

Bauteile

- 1 Begrenzer
- 2 Filter
- 3 Mischer
- 4 Verstärker
- 5 Schalter
- 6 Diode
- 7 A1-Überlagerer
- 8 Regler
- 9 Instrument
- 10 Abstimmkapazität
- 11 Kapazitäts-Variations-Diode
- 12 Phasen-Diskriminator
- 13 Frequenzteiler
- 14 Digital-Analog-Wandler
- 15 Speicher für Empfangsfrequenz
- 16 Programmierbarer Frequenzteiler
- 17 Frequenznormal 2 MHz
- 18 Gleichrichter
- 19 Stabilisierung
- 20 Dämpfungsregler
- 21 Geschalteter Phasenschieber
- 22 Sample and Hold
- 23 Variabler Oszillator

- 1.9 Hand-/Automatik-Regelung/Rauschsperr
- 1.10 Störbegrenzer
- 1.11 HF-Regelung Hand, bzw. Einsatzpunkt Rauschsperr
- 1.12 Betriebsart
- 1.13 A1-Überlagerer
- 1.14 Bandbreite
- 1.15 extern/intern Frequenznormal

2. Ein- und Ausgänge

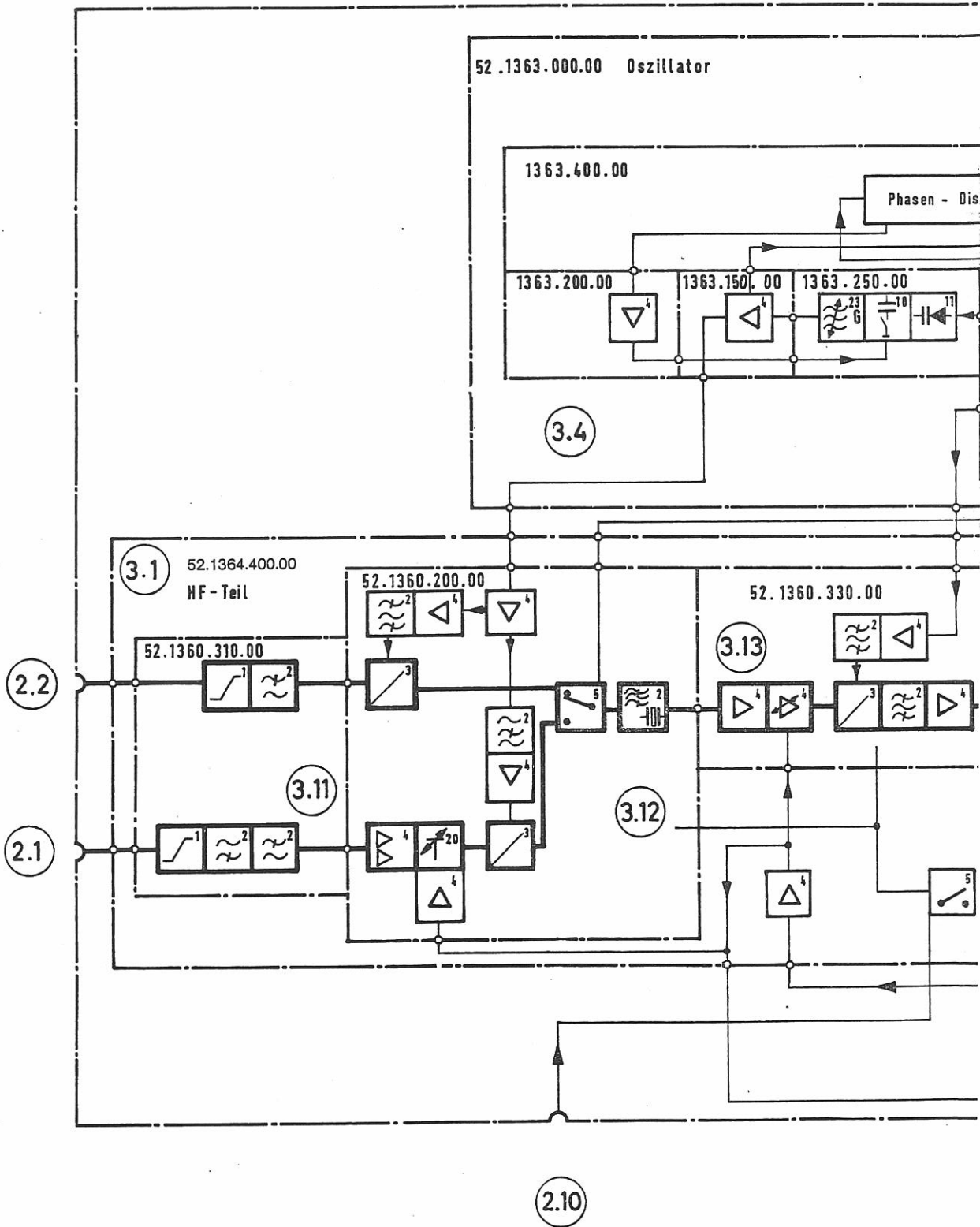
- 2.1 Antenne 1,6 - 30 MHz
- 2.2 Antenne 0,01 - 1,6 MHz
- 2.3 Frequenz Ein-/Ausgang (digital)
- 2.4 Externes Frequenznormal
- 2.5 Netz 110/220 V
- 2.6 ZF-Ausgang 200 kHz
- 2.7 Kopfhörer
- 2.8 Kopfhörer
- 2.9 NF-Leitungsausgang
- 2.10 Break-in Eingang
- 2.11 Regelspannung

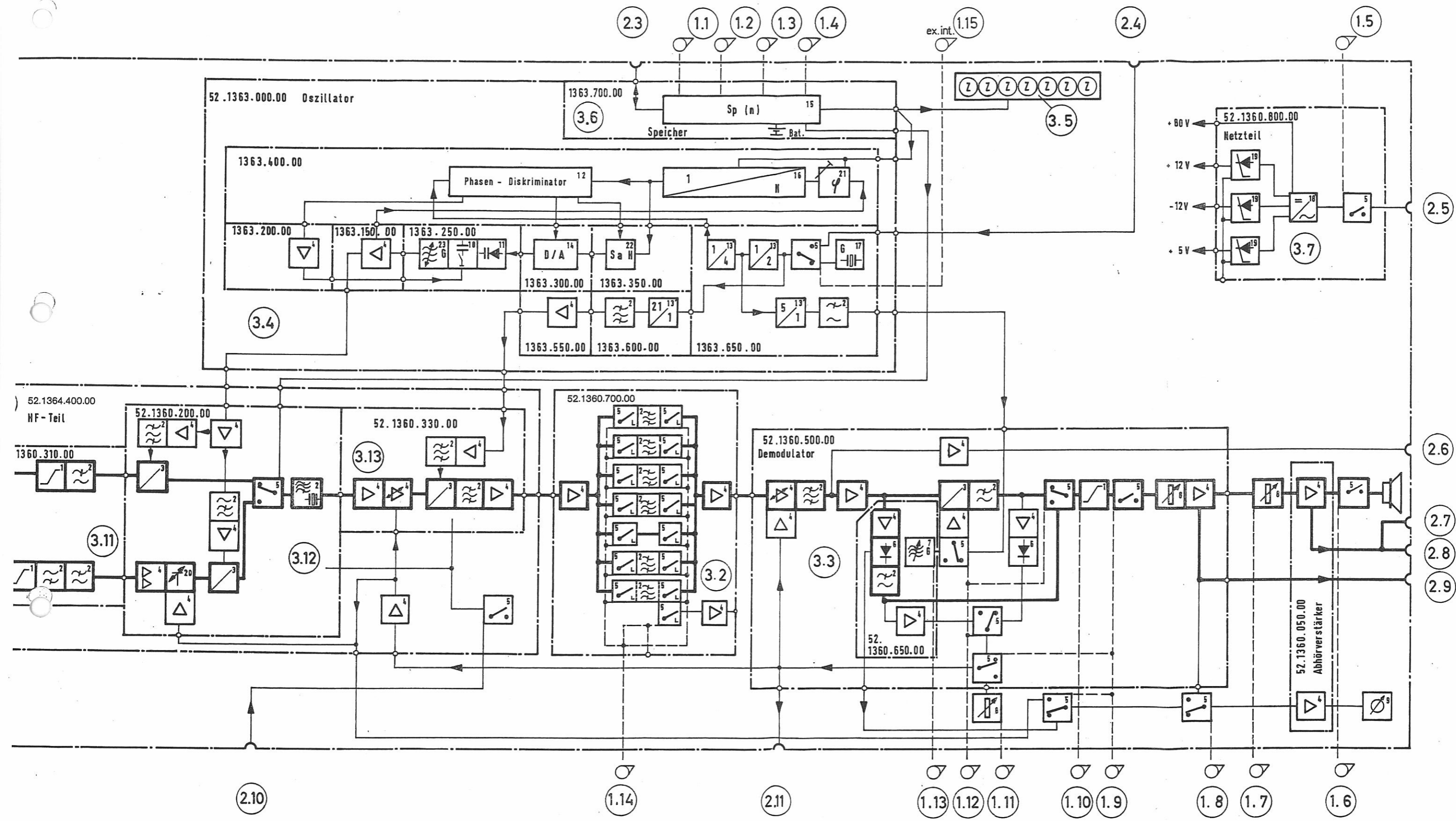
1. Bedienelemente

- 1.1 Abstimmung
- 1.2 Schneller Frequenzwechsel 312 kHz/s
- 1.3 Schneller Frequenzwechsel 3,12 MHz/s
- 1.4 Abstimmung gesperrt
- 1.5 Gerät – EIN
- 1.6 Lautsprecher – EIN
- 1.7 NF-Regelung
- 1.8 Instrument-Umschaltung, Relative Antennenspannung/Leistungspegel

3. Baugruppen

- 3.1 HF-Teil HT 1510 LH
- 3.11 Eingangsfiler
- 3.12 1. Mischer
- 3.13 2. Mischer
- 3.2 ZF-Filerbaugruppe FI 1510
- 3.3 Demodulator DE 1500
- 3.4 Synthesizer AO 1500
- 3.5 Frequenzanzeige
- 3.6 Speicher
- 3.7 Netzstromversorgung NS 1500

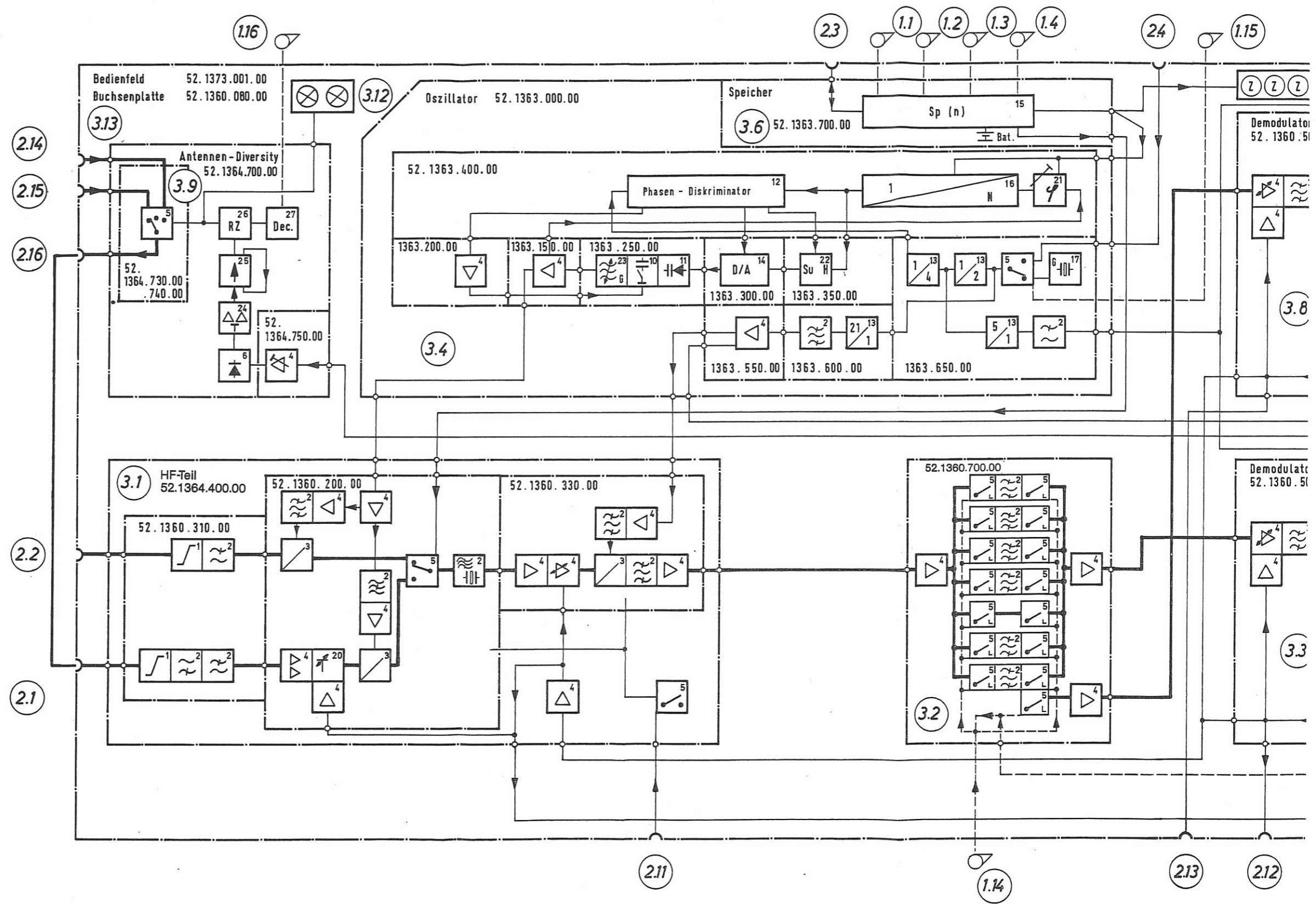




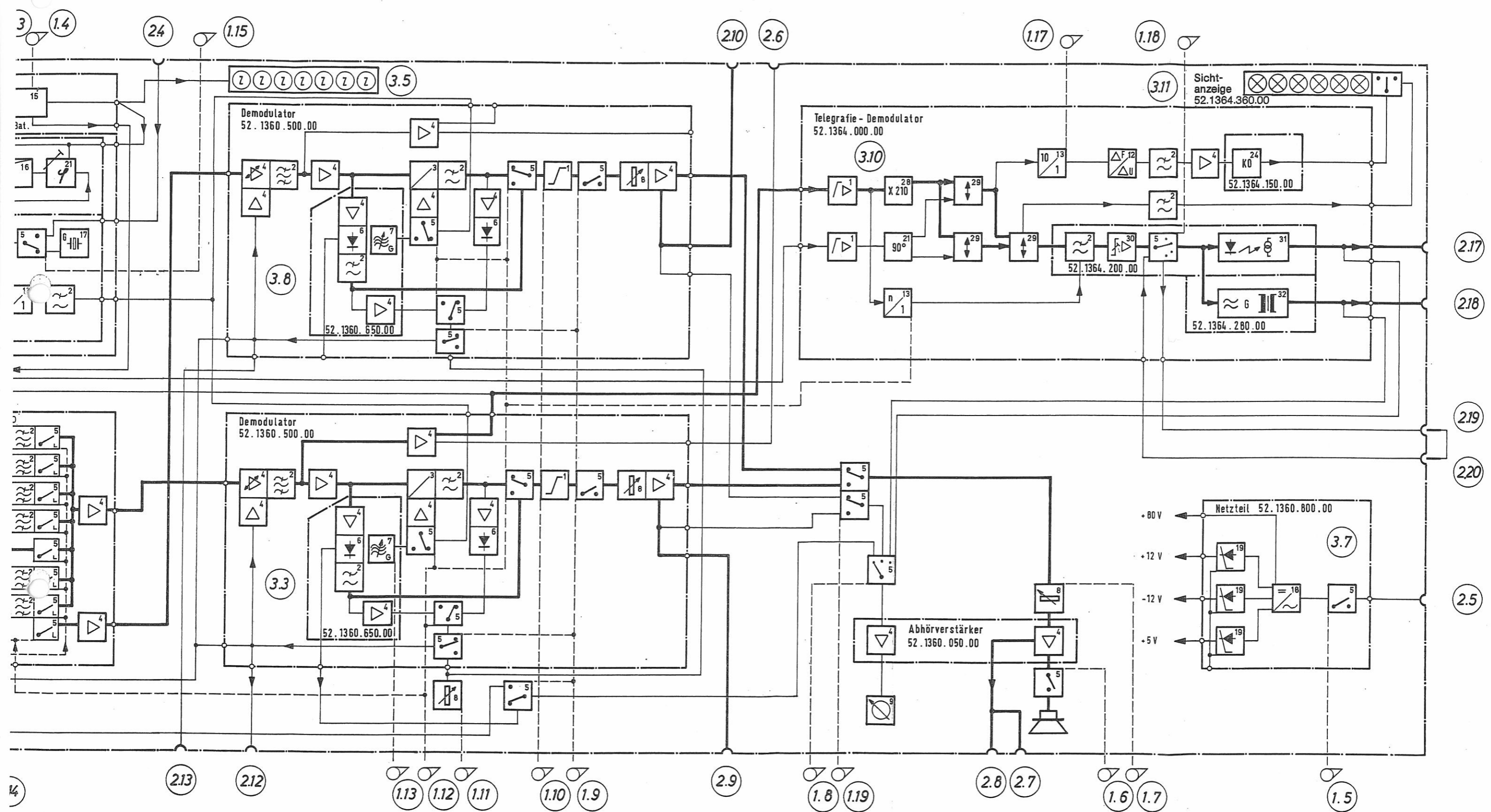
Allwellen-Empfänger E 1500
 Allwave Receiver E 1500
 Anlage 1.1/Annex 1.1



<u>Bauteile</u>			
1	Begrenzer	1.12	Betriebsart
2	Filter	1.13	A1-Überlagerer
3	Mischer	1.14	Bandbreite
4	Verstärker	1.15	extern/intern Frequenznormal
5	Schalter	1.16	Antenne 1/Antenne 2/Diversity
6	Diode	1.17	Linienabstand
7	A1-Überlagerer	1.18	Zeichenumkehr Normal/Null/Invers
8	Regler	1.19	Abhören Kanal 1/Kanal 2
9	Instrument		
10	Abstimmkapazität		
11	Kapazitäts-Variations-Diode	2.	<u>Ein- und Ausgänge</u>
12	Phasen-Diskriminator	2.1	Antenne 1,6 - 30 MHz
13	Frequenzteiler	2.2	Antenne 0,01 - 1,6 MHz
14	Digital-Analog-Wandler	2.3	Frequenz Ein-/Ausgang (digital)
15	Speicher für Frequenzempfang	2.4	Externes Frequenznormal
16	Programmierbarer Frequenzteiler	2.5	Netz 110/220 V
17	Frequenznormal 2 MHz	2.6	ZF-Ausgang 200 kHz
18	Gleichrichter	2.7	Kopfhörer
19	Stabilisierung	2.8	Kopfhörer
20	Dämpfungsregler	2.9	NF-Leitungsausgang, Kanal 1
21	Geschalteter Phasenschieber	2.10	NF-Leitungsausgang, Kanal 2
22	Sample and Hold	2.11	Break-in Eingang
23	Variabler Oszillator	2.12	Regelspannung
24	Komparator	2.13	Regelspannung
25	monostabile Kippstufe	2.14	Antenne 1 Antennen-Diversity-Gerät
26	bistabile Kippstufe	2.15	Antenne 2 Antennen-Diversity-Gerät
27	Decoder	2.16	Ausgang Antennen-Diversity-Gerät
28	Frequenzvervielfacher	2.17	Einfach-/Doppelstrom
29	D-Flipflop	2.18	Tontast-Ausgang
30	Schwelle	2.19	Anschluß für Telegraphie-Umsetzer
31	Einfach-/Doppelstromrelais	2.20	Anschluß für Telegraphie-Umsetzer
32	Tontaste		
		3.	<u>Baugruppen</u>
1.	<u>Bedienelemente</u>	3.1	HF-Teil HT 1510 LH
1.1	Abstimmung	3.2	ZF-Filterbaugruppe FI 1510
1.2	Schneller Frequenzwechsel 312 kHz/s	3.3	Demodulator DE 1500 (Kanal 1)
1.3	Schneller Frequenzwechsel 3,12 MHz/s	3.4	Synthesizer AO 1500
1.4	Abstimmung gesperrt	3.5	Frequenzanzeige
1.5	Gerät – EIN	3.6	Speicher
1.6	Lautsprecher – EIN	3.7	Netzstromversorgung NS 1500
1.7	NF-Regelung	3.8	Demodulator DE 1500 (Kanal 2)
1.8	Instrument-Umschaltung, Relative Antennenspannung/Leistungspegel	3.9	Antennen-Diversity AD 1500
1.9	Hand-/Automatik-Regelung/Rauschsperr	3.10	Telegraphie-Demodulator TD 1500
1.10	Störbegrenzer	3.11	Sichtanzeige mit Seitenkennung und Treiber
1.11	HF-Regelung Hand, bzw. Einsatzpunkt Rauschsperr	3.12	Sichtanzeige Antennen-Diversity
		3.13	Bedienfeld BF 1501

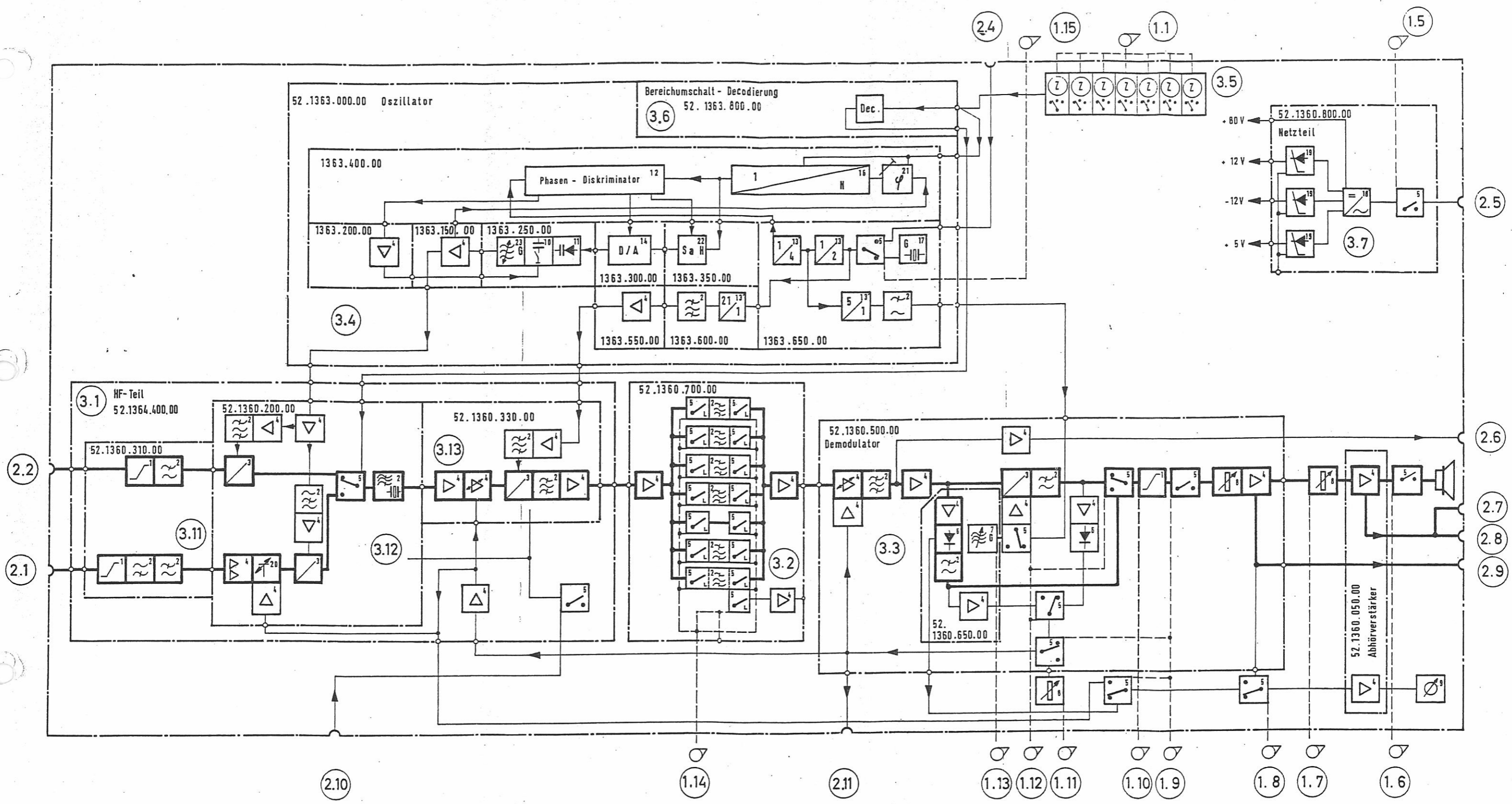


1. E15-01
1-2



Allwellen-Empfänger E 1501
 Allwave Receiver E 1501
 Anlage 1.2/Annex 1.2



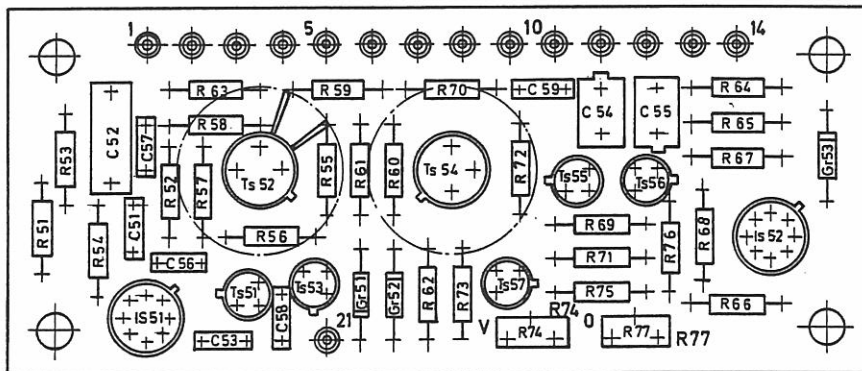
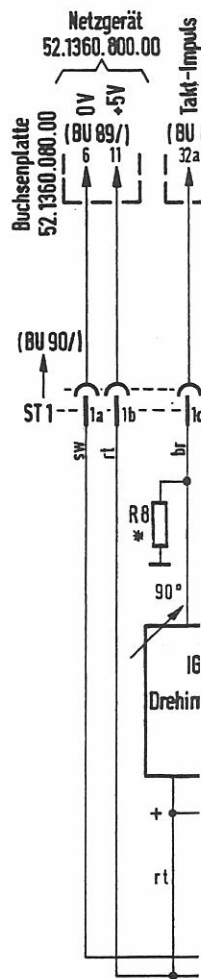


Übersichtsschaltplan Allwellen-Empfänger E 1502
 Block Diagram of the Allwave Receiver E 1502
 Anlage 1.1/Annex 1.1

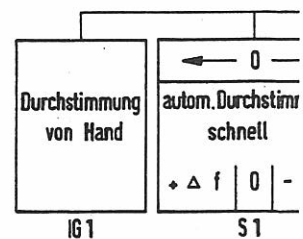


Buchsenplatte
 Netzgerät
 Takt-Impuls
 Vor/Rück-Impuls
 Schnell nach höherer Frequenz
 Schnell nach niederer Frequenz
 Sehr schnell nach höherer Frequenz
 Sehr schnell nach niederer Frequenz
 Abstimm Sperre
 automatische Durchstimmung
 Dekade
 ZF-2-Filter
 Demodulator 1
 HF-Teil
 Regelspannung
 Rausch Sperre
 Handregelung
 Störbegrenzer
 ZF-Pegel-Anzeige
 Handregelspg.
 A1-Osz.-Verst.
 Regelzeit lang
 Regelzeit kurz
 Abschaltung
 Drehimpuls-Geber
 Durchstimmung von Hand
 autom. Durchstimmung schnell
 autom. Durchstimmung sehr schnell
 Durchstimmung
 Frequenz-Anzeige
 Bandbreite
 Lautsprecher
 Lautstärke
 Instr. Anzeige
 Abhörverstärker
 autom. Regel + RSp
 autom. Regelung
 A1-Oszillator Verstimmung
 HF-Handregelung bzw.
 Schwelle für Rausch Sperre
 Zu jeder Schaltteilnummer 050 addieren
 Betriebsart
 (zum Abhörverstärker)
 zum Trafo
 Schutzkontakt
 Netz

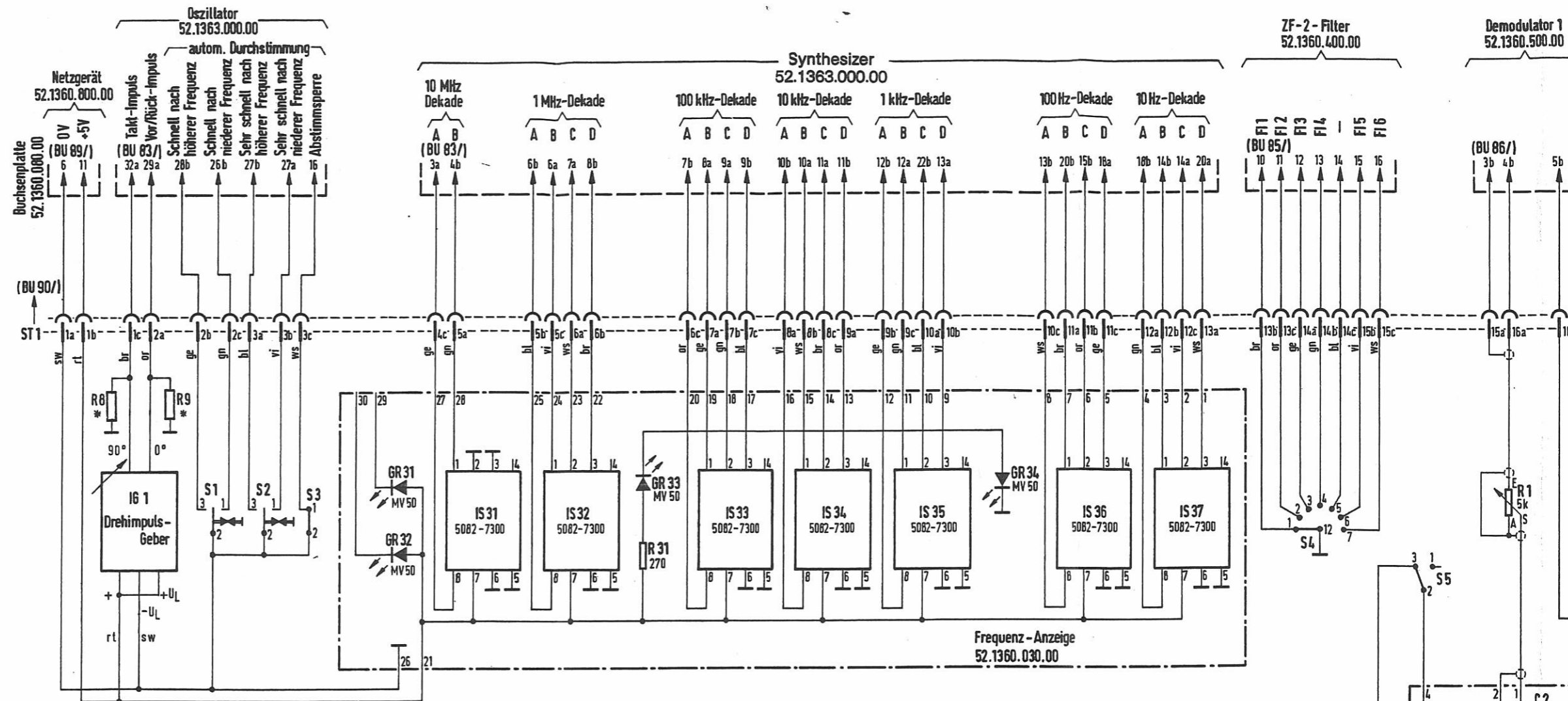
Jacks Plate
 Power Unit
 Clock Pulse
 Forward/Reverse Pulse
 Rapid to higher Frequency
 Rapid to lower Frequency
 Very rapid to higher Frequency
 Very rapid to lower Frequency
 Tuning disable
 Automatic Sweeptuning
 Decade
 IF 2 Filter
 Demodulator 1
 RF Section
 AGC Voltage
 Squelch
 MGC
 Noise Limiter
 IF Level Indication
 MGC Voltage
 BFO Amplifier
 AGC Time long
 AGC Time short
 Switch-Off
 Rotation Pulse Generator
 Manual Sweeptuning
 Automatic Sweeptuning, rapid
 Automatic Sweeptuning, very rapid
 Sweeptuning
 Frequency Display
 Bandwidth
 Loudspeaker
 AF Volume
 Meter Indication
 Monitor Amplifier
 AGC + Squelch
 AGC
 BFO Detuning
 Manual RF Gain Control or
 Threshold for Squelch
 Add 050 to each component number
 Service Type
 (to monitor amplifier)
 to Transformer
 Ground contact
 Mains



Bestückungsplan Abhörverstärker
 Printed Circuit Board of AF Monitoring Amplifier

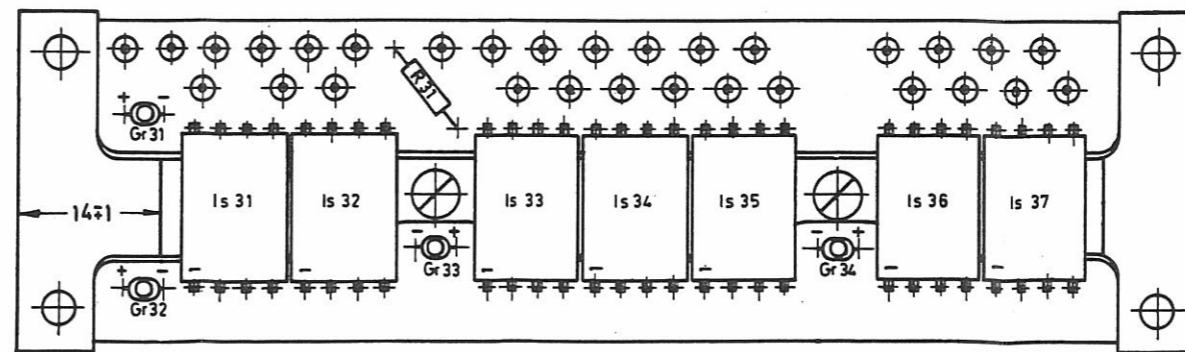
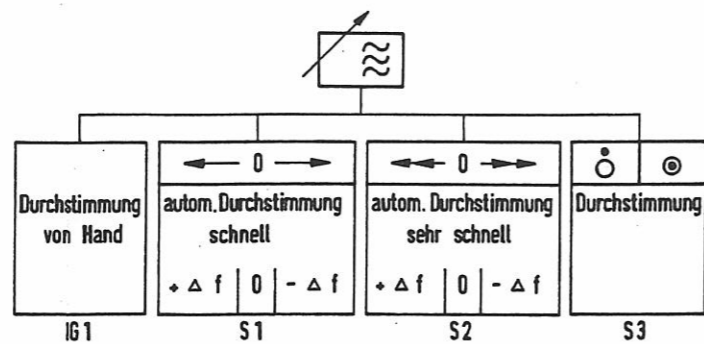


- Jacks Plate
- Power Unit
- Clock Pulse
- Forward/Reverse Pulse
- Rapid to higher Frequency
- Rapid to lower Frequency
- Very rapid to higher Frequency
- Very rapid to lower Frequency
- Tuning disable
- Automatic Sweeptuning
- Decade
- IF 2 Filter
- Demodulator 1
- RF Section
- AGC Voltage
- Squelch
- MGC
- Noise Limiter
- IF Level Indication
- MGC Voltage
- BFO Amplifier
- AGC Time long
- AGC Time short
- Switch-Off
- Rotation Pulse Generator
- Manual Sweeptuning
- Automatic Sweeptuning, rapid
- Automatic Sweeptuning, very rapid
- Sweeptuning
- Frequency Display
- Bandwidth
- Loudspeaker
- AF Volume
- Meter Indication
- Monitor Amplifier
- AGC + Squelch
- AGC
- BFO Detuning
- Manual RF Gain Control or
- Threshold for Squelch
- Add 050 to each component number
- Service Type
- (to monitor amplifier)
- to Transformer
- Ground contact
- Mains

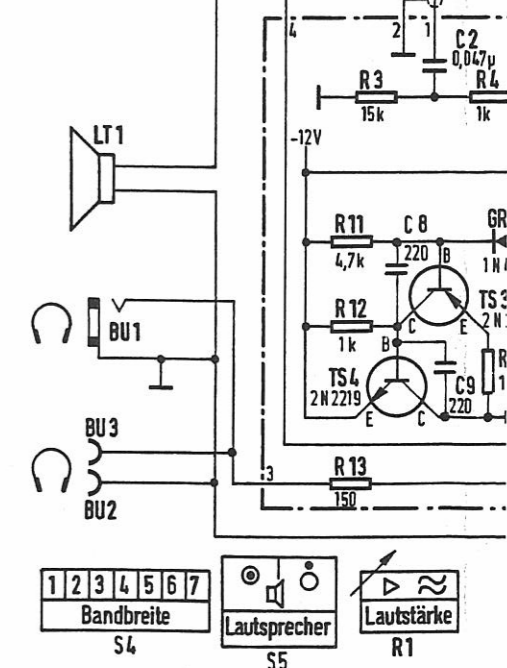


* Wert wird vom Prüffeld ermittelt
(zwischen 10 kΩ und 33 kΩ)

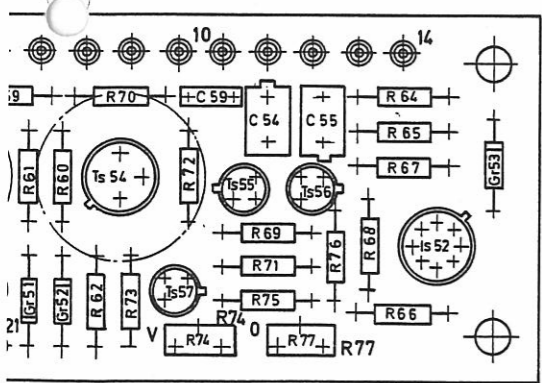
* Value is determined in test shop
(between 10 kΩ and 33 kΩ)



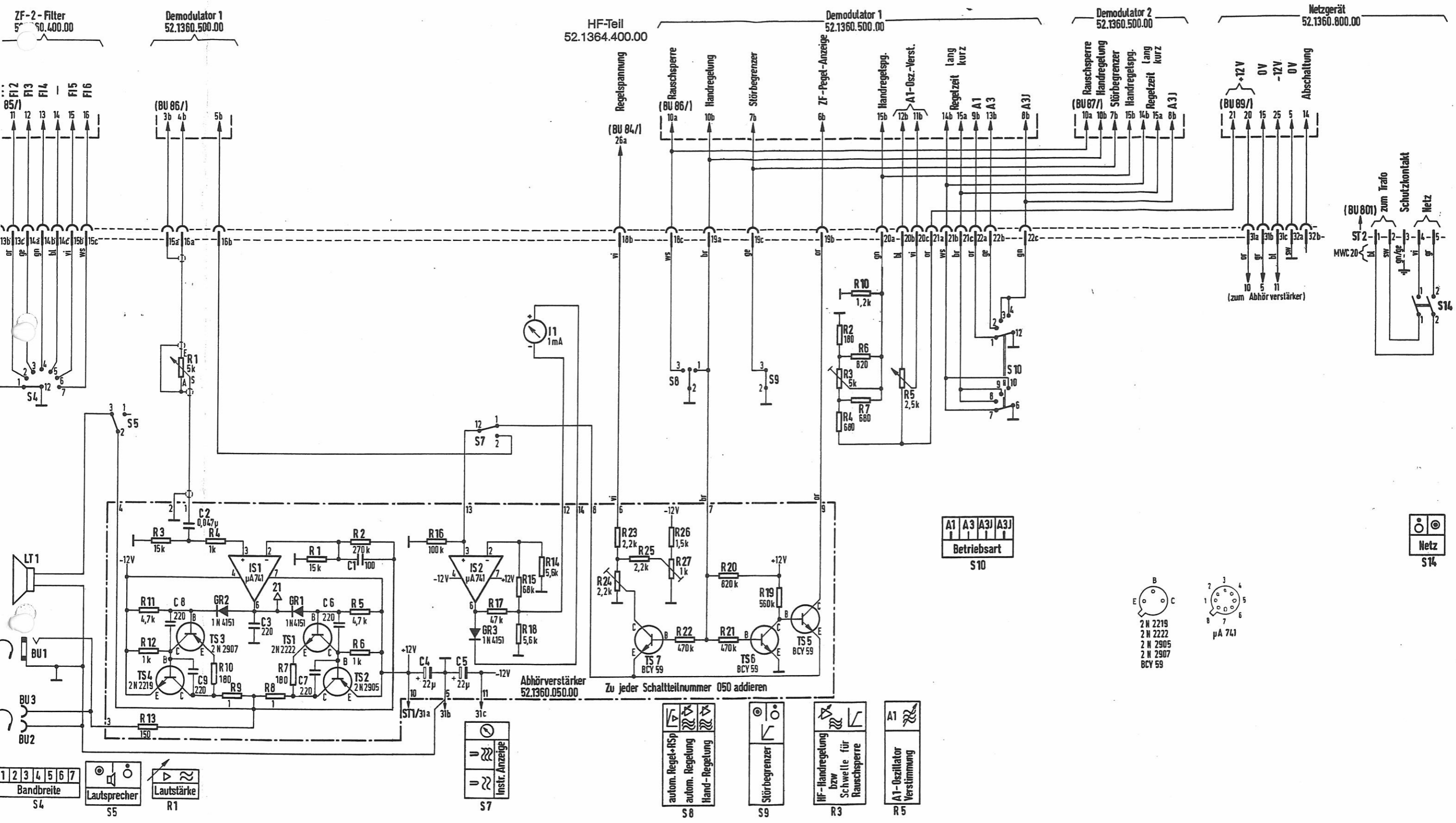
Bestückungsplan Frequenzanzeige
Printed Circuit Board of Digital Frequency Display



2.1
2-3



Bestückungsplan Abhörverstärker
IF Monitoring Amplifier

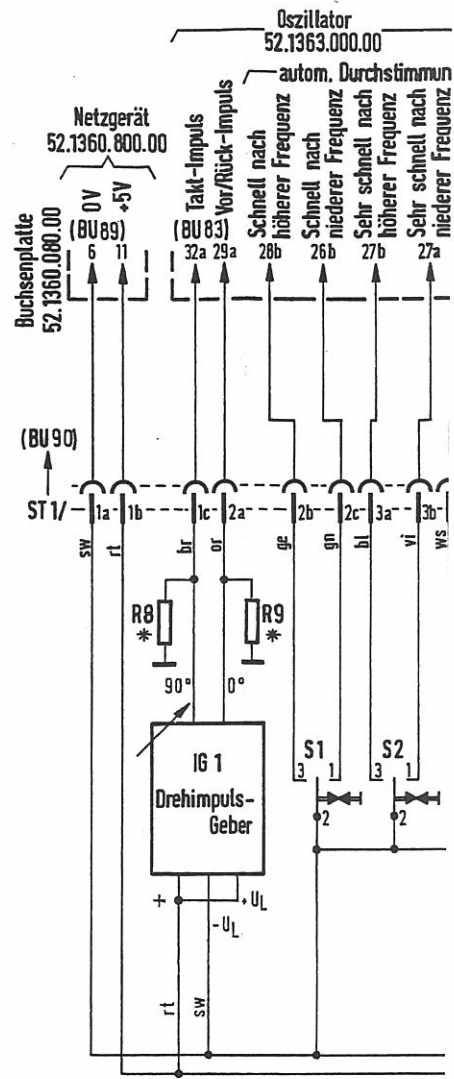


Stromlaufplan Bedienfeld BF 1500
 Circuit Diagram of Control Unit BF 1500
 Anlage 2.1/Annex 2.1

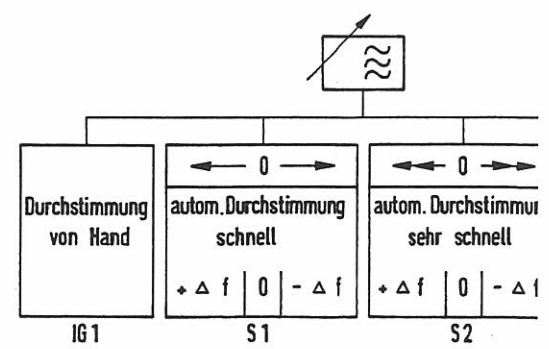


Buchsenplatte
 Netzgerät
 Autom. Durchstimmung
 Takt-Impuls
 Vor/Rück-Impuls
 Schnell nach höherer Frequenz
 Schnell nach niedriger Frequenz
 Sehr schnell nach höherer Frequenz
 Sehr schnell nach niedriger Frequenz
 Abstimm Sperre
 Antennendiversity-Gerät
 Anzeige
 Antenne
 Dekade
 Drehimpuls-Geber
 Durchstimmung von Hand
 autom. Durchstimmung schnell
 autom. Durchstimmung sehr schnell
 Durchstimmung
 ZF-2-Filter
 Frequenz-Anzeige
 Demodulator
 Telegrafie-Demodulator
 Fernschreibstrom
 Tontastpegel
 HF-Teil
 Regelspannung
 Rausch Sperre
 Handregelung
 Störbegrenzer
 ZF-Pegel-Anzeige
 Handregelspg.
 A1-Osz.-Verst.
 Regelzeit lang
 Regelzeit kurz
 Antennen Schalt-Leitung
 Fernschreiben
 normal
 invers
 Frequenzhub-Vervielfachung
 Steuerleitungen
 Abschaltung
 Bandbreite
 Lautsprecher
 Lautstärke
 NF-Kanal I
 Instr. Anzeige
 autom. Regel + RSp
 autom. Regelung
 HF-Handregelung bzw.
 Schwelle für Rausch Sperre
 A1-Oszillator-Verstimmung
 Betriebsart
 Fernschr. Masch. aus
 Hubvervielfach. x 10 ein
 Sichtanzeige
 zum Abhörverstärker
 zum Trafo
 Schutzkontakt
 Netz
 NF-Pegel
 zu jeder Schalteil-
 nummer 050 addieren

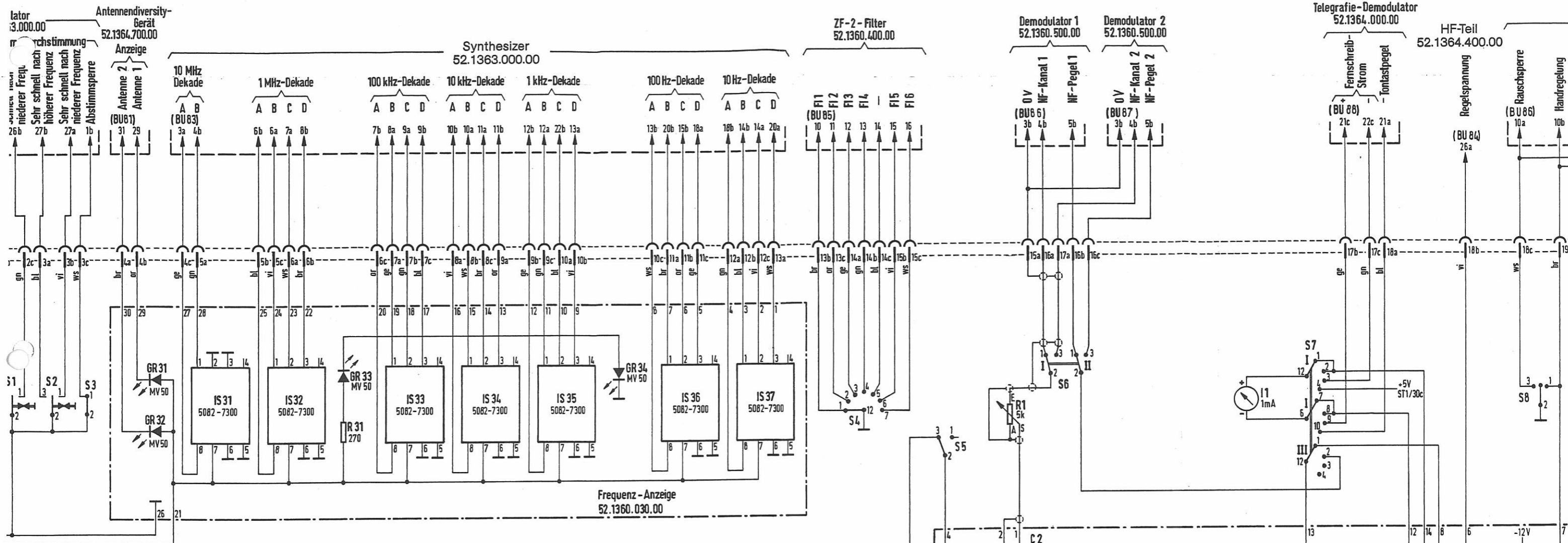
Jacks Plate
 Power Unit
 Automatic Sweeptuning
 Clock Pulse
 Forwards/Reverse Pulse
 Rapid to higher Frequency
 Rapid to lower Frequency
 Very rapid to higher Frequency
 Very rapid to lower Frequency
 Tuning disable
 Antenna Diversity Unit
 Indication
 Antenna
 Decade
 Rotation Pulse Generator
 Manual Sweeptuning
 Automatic Sweeptuning rapid
 Automatic Sweeptuning very rapid
 Sweeptuning
 IF 2 Filter
 Frequency Display
 Demodulator
 Telegraphy Demodulator
 Teletyp Current
 VF Keying Level
 RF Section
 AGC Voltage
 Squelch
 MGC
 Noise Limiter
 IF Level Indication
 MGC Voltage
 BFO Amplifier
 AGC Time long
 AGC Time short
 Antennas Switching Line
 Teletypewriter
 normal
 inverse
 FM deviation multiplier
 Control Lines
 Switch-Off
 Bandwidth
 Loudspeaker
 AF Volume
 AF Chan. I
 Meter Indication
 AGC + Squelch
 AGC
 Manual RF Gain Control or
 Threshold for Squelch
 BFO Detuning
 Service type
 Teletypewriter off
 FM deviation multiplication x 10 on
 Visual Indicator
 to monitor amplifier
 to Transformer
 Ground contact
 Mains
 AF Level
 Add 050 to each
 component number



* Wert wird vom Prüffeld err (zwischen 10 kΩ und 33 kΩ)

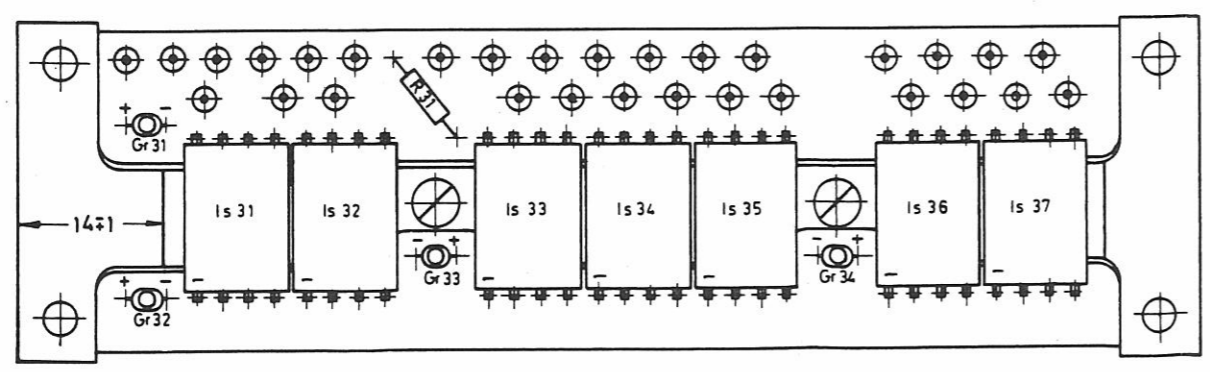
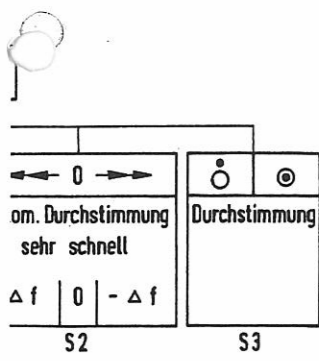


