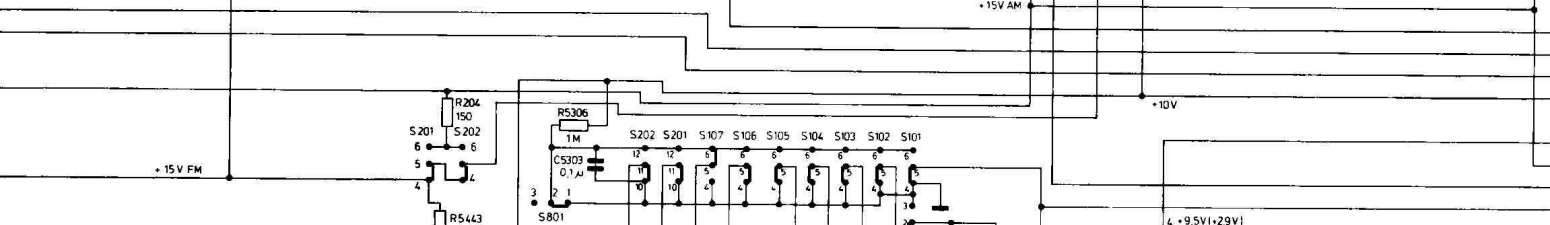
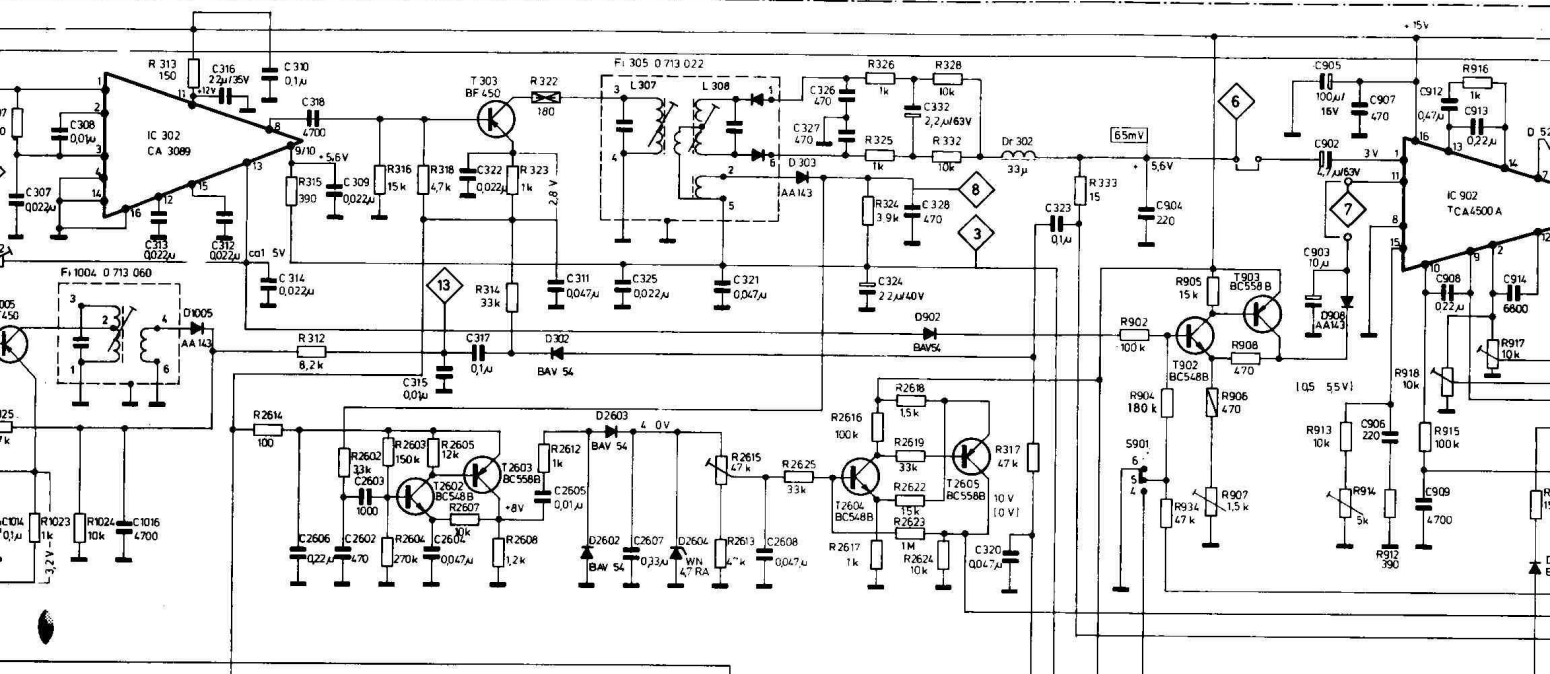
1/2 W

