

STUDER D941 Mixing Console

Schemata / Circuit Diagrams

1. Block Diagram Layout

2. Fader Panel Units

3. Centralized Unit

4. Monitor Units

5. Processor and Interface Units

6. Meter Panel Units

7. Units of Eurocard Frame

8. Connector Panel

9. Wiring List

10. Wiring Diagrams Accessories

Prepared and edited by:
STUDER Professional Audio AG
Technical Documentation
Althardstrasse 30
CH-8105 Regensdorf - Switzerland

Copyright by STUDER Professional Audio AG
Printed in Switzerland
Order no. 10.27.4120 (Ed. 1296)

We reserve the right to make alterations

STUDER is a registered trade mark of STUDER Professional Audio AG, Regensdorf

Contents of Schemata / Circuit Diagram Sections in Alphabetical Order

	Section
4 Balancing Amplifier Gain 6 dB	1.915.914.00 7
4CH Fader Unit	1.940.715.00 2
Aux Indicator 4xLED	1.913.135.00 6
Centralized Front Board	1.940.763.00 3
Centralized Unit	1.940.765.00 3
Channel Controller Board	1.940.753.20 3
Channel Controller Board	1.940.753.20 2
CR Monitor Control Unit	1.990.420.00 4
- CR Monitor Switch Board	1.990.429.00 4
CR/Studio Monitor Amplifier	1.917.310.00 7
CR/Studio Monitor Amplifier/Out	1.917.312.00 7
CR + Studio Monitor Mix Amplifier	1.917.300.00 7
Fader Front Board	1.940.713.00 2
LED PPM Meter	1.913.291.00 6
Modul Processor Board	1.990.190.31 5
Monitor Relays Unit 8x2/2	1.917.601.00 7
Optical Synchronous IF	1.940.140.81 8
PFL Amplifier	1.913.200.00 6
PFL Amplifier with Vol. + Headphone-Jack	1.913.202.00 6
PFL/Talk Back Headphone Amplifier	1.917.330.81 7
PFL/Talk Back Headphone Unit	1.990.440.00 4
- PFL/Talk Back Switch Board	1.990.449.00 4
Power Supply ±15V/3.4A	1.940.602.00 7
Power Supply 24V/4.2A	1.940.603.00 7
Power Supply 3V...6V	1.915.111.81 7
Power Supply 5V/20A	1.940.601.00 7
Serdat Master Interface	1.990.496.00 5
Serdat Slave Interface	1.990.497.00 5
Signal Input/Output Interface	1.917.611.00 7
Source Selector Unit	1.990.490.00 4
Source Selector Unit	1.990.498.00 4
- Source Selector Switch Board	1.990.499.00 4
Studio Monitor Control Unit	1.990.430.00 4
- Studio Monitor Switch Board	1.990.439.00 4
Subcard for CR/Studio Monitor	1.917.311.00 7
Subcard for PFL Talk Back Headphone	1.917.331.00 7
Surface Interface	1.940.712.00 2
Surface Interface	1.940.712.20 3
Talk Back Amplifier	1.917.320.00 7

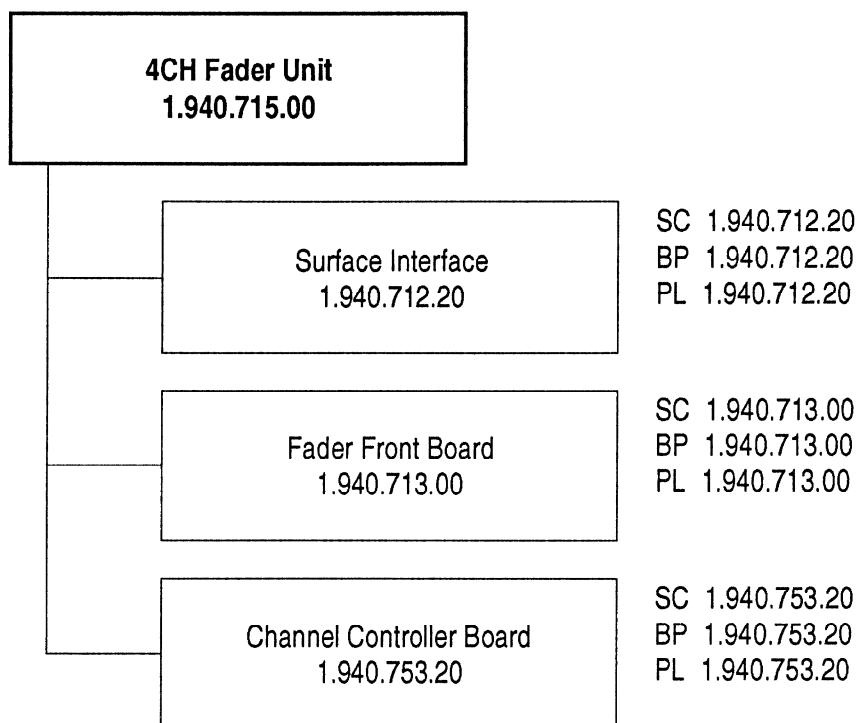
Contents of Schemata / Circuit Diagram Sections in Numerical Order

	Section
1.913.135.00	Aux Indicator 4xLED
1.913.200.00	PFL Amplifier
1.913.202.00	PFL Amplifier with Vol. + Headphone-Jack.....
1.913.291.00	LED PPM Meter.....
1.915.111.81	Power Supply 3V...6V
1.915.914.00	4 Balancing Amplifier Gain 6 dB
1.917.300.00	CR + Studio Monitor Mix Amplifier
1.917.310.00	CR/Studio Monitor Amplifier
1.917.311.00	Subcard for CR/Studio Monitor
1.917.312.00	CR/Studio Monitor Amplifier/Out.....
1.917.320.00	Talk Back Amplifier
1.917.330.81	PFL/Talk Back Headphone Amplifier
1.917.331.00	Subcard for PFL Talk Back Headphone
1.917.601.00	Monitor Relays Unit 8x2/2
1.917.611.00	Signal Input/Output Interface.....
1.940.140.81	Optical Synchronous IF
1.940.601.00	Power Supply 5V/20A
1.940.602.00	Power Supply ±15V/3.4A
1.940.603.00	Power Supply 24V/4.2A
1.940.712.00	Surface Interface
1.940.712.20	Surface Interface
1.940.713.00	Fader Front Board
1.940.715.00	4CH Fader Unit
1.940.753.20	Channel Controller Board.....
1.940.753.20	Channel Controller Board.....
1.940.763.00	Centralized Front Board
1.940.765.00	Centralized Unit.....
1.990.190.31	Modul Processor Board
1.990.420.00	CR Monitor Control Unit
1.990.429.00	- CR Monitor Switch Board
1.990.430.00	Studio Monitor Control Unit
1.990.439.00	- Studio Monitor Switch Board.....
1.990.440.00	PFL/Talk Back Headphone Unit
1.990.449.00	- PFL/Talk Back Switch Board.....
1.990.490.00	Source Selector Unit
1.990.496.00	Serdat Master Interface
1.990.497.00	Serdat Slave Interface
1.990.498.00	Source Selector Unit
1.990.499.00	- Source Selector Switch Board

SCHEMATA / CIRCUIT DIAGRAMS

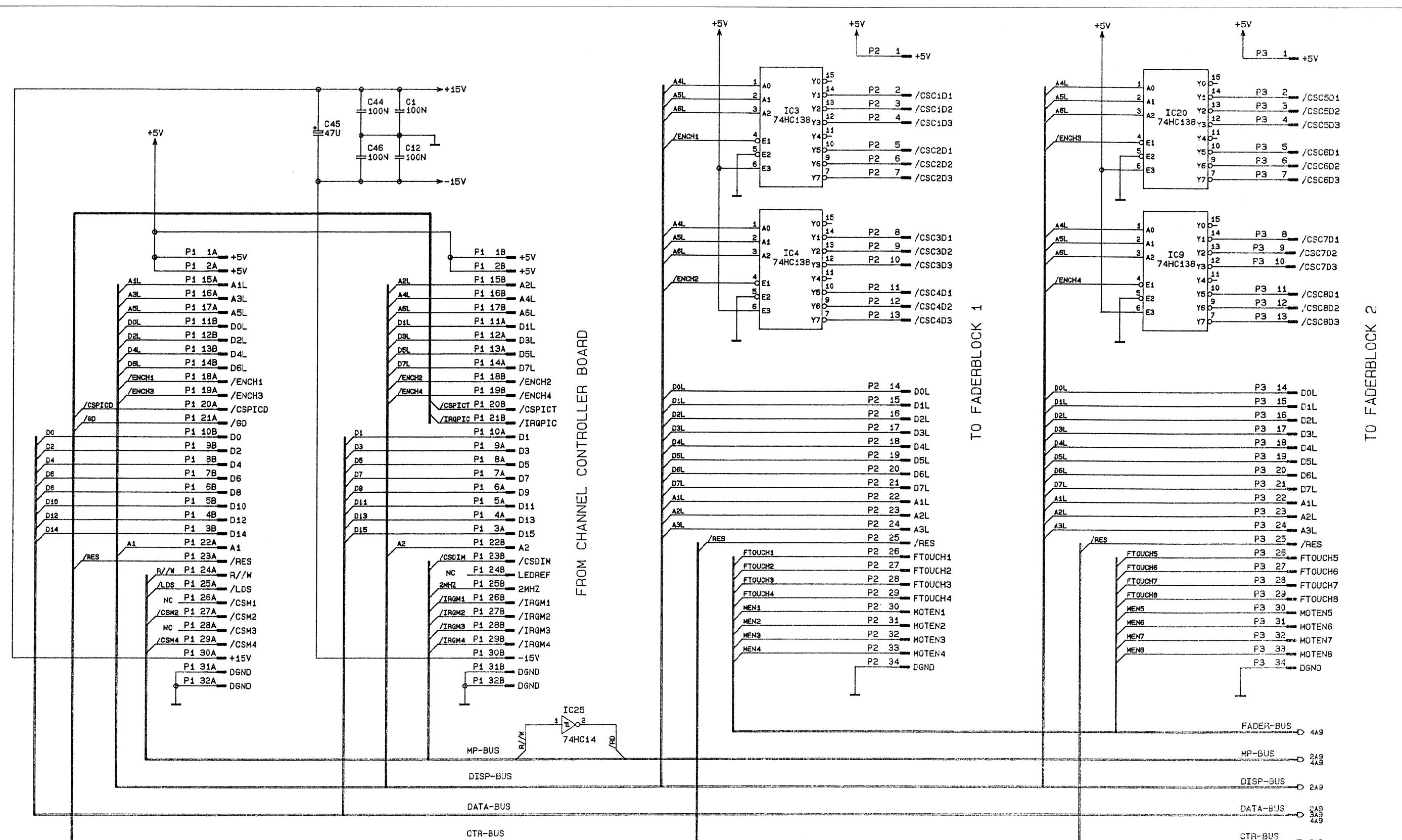
Fader Panel Units

4CH Fader Unit	1.940.715.00
Surface Interface	1.940.712.00
Fader Front Board	1.940.713.00
Channel Controller Board	1.940.753.20

4CH Fader Unit**1.940.715.00**

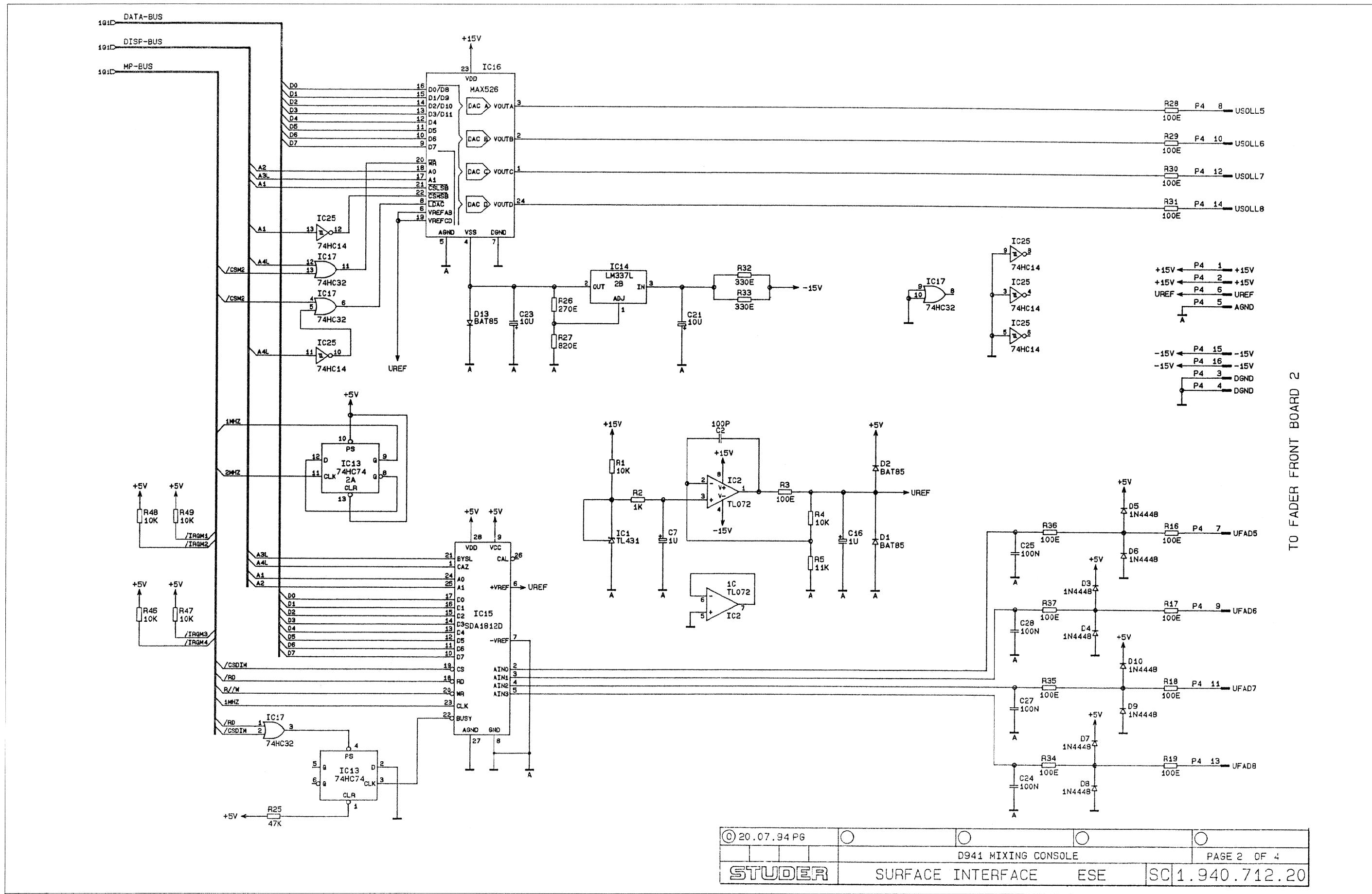
SC: Schema Circuit Diagram
BP: Bestückungsplan PCB Layout
PL: Positionsliste Positional List