2. 2
1-3

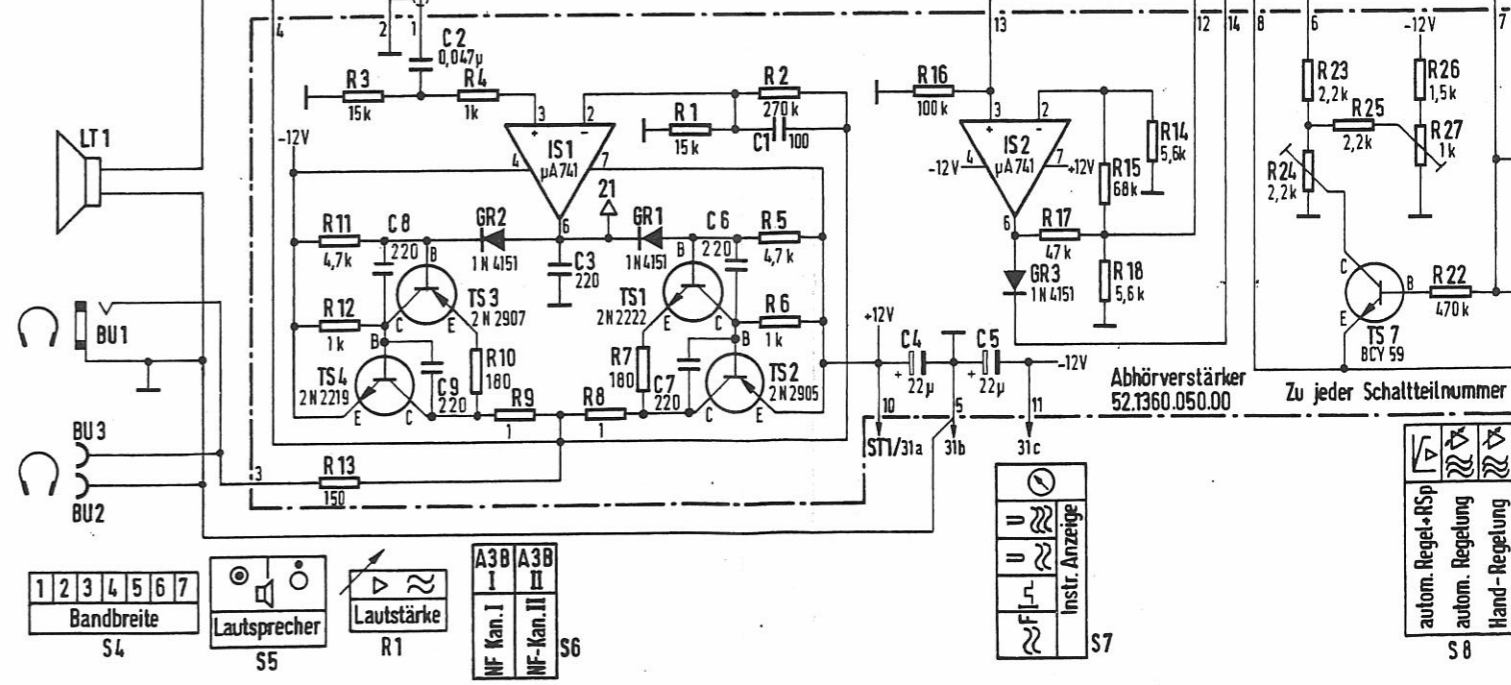


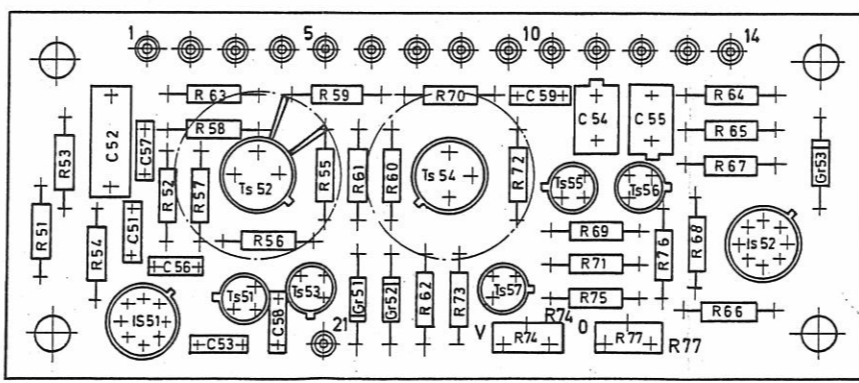
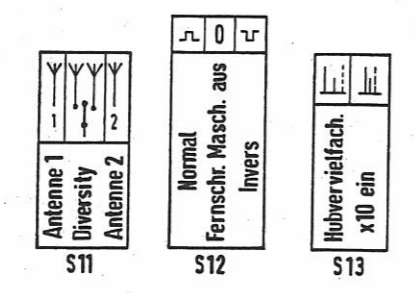
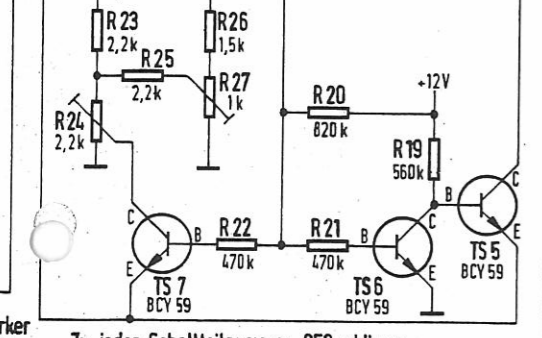
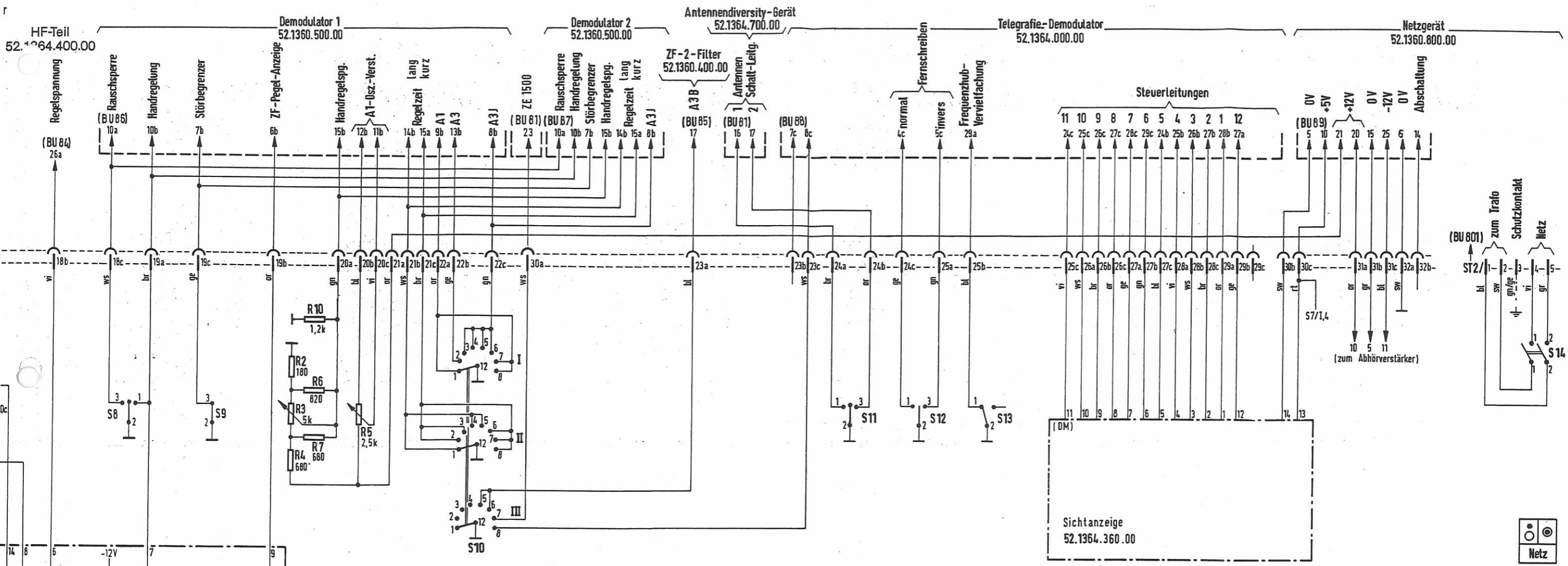
Prüfelfeld ermittelt Ω und 33 k Ω

* Value is determined in test shop (between 10 k Ω and 33 k Ω)

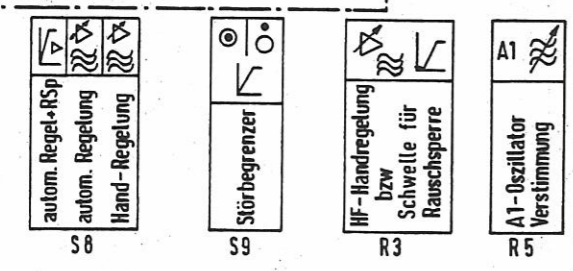


Bestückungsplan Frequenzanzeige
Printed Circuit Board of Digital Frequency Display



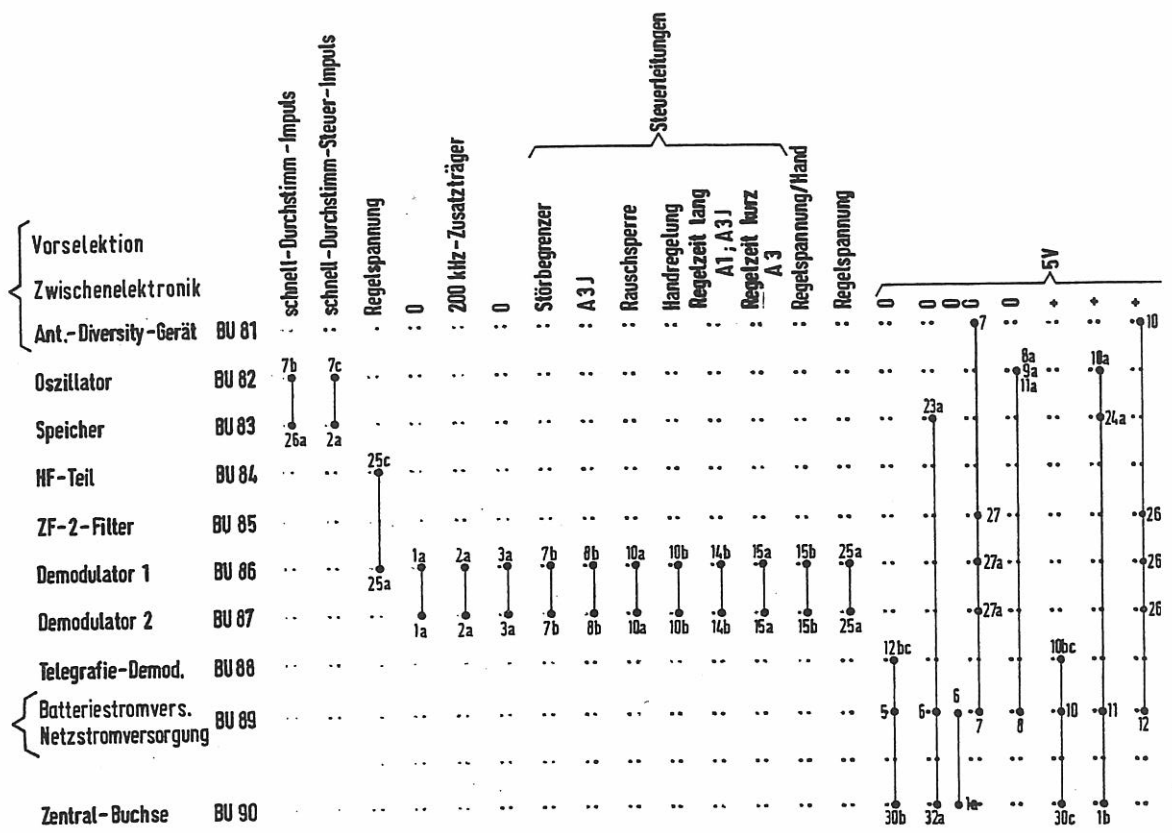
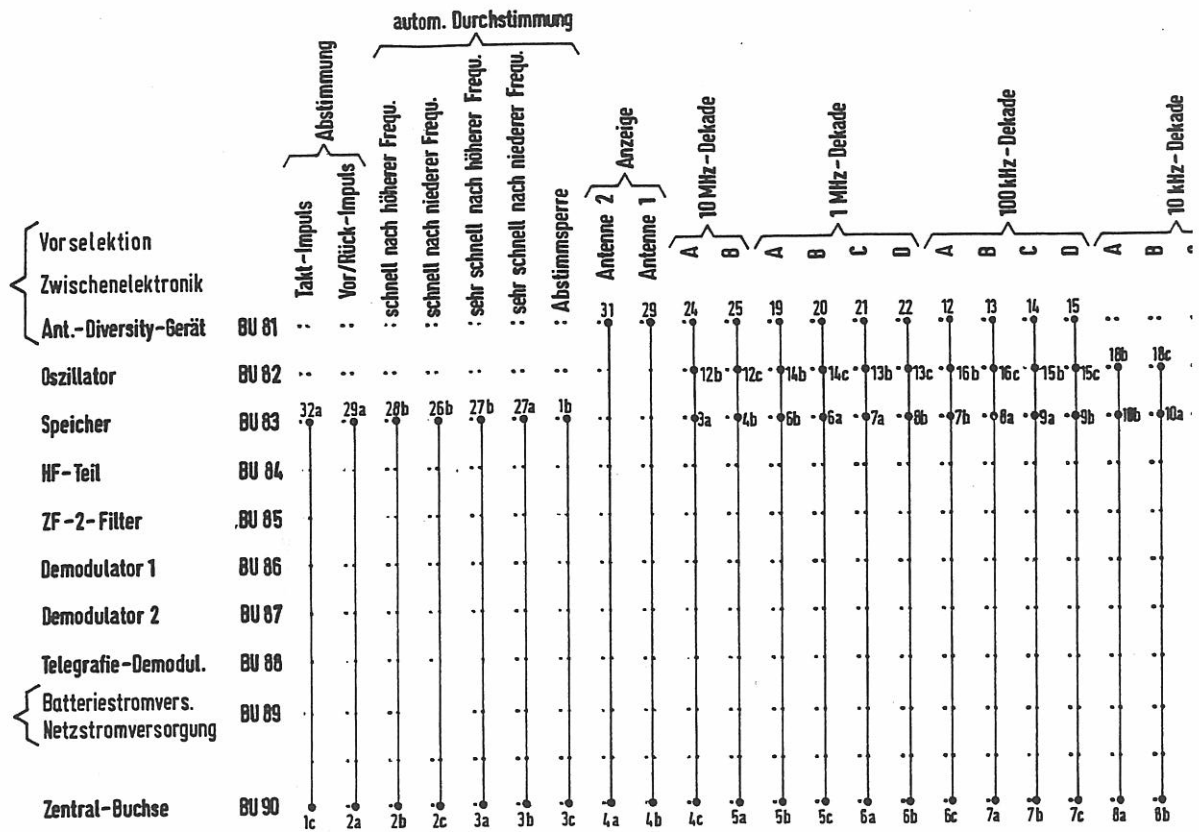


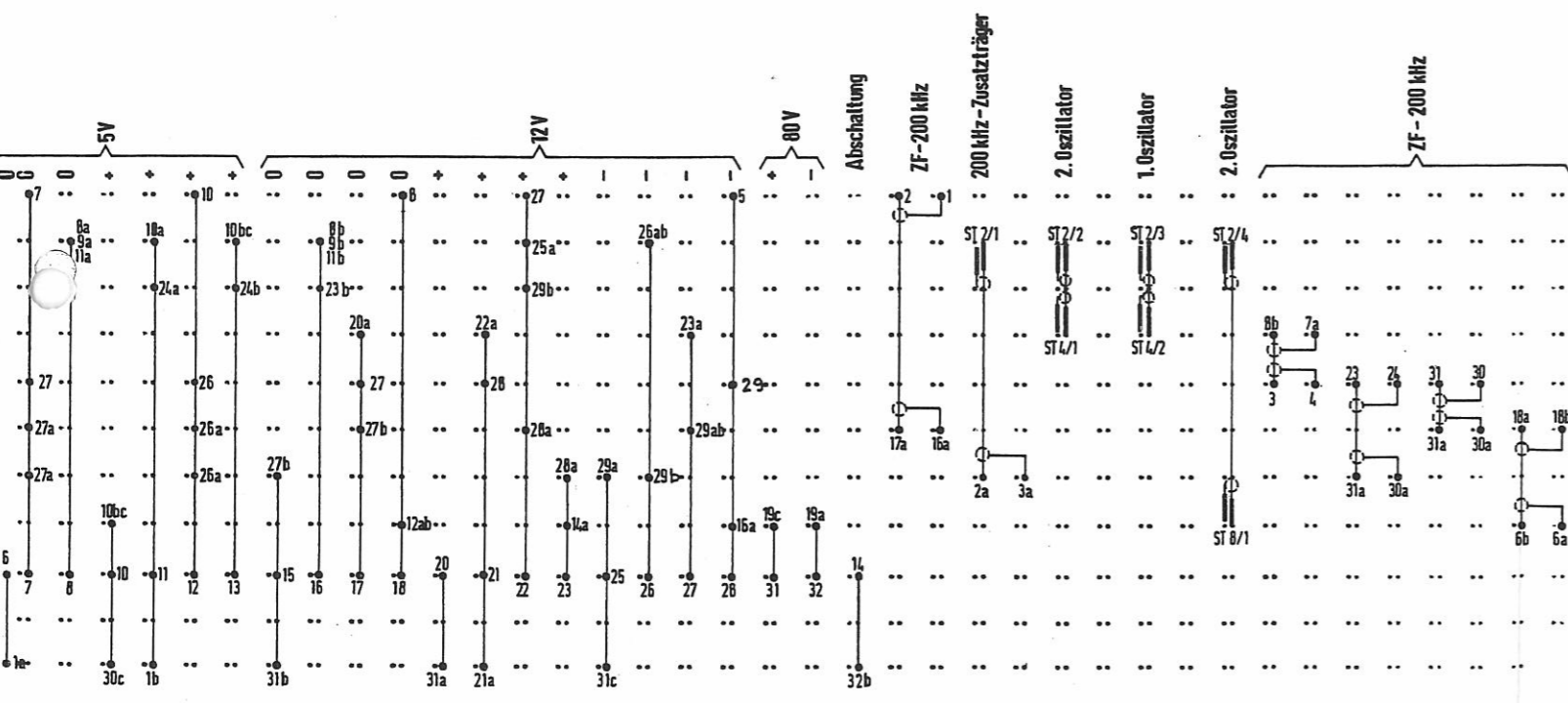
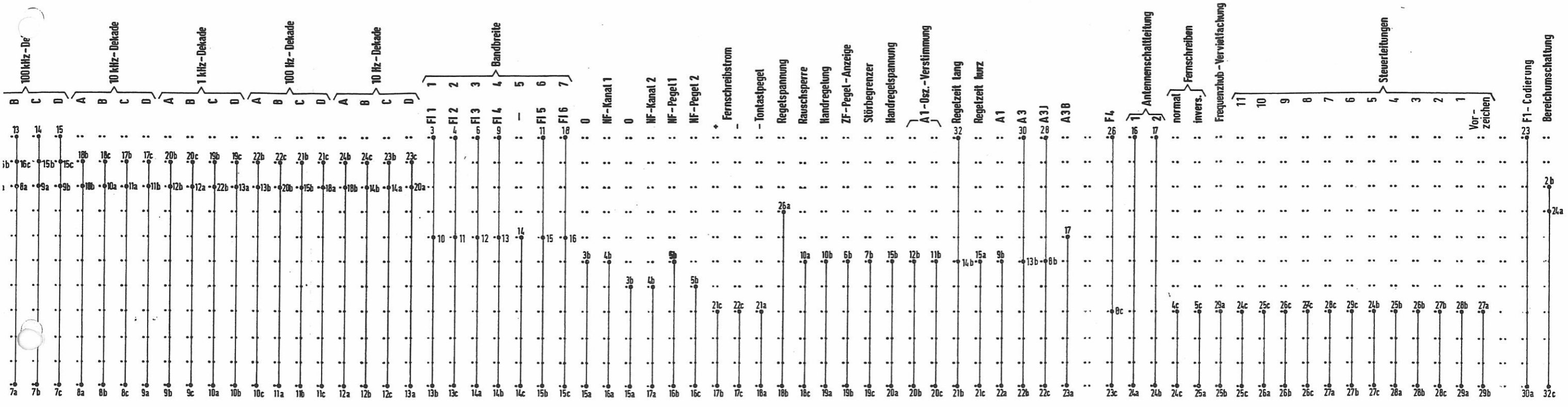
Bestückungsplan Abhörverstärker
Printed Circuit Board of AF Monitoring Amplifier



Stromlaufplan Bedienfeld BF 1501
Circuit Diagram of Control Unit BF 1501
Anlage 2.2/Annex 2.2
3-3







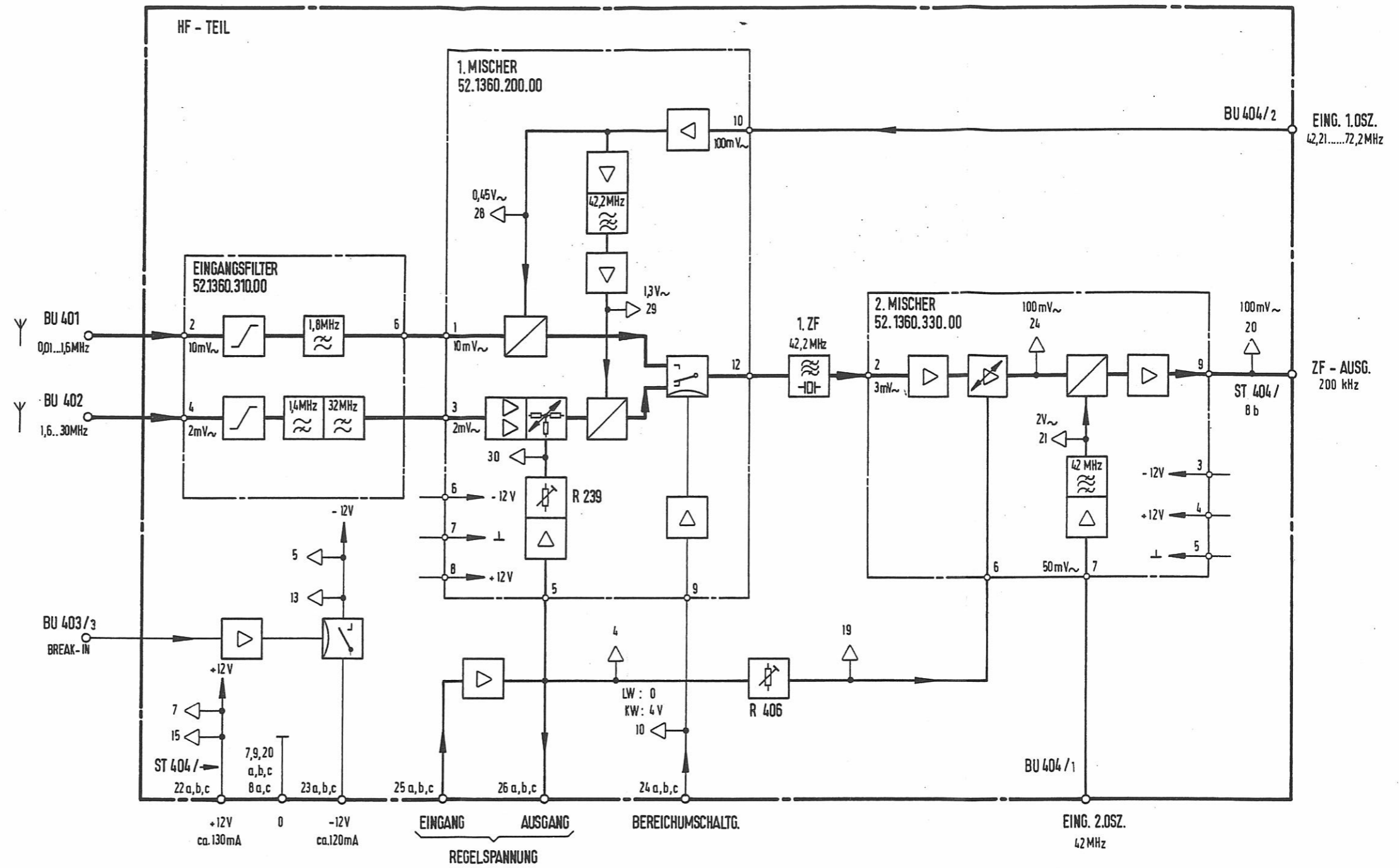
Vorselektion
 Ant.-Diversity-Gerät
 Oszillator
 Speicher
 HF-Teil
 ZF-2-Filter
 Demodulator
 Telegrafie-Demodul.
 Zwischenelektronik
 Batteriestromvers.
 Netzstromversorgung
 Zentral-Buchse
 schnell-Durchstimm-Impuls
 schnell-Durchstimm-Steuer-Impuls
 Regelspannung
 200 kHz-Zusatzträger
 Regelspannung/Hand
 Takt-Impuls
 Vor/Rück-Impuls
 Abstimmung
 schnell nach höherer Frequ.
 sehr schnell nach höherer Frequ.
 sehr schnell nach niedriger Frequ.
 Abstimm Sperre
 autom. Durchstimmung
 Antenne

Preselection
 Antenna Diversity Unit
 Oscillator
 Memory
 RF Section
 IF 2 Filter
 Demodulator
 Telegraphy Demodulator
 Electronic Interface
 Battery Power Unit
 Mains Power Unit
 Central Jack
 Rapid Sweeptuning Pulse
 Rapid Sweeptuning Pulse
 Gain Control Voltage
 200 kHz Auxiliary Carrier
 Long Time Constant
 Short Time Constant
 MGC Voltage
 Clock Pulse
 Forwards/Reverse Pulse
 Tuning
 rapid to higher frequency
 rapid to lower frequency
 very rapid to higher frequency
 very rapid to lower frequency
 Tuning Disable
 automatic Sweeptuning
 Antenna

Anzeige
 Dekade
 Bandbreite
 Oszillator
 NF-Kanal
 NF-Pegel
 Fernschreibstrom
 Tontastpegel
 Abschaltung
 ZF-200 kHz
 2. Oszillator
 1. Oszillator
 Rausch Sperre
 Handregelung
 ZF-Pegel-Anzeige
 Störbegrenzer
 Handregelspannung
 A1-Osz.-Verstimmung
 Regelzeit lang
 Regelzeit kurz
 Antennenschaltleitung
 normal
 invers.
 Fernschreiben
 Frequenzhub-Vervielfachung
 Steuerleitungen
 Bereichumschaltung
 Vorzeichen
 Codierung

Indication
 Decade
 Bandwidth
 AF Channel
 AF Level
 Teletypewriter Current
 VF Keying Level
 Switch-Off
 IF 200 kHz
 2nd. Oscillator
 1st. Oscillator
 Squeech
 MGC
 IF Level Indication
 Noise Limiter
 MGC Voltage
 BFO Detuning
 AGC Time, long
 AGC Time, short
 Antennas Switching Line
 normal
 inverse
 Teletype
 FM-deviation multiplication
 Control Lines
 Range Switching
 Polarity
 Coding

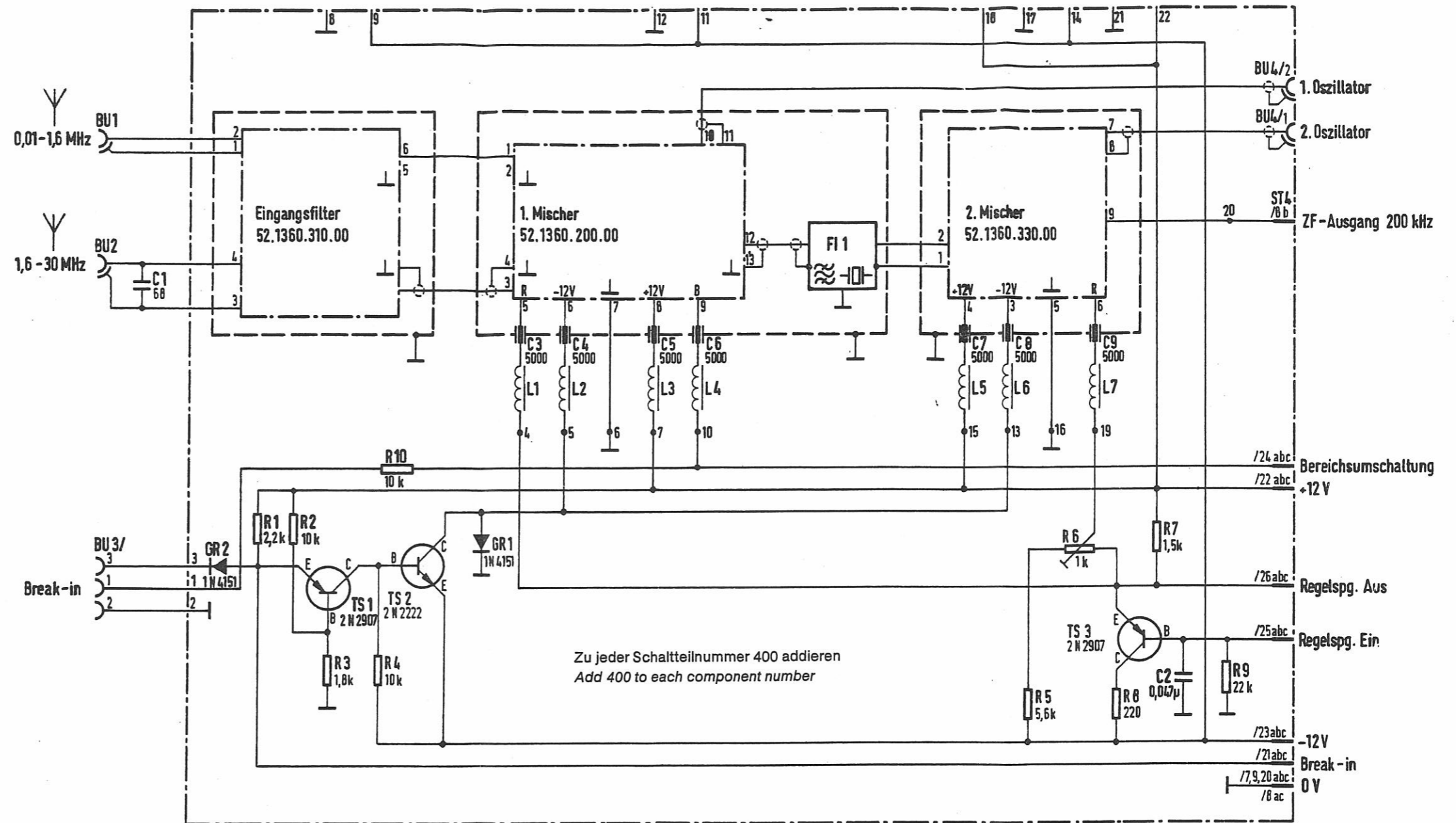




- | | |
|-------------------|-----------------------|
| HF-Teil | RF Module |
| Eingangsfiler | Input Filter |
| 1. Mischer | 1st. Mixer |
| 2. Mischer | 2nd. Mixer |
| 1. Osz. | 1st. Oscillator |
| 2. Osz. | 2nd. Oscillator |
| ZF-Ausg. | IF Output |
| Bereichumschaltg. | Range Change-Over |
| Regelspannung | AGC Voltage |
| Eingang | Input |
| Ausgang | Output |
| Eing. 2. Osz. | Input 2nd. Oscillator |

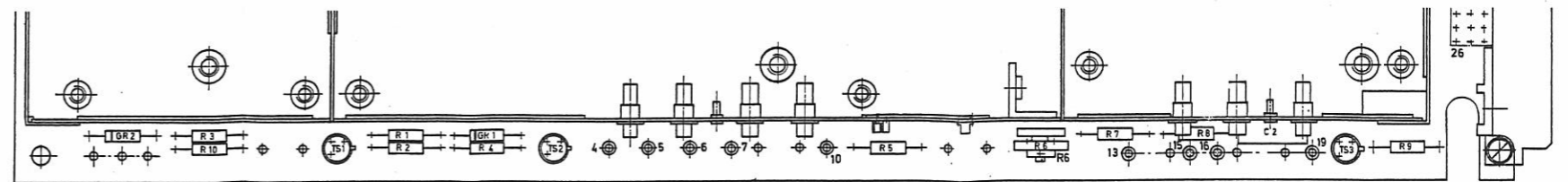
Übersichtsschaltplan HF-Teil HT 1510 LH
 Block Diagram of RF Module HT 1510 LH
 Anlage 4/Annex 4
 Blatt 1/Sheet 1





Eingangsfiter
 1. Mischer
 2. Mischer
 1. Oszillator
 2. Oszillator
 ZF-Ausgang 200 kHz
 Bereichsumschaltung
 Regelspg. Aus
 Regelspg. Ein

Input Filter
 First Mixer
 Second Mixer
 First Oscillator
 Second Oscillator
 IF Output 200 kHz
 Range Change-Over
 AGC Voltage OFF
 AGC Voltage ON

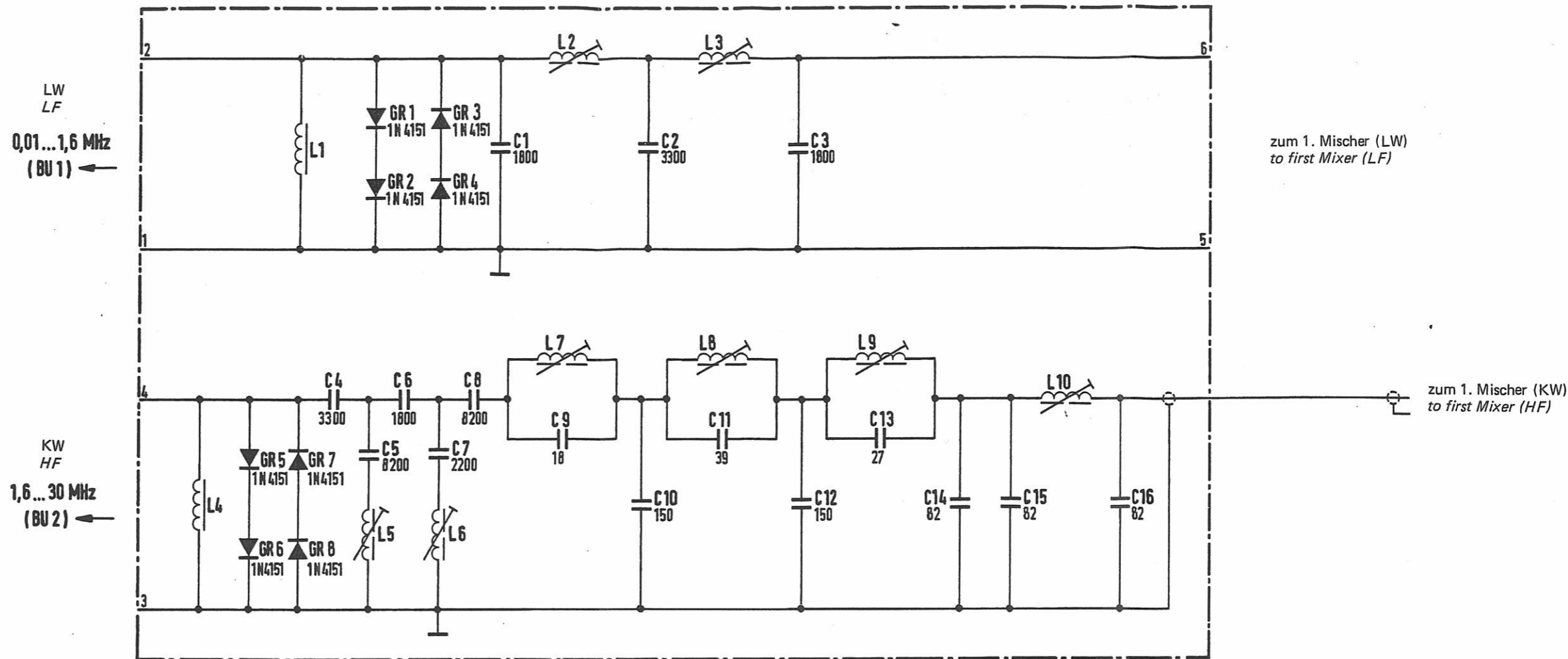


Bestückungsplan/ Printed Circuit Board



Stromlaufplan HF-Teil HT 1510 LH
 Circuit Diagram of RF Module HT 1510 LH
 Anlage 4/Annex 4
 Blatt 2/Sheet 2





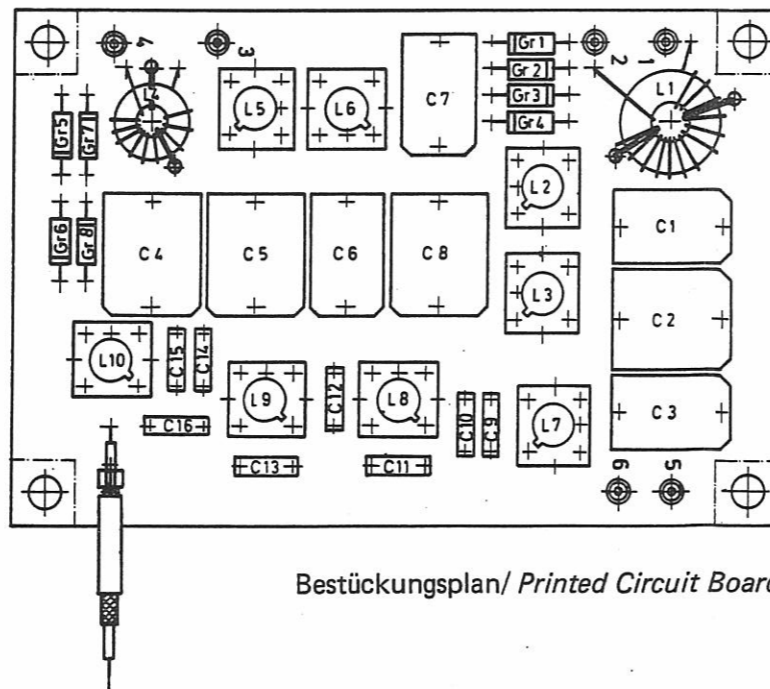
LW
LF
0,01...1,6 MHz
(BU 1)

zum 1. Mischer (LW)
to first Mixer (LF)

KW
HF
1,6...30 MHz
(BU 2)

zum 1. Mischer (KW)
to first Mixer (HF)

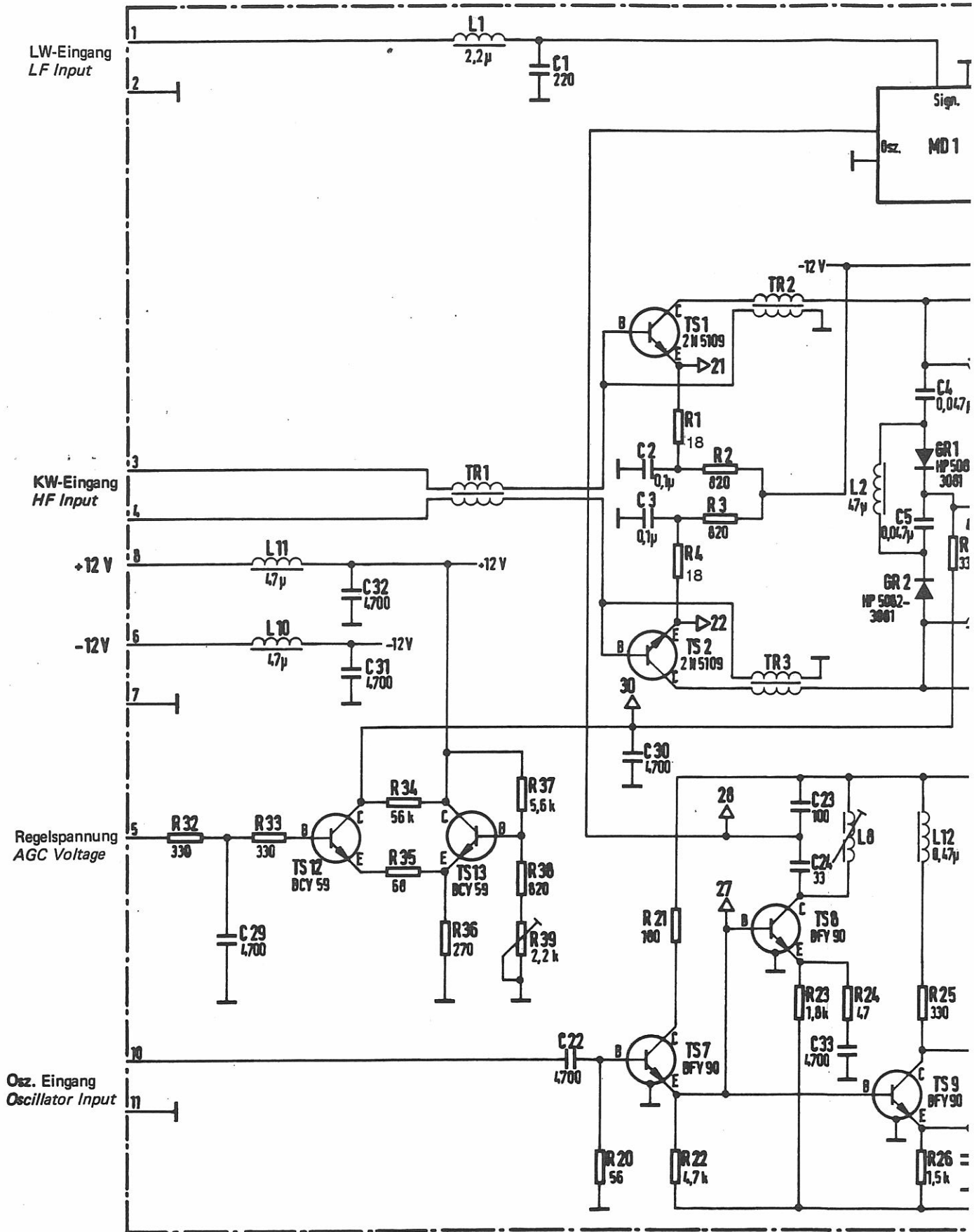
Zu jeder Schalteilnummer 310 addieren
Add 310 to each components number

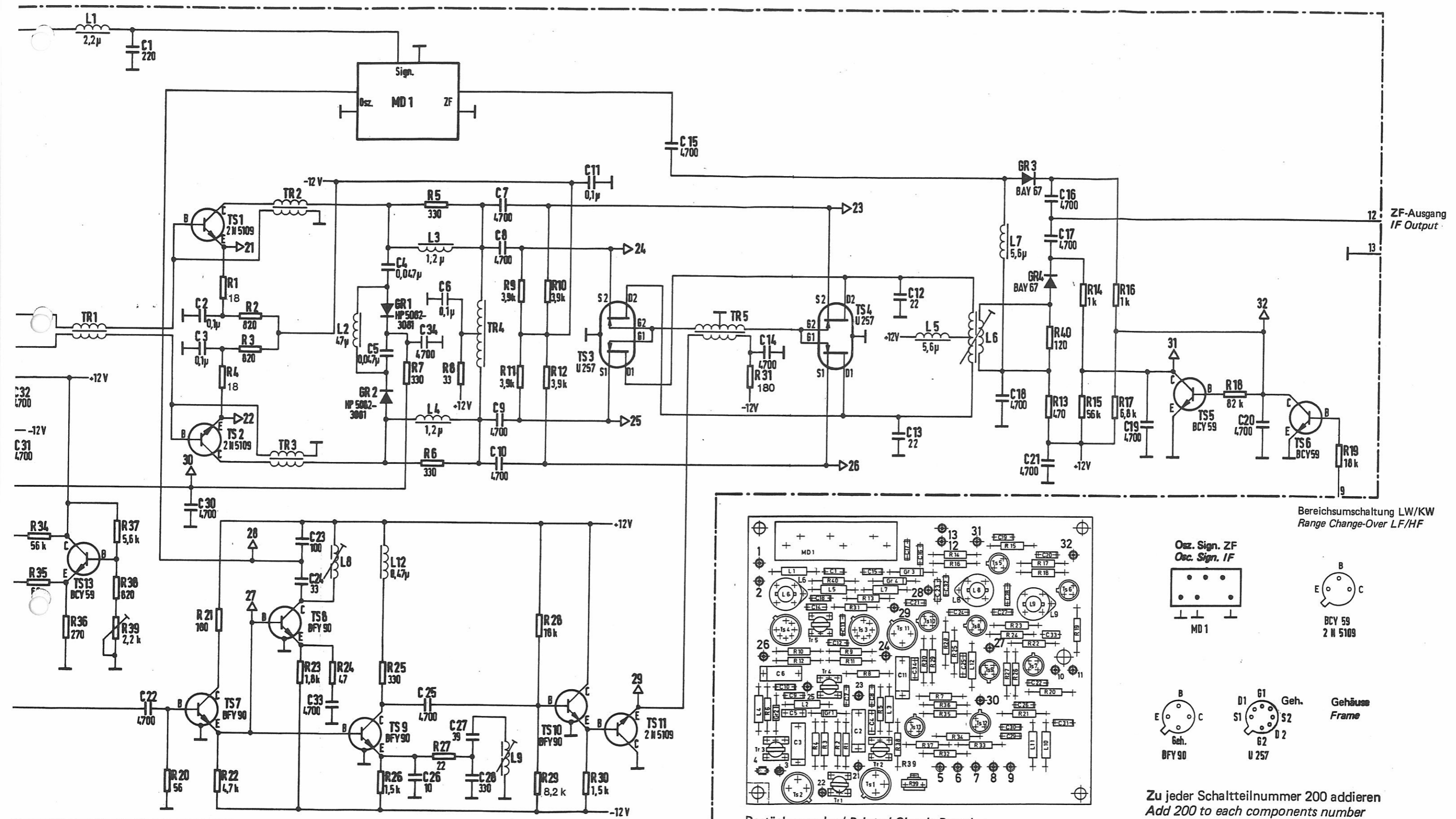


Bestückungsplan/ Printed Circuit Board

Stromlaufplan Eingangsfiler
Circuit Diagram of Input Filter
Anlage 5/ Annex 5

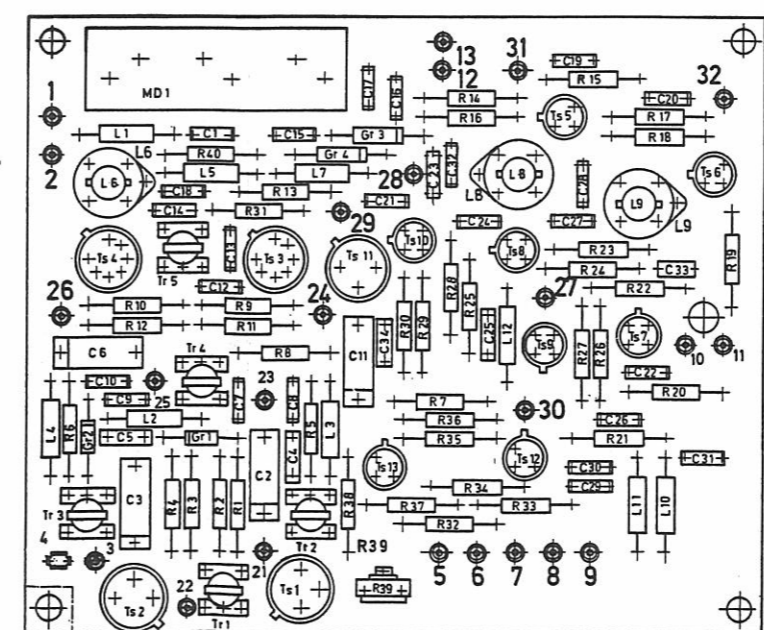




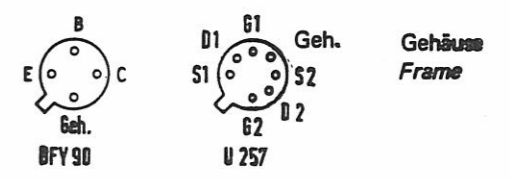
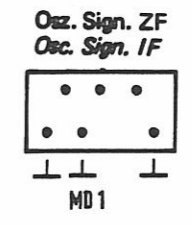


ZF-Ausgang
IF Output

Bereichumschaltung LW/KW
Range Change-Over LF/HF



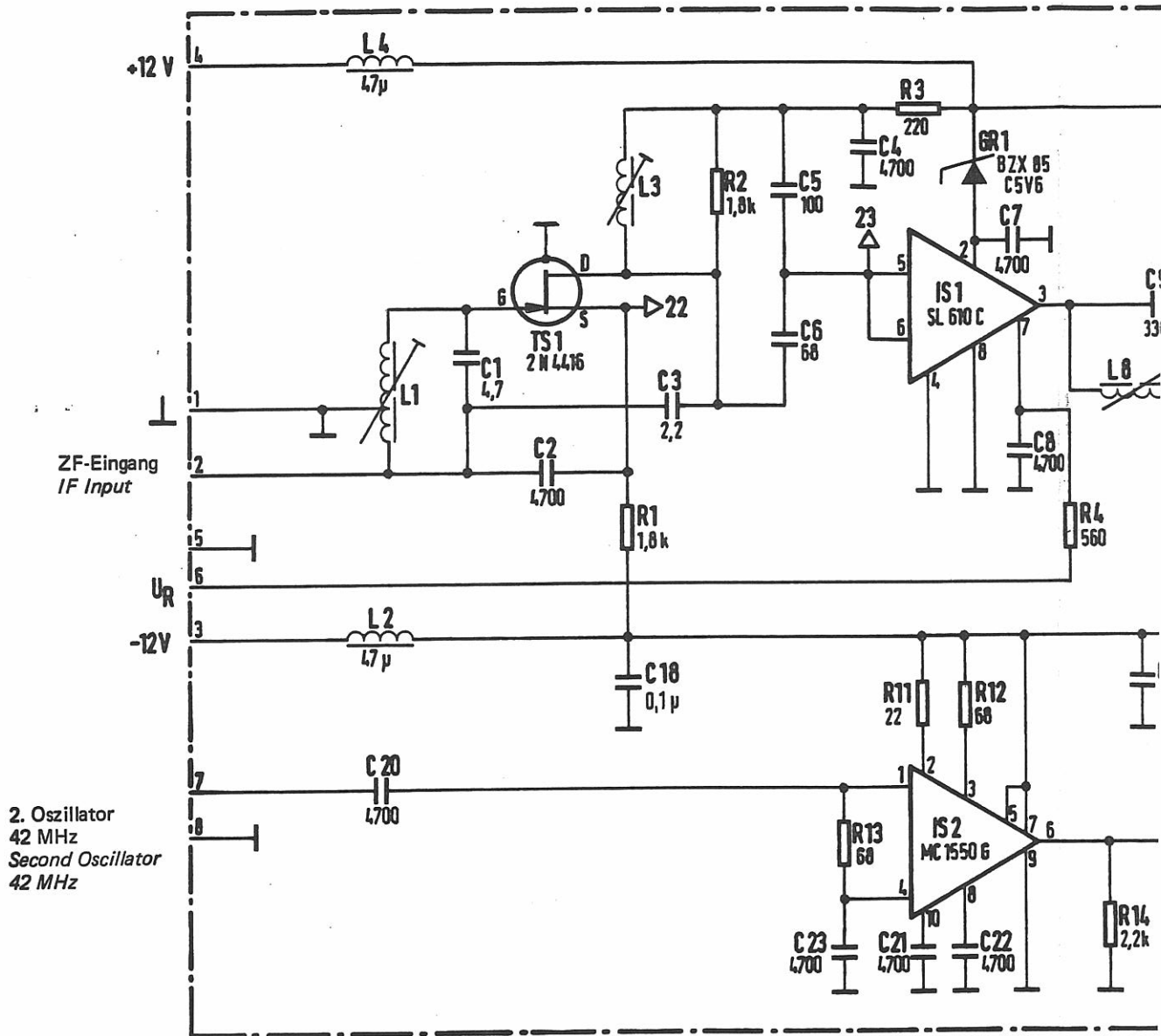
Bestückungsplan / Printed Circuit Board



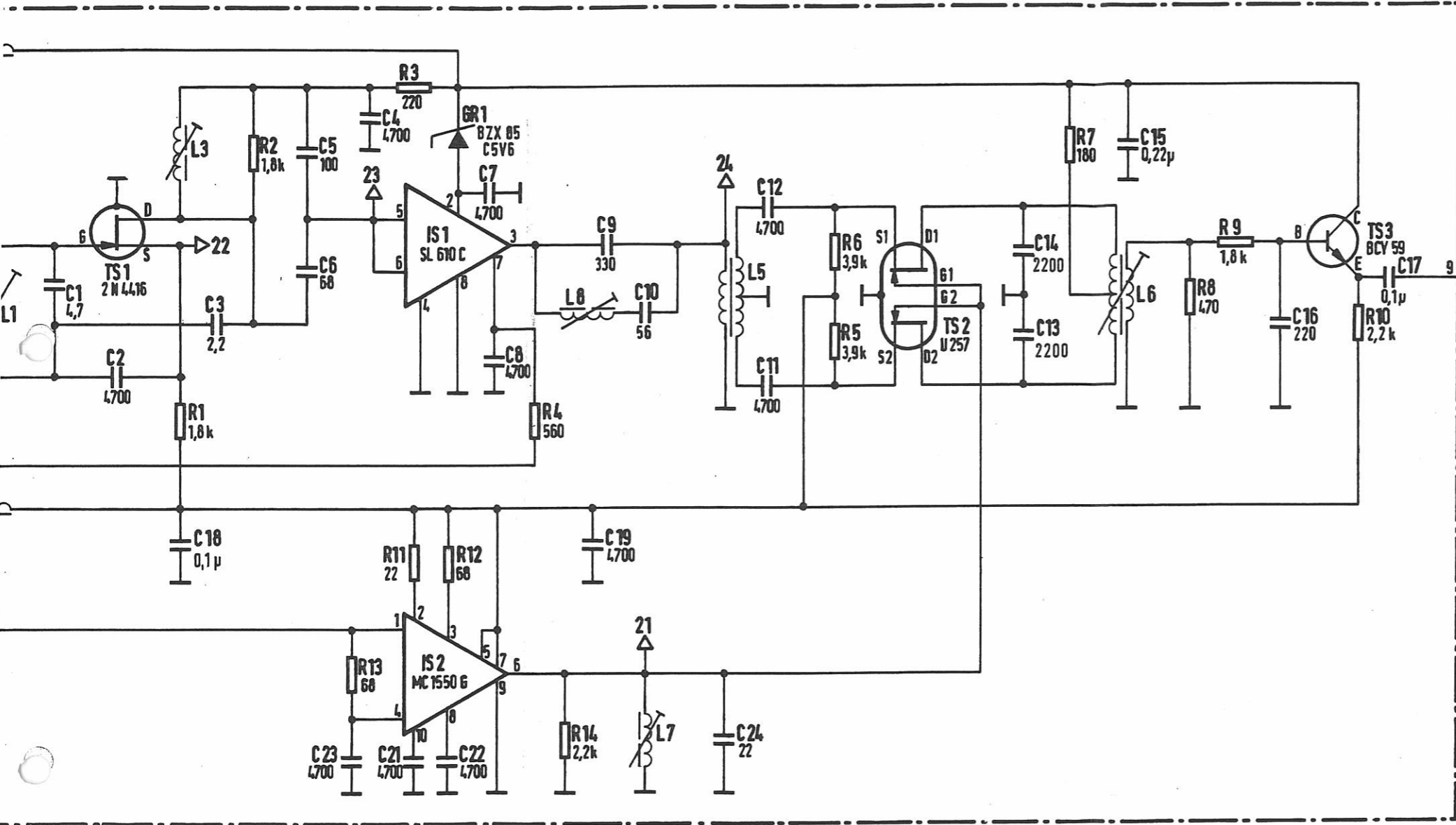
Zu jeder Schaltteilnummer 200 addieren
Add 200 to each components number