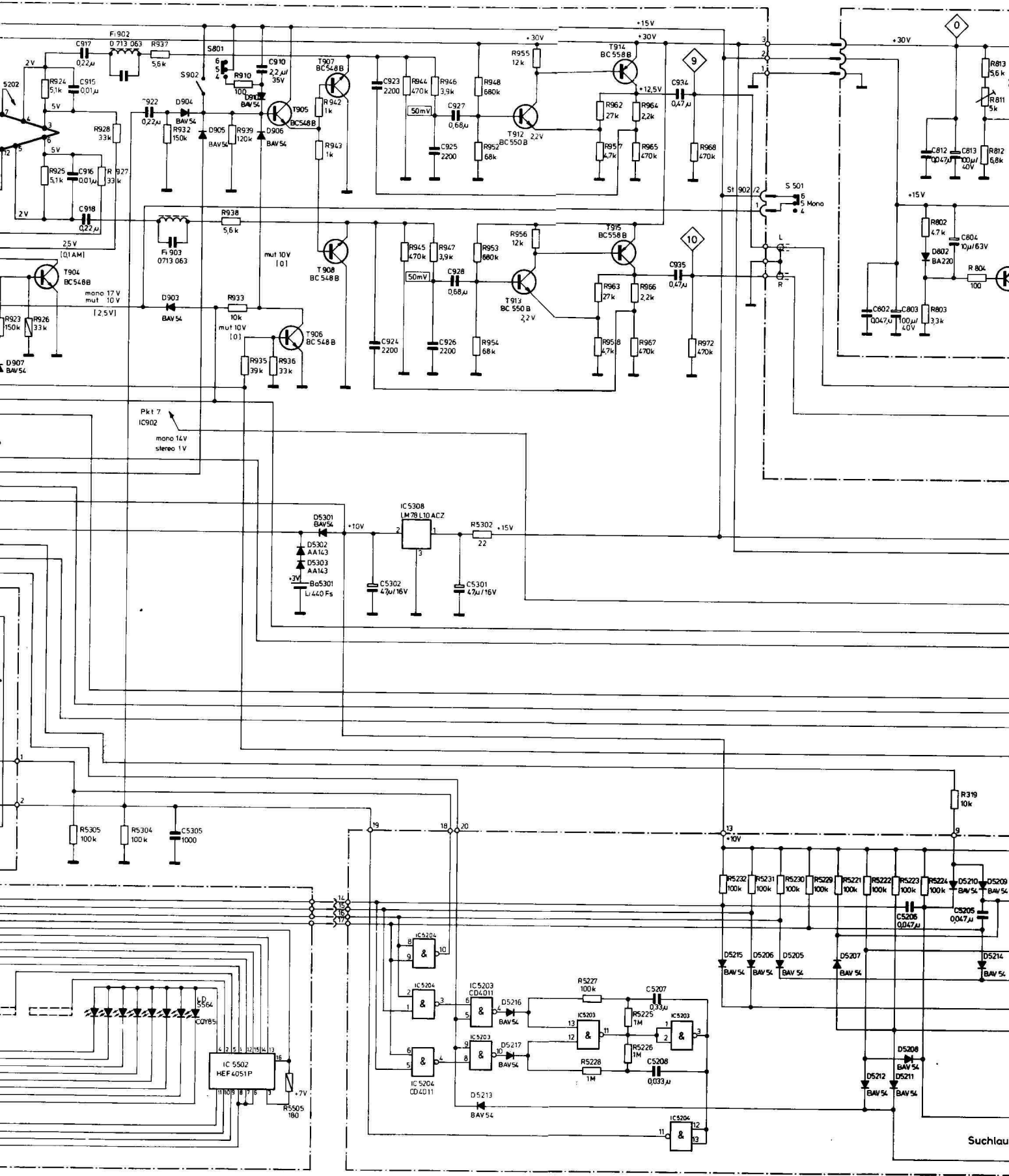


# Stromlaufplan Circuit Diagram Schéma

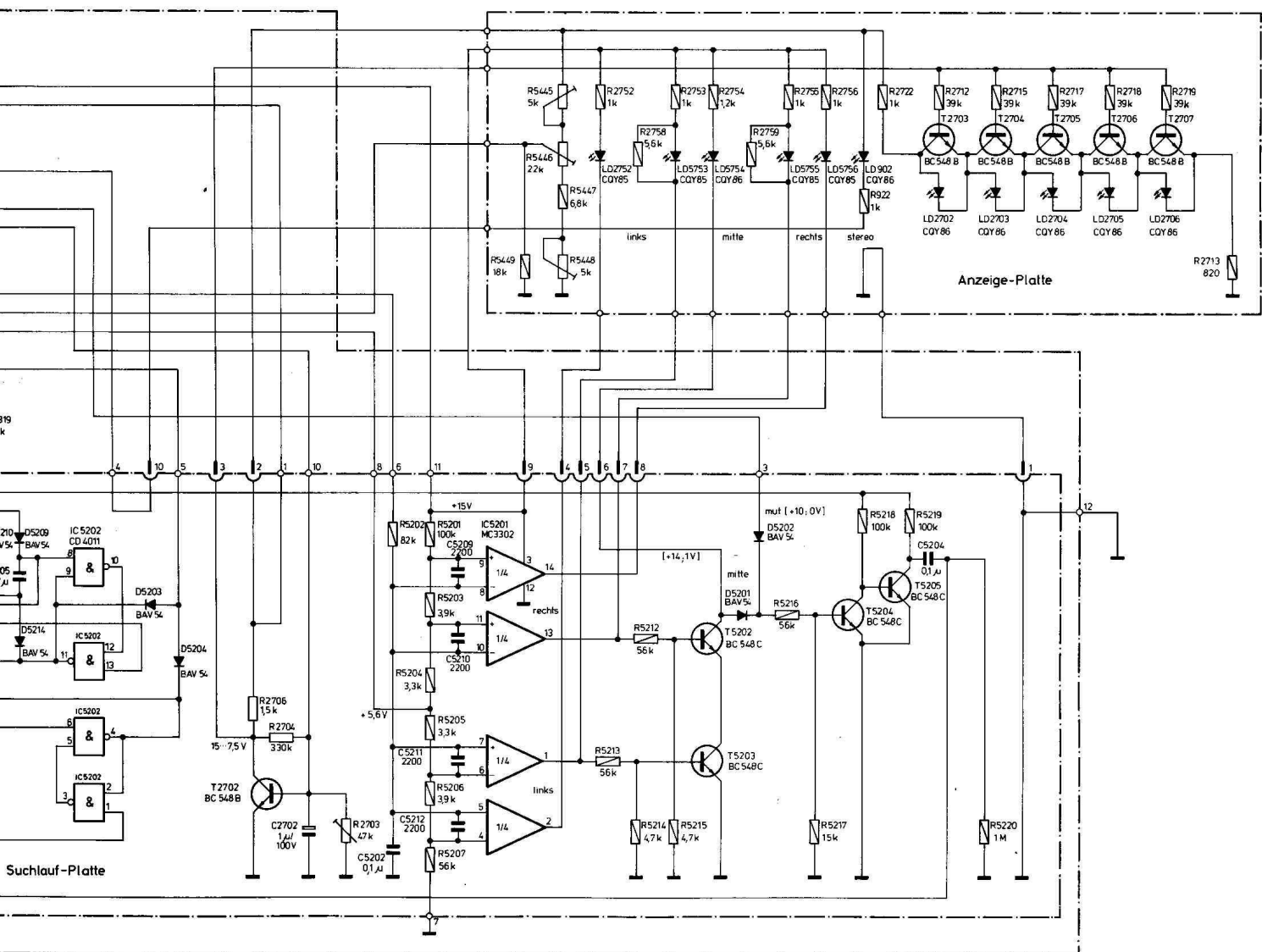