Surface Interface 1.940.712.20



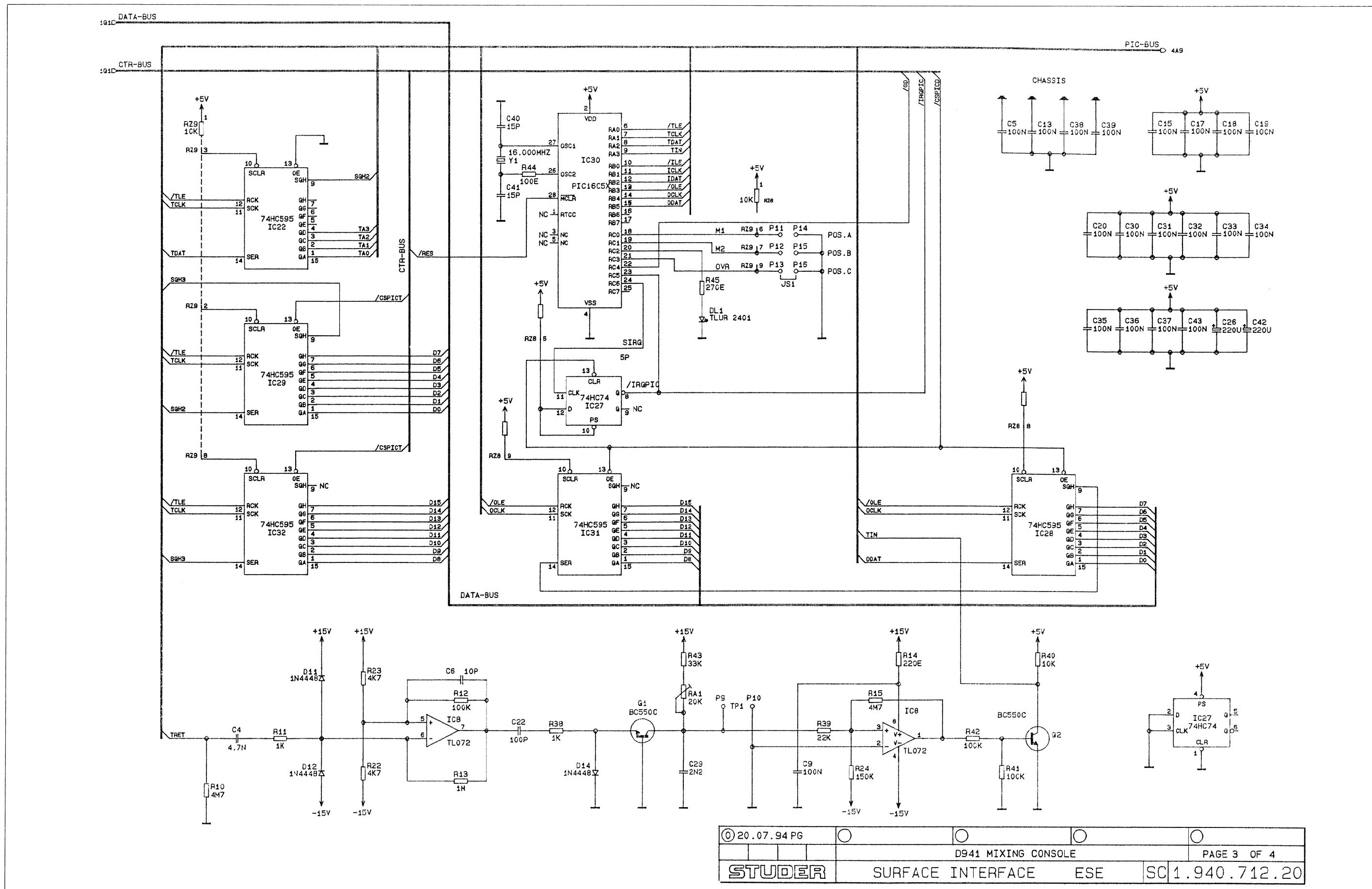


Surface Interface I.940.712.20



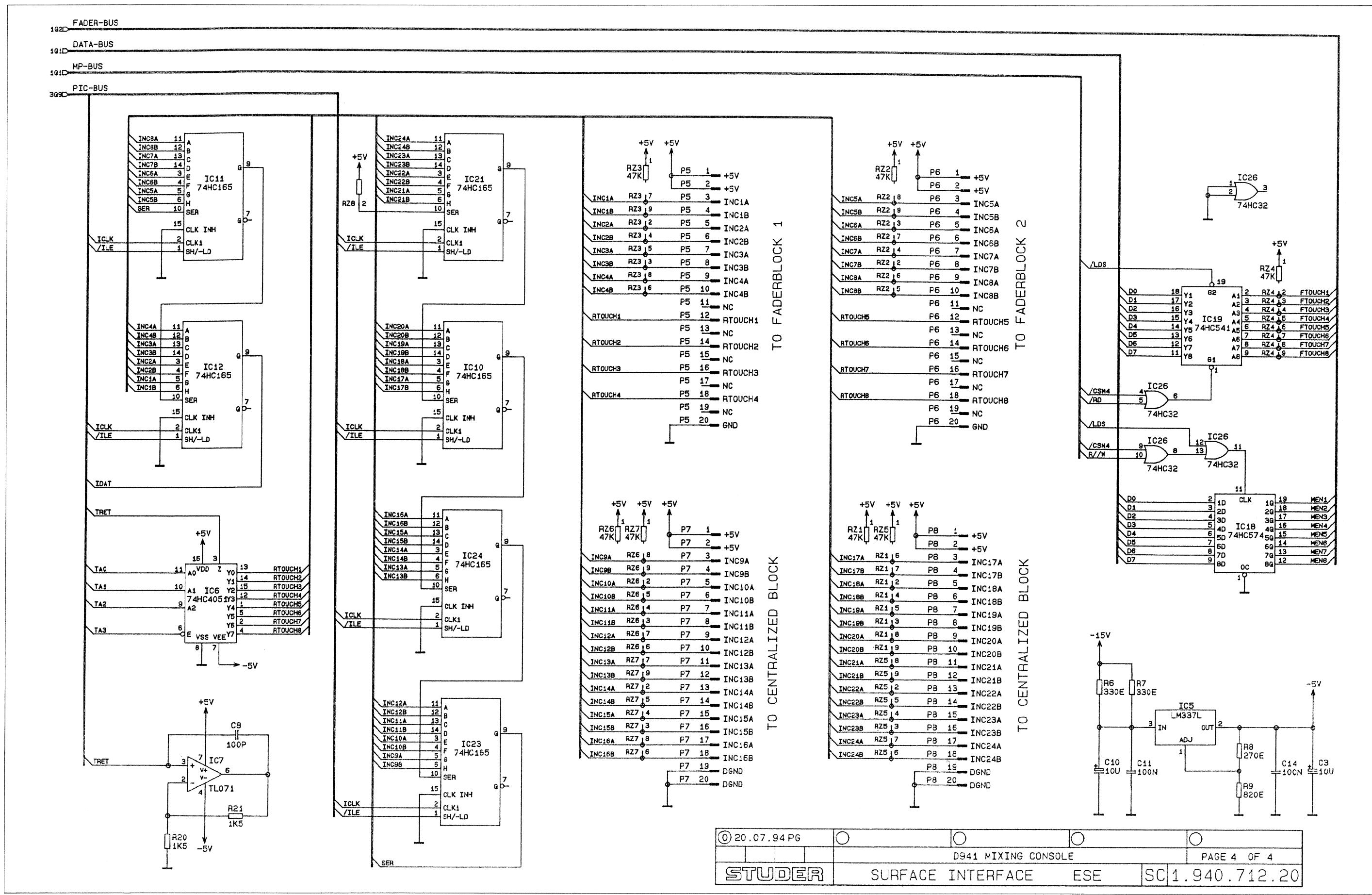


Surface Interface 1.940.712.20





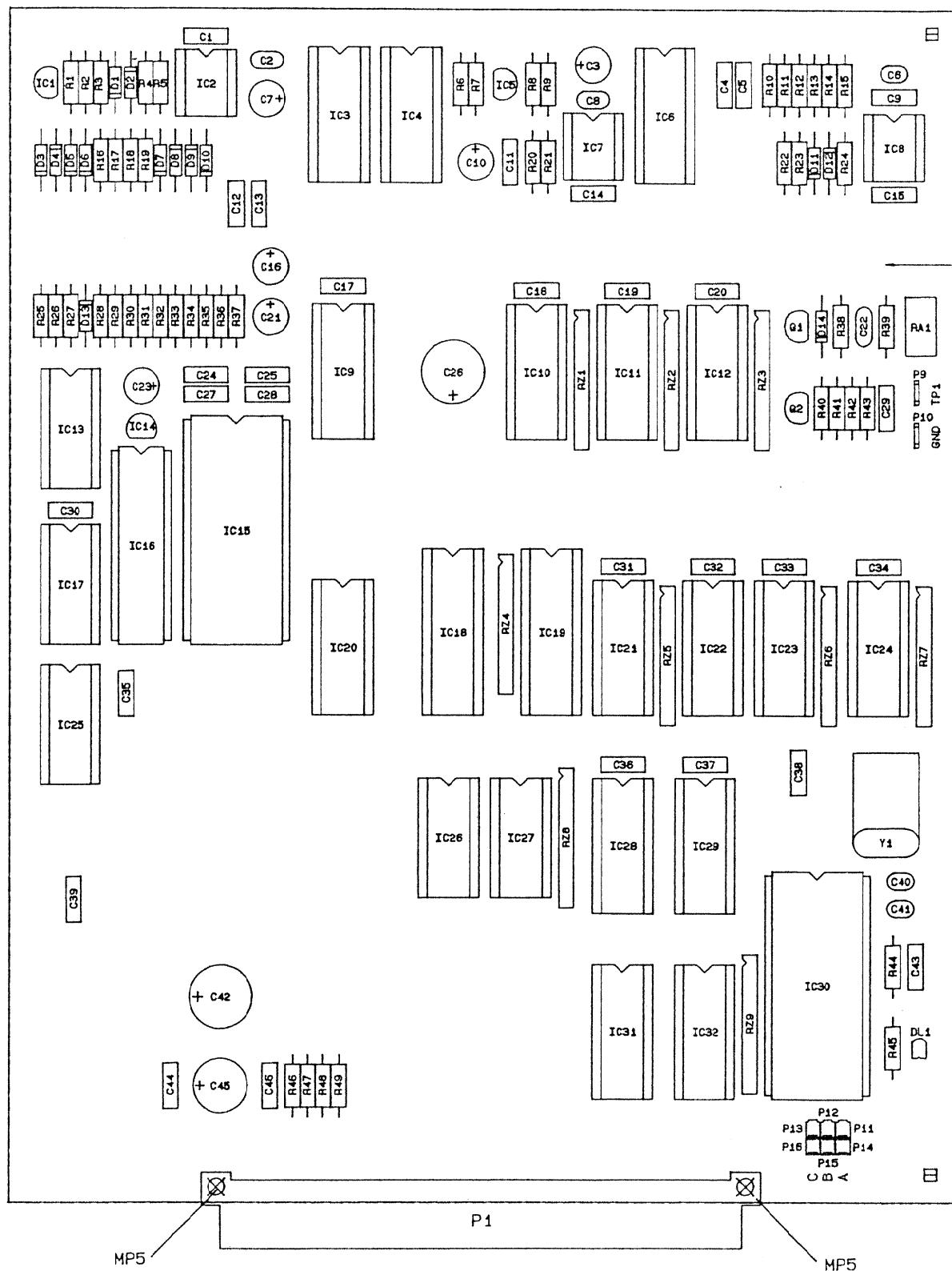
Surface Interface 1.940.712.20



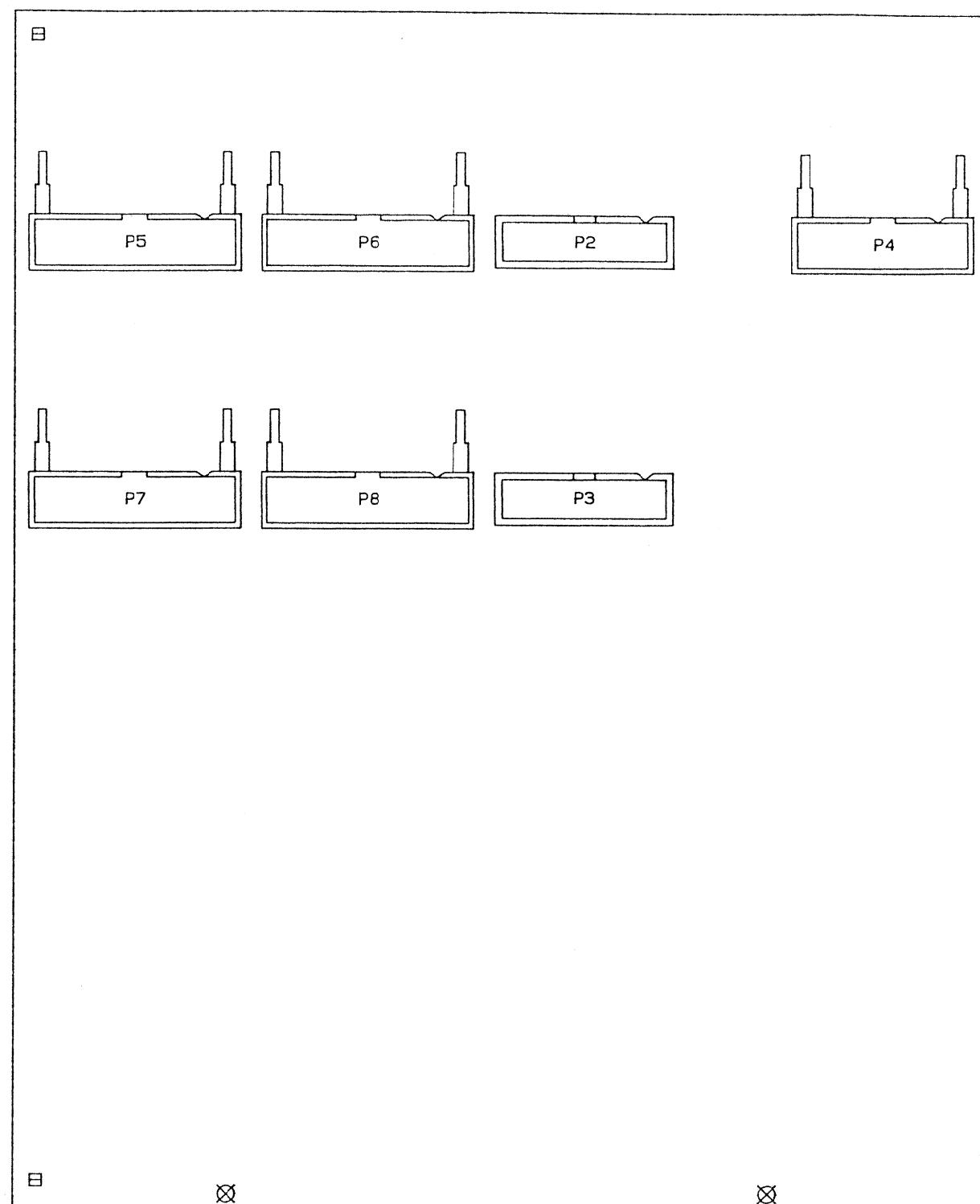
Surface Interface 1.940.712.20



Component side



Solder side



<input type="radio"/>			
<input type="radio"/>			
<input checked="" type="radio"/>	20.07.94	PG	<i>[Signature]</i>
IND	DATUM	GEZ.	SEPR. GES.
BLATT 1 VON 1			

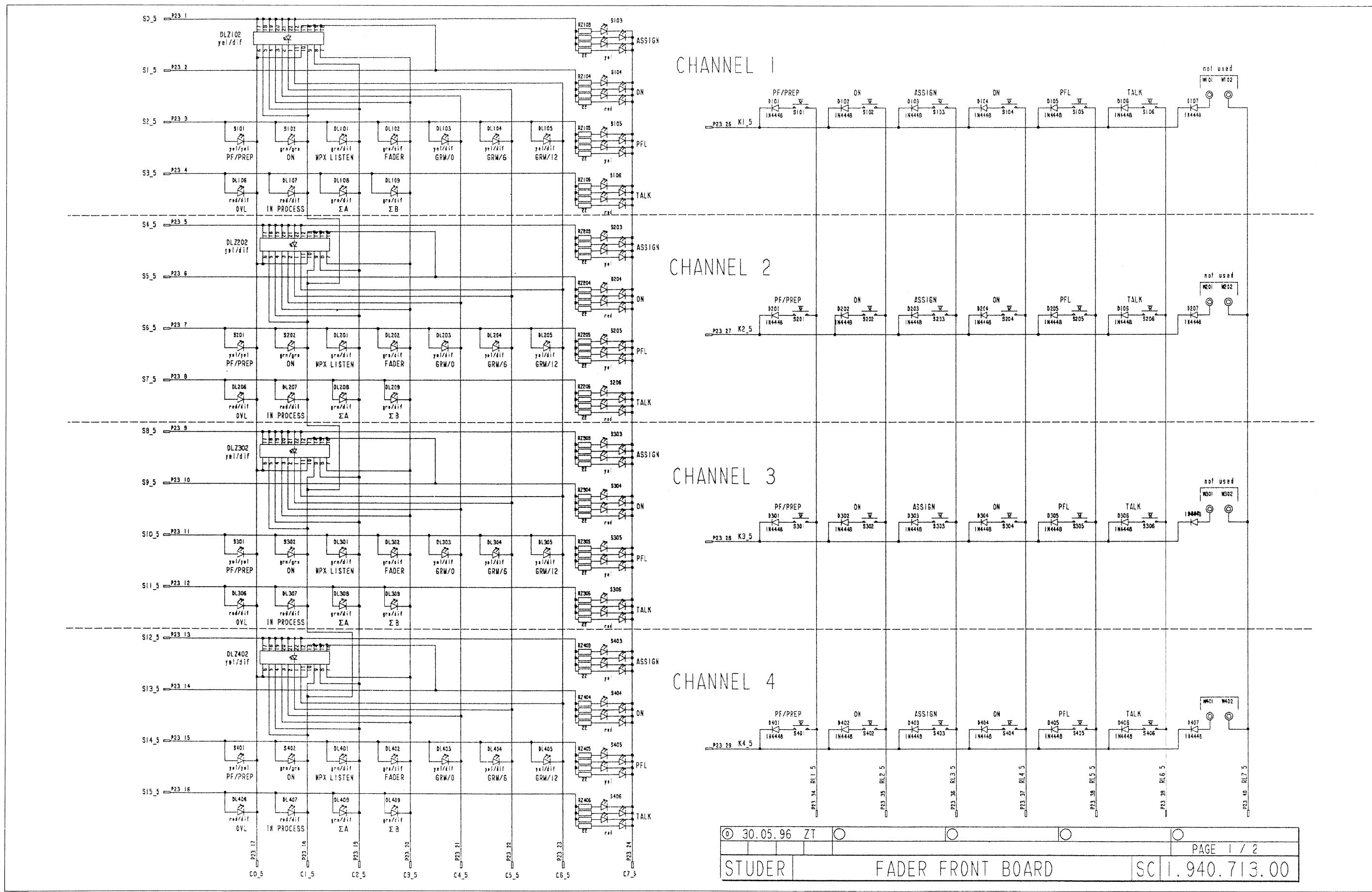


Surface Interface I.940.712.20

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
<i>PIC 15 C 57-HS/P SW940712 (1.940.930.20)</i>																	
0 C 1		59.06.0104	100n	PETP, 10%, 63V		0 IC 21		50.17.1165	74HC165	IC ... 74 HC 165.. ,A		0 R 41		57.11.3104	100k	MF, 1%, 0207	
0 C 2		59.34.4101	100p	CER 63V, 5%, N750		0 IC 22		50.17.1595	74HC595	IC ... 74 HC 595.. ,A		0 R 42		57.11.3104	100k	MF, 1%, 0207	
0 C 3		59.22.5100	10u	EL 35V, 20%, rad RM5		0 IC 23		50.17.1165	74HC165	IC ... 74 HC 165.. ,A		0 R 43		57.11.3333	33k	MF, 1%, 0207	
0 C 4		59.06.0472	4n7	PETP, 10%, 63V		0 IC 24		50.17.1165	74HC165	IC ... 74 HC 165.. ,A		0 R 44		57.11.3101	100R	MF, 1%, 0207	
0 C 5		59.06.0104	100n	PETP, 10%, 63V		0 IC 25		50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0 R 45		57.11.3271	270R	MF, 1%, 0207	
0 C 6		59.34.1100	10p	CER 63V, 5%, NP 0		0 IC 26		50.17.1032	74HC32	IC ... 74 HC 32 .. ,A		0 R 46		57.11.3103	10k	MF, 1%, 0207	
0 C 7		59.22.8109	1u	EL 50V, 20%, rad RM5		0 IC 27		50.17.1074	74HC74	IC ... 74 HC 74 .. ,A		0 R 47		57.11.3103	10k	MF, 1%, 0207	
0 C 8		59.34.4101	100p	CER 63V, 5%, N750		0 IC 28		50.17.1595	74HC595	IC ... 74 HC 595.. ,A		0 R 48		57.11.3103	10k	MF, 1%, 0207	
0 C 9		59.06.0104	100n	PETP, 10%, 63V		0 IC 29		50.17.1595	74HC595	IC ... 74 HC 595.. ,A		0 R 49		57.11.3103	10k	MF, 1%, 0207	
0 C 10		59.22.5100	10u	EL 35V, 20%, rad RM5		0 IC 30		50.16.0301	PIC 15 C 57-HS/P SW940712 (1.940.930.20)			0 RA 1		58.01.9203	20k	Cermet, 10%, 0.5W, vertical	
0 C 11		59.06.0104	100n	PETP, 10%, 63V		0 IC 31		50.17.1595	74HC595	IC ... 74 HC 595.. ,A		0 RZ 1		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 12		59.06.0104	100n	PETP, 10%, 63V		0 IC 32		50.17.1595	74HC595	IC ... 74 HC 595.. ,A		0 RZ 2		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 13		59.06.0104	100n	PETP, 10%, 63V		0 JS 1		54.01.0021	Jumper	0.63 * 0.63mm		0 RZ 3		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 14		59.06.0104	100n	PETP, 10%, 63V		0 MP 1		1.940.712.11	1 pce	SURFACE INTERFACE PCB /\\		0 RZ 4		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 15		59.06.0104	100n	PETP, 10%, 63V		0 MP 2		1.940.712.04	1 pce	NR-ETIKETTE 5 * 20		0 RZ 5		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 16		59.22.8109	1u	EL 50V, 20%, rad RM5		0 MP 3		43.01.0108	1 pce	Label ESE-WARNSCHILD		0 RZ 6		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 17		59.06.0104	100n	PETP, 10%, 63V		0 MP 4		1.101.001.20	1 pce	Label TEXT-ETIK. 5*20 HARDWARE -20		0 RZ 7		57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0 C 18		59.06.0104	100n	PETP, 10%, 63V		0 MP 5		28.99.0119	2 pces	ROHRNIEDE D 2.5*0.15* 9		0 RZ 8		57.88.4103	10k	RZ 8 * 10 K, 2%, SIP 9	
0 C 19		59.06.0104	100n	PETP, 10%, 63V		0 MP 6		65.99.0167	10 mm	Tape POLYURH. KLEBBAND WS, 9*3		0 RZ 9		57.88.4103	10k	RZ 8 * 10 K, 2%, SIP 9	
0 C 20		59.22.5100	10u	EL 35V, 20%, rad RM5		0 P 1		54.11.2004	64-P	P EU-B 2'32		0 XIC 15		53.03.0173	28p	D L 0.6", lot. gerade	
0 C 21		59.34.2101	100p	CER 63V, 5%, N150		0 P 2		54.16.0534	34p	P 1/40", 34 P, AU, PRINT		0 XIC 30		53.03.0173	28p	D L 0.6", lot. gerade	
0 C 22		59.22.6100	10u	EL 35V, 20%, rad RM5		0 P 3		54.16.0534	34p	P 1/40", 34 P, AU, PRINT		0 Y 1		89.01.1009	16.000MHz	Y 16.000 MHZ, HC 49/U	
0 C 23		59.06.0104	100n	PETP, 10%, 63V		0 P 4		54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE		End of List					
0 C 24		59.06.0104	100n	PETP, 10%, 63V		0 P 5		54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE		Comments:					
0 C 25		59.06.0104	100n	PETP, 10%, 63V		0 P 6		54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0 C 26		59.22.4221	220u	EL 16V, 20%, rad RM5		0 P 7		54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0 C 27		59.06.0104	100n	PETP, 10%, 63V		0 P 8		54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0 C 28		59.06.0104	100n	PETP, 10%, 63V		0 P 9		54.02.0320	1p	Flatpin 2.8*0.8mm							
0 C 29		59.06.0222	2n2	PETP, 10%, 63V		0 P 10		54.02.0320	1p	Flatpin 2.8*0.8mm							
0 C 30		59.06.0104	100n	PETP, 10%, 63V		0 P 11		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 31		59.06.0104	100n	PETP, 10%, 63V		0 P 12		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 32		59.06.0104	100n	PETP, 10%, 63V		0 P 13		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 33		59.06.0104	100n	PETP, 10%, 63V		0 P 14		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 34		59.06.0104	100n	PETP, 10%, 63V		0 P 15		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 35		59.06.0104	100n	PETP, 10%, 63V		0 P 16		54.01.0020	1-P	P STIFT .63*63, H=5.8/3.4							
0 C 36		59.06.0104	100n	PETP, 10%, 63V		0 R 1		57.11.3103	10k	MF, 1%, 0207							
0 C 37		59.06.0104	100n	PETP, 10%, 63V		0 R 2		57.11.3102	1k0	MF, 1%, 0207							
0 C 38		59.06.0104	100n	PETP, 10%, 63V		0 R 3		57.11.3101	100R	MF, 1%, 0207							
0 C 39		59.06.0104	100n	PETP, 10%, 63V		0 R 4		57.11.3103	10k	MF, 1%, 0207							
0 C 40</																	