Stromlaufplan 1. Mischer
Circuit Diagram of First Mixer
Anlage 6/ Annex 6

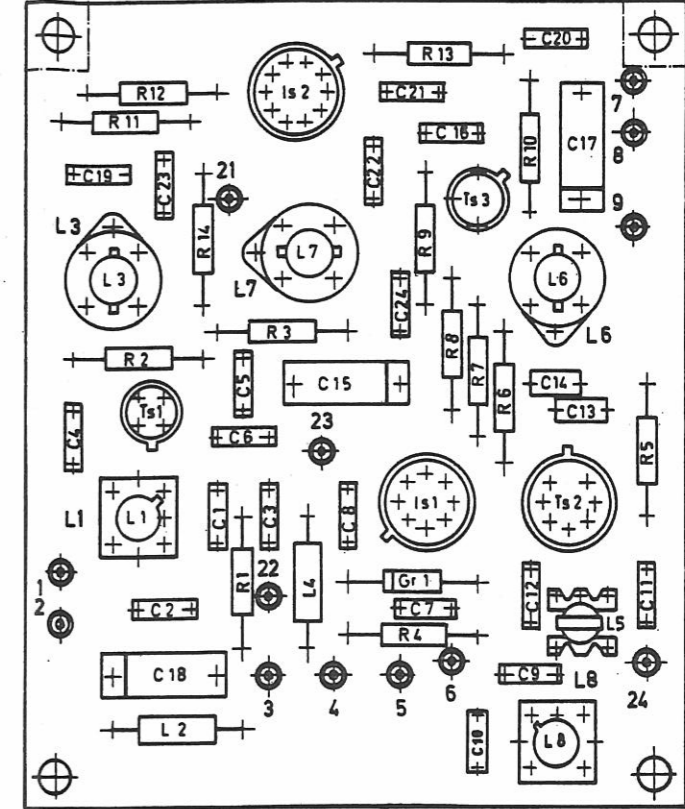




Zu jeder Schalteilnummer 330 addieren
 Add 330 to each components number

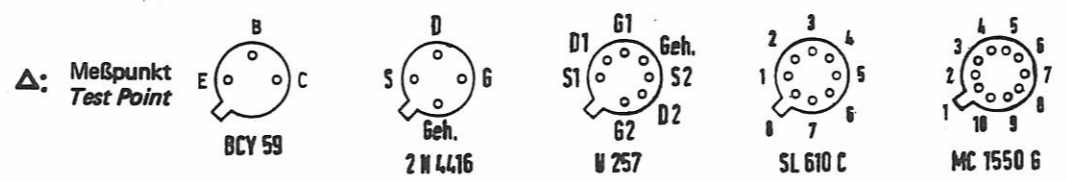


ZF-Ausgang
200 kHz
IF Output
200 kHz



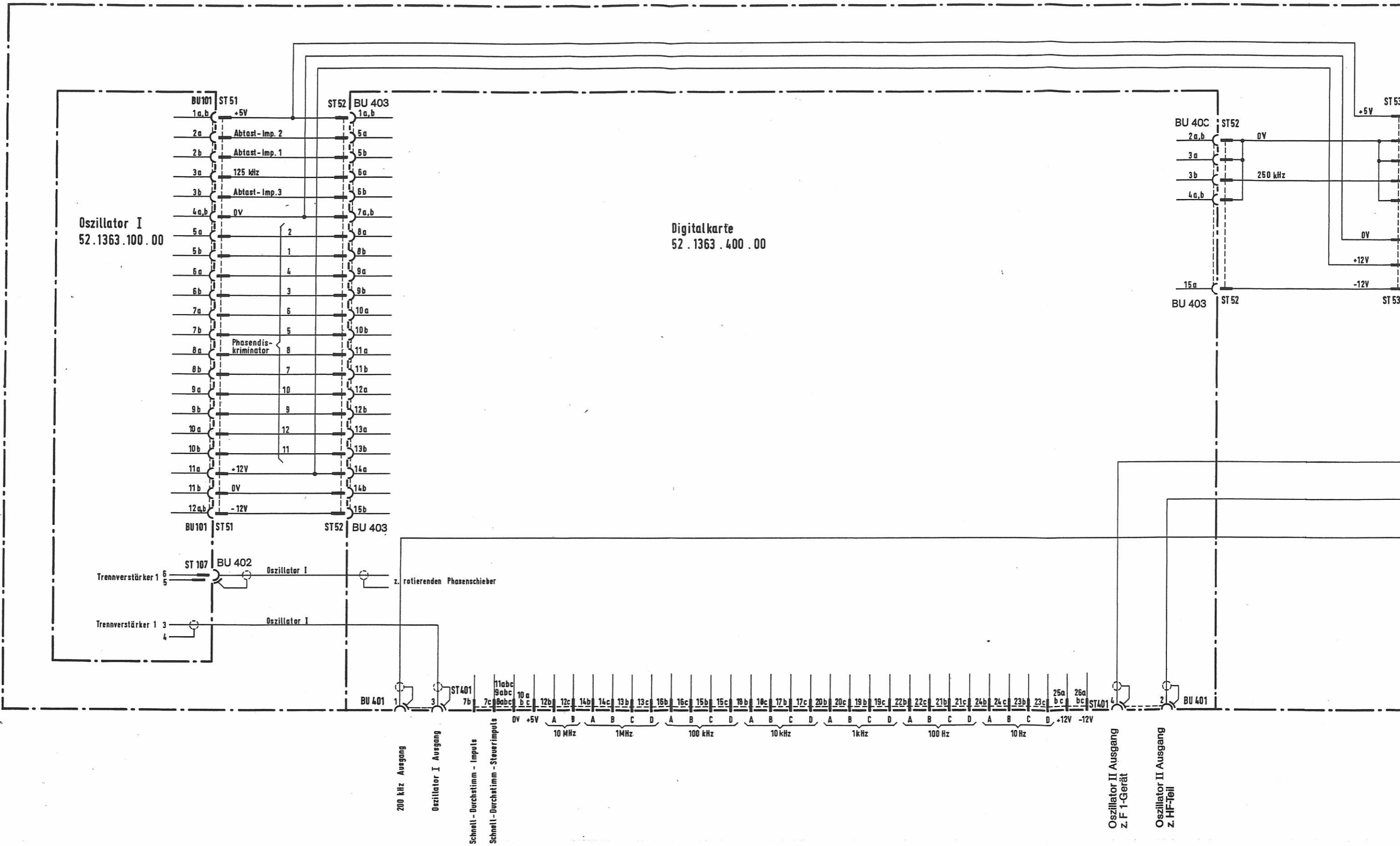
Bestückungsplan/ Printed Circuit Board

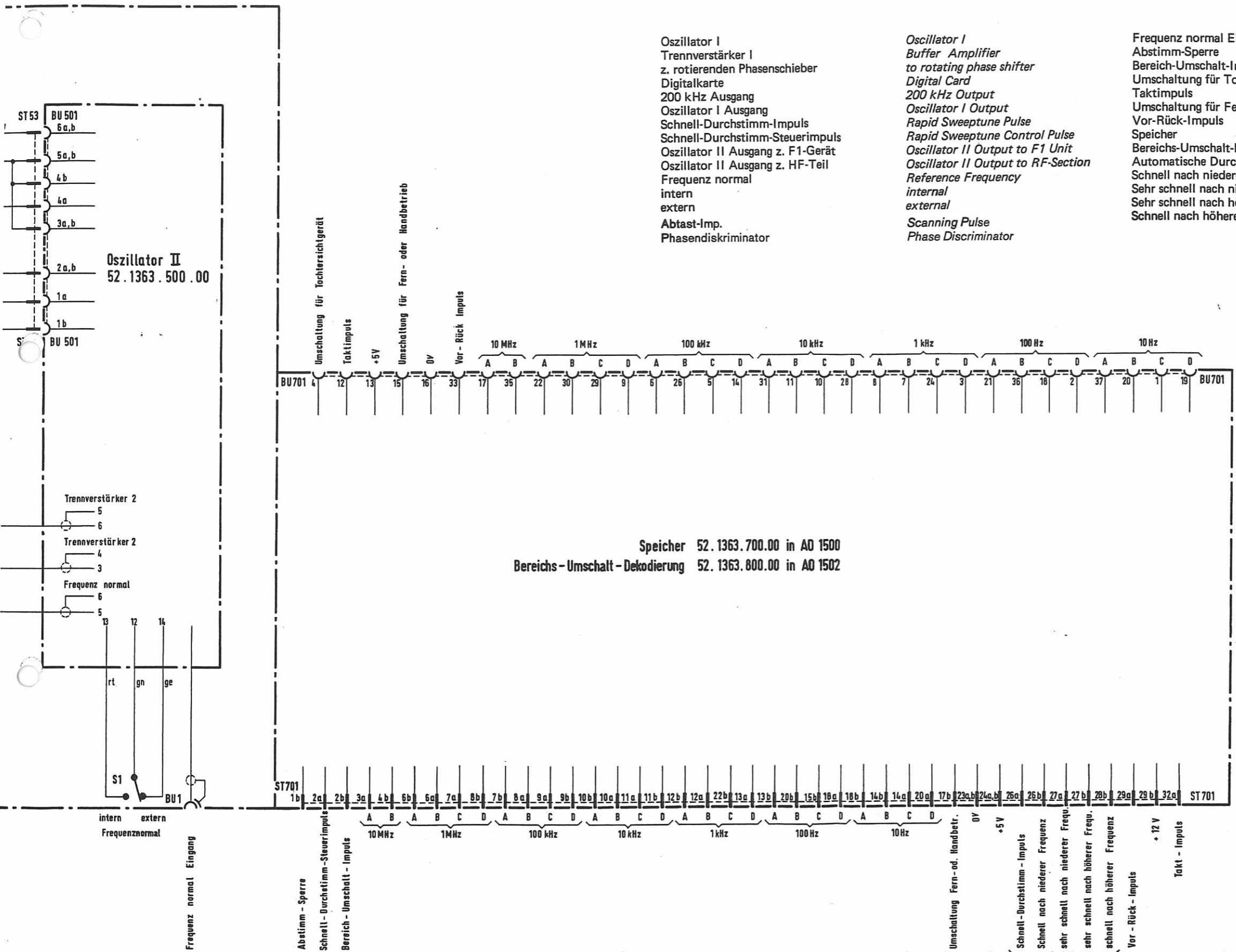
Zu jeder Schaltteilnummer 330 addieren
Add 330 to each components number



Stromlaufplan 2. Mischer
Circuit Diagram of Second Mixer
Anlage 7/ Annex 7







Oszillator I
Trennverstärker I
z. rotierenden Phasenschieber
Digitalkarte
200 kHz Ausgang
Oszillator I Ausgang
Schnell-Durchstimm-Impuls
Schnell-Durchstimm-Steuerimpuls
Oszillator II Ausgang z. F1-Gerät
Oszillator II Ausgang z. HF-Teil
Frequenz normal
intern
extern
Abtast-Imp.
Phasendiskriminator

Oscillator I
Buffer Amplifier
to rotating phase shifter
Digital Card
200 kHz Output
Oscillator I Output
Rapid Sweeptune Pulse
Rapid Sweeptune Control Pulse
Oscillator II Output to F1 Unit
Oscillator II Output to RF-Section
Reference Frequency
internal
external
Scanning Pulse
Phase Discriminator

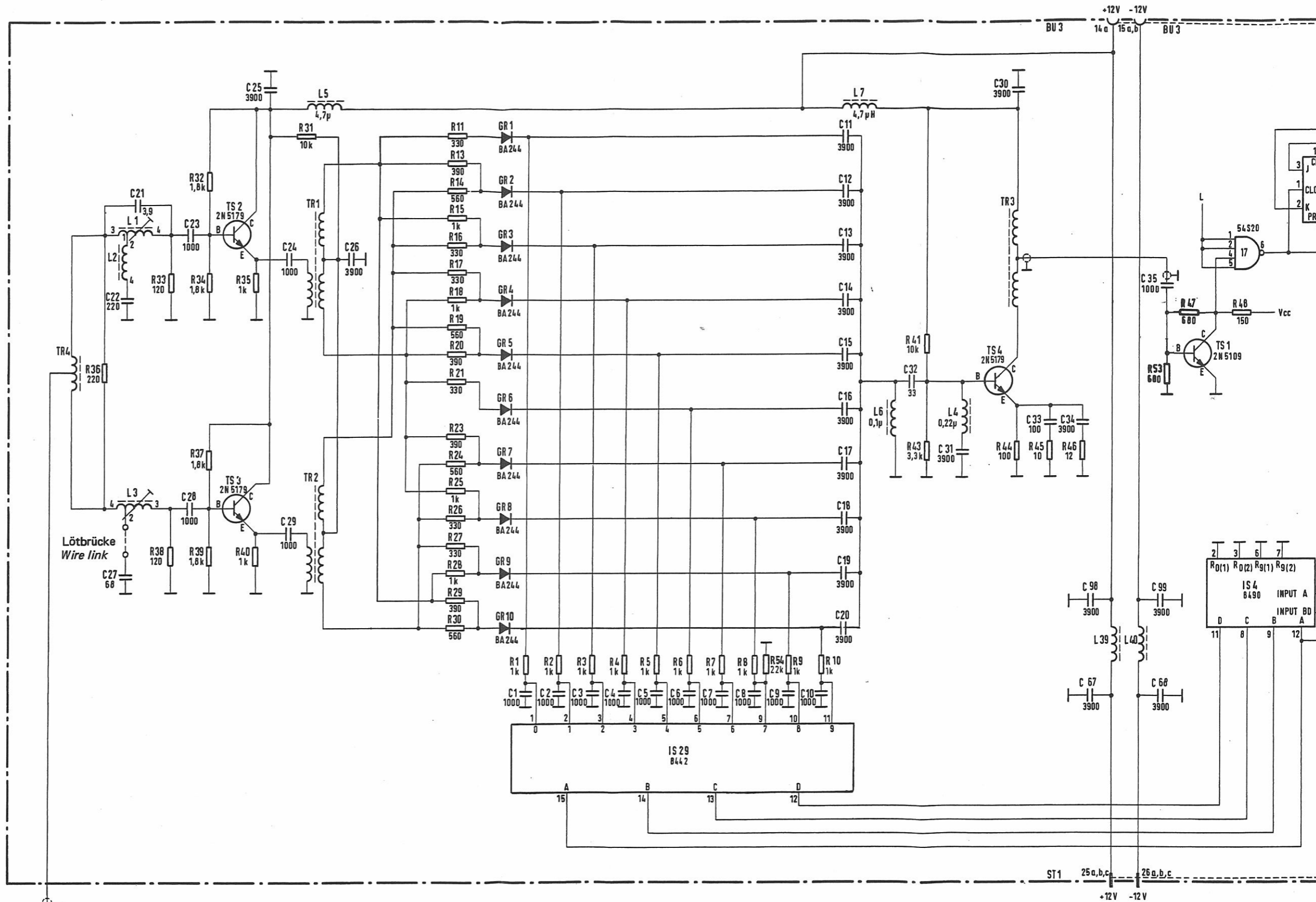
Frequenz normal Eingang
Abstimm-Sperre
Bereich-Umschalt-Impuls
Umschaltung für Tochtersichtgerät
Taktimpuls
Umschaltung für Fern- od. Handbetrieb
Vor-Rück-Impuls
Speicher
Bereichs-Umschalt-Dekodierung
Automatische Durchstimmung
Schnell nach niederer Frequenz
Sehr schnell nach niederer Frequenz
Sehr schnell nach höherer Frequenz
Schnell nach höherer Frequenz

Reference Frequency Input
Tuning Disable
Range Switching Pulse
Switchover for Repeater Display Unit
Clock Pulse
Switchover for Remote or Manual Operation
Forwards/Reverse Pulse
Memory
Range Switching Decoder
Automatic Sweeptuning
Rapid to lower frequency
Very rapid to lower frequency
Very rapid to higher frequency
Rapid to higher frequency

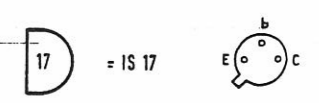
Speicher 52.1363.700.00 in AO 1500
Bereichs-Umschalt-Dekodierung 52.1363.800.00 in AO 1502

Stromlaufplan Synthesizer AO 1500
Circuit Diagram of Synthesizer AO 1500
Anlage 8/Annex 8





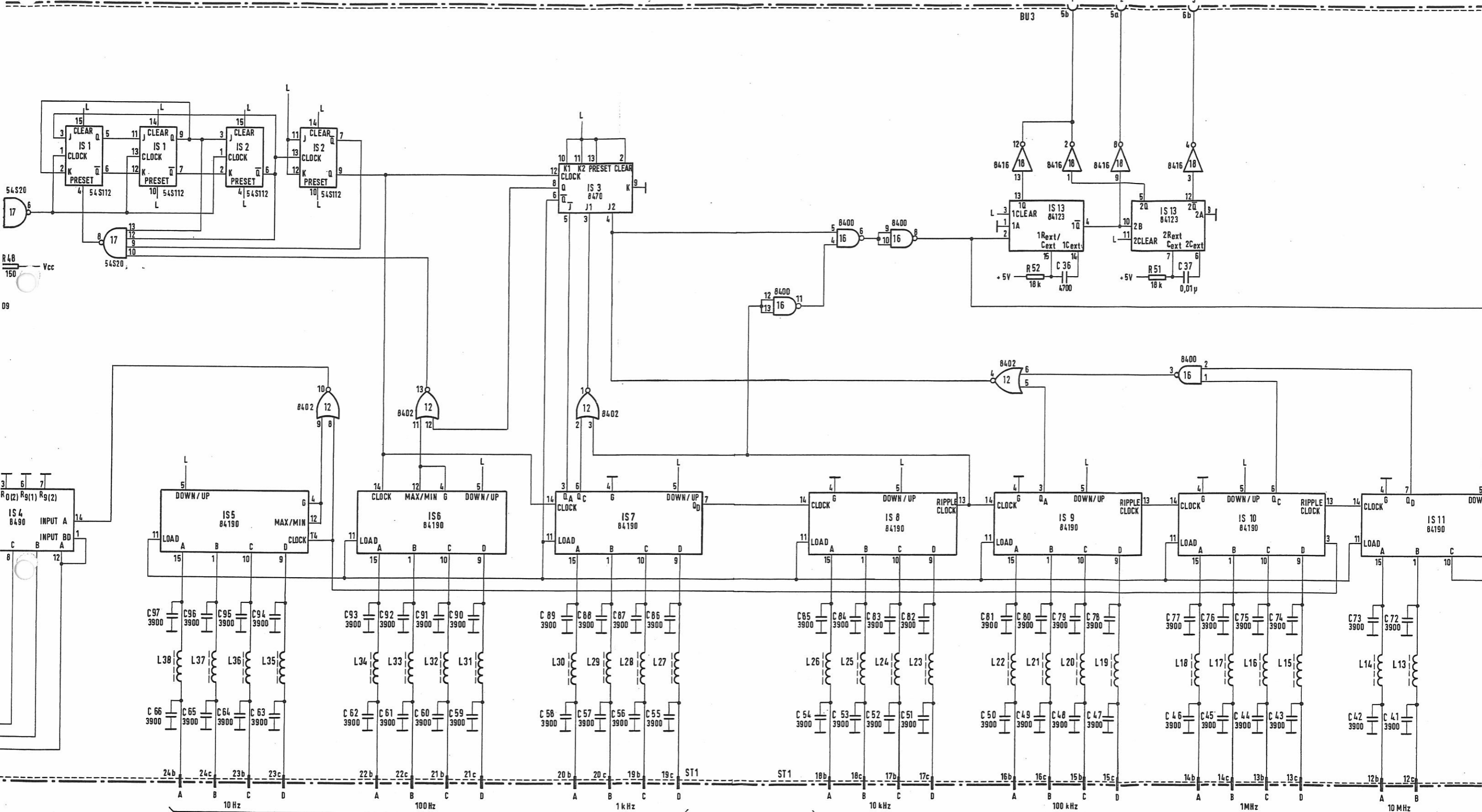
BU 2
v. Trennverstärker 1
from buffer amplifier 1



52.1363.400.00 STR (01)

9
1-3

Abtastimpuls
Sensing Pulse

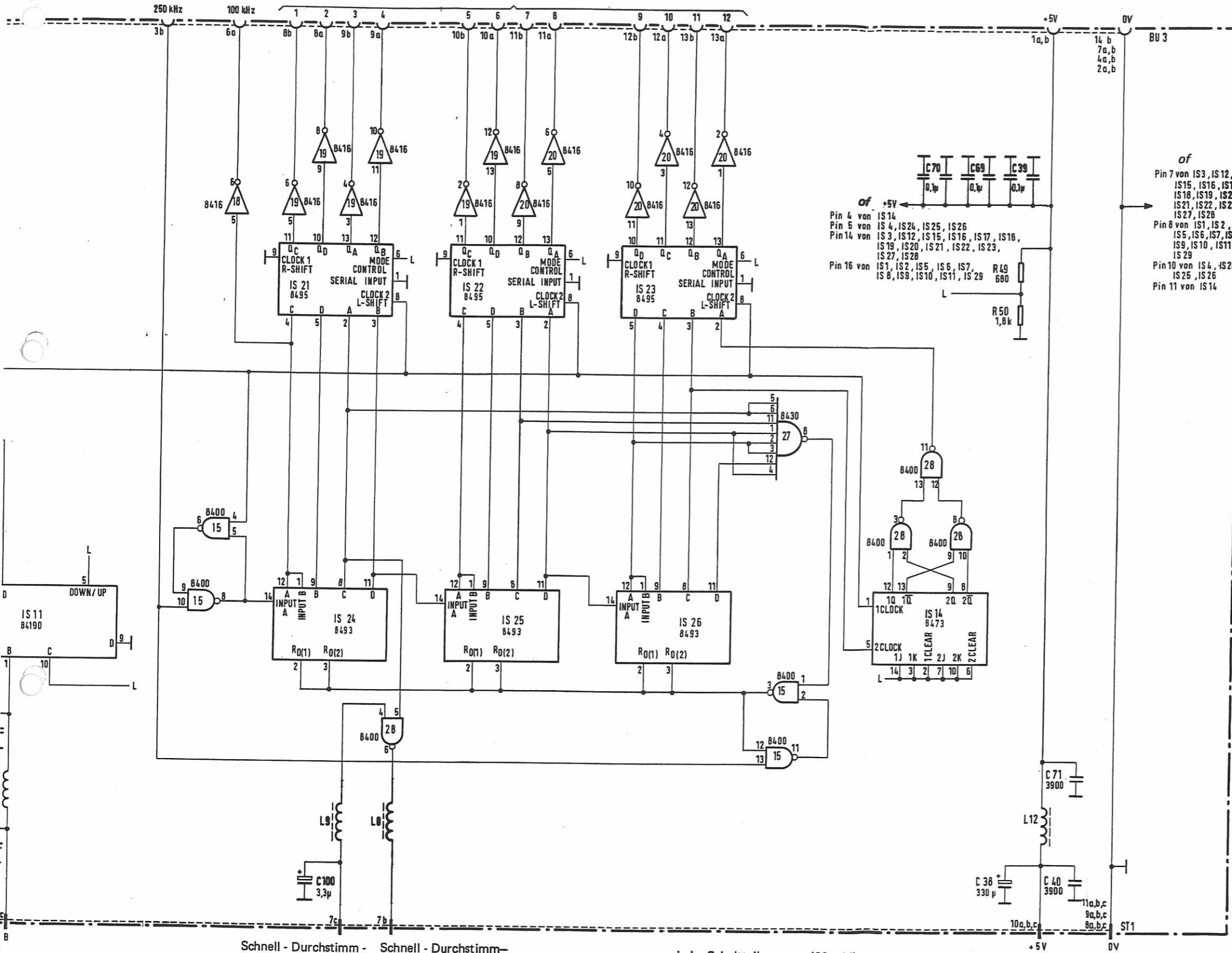


17 E C TS1 bis TS4
to

Dekade
Decade

Dekade
Decade

Phasendiskriminator
Phase Discriminator

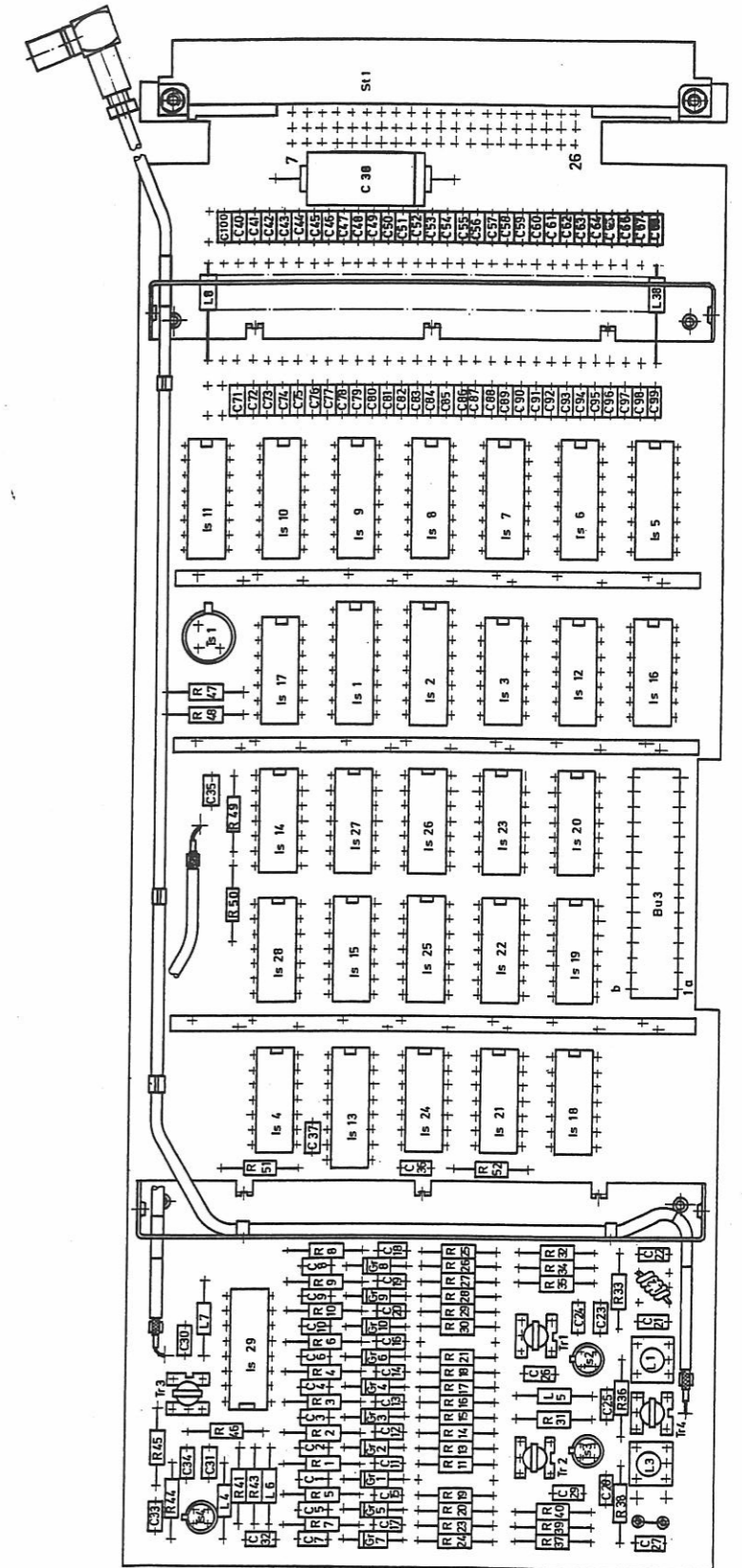


- of +5V
- Pin 4 von IS 14
 - Pin 5 von IS 4, IS 24, IS 25, IS 26
 - Pin 14 von IS 3, IS 12, IS 15, IS 16, IS 17, IS 18, IS 19, IS 20, IS 21, IS 22, IS 23, IS 27, IS 28
 - Pin 16 von IS 1, IS 2, IS 5, IS 6, IS 7, IS 8, IS 9, IS 10, IS 11, IS 29
- of
- Pin 7 von IS 3, IS 12, IS 15, IS 16, IS 17, IS 18, IS 19, IS 20, IS 21, IS 22, IS 23, IS 27, IS 28
 - Pin 8 von IS 1, IS 2, IS 5, IS 6, IS 7, IS 9, IS 10, IS 11, IS 29
 - Pin 10 von IS 4, IS 24, IS 25, IS 26
 - Pin 11 von IS 14

Schnell - Durchstimm - Steuerimpuls
Rapid sweeptuning control pulse

Schnell - Durchstimm - Impuls
Rapid sweeptuning pulse

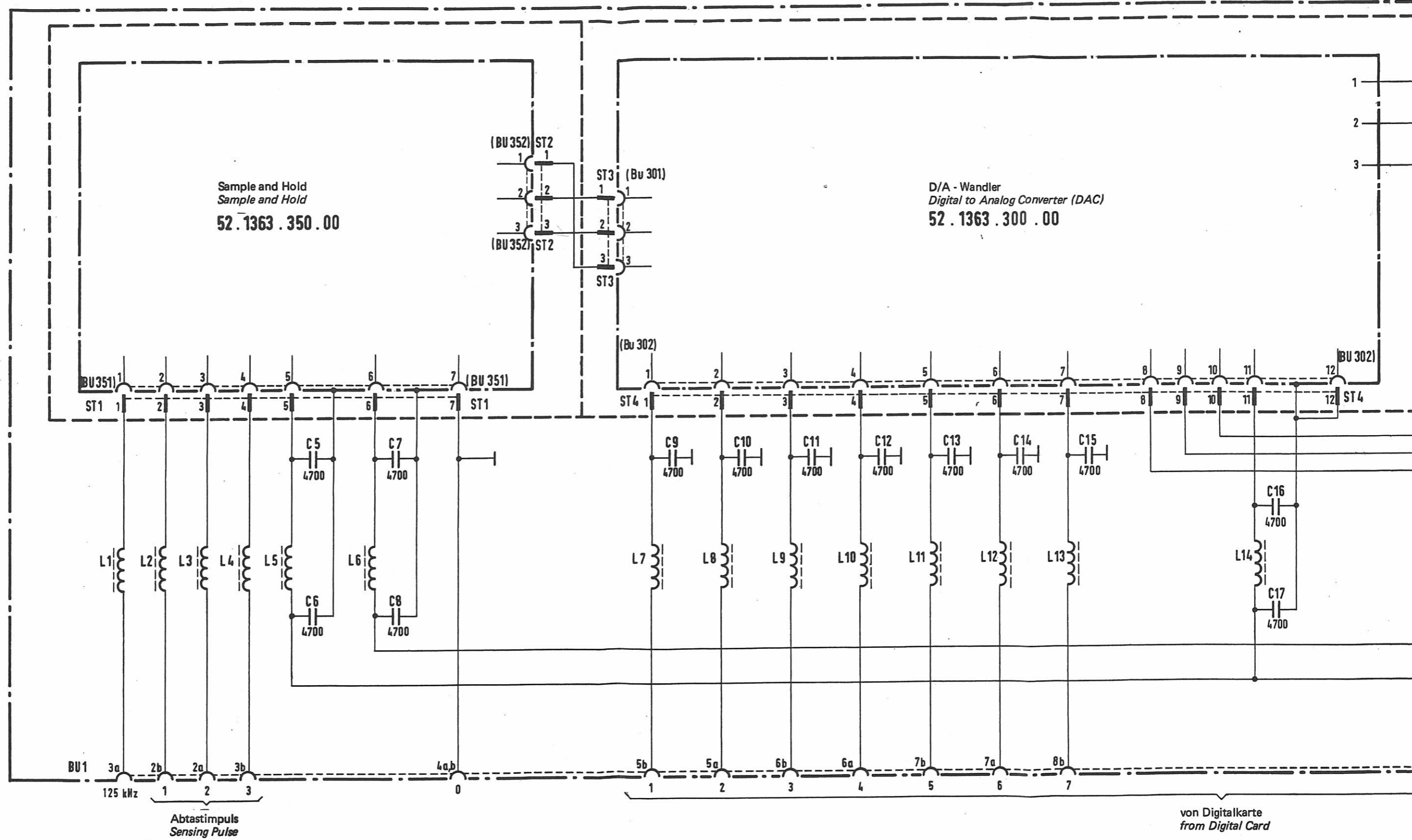
zu jeder Schalteilnummer 400 addieren
Add 400 to each components number

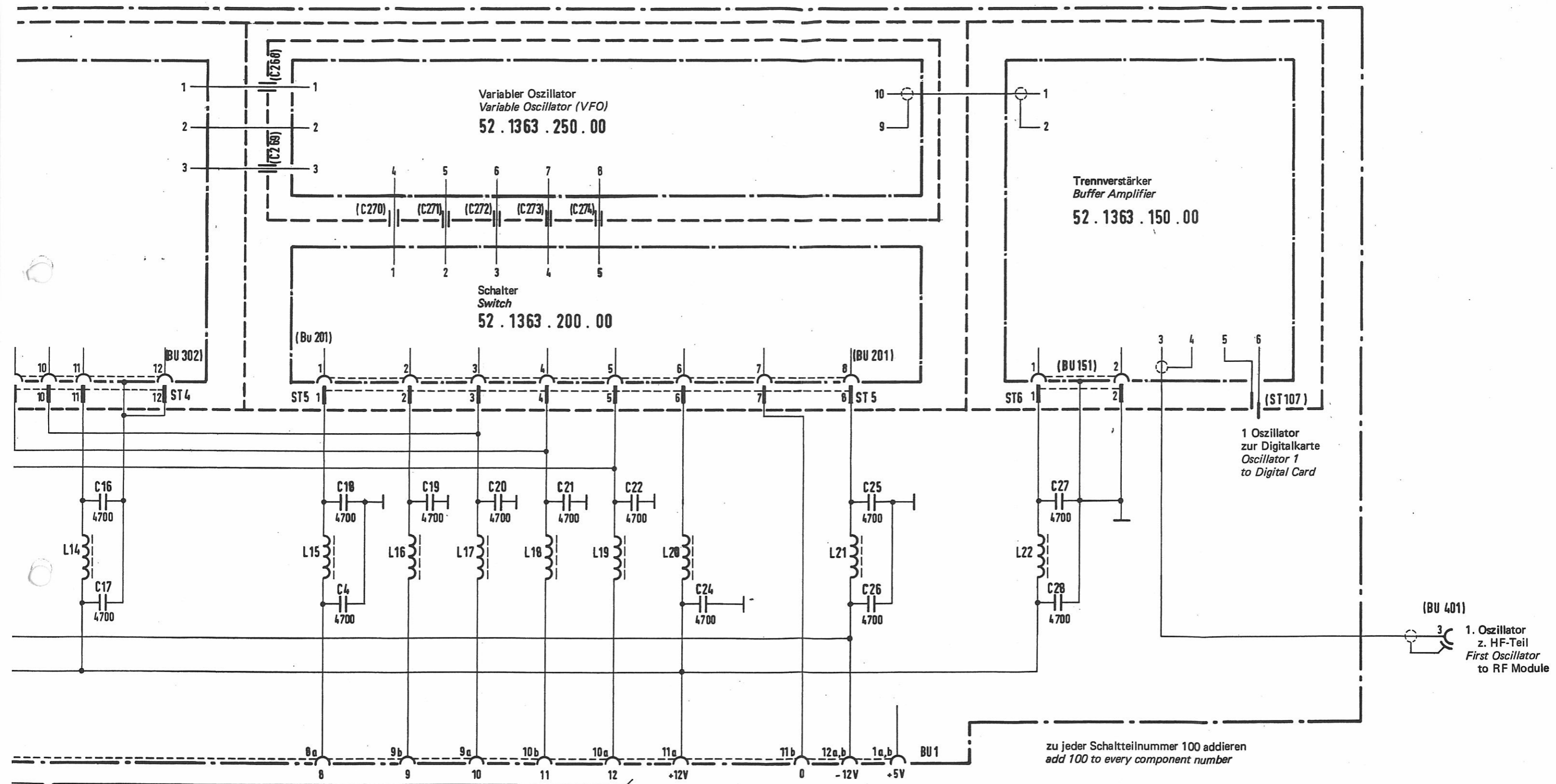


Bestückungsplan/ Printed Circuit Board

Stromlaufplan Digital - Karte
Circuit Diagram of Digital Card
Anlage 9/ Annex 9





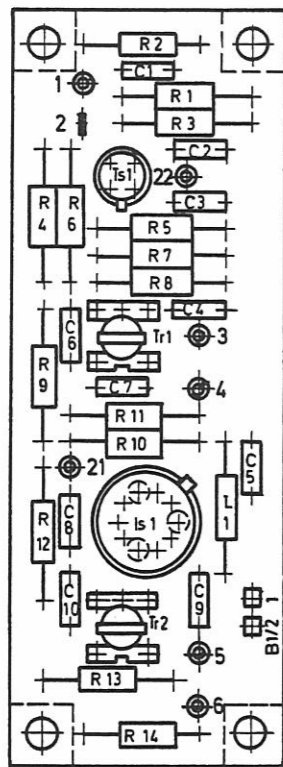


von Digitalkarte
 from Digital Card

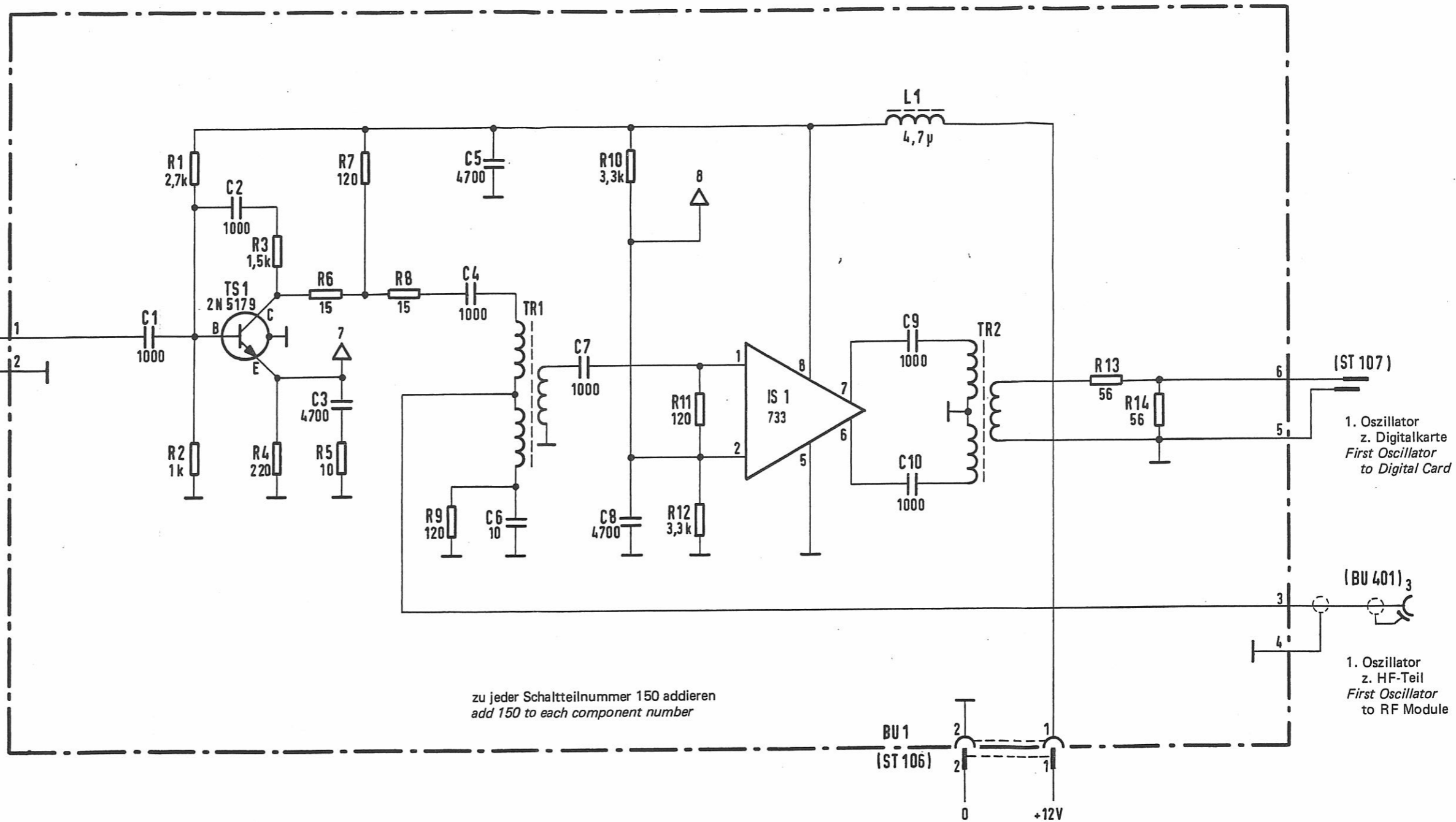
Stromlaufplan Oszillator 1 (Grundkarte)
 Circuit Diagram of Oscillator 1 (Basic Card)
 Anlage 10/ Annex 10



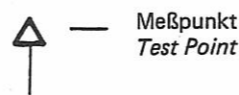
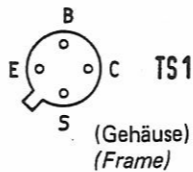
vom variablen Oszillator
from variable Oscillator
52.1363.250.00



Bestückungsplan/ Printed Circuit Board



zu jeder Schaltteilnummer 150 addieren
add 150 to each component number

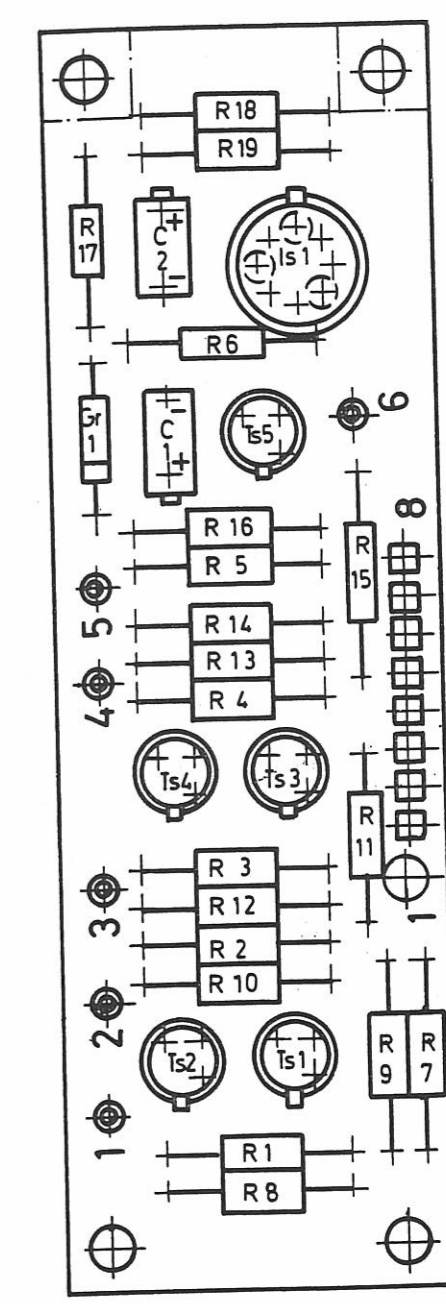
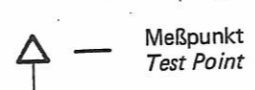
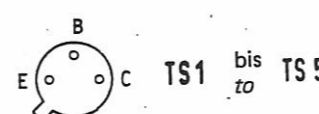
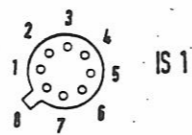
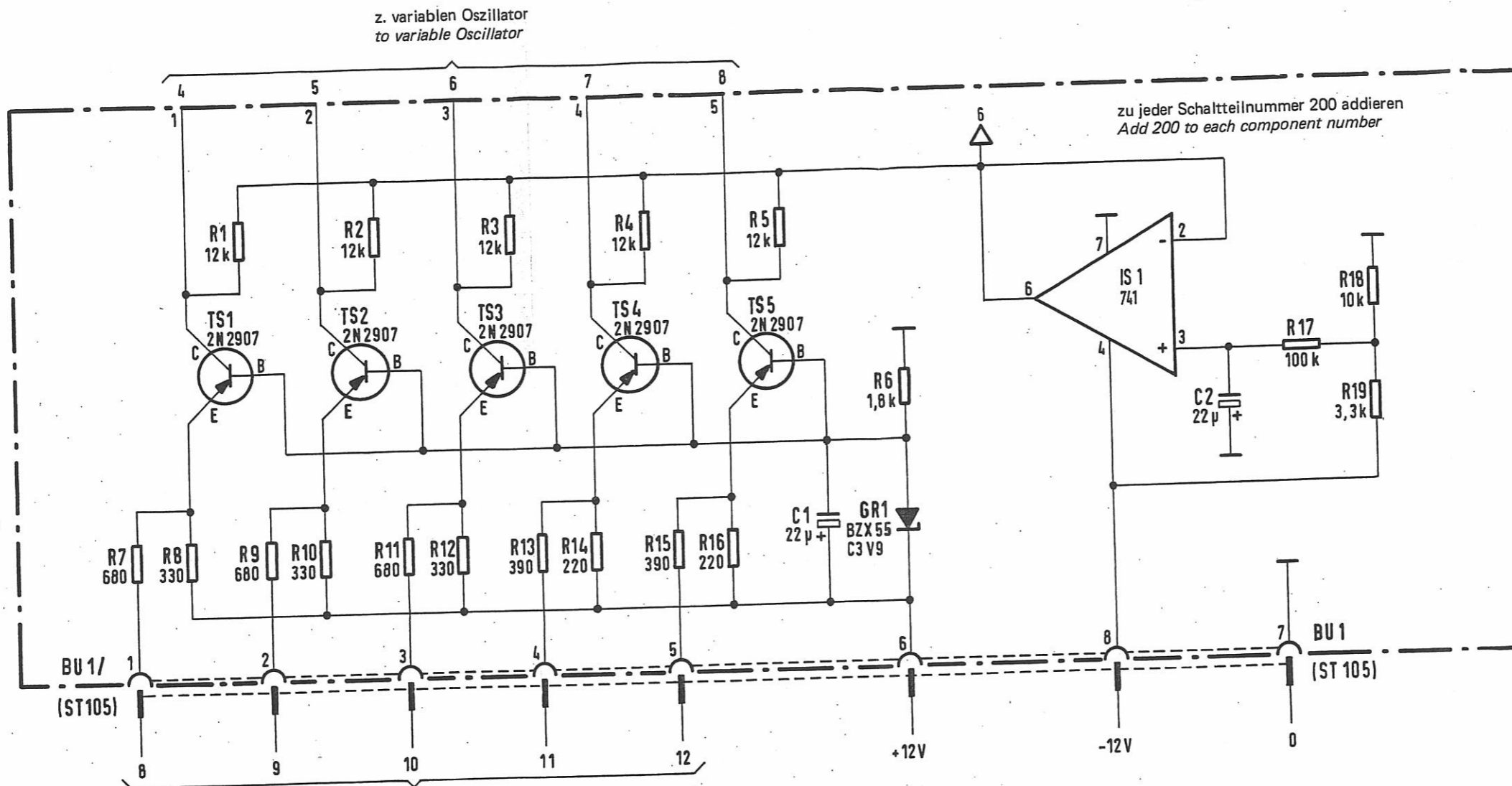


1. Oszillator
z. Digitalkarte
First Oscillator
to Digital Card

(BU 401)₃
1. Oszillator
z. HF-Teil
First Oscillator
to RF Module

Stromlaufplan Trennverstärker 1
Circuit Diagram of Buffer Amplifier 1
Anlage 11/ Annex 11