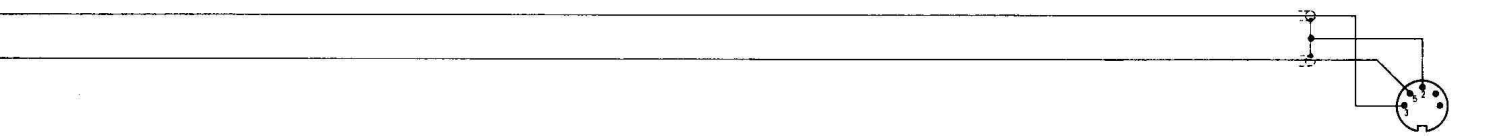
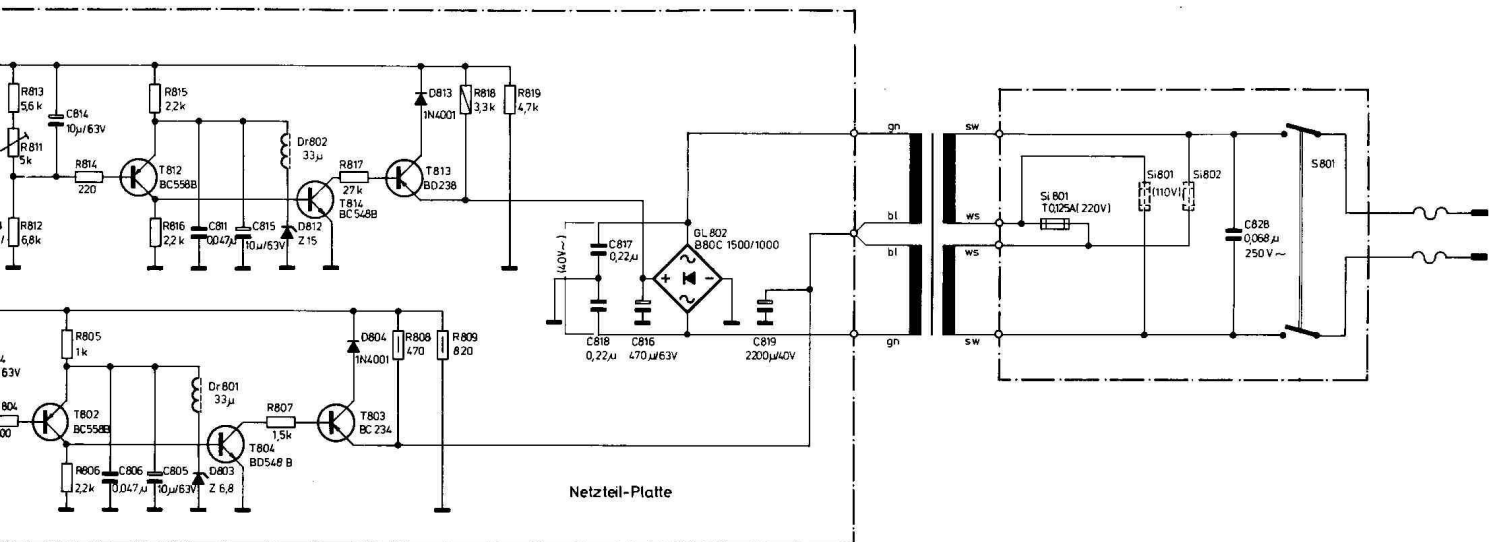