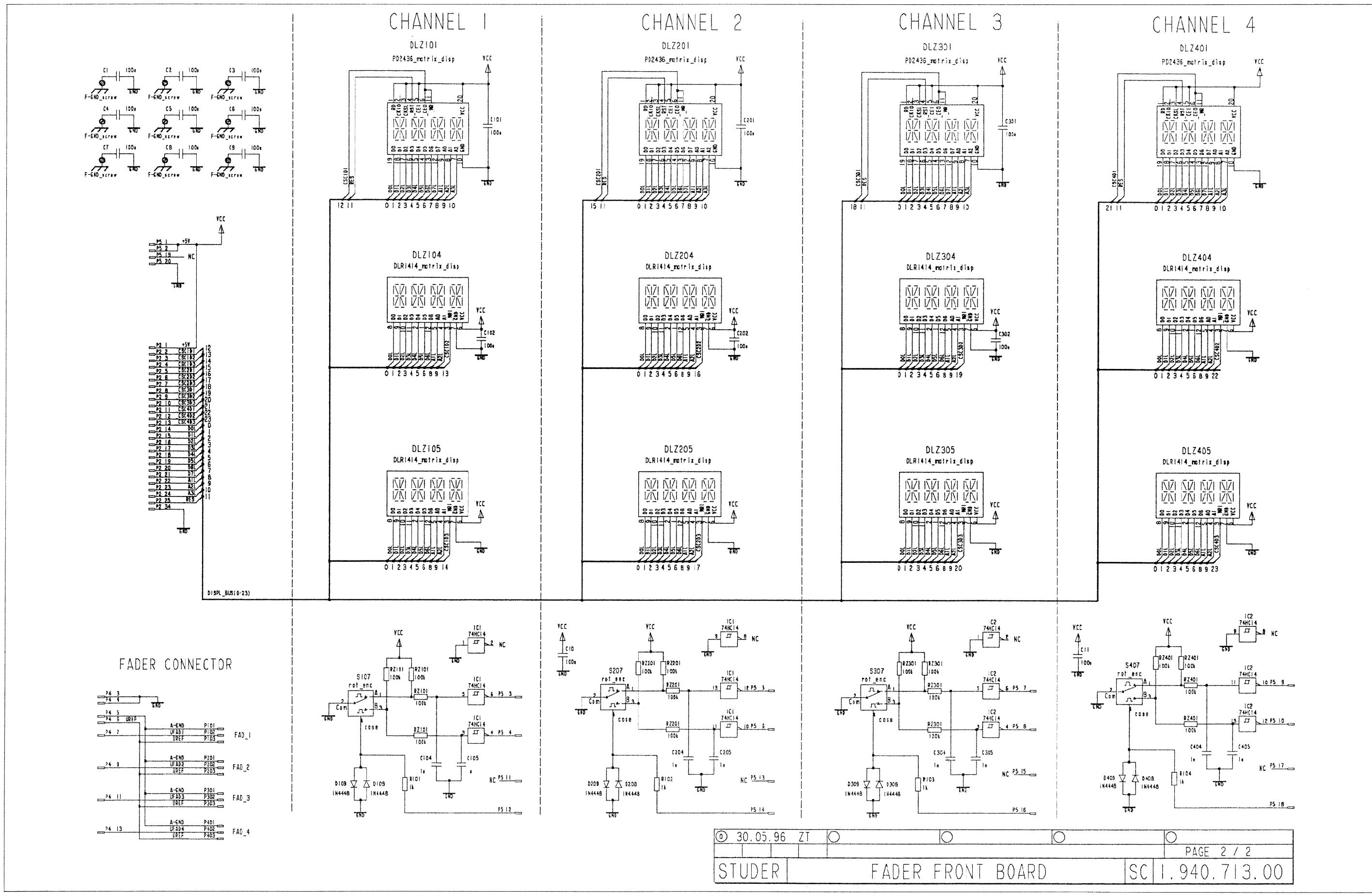


Fader Front Board 1.940.713.00

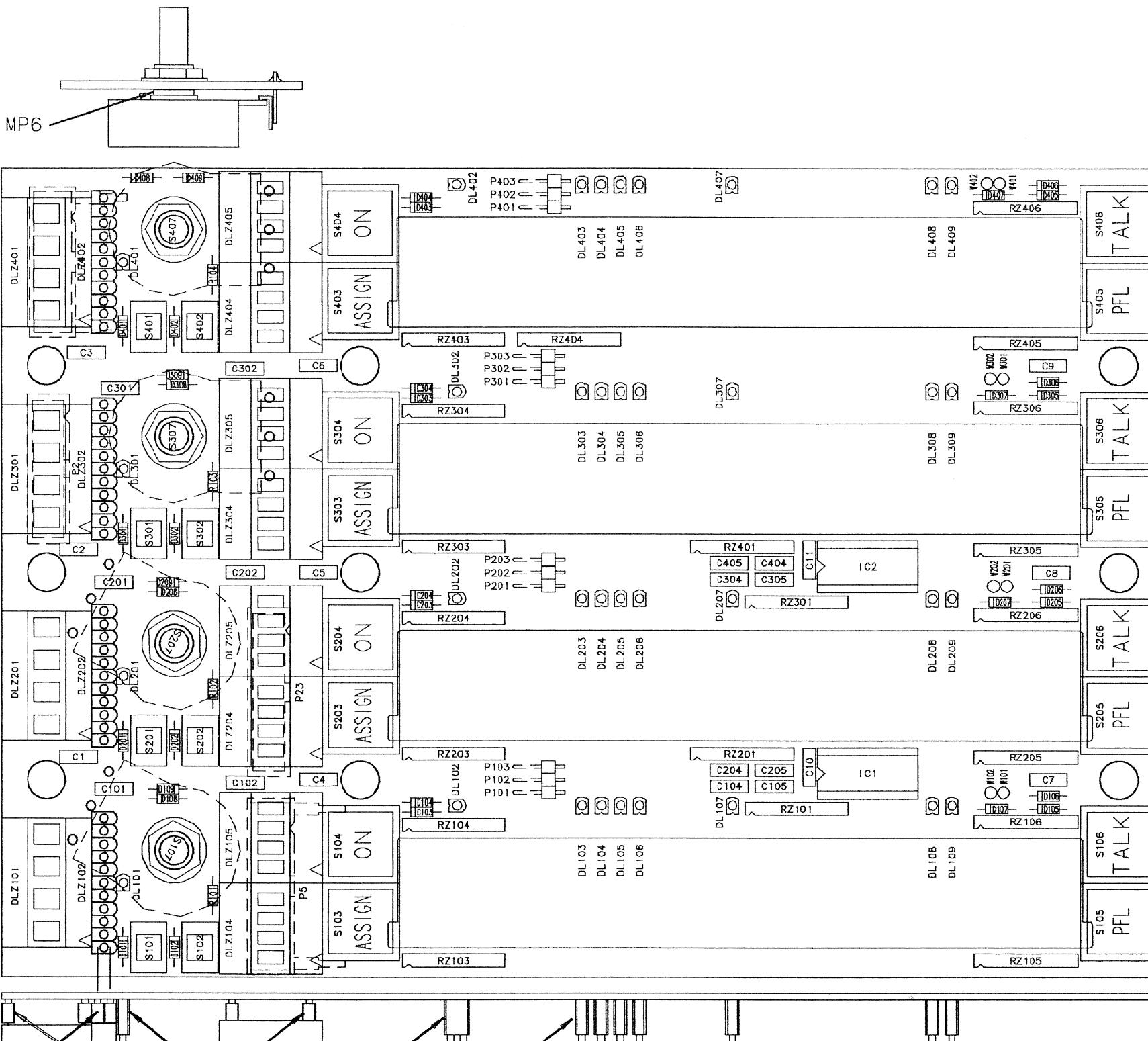




Fader Front Board 1.940.713.00



Fader Front Board 1.940.713.00



Nachfertigung		Ausgabe		Stempel	
Edition	Ausgabe	Date	Viso	Dokt.	Seal
		30.05.96	ZT		
		Date	Viso	Dokt.	Seal
		Datum	Gepr.	Ges.	Index

Copy to:
Kopie fuer:



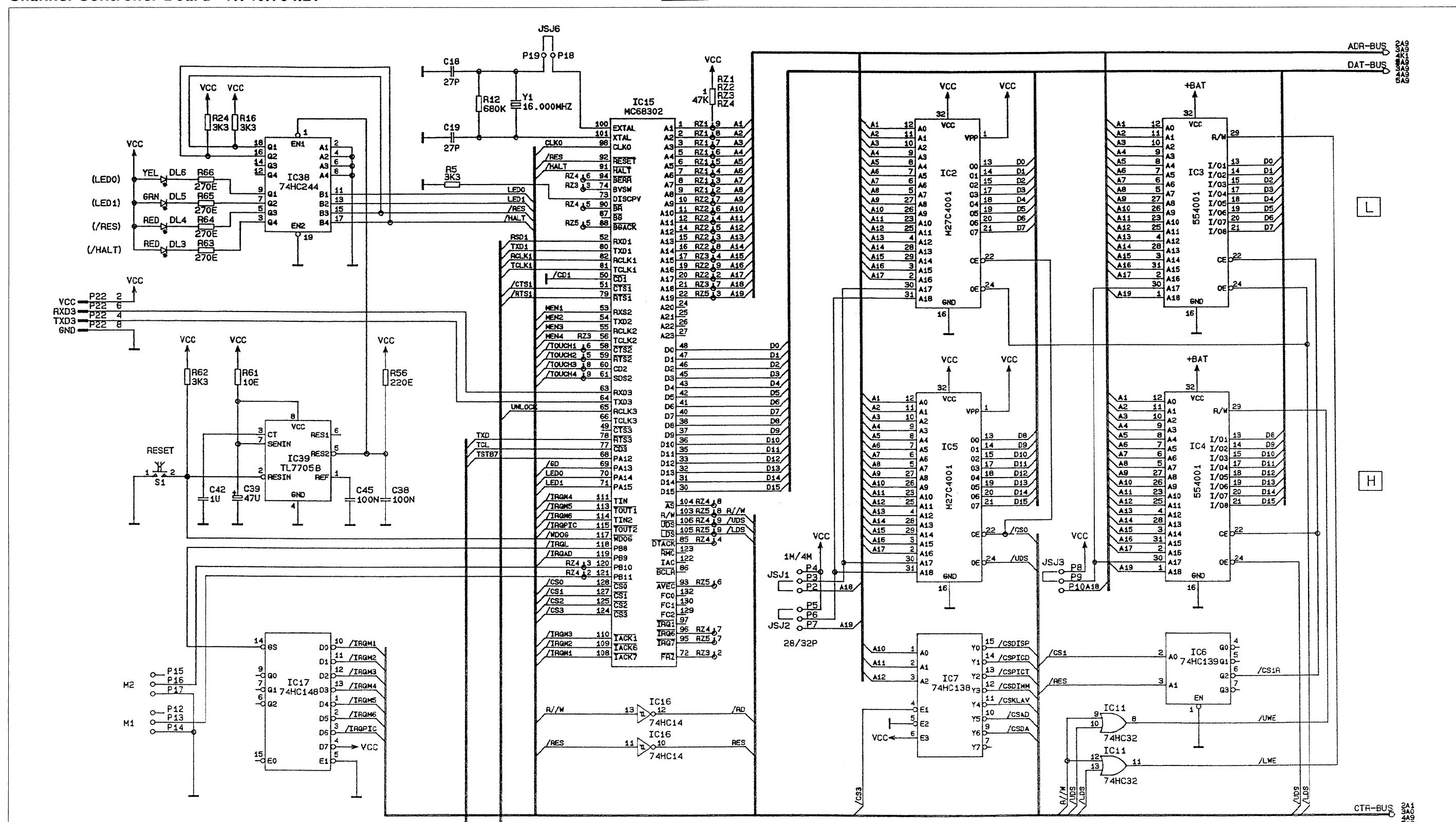
Fader Front Board 1.940.713.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 10%, 63V		0	DL 303	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	RZ 405	57.88.2220	4*22R	2%	SIP 8
0	C 2	59.06.0104	100n	PETP, 10%, 63V		0	DL 304	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	RZ 406	57.88.2220	4*22R	2%	SIP 8
0	C 3	59.06.0104	100n	PETP, 10%, 63V		0	DL 305	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	S 101	55.15.0644	1*a	S	TASTE 1A, 5MM, GB/GB
0	C 4	59.06.0104	100n	PETP, 10%, 63V		0	DL 306	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	S 102	55.15.0655	1*a	S	TASTE 1A, 5MM, GN/GN
0	C 5	59.06.0104	100n	PETP, 10%, 63V		0	DL 307	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	S 103	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 6	59.06.0104	100n	PETP, 10%, 63V		0	DL 308	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 104	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 7	59.06.0104	100n	PETP, 10%, 63V		0	DL 309	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 105	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 8	59.06.0104	100n	PETP, 10%, 63V		0	DL 401	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 106	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 9	59.06.0104	100n	PETP, 10%, 63V		0	DL 402	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 107	1.940.751.02		ROTARY ENCODER	
0	C 10	59.06.0104	100n	PETP, 10%, 63V		0	DL 403	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	S 201	55.15.0644	1*a	S	TASTE 1A, 5MM, GB/GB
0	C 11	59.06.0104	100n	PETP, 10%, 63V		0	DL 404	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	S 203	55.15.0744	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 101	59.06.0104	100n	PETP, 10%, 63V		0	DL 405	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	S 205	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 102	59.06.0104	100n	PETP, 10%, 63V		0	DL 406	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	S 206	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 104	59.06.0102	1n0	PETP, 10%, 63V		0	DL 407	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	S 207	1.940.751.02		ROTARY ENCODER	
0	C 105	59.06.0102	1n0	PETP, 10%, 63V		0	DL 408	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 301	55.15.0644	1*a	S	TASTE 1A, 5MM, GB/GB
0	C 201	59.06.0104	100n	PETP, 10%, 63V		0	DL 409	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	S 302	55.15.0655	1*a	S	TASTE 1A, 5MM, GN/GN
0	C 202	59.06.0104	100n	PETP, 10%, 63V		0	DLZ 101	73.01.0405	LED DOT MATR-DISP 4 DIG 5X7			0	S 303	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 204	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 102	50.04.2812	DLZ 11*D GB			0	S 304	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 205	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 104	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 305	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 301	59.06.0104	100n	PETP, 10%, 63V		0	DLZ 105	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 306	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	C 302	59.06.0104	100n	PETP, 10%, 63V		0	DLZ 201	73.01.0405	LED DOT MATR-DISP 4 DIG 5X7			0	S 307	1.940.751.02		ROTARY ENCODER	
0	C 304	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 202	50.04.2812	DLZ 11*D GB			0	S 401	55.15.0644	1*a	S	TASTE 1A, 5MM, GB/GB
0	C 305	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 204	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 402	55.15.0655	1*a	S	TASTE 1A, 5MM, GN/GN
0	C 404	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 205	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 403	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	C 405	59.06.0102	1n0	PETP, 10%, 63V		0	DLZ 301	73.01.0405	LED DOT MATR-DISP 4 DIG 5X7			0	S 404	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	D 101	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 304	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 405	55.15.0744	1*a	S	TASTE 1A, 12MM, GB/GB
0	D 102	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 305	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	S 406	55.15.0722	1*a	S	TASTE 1A, 12MM, RT/RT
0	D 103	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 401	73.01.0405	LED DOT MATR-DISP 4 DIG 5X7			0	S 407	1.940.751.02		ROTARY ENCODER	
0	D 104	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 402	50.04.2812	DLZ 11*D GB			0	W 101	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 105	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 404	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	W 102	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 106	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DLZ 405	73.01.0406	LED DOT MATR-DISP 4 DIG 5X7			0	W 201	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 107	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	IC 1	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0	W 202	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 108	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	IC 2	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0	W 301	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 109	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 1	1.940.711.11 1 pce	FADER FRONT PCB	/A		0	W 302	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 201	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 2	43.01.0108 1 pce	Label	ESE-WARNSCHILD		0	W 401	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 202	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 3	1.940.713.04 1 pce	NR-EТИKETTE 5 * 20			0	W 402	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	D 203	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 4	53.03.0218 264 pc	1p	XIC SINGLE, IN-LINE 1PIN=1STK							
0	D 205	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 5	53.03.0240 36 pcs	XLED SINGLE LINE, 2 POL PRINT								
0	D 207	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 6	1.010.091.23 4 pcs	DISTANZSCHIEIBE D 9.0/12*1.2								
0	D 208	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	D 209	50.04.0125	1N4448														

STUDER

D941 Mixing Console

- Channel Controller Board 1.940.753.21
 Channel Controller Board 1.940.756.21
 Channel Controller Board 1.940.764.21

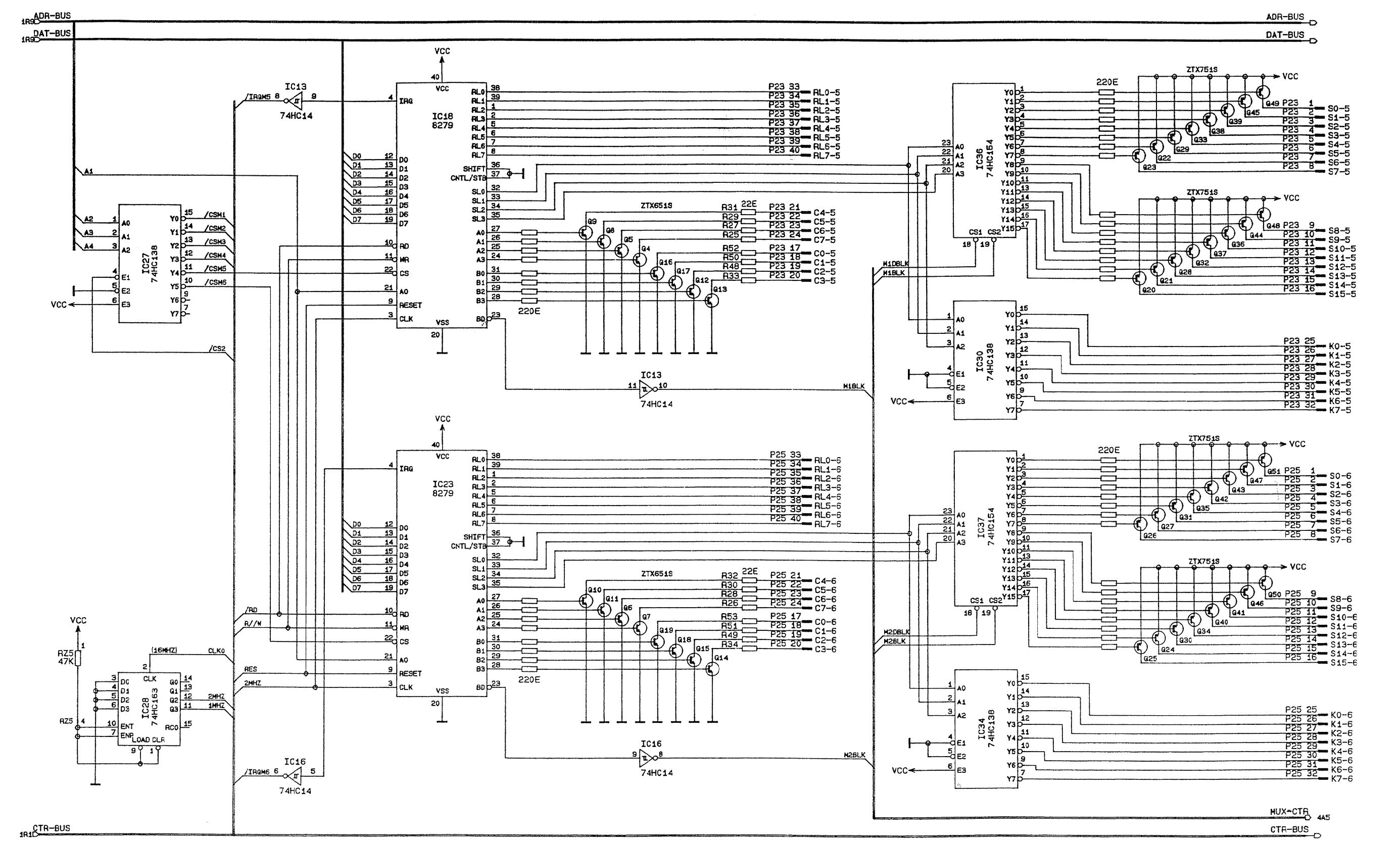


TCL → P20 12 TCK → P20 13
 TSTB7 → P20 14 TXD → TXD

① 30.6.97	○	○	○	○
D940 DIGITAL MIXING CONSOLE				
STUDER	CHANNEL CONTROLLER	SC 1.940.753-21	PAGE 1 OF 5	



Channel Controller Board 1.940.753.21
Channel Controller Board 1.940.756.21
Channel Controller Board 1.940.764.21