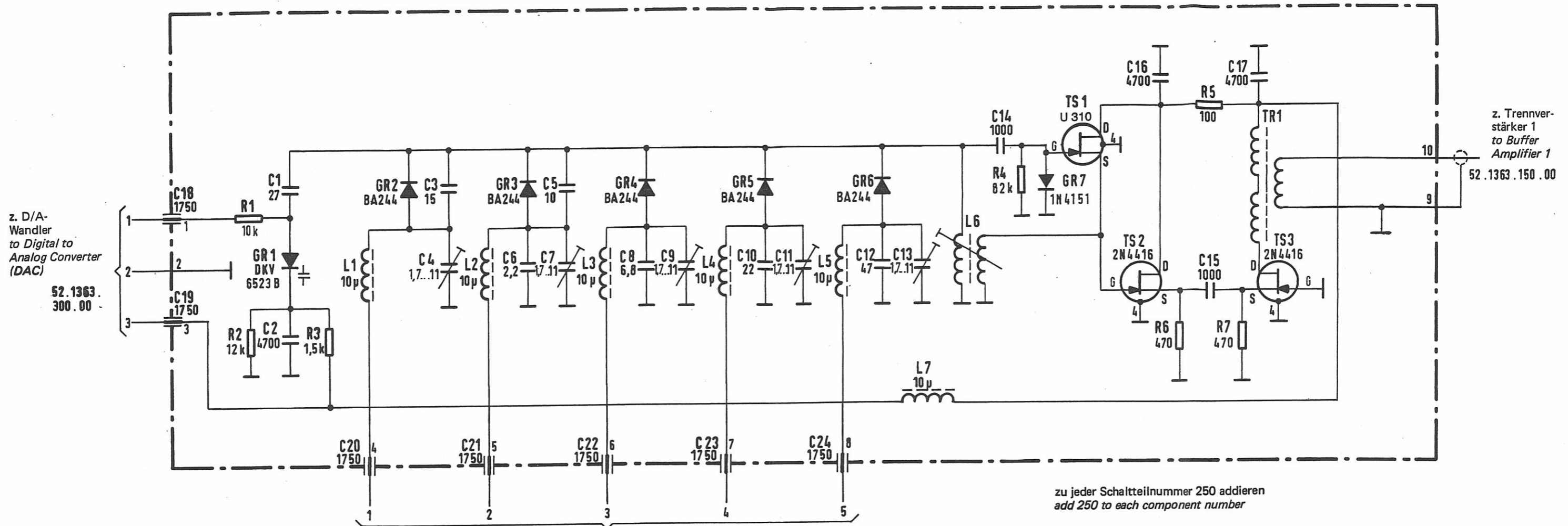




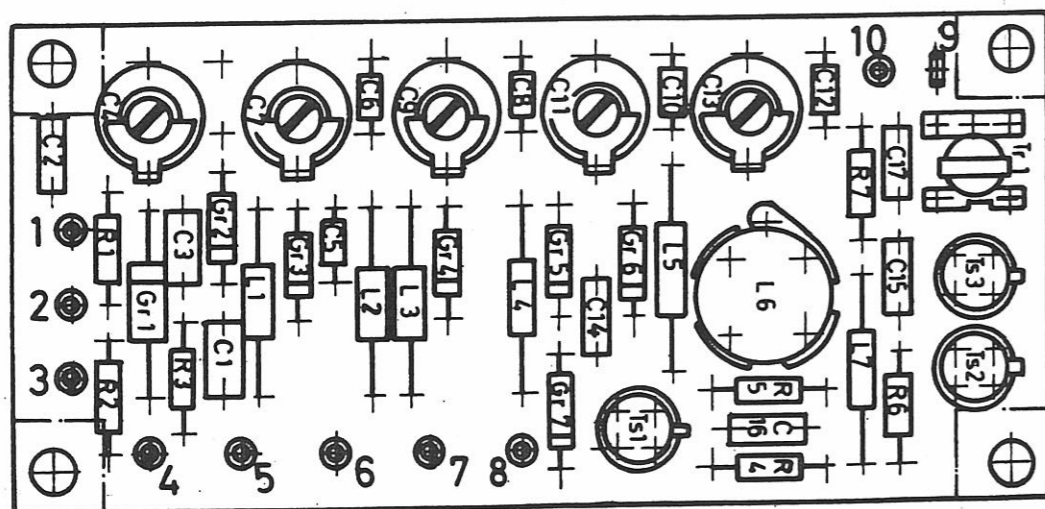
Bestückungsplan/ Printed Circuit Board

Stromlaufplan Schalter
Circuit Diagram of Switch
Anlage 12/ Annex 12

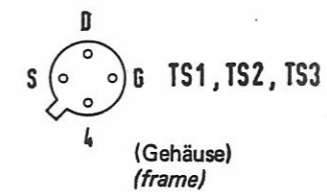


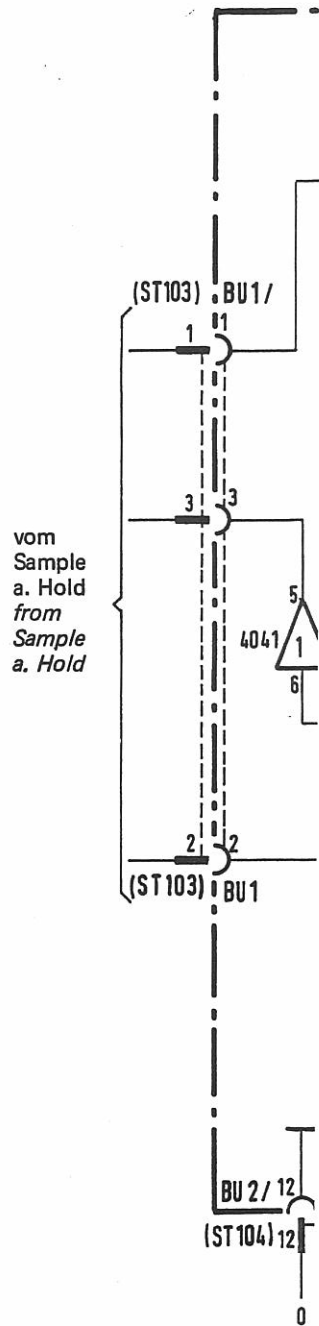


z. Schalter to Switch 52.1363.200.00

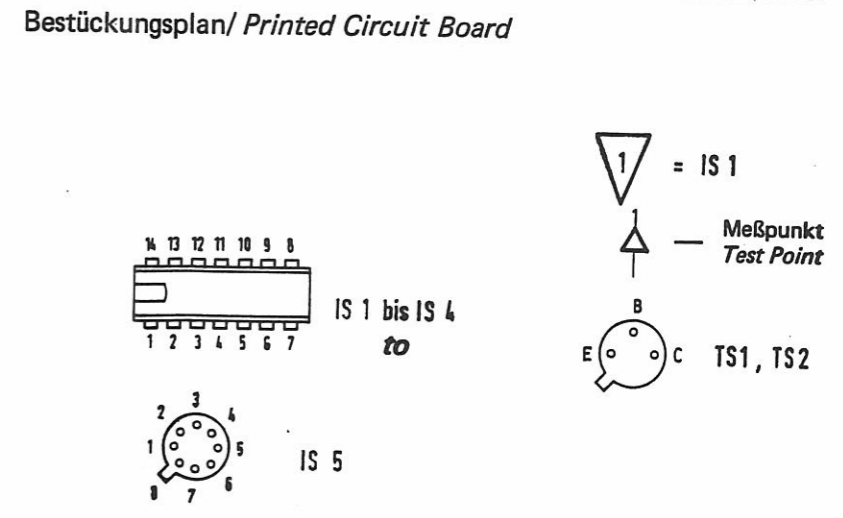
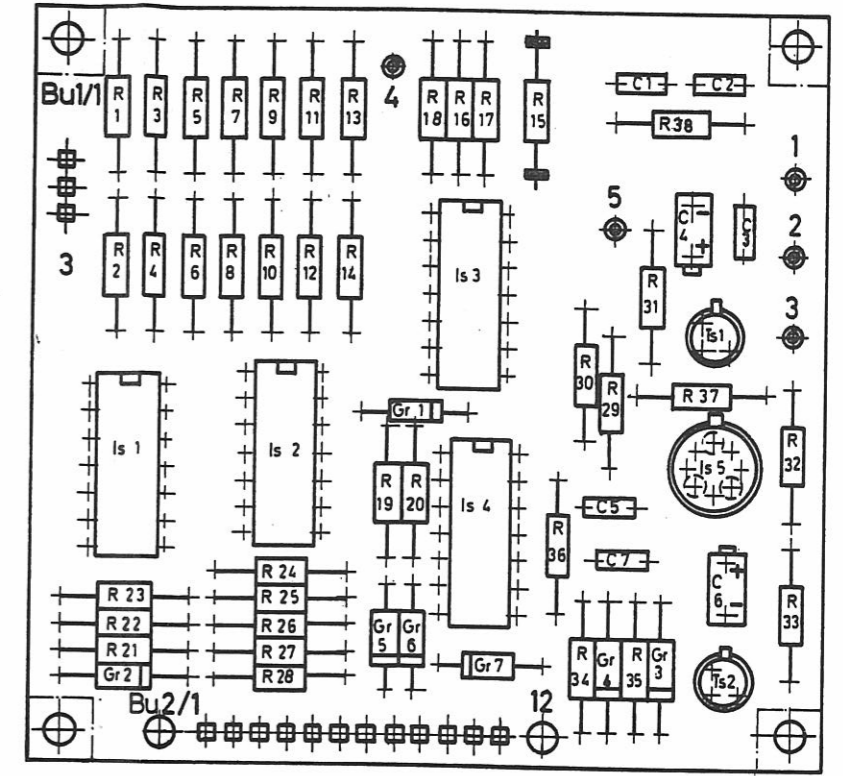
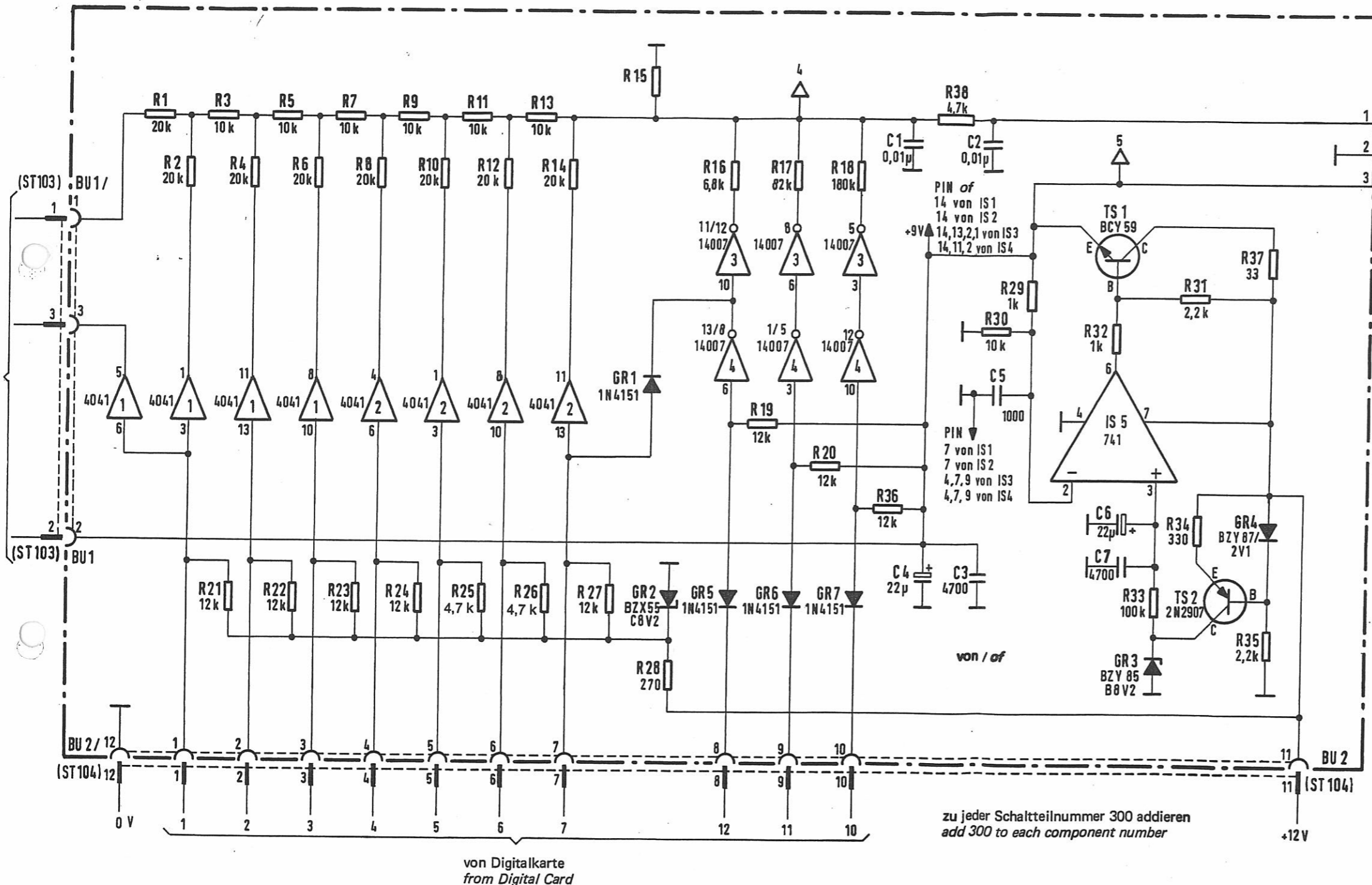


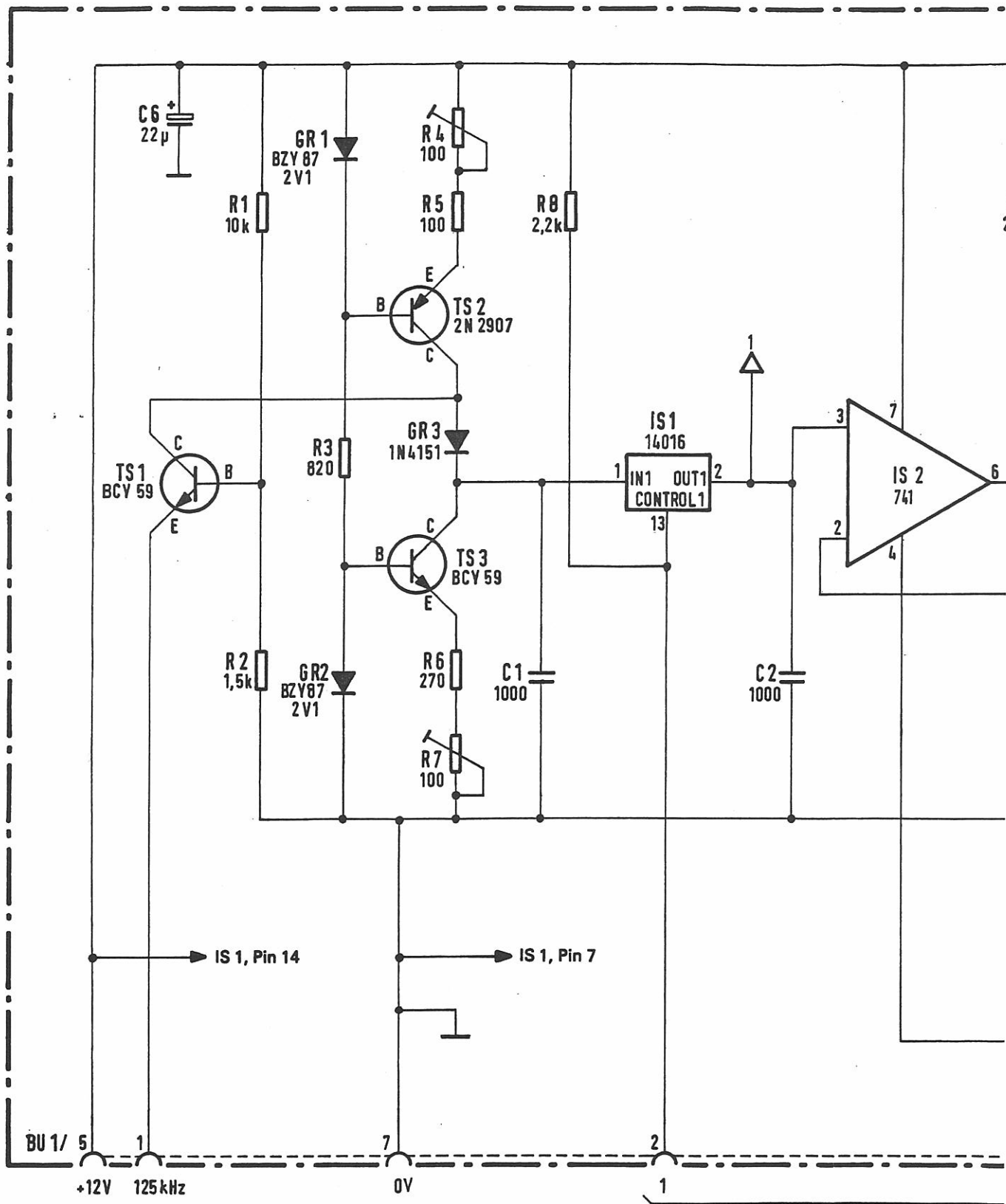
Bestückungsplan/ Printed Circuit Board

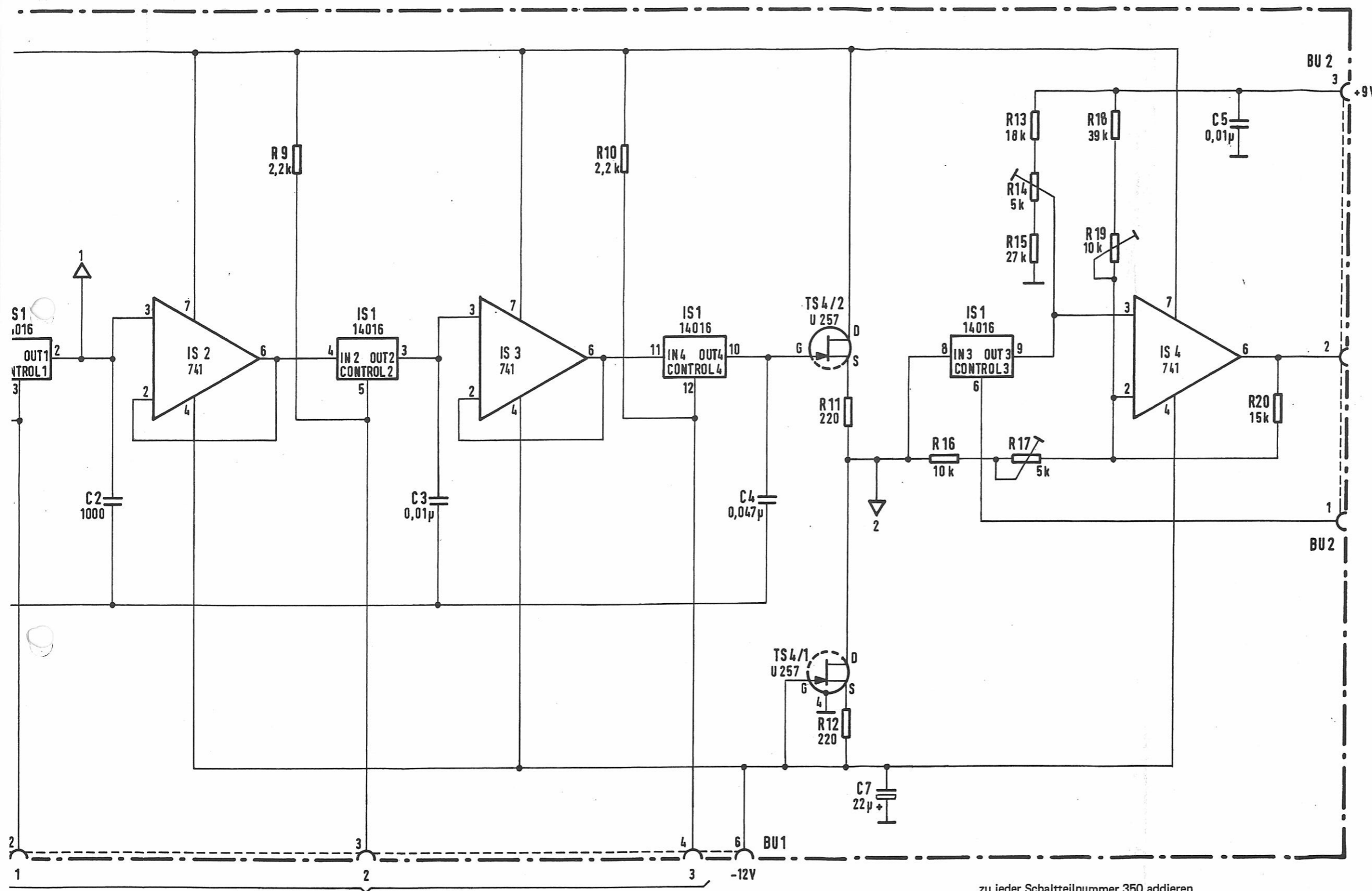




14
1-2

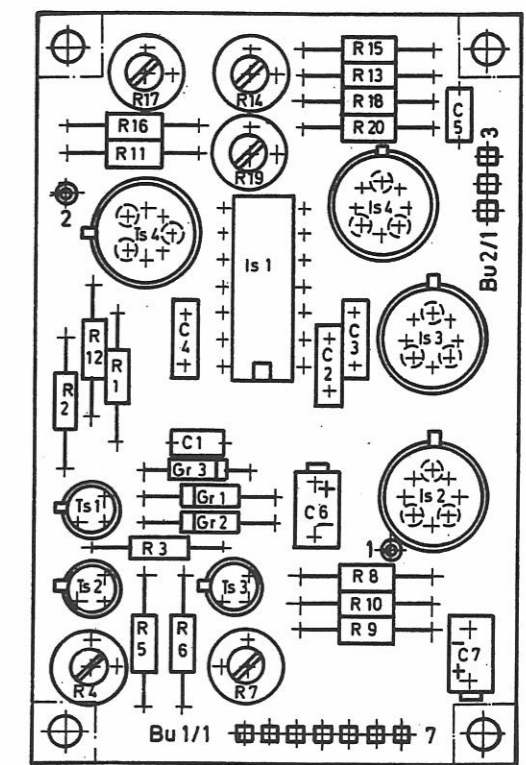




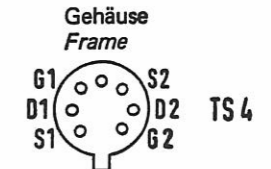
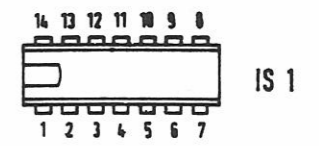
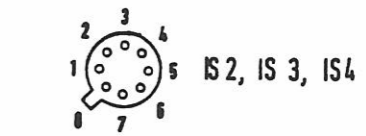


Abtastimpuls
Sensing Pulse

zu jeder Schalteilnummer 350 addieren
add 350 to each component number



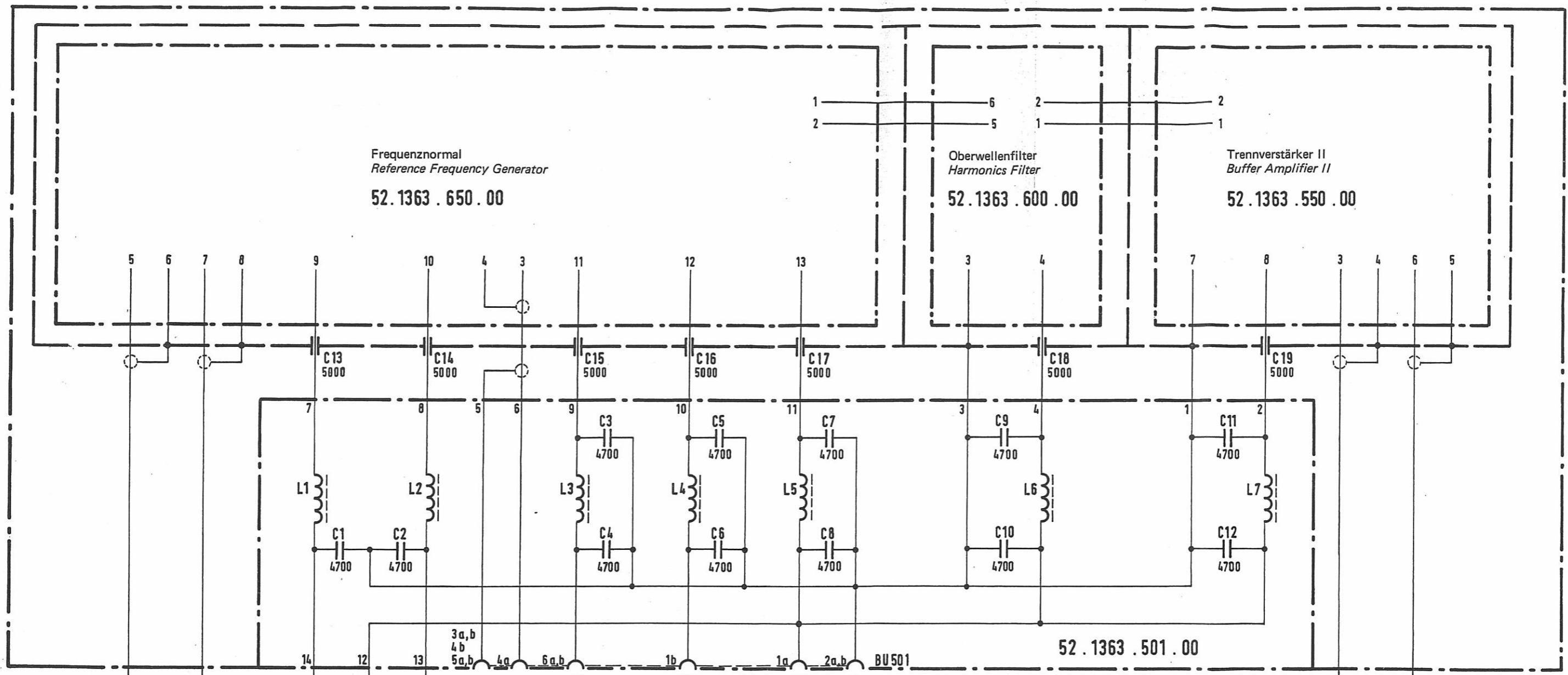
Bestückungsplan/ Printed Circuit Board



Meßpunkt
Test Point

Stromlaufplan Sample and Hold
Circuit Diagram of Sample and Hold
Anlage 15/ Annex 15





200 kHz z. Demodulator to Demodulator
 Frequenznormal Eingang Input Reference Frequency Generator

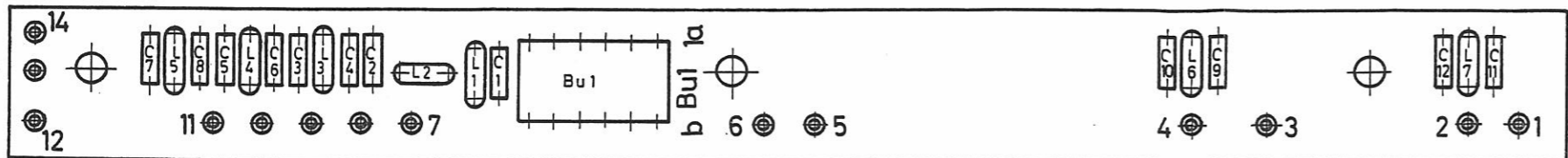
extern / intern Frequenznormal external / internal Reference Frequency Generator

250 kHz z. Digitalkarte to Digital Card

zu jeder Schalteilnummer 500 addieren add 500 to each component number

(BU 401) 2 z. HF - Teil to RF Module
 (BU 401) 4 z. F1 - Gerät to F1 Unit

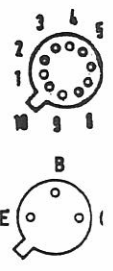
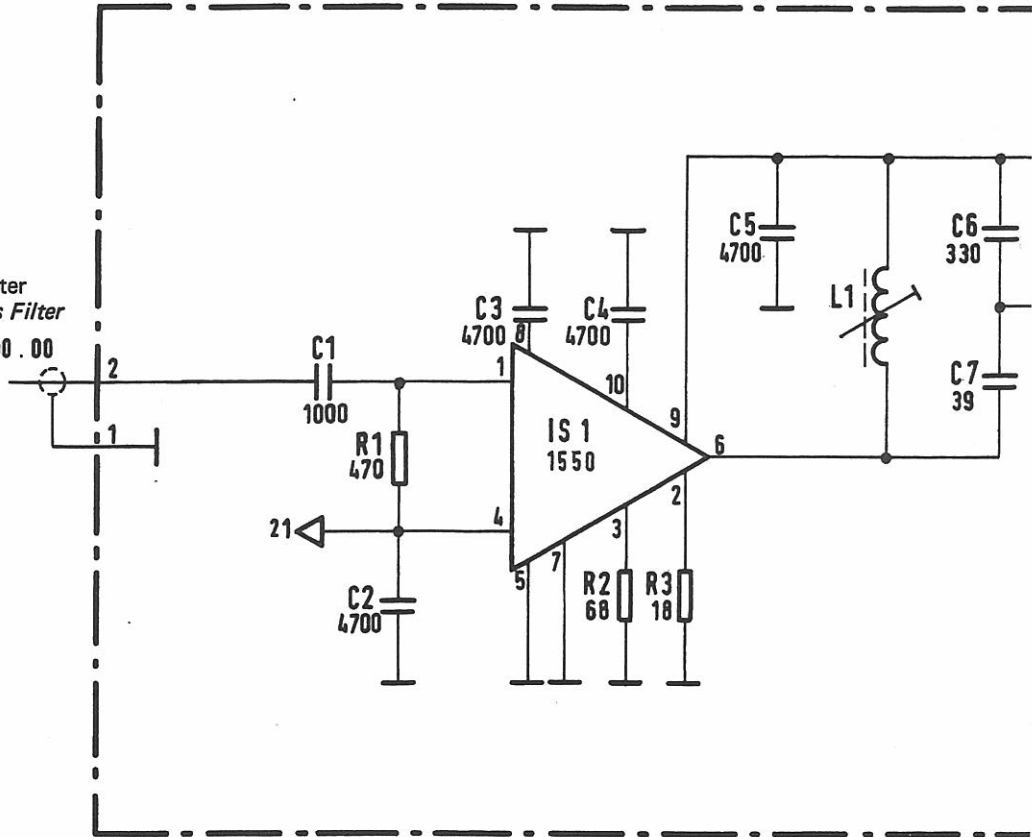
Oszillator 2 - Ausgang Output Oscillator 2

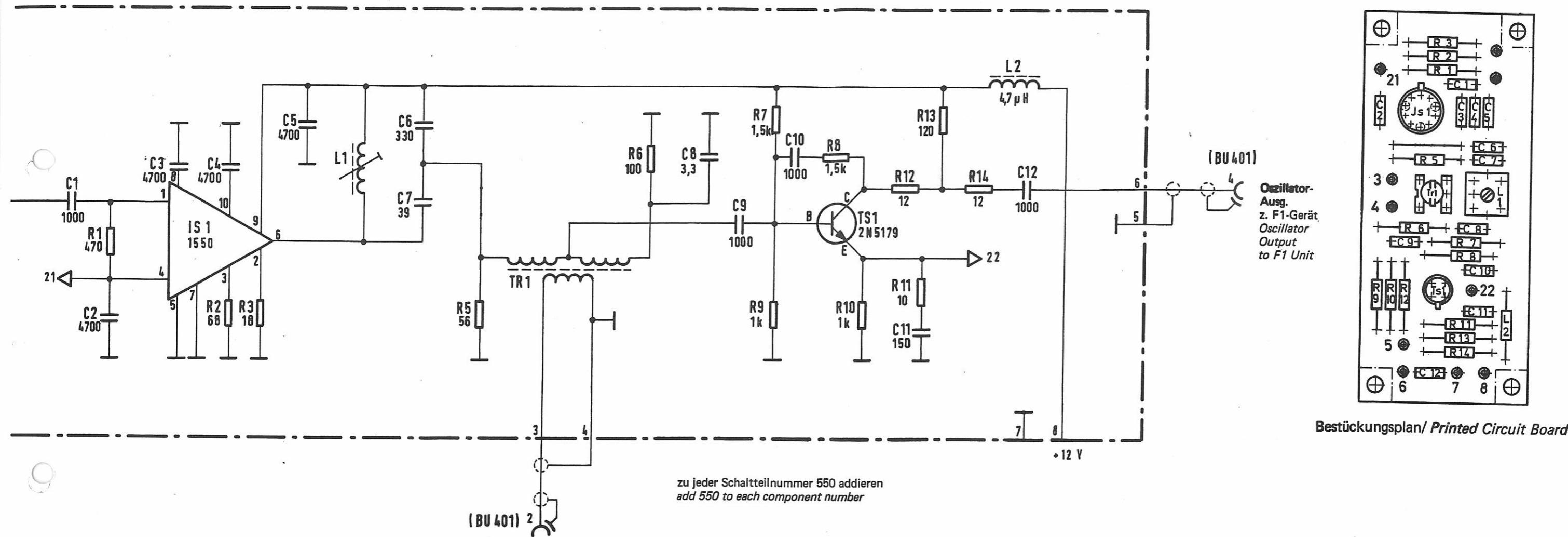


Bestückungsplan/ Printed Circuit Board



v. Oberwellenfilter
 from Harmonics Filter
 52.1363.600.00

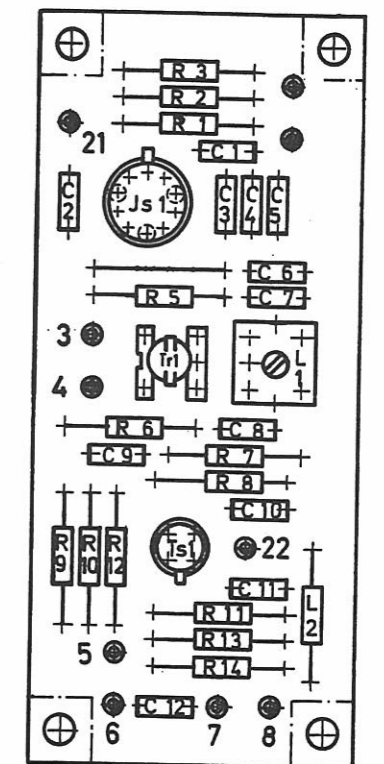




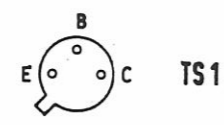
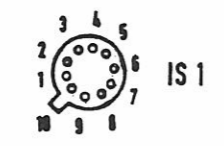
zu jeder Schalteilnummer 550 addieren
add 550 to each component number

Oszillator-Ausg.
z. F1-Gerät
Oscillator
Output
to F1 Unit

Bestückungsplan/ Printed Circuit Board



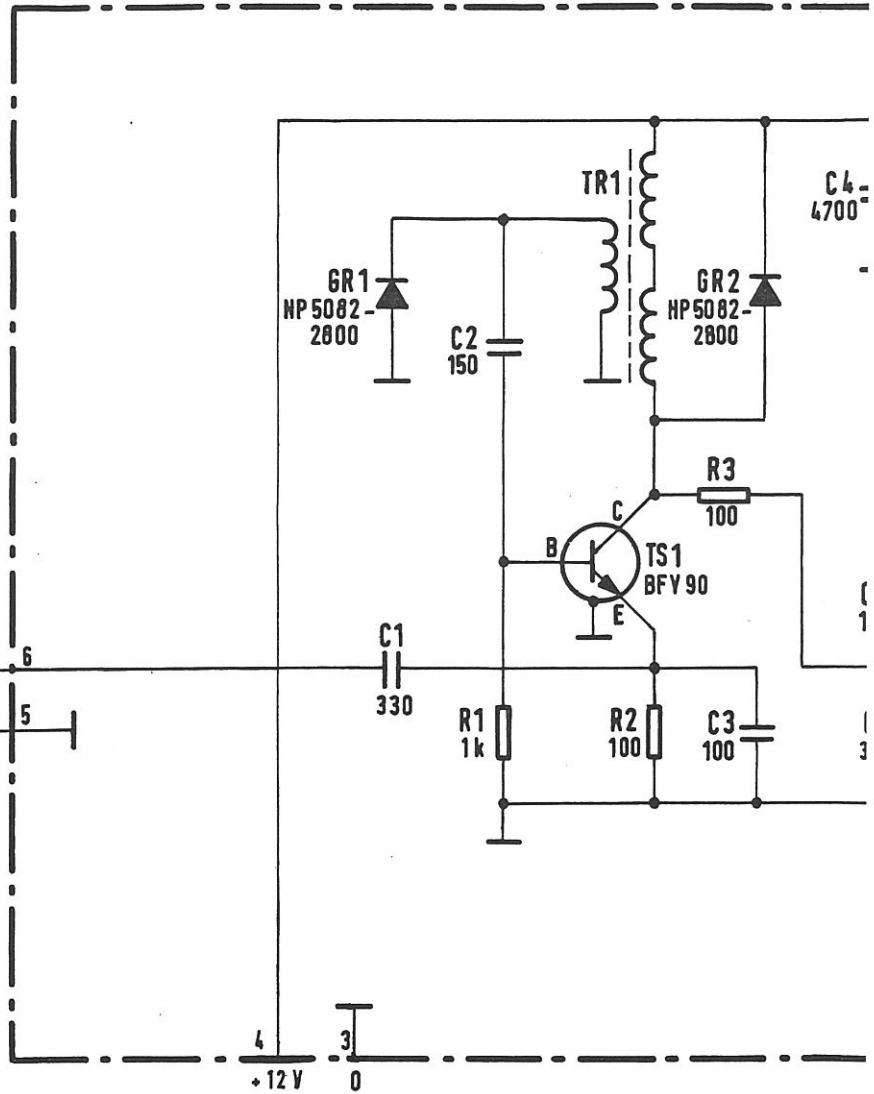
Oszillator-Ausg.
z. HF-Teil
Oscillator Output to RF Module

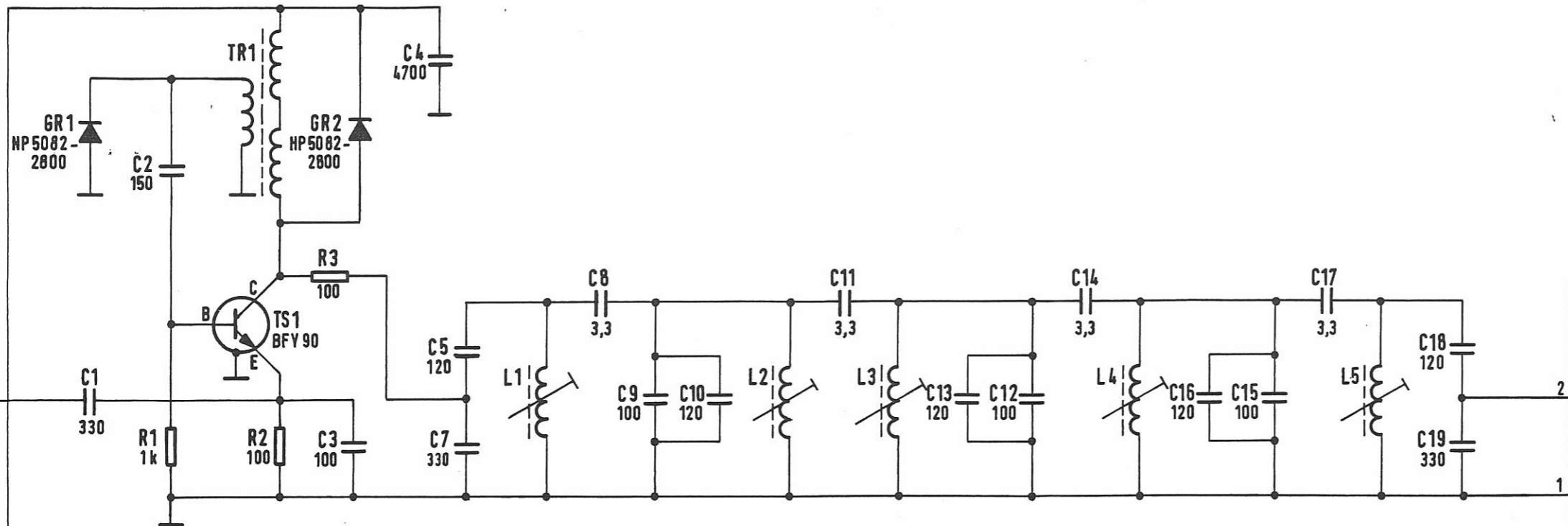


Meßpunkt
Test Point



v. Frequenz normal
from Reference
Frequency Generator
52.1363.650.00

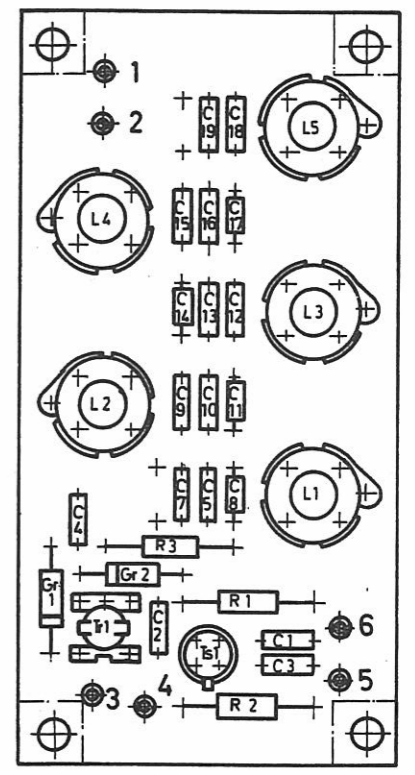




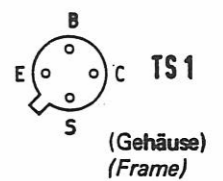
4
+12V
3
0

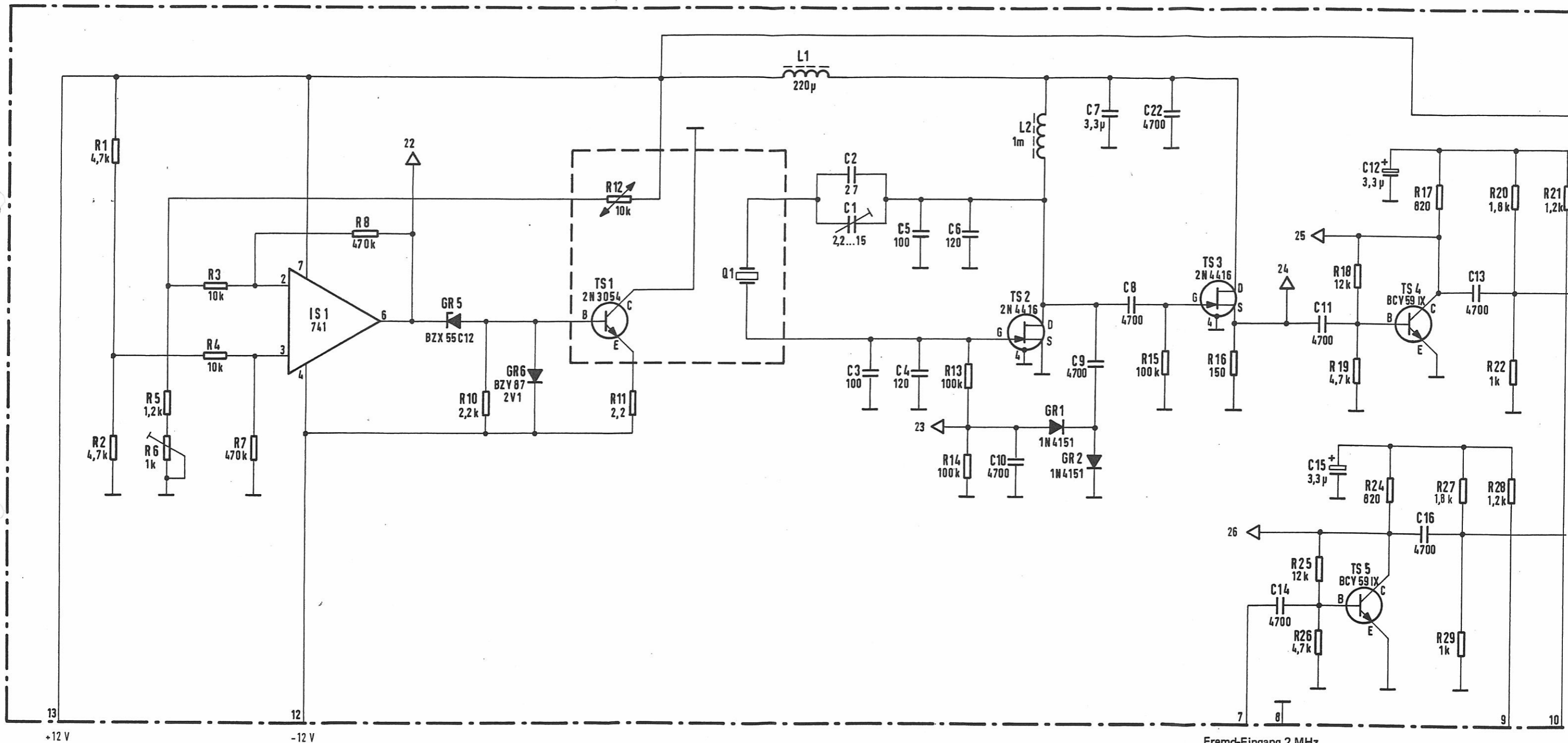
zu jeder Schalteilnummer 600 addieren
add 600 to each component number

z. Trennverst. 2
to Buffer
Amplifier 2
52.1363.550.00

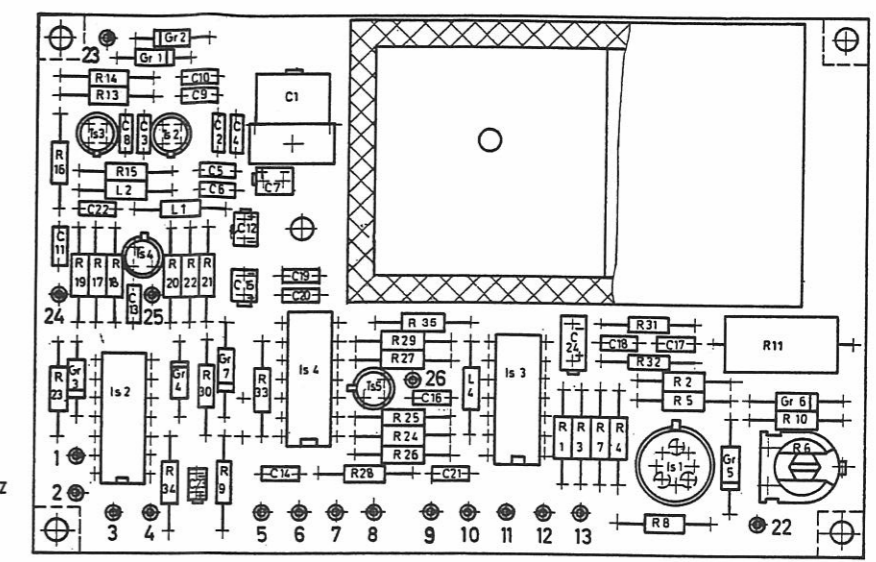
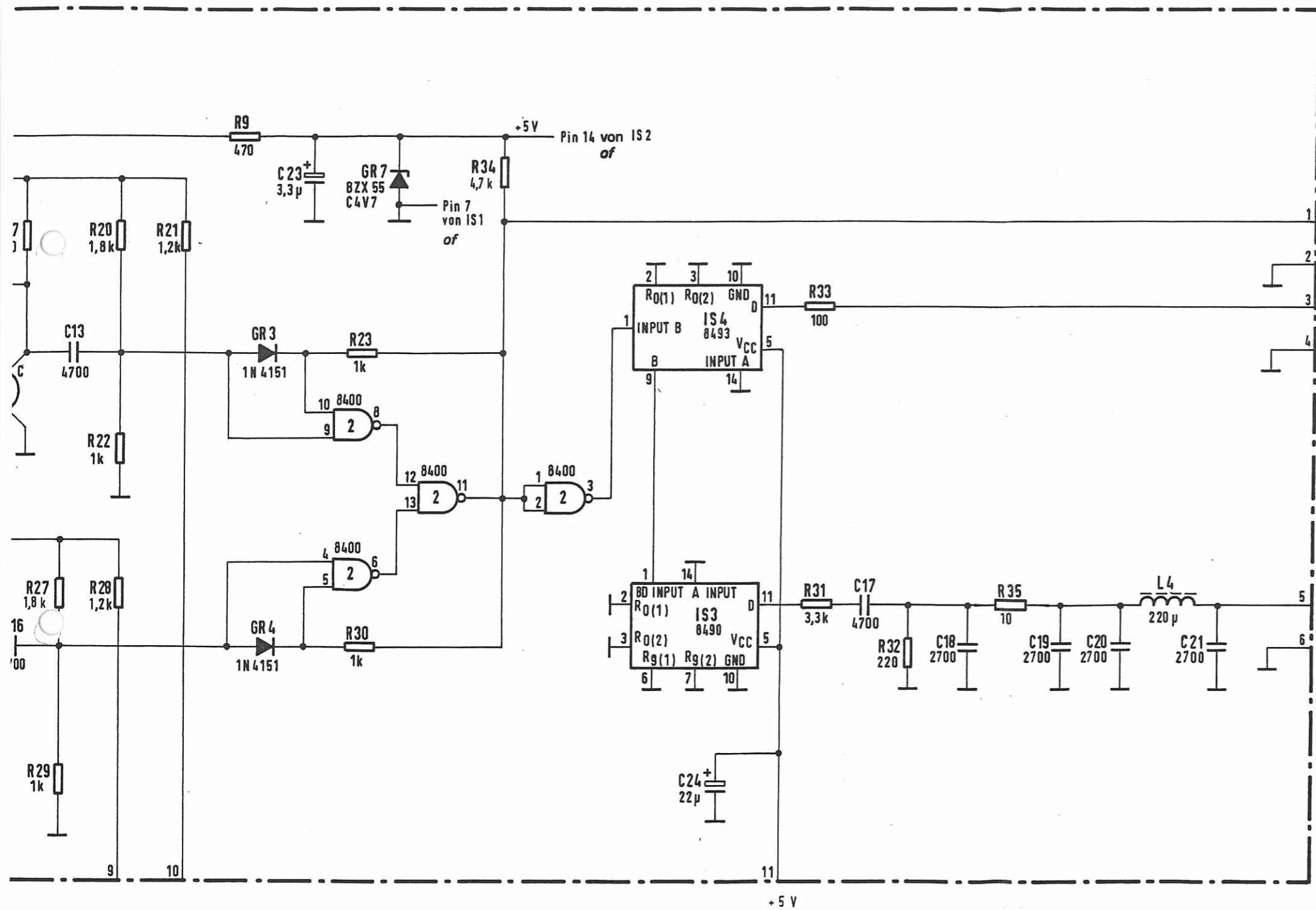


Bestückungsplan/ Printed Circuit Board

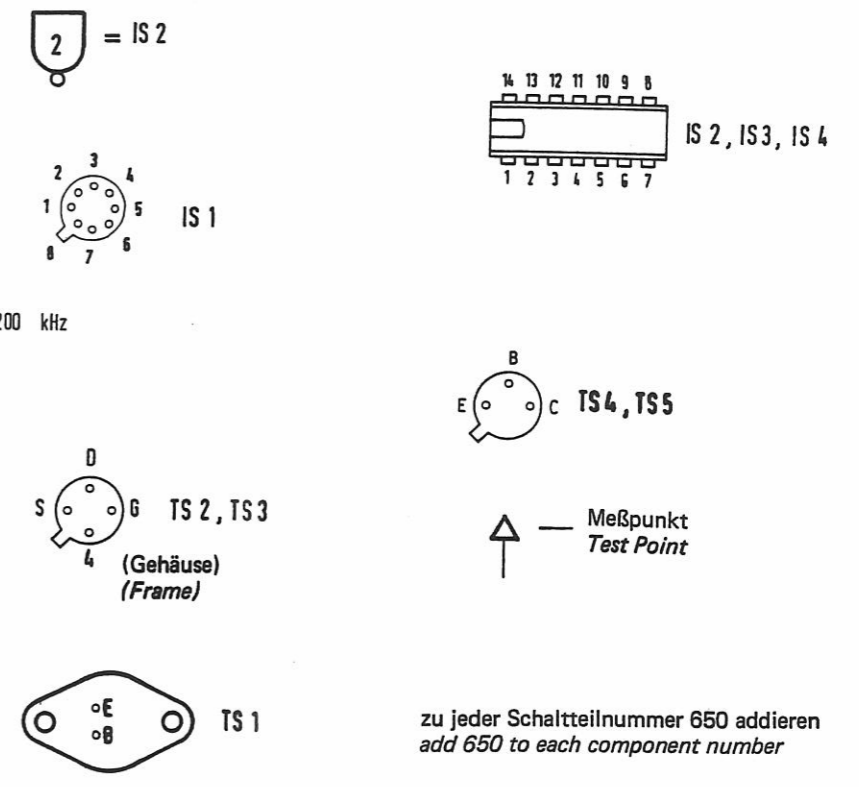




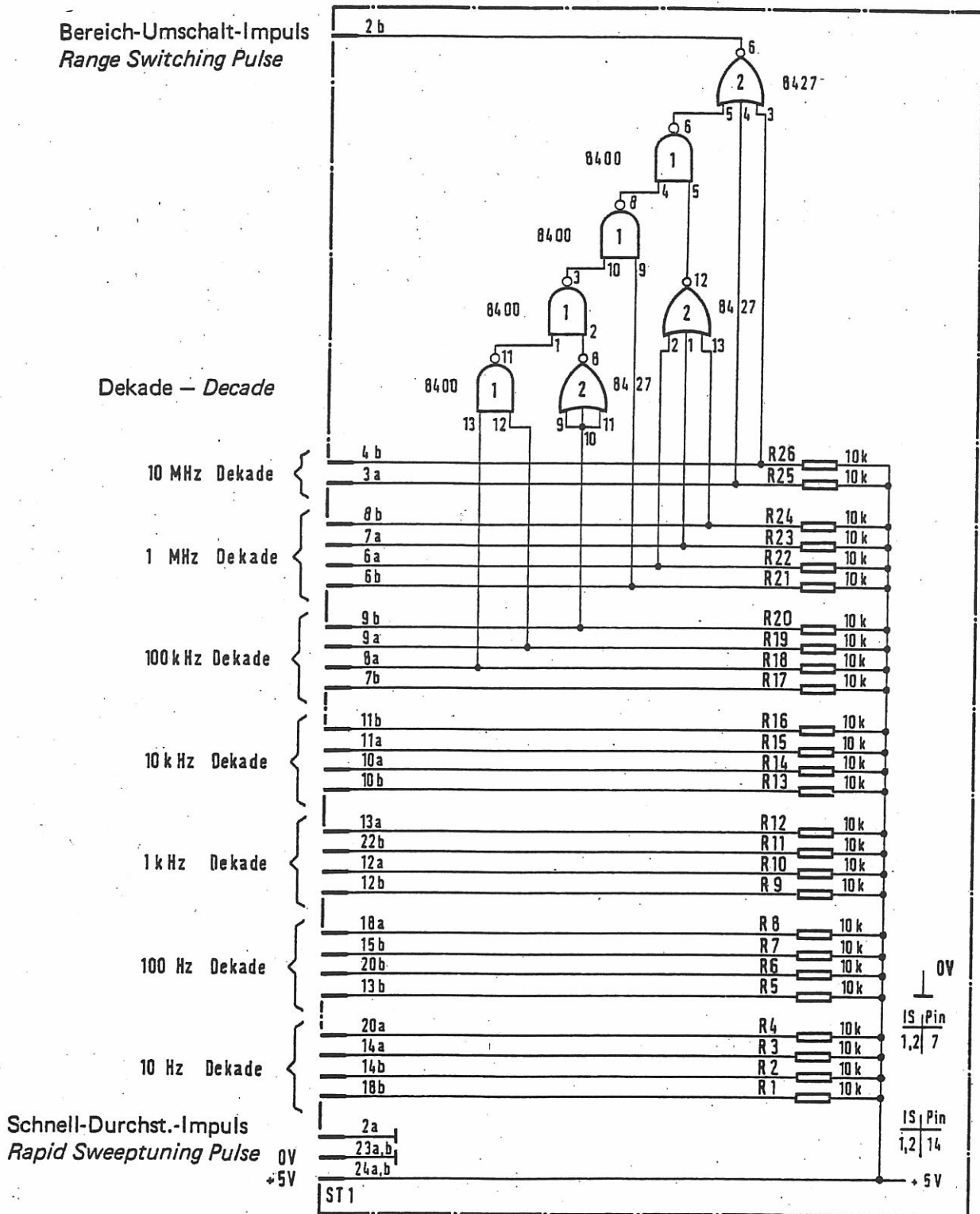
Fremd-Eingang 2 MHz
 Input for external
 2 MHz reference frequency