Suchlau



# Hinweise zum Stromlaufplan TS 501

## Gezeichnete Schalterstellungen:

Stationstasten: UKW 1 gedrückt  
stereo-fern/muting  
gedrückt

Spannungsangaben ohne Bezugslinie  
sind gegen Masse zu messen.  
Gemessen wird generell bei 220 V  
Netzspannung und mit einem Meß-  
instrument, dessen Eingangswiderstand  
mindestens 50 k $\Omega$ /V beträgt.

## Frequenzbereiche:

UKW 87,5... 106,6 MHz  
in 100 kHz-Schritten  
MW<sub>1</sub> 519 ... 1092 kHz  
in 3 kHz-Schritten  
MW<sub>2</sub> 1059 ... 1632 kHz  
in 3 kHz-Schritten

## Oszillatorspannungen:

UKW ca. 20 mV an Meßpunkt 2  
MW<sub>1</sub> ca. 100 mV an Meßpunkt 3  
MW<sub>2</sub> ca. 100 mV an Meßpunkt 3

gemessen mit UHF-Millivoltmeter URV  
Rhode & Schwarz

# Notes on Circuit Diagram TS 501

## Switch positions shown:

Station push buttons: FM 1 depressed  
Stereo-far/muting  
depressed

Voltages without reference lines are  
measured to ground (chassis).  
Measurements should always be carried  
out at 220 V mains voltage with a 50 k $\Omega$ /V  
meter.

## Tuning range:

UKW 87,5... 106,6 MHz  
at 100 kHz-steps  
MW<sub>1</sub> 519 ... 1092 kHz  
at 3 kHz-steps  
MW<sub>2</sub> 1059 ... 1632 kHz  
at 3 kHz-steps

## Local oscillator voltages:

UKW ca. 20 mV at test point 2  
MW<sub>1</sub> ca. 100 mV at test point 3  
MW<sub>2</sub> ca. 100 mV at test point 3

measured with Rhode & Schwarz UHF  
Millivoltmeter, type URV.

# Indications pour le schéma TS 501

## Positions des touches:

Touches de stations: FM 1 enfoncée  
stéréo lointaine/  
muting enfoncée

Indications de tension sans ligue de base  
sont mesurés sur potentiel négatif.  
Les valeurs sont mesurées généralement  
avec une tension de 220 V et avec un  
instrument de mesure d'une résistance  
d'entrée de plus que 50 k $\Omega$ /V.

## Gammes: FM et AM

FM 87,5... 106,6 MHz  
à distance de 100 kHz  
PO<sub>1</sub> 519 ... 1092 kHz  
à distance de 3 kHz  
PO<sub>2</sub> 1059 ... 1632 kHz  
à distance de 3 kHz

## Tensions oscillateur:

FM environ 20 mV a point de mesure 2  
PO<sub>1</sub> environ 100 mV a point de mesure 3  
PO<sub>2</sub> environ 100 mV a point de mesure 3

Mesure avec UHF Millivolt mètre URV  
Rhode et Schwarz