0 30.6

.97 ~~M~~

三

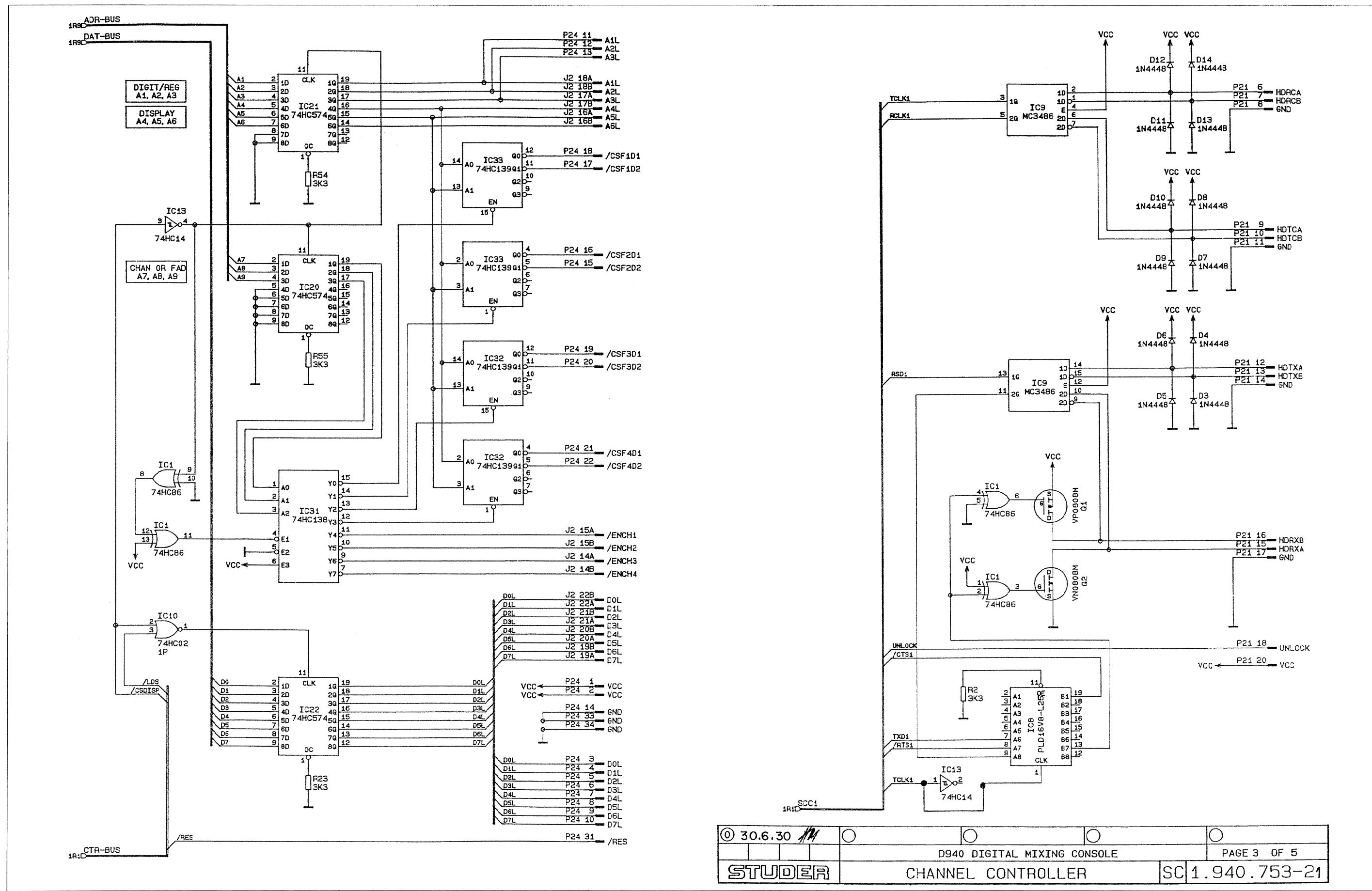
D940 DIGITAL MIXING CONSOLE

1

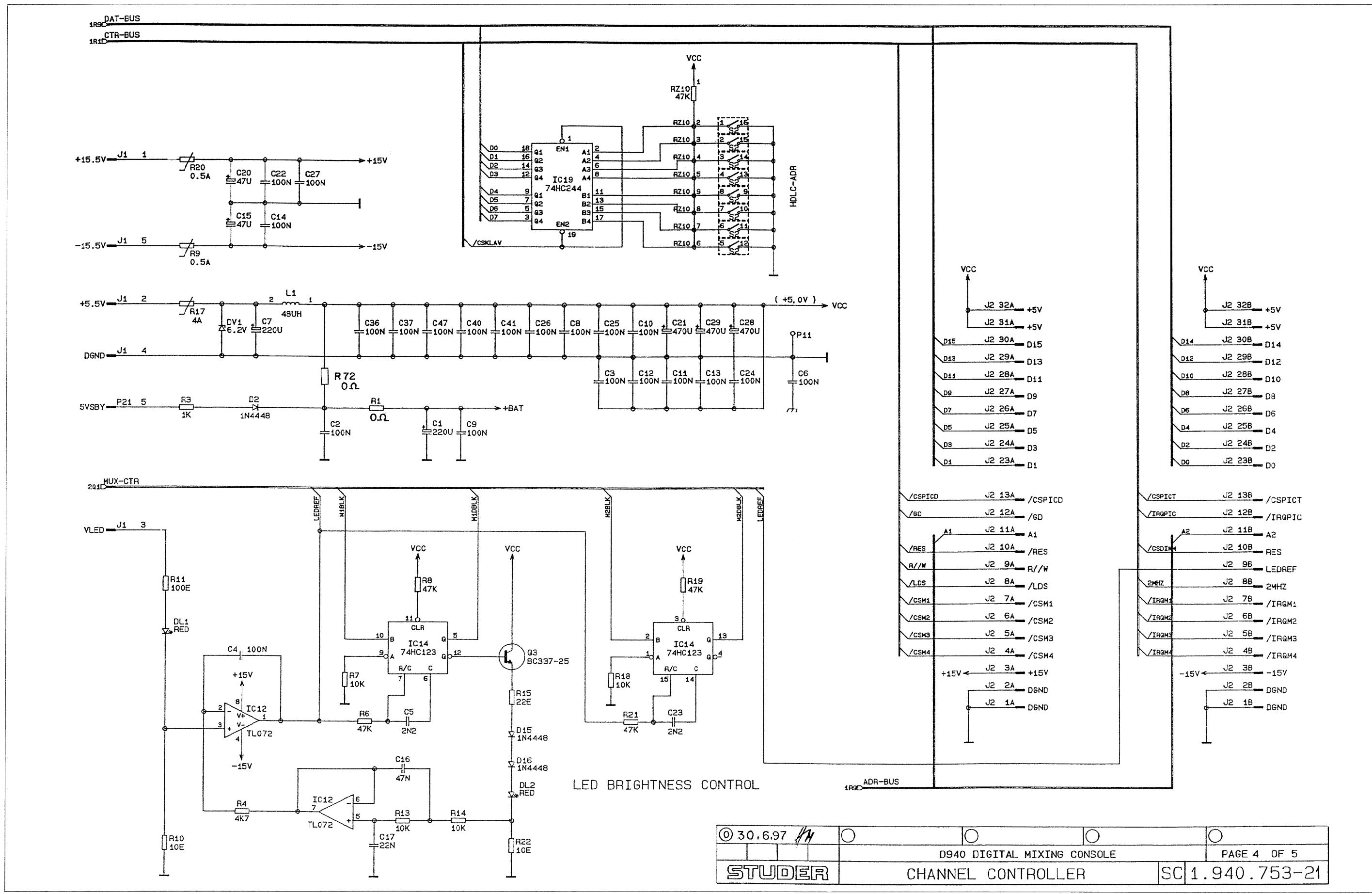
PAGE 2 OF 5



Channel Controller Board 1.940.753.21
Channel Controller Board 1.940.756.21
Channel Controller Board 1.940.764.21



- Channel Controller Board I.940.753.21
 Channel Controller Board I.940.756.21
 Channel Controller Board I.940.764.21

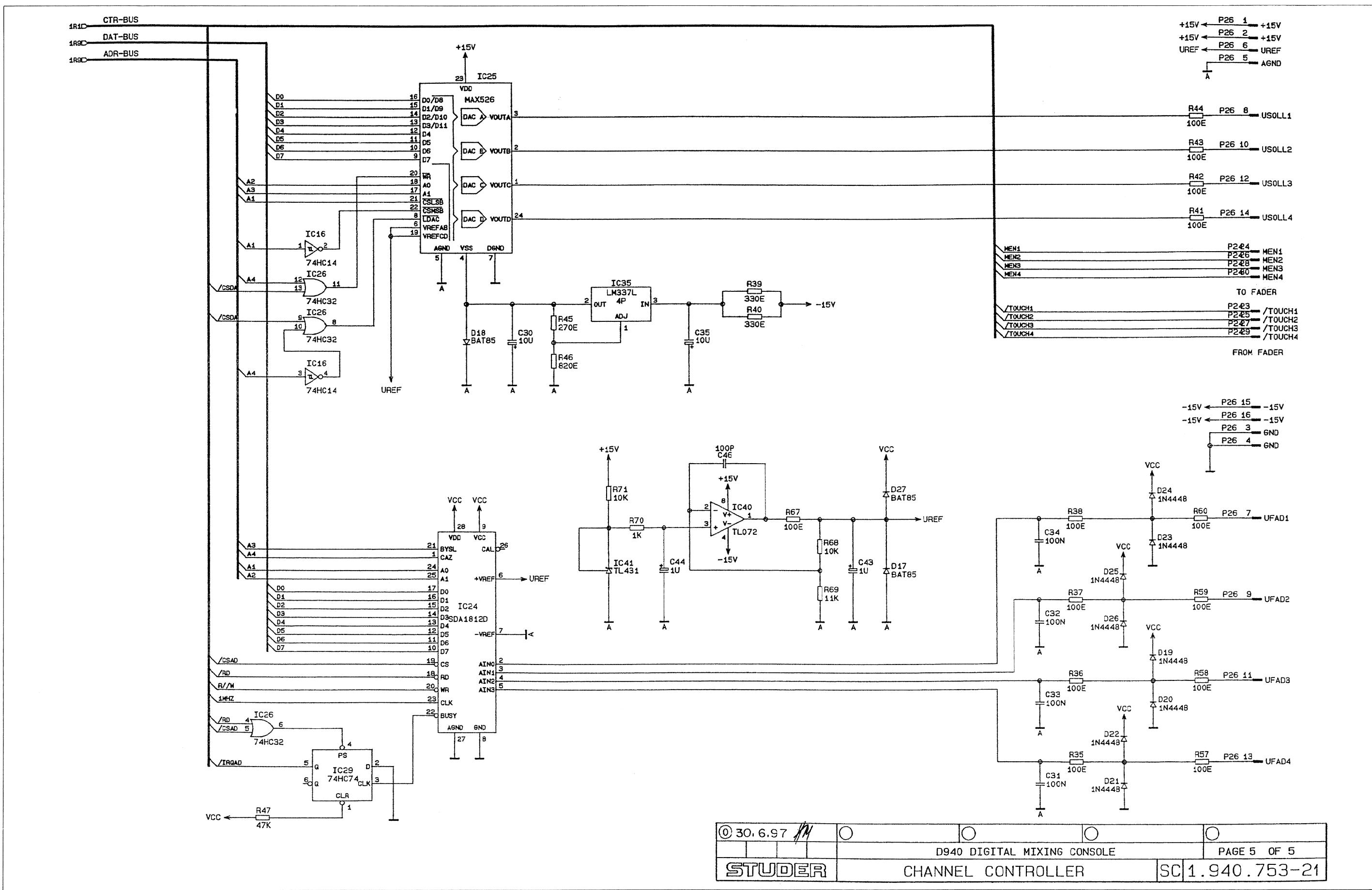


STUDER

D941 Mixing Console



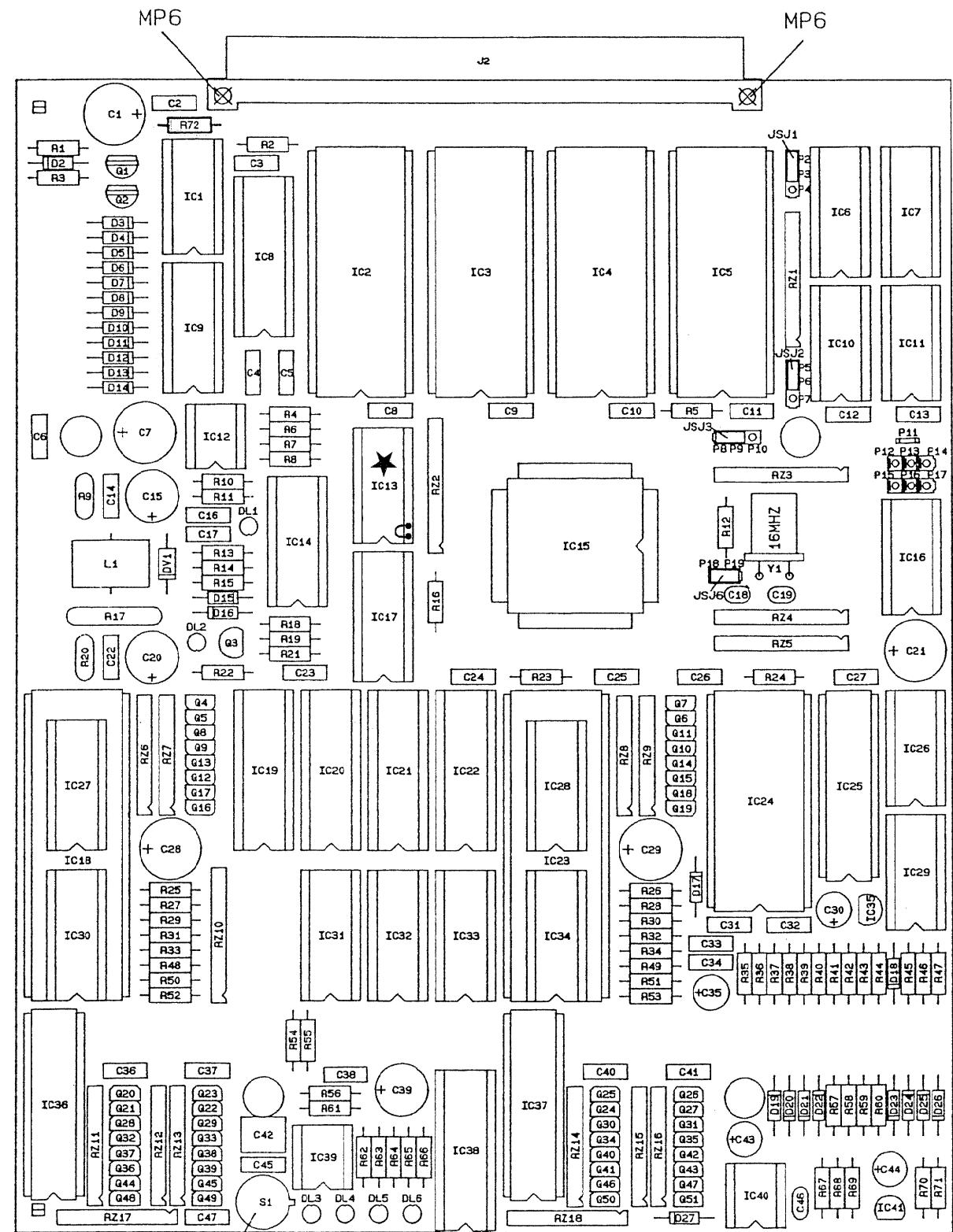
Channel Controller Board 1.940.753.21
Channel Controller Board 1.940.756.21
Channel Controller Board 1.940.764.21



Channel Controller Board 1.940.753.21

Channel Controller Board 1.940.756.21

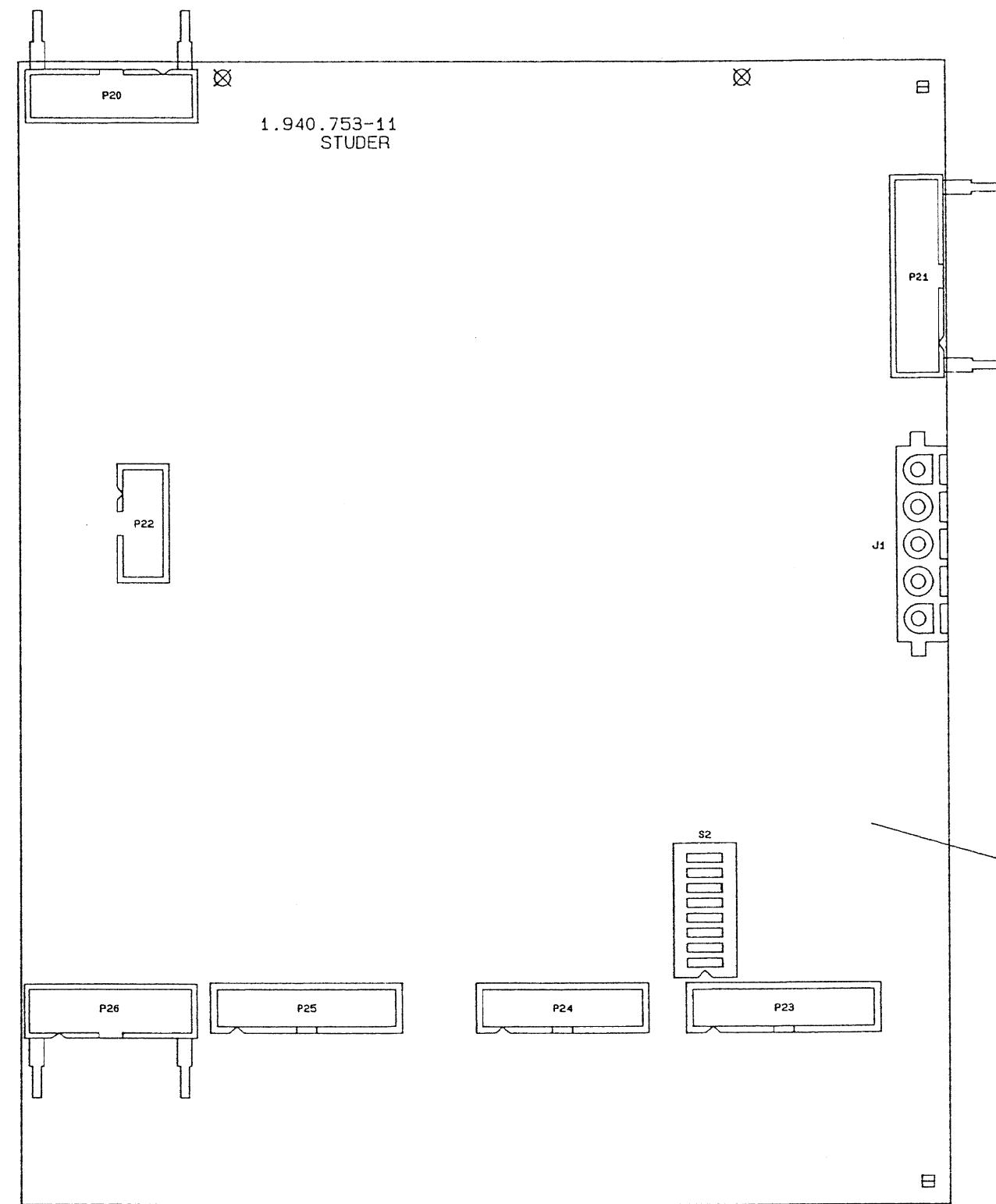
Channel Controller Board 1.940.764.21



Component side

MP5

★ IC13: Cut pin 2 before soldering, connect pins 1 and 2 with a piece of wire



Solder side

○	
○	
○	
○	
○	
○	30.6.97
IND	DATUM
GEZ.	GEPR.
GES	
	BLATT 1 VON 1



Channel Controller Board 1.940.753.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 4	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns	
0	C 2	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 5	1.940.935.20	SW940750 HDLC-EPROM	,A	50.14.2009
0	C 3	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 6	50.17.1139	74HC139	IC ... 74 HC 139.,	,A
0	C 4	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 7	50.17.1138	74HC138	IC ... 74 HC 138.,	,A
0	C 5	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 8	50.18.0100	PLD16V8	16 V 8 D - 25 LP	
0	C 6	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 9	50.15.0104	MC3486	IC MC 3486 P, DS 3486 N,	
0	C 7	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 10	50.17.1002	74HC02	IC ... 74 HC 02.,	,A
0	C 8	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 11	50.17.1032	74HC32	IC ... 74 HC 32.,	,A
0	C 9	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 12	50.09.0101	TL072	IC TL 072 CN	,A
0	C 10	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 13	50.17.1014	74HC14	IC ... 74 HC 14.,	,A
0	C 11	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 14	50.17.1123	74HC123	IC ... 74 HC 123.,	,A
0	C 12	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 15	50.63.0100	MC68302	IC MC 68 302 FC 16 C	,A
0	C 13	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 16	50.17.1014	74HC14	IC ... 74 HC 14.,	,A
0	C 14	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 17	50.17.1148	74HC148	IC ... 74 HC 148.,	,A
0	C 15	59.22.6470	47u	EL	40V, 20%, RM5	1	IC 18	50.16.0703	8279	IC TMP 82 C 79 P-2	
0	C 16	59.06.5473	47n	PETP	63V, 5%, RM5	0	IC 19	50.17.1244	74HC244	IC ... 74 HC 244.,	,A
0	C 17	59.06.5223	22n	PETP	63V, 5%, RM5	0	IC 20	50.17.1574	74HC574	IC ... 74 HC 574.,	,A
0	C 18	59.34.2270	27p	CER	63V, 5%, N150	0	IC 21	50.17.1574	74HC574	IC ... 74 HC 574.,	,A
0	C 19	59.34.2270	27p	CER	63V, 5%, N150	0	IC 22	50.17.1574	74HC574	IC ... 74 HC 574.,	,A
0	C 20	59.22.6470	47u	EL	40V, 20%, RM5	1	IC 23	50.16.0703	8279	IC TMP 82 C 79 P-2	
0	C 21	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 24	50.19.0204	IC ADS 7803 BP	,A	
0	C 22	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 25	50.19.0113	MAX526D	D/A Converter 12 Bit	
0	C 23	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32.,	,A
0	C 24	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 27	50.17.1138	74HC138	IC ... 74 HC 138.,	,A
0	C 25	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 28	50.17.1163	74HC163	IC ... 74 HC 163.,	,A
0	C 26	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 29	50.17.1074	74HC74	IC ... 74 HC 74.,	,A
0	C 27	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 30	50.17.1138	74HC138	IC ... 74 HC 138.,	,A
0	C 28	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 31	50.17.1138	74HC138	IC ... 74 HC 138.,	,A
0	C 29	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 32	50.17.1139	74HC139	IC ... 74 HC 139.,	,A
0	C 30	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 33	50.17.1139	74HC139	IC ... 74 HC 139.,	,A
0	C 31	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 34	50.17.1138	74HC138	IC ... 74 HC 138.,	,A
0	C 32	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 35	50.10.0109	LM337L	IC LM 337 LZ,	
0	C 33	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 36	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 34	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 37	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 35	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 38	50.17.1244	74HC244	IC ... 74 HC 244.,	,A
0	C 36	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 39	50.11.0157	TL7705B	IC TL 7705 BCP,	
0	C 37	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 40	50.09.0101	TL072	IC TL 072 CN	,A
0	C 38	59.06.5104	100n	PETP	63V, 5%, RM5	0	IC 41	50.10.0106	TL431	IC TL 431 CLP,	
0	C 39	59.22.6470	47u	EL	40V, 20%, RM5	0	J 1	54.25.0005	5p	Buchse, 16A, vertikal, PCB	
0	C 40	59.06.0104	100n	PETP	63V, 10%, RM5	0	J 2	54.11.2010	64p	EU-Q 2*32p	
0	C 41	59.06.0104	100n	PETP	50V, 5%, RM5	0	JSJ 1	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 42	59.06.5105	1u0	PETP	50V, 5%, RM5	0	JSJ 2	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 43	59.22.8109	1u	EL	50V, 20%, RM5	0	JSJ 3	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 44	59.22.8109	1u	EL	50V, 20%, RM5	0	JSJ 4	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 45	59.06.5104	100n	PETP	63V, 5%, RM5	0	JSJ 5	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 46	59.34.4101	100p	CER	63V, 5%, N750	0	JSJ 6	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 47	59.06.0104	100n	PETP	63V, 10%, RM5	0	L 1	62.03.0010	48uH	2A Toroid Chocke	
0	D 2	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 1	1.940.753.11	1 pce	CHANNEL CONTROLLER PCB	/\\
0	D 3	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 2	1.940.753.04	1 pce	NR.-ETIKETTE	5 * 20
0	D 4	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 3	1.101.001.20	1 pce	TEXT-ETIK. 5*20	HARDWARE-20
0	D 5	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 4	43.01.0108	1 pce	ESE-WARNSCHILD	
0	D 6	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 5	1.010.015.50	1 pce	ISOLIER-SCHEIBE	ZU T0 5
0	D 7	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 6	28.99.0119	2 pces	ROHRNIETE	D 2.5*0.15* 9
0	D 8	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 2	54.01.0020	1p	Pin 0.63*0.63	
0	D 9	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 3	54.01.0020	1p	Pin 0.63*0.63	
0	D 10	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 4	54.01.0020	1p	Pin 0.63*0.63	
0	D 11	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 5	54.01.0020	1p	Pin 0.63*0.63	
0	D 12	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 6	54.01.0020	1p	Pin 0.63*0.63	
0	D 13	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 7	54.01.0020	1p	Pin 0.63*0.63	
0	D 14	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 8	54.01.0020	1p	Pin 0.63*0.63	
0	D 15	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 9	54.01.0020	1p	Pin 0.63*0.63	
0	D 16	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 10	54.01.0020	1p	Pin 0.63*0.63	
0	D 17	50.04.0127	BAT85		200mA, Schottky	0	P 11	54.02.0320	1p	Flatpin, 2.8*0.8mm	
0	D 18	50.04.0127	BAT85		200mA, Schottky	0	P 12	54.01.0020	1p	Pin 0.63*0.63	
0	D 19	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 13	54.01.0020	1p	Pin 0.63*0.63	
0	D 20	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 14	54.01.0020	1p	Pin 0.63*0.63	
0	D 21	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 15	54.01.0020	1p	Pin 0.63*0.63	
0	D 22	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 16	54.01.0020	1p	Pin 0.63*0.63	
0	D 23	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 17	54.01.0020	1p	Pin 0.63*0.63	
0	D 24	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 18	54.01.0020	1p	Pin 0.63*0.63	
0	D 25	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 19	54.01.0020	1p	Pin 0.63*0.63	
0	D 26	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 20	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	D 27	50.04.0127	BAT85		200mA, Schottky	0	P 21	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE	
0	DL 1	50.04.2129	LS3360	DL LS 3360 ,	RT DIFF	0	P 22	54.14.2001	10p	1/20" Au, gerade, ohne Verrieg	
0	DL 2	50.04.2129	LS3360	DL LS 3360 ,	RT DIFF	0	P 23	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	DL 3	50.04.2129	LS3360	DL LS 3360 ,	RT DIFF	0	P 24	54.16.0534	34p	P 1/40", 34 P, AU, PRINT	
0	DL 4	50.04.2129	LS3360	DL LS 3360 ,	RT DIFF	0	P 25	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	DL 5	50.04.2131	LG3360	DL LG 3360 ,	GN DIFF	0	P 26	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	DL 6	50.04.2130	LY3360	DL LY 3360 ,	GB DIFF	0	Q 1	50.03.1554	VPO808M	VP 0808 M	
0	IC 1	50.17.1086	74HC86	IC ... 74 HC 86 ..	,A	0	Q 2	50.03.1505	VNO808M	VN 0808 M, ZVN 0108 A	
0	IC 2	1.940.935.20		SW940750 HDLC-EPROM	,A	0	Q 3	50.43.0340		Q BC 337-25,	
0	IC 3	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns		0	Q 4	50.03.0523	ZTX651	ZTX 651	