Bestückungsplan/ Printed Circuit Board

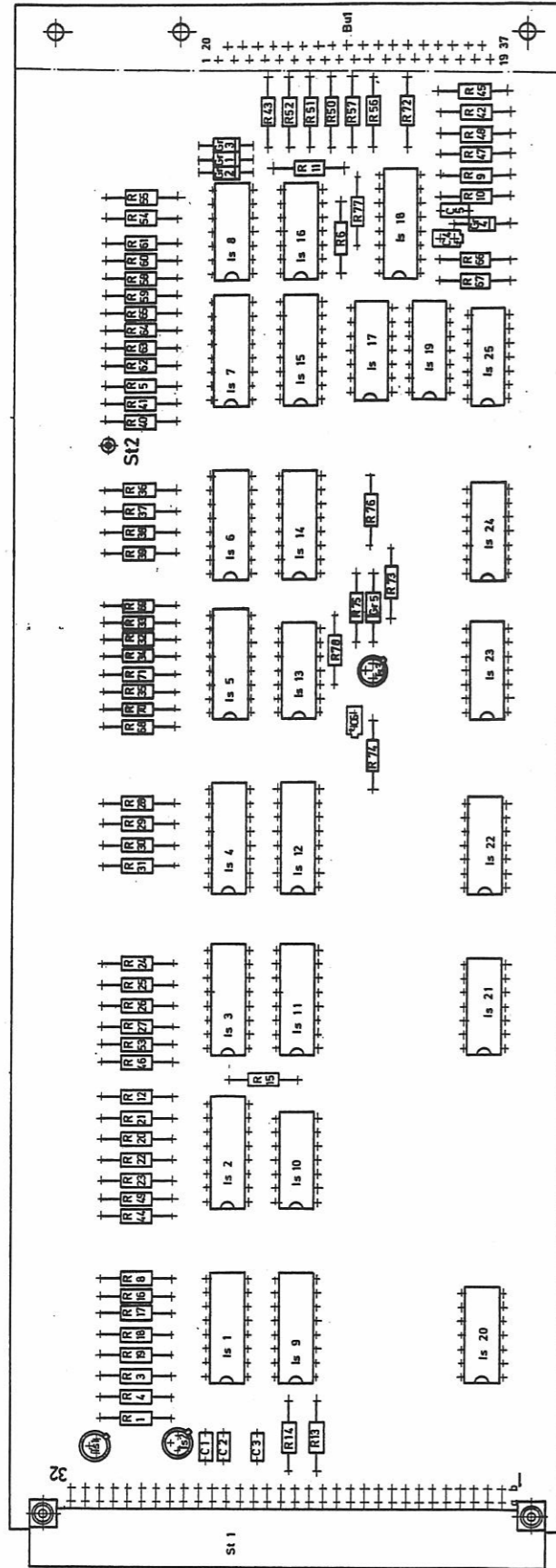


Bereich-Umschalt-Impuls
Range Switching Pulse

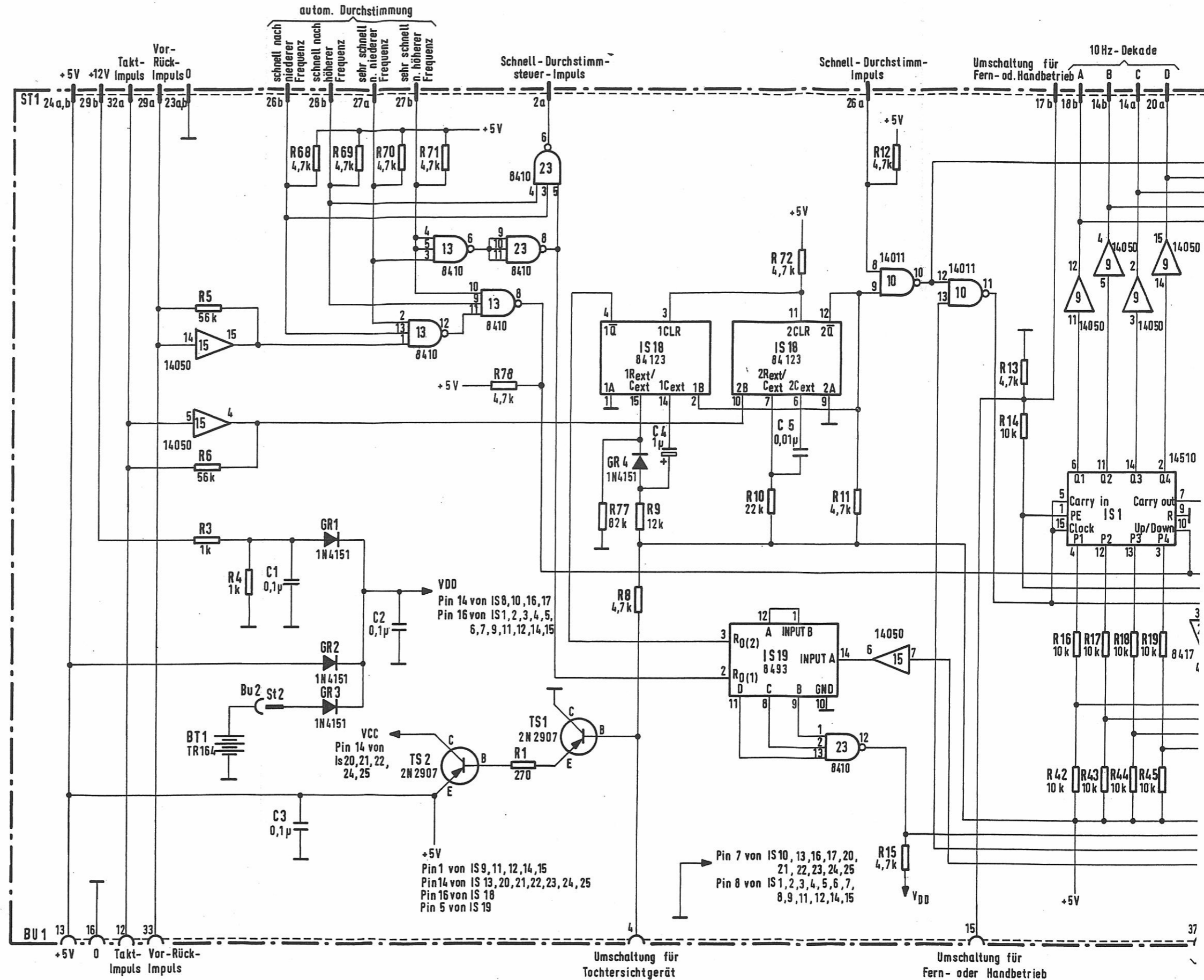


Bereichumschalt-Decodierung
Range Switching Decoder
Anlage 20/Annex 20

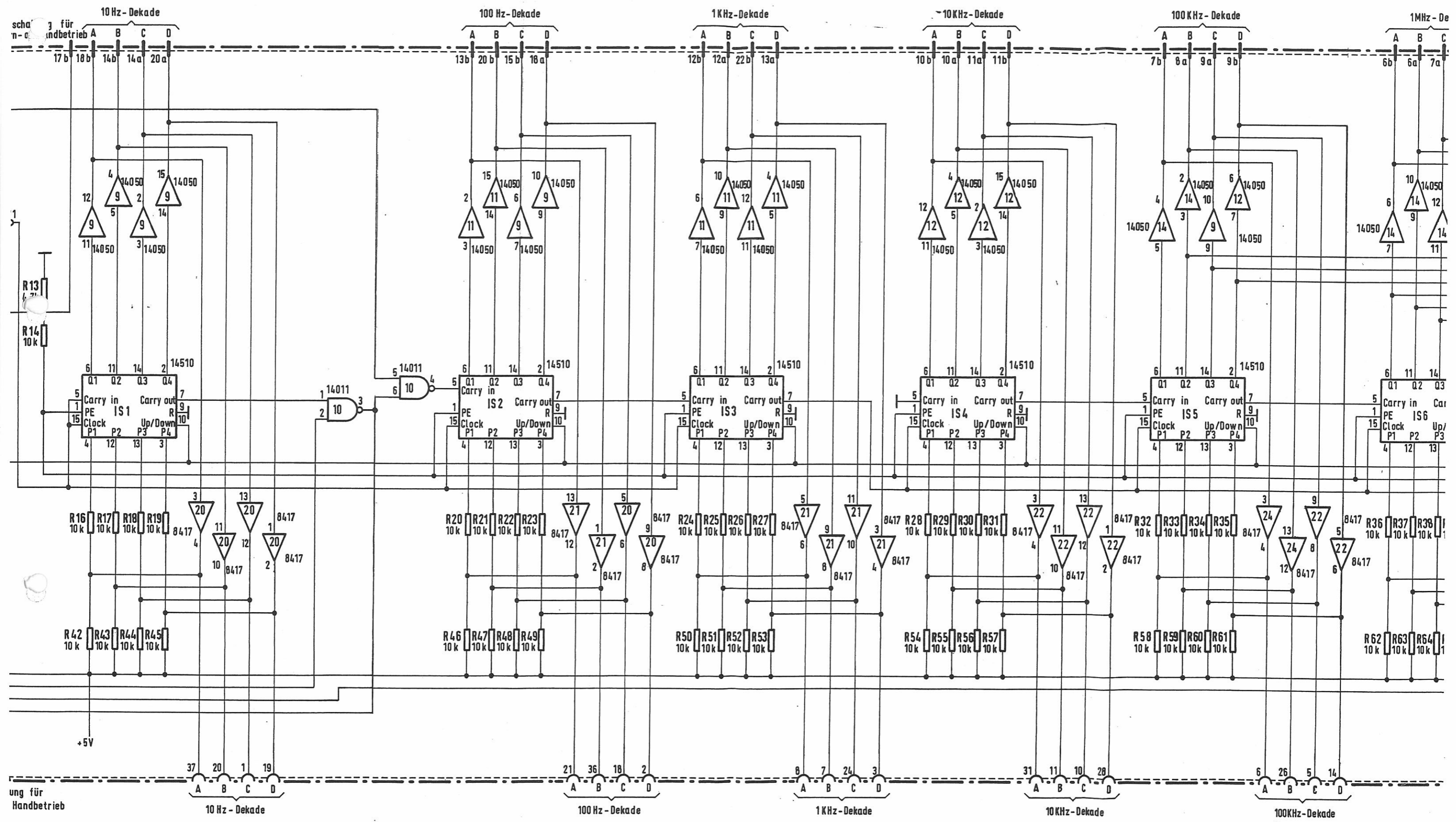




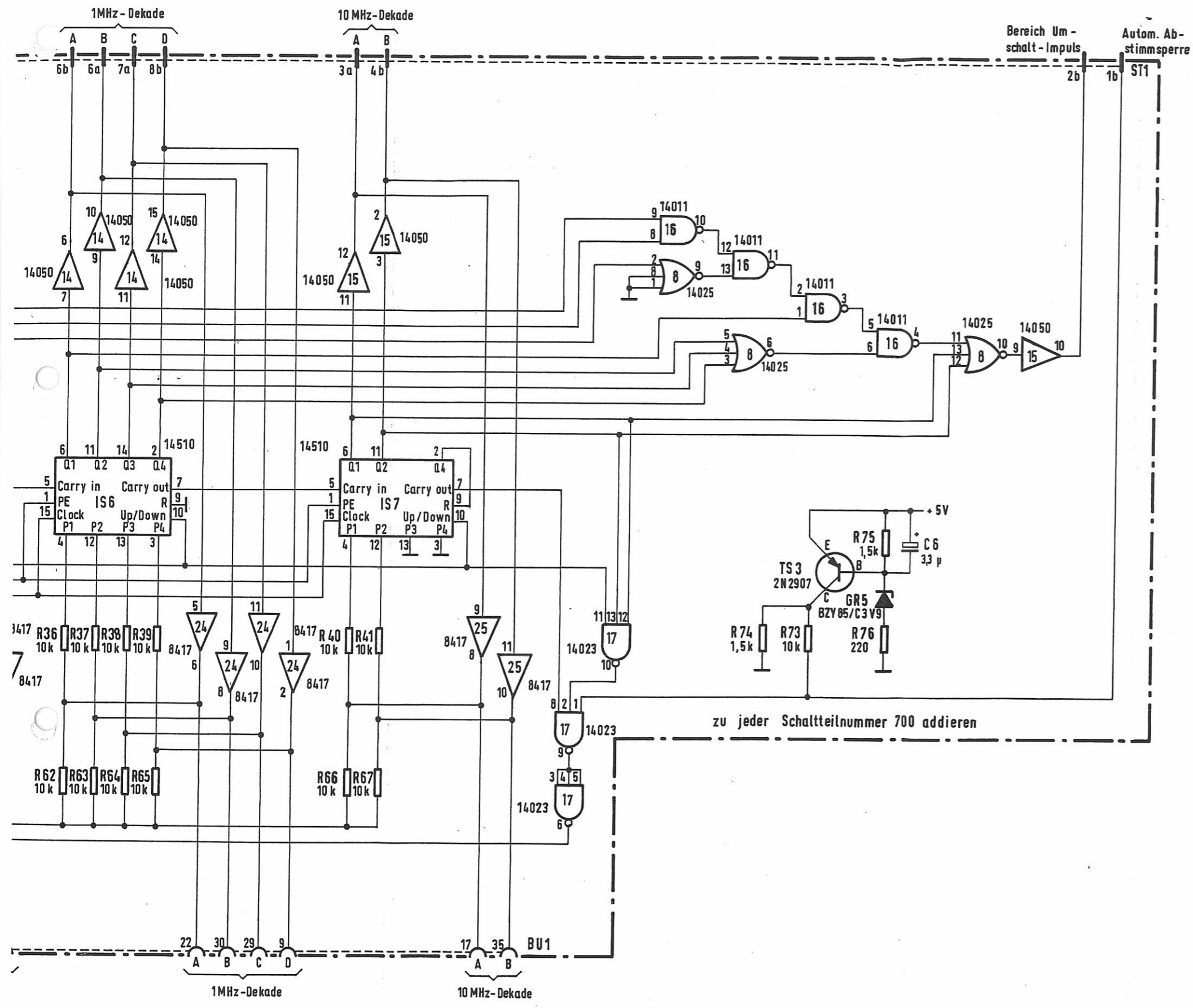
Bestückungsplan/Printed Circuit Board



20
1-3

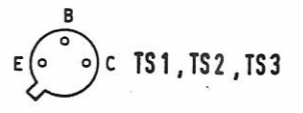
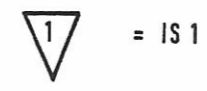
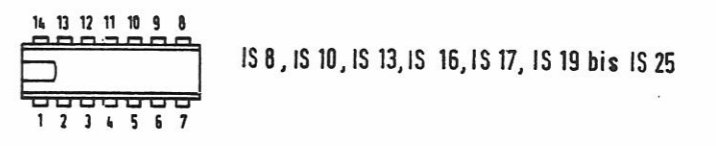
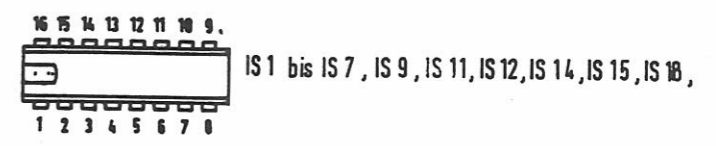


20
2-3



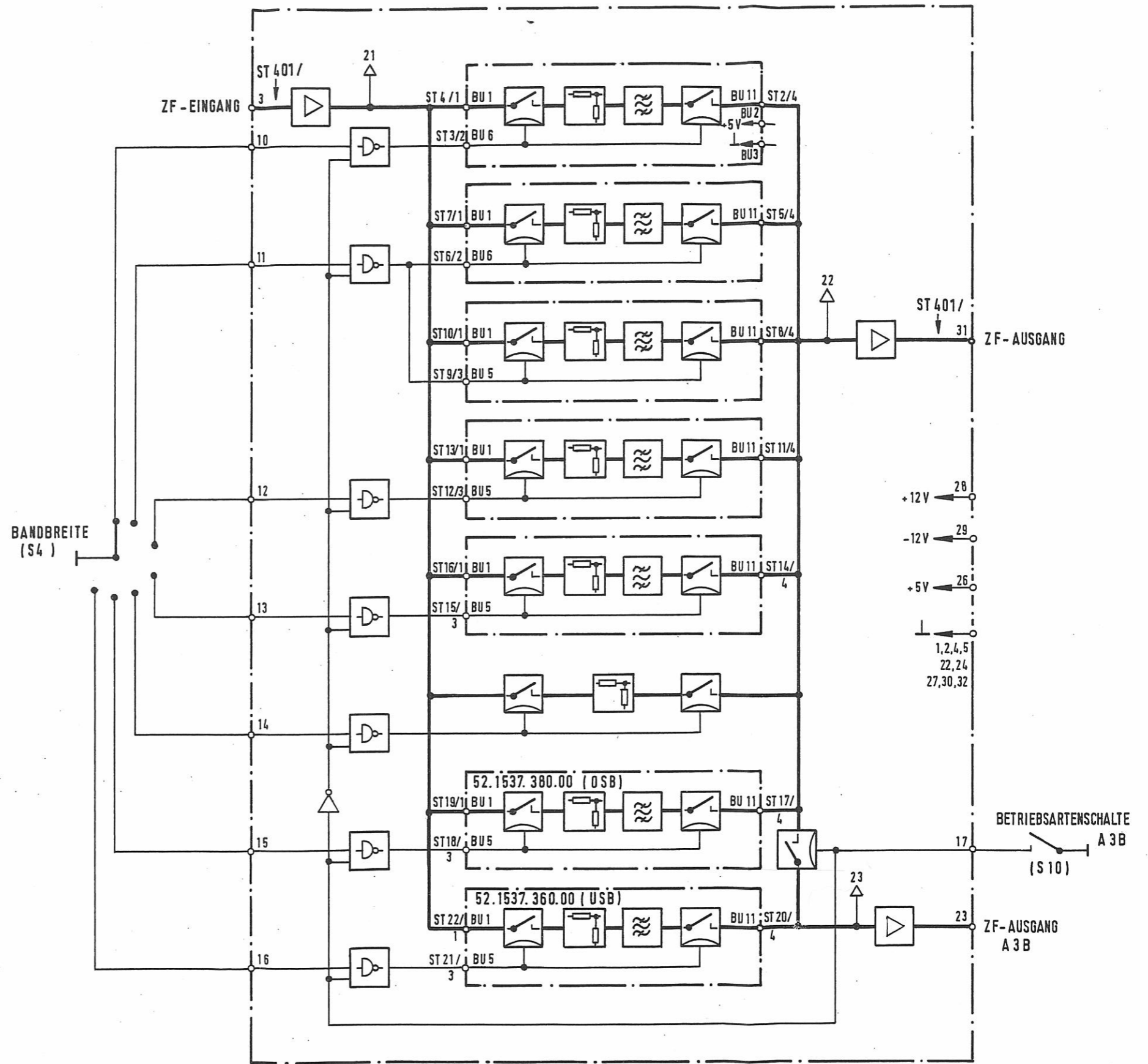
Taktimpuls
 Vor-Rück-Impuls
 schnell nach niederer Frequenz
 schnell nach höherer Frequenz
 sehr schnell nach niederer Frequenz
 sehr schnell nach höherer Frequenz
 Schnell-Durchstimm-Impuls
 Schnell-Durchstimm-Impuls
 Umschaltung für Fern- od. Handbetrieb
 Dekade
 Bereich Umschalt-Impuls
 Autom. Abstimm Sperre
 Pin ... von
 Takt-Impuls
 Umschaltung für Tocht ersicht gerät
 Zu jeder Schaltteilnummer 700 addieren
 bis
 Automatische Durchstimmung

Clock Pulse
 Forwards Reverse Pulse
 rapid to lower frequency
 rapid to higher frequency
 very rapid to lower frequency
 very rapid to higher frequency
 Rapid Sweeptuning Pulse
 Rapid Sweeptuning Pulse
 Switchover for Remote or Manual Operation
 Decade
 Range Switching Pulse
 Automatic Tuning Disable
 Pin ... of
 Clock Pulse
 Switchover for Repeater Display Unit
 Add 700 to each components number
 to
 Automatic Sweeptuning



Stromlaufplan Speicher
 Circuit Diagram of Memory
 Anlage 20/ Annex 20

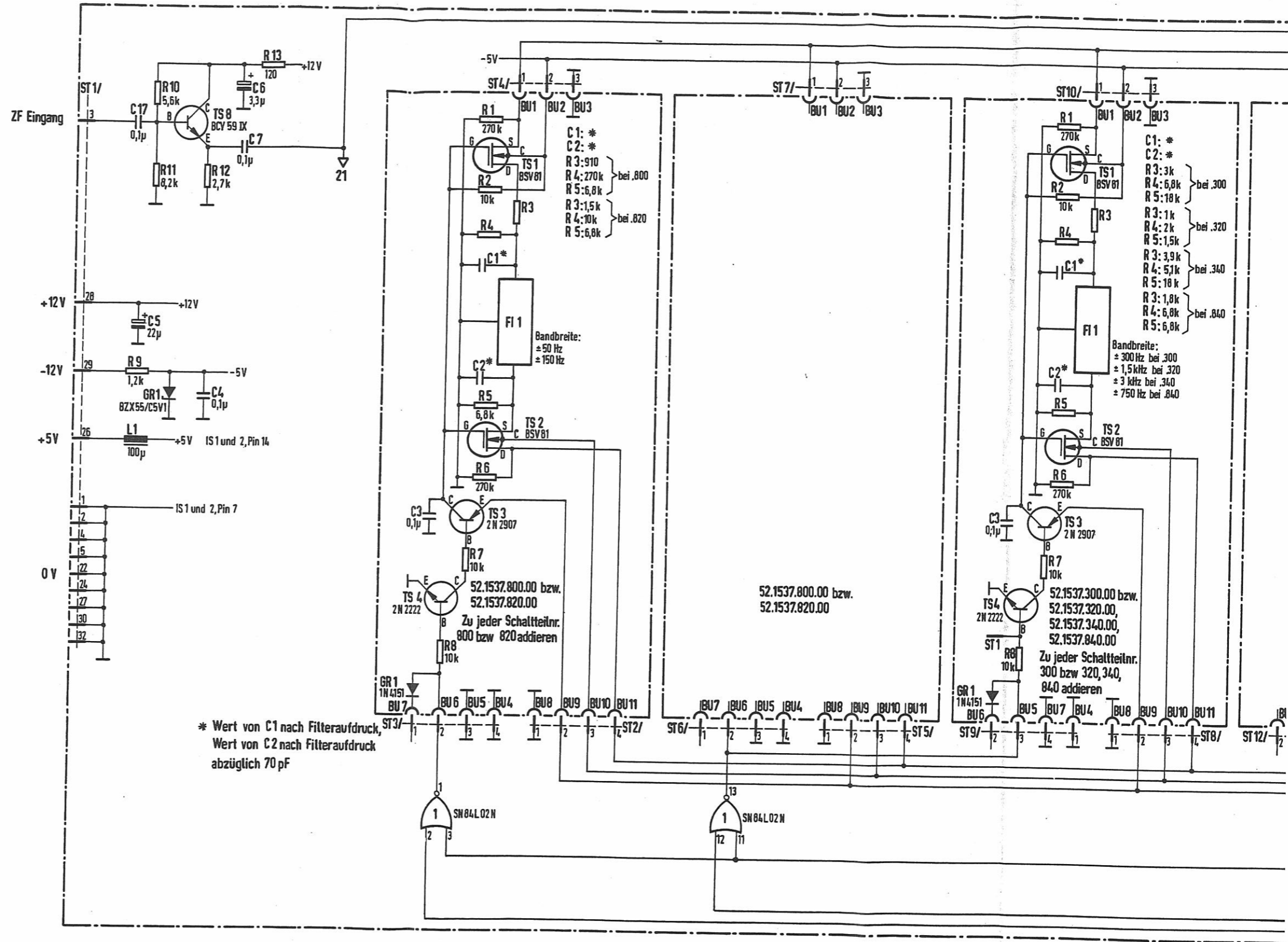
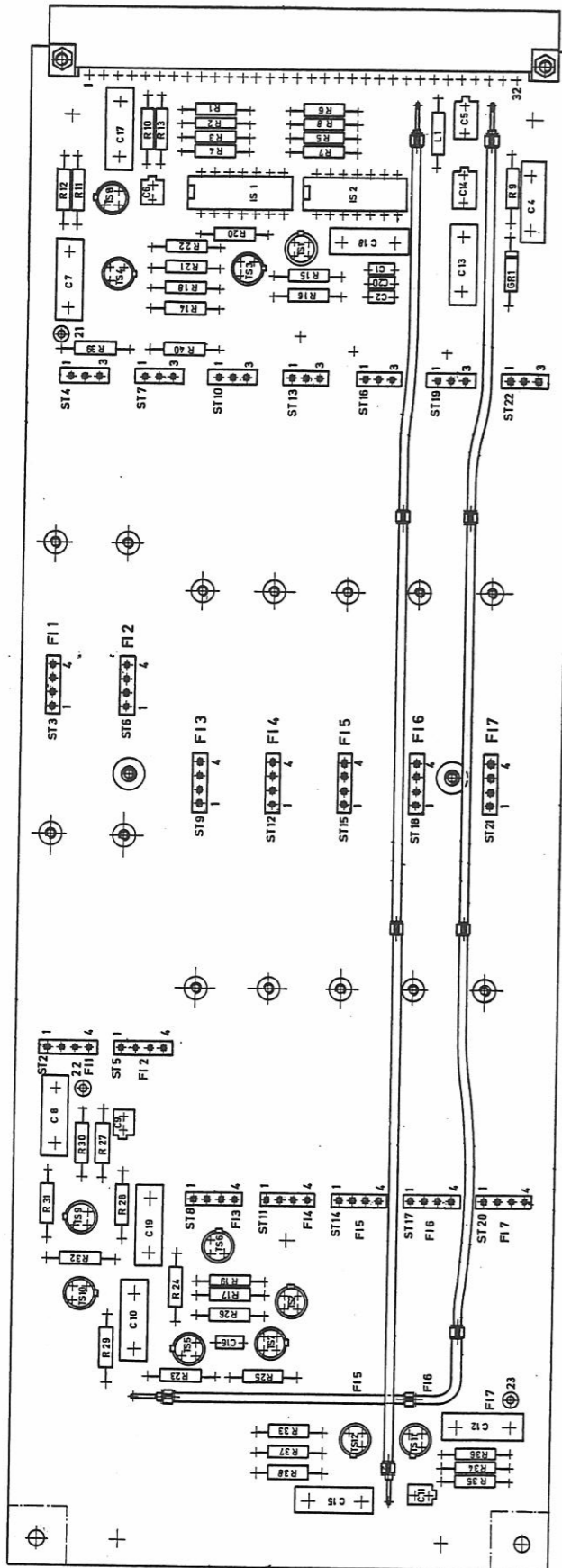




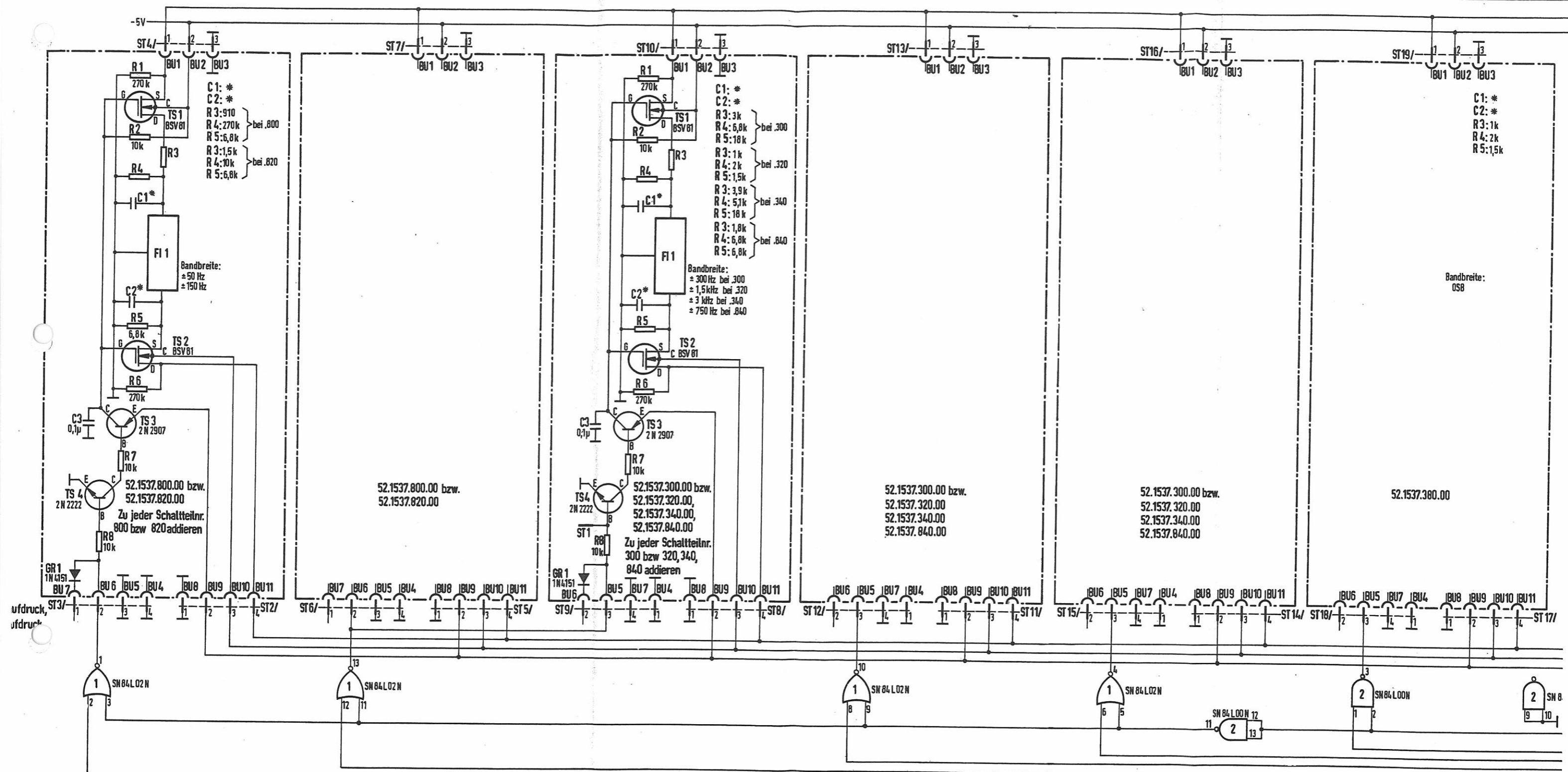
Bandbreite	Bandwidth
ZF-Eingang	IF Input
ZF-Ausgang	IF Output
Betriebsartenschalter	Service Selector Switch
OSB	USB
USB	LSB

Übersichtsschaltplan ZF-Filterbaugruppe FI 1510
 Block Diagram of IF Filter Module FI 1510
 Anlage 21/Annex 21
 Blatt 1/Sheet 1

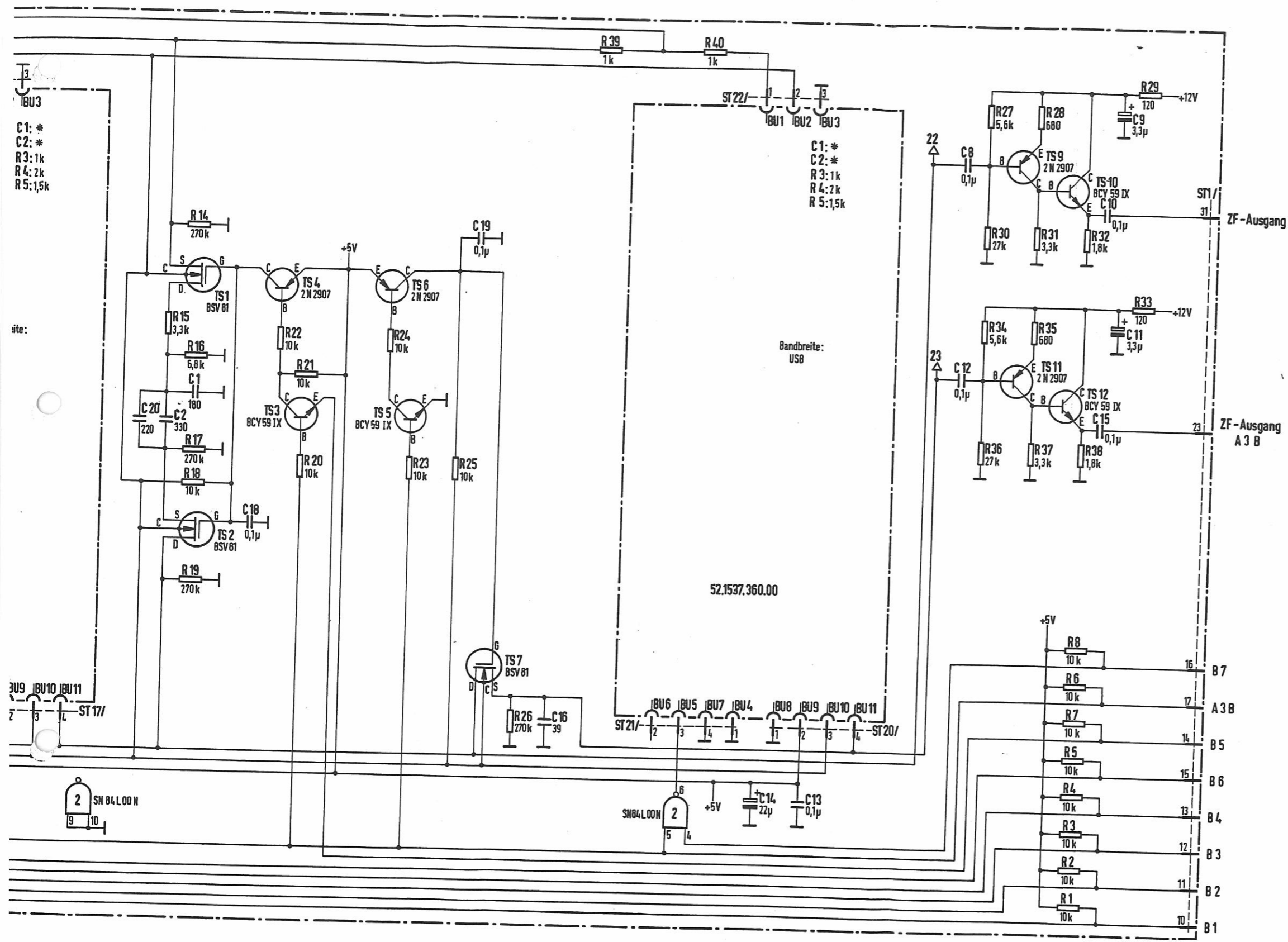




* Wert von C1 nach Filteraufdruck,
Wert von C2 nach Filteraufdruck
abzüglich 70 pF



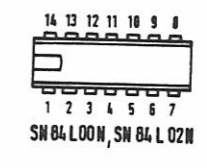
21-2
 2-3



ZF-Eingang
ZF-Ausgang
Wert von C
nach Filteraufdruck
abzüglich 70 pF
und
bei ...
bzw.
Bandbreite
Meßpunkt
zu jeder Schaltteilnummer ...
addieren

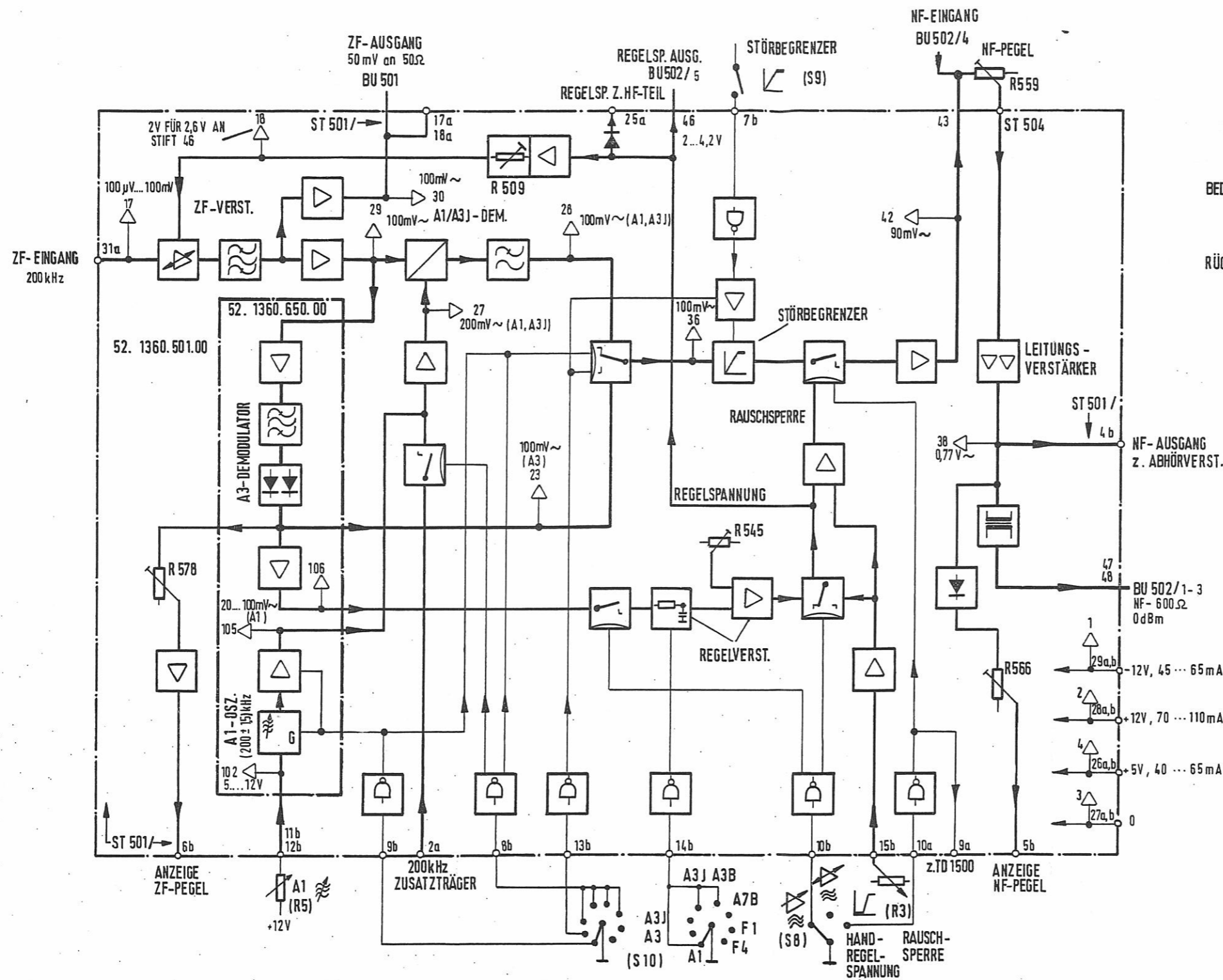
IF Input
IF Output
C-value according to
specification printed on filter
subtract 70 pF
and
in circuit board 52.1537...00
or
bandwidth
Test Point
add ... to each components
number

↑ : Meßpunkt



Stromlaufplan ZF-Filterbaugruppe FI 1510
Circuit Diagram of IF Filter Module FI 1510
Anlage 21/Annex 21
Blatt 2/Sheet 2
3-5



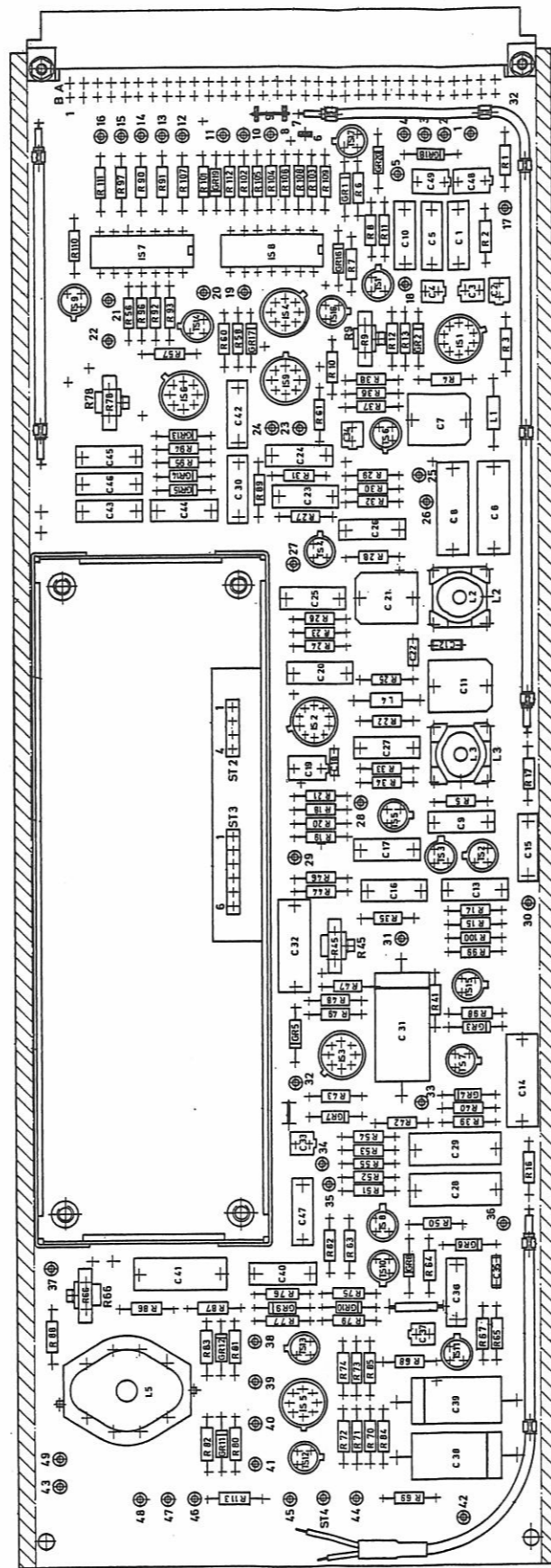


BEDIENFELD: R 3, R 5
S 8, S 9, S 10

RÜCKWAND: BU 501, BU 502
R 559

- | | |
|--------------------------------|--------------------------------------|
| ZF-Ausgang
50 mV an 50 Ω | IF Output
50 mV across 50 Ω |
| Regelsp. z. HF-Teil | AGC Voltage to RF Module |
| Regelsp. Ausg. | Output Gain Control Voltage |
| Störbegrenzer | Noise Limiter |
| NF-Eingang | AF Input |
| NF-Pegel | AF Level |
| ZF-Verst. | IF Amplifier |
| ZF-Eingang | IF Input |
| 2 V für 2,6 V an Stift 46 | 2 V for 2.6 V on pin 46 |
| Störbegrenzer | Noise Limiter |
| Bedienfeld | Control Panel |
| Rückwand | Rear Panel |
| Leitungsverstärker | Line Amplifier |
| NF-Ausgang z. Abhörverst. | AF Output to AF Monitoring Amplifier |
| Regelspannung | Gain Control Voltage |
| Rauschsperr | Squelch |
| Regelverst. | AGC Amplifier |
| A1-Osz. | BFO Oscillator |
| Anzeige ZF-Pegel | Indication IF Level |
| Zusatzträger | Auxiliary Carrier |
| Anzeige NF-Pegel
z. TD 1500 | Indication AF Level
to TD 1500 |
| Handregelspannung | MGC Voltage |

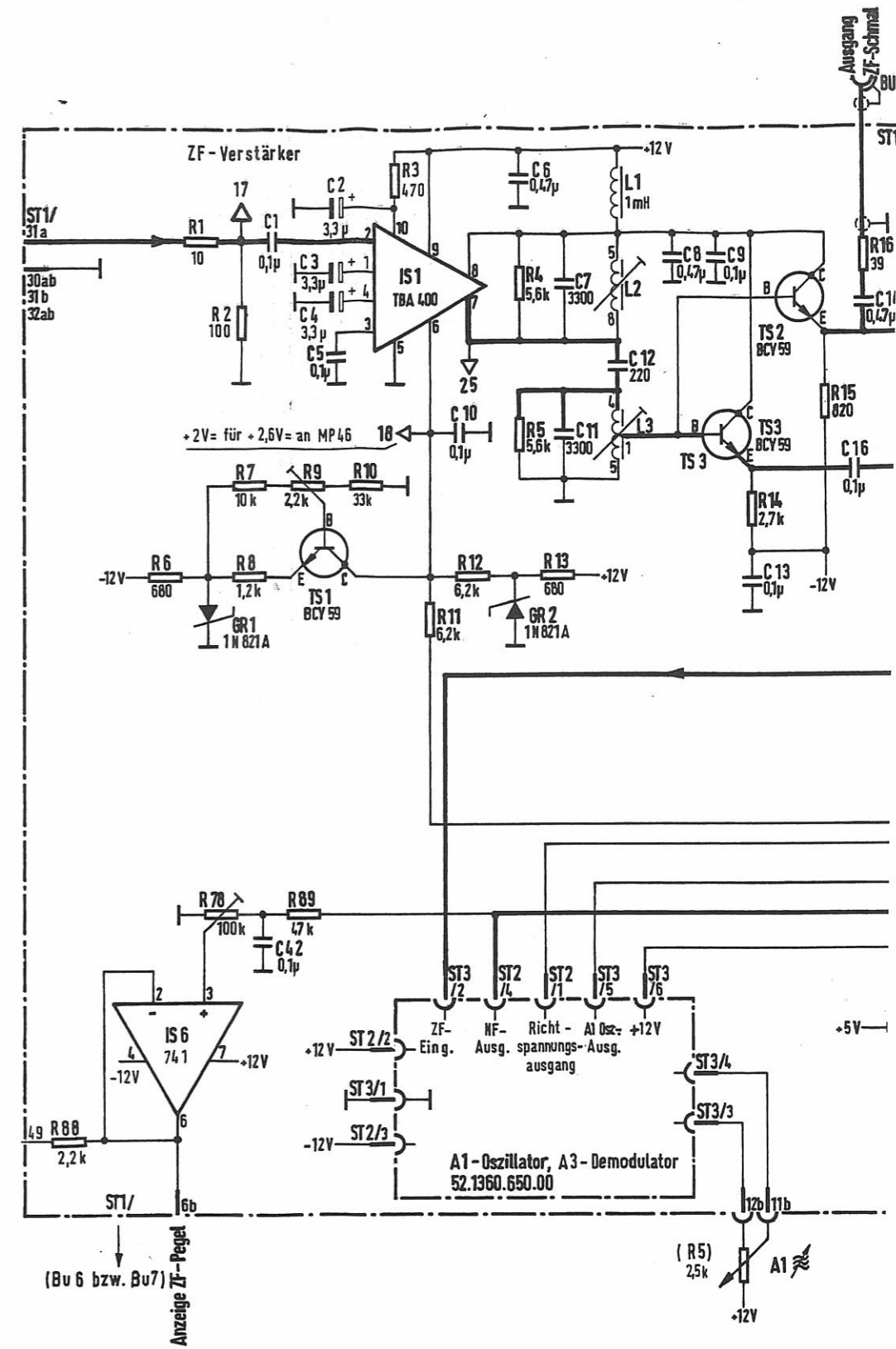




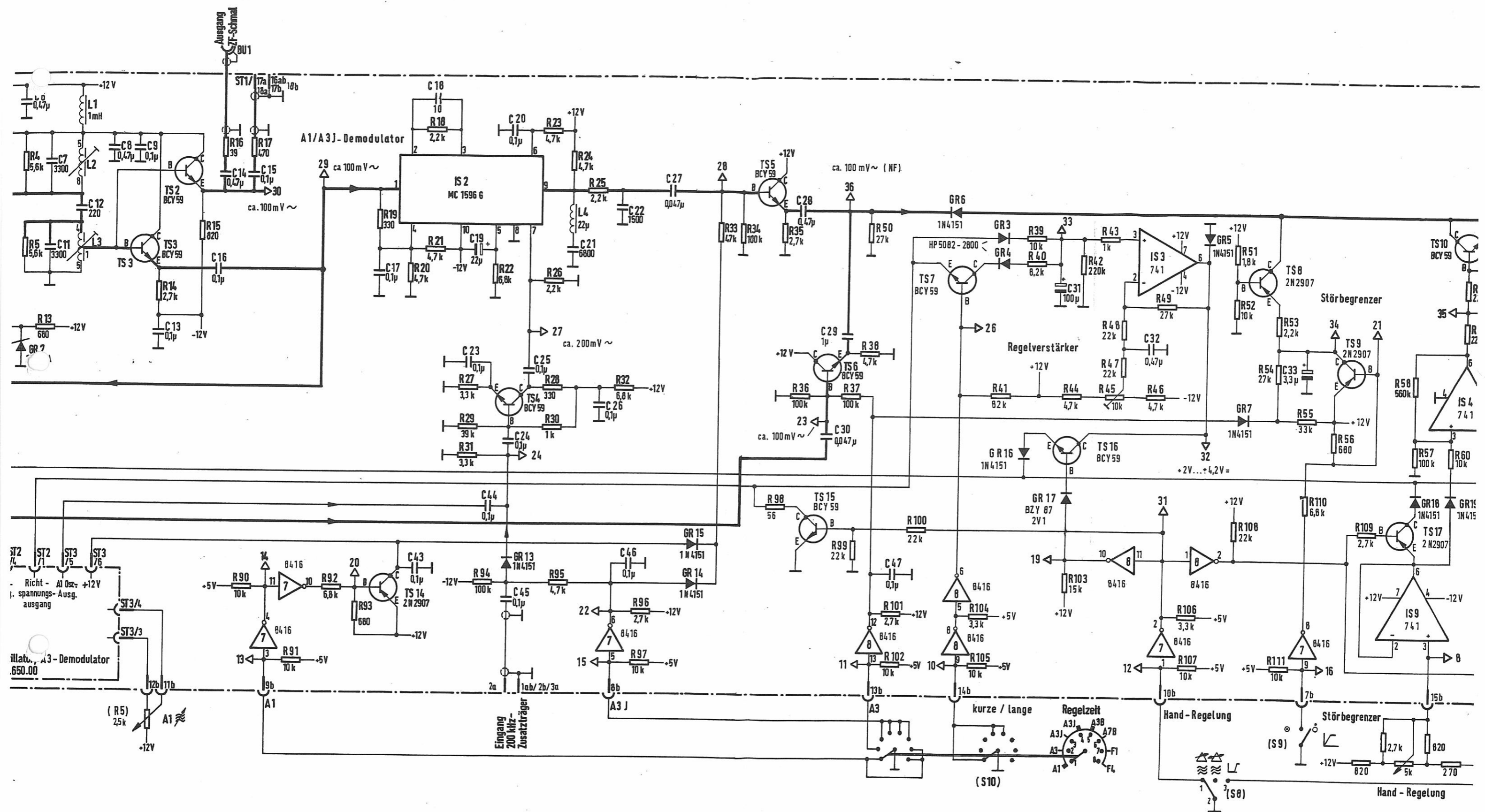
Bestückungsplan/Printed Circuit Board

52.1360.500 STR (05)

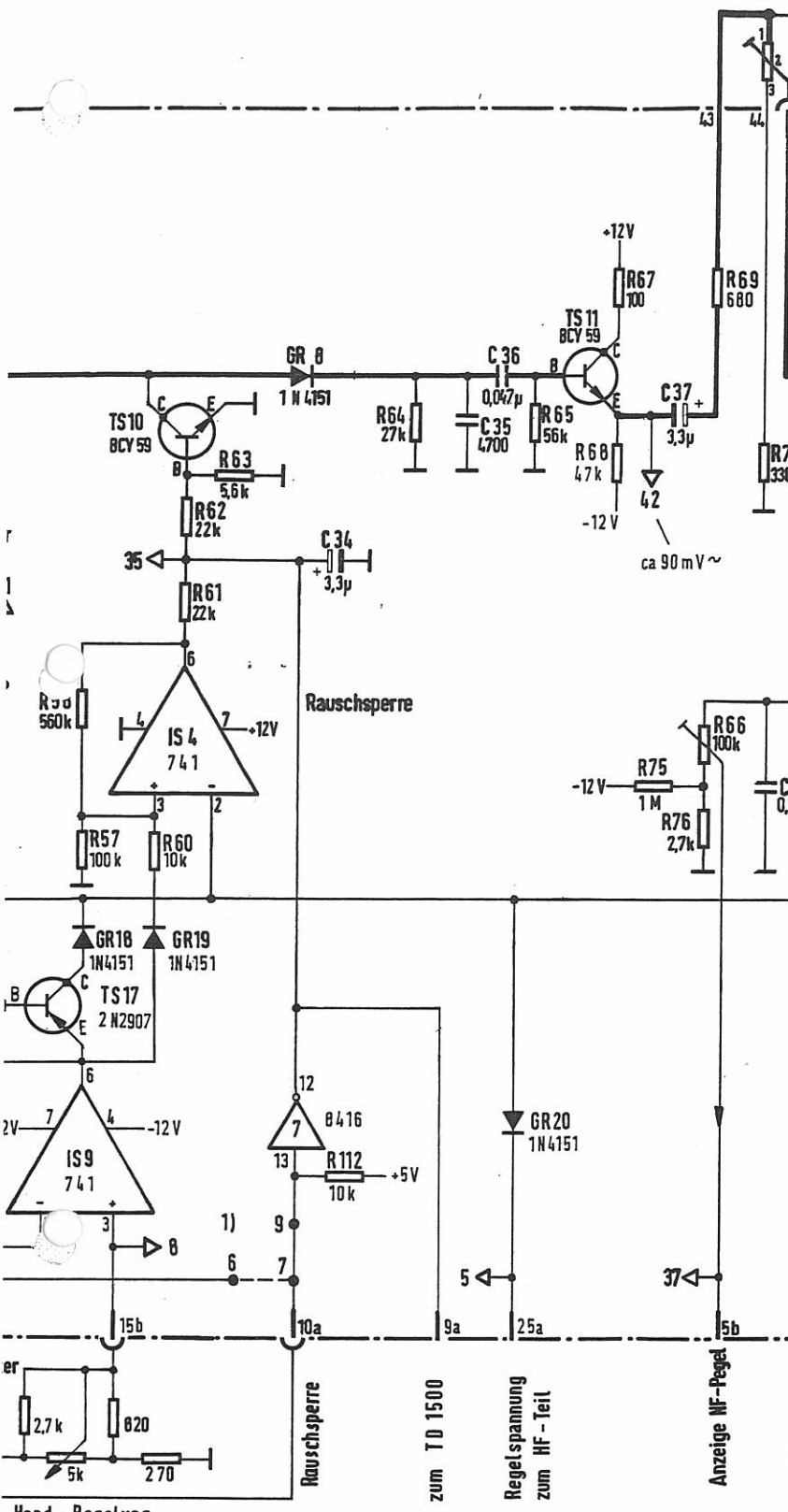
ZF- Eingang
 $90 \mu\text{V} \dots 90 \text{mV} \sim$
 200 kHz



22-2
 1-3



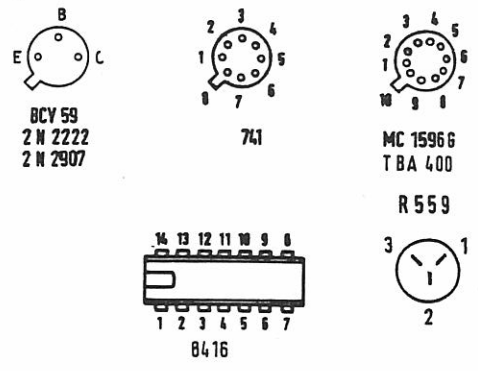
22-2
2-3



- IF Input
- IF Amplifier
- Output IF Narrow
- Demodulator
- for ... at
- or
- Indication IF Level
- AF Output
- Rectified Voltage Output
- BFO Output
- BFO
- Input 200 kHz Auxilliary Carrier
- AGC Amplifier
- Noise Limiter
- Squelch
- AF Amplifier
- short/long AGC time
- MGC
- to
- AGC Voltage
- to RF module
- Indication AF Level
- AF Input
- 600 Ω AF Output
- Output AGC Voltage
- Test Point
- wire Link
- remove
- Add 500 to each components number

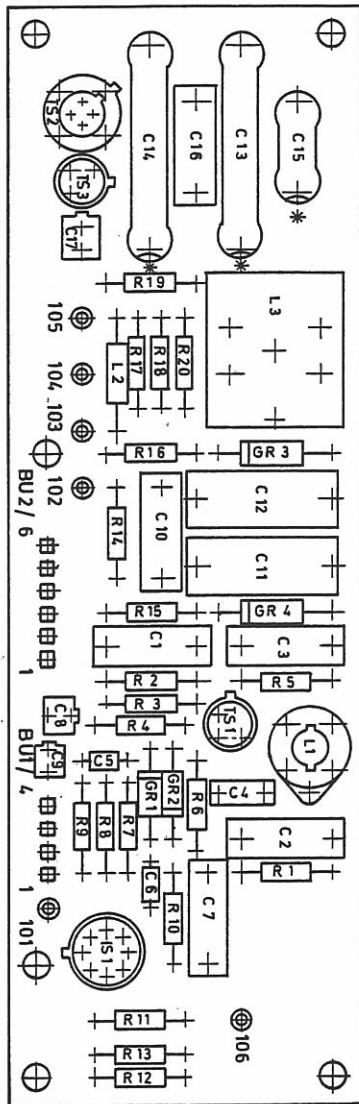
Pinnummer 500 addieren

- : Rauschsperr A (Standard)
- : Rauschsperr B (Brücke 7-9 entfernen)



Plan Demodulator DE 1500
 of Demodulator DE 1500
 Anlage 22/Annex 22
 Blatt 2/Sheet 2



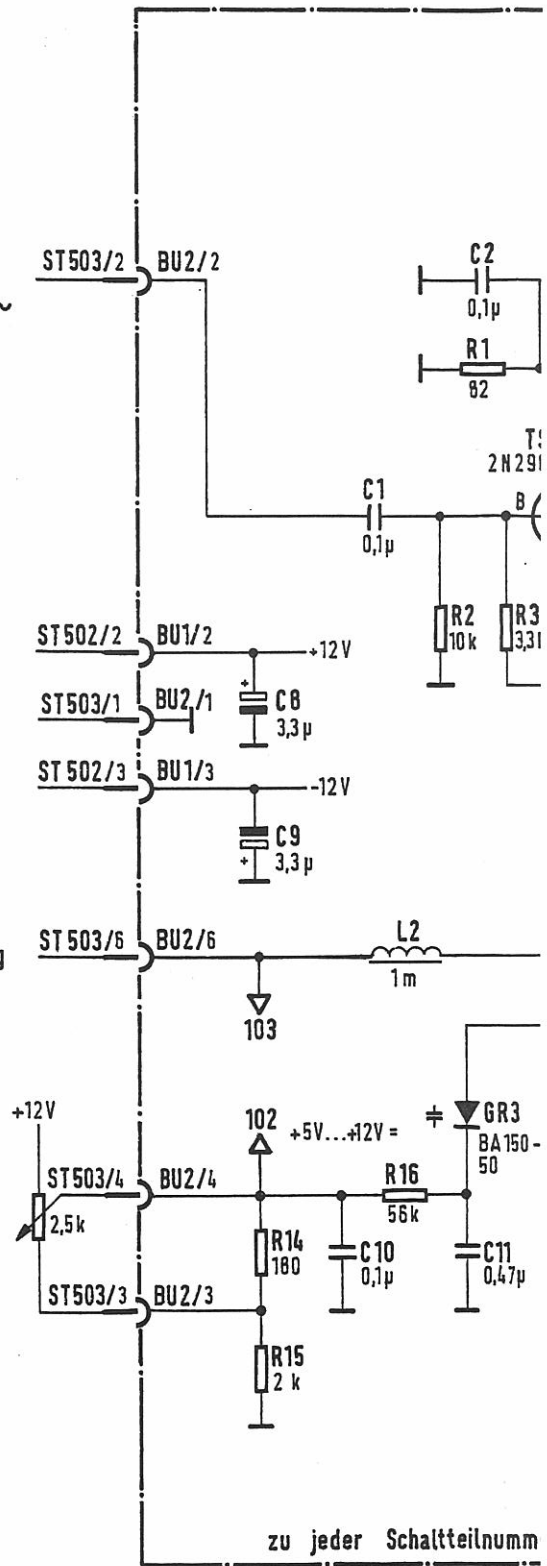


Bestückungsplan
Printed Circuit Board

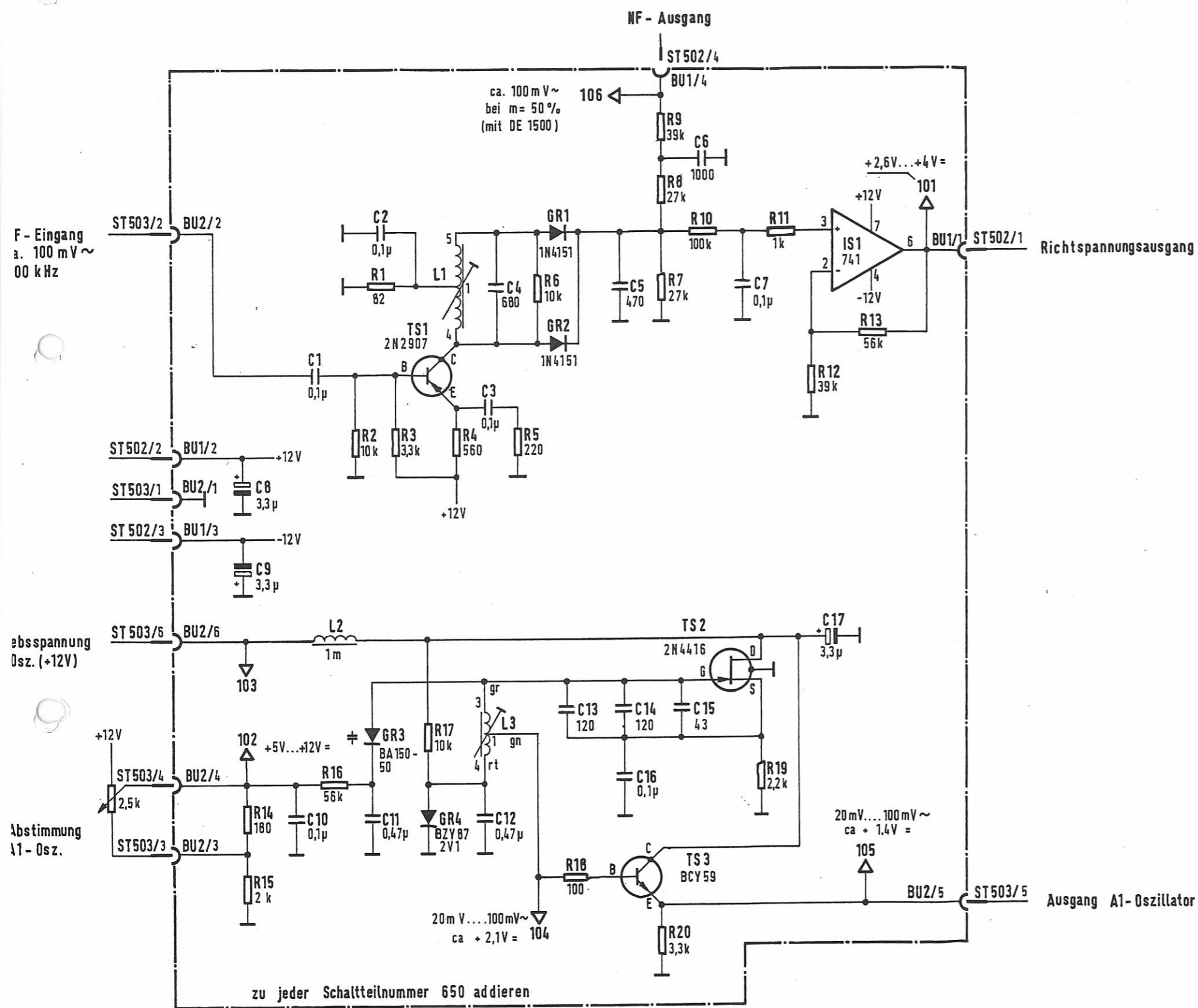
ZF - Eingang
ca. 100 mV ~
200 kHz

Betriebsspannung
A1 - Osz. (+12V)

Abstimmung
A1 - Osz.

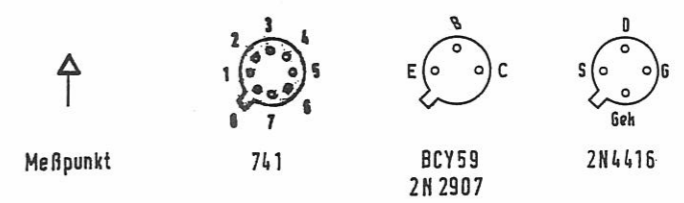


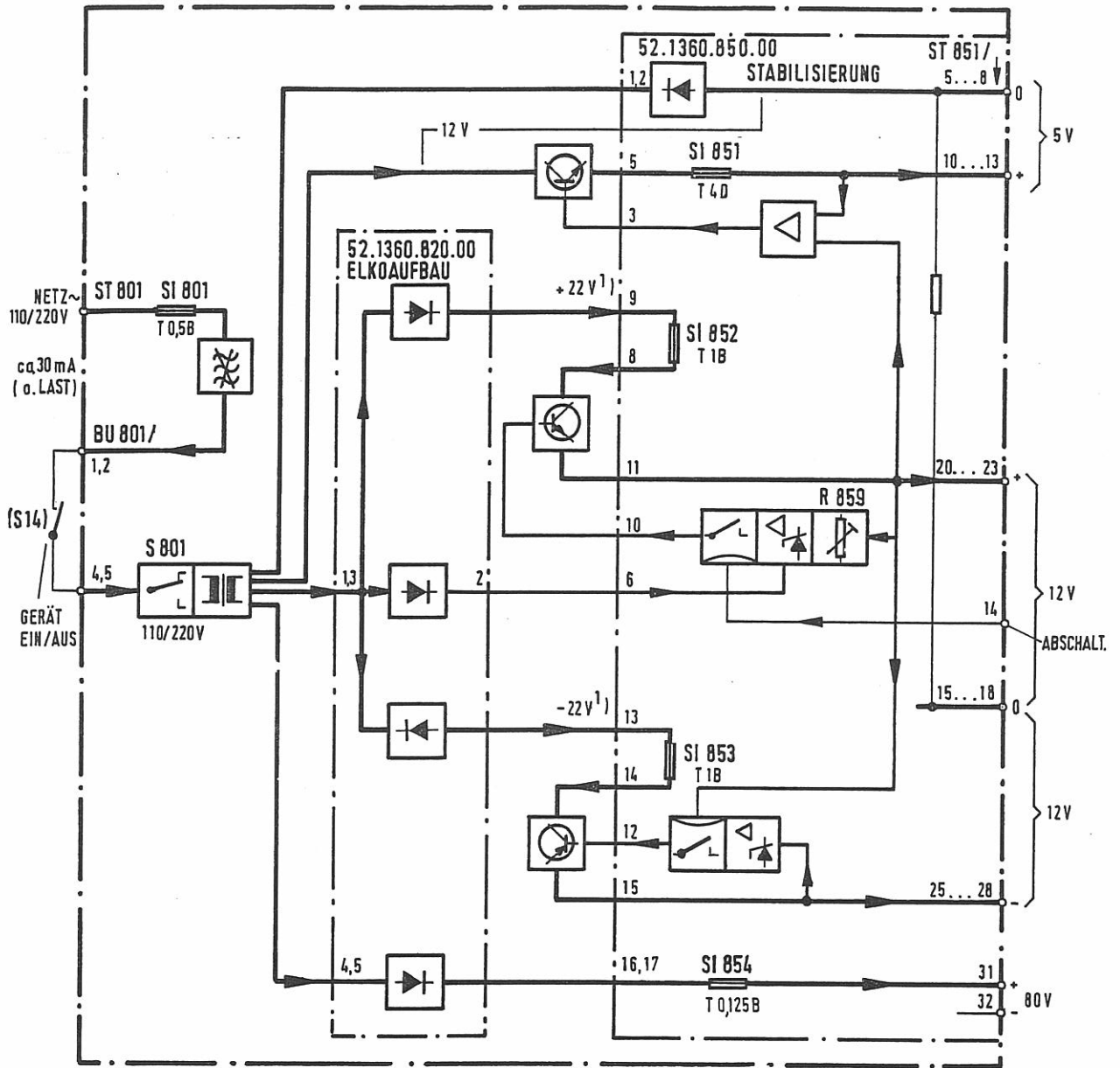
zu jeder Schalteilmumm



ZF-Eingang ca. 100 mV~ 200 kHz
 Betriebsspannung A 1-Osz. (+12 V)
 Abstimmung A 1-Osz.
 ca. 100 mV~ bei m = 50% (mit DE 1500)
 NF-Ausgang
 Richtspannungsausgang
 Meßpunkt
 Gehäuse
 Ausgang A 1-Oszillator
 zu jeder Schaltteilnummer
 650 addieren

IF Input approx. 100 mV~ 200 kHz
 Operating Voltage A 1 Oscillator (+ 12)
 Tuning A 1 Oscillator
 approx. 100 mV~ at m = 50% (with DE 1500)
 RF Output
 Rectified Voltage Output
 Test Point
 Frame
 Output A 1 Oscillator
 Add 650 to each
 components number



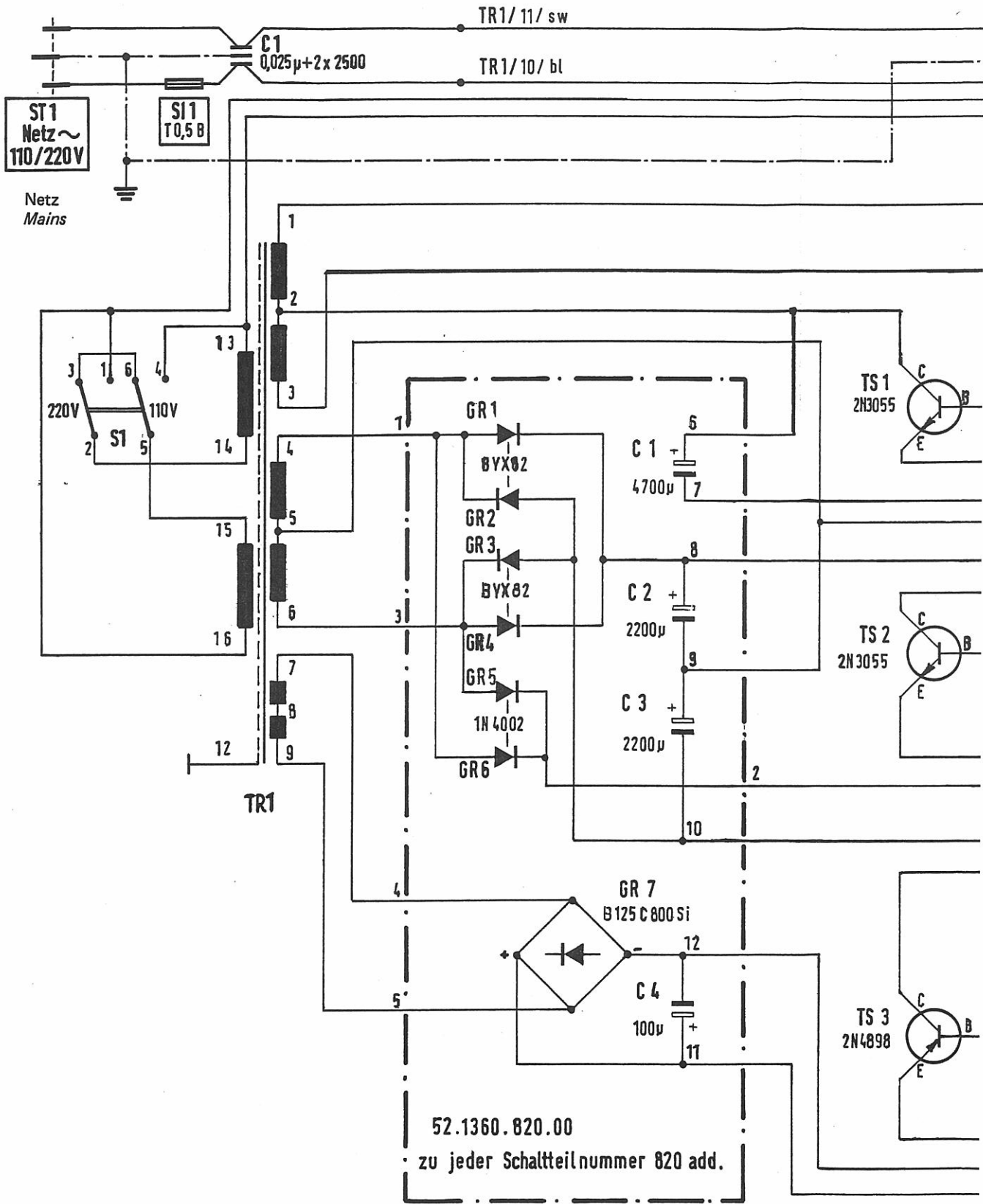


Stabilisierung	Stabilization
Netz	Mains
Elkoaufbau (o. Last)	Electrolytic capacitors board (without load)
Gerät Ein/Aus	Unit On/Off
Abschalt.	Switching-off

1) Spannung gegen ST 851/15 bis 18 oder Anschlußstift 7 der Leiterkarte 52.1360.850.00 gemessen
 1) Voltage measured in respect of ST 851/15 to 18 or pin 7 of circuit board 52.1360.850.00

Übersichtsschaltplan Netzstromversorgung NS 1500
 Block Diagram of Mains Power Unit NS 1500
 Anlage 24/Annex 24
 Blatt 1/Sheet 1





52.1360.820.00
zu jeder Schalteilnummer 820 add.

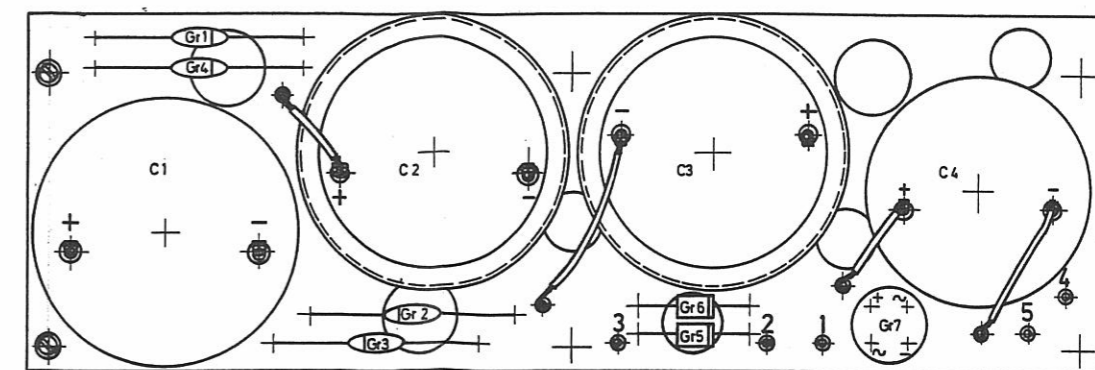
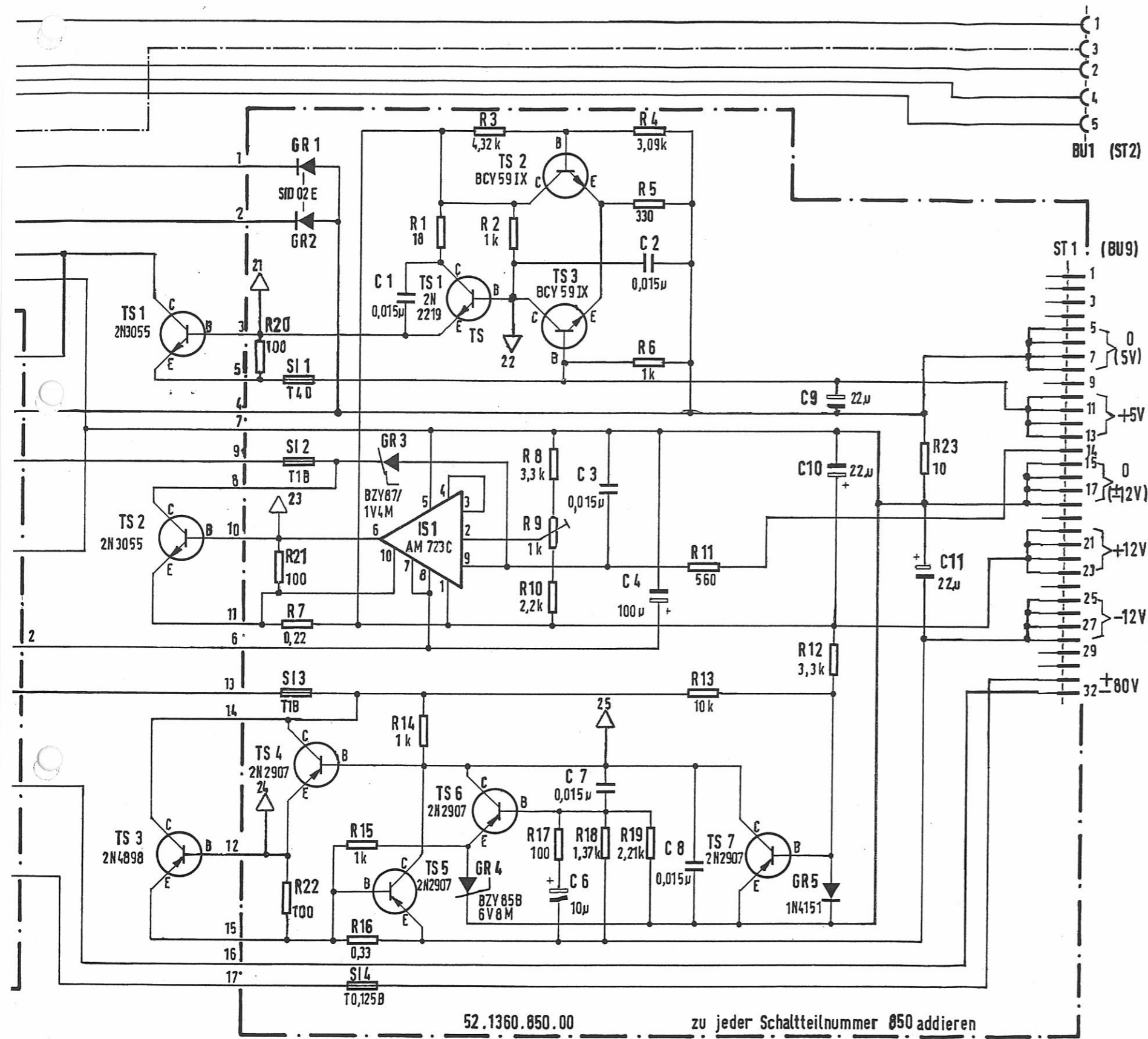
zu jeder Schalteilnummer 800 addieren

Meßpunkt
Test Point



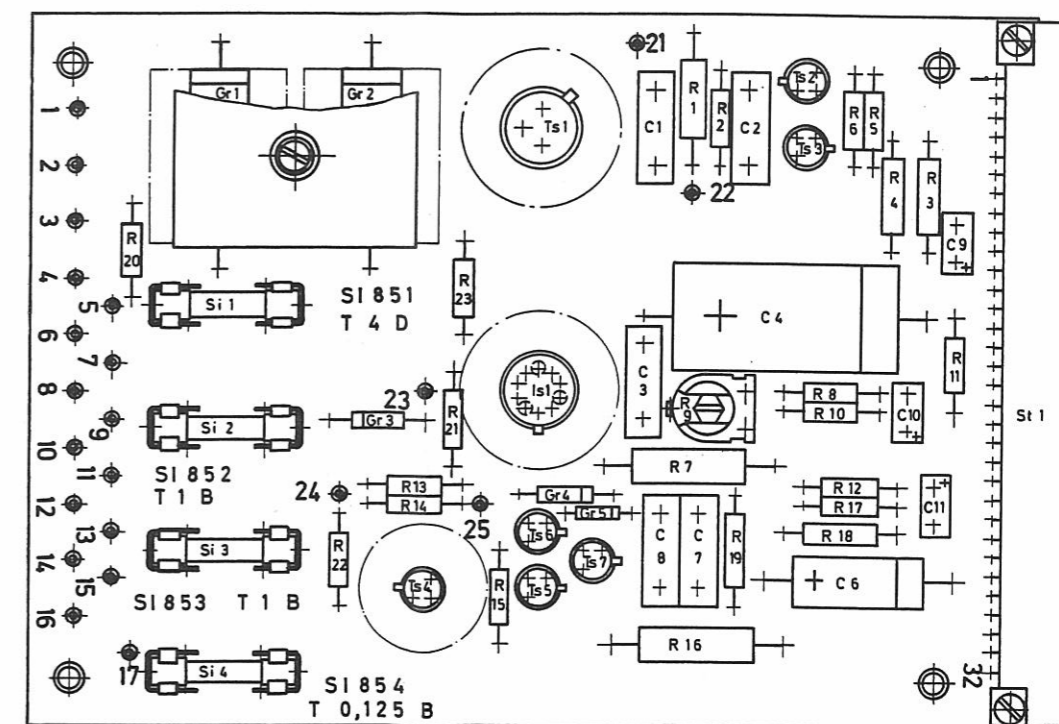
AM 723 C





52.1360.820.00

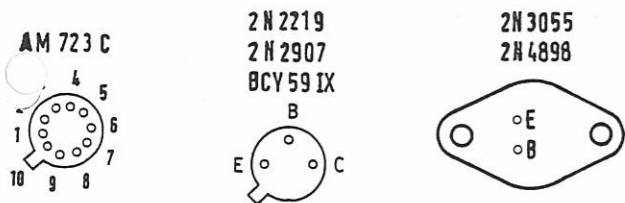
Bestückungsplan/ Printed Circuit Board



52.1360.850.00

Bestückungsplan/ Printed Circuit Board

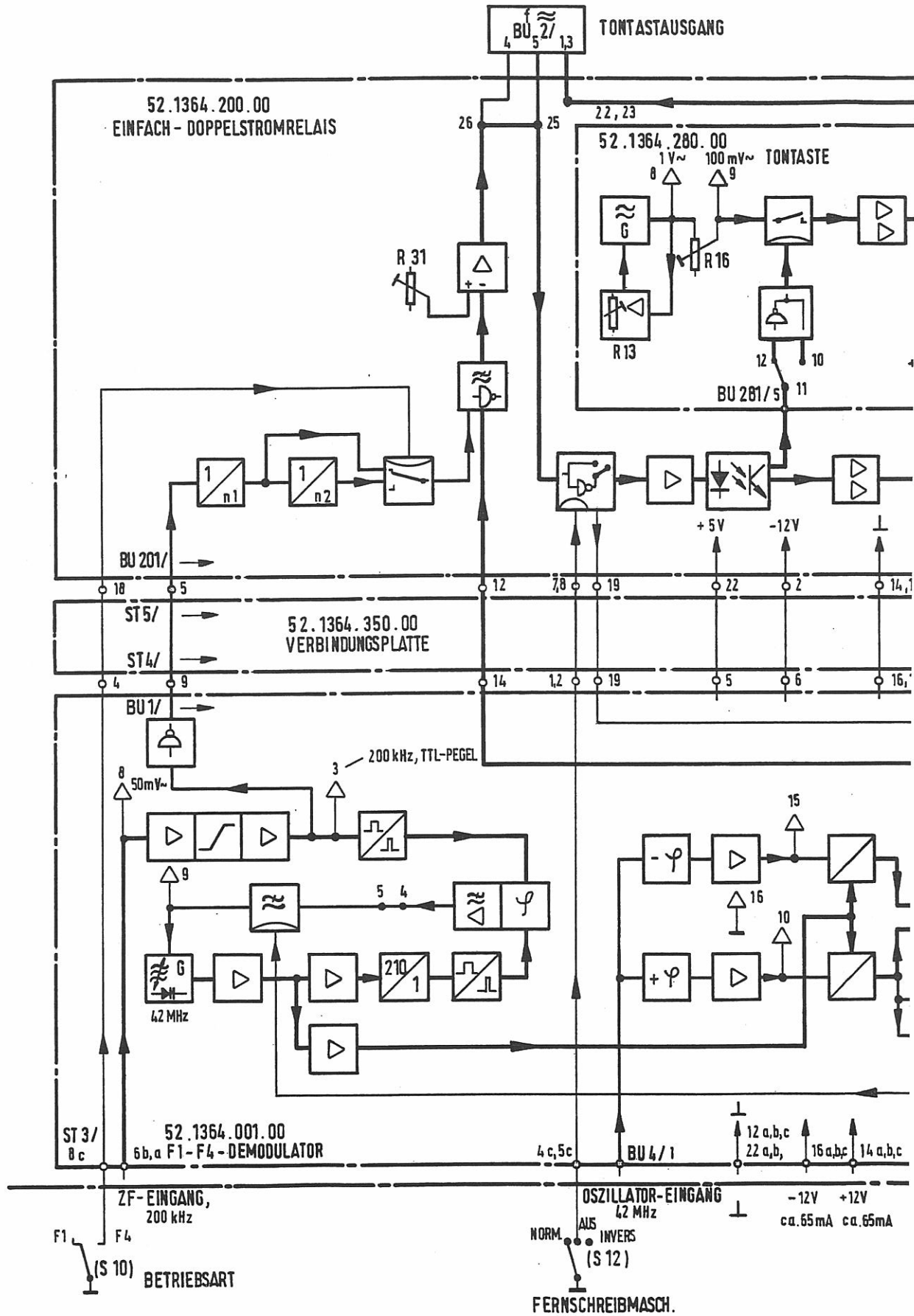
en

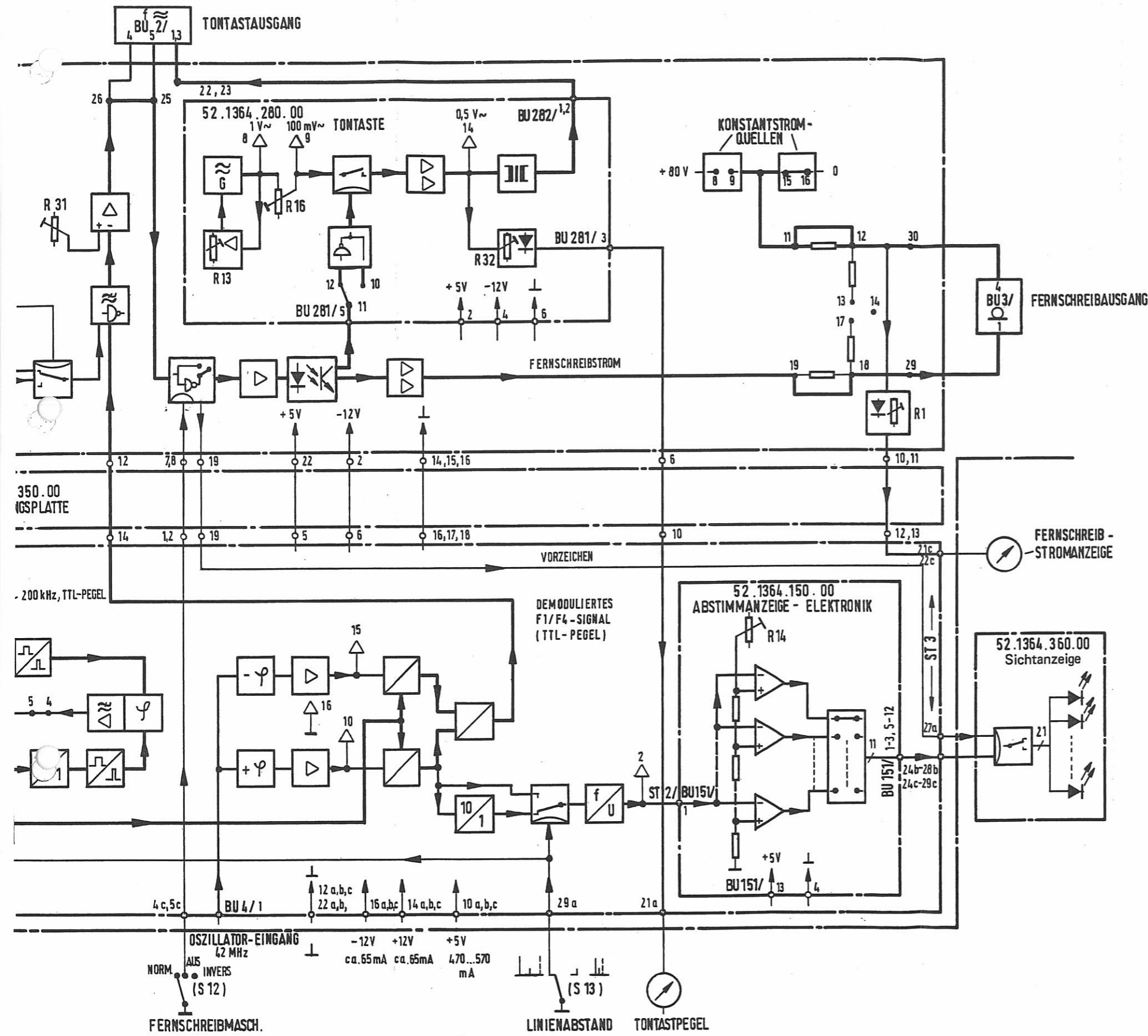


Zu jeder Schalteilnummer ... addieren
Add ... to each components number

Stromlaufplan Netzstromversorgung NS 1500
Circuit Diagram of Mains Power Unit NS 1500
Anlage 24/Annex 24
Blatt 2/Sheet 2
2 - 2



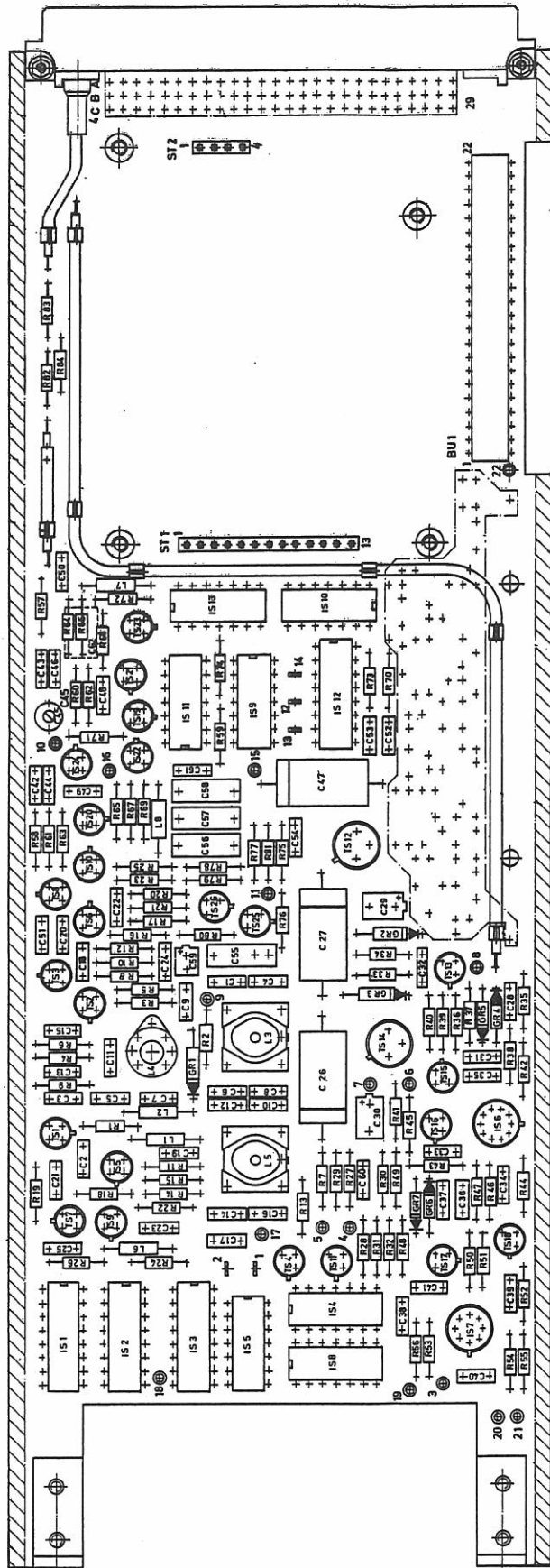




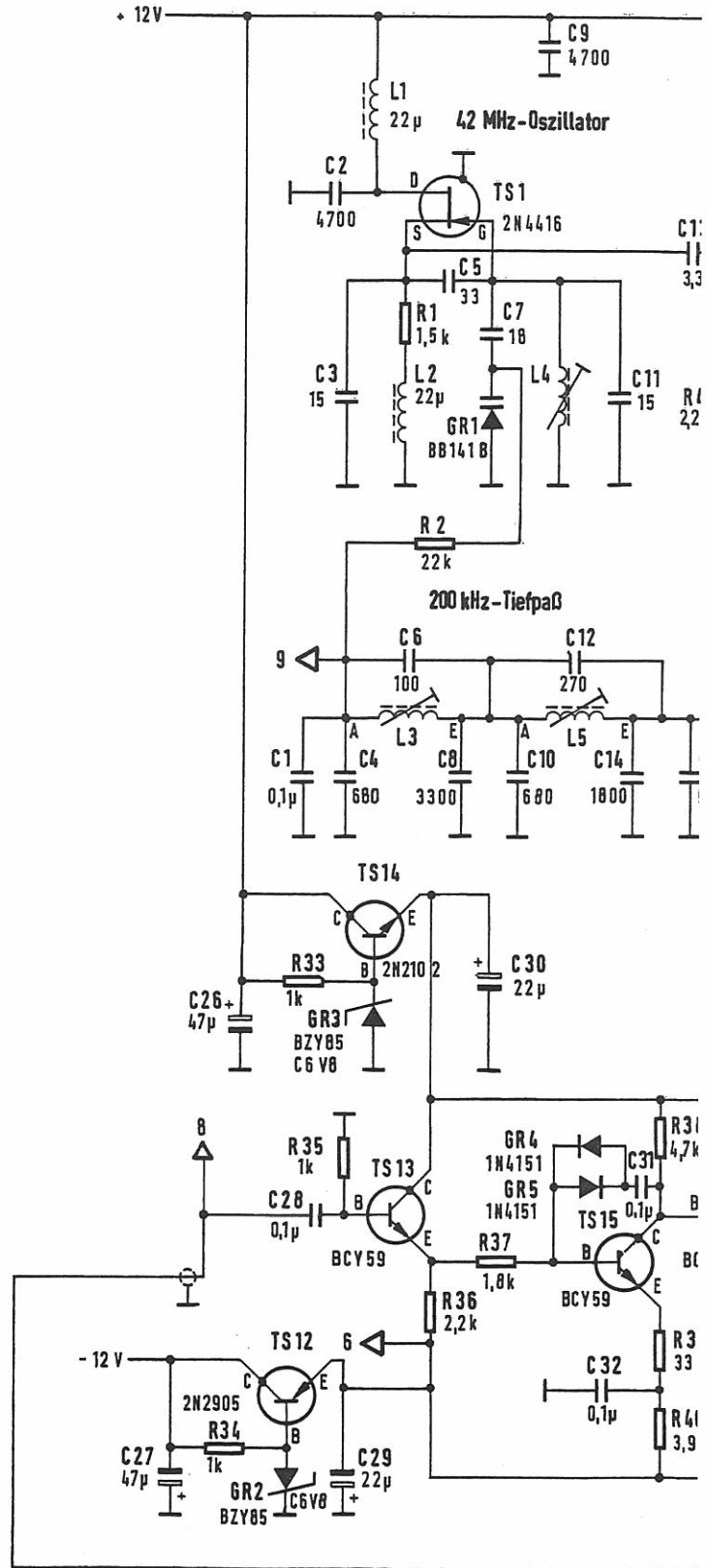
- | | |
|----------------------------------------|--------------------------------------|
| Tontastenausgang | VF Keying Output |
| Einfach-Doppelstromrelais | Single/Double Current Relay |
| Tontaste | AF Modulator |
| Konstantstromquellen | Constant Current Sources |
| Fernschreibstrom | Teletype Current |
| Fernschreibausgang | Teletype Output |
| Verbindungsplatte | Interconnections Baseboard |
| Vorzeichen | Polarity |
| Fernschreibstromanzeige | Teletype Current Indication |
| TTL-Pegel | TTL Level |
| Demoduliertes F1/F4-Signal (TTL-Pegel) | Demodulated F1/F4 signal (TTL Level) |
| Abstimmanzeige-Elektronik | Electronic Tuning Indicator |
| Sichtanzeige | Visual Display |
| ZF-Eingang | IF Input |
| Oszillator-Eingang | Oscillator Input |
| Betriebsart | Service Type |
| Aus | off |
| Fernschreibmasch. | Teletypewriter |
| Linienabstand | Line Separation |
| Tontastpegel | VF Keying Level |
-
- | | |
|-----------------------------------------|-------------------------------------------------|
| Lage der Lötbrücken: | Position of soldered links: |
| a) Gezeichnet ist Einfachstrombetrieb | a) Single current operation is shown |
| b) Doppelstromb. Brücke 15-16 entfällt | b) Double current operation link 15-16 omitted, |
| Brücke 8-9 hinzu | link 8-9 added. |
| c) ± 6 V Datenausg. (V 24): Wie Doppel- | c) Data output ± 6 V (V 24): As double current |
| strom. Ferner Brücke 11-12 und 18-19 | operation. Links 11-12 and 18-19 also omitted, |
| entfällt, Brücke 13-14-17 hinzu | link 13-14-17 added. |

Übersichtsschaltplan Telegraphie-Demodulator TD 1500
 Block Diagram of Telegraphy Demodulator TD 1500
 Anlage 25/Annex 25
 Blatt 1/Sheet 1

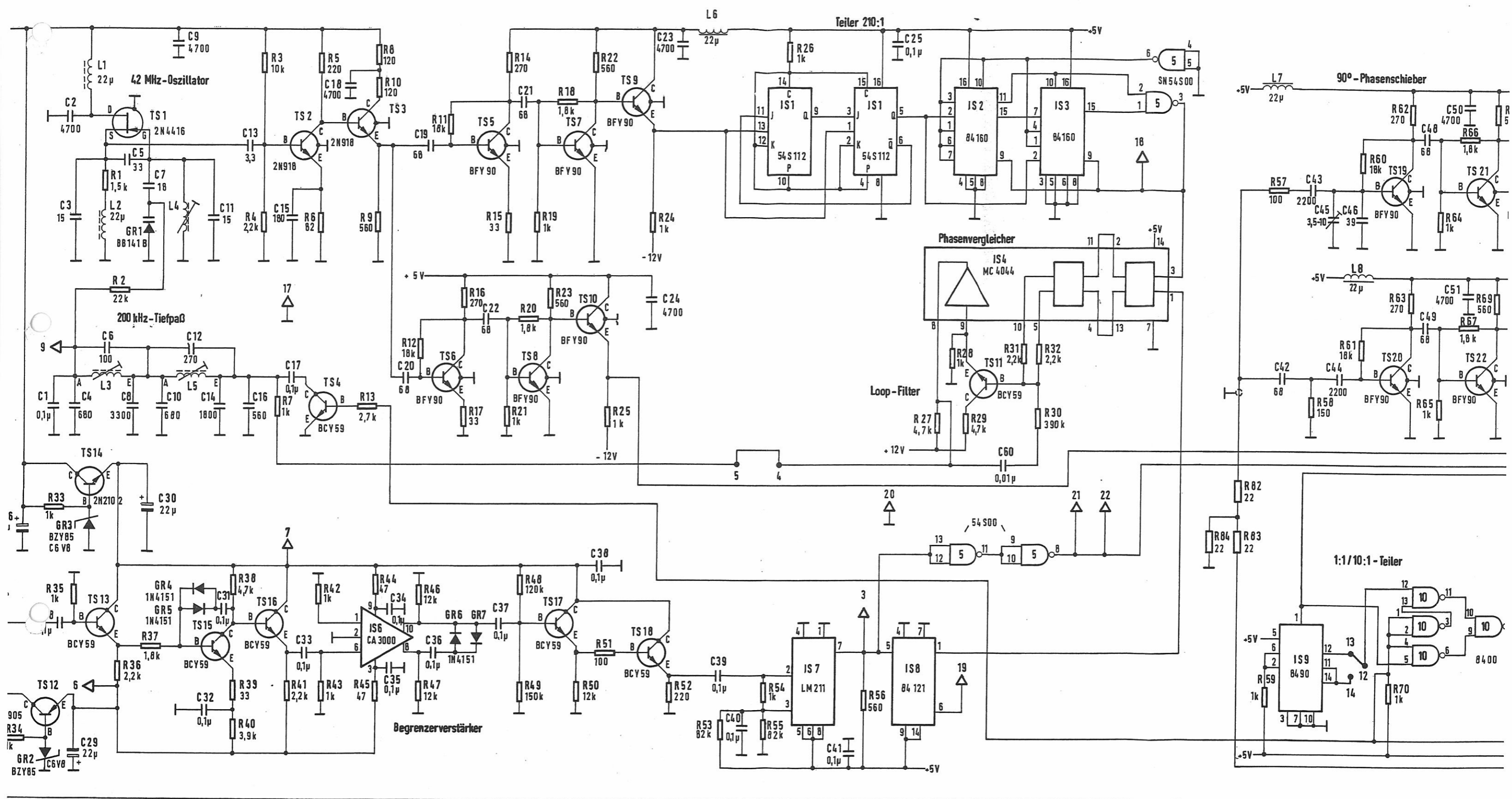




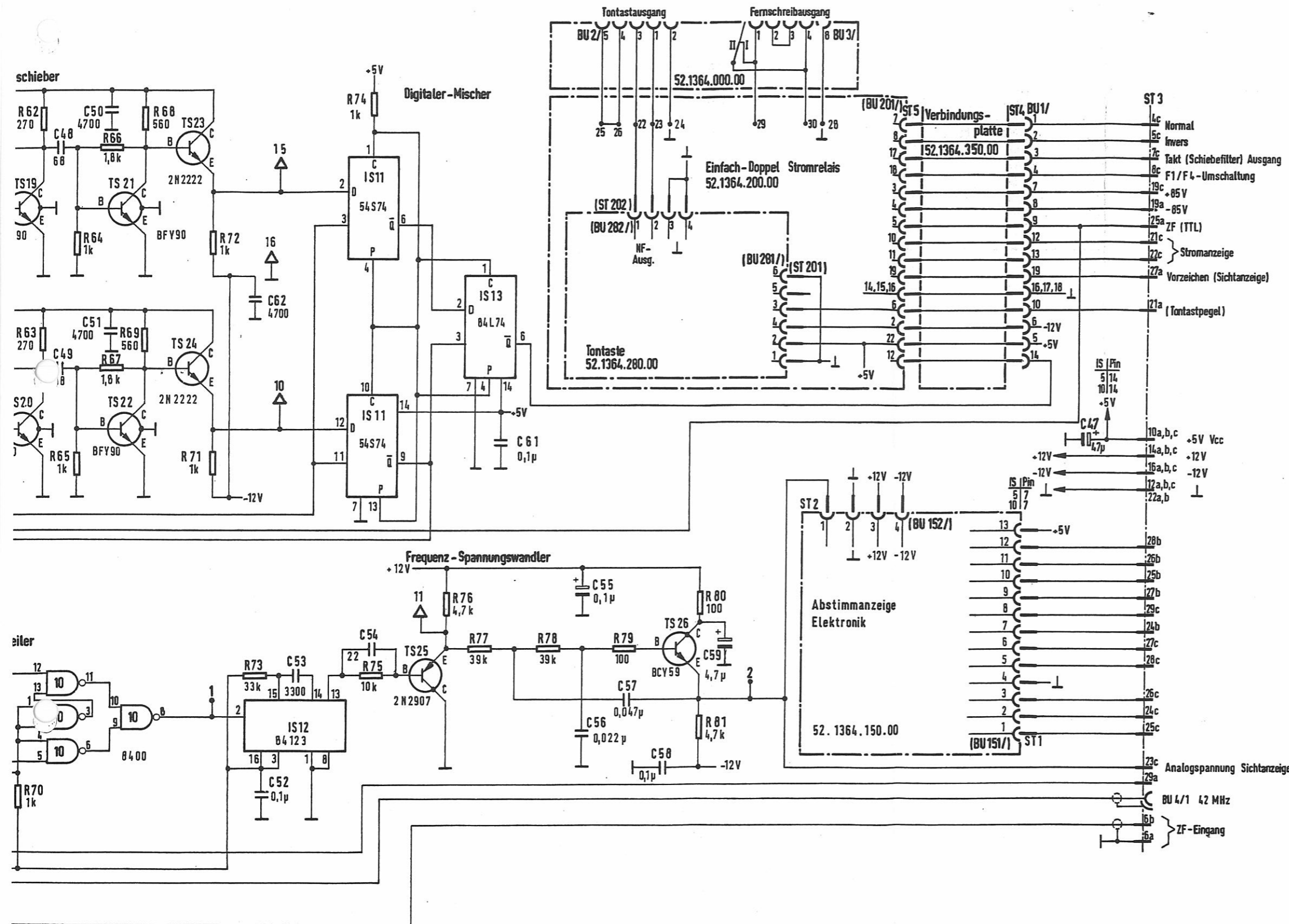
Bestückungsplan/Printed Circuit Board



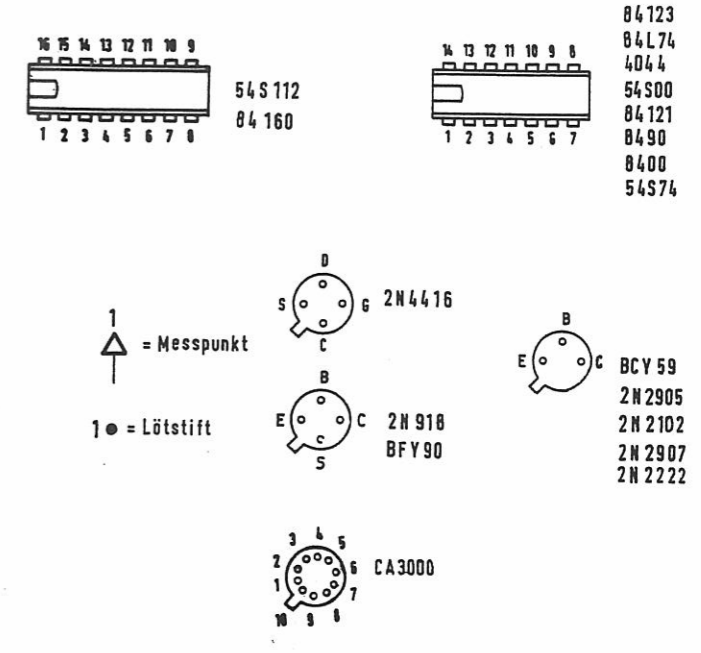
25-2
1-3



25-2
2-3

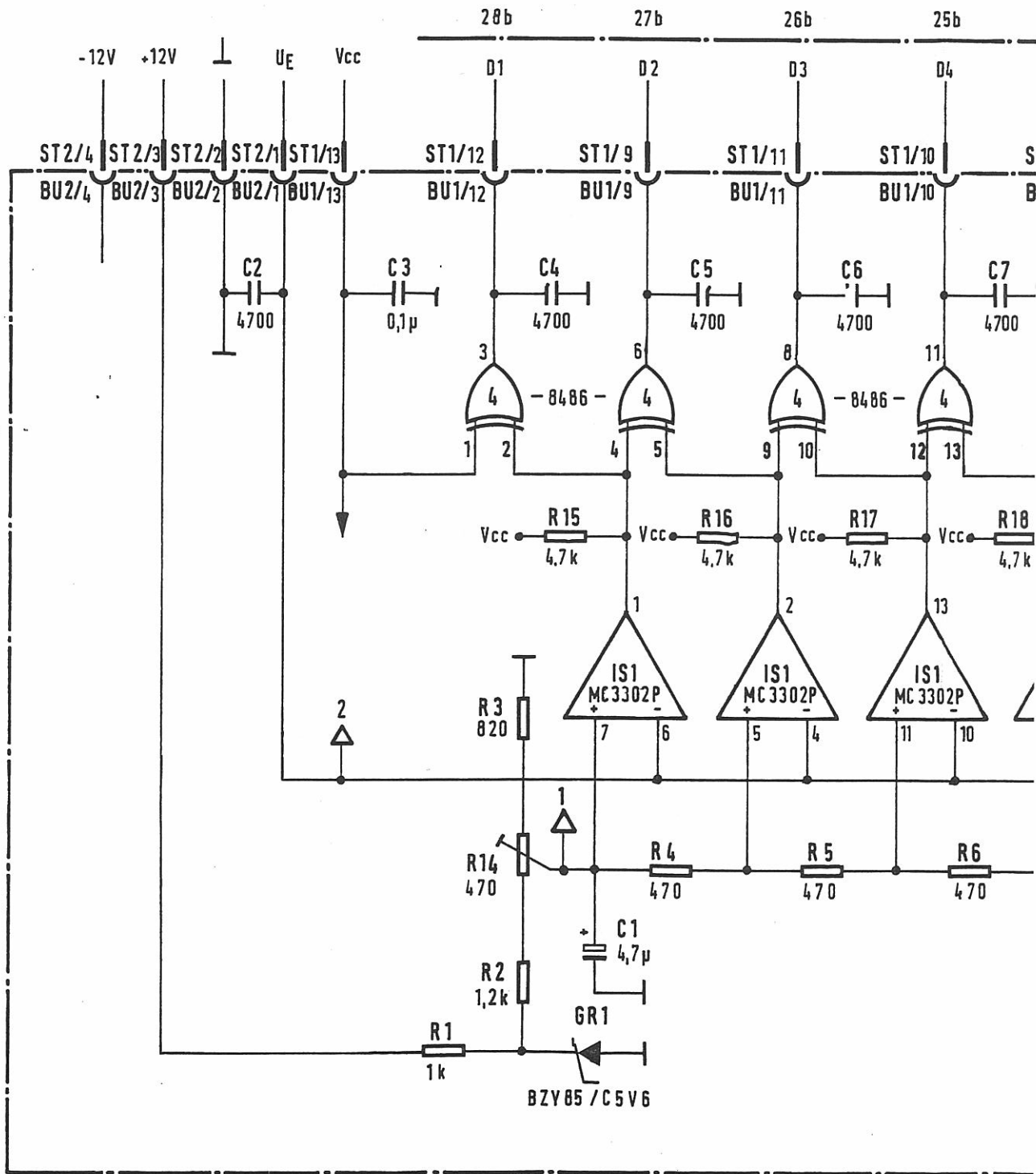


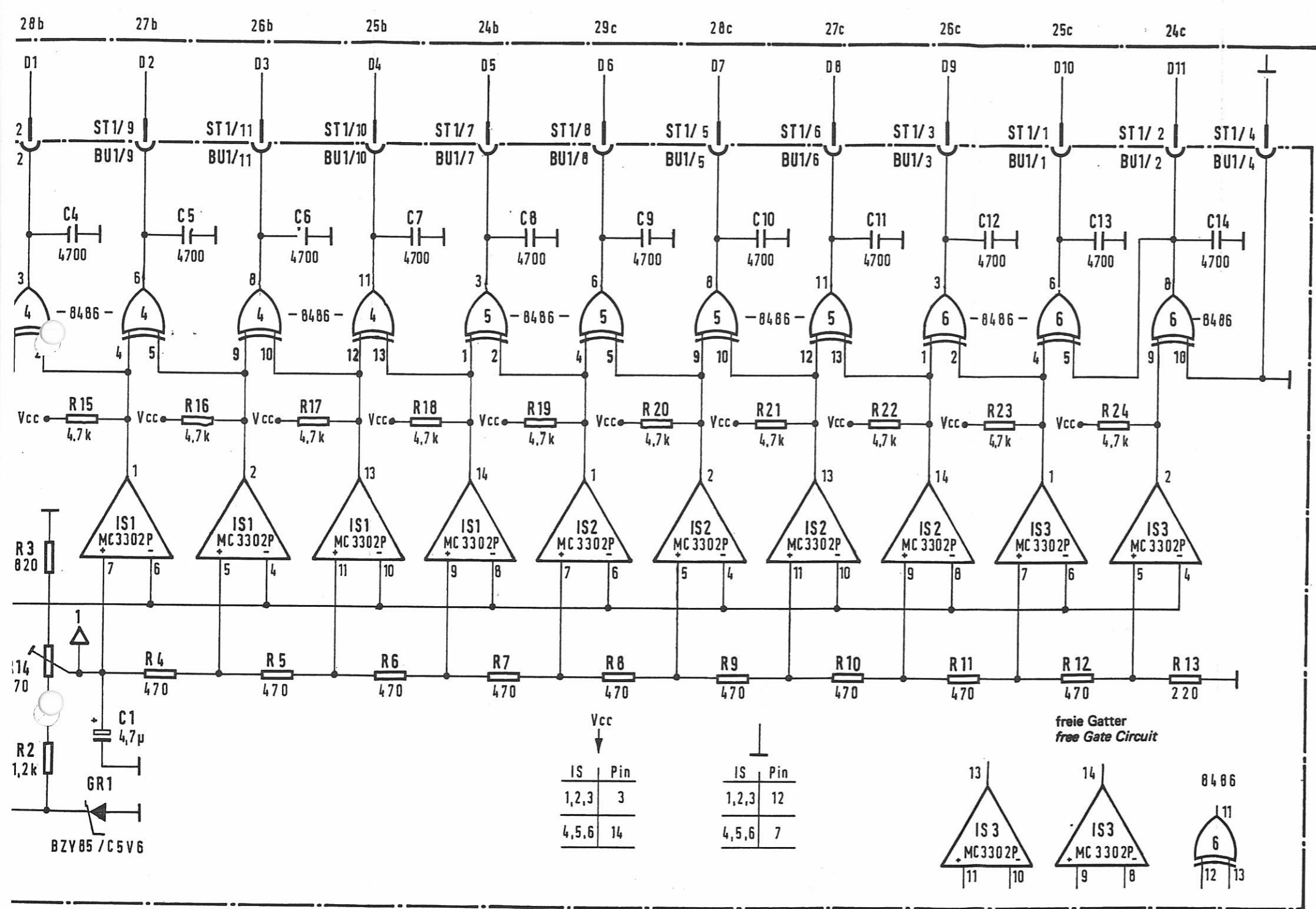
- | | |
|------------------------------|--------------------------------|
| Messpunkt | Test Point |
| Lötstift | Soldering Pin |
| 42 MHz-Oszillator | 42 MHz Oscillator |
| 200 kHz-Tiefpaß | 200 kHz Low-Pass Filter |
| Begrenzerverstärker | Limiter Amplifier |
| Teiler 210 : 1 | 210 : 1 Divider |
| Phasenvergleichler | Phase Comparator |
| Loop-Filter | Loop Filter |
| 90°-Phasenschieber | 90° Phase Shifter |
| 1:1/10:1-Teiler | 1:1/1:10 Divider |
| Digitaler Mischer | Digital Mixer |
| Frequenz-Spannungswandler | Frequency to Voltage Converter |
| Tontastausgang | VF Keying Output |
| Fernschreibausgang | Teletype Output |
| Einfach-Doppel-Stromrelais | Single/Double Current Relay |
| NF-Ausgang | AF Output |
| Tontaste | AF Modulator |
| Verbindungsplatte | Interconnections Baseboard |
| Normal | Normal |
| Invers | Inverse |
| Takt (Schiebefilter) Ausgang | Clock (Shift Filter) Output |
| F1/F4-Umschaltung | F1/F4 Switchover |
| ZF (TTL) | IF (TTL) |
| Stromanzeige | Current Indication |
| Vorzeichen (Sichtanzeige) | Sign (Visual Display) |
| (Tontastpegel) | (VF Keying Level) |
| Abstimmmanzeige Elektronik | Electronic Tuning Indicator |
| Analogspannung Sichtanzeige | Analog Voltage, Visual Display |
| ZF-Eingang | IF Input |