Channel Controller Board 1.940.753.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 5	50.03.0523	ZTX651	ZTX 651		0	R 40	57.11.3331	330R	MF, 1%, 0207	
0	Q 6	50.03.0523	ZTX651	ZTX 651		0	R 41	57.11.3101	100R	MF, 1%, 0207	
0	Q 7	50.03.0523	ZTX651	ZTX 651		0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	Q 8	50.03.0523	ZTX651	ZTX 651		0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	Q 9	50.03.0523	ZTX651	ZTX 651		0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	Q 10	50.03.0523	ZTX651	ZTX 651		0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	Q 11	50.03.0523	ZTX651	ZTX 651		0	R 46	57.11.3821	820R	MF, 1%, 0207	
0	Q 12	50.03.0523	ZTX651	ZTX 651		0	R 47	57.11.3473	47k	MF, 1%, 0207	
0	Q 13	50.03.0523	ZTX651	ZTX 651		0	R 48	57.11.3220	22R	MF, 1%, 0207	
0	Q 14	50.03.0523	ZTX651	ZTX 651		0	R 49	57.11.3220	22R	MF, 1%, 0207	
0	Q 15	50.03.0523	ZTX651	ZTX 651		0	R 50	57.11.3220	22R	MF, 1%, 0207	
0	Q 16	50.03.0523	ZTX651	ZTX 651		0	R 51	57.11.3220	22R	MF, 1%, 0207	
0	Q 17	50.03.0523	ZTX651	ZTX 651		0	R 52	57.11.3220	22R	MF, 1%, 0207	
0	Q 18	50.03.0523	ZTX651	ZTX 651		0	R 53	57.11.3220	22R	MF, 1%, 0207	
0	Q 19	50.03.0523	ZTX651	ZTX 651		0	R 54	57.11.3332	3k3	MF, 1%, 0207	
0	Q 20	50.03.0352	ZTX751S	ZTX 751 S		0	R 55	57.11.3332	3k3	MF, 1%, 0207	
0	Q 21	50.03.0352	ZTX751S	ZTX 751 S		0	R 56	57.11.3221	220R	MF, 1%, 0207	
0	Q 22	50.03.0352	ZTX751S	ZTX 751 S		0	R 57	57.11.3101	100R	MF, 1%, 0207	
0	Q 23	50.03.0352	ZTX751S	ZTX 751 S		0	R 58	57.11.3101	100R	MF, 1%, 0207	
0	Q 24	50.03.0352	ZTX751S	ZTX 751 S		0	R 59	57.11.3101	100R	MF, 1%, 0207	
0	Q 25	50.03.0352	ZTX751S	ZTX 751 S		0	R 60	57.11.3101	100R	MF, 1%, 0207	
0	Q 26	50.03.0352	ZTX751S	ZTX 751 S		0	R 61	57.11.3100	10R	MF, 1%, 0207	
0	Q 27	50.03.0352	ZTX751S	ZTX 751 S		0	R 62	57.11.3332	3k3	MF, 1%, 0207	
0	Q 28	50.03.0352	ZTX751S	ZTX 751 S		0	R 63	57.11.3271	270R	MF, 1%, 0207	
0	Q 29	50.03.0352	ZTX751S	ZTX 751 S		0	R 64	57.11.3271	270R	MF, 1%, 0207	
0	Q 30	50.03.0352	ZTX751S	ZTX 751 S		0	R 65	57.11.3271	270R	MF, 1%, 0207	
0	Q 31	50.03.0352	ZTX751S	ZTX 751 S		0	R 66	57.11.3271	270R	MF, 1%, 0207	
0	Q 32	50.03.0352	ZTX751S	ZTX 751 S		0	R 67	57.11.3101	100R	MF, 1%, 0207	
0	Q 33	50.03.0352	ZTX751S	ZTX 751 S		0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	Q 34	50.03.0352	ZTX751S	ZTX 751 S		0	R 69	57.11.3113	11k	MF, 1%, 0207	
0	Q 35	50.03.0352	ZTX751S	ZTX 751 S		0	R 70	57.11.3102	1k0	MF, 1%, 0207	
0	Q 36	50.03.0352	ZTX751S	ZTX 751 S		0	R 71	57.11.3103	10k	MF, 1%, 0207	
0	Q 37	50.03.0352	ZTX751S	ZTX 751 S		0	R 72	57.11.3000	0R0	MF, 0207	
0	Q 38	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 1	57.88.4473	8*47k	2%, SIP 9	
0	Q 39	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 2	57.88.4473	8*47k	2%, SIP 9	
0	Q 40	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 3	57.88.4473	8*47k	2%, SIP 9	
0	Q 41	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 4	57.88.4473	8*47k	2%, SIP 9	
0	Q 42	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 5	57.88.4473	8*47k	2%, SIP 9	
0	Q 43	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 6	57.88.2221	4*220R	2%, SIP 8	
0	Q 44	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 7	57.88.2221	4*220R	2%, SIP 8	
0	Q 45	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 8	57.88.2221	4*220R	2%, SIP 8	
0	Q 46	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 9	57.88.2221	4*220R	2%, SIP 8	
0	Q 47	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 10	57.88.4473	8*47k	2%, SIP 9	
0	Q 48	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 11	57.88.2221	4*220R	2%, SIP 8	
0	Q 49	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 12	57.88.2221	4*220R	2%, SIP 8	
0	Q 50	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 13	57.88.2221	4*220R	2%, SIP 8	
0	Q 51	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 14	57.88.2221	4*220R	2%, SIP 8	
0	R 1	57.11.3000	0R0	MF, 0207		0	RZ 15	57.88.2221	4*220R	2%, SIP 8	
0	R 2	57.11.3332	3k3	MF, 1%, 0207		0	RZ 16	57.88.2221	4*220R	2%, SIP 8	
0	R 3	57.11.3102	1k0	MF, 1%, 0207		0	RZ 17	57.88.2221	4*220R	2%, SIP 8	
0	R 4	57.11.3472	4k7	MF, 1%, 0207		0	RZ 18	57.88.2221	4*220R	2%, SIP 8	
0	R 5	57.11.3332	3k3	MF, 1%, 0207		0	S 1	55.03.0122	1*a	S 1 TASTE, 1*A, PRINT,IMPULS	
0	R 6	57.11.3473	47k	MF, 1%, 0207		0	S 2	55.01.0168	8*a	SZ , 8*A, DIL	
0	R 7	57.11.3103	10k	MF, 1%, 0207		0	XIC 2	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 8	57.11.3473	47k	MF, 1%, 0207		0	XIC 3	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 9	57.92.7013	0.5A	POLY- PTC, 60V		0	XIC 4	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 10	57.11.3100	10R	MF, 1%, 0207		0	XIC 5	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 11	57.11.3101	100R	MF, 1%, 0207		0	XIC 8	53.03.0165	20p	DIL 0.3", löt, gerade	
0	R 12	57.11.3684	680k	MF, 1%, 0207		0	XIC 9	53.03.0168	16p	DIL 0.3", löt, gerade	
0	R 13	57.11.3103	10k	MF, 1%, 0207		0	XIC 18	53.03.0218	1p	single-in-line	
0	R 14	57.11.3103	10k	MF, 1%, 0207		0	XIC 23	53.03.0218	1p	single-in-line	
0	R 15	57.11.3220	22R	MF, 1%, 0207		0	XIC 24	53.03.0173	28p	DIL 0.6", löt, gerade	
0	R 16	57.11.3332	3k3	MF, 1%, 0207		0	XIC 25	53.03.0182	24p	DIL 0.3", löt, gerade	
0	R 17	57.92.7058	4.0A	POLY- PTC, 30V		0	Y 1	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U	
0	R 18	57.11.3103	10k	MF, 1%, 0207							
0	R 19	57.11.3473	47k	MF, 1%, 0207							
0	R 20	57.92.7013	0.5A	POLY- PTC, 60V							
0	R 21	57.11.3473	47k	MF, 1%, 0207							
0	R 22	57.11.3100	10R	MF, 1%, 0207							
0	R 23	57.11.3332	3k3	MF, 1%, 0207							
0	R 24	57.11.3332	3k3	MF, 1%, 0207							
0	R 25	57.11.3220	22R	MF, 1%, 0207							
0	R 26	57.11.3220	22R	MF, 1%, 0207							
0	R 27	57.11.3220	22R	MF, 1%, 0207							
0	R 28	57.11.3220	22R	MF, 1%, 0207							
0	R 29	57.11.3220	22R	MF, 1%, 0207							
0	R 30	57.11.3220	22R	MF, 1%, 0207							
0	R 31	57.11.3220	22R	MF, 1%, 0207							
0	R 32	57.11.3220	22R	MF, 1%, 0207							
0	R 33	57.11.3220	22R	MF, 1%, 0207							
0	R 34	57.11.3220	22R	MF, 1%, 0207							
0	R 35	57.11.3101	100R	MF, 1%, 0207							
0	R 36	57.11.3101	100R	MF, 1%, 0207							
0	R 37	57.11.3101	100R	MF, 1%, 0207							
0	R 38	57.11.3101	100R	MF, 1%, 0207							
0	R 39	57.11.3331	330R	MF, 1%, 0207							

End of List

Comments:
Process of 8279 has been changed to CMOS technology



Channel Controller Board 1.940.756.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 4	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns	
0	C 2	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 5	50.14.2009	27C1001	EPROM 128K * 8	
0	C 3	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 6	50.17.1139	74HC139	SW HDLC EPROM 1.941.710.xx	
0	C 4	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 7	50.17.1138	74HC138	IC ... 74 HC 139 .. ,A	
0	C 5	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 8	50.18.0100	PLD16V8	16 V 8 D - 25 LP	
0	C 6	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 9	50.15.0104	MC3486	DIP20, SW753 HDLC-GAL (1.940.915.20)	
0	C 7	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 10	50.17.1002	74HC02	IC ... 74 HC 02 .. ,A	
0	C 8	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 11	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A	
0	C 9	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 12	50.09.0101	TL072	IC TL 072 CN ,A	
0	C 10	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 13	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A	
0	C 11	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 14	50.17.1123	74HC123	SEE COMMENT	
0	C 12	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 15	50.63.0100	MC68302	IC MC 68302 FC 16 C ,A	
0	C 13	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 16	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A	
0	C 14	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 17	50.17.1148	74HC148	IC ... 74 HC 148 .. ,A	
0	C 15	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 18	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 16	59.06.5473	47n	PETP	63V, 5%, RM5	0	IC 19	50.17.1244	74HC244	IC ... 74 HC 244 .. ,A	
0	C 17	59.06.5223	22n	PETP	63V, 5%, RM5	0	IC 20	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 18	59.34.2270	27p	CER	63V, 5%, N150	0	IC 21	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 19	59.34.2270	27p	CER	63V, 5%, N150	0	IC 22	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 20	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 23	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 21	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 24	50.19.0204	ADS7832		
0	C 22	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 25	50.19.0113	MAX526D	D/A Converter 12 Bit	
0	C 23	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A	
0	C 24	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 27	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 25	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 28	50.17.1163	74HC163	IC ... 74 HC 163 .. ,A	
0	C 26	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 29	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A	
0	C 27	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 30	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 28	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 31	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 29	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 32	50.17.1139	74HC139	IC ... 74 HC 139 .. ,A	
0	C 30	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 33	50.17.1139	74HC139	IC ... 74 HC 139 .. ,A	
0	C 31	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 34	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 32	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 35	50.10.0109	LM337L	IC LM 337 LZ,	
0	C 33	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 36	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 34	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 37	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 35	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 38	50.17.1244	74HC244	IC ... 74 HC 244 .. ,A	
0	C 36	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 39	50.11.0157	TL7705B	IC TL 7705 BCP,	
0	C 37	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 40	50.09.0101	TL072	IC TL 072 CN ,A	
0	C 38	59.06.5104	100n	PETP	50V, 5%, RM5	0	IC 41	50.10.0106	TL431	IC TL 431 CLP,	
0	C 39	59.22.6470	47u	EL	40V, 20%, RM5	0	J 1	54.25.0005	5p	Buchse, 16A, vertikal, PCB	
0	C 40	59.06.0104	100n	PETP	63V, 10%, RM5	0	J 2	54.11.0130	32 pcs 2p	P STIFT, 2R WNKL 2 PIN=1 STK.	
0	C 41	59.06.0104	100n	PETP	63V, 10%, RM5	0	JSJ 1	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 42	59.06.5105	1u0	PETP	50V, 5%, RM5	0	JSJ 2	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 43	59.22.8109	1u	EL	50V, 20%, RM5	0	JSJ 3	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 44	59.22.8109	1u	EL	50V, 20%, RM5	0	JSJ 6	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 45	59.06.5104	100n	PETP	63V, 5%, RM5	0	L 1	62.03.0010	48uH	2A Toroid Choke	
0	C 46	59.34.4101	100p	CER	63V, 5%, N750	0	MP 1	1.940.753.11	1 mp	CHANNEL CONTROLLER PCB /I	
0	C 47	59.06.0104	100n	PETP	63V, 10%, RM5	0	MP 2	1.940.753.04	1 mp	NR-ETIKETTE 5 * 20	
0	D 2	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 3	1.101.001.20	1 mp	TEXT-ETIK 5*20 HARDWARE-20	
0	D 3	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 4	43.01.0108	1 mp	ESE-WARNSCHILD	
0	D 4	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 5	1.010.015.50	1 mp	ISOLIER-SCHEIBE ZU T0 5	
0	D 5	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 6	not used	2 mp	ROHRNIETE D 2.5*0.15* 9	
0	D 6	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 2	54.01.0020	1p	Pin 0.63*0.63	
0	D 7	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 3	54.01.0020	1p	Pin 0.63*0.63	
0	D 8	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 4	54.01.0020	1p	Pin 0.63*0.63	
0	D 9	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 5	54.01.0020	1p	Pin 0.63*0.63	
0	D 10	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 6	54.01.0020	1p	Pin 0.63*0.63	
0	D 11	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 7	54.01.0020	1p	Pin 0.63*0.63	
0	D 12	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 8	54.01.0020	1p	Pin 0.63*0.63	
0	D 13	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 9	54.01.0020	1p	Pin 0.63*0.63	
0	D 14	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 10	54.01.0020	1p	Pin 0.63*0.63	
0	D 15	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 11	54.02.0320	1p	Flatpin, 2.8*0.8mm	
0	D 16	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 12	54.01.0020	1p	Pin 0.63*0.63	
0	D 17	50.04.0127	BAT85		200mA, Schottky	0	P 13	54.01.0020	1p	Pin 0.63*0.63	
0	D 18	50.04.0127	BAT85		200mA, Schottky	0	P 14	54.01.0020	1p	Pin 0.63*0.63	
0	D 19	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 15	54.01.0020	1p	Pin 0.63*0.63	
0	D 20	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 16	54.01.0020	1p	Pin 0.63*0.63	
0	D 21	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 17	54.01.0020	1p	Pin 0.63*0.63	
0	D 22	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 18	54.01.0020	1p	Pin 0.63*0.63	
0	D 23	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 19	54.01.0020	1p	Pin 0.63*0.63	
0	D 24	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 20	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	D 25	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 21	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE	
0	D 26	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 22	54.14.2001	10p	1/20" Au, gerade, ohne Verrieg	
0	D 27	50.04.0127	BAT85		200mA, Schottky	0	P 23	54.16.0540	40p	P 1/40", 34 P, AU, PRINT	
0	DV 1	50.04.1511	6V2	Zener	5%, 1.3W, DO-41	0	P 24	54.16.0534	34p	P 1/40", 34 P, AU, PRINT	
0	IC 1	50.17.1086	74HC86	IC ... 74 HC 86 .. ,A		0	P 25	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	IC 2	50.14.2009	27C1001	EPROM 128K * 8		0	P 26	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	IC 3	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns		0	Q 1	50.03.1554	VP0808M	VP 0808 M	
0	IC 4	50.14.2009	27C1001	EPROM 128K * 8		0	Q 2	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	