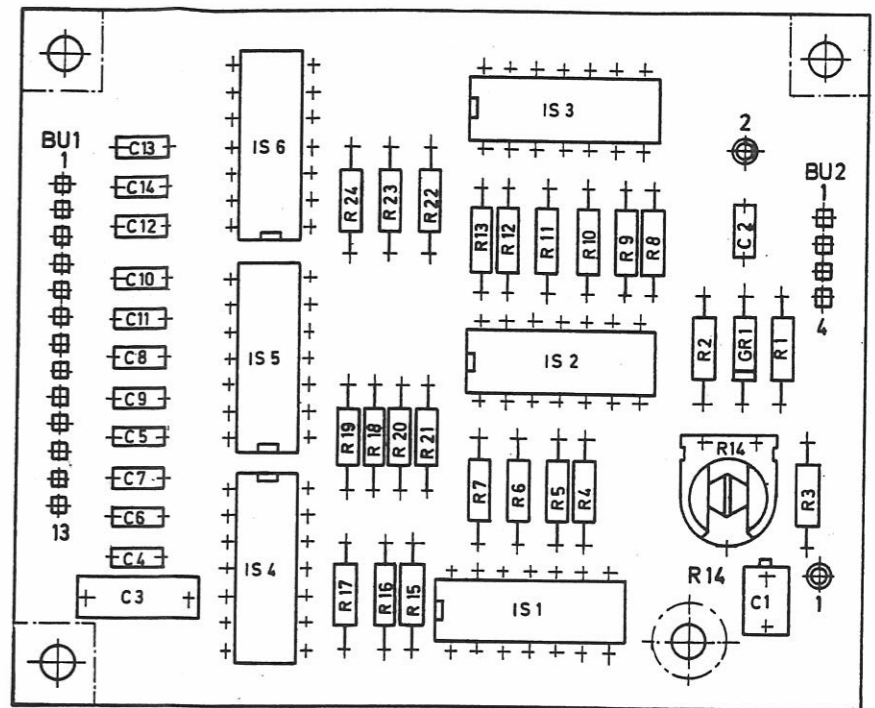
Stromlaufplan Telegraphie-Demodulator TD 1500
 Circuit Diagram of Telegraphy Demodulator TD 1500
 Anlage 25/Annex 25
 Blatt 2/Sheet 2
 2 - 3



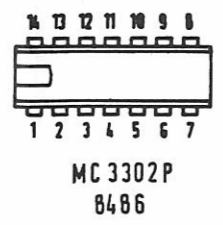




Zu jeder Schalteilnummer 150 addieren
 Add 150 to each components number

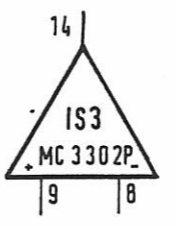
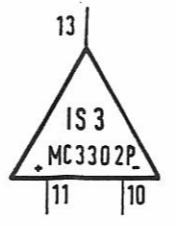


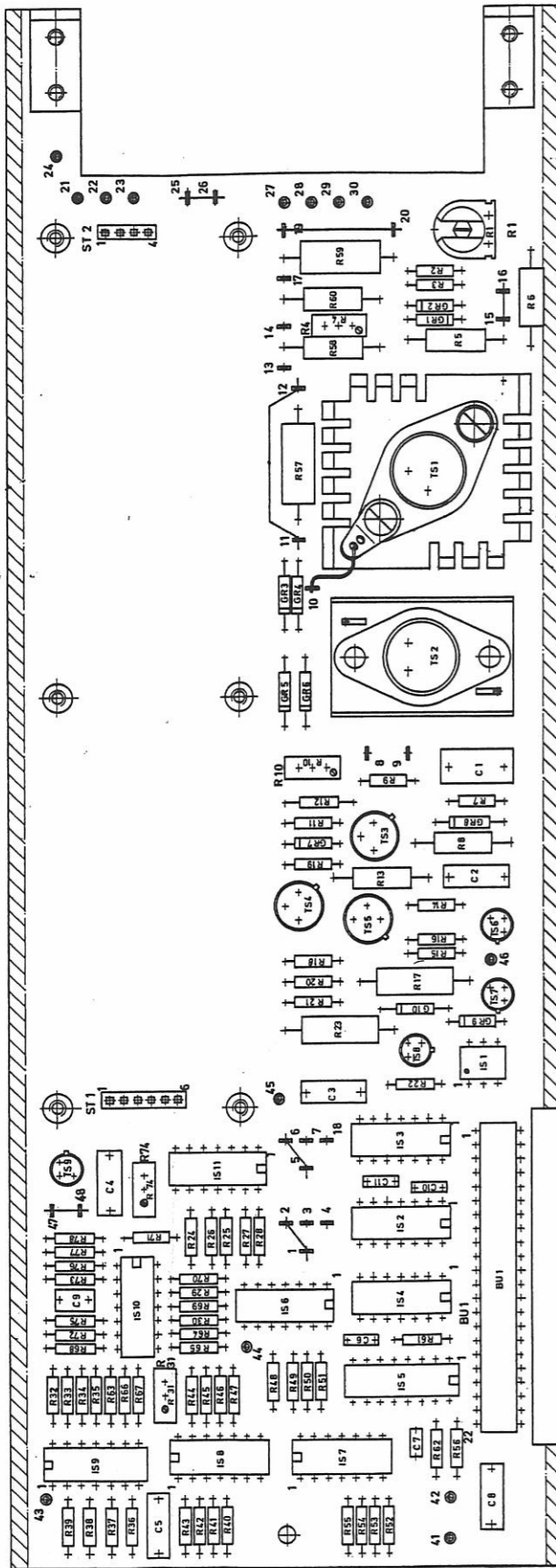
Bestückungsplan / Printed Circuit Board



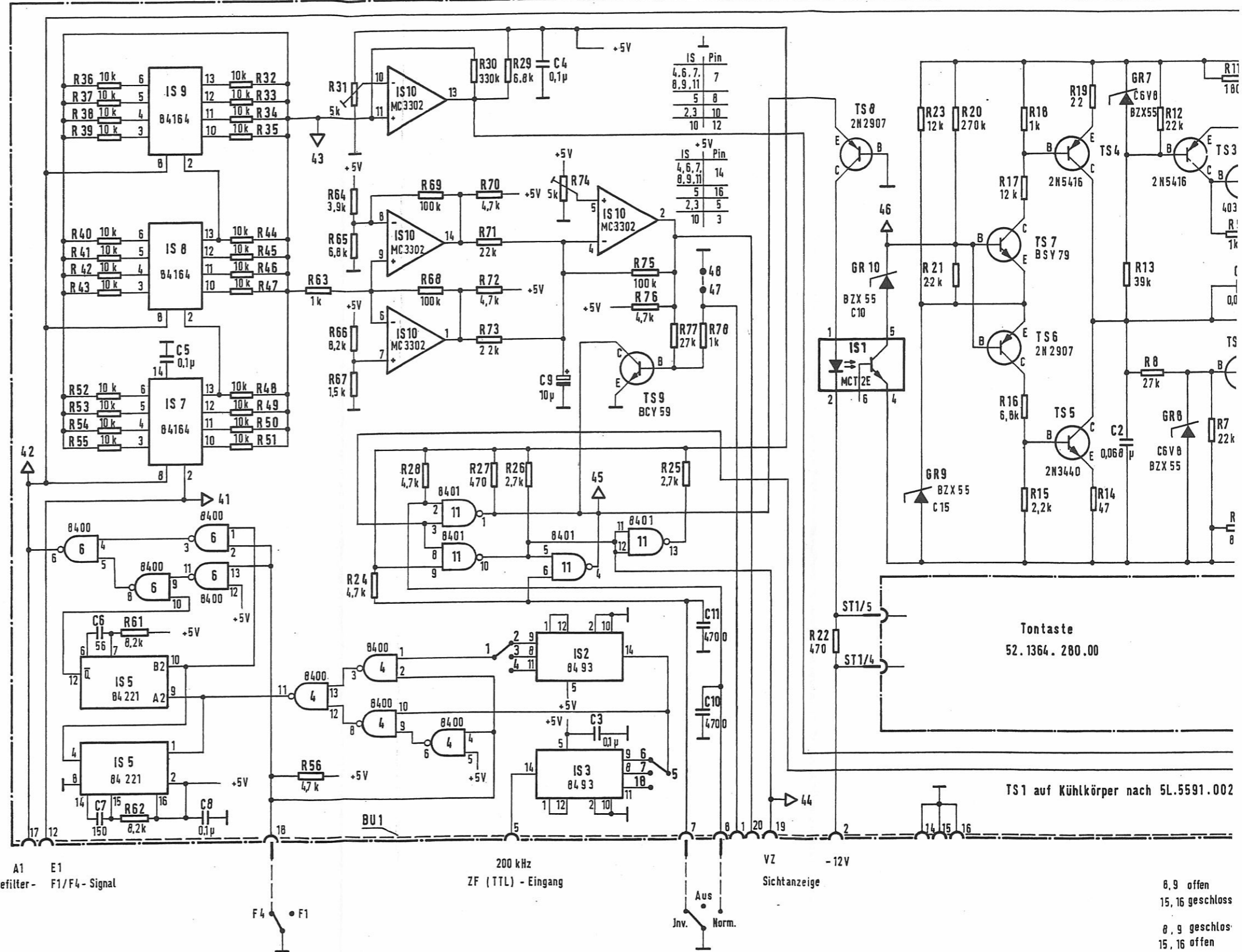
IS	Pin
1,2,3	3
4,5,6	14

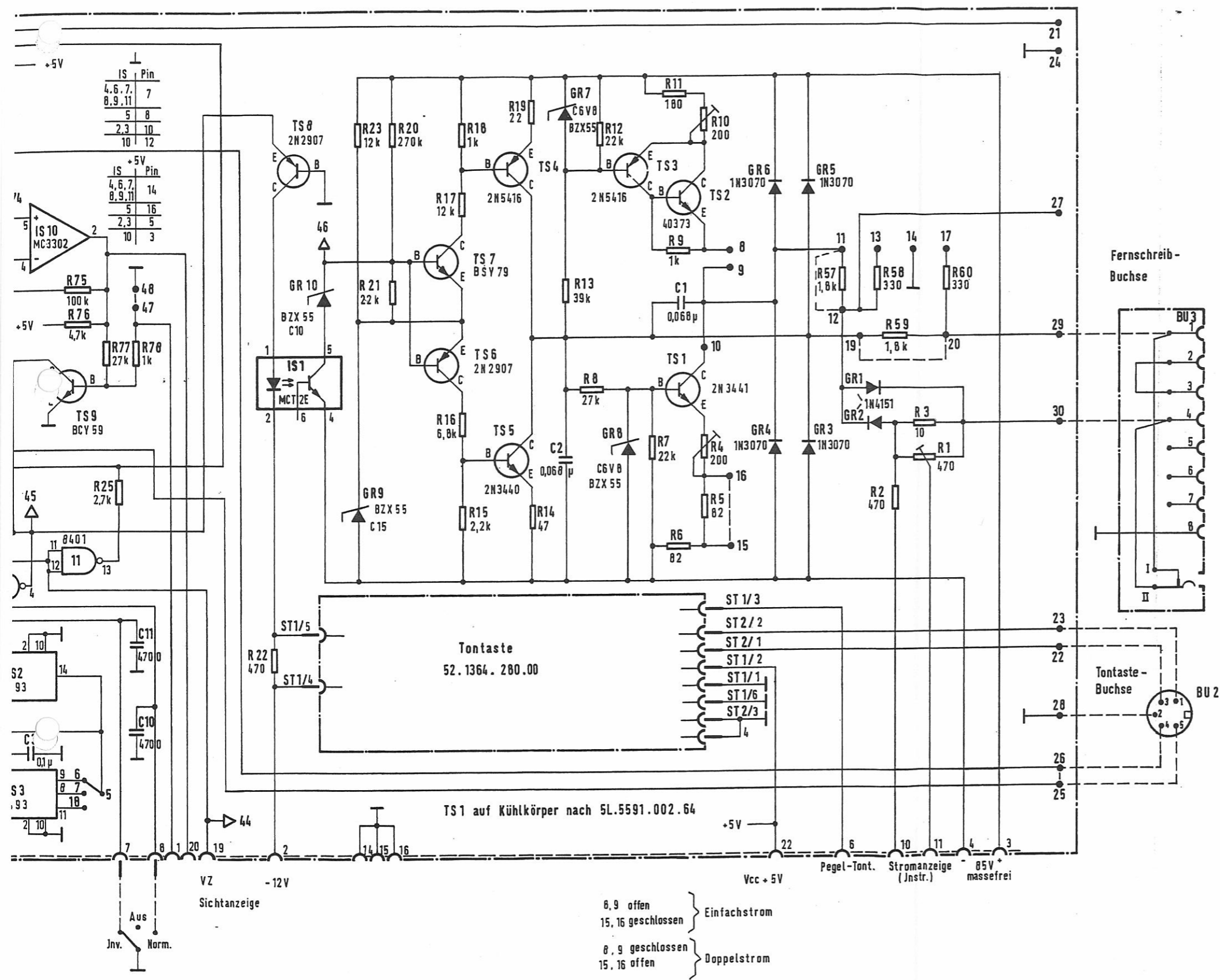
IS	Pin
1,2,3	12
4,5,6	7





Bestückungsplan/Printed Circuit Board

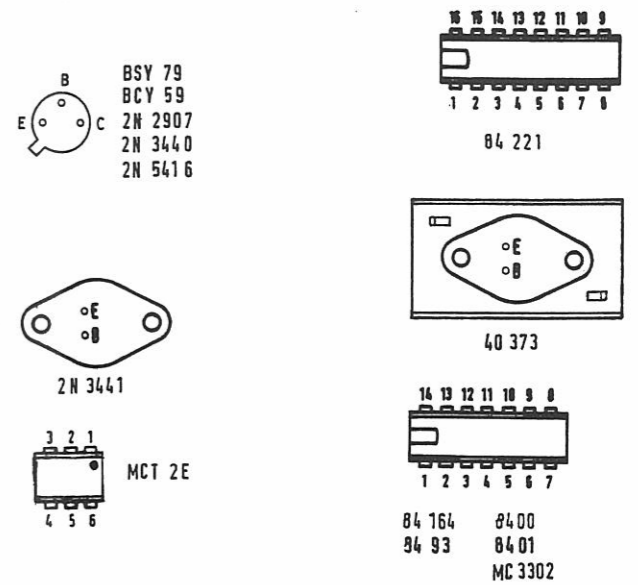




Schiebefilter - Takt
 ZF (TTL) Eingang
 F1/F4-Signal
 Inv.
 Aus
 Norm.
 Sichtanzeige
 massefrei
 Tastatur
 TS 1 auf Kühlkörper nach 5L.5591.002.64
 offen
 geschlossen
 Einfachstrom
 Doppelstrom
 Pegel-Tont.
 Stromanzeige (Instr.)
 Fernschreib-Buchse
 Tastatur - Buchse
 Messpunkt

Shift Filter Clock
 IF Input (TTL)
 F1/F4 Signal
 Inverse
 Off
 Normal
 Visual Display
 floating
 AF Modulator
 TS 1 on cooling fin according to 5L.5591.002.64
 open
 closed
 Single Current
 Double Current
 VF-Keying Level
 Current Indication (Meter)
 Teletypewriter Jack
 AF Modulator Jack
 Test point

Messpunkt

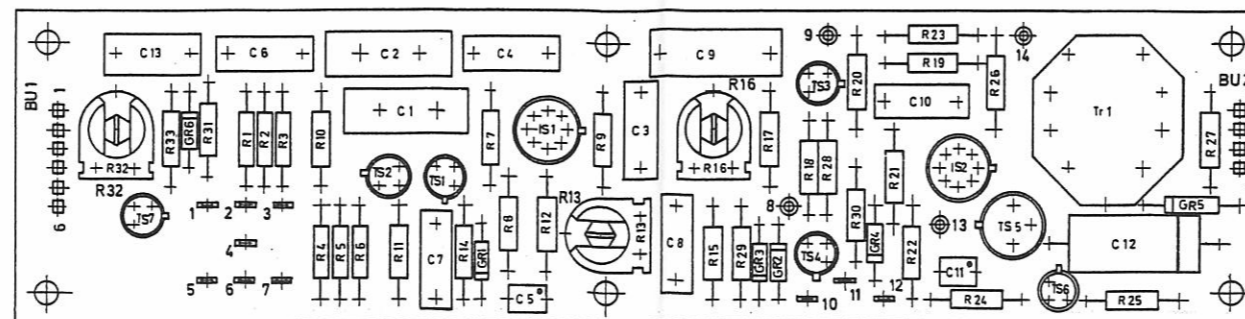
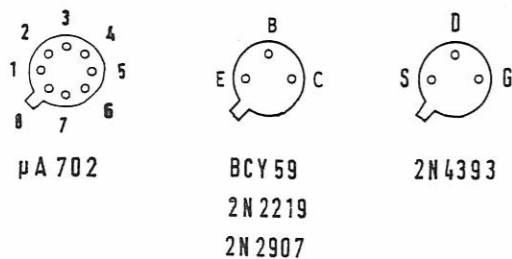
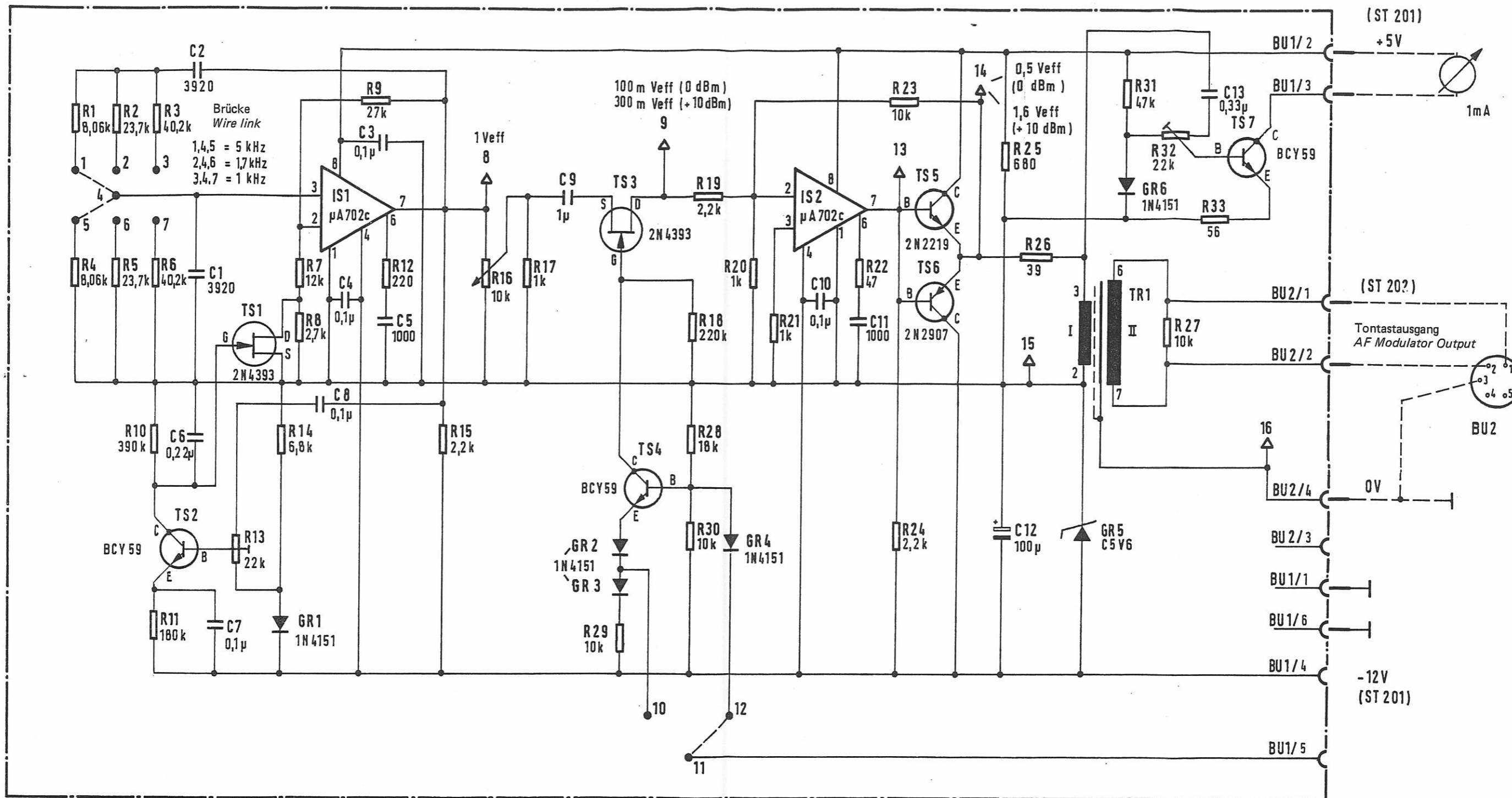


zu jeder Schaltteilnummer 200 addieren
 Add 200 to each component number

8, 9 offen
 15, 16 geschlossen } Einfachstrom
 8, 9 geschlossen
 15, 16 offen } Doppelstrom

Stromlaufplan Einfach-Doppelstromrelais
 Circuit Diagram of Single/Double Current Relay
 Anlage 27/ Annex 27





Bestückungsplan/ Printed Circuit Board

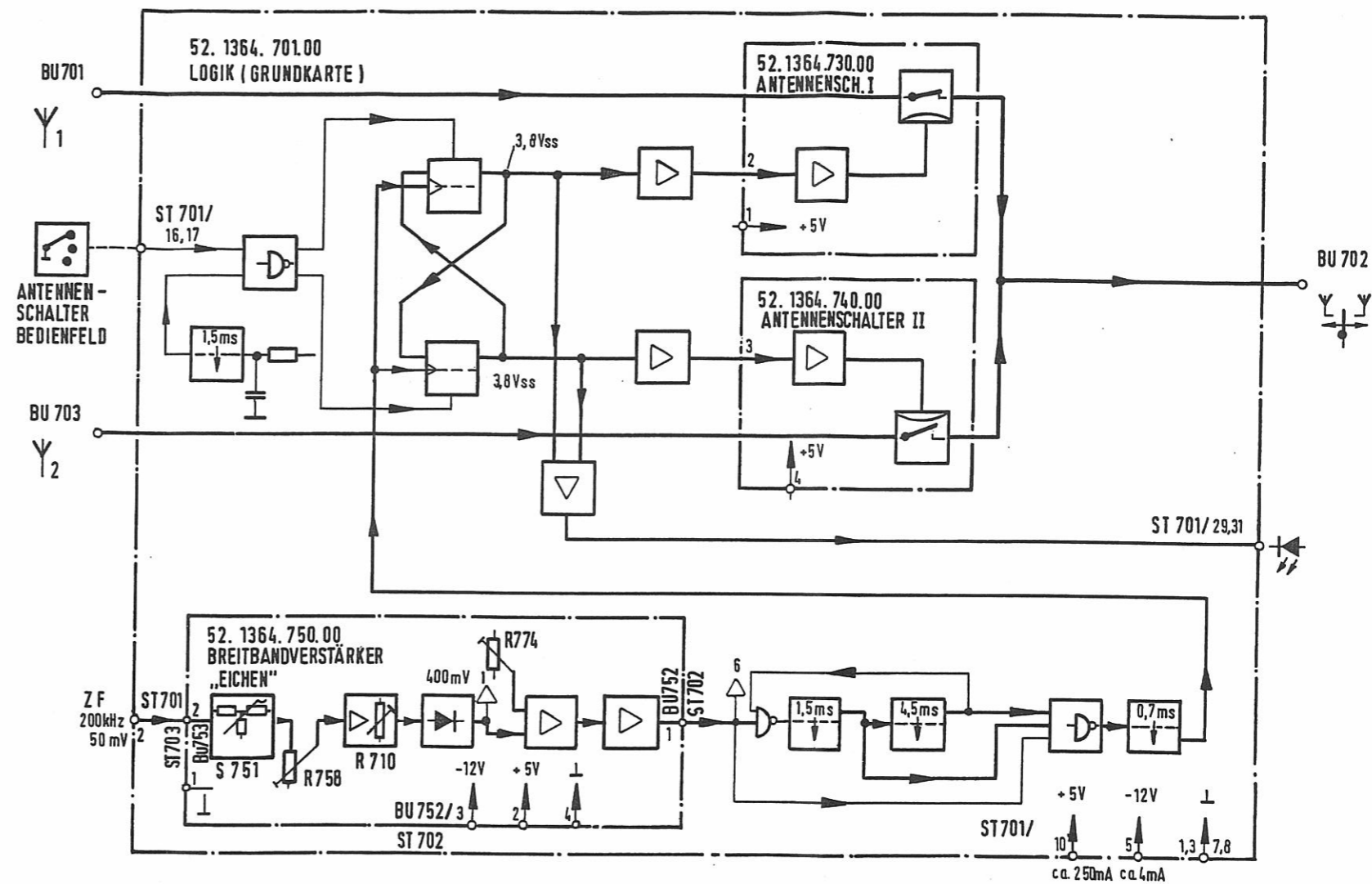
Zu jeder Schaltteilnummer 280 addieren
Add 280 to each components number

● = Lötstift
Soldering Pin

▲ = Meßpunkt
Test Point

Stromlaufplan Tontaste
Circuit Diagram of AF Modulator
Anlage 28/ Annex 28

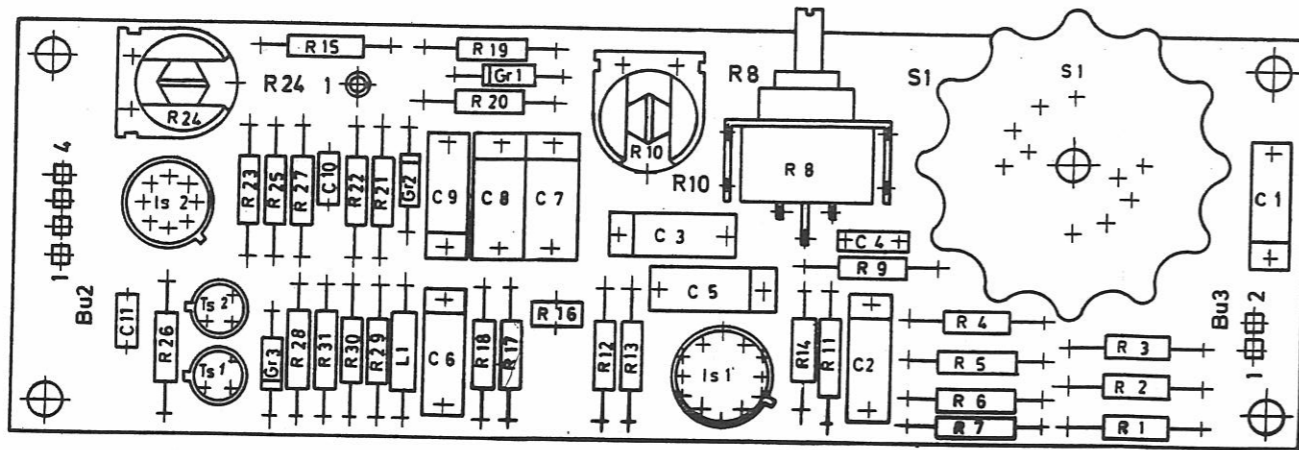




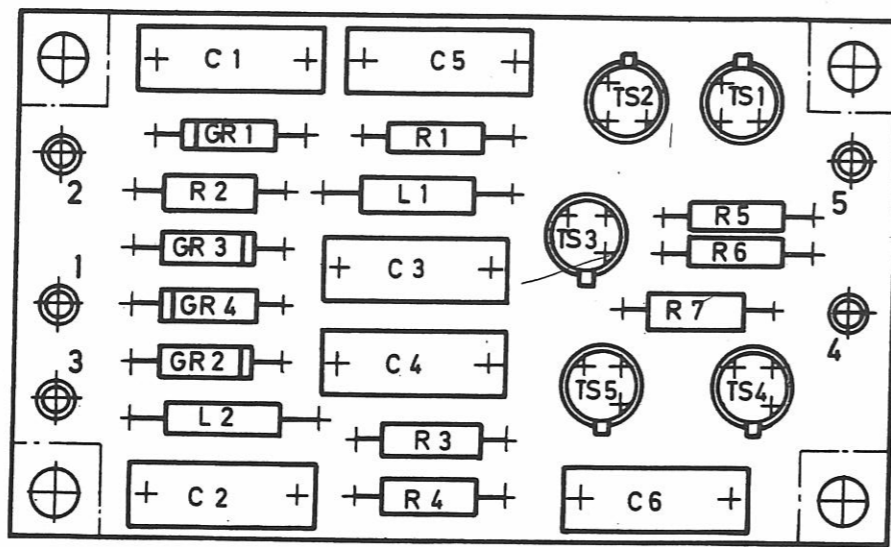
Logik (Grundkarte)	Logic (Basic Circuit Card)
Antennenschalter (Antennensch.)	Antenna Change-Over Switch
3,8 Vss	3,8 V (peak-to-peak)
Bedienfeld	Control Panel
Breitbandverstärker	Wideband Amplifier
"Eichen"	"Calibration"

Übersichtsschaltplan Antennendiversity AD 1500
 Block Diagram of Antenna Diversity Unit AD 1500
 Anlage 29/Annex 29
 Blatt 1/Sheet 1

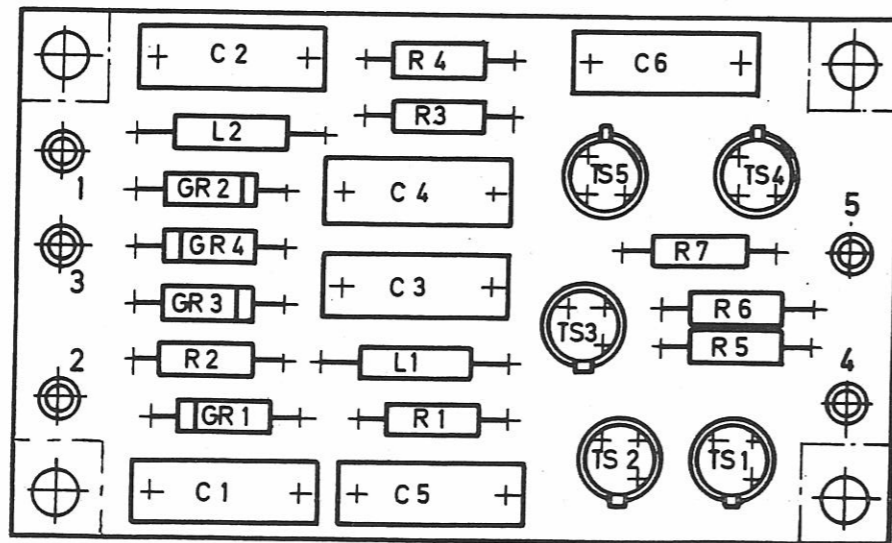




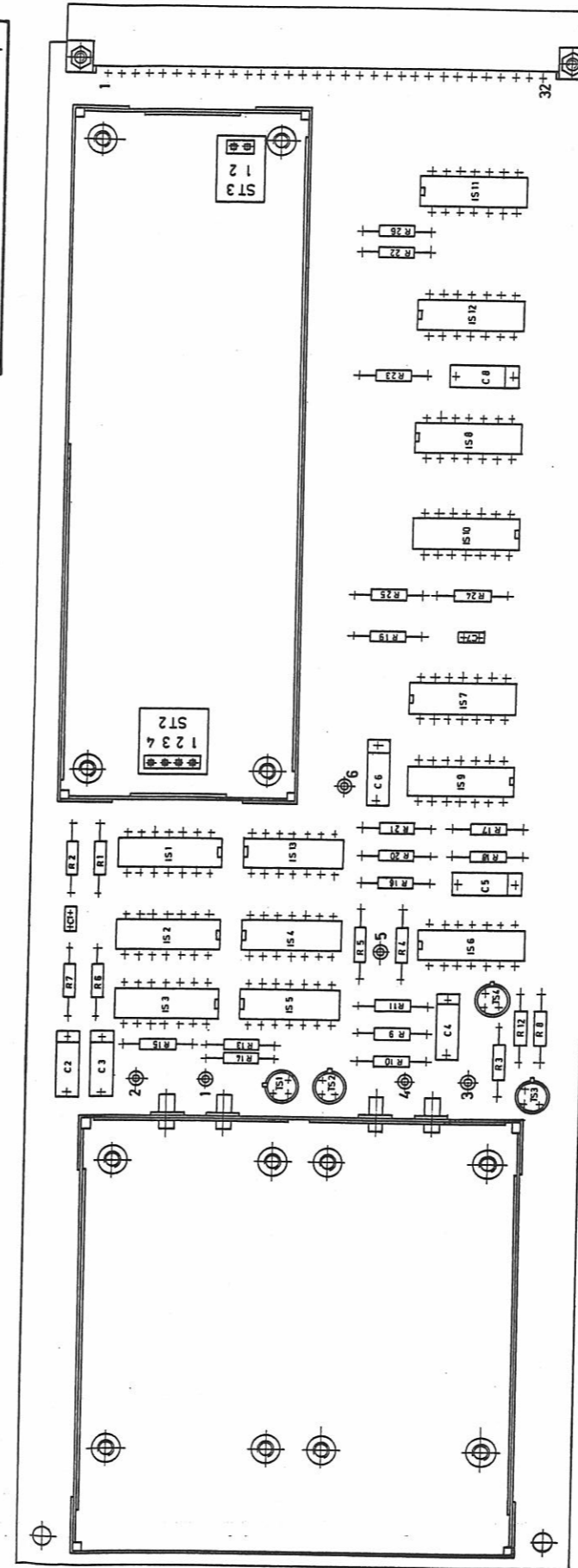
Bestückungsplan Breitbandverstärker
Printed Circuit Board Wide-Band Amplifier



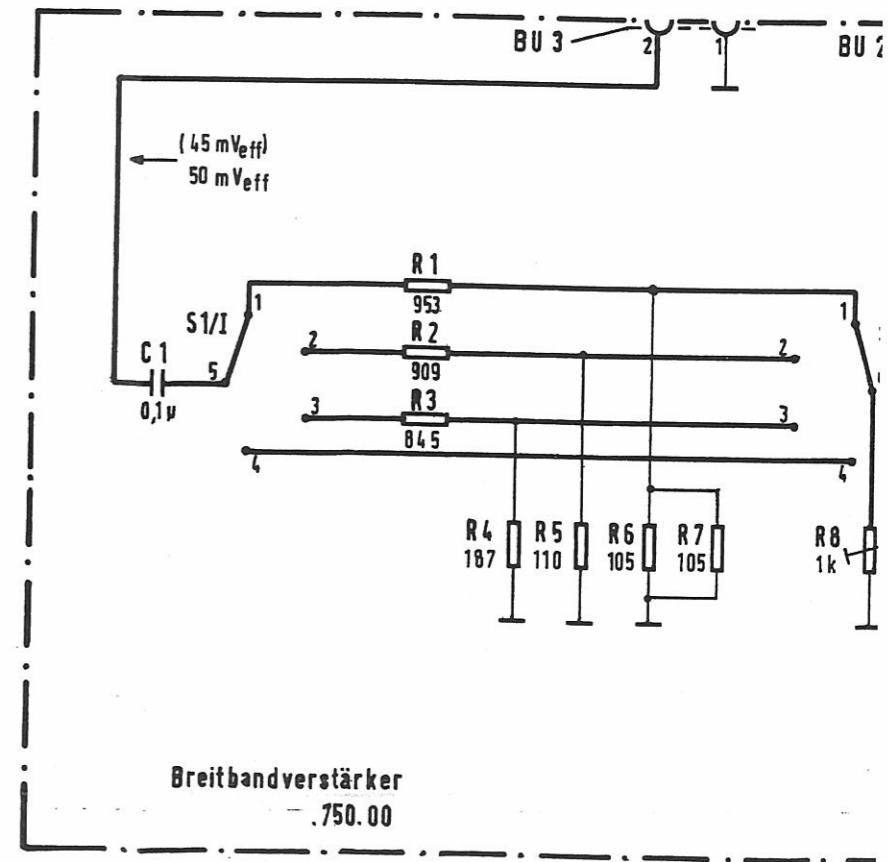
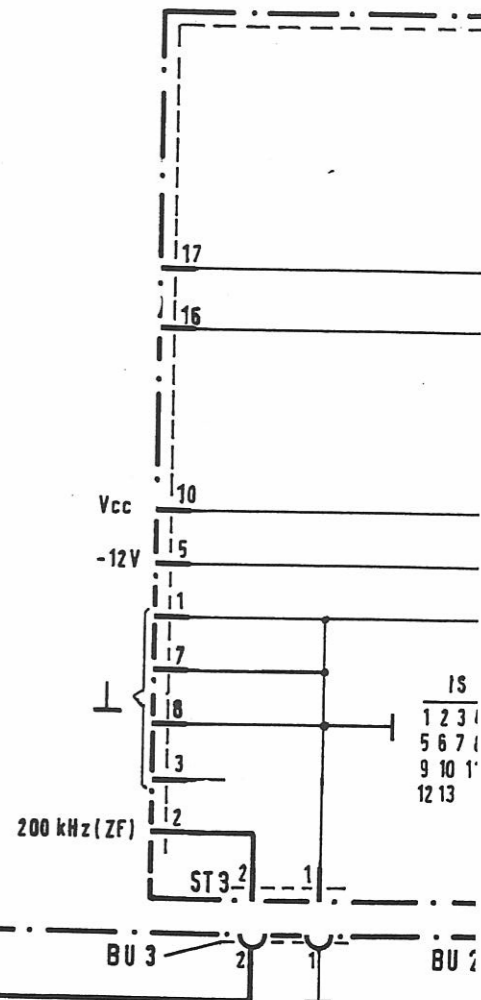
Bestückungsplan Antennenschalter I
Printed Circuit Board Antenna Change-Over Switch I

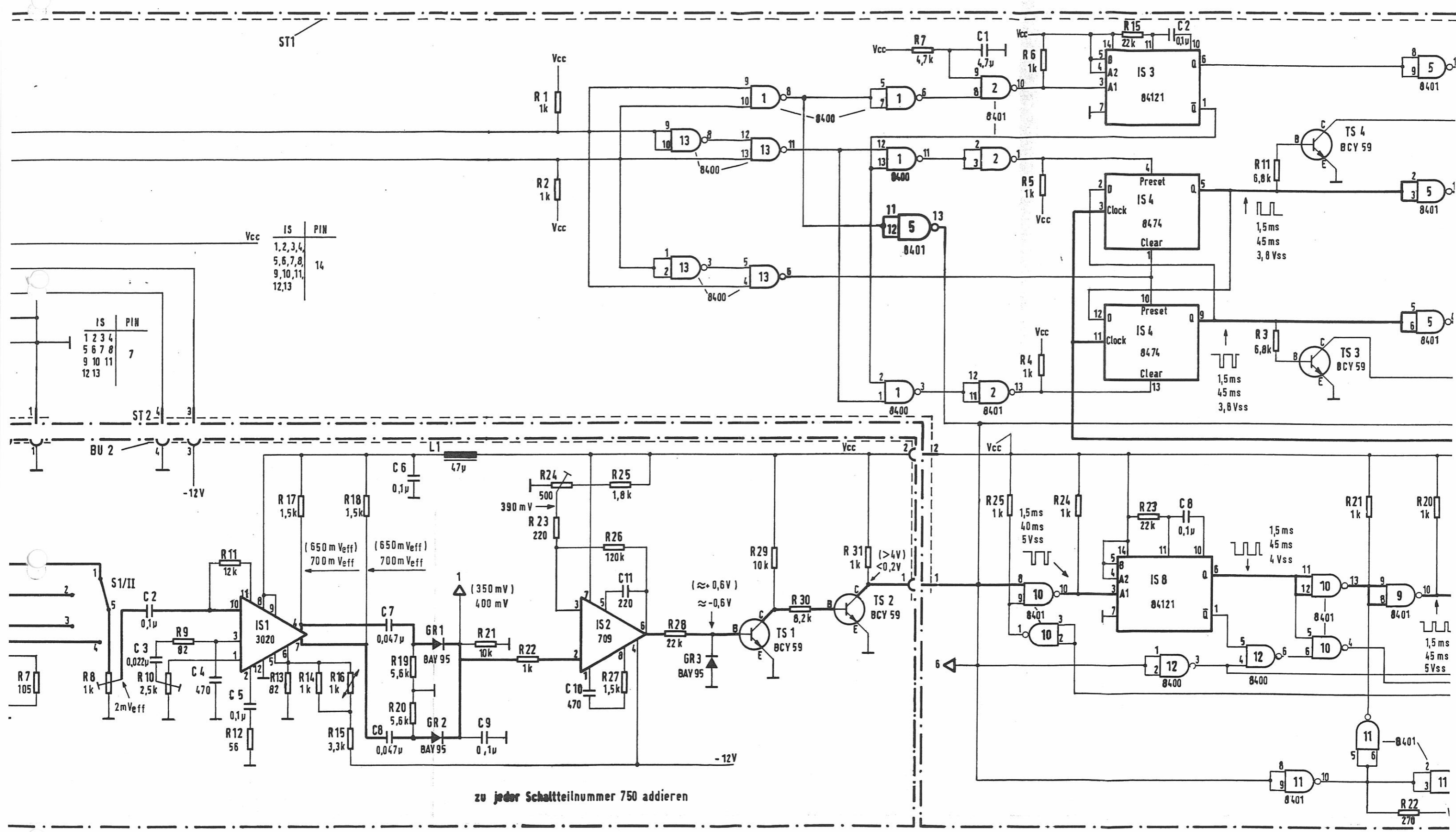


Bestückungsplan Antennenschalter II
Printed Circuit Board Antenna Change-Over Switch II



Bestückungsplan Logik
Printed Circuit Board Logic





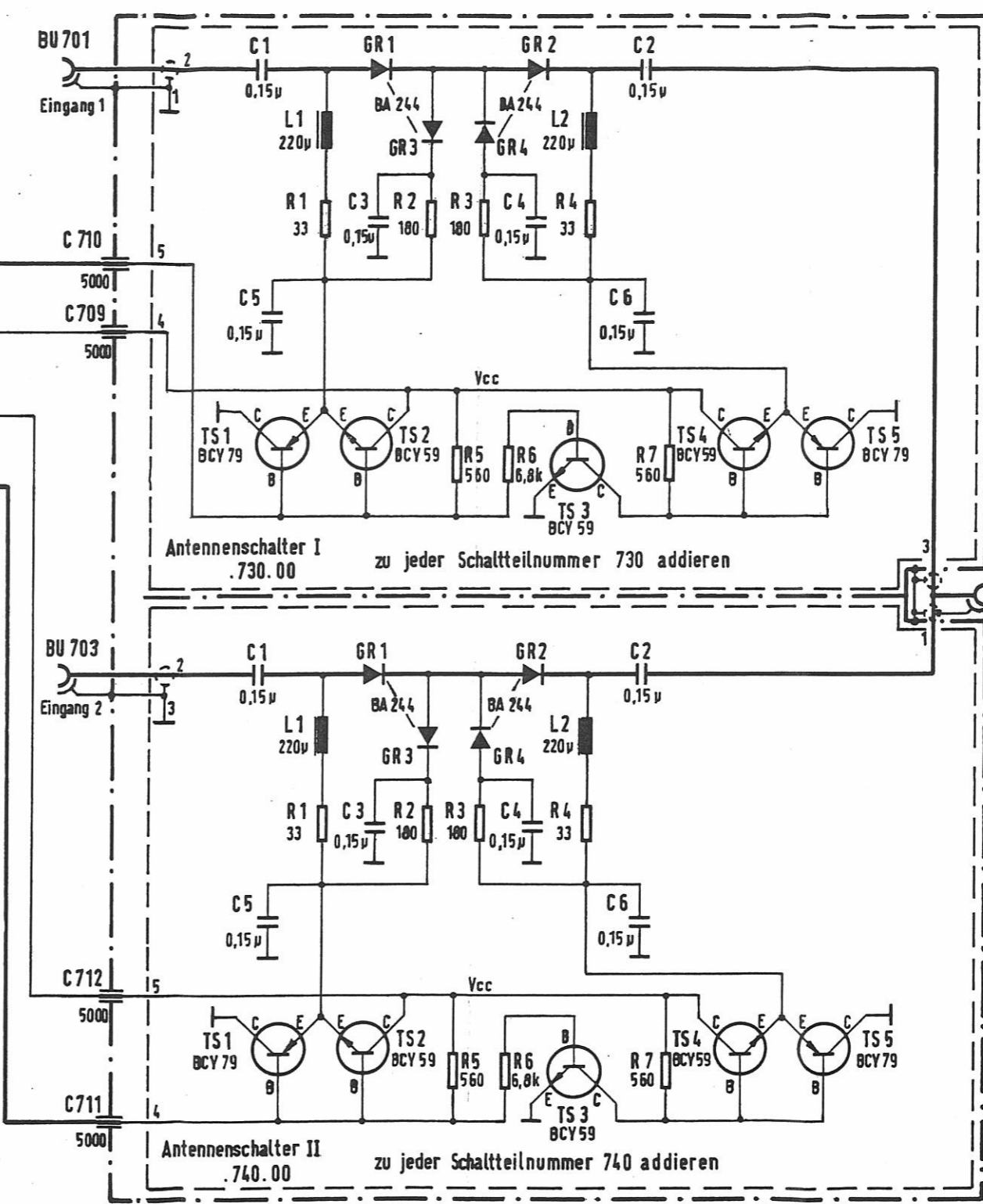
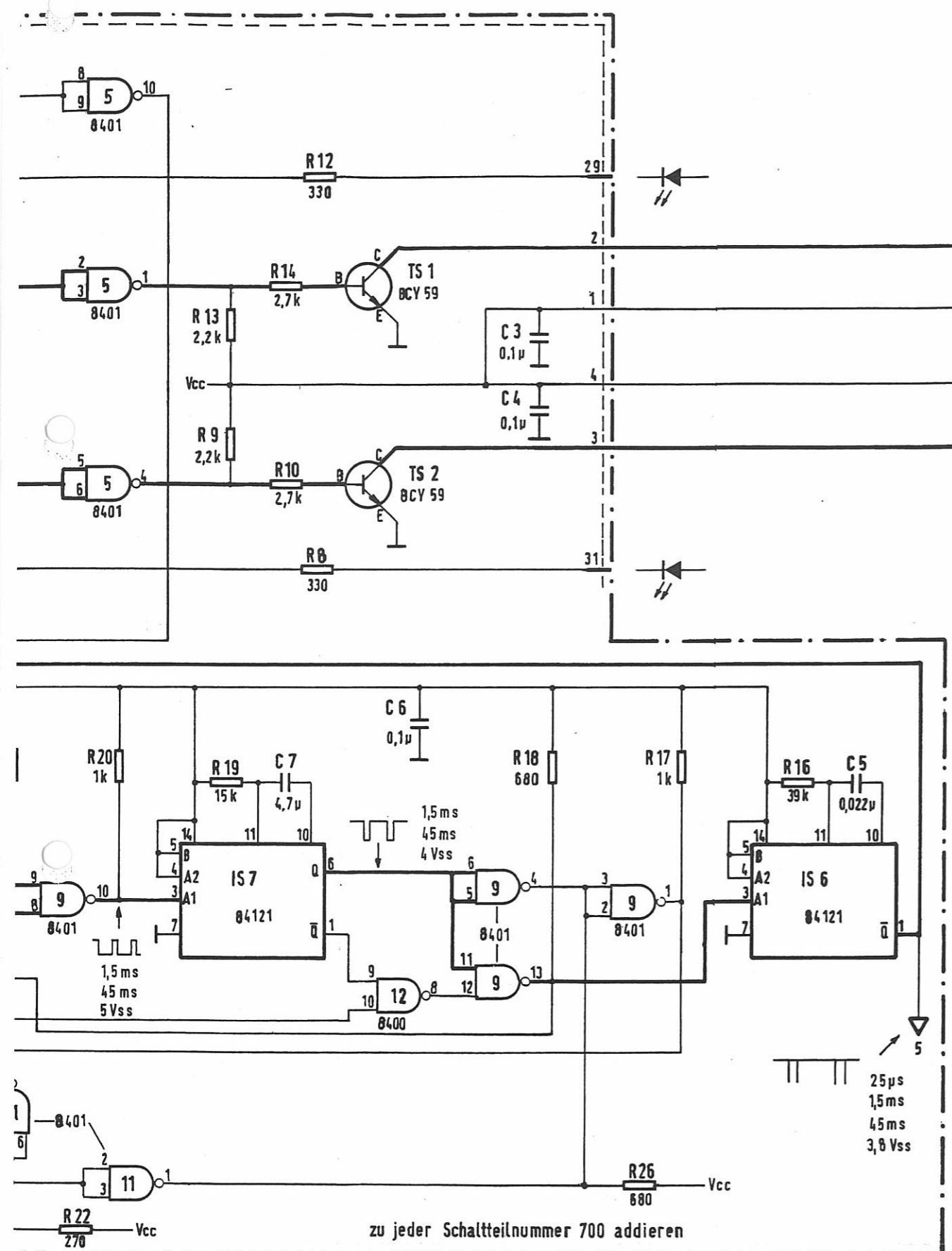
ST1

IS	PIN
1,2,3,4	14
5,6,7,8	
9,10,11	
12,13	

IS	PIN
1 2 3 4	7
5 6 7 8	
9 10 11	
12 13	

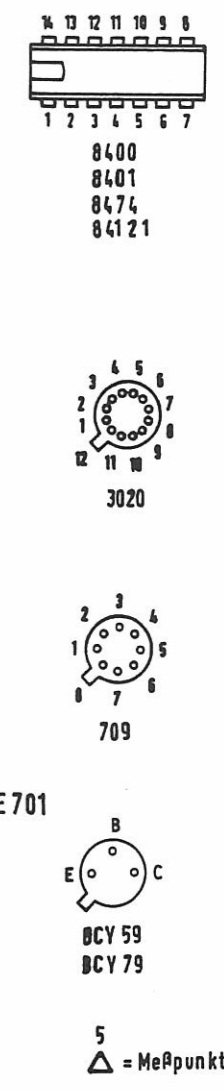
zu jeder Schalteilnummer 750 addieren

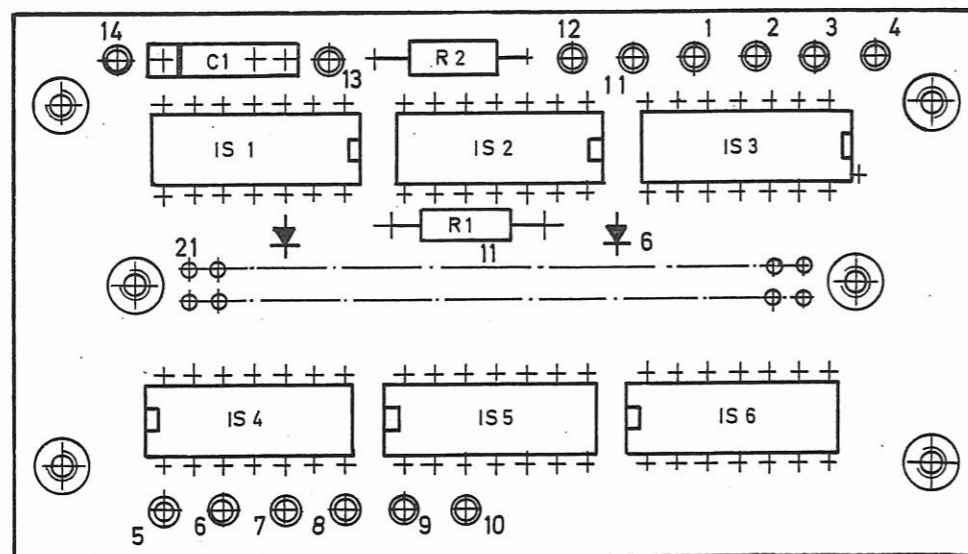
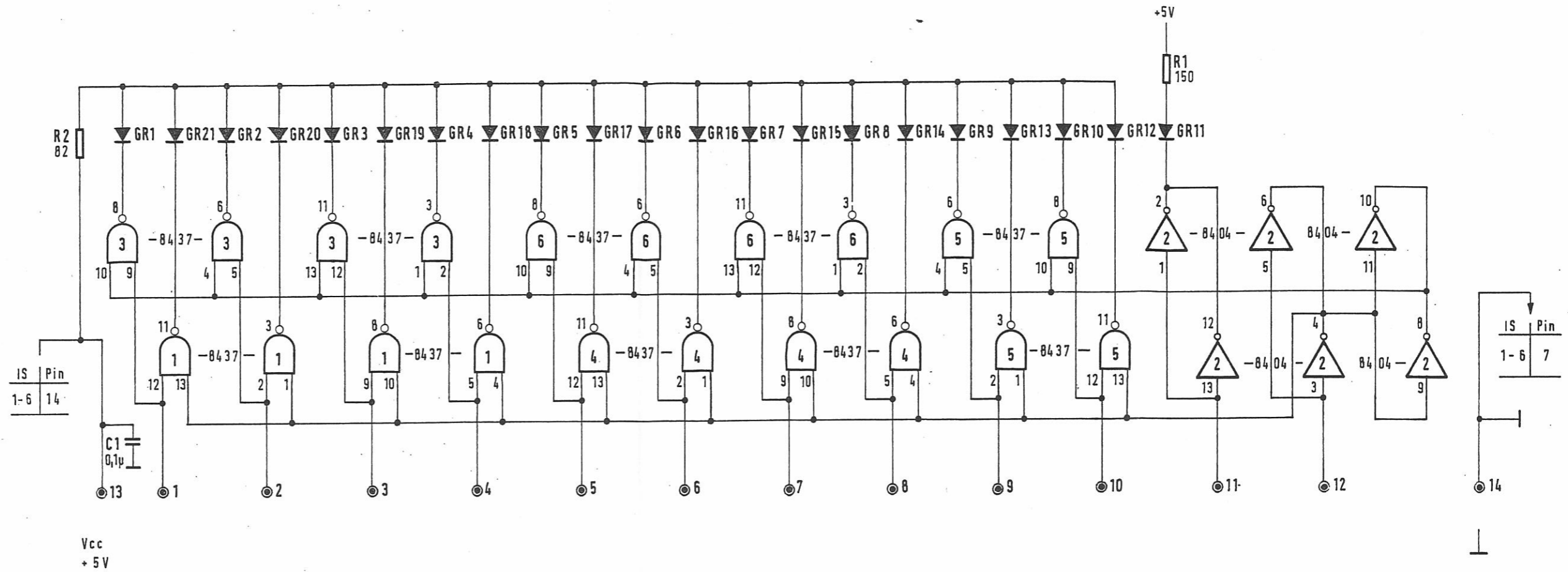
29-2
2-3



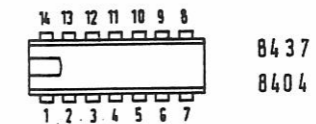
Eingang Input
 Ausgang Output
 Meßpunkt Test Point
 Breitbandverstärker Wide-band Amplifier
 Antennenschalter Antenna Change-Over Switch

zu jeder Schaltteilnummer ... addieren
 Add ... to each component number



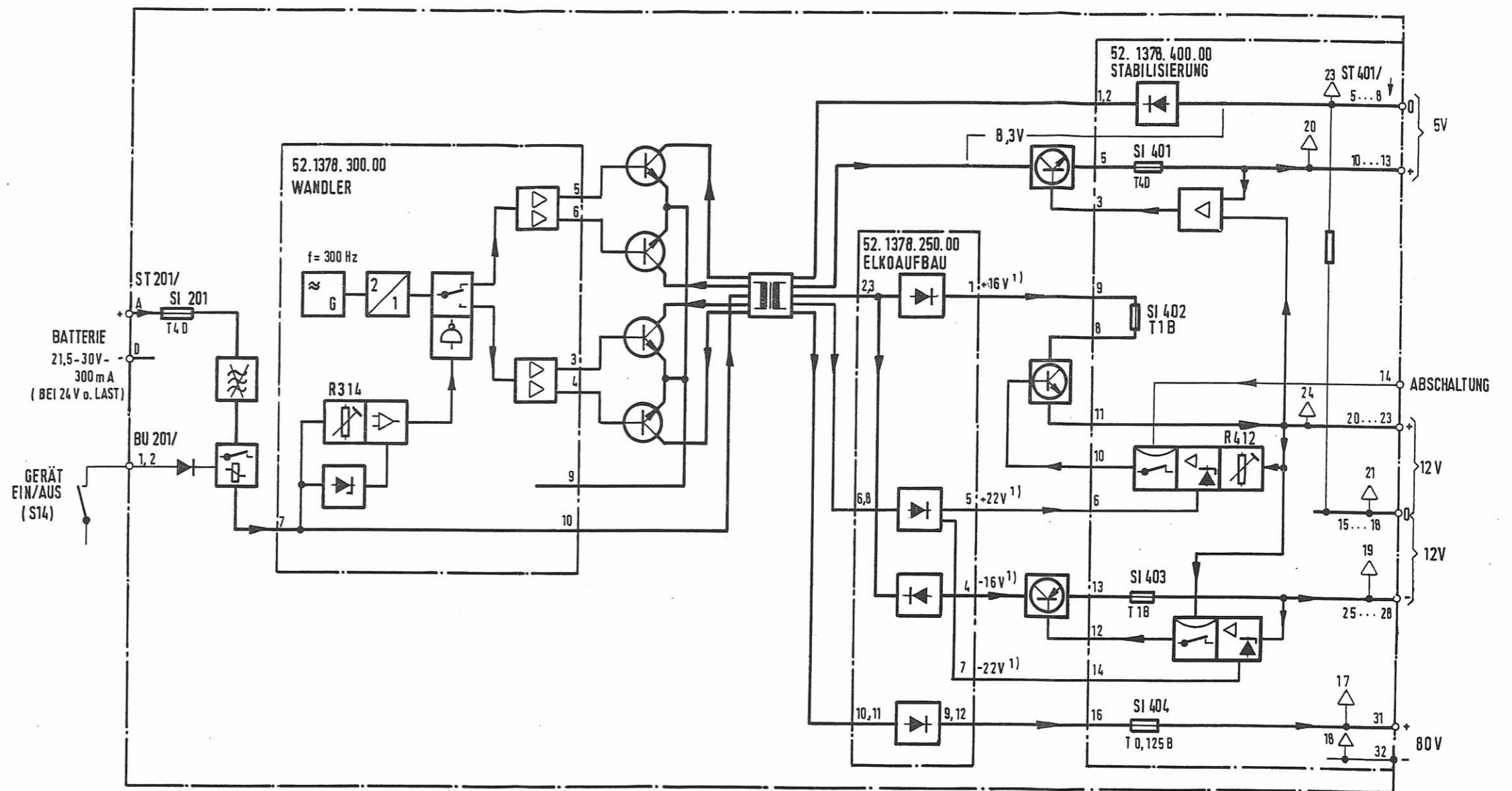


Bestückungsplan/Printed Circuit Board



Stromlaufplan Sichtanzeige
Circuit Diagram of Visual Display
Anlage 30/Annex 30

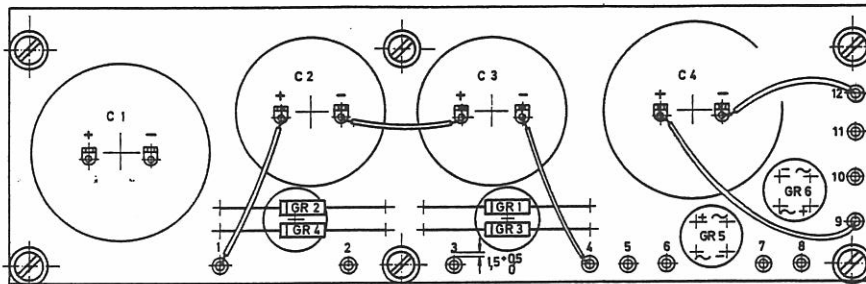




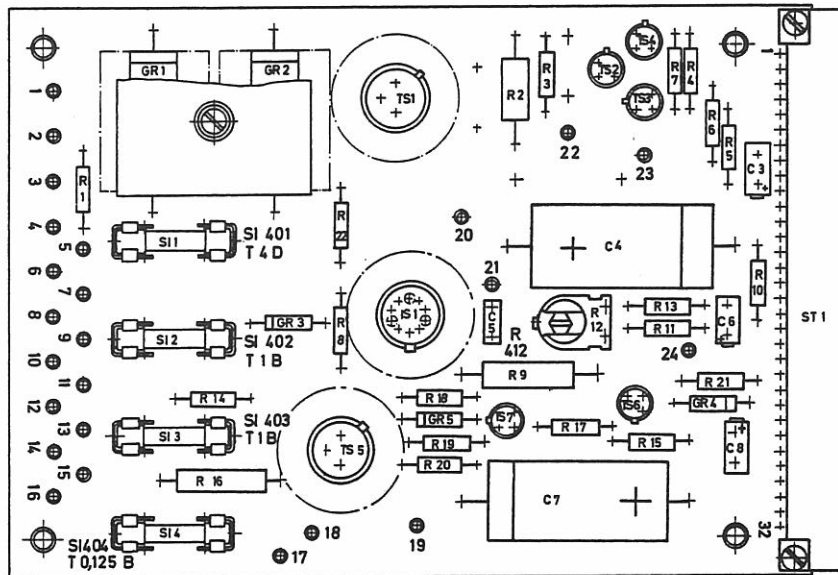
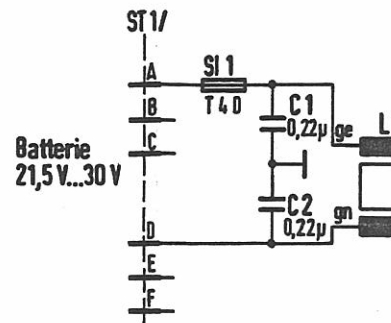
Stabilisierung	Stabilization
Wandler	Converter
Elkoeffbau	Electrolytic Capacitors Board
Batterie	Battery
(bei 24 V o. Last)	(at 24 V without load)
Abschaltung	Switching off
Gerät Ein/Aus	Unit On/off
1) Spannung gegen MP 21 gemessen	1) Voltage measured in respect of Test Point MP 21

Übersichtsschaltplan Batteriestromversorgung BS 1500
 Block Diagram of Battery Power Unit BS 1500
 Anlage 31/Annex 31
 Blatt 1/Sheet 1

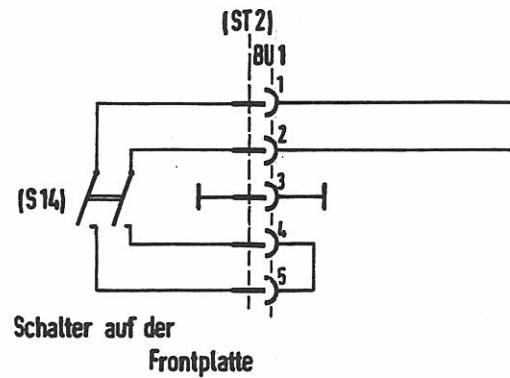




Bestückungsplan Elkoaufbau
Printed Circuit Board Electrolytic capacitors board

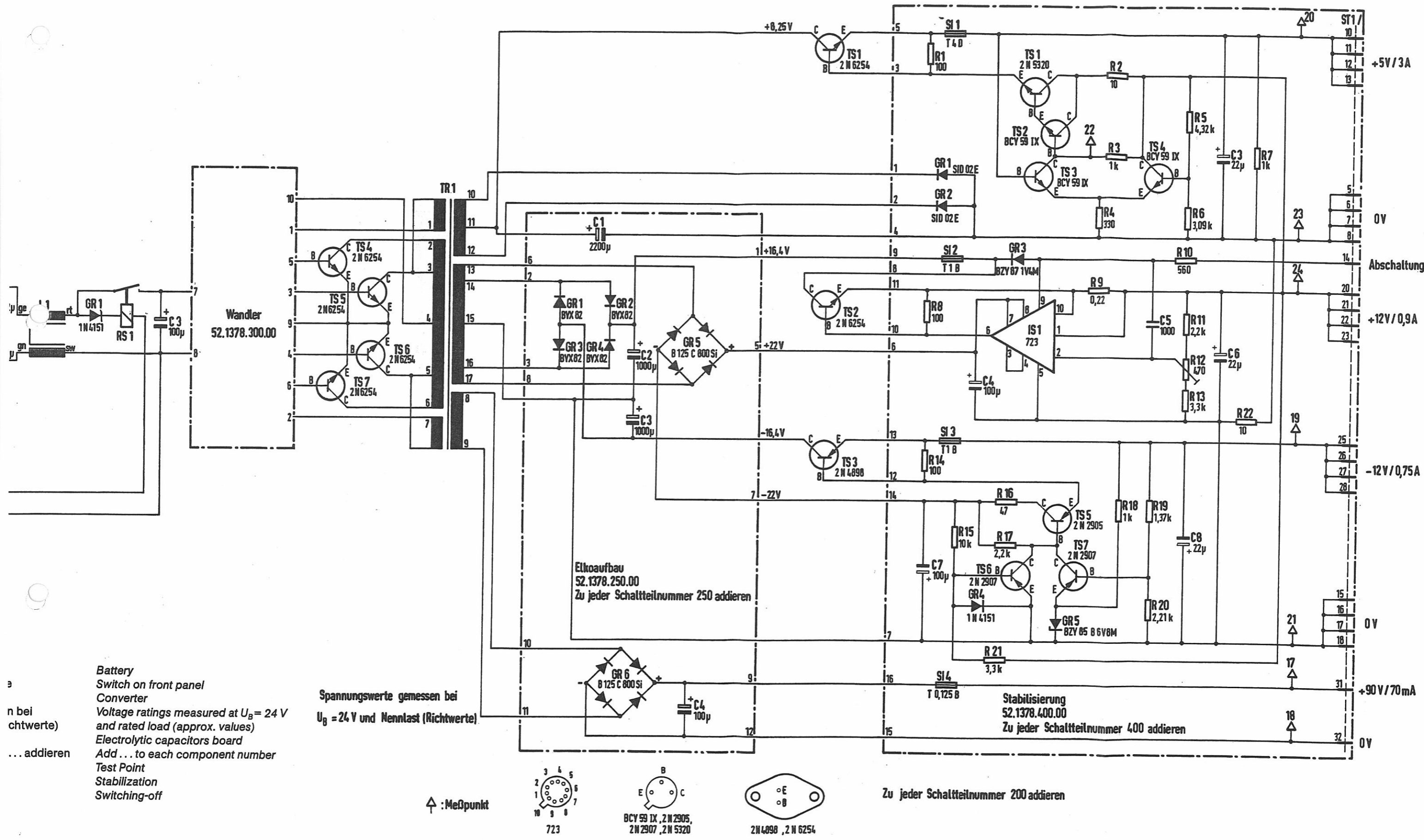


Bestückungsplan Stabilisierung
Printed Circuit Board Stabilization



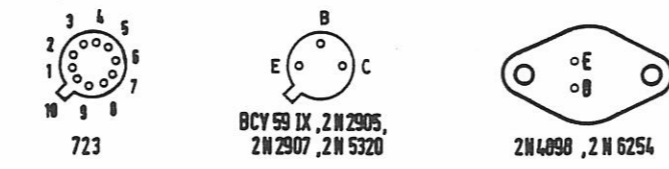
Schalter auf der Frontplatte

- Batterie
- Schalter auf der Frontplatte
- Wandler
- Spannungswerte gemessen bei $U_B = 24\text{ V}$ und Nennlast (Richtwert)
- Elkoaufbau
- Zu jeder Schaltteilnummer ... add
- Meßpunkt
- Stabilisierung
- Abschaltung



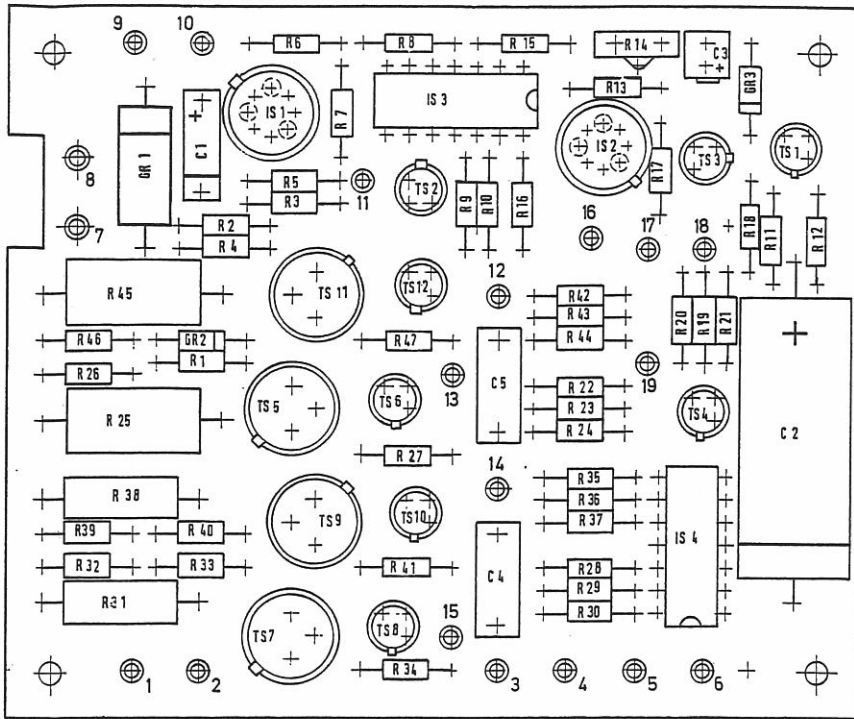
Battery
 Switch on front panel
 Converter
 Voltage ratings measured at $U_B = 24V$
 and rated load (approx. values)
 Electrolytic capacitors board
 Add ... to each component number
 Test Point
 Stabilization
 Switching-off

Spannungswerte gemessen bei
 $U_B = 24V$ und Nennlast (Richtwerte)



Zu jeder Schaltteilnummer 200 addieren



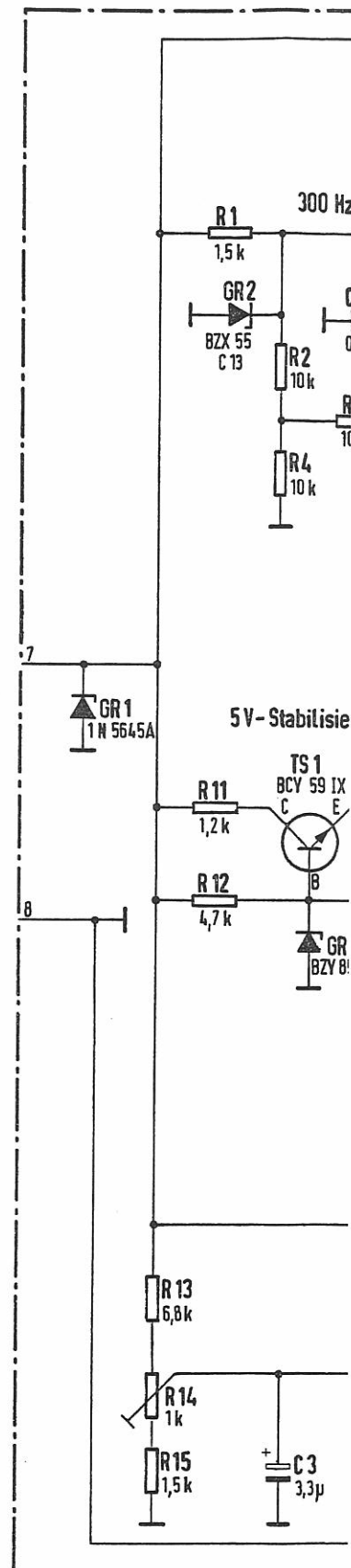


Bestückungsplan/Printed Circuit Board

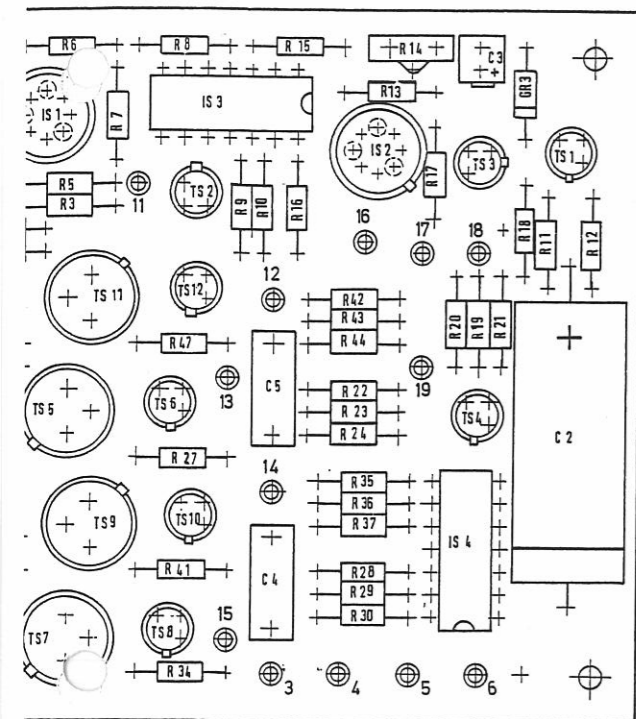
Eingangsschaltung
21,5 V - 30V

Eingangsschaltung
5 V-Stabilisierung
und
Batteriespannungsfühler
zum Wandlertransformator
Meßpunkt
Zu jeder Schaltteilnummer
... addieren

Input circuit
5 V Stabilization
and
Battery voltage sensor
to Transformer
Test Point
Add ... to each
component number



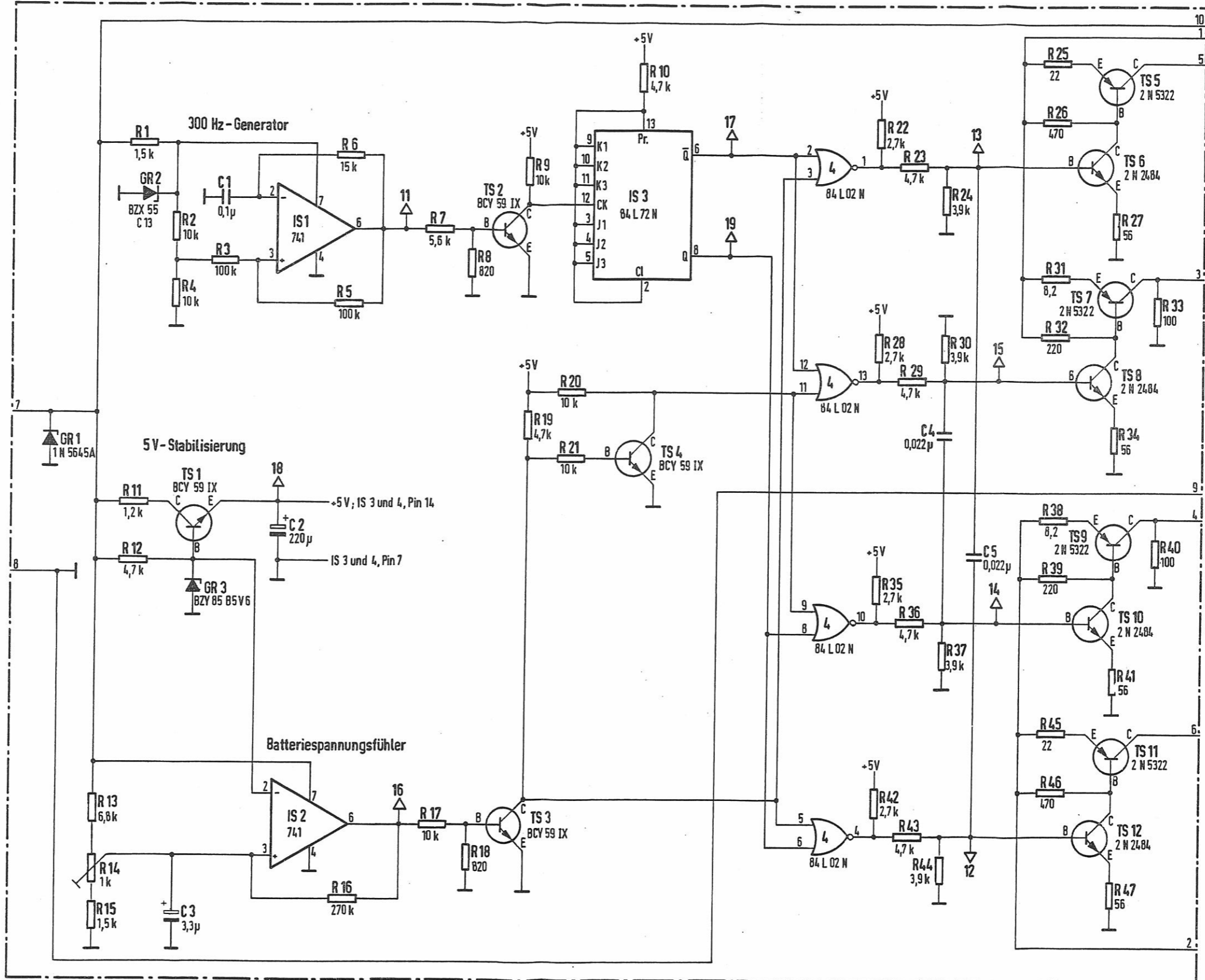
Zu jeder Schaltteilnummer 300 addieren



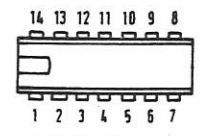
ted Circuit Board

Eingangsschaltung
21,5 V - 30 V

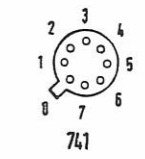
Input circuit
5 V Stabilization
and
Battery voltage sensor
to Transformer
Test Point
Add ... to each
component number



Zu jeder Schaltteilnummer 300 addieren



84 L 02 N, 84 L 72 N



741

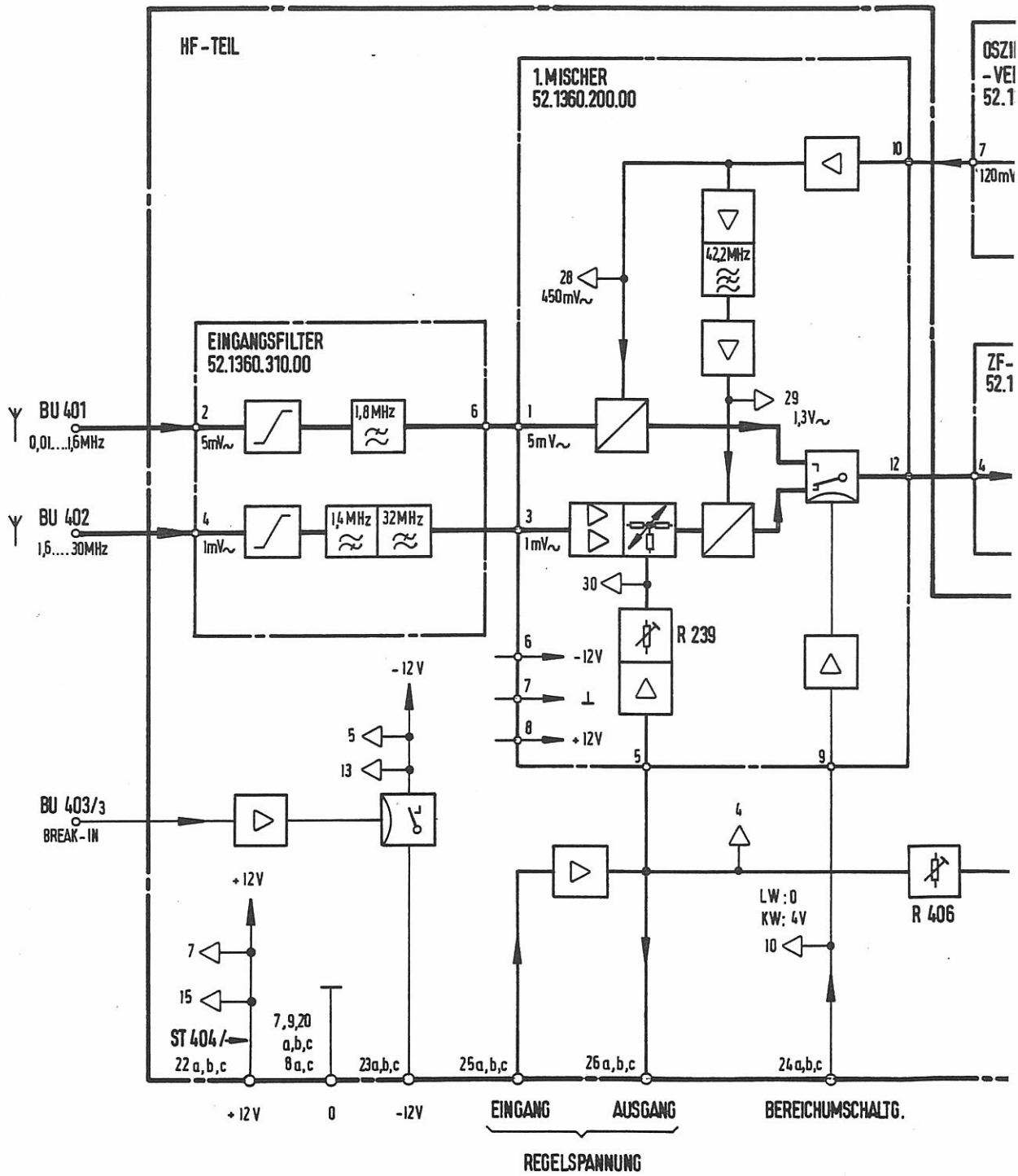
zum Wandlertransformator



BCY 59 IX
2 N 2484
2 N 5322

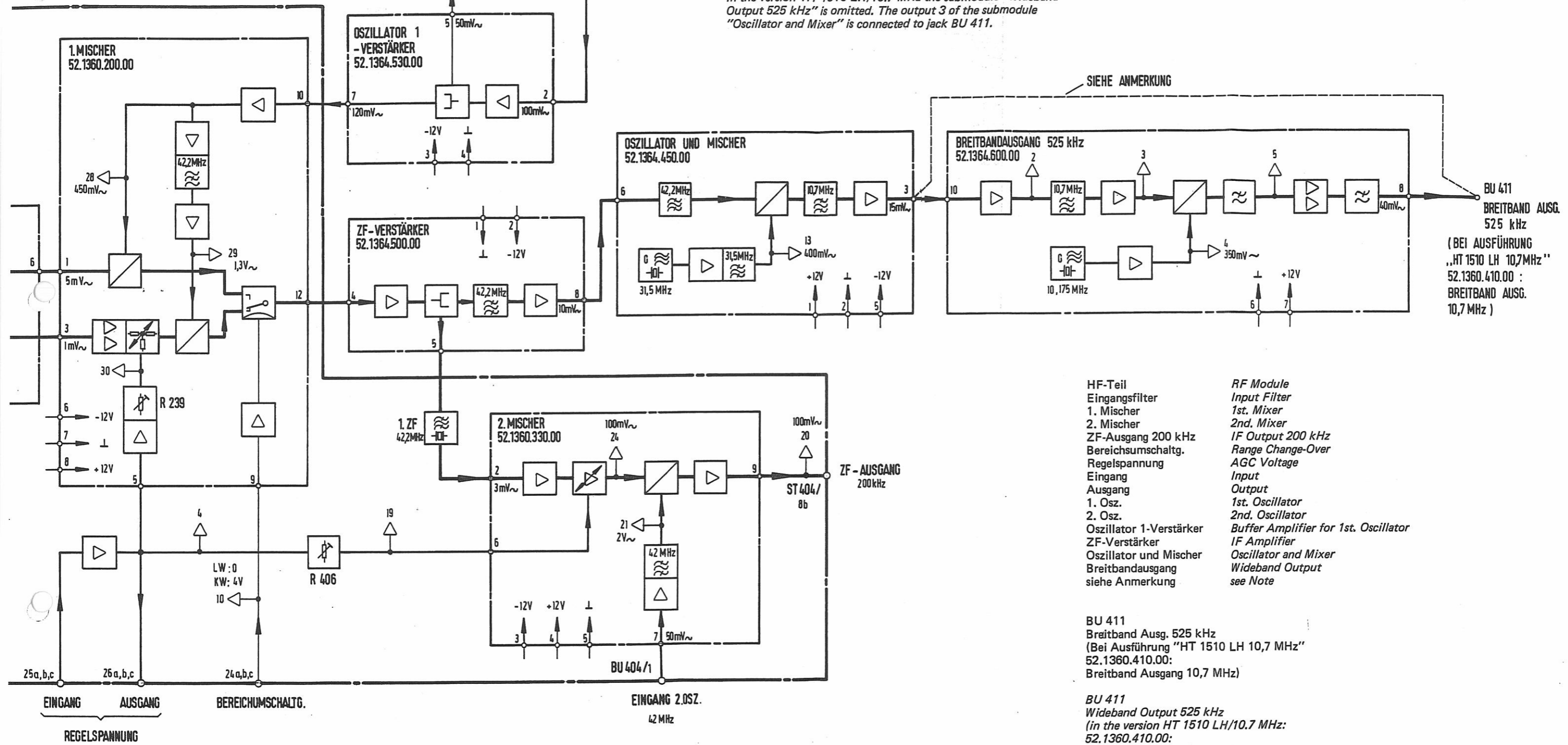
↑: Meßpunkt





AUSGANG 1.OSZ.
BU 412
EINGANG 1.OSZ.
BU 413
42,21...72,2 MHz

Anmerkung:
Bei Ausführung HT 1510 LH 10,7 MHz, 52.1364.410.00, entfällt die Baugruppe "Breitbandausgang 525 kHz", 52.1364.600.00. Der Ausgang Anschluß 3 vom "Oszillator und Mischer", 52.1364.450.00, ist direkt mit Buchse BU 411 verbunden.
Note:
In the version HT 1510 LH/10.7 MHz the submodule "Wideband Output 525 kHz" is omitted. The output 3 of the submodule "Oscillator and Mixer" is connected to jack BU 411.



SIEHE ANMERKUNG

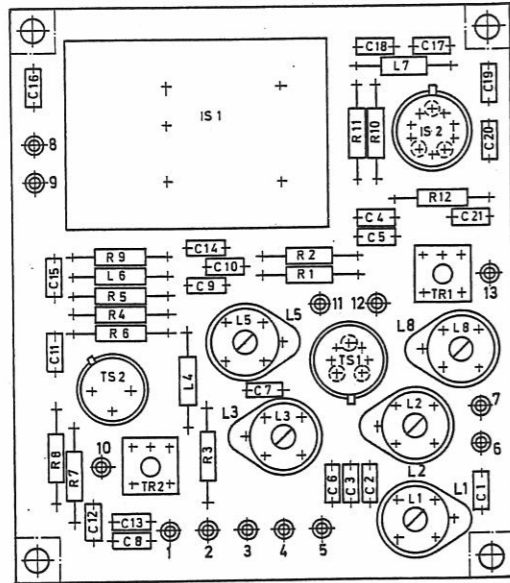
- | | |
|-------------------------|--------------------------------------|
| HF-Teil | RF Module |
| Eingangsfiler | Input Filter |
| 1. Mischer | 1st. Mixer |
| 2. Mischer | 2nd. Mixer |
| ZF-Ausgang 200 kHz | IF Output 200 kHz |
| Bereichumschaltg. | Range Change-Over |
| Regelspannung | AGC Voltage |
| Eingang | Input |
| Ausgang | Output |
| 1. Osz. | 1st. Oscillator |
| 2. Osz. | 2nd. Oscillator |
| Oszillator 1-Verstärker | Buffer Amplifier for 1st. Oscillator |
| ZF-Verstärker | IF Amplifier |
| Oszillator und Mischer | Oscillator and Mixer |
| Breitbandausgang | Wideband Output |
| siehe Anmerkung | see Note |

BU 411
Breitband Ausg. 525 kHz
(Bei Ausführung "HT 1510 LH 10,7 MHz")
52.1360.410.00:
Breitband Ausgang 10,7 MHz)

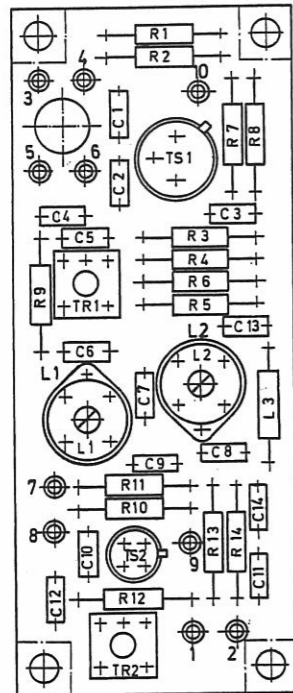
BU 411
Wideband Output 525 kHz
(in the version HT 1510 LH/10.7 MHz:
52.1360.410.00:
Wideband Output 10.7 MHz)

Übersichtsschaltplan HF-Teil HT 1510 LH
10,7 MHz/525 kHz
Block Diagram of RF Module HT 1510 LH
10.7 MHz/525 kHz
Anlage 33/Annex 33
Blatt 1/Sheet 1
2 - 2

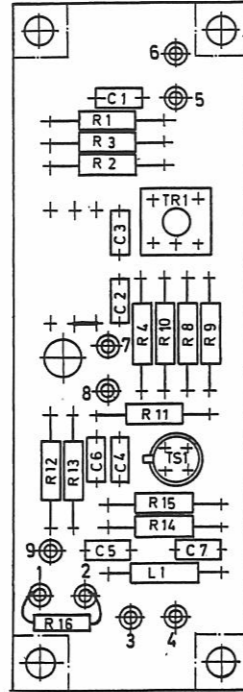




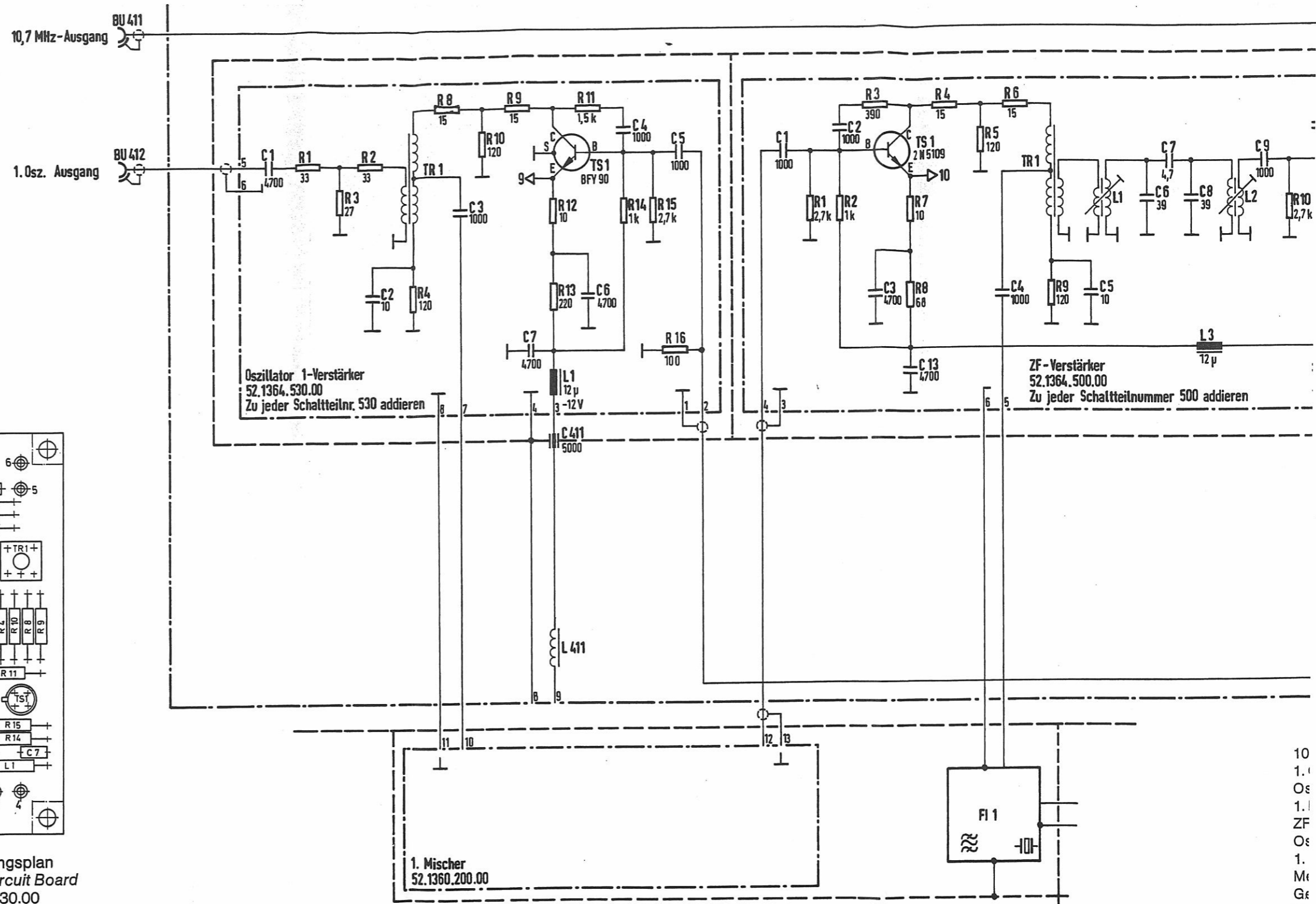
Bestückungsplan/Printed Circuit Board
52.1364.450.00



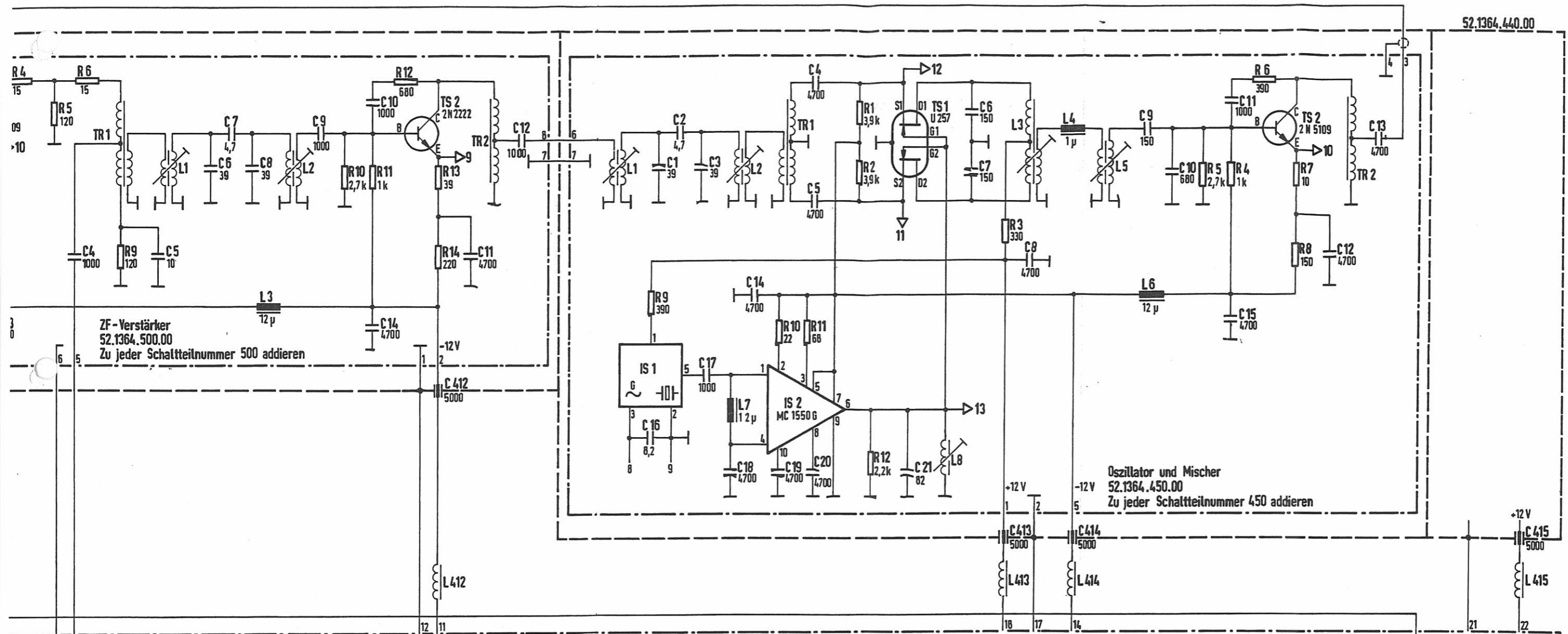
Bestückungsplan
Printed Circuit Board
52.1364.500.00



Bestückungsplan
Printed Circuit Board
52.1364.530.00



3-2
1-2



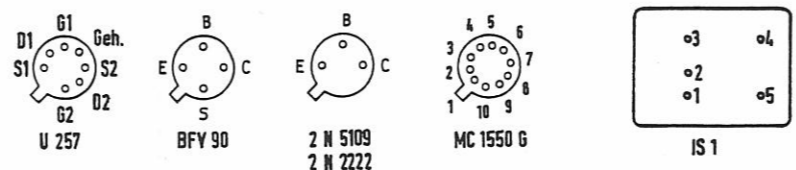
ZF-Verstärker
52.1364.500.00
Zu jeder Schaltteilnummer 500 addieren

Oszillator und Mischer
52.1364.450.00
Zu jeder Schaltteilnummer 450 addieren

52.1364.400.00

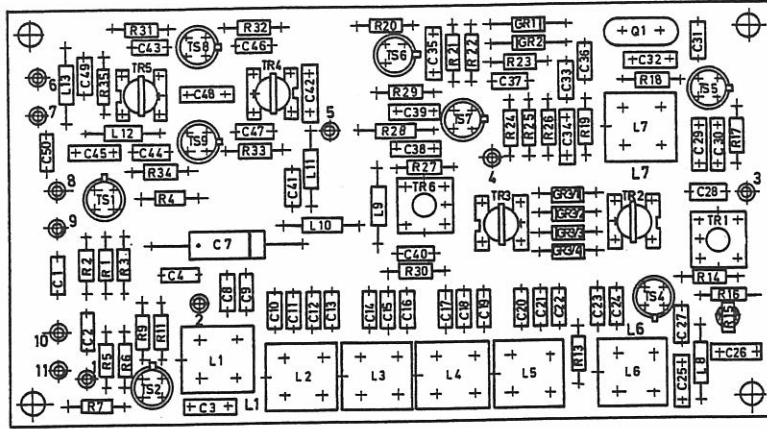
10,7 MHz-Ausgang
1. Osz. Ausgang
Oszillator 1-Verstärker
1. Mischer
ZF-Verstärker
Oszillator und Mischer
1. Oszillator
Meßpunkt
Geh.
Zu jeder Schaltteilnummer
... addieren

Output 10.7 MHz
Output 1st. Oscillator
Buffer Amplifier for 1st. Oscillator
1st. Mixer
IF Amplifier
Oscillator and Mixer
1st. Oscillator
Test Point
Frame
Add ... to each
component number



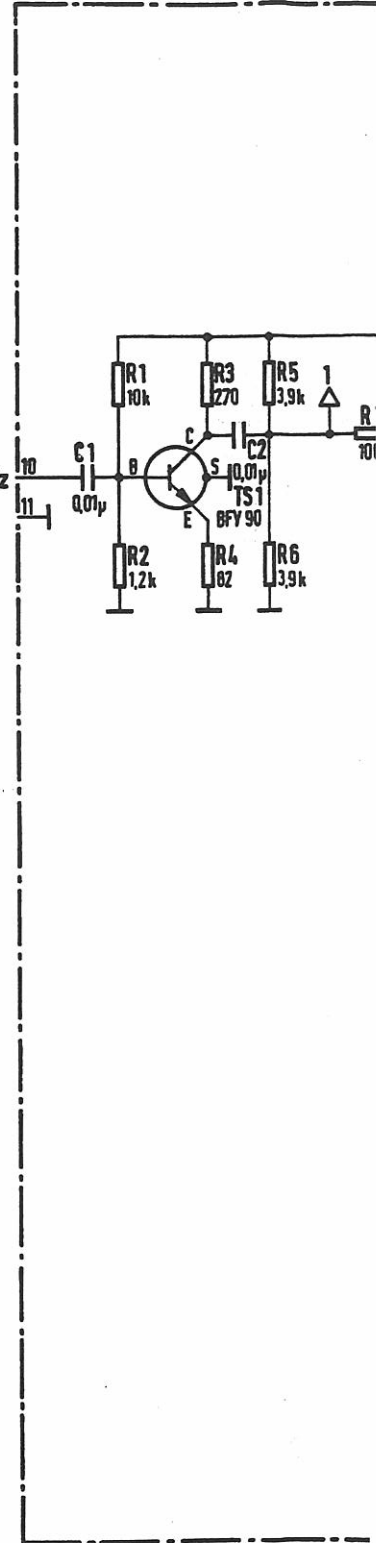
△ : Meßpunkt

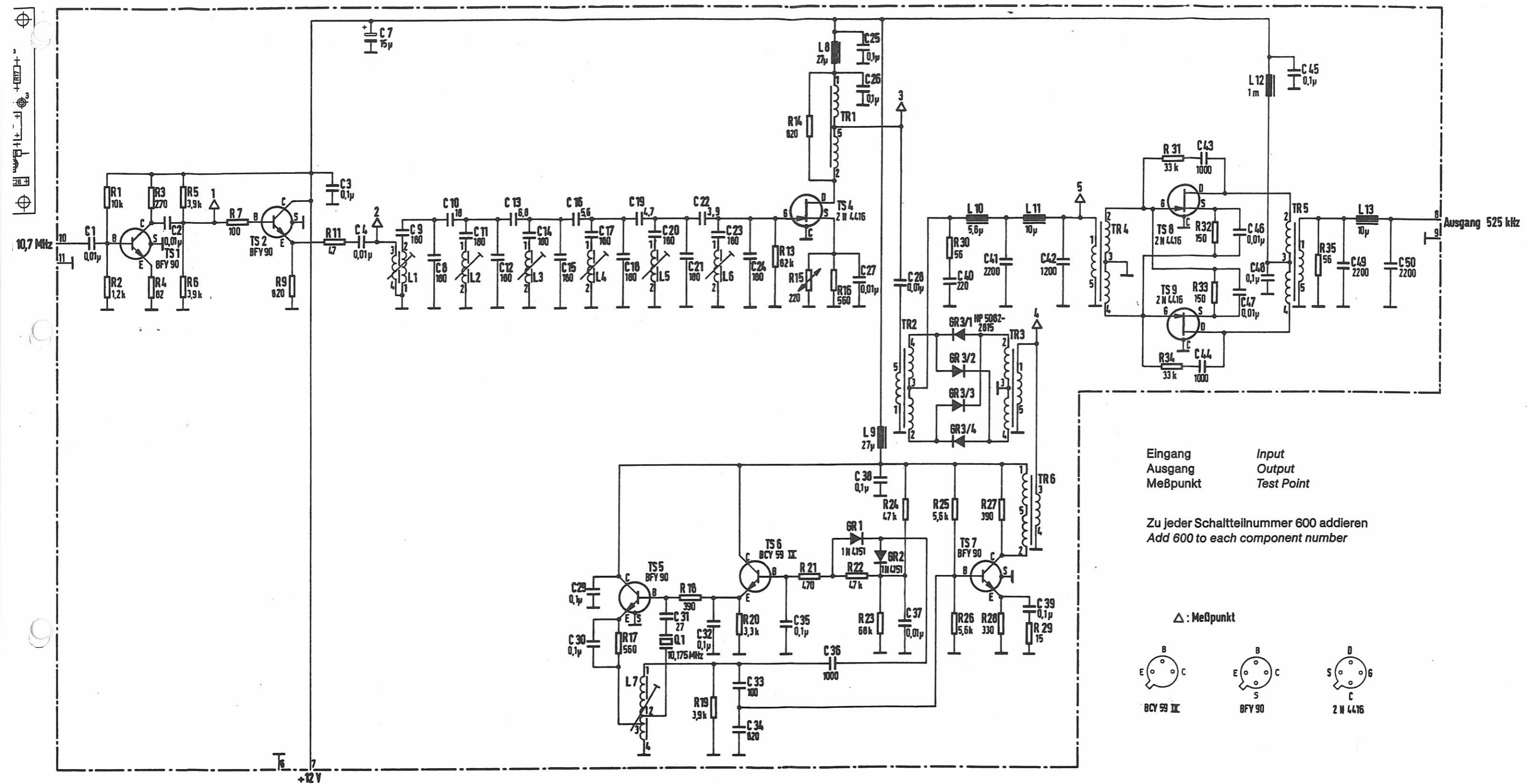




Bestückungsplan/Printed Circuit Board

Eingang 10,7 MHz





Stromlaufplan Frequenzumsetzer 10,7 MHz/525 kHz
 Circuit Diagram of Frequency Converter 10.7 MHz/525 kHz
 Anlage 34/Annex 34
 2 - 2