**Channel Controller Board 1.940.756.21**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 3	50.43.0340			Q BC 337-25,	0	R 38	57.11.3101	100R	MF, 1%, 0207	
0	Q 4	50.03.0523	ZTX651	ZTX 651		0	R 39	57.11.3331	330R	MF, 1%, 0207	
0	Q 5	50.03.0523	ZTX651	ZTX 651		0	R 40	57.11.3331	330R	MF, 1%, 0207	
0	Q 6	50.03.0523	ZTX651	ZTX 651		0	R 41	57.11.3101	100R	MF, 1%, 0207	
0	Q 7	50.03.0523	ZTX651	ZTX 651		0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	Q 8	50.03.0523	ZTX651	ZTX 651		0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	Q 9	50.03.0523	ZTX651	ZTX 651		0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	Q 10	50.03.0523	ZTX651	ZTX 651		0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	Q 11	50.03.0523	ZTX651	ZTX 651		0	R 46	57.11.3821	820R	MF, 1%, 0207	
0	Q 12	50.03.0523	ZTX651	ZTX 651		0	R 47	57.11.3473	47k	MF, 1%, 0207	
0	Q 13	50.03.0523	ZTX651	ZTX 651		0	R 48	57.11.3220	22R	MF, 1%, 0207	
0	Q 14	50.03.0523	ZTX651	ZTX 651		0	R 49	57.11.3220	22R	MF, 1%, 0207	
0	Q 15	50.03.0523	ZTX651	ZTX 651		0	R 50	57.11.3220	22R	MF, 1%, 0207	
0	Q 16	50.03.0523	ZTX651	ZTX 651		0	R 51	57.11.3220	22R	MF, 1%, 0207	
0	Q 17	50.03.0523	ZTX651	ZTX 651		0	R 52	57.11.3220	22R	MF, 1%, 0207	
0	Q 18	50.03.0523	ZTX651	ZTX 651		0	R 53	57.11.3220	22R	MF, 1%, 0207	
0	Q 19	50.03.0523	ZTX651	ZTX 651		0	R 54	57.11.3332	3k3	MF, 1%, 0207	
0	Q 20	50.03.0352	ZTX751S	ZTX 751 S		0	R 55	57.11.3332	3k3	MF, 1%, 0207	
0	Q 21	50.03.0352	ZTX751S	ZTX 751 S		0	R 56	57.11.3221	220R	MF, 1%, 0207	
0	Q 22	50.03.0352	ZTX751S	ZTX 751 S		0	R 57	57.11.3101	100R	MF, 1%, 0207	
0	Q 23	50.03.0352	ZTX751S	ZTX 751 S		0	R 58	57.11.3101	100R	MF, 1%, 0207	
0	Q 24	50.03.0352	ZTX751S	ZTX 751 S		0	R 59	57.11.3101	100R	MF, 1%, 0207	
0	Q 25	50.03.0352	ZTX751S	ZTX 751 S		0	R 60	57.11.3101	100R	MF, 1%, 0207	
0	Q 26	50.03.0352	ZTX751S	ZTX 751 S		0	R 61	57.11.3100	10R	MF, 1%, 0207	
0	Q 27	50.03.0352	ZTX751S	ZTX 751 S		0	R 62	57.11.3332	3k3	MF, 1%, 0207	
0	Q 28	50.03.0352	ZTX751S	ZTX 751 S		0	R 63	57.11.3271	270R	MF, 1%, 0207	
0	Q 29	50.03.0352	ZTX751S	ZTX 751 S		0	R 64	57.11.3271	270R	MF, 1%, 0207	
0	Q 30	50.03.0352	ZTX751S	ZTX 751 S		0	R 65	57.11.3271	270R	MF, 1%, 0207	
0	Q 31	50.03.0352	ZTX751S	ZTX 751 S		0	R 66	57.11.3271	270R	MF, 1%, 0207	
0	Q 32	50.03.0352	ZTX751S	ZTX 751 S		0	R 67	57.11.3101	100R	MF, 1%, 0207	
0	Q 33	50.03.0352	ZTX751S	ZTX 751 S		0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	Q 34	50.03.0352	ZTX751S	ZTX 751 S		0	R 69	57.11.3113	11k	MF, 1%, 0207	
0	Q 35	50.03.0352	ZTX751S	ZTX 751 S		0	R 70	57.11.3102	1k0	MF, 1%, 0207	
0	Q 36	50.03.0352	ZTX751S	ZTX 751 S		0	R 71	57.11.3103	10k	MF, 1%, 0207	
0	Q 37	50.03.0352	ZTX751S	ZTX 751 S		0	R 72	57.11.3000	0R0	MF, 0207	
0	Q 38	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 1	57.88.4473	8*47k	2%, SIP 9	
0	Q 39	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 2	57.88.4473	8*47k	2%, SIP 9	
0	Q 40	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 3	57.88.4473	8*47k	2%, SIP 9	
0	Q 41	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 4	57.88.4473	8*47k	2%, SIP 9	
0	Q 42	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 5	57.88.4473	8*47k	2%, SIP 9	
0	Q 43	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 6	57.88.2221	4*220R	2%, SIP 8	
0	Q 44	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 7	57.88.2221	4*220R	2%, SIP 8	
0	Q 45	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 8	57.88.2221	4*220R	2%, SIP 8	
0	Q 46	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 9	57.88.2221	4*220R	2%, SIP 8	
0	Q 47	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 10	57.88.4473	8*47k	2%, SIP 9	
0	Q 48	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 11	57.88.2221	4*220R	2%, SIP 8	
0	Q 49	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 12	57.88.2221	4*220R	2%, SIP 8	
0	Q 50	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 13	57.88.2221	4*220R	2%, SIP 8	
0	Q 51	50.03.0352	ZTX751S	ZTX 751 S		0	RZ 14	57.88.2221	4*220R	2%, SIP 8	
0	R 1	57.11.3000	0R0	MF, 0207		0	RZ 15	57.88.2221	4*220R	2%, SIP 8	
0	R 2	57.11.3332	3k3	MF, 1%, 0207		0	RZ 16	57.88.2221	4*220R	2%, SIP 8	
0	R 3	57.11.3102	1k0	MF, 1%, 0207		0	RZ 17	57.88.2221	4*220R	2%, SIP 8	
0	R 4	57.11.3472	4k7	MF, 1%, 0207		0	RZ 18	57.88.2221	4*220R	2%, SIP 8	
0	R 5	57.11.3332	3k3	MF, 1%, 0207		0	S 1	55.03.0122	1*a	S 1 TASTE, 1*A, PRINT,IMPULS	
0	R 6	57.11.3473	47k	MF, 1%, 0207		0	S 2	55.01.0168	8*a	SZ , 8*A, DIL	
0	R 7	57.11.3103	10k	MF, 1%, 0207		0	XIC 2	53.03.0184	32p	DIL 0.6", lbt, gerade	
0	R 8	57.11.3473	47k	MF, 1%, 0207		0	XIC 3	53.03.0184	32p	DIL 0.6", lbt, gerade	
0	R 9	57.92.7013	0.5A	POLY-PTC, 60V		0	XIC 4	53.03.0184	32p	DIL 0.6", lbt, gerade	
0	R 10	57.11.3100	10R	MF, 1%, 0207		0	XIC 5	53.03.0184	32p	DIL 0.6", lbt, gerade	
0	R 11	57.11.3101	100R	MF, 1%, 0207		0	XIC 8	53.03.0165	20p	DIL 0.3", lbt, gerade	
0	R 12	57.11.3684	680k	MF, 1%, 0207		0	XIC 9	53.03.0168	16p	DIL 0.3", lbt, gerade	
0	R 13	57.11.3103	10k	MF, 1%, 0207		0	XIC 18	53.03.0218	1p	single-in-line	
0	R 14	57.11.3103	10k	MF, 1%, 0207		0	XIC 23	53.03.0218	1p	single-in-line	
0	R 15	57.11.3220	22R	MF, 1%, 0207		0	XIC 24	53.03.0173	28p	DIL 0.6", lbt, gerade	
0	R 16	57.11.3332	3k3	MF, 1%, 0207		0	XIC 25	53.03.0182	24p	DIL 0.3", lbt, gerade	
0	R 17	57.92.7058	4.0A	POLY-PTC, 30V		0	Y 1	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U	
0	R 18	57.11.3103	10k	MF, 1%, 0207							
0	R 19	57.11.3473	47k	MF, 1%, 0207							
0	R 20	57.92.7013	0.5A	POLY-PTC, 60V							
0	R 21	57.11.3473	47k	MF, 1%, 0207							
0	R 22	57.11.3100	10R	MF, 1%, 0207							
0	R 23	57.11.3332	3k3	MF, 1%, 0207							
0	R 24	57.11.3332	3k3	MF, 1%, 0207							
0	R 25	57.11.3220	22R	MF, 1%, 0207							
0	R 26	57.11.3220	22R	MF, 1%, 0207							
0	R 27	57.11.3220	22R	MF, 1%, 0207							
0	R 28	57.11.3220	22R	MF, 1%, 0207							
0	R 29	57.11.3220	22R	MF, 1%, 0207							
0	R 30	57.11.3220	22R	MF, 1%, 0207							
0	R 31	57.11.3220	22R	MF, 1%, 0207							
0	R 32	57.11.3220	22R	MF, 1%, 0207							
0	R 33	57.11.3220	22R	MF, 1%, 0207							
0	R 34	57.11.3220	22R	MF, 1%, 0207							
0	R 35	57.11.3101	100R	MF, 1%, 0207							
0	R 36	57.11.3101	100R	MF, 1%, 0207							
0	R 37	57.11.3101	100R	MF, 1%, 0207							

Comments

IC13:
BEFORE INSERT, CUT PIN 2.
CONNECT PIN 1 AND PIN 2 ON SOLDERING SIDE.

End of List



Channel Controller Board 1.940.764.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 4	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns	
0	C 2	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 5	50.14.2009	27C1001	EPROM 128K * 8	
0	C 3	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 6	50.17.1139	74HC139	SW HDLC EPROM 1.941.760.xx	
0	C 4	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 7	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 5	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 8	50.18.0100	PLD16V8	16 V D - 25 LP	
0	C 6	59.06.0104	100n	PETP	63V, 10%, RM5					DIP20, SW753 HDLC-GAL (1.940.915.20)	
0	C 7	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 9	50.15.0104	MC3486	IC MC 3486 P, DS 3486 N,	
0	C 8	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 10	50.17.1002	74HC02	IC ... 74 HC 02 .. ,A	
0	C 9	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 11	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A	
0	C 10	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 12	50.09.0101	TL072	IC TL 072 CN ,A	
0	C 11	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 13	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A	
0	C 12	59.06.0104	100n	PETP	63V, 10%, RM5					SEE COMMENT	
0	C 13	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 14	50.17.1123	74HC123	IC ... 74 HC 123 .. ,A	
0	C 14	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 15	50.63.0100	MC68302	IC MC 68302 FC 16 C ,A	
0	C 15	59.22.8470	47u	EL	40V, 20%, RM5	0	IC 16	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A	
0	C 16	59.06.5473	47n	PETP	63V, 5%, RM5	0	IC 17	50.17.1148	74HC148	IC ... 74 HC 148 .. ,A	
0	C 17	59.06.5223	22n	PETP	63V, 5% RM5	0	IC 18	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 18	59.34.2270	27p	CER	63V, 5%, N150	0	IC 19	50.17.1244	74HC244	IC ... 74 HC 244 .. ,A	
0	C 19	59.34.2270	27p	CER	63V, 5%, N150	0	IC 20	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 20	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 21	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 21	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 22	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A	
0	C 22	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 23	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 23	59.06.5222	2n2	PETP	63V, 5%, RM5	0	IC 24	50.19.0204	ADS7832		
0	C 24	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 25	50.19.0113	MAX526D	D/A Converter 12 Bit	
0	C 25	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A	
0	C 26	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 27	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 27	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 28	50.17.1163	74HC163	IC ... 74 HC 163 .. ,A	
0	C 28	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 29	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A	
0	C 29	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 30	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 30	59.22.6100	10u	EL	35V, 20%, RM6	0	IC 31	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 31	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 32	50.17.1139	74HC139	IC ... 74 HC 139 .. ,A	
0	C 32	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 33	50.17.1139	74HC139	IC ... 74 HC 139 .. ,A	
0	C 33	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 34	50.17.1138	74HC138	IC ... 74 HC 138 .. ,A	
0	C 34	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 35	50.10.0109	LM337L	IC LM 337 LZ,	
0	C 35	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 36	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 36	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 37	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 37	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 38	50.17.1244	74HC244	IC ... 74 HC 244 .. ,A	
0	C 38	59.06.5104	100n	PETP	63V, 5%, RM5	0	IC 39	50.11.0157	TL7705B	IC TI. 7705 BCP,	
0	C 39	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 40	50.09.0101	TL072	IC TL 072 CN ,A	
0	C 40	59.06.0104	100n	PETP	63V, 10%, RM5	0	IC 41	50.10.0106	TL431	IC TL 431 CLP,	
0	C 41	59.06.0104	100n	PETP	63V, 10%, RM5						
0	C 42	59.06.5105	1u0	PETP	50V, 5%, RM5						
0	C 43	59.22.8109	1u	EL	50V, 20%, RM5	0	J 1	54.25.0005	5p	Buchse, 16A, vertikal, PCB	
0	C 44	59.22.8109	1u	EL	50V, 20%, RM5	0	J 2	54.11.2010	64p	EU-Q 2*32p	
0	C 45	59.06.5104	100n	PETP	63V, 5%, RM5	0	JSJ 1	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 46	59.34.4101	100p	CER	63V, 5%, N750	0	JSJ 2	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 47	59.06.0104	100n	PETP	63V, 10%, RM5	0	JSJ 3	54.01.0021	Jumper	0.63 * 0.63mm	
0	D 2	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	JSJ 6	54.01.0021	Jumper	0.63 * 0.63mm	
0	D 3	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	L 1	62.03.0010	48uH	2A Toroid Choke	
0	D 4	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 1	1.940.753.11	1 mp	CHANNEL CONTROLLER PCB /	
0	D 5	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 2	1.940.753.04	1 mp	NR.-ETIKETTE 5 * 20	
0	D 6	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 3	1.101.001.20	1 mp	TEXT-ETIK. 5*20 HARDWARE -20	
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 4	43.01.0018	1 mp	ESE-WARNSCHILD	
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 5	1.010.015.50	1 mp	ISOLIER-SCHEIBE ZU T0 5	
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 6	28.99.0119	2 mp	ROHRNIETE D 2.5*0.15* 9	
0	D 10	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 2	54.01.0020	1p	Pin 0.63*0.63	
0	D 11	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 3	54.01.0020	1p	Pin 0.63*0.63	
0	D 12	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 4	54.01.0020	1p	Pin 0.63*0.63	
0	D 13	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 5	54.01.0020	1p	Pin 0.63*0.63	
0	D 14	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 6	54.01.0020	1p	Pin 0.63*0.63	
0	D 15	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 7	54.01.0020	1p	Pin 0.63*0.63	
0	D 16	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 8	54.01.0020	1p	Pin 0.63*0.63	
0	D 17	50.04.0127	BAT85	200mA, Schottky		0	P 9	54.01.0020	1p	Pin 0.63*0.63	
0	D 18	50.04.0127	BAT85	200mA, Schottky		0	P 10	54.01.0020	1p	Pin 0.63*0.63	
0	D 19	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 11	54.02.0320	1p	Flatpin, 2.8*0.8mm	
0	D 20	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 12	54.01.0020	1p	Pin 0.63*0.63	
0	D 21	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 13	54.01.0020	1p	Pin 0.63*0.63	
0	D 22	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 14	54.01.0020	1p	Pin 0.63*0.63	
0	D 23	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 15	54.01.0020	1p	Pin 0.63*0.63	
0	D 24	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 16	54.01.0020	1p	Pin 0.63*0.63	
0	D 25	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 17	54.01.0020	1p	Pin 0.63*0.63	
0	D 26	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 18	54.01.0020	1p	Pin 0.63*0.63	
0	D 27	50.04.0127	BAT85	200mA, Schottky		0	P 19	54.01.0020	1p	Pin 0.63*0.63	
0	DL 1	50.04.2129	LS3360	DL LS 3360 , RT DIFF		0	P 20	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	DL 2	50.04.2129	LS3360	DL LS 3360 , RT DIFF		0	P 21	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE	
0	DL 3	50.04.2129	LS3360	DL LS 3360 , RT DIFF		0	P 22	54.14.2001	10p	1/20" Au, gerade, ohne Verrieg	
0	DL 4	50.04.2129	LS3360	DL LS 3360 , RT DIFF		0	P 23	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	DL 5	50.04.2129	LG3360	DL LG 3360 , GN DIFF		0	P 24	54.16.0534	34p	P 1/40", 34 P, AU, PRINT	
0	DL 6	50.04.2129	LY3360	DL LY 3360 , GB DIFF		0	P 25	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	DV 1	50.04.1511	6V2	Zener, 5%, 1.3W, DO-41		0	P 26	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	IC 1	50.17.1086	74HC86	IC ... 74 HC 86 .. ,A		0	Q 1	50.03.1554	VP0808M	VP 0808 M	
0	IC 2	50.14.2009	27C1001	EPROM 128K * 8		0	Q 2	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	
0	IC 3	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns							

Channel Controller Board 1.940.764.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 3	50.43.0340			Q BC 337-25,	0	R 38	57.11.3101	100R	MF, 1%, 0207	
0	Q 4	50.03.0523		ZTX651	ZTX 651	0	R 39	57.11.3331	330R	MF, 1%, 0207	
0	Q 5	50.03.0523		ZTX651	ZTX 651	0	R 40	57.11.3331	330R	MF, 1%, 0207	
0	Q 6	50.03.0523		ZTX651	ZTX 651	0	R 41	57.11.3101	100R	MF, 1%, 0207	
0	Q 7	50.03.0523		ZTX651	ZTX 651	0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	Q 8	50.03.0523		ZTX651	ZTX 651	0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	Q 9	50.03.0523		ZTX651	ZTX 651	0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	Q 10	50.03.0523		ZTX651	ZTX 651	0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	Q 11	50.03.0523		ZTX651	ZTX 651	0	R 46	57.11.3821	820R	MF, 1%, 0207	
0	Q 12	50.03.0523		ZTX651	ZTX 651	0	R 47	57.11.3473	47k	MF, 1%, 0207	
0	Q 13	50.03.0523		ZTX651	ZTX 651	0	R 48	57.11.3220	22R	MF, 1%, 0207	
0	Q 14	50.03.0523		ZTX651	ZTX 651	0	R 49	57.11.3220	22R	MF, 1%, 0207	
0	Q 15	50.03.0523		ZTX651	ZTX 651	0	R 50	57.11.3220	22R	MF, 1%, 0207	
0	Q 16	50.03.0523		ZTX651	ZTX 651	0	R 51	57.11.3220	22R	MF, 1%, 0207	
0	Q 17	50.03.0523		ZTX651	ZTX 651	0	R 52	57.11.3220	22R	MF, 1%, 0207	
0	Q 18	50.03.0523		ZTX651	ZTX 651	0	R 53	57.11.3220	22R	MF, 1%, 0207	
0	Q 19	50.03.0523		ZTX651	ZTX 651	0	R 54	57.11.3332	3k3	MF, 1%, 0207	
0	Q 20	50.03.0352		ZTX751S	ZTX 751 S	0	R 55	57.11.3332	3k3	MF, 1%, 0207	
0	Q 21	50.03.0352		ZTX751S	ZTX 751 S	0	R 56	57.11.3221	220R	MF, 1%, 0207	
0	Q 22	50.03.0352		ZTX751S	ZTX 751 S	0	R 57	57.11.3101	100R	MF, 1%, 0207	
0	Q 23	50.03.0352		ZTX751S	ZTX 751 S	0	R 58	57.11.3101	100R	MF, 1%, 0207	
0	Q 24	50.03.0352		ZTX751S	ZTX 751 S	0	R 59	57.11.3101	100R	MF, 1%, 0207	
0	Q 25	50.03.0352		ZTX751S	ZTX 751 S	0	R 60	57.11.3101	100R	MF, 1%, 0207	
0	Q 26	50.03.0352		ZTX751S	ZTX 751 S	0	R 61	57.11.3100	10R	MF, 1%, 0207	
0	Q 27	50.03.0352		ZTX751S	ZTX 751 S	0	R 62	57.11.3332	3k3	MF, 1%, 0207	
0	Q 28	50.03.0352		ZTX751S	ZTX 751 S	0	R 63	57.11.3271	270R	MF, 1%, 0207	
0	Q 29	50.03.0352		ZTX751S	ZTX 751 S	0	R 64	57.11.3271	270R	MF, 1%, 0207	
0	Q 30	50.03.0352		ZTX751S	ZTX 751 S	0	R 65	57.11.3271	270R	MF, 1%, 0207	
0	Q 31	50.03.0352		ZTX751S	ZTX 751 S	0	R 66	57.11.3271	270R	MF, 1%, 0207	
0	Q 32	50.03.0362		ZTX751S	ZTX 751 S	0	R 67	57.11.3101	100R	MF, 1%, 0207	
0	Q 33	50.03.0352		ZTX751S	ZTX 751 S	0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	Q 34	50.03.0352		ZTX751S	ZTX 751 S	0	R 69	57.11.3113	11k	MF, 1%, 0207	
0	Q 35	50.03.0352		ZTX751S	ZTX 751 S	0	R 70	57.11.3102	1k0	MF, 1%, 0207	
0	Q 36	50.03.0352		ZTX751S	ZTX 751 S	0	R 71	57.11.3103	10k	MF, 1%, 0207	
0	Q 37	50.03.0352		ZTX751S	ZTX 751 S	0	R 72	57.11.3000	0R0	MF, 0207	
0	Q 38	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 1	57.88.4473	8*47k	2%, SIP 9	
0	Q 39	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 2	57.88.4473	8*47k	2%, SIP 9	
0	Q 40	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 3	57.88.4473	8*47k	2%, SIP 9	
0	Q 41	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 4	57.88.4473	8*47k	2%, SIP 9	
0	Q 42	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 5	57.88.4473	8*47k	2%, SIP 9	
0	Q 43	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 6	57.88.2221	4*220R	2%, SIP 8	
0	Q 44	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 7	57.88.2221	4*220R	2%, SIP 8	
0	Q 45	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 8	57.88.2221	4*220R	2%, SIP 8	
0	Q 46	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 9	57.88.2221	4*220R	2%, SIP 8	
0	Q 47	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 10	57.88.4473	8*47k	2%, SIP 9	
0	Q 48	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 11	57.88.2221	4*220R	2%, SIP 8	
0	Q 49	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 12	57.88.2221	4*220R	2%, SIP 8	
0	Q 50	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 13	57.88.2221	4*220R	2%, SIP 8	
0	Q 51	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 14	57.88.2221	4*220R	2%, SIP 8	
0	R 1	57.11.3000	0R0	MF, 0207		0	RZ 15	57.88.2221	4*220R	2%, SIP 8	
0	R 2	57.11.3332	3k3	MF, 1%, 0207		0	RZ 16	57.88.2221	4*220R	2%, SIP 8	
0	R 3	57.11.3102	1k0	MF, 1%, 0207		0	RZ 17	57.88.2221	4*220R	2%, SIP 8	
0	R 4	57.11.3472	4K7	MF, 1%, 0207		0	RZ 18	57.88.2221	4*220R	2%, SIP 8	
0	R 5	57.11.3332	3k3	MF, 1%, 0207		0	S 1	55.03.0122	1*a	S 1 TASTE, 1A, PRINT,IMPULS	
0	R 6	57.11.3473	47k	MF, 1%, 0207		0	S 2	55.01.0168	8*a	SZ , 8A, DIL	
0	R 7	57.11.3103	10k	MF, 1%, 0207		0	XIC 2	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 8	57.11.3473	47k	MF, 1%, 0207		0	XIC 3	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 9	57.92.7013	0.5A	POLY-PTC, 60V		0	XIC 4	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 10	57.11.3100	10R	MF, 1%, 0207		0	XIC 5	53.03.0184	32p	DIL 0.6", löt, gerade	
0	R 11	57.11.3101	100R	MF, 1%, 0207		0	XIC 8	53.03.0165	20p	DIL 0.3", löt, gerade	
0	R 12	57.11.3684	680k	MF, 1%, 0207		0	XIC 9	53.03.0168	16p	DIL 0.3", löt, gerade	
0	R 13	57.11.3103	10k	MF, 1%, 0207		0	XIC 18	53.03.0218	1p	single-in-line	
0	R 14	57.11.3103	10k	MF, 1%, 0207		0	XIC 23	53.03.0218	1p	single-in-line	
0	R 15	57.11.3220	22R	MF, 1%, 0207		0	XIC 24	53.03.0173	28p	DIL 0.6", löt, gerade	
0	R 16	57.11.3332	3k3	MF, 1%, 0207		0	XIC 25	53.03.0162	24p	DIL 0.3", löt, gerade	
0	R 17	57.92.7058	4.0A	POLY-PTC, 30V		0	Y 1	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U	
0	R 18	57.11.3103	10k	MF, 1%, 0207							
0	R 19	57.11.3473	47k	MF, 1%, 0207							
0	R 20	57.92.7013	0.5A	POLY-PTC, 60V							
0	R 21	57.11.3473	47k	MF, 1%, 0207							
0	R 22	57.11.3100	10R	MF, 1%, 0207							
0	R 23	57.11.3332	3k3	MF, 1%, 0207							
0	R 24	57.11.3332	3k3	MF, 1%, 0207							
0	R 25	57.11.3220	22R	MF, 1%, 0207							
0	R 26	57.11.3220	22R	MF, 1%, 0207							
0	R 27	57.11.3220	22R	MF, 1%, 0207							
0	R 28	57.11.3220	22R	MF, 1%, 0207							
0	R 29	57.11.3220	22R	MF, 1%, 0207							
0	R 30	57.11.3220	22R	MF, 1%, 0207							
0	R 31	57.11.3220	22R	MF, 1%, 0207							
0	R 32	57.11.3220	22R	MF, 1%, 0207							
0	R 33	57.11.3220	22R	MF, 1%, 0207							
0	R 34	57.11.3220	22R	MF, 1%, 0207							
0	R 35	57.11.3101	100R	MF, 1%, 0207							
0	R 36	57.11.3101	100R	MF, 1%, 0207							
0	R 37	57.11.3101	100R	MF, 1%, 0207							

End of List

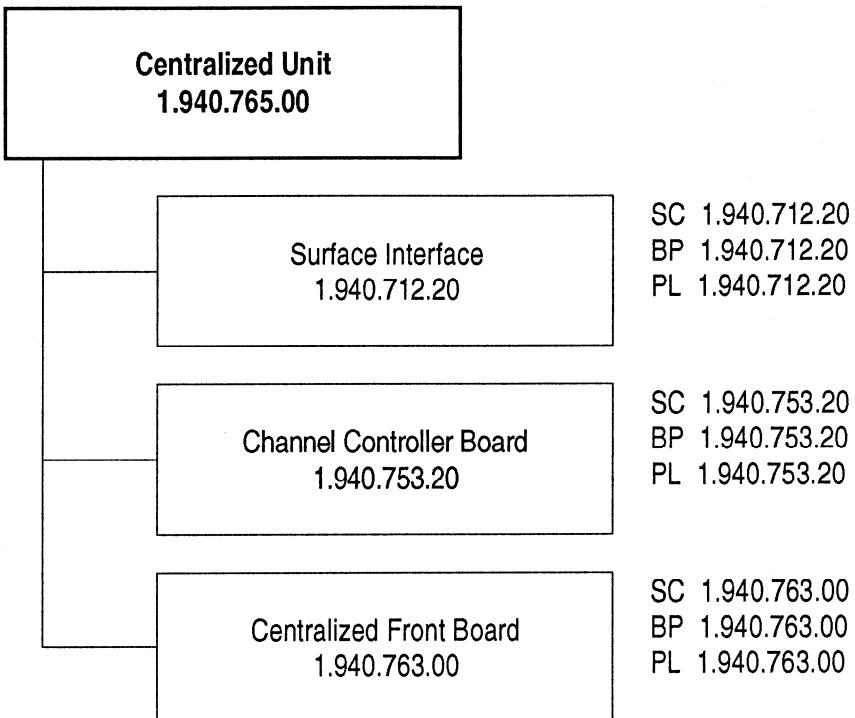
Comments

IC13:
BEFORE INSERT, CUT PIN 2.
CONNECT PIN 1 AND PIN 2 ON SOLDERING SIDE.

SCHEMATA / CIRCUIT DIAGRAMS

Centralized Unit

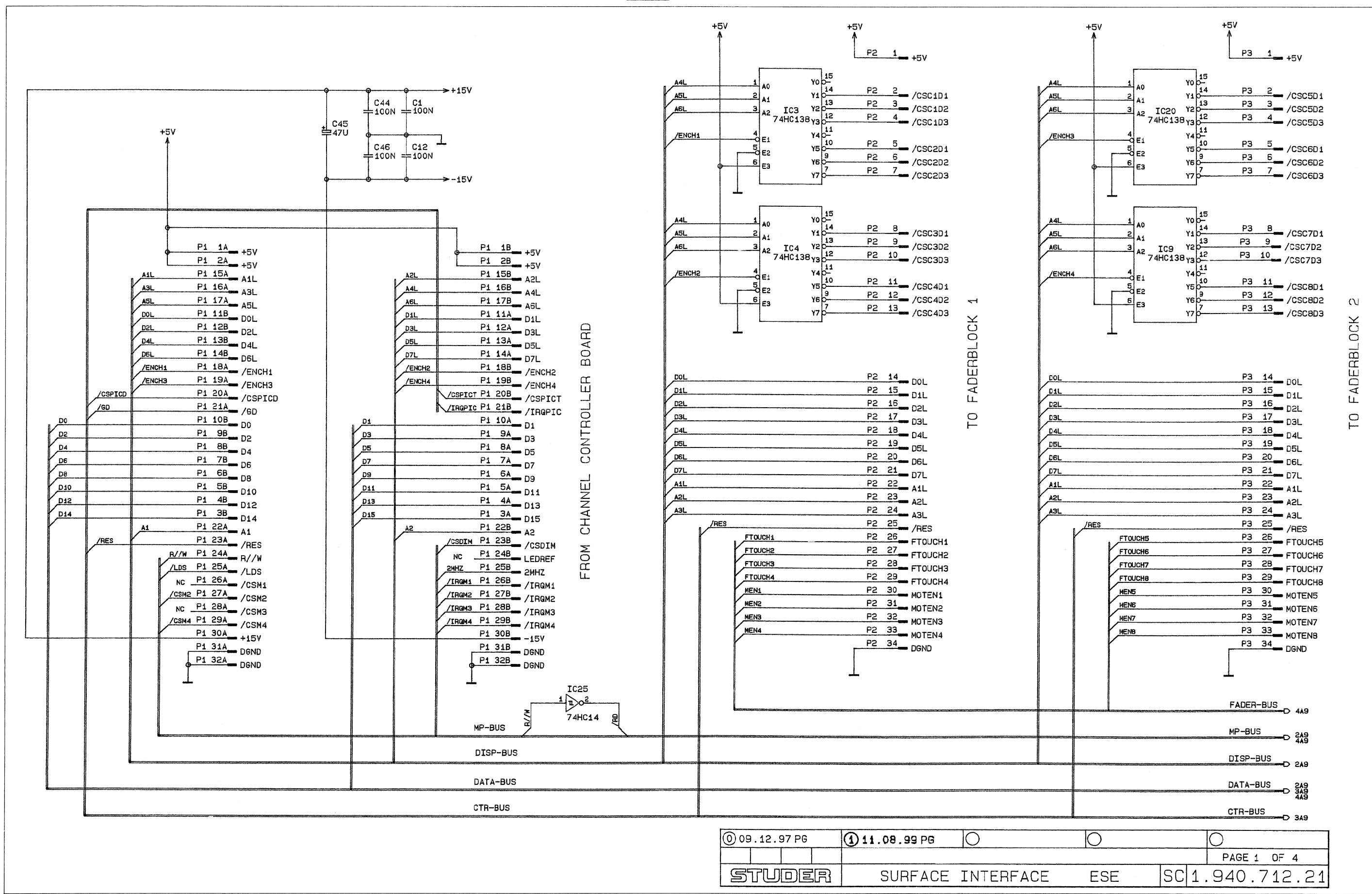
Centralized Unit	1.940.765.00
Surface Interface	1.940.712.20
Channel Controller Board	1.940.753.20
Centralized Front Board	1.940.763.00

Centralized Unit**1.940.765.00**

SC: Schema Circuit Diagram
BP: Bestückungsplan PCB Layout
PL: Positionsliste Positional List

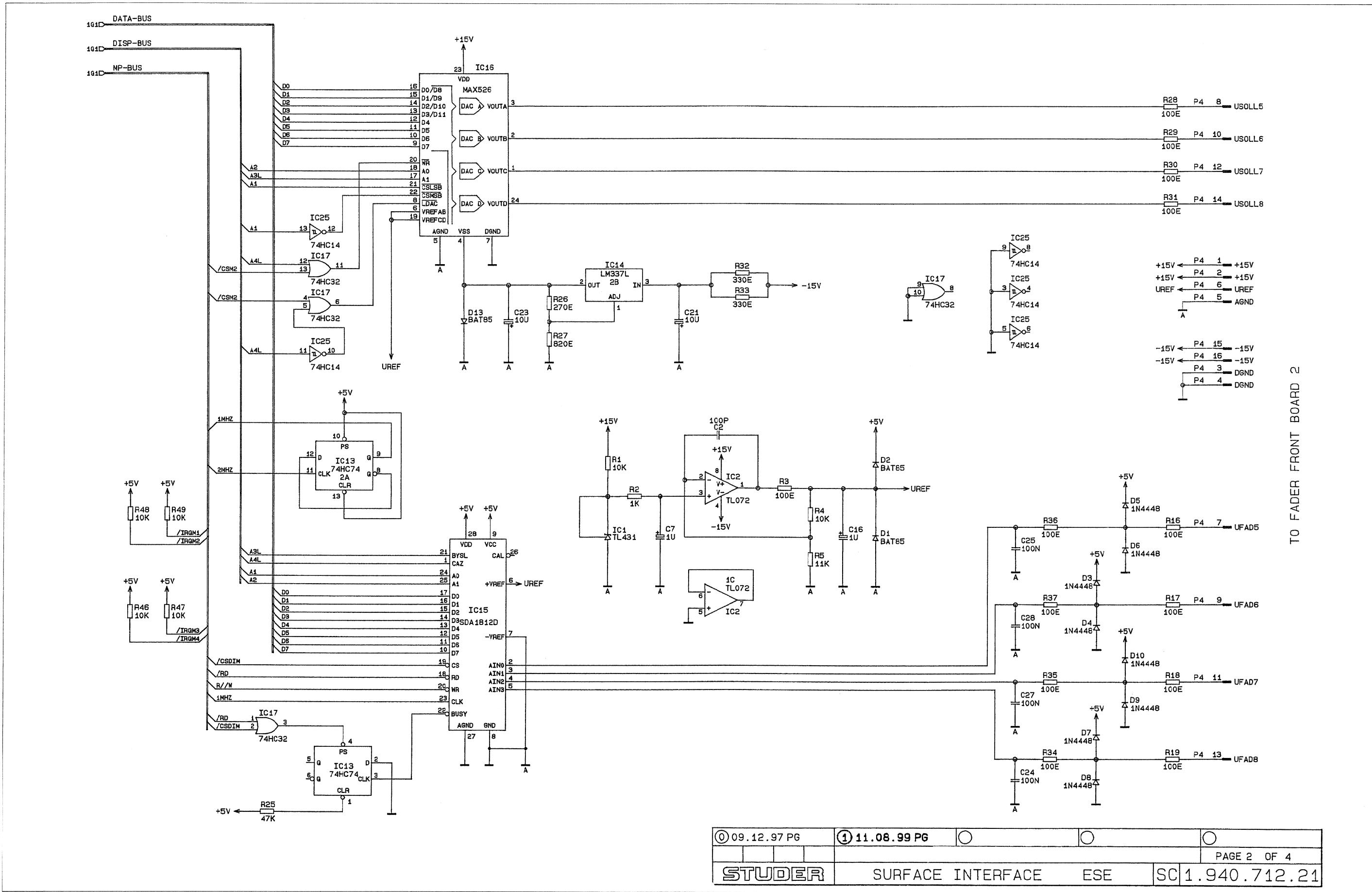


Surface Interface 1.940.712.21



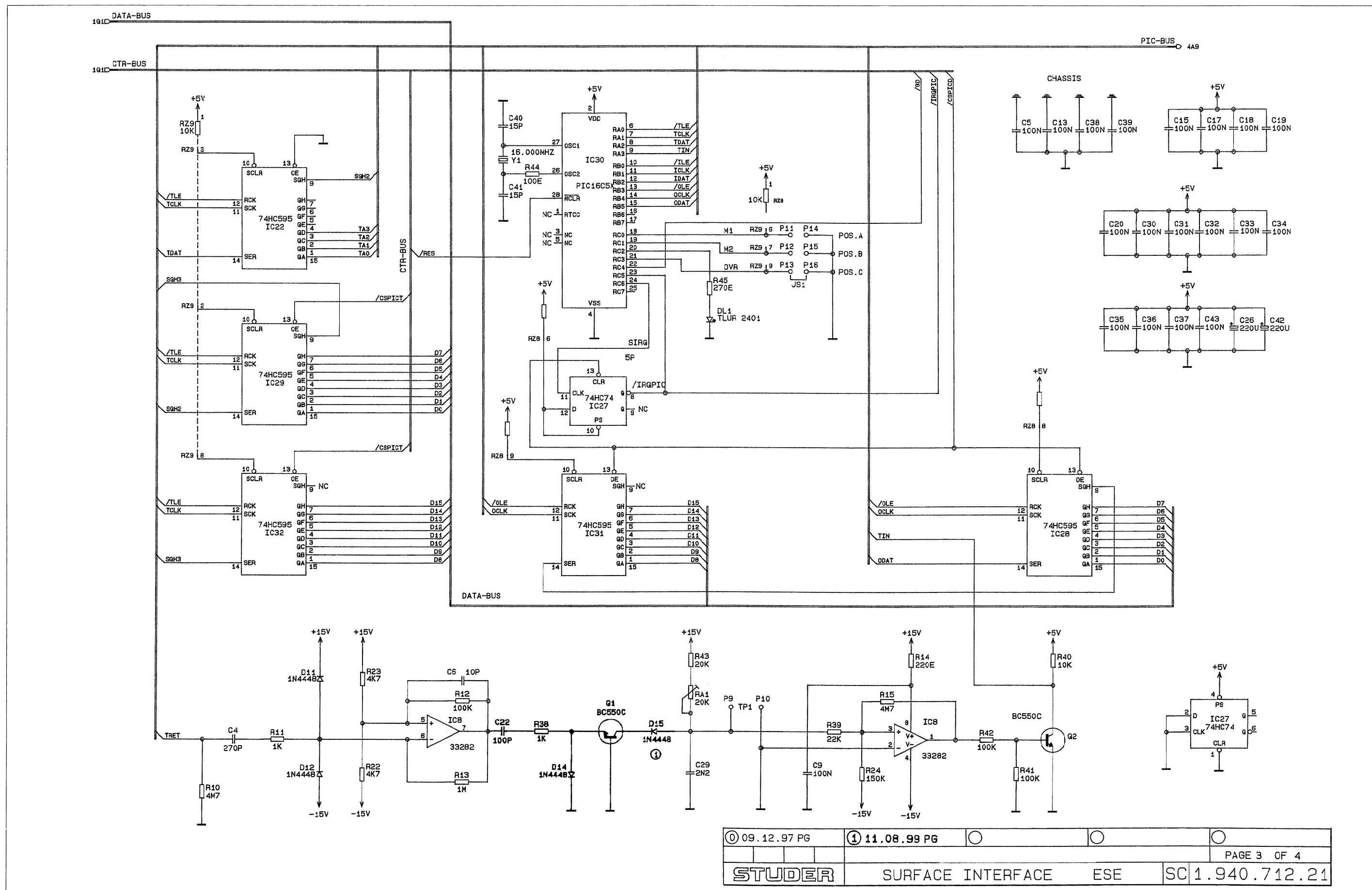


Surface Interface 1.940.712.21



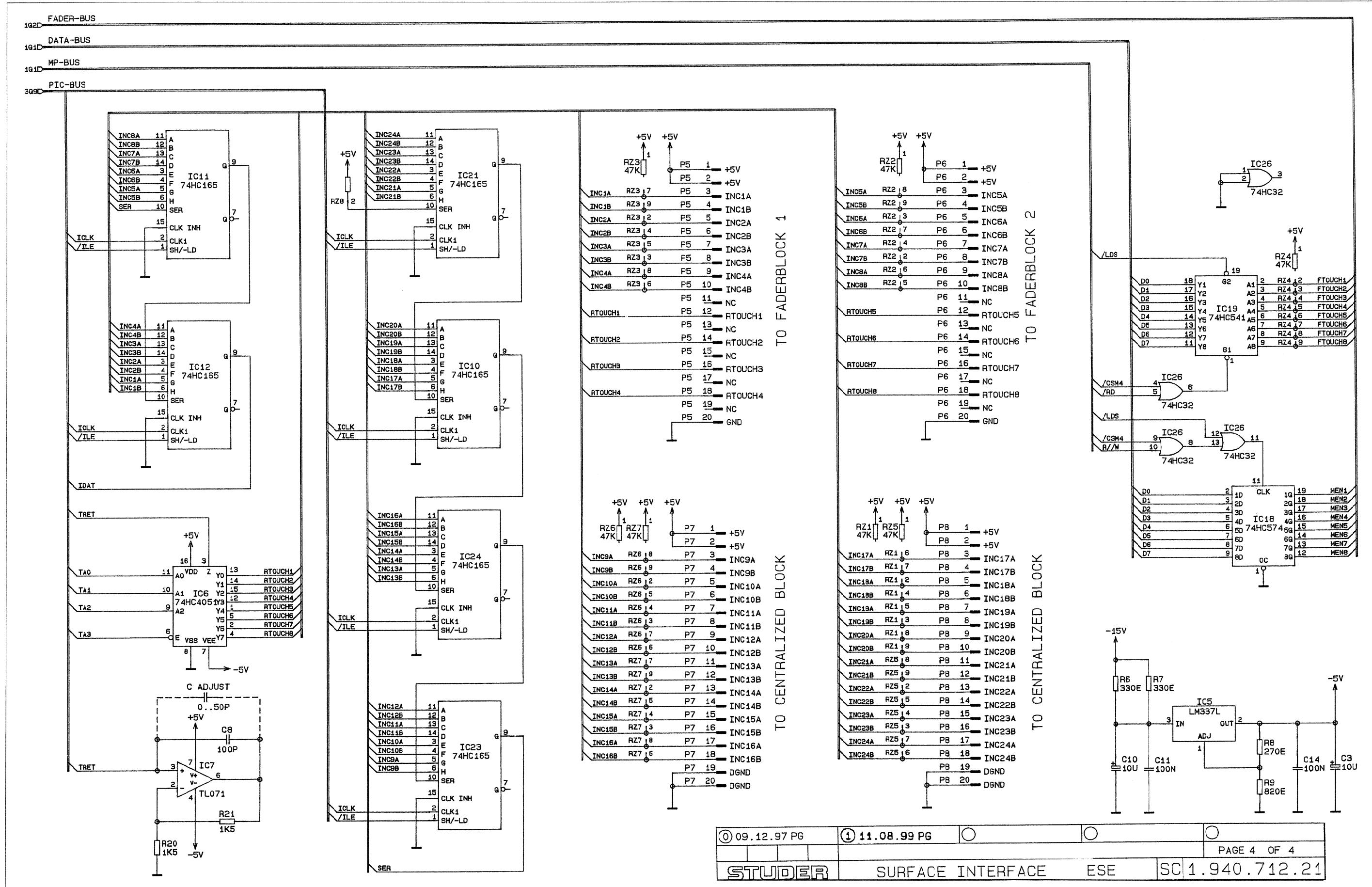


Surface Interface 1.940.712.21

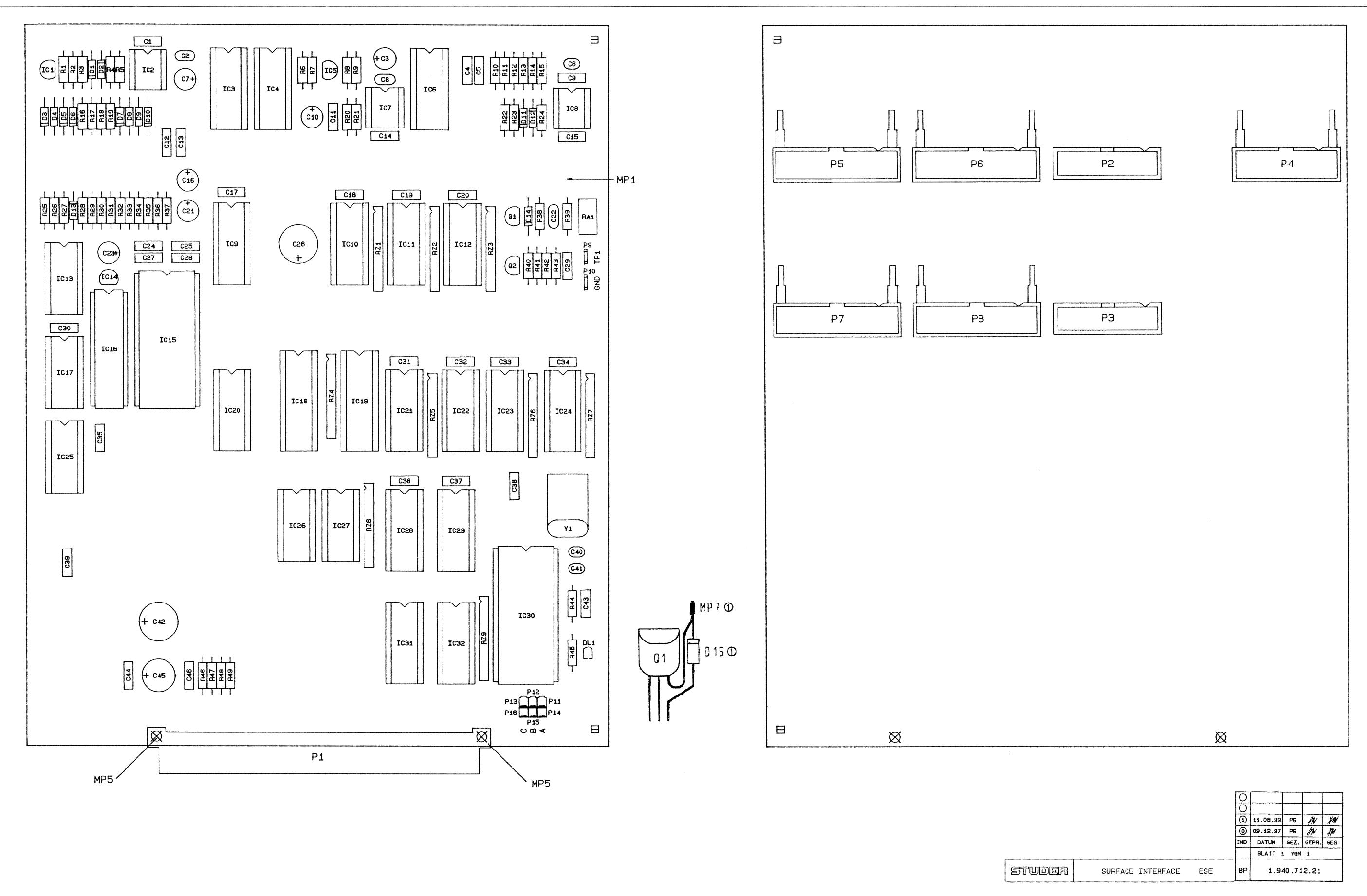


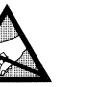


Surface Interface 1.940.712.21



Surface Interface 1.940.712.21



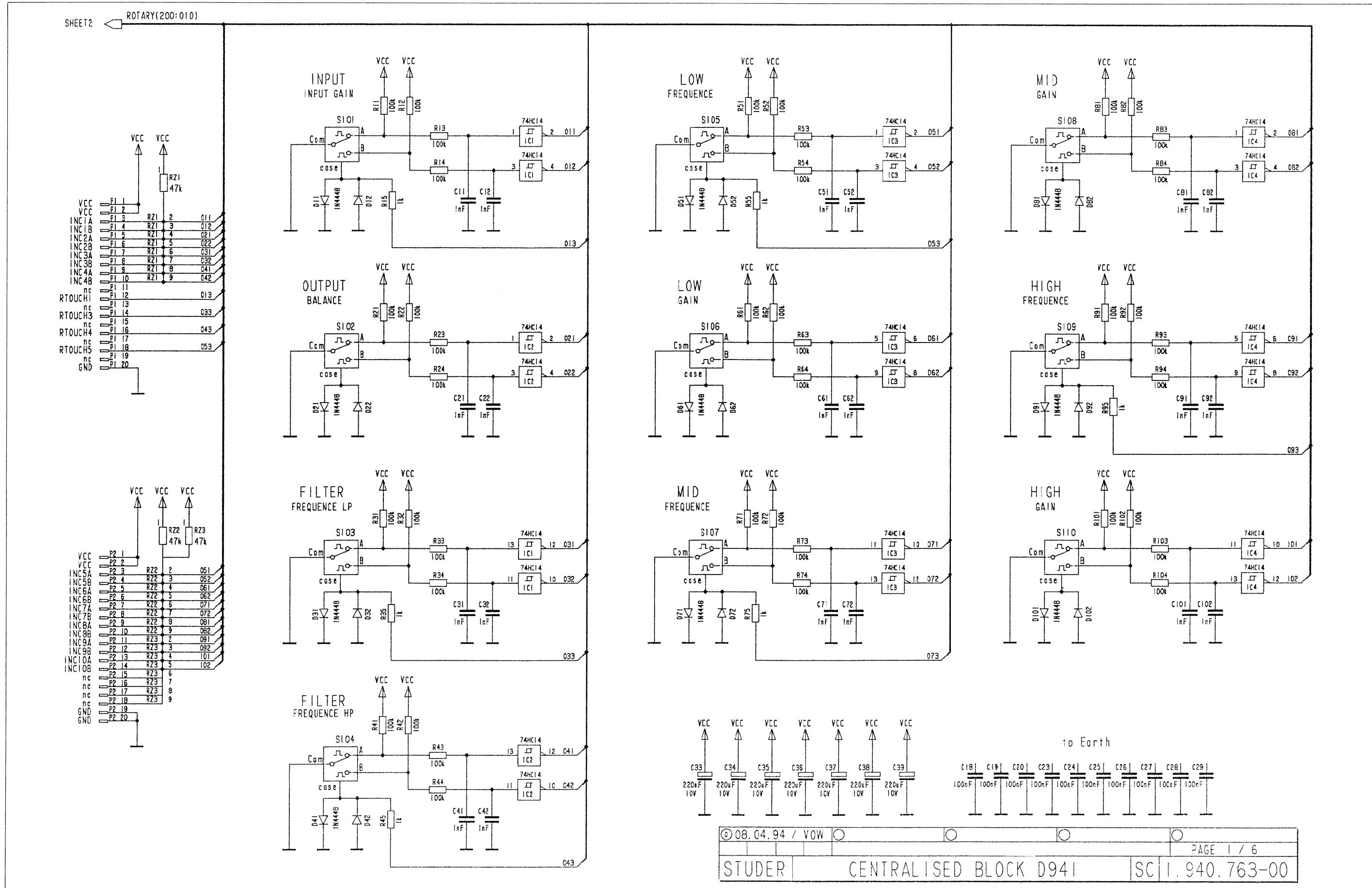
**Surface Interface 1.940.712.21**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 23	50.17.1165	74HC165	IC ... 74 HC 165 .. ,A		0	R 42	57.11.3104	100k	MF, 1%, 0207	
0	C 2	59.34.4101	100p	CER 63V, 5%, N750		0	IC 24	50.17.1165	74HC165	IC ... 74 HC 165 .. ,A		0	R 43	57.11.3203	20k	MF, 1%, 0207	
0	C 3	59.22.6100	10u	EL 35V, 20%, RM5		0	IC 25	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	C 4	59.34.4271	270p	CER 63V, 5%, N750		0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A		0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 27	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A		0	R 46	57.11.3103	10k	MF, 1%, 0207	
0	C 6	59.34.1100	10p	CER 63V, 5%, NP 0		0	IC 28	50.17.1595	74HC595	IC ... 74 HC 555 .. ,A		0	R 47	57.11.3103	10k	MF, 1%, 0207	
0	C 7	59.22.8109	1u	EL 53V, 20%, RM5		0	IC 29	50.17.1595	74HC595	IC ... 74 HC 555 .. ,A		0	R 48	57.11.3103	10k	MF, 1%, 0207	
0	C 8	59.34.4101	100p	CER 63V, 5%, N750	+ cap. 0.50pf parallel to C8 for adjustment	0	IC 30	50.16.0301	IC PIC 16 C 57-HS/P	IC ... 74 HC 555 .. ,A		0	R 49	57.11.3103	10k	MF, 1%, 0207	
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 31	50.17.1595	74HC595	IC ... 74 HC 555 .. ,A		0	RA 1	58.01.9203	20k	Cermet, 10%, 0.5W, vertical	
0	C 10	59.22.6100	10u	EL 35V, 20%, RM5		0	IC 32	50.17.1595	74HC595	IC ... 74 HC 555 .. ,A		0	RZ 1	57.88.4473	8*47K	2%, SIP 9	
0	C 11	59.06.0104	100n	PETP, 63V, 10%, RM5		0	JS 1	54.01.0021	Jumper	0.63 * 0.63mm		0	RZ 2	57.88.4473	8*47K	2%, SIP 9	
0	C 12	59.06.0104	100n	PETP, 63V, 10%, RM5		0	MP 1	1.940.712.11	1 pce	SURFACE INTERFACE PCB /A		0	RZ 3	57.88.4473	8*47K	2%, SIP 9	
0	C 13	59.06.0104	100n	PETP, 63V, 10%, RM5		0	MP 2	1.940.712.04	1 pce	NR-ET-KETTE 5 * 20		0	RZ 4	57.88.4473	8*47K	2%, SIP 9	
0	C 14	59.06.0104	100n	PETP, 63V, 10%, RM5		0	MP 3	43.01.0108	1 pce	Label ESE-WARNSCHILD		0	RZ 5	57.88.4473	8*47K	2%, SIP 9	
0	C 15	59.06.0104	100n	PETP, 63V, 10%, RM5		0	MP 4	1.101.001.20	1 pce	TEXT-ETIK 5*20 HARDWARE -20		0	RZ 6	57.88.4473	8*47K	2%, SIP 9	
0	C 16	59.22.8109	1u	EL 50V, 20%, RM5		0	MP 5	28.99.0119	2 pce	ROHRNIETE D 2.5*0.15* 9		0	RZ 7	57.88.4473	8*47K	2%, SIP 9	
0	C 17	59.06.0104	100n	PETP, 63V, 10%, RM5		0	MP 6	65.99.0167	10 mm	Tape POLYURH. KLEBBAND WS, 9* 3		0	RZ 8	57.88.4103	8*10K	2%, SIP 9	
0	C 18	59.06.0104	100n	PETP, 63V, 10%, RM5		1	MP 7	29.99.0134	1.8*5	Lötspirale Cu Sn		0	RZ 9	57.88.4103	8*10K	2%, SIP 9	
0	C 19	59.06.0104	100n	PETP, 63V, 10%, RM5		1	MP 8	43.1C.0110	A	Revisions-Etikette 5mm h'blau							
0	C 20	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 1	54.11.2004	64-P	P EU-B 2 * 32		0	XIC 15	53.03.0173	28p	DIL 0.6", löt, gerade	
0	C 21	59.22.6100	10u	EL 35V, 20%, RM5		0	P 2	54.16.0534	34p	P 1/4C", 34 P, AU, PRINT		0	XIC 30	53.03.0173	28p	DIL 0.6", löt, gerade	
0	C 22	59.34.2101	100p	CER 63V, 5%, N150		0	P 3	54.16.0534	34p	P 1/4C", 34 P, AU, PRINT		0	Y 1	89.01.1009	16.000 MHz	16.000 000 MHz, HC 49/U	
0	C 23	59.22.6100	10u	EL 35V, 20%, RM5		0	P 4	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	C 24	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 5	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0	C 25	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 6	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0	C 26	59.22.4221	220u	EL 16V, 20%, RM5		0	P 7	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 8	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0	C 28	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 9	54.02.0320	1p	Flatpin, 2.8*0.8mm							
0	C 29	59.06.0222	2n2	PETP, 63V, 10%, RM5		0	P 10	54.02.0320	1p	Flatpin, 2.8*0.6mm							
0	C 30	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 11	54.11.0136	2*3p	Pin 0.63*0.63, RM2.54							
0	C 31	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 12	not used	1p	Pin 0.63*0.63							
0	C 32	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 13	not used	1p	Pin 0.63*0.63	see P11						
0	C 33	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 14	not used	1p	Pin 0.63*0.63	see P11						
0	C 34	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 15	not used	1p	Pin 0.63*0.63	see P11						
0	C 35	59.06.0104	100n	PETP, 63V, 10%, RM5		0	P 16	not used	1p	Pin 0.63*0.63	see P11						
0	C 36	59.06.0104	100n	PETP, 63V, 10%, RM5		0	Q 1	50.03.0407	BC550C	BC 550 C							
0	C 37	59.06.0104	100n	PETP, 63V, 10%, RM5		0	Q 2	50.03.0407	BC550C	BC 550 C							
0	C 43	59.06.0104	100n	PETP, 63V, 10%, RM5		0	R 1	57.11.3103	10k	MF, 1%, 0207							
0	C 44	59.06.0104	100n	PETP, 63V, 10%, RM5		0	R 2	57.11.3102	1k0	MF, 1%, 0207							
0	C 45	59.22.8470	47u	EL 63V, 20%, RM5		0	R 3	57.11.3101	100R	MF, 1%, 0207							
0	C 46	59.06.0104	100n	PETP, 63V, 10%, RM5		0	R 4	57.11.3103	10k	MF, 1%, 0207							
0	D 1	50.04.0127	BAT85	200mA, Schottky		0	R 5	57.11.3113	11k	MF, 1%, 0207							
0	D 2	50.04.0127	BAT85	200mA, Schottky		0	R 6	57.11.3331	330R	MF, 1%, 0207							
0	D 3	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 7	57.11.3331	330R	MF, 1%, 0207							
0	D 4	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 8	57.11.32									



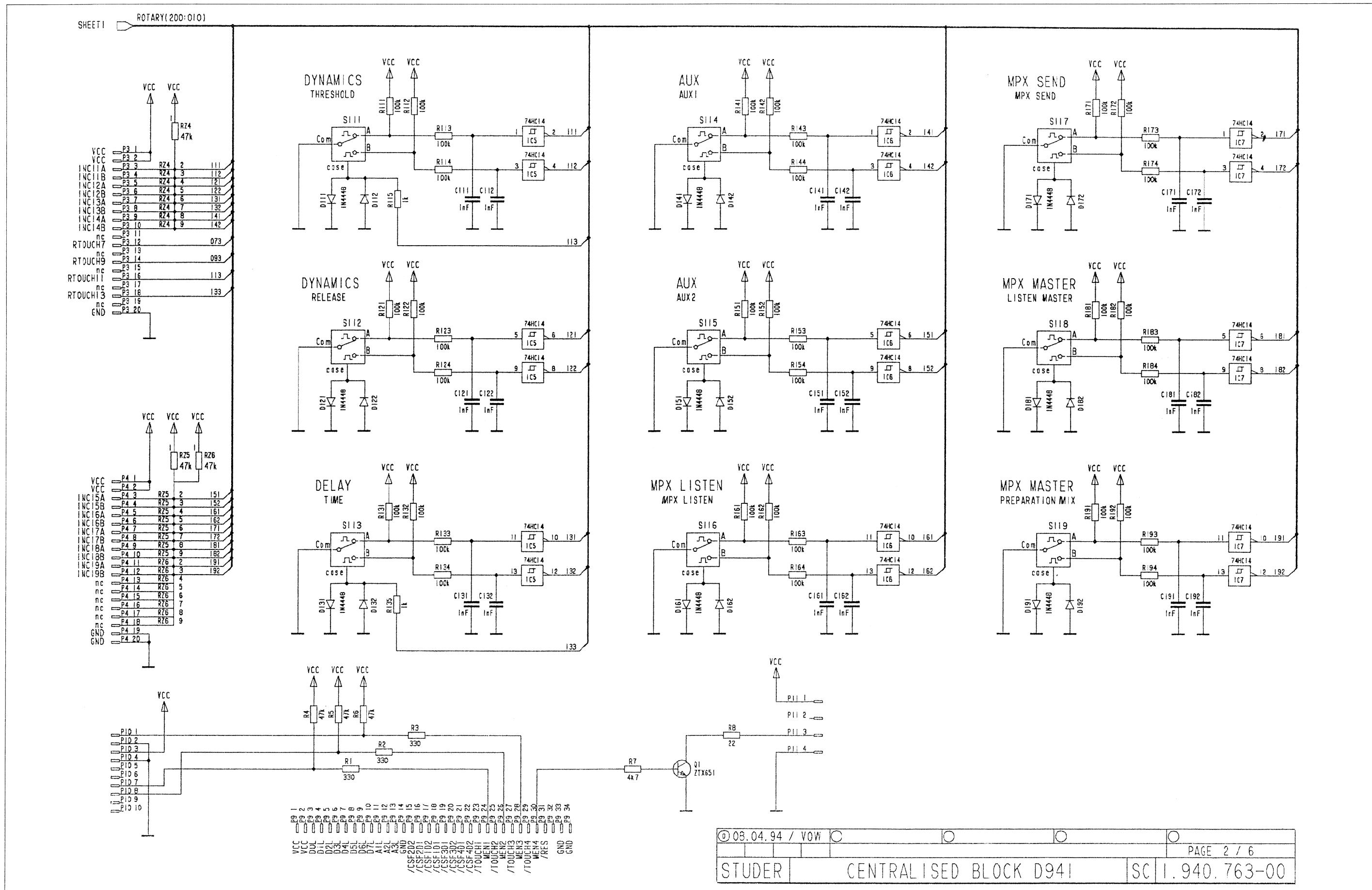
Centralized Front Board 1.940.763.00

SHEET2 ROTARY(200:010)



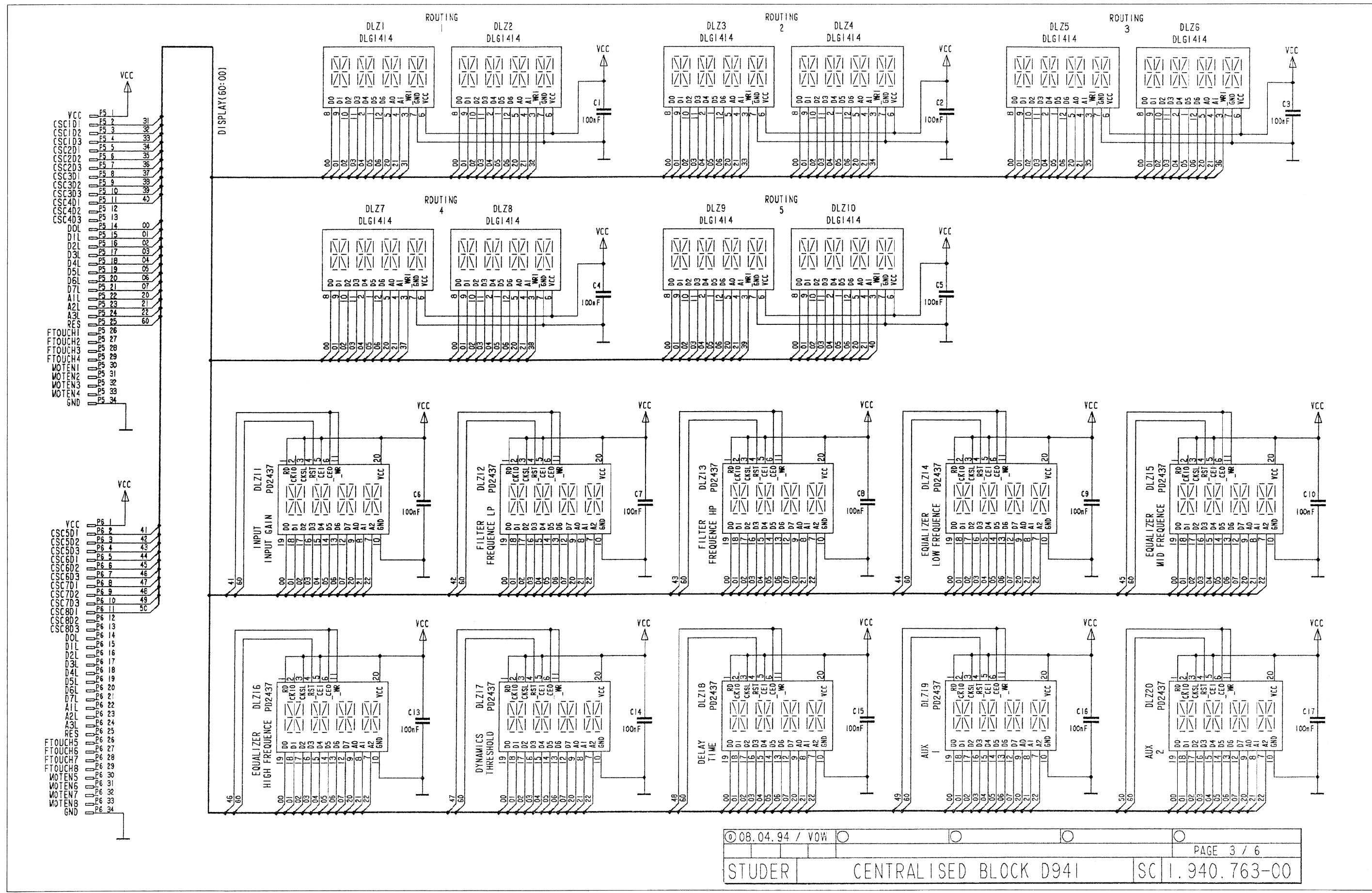


Centralized Front Board 1.940.763.00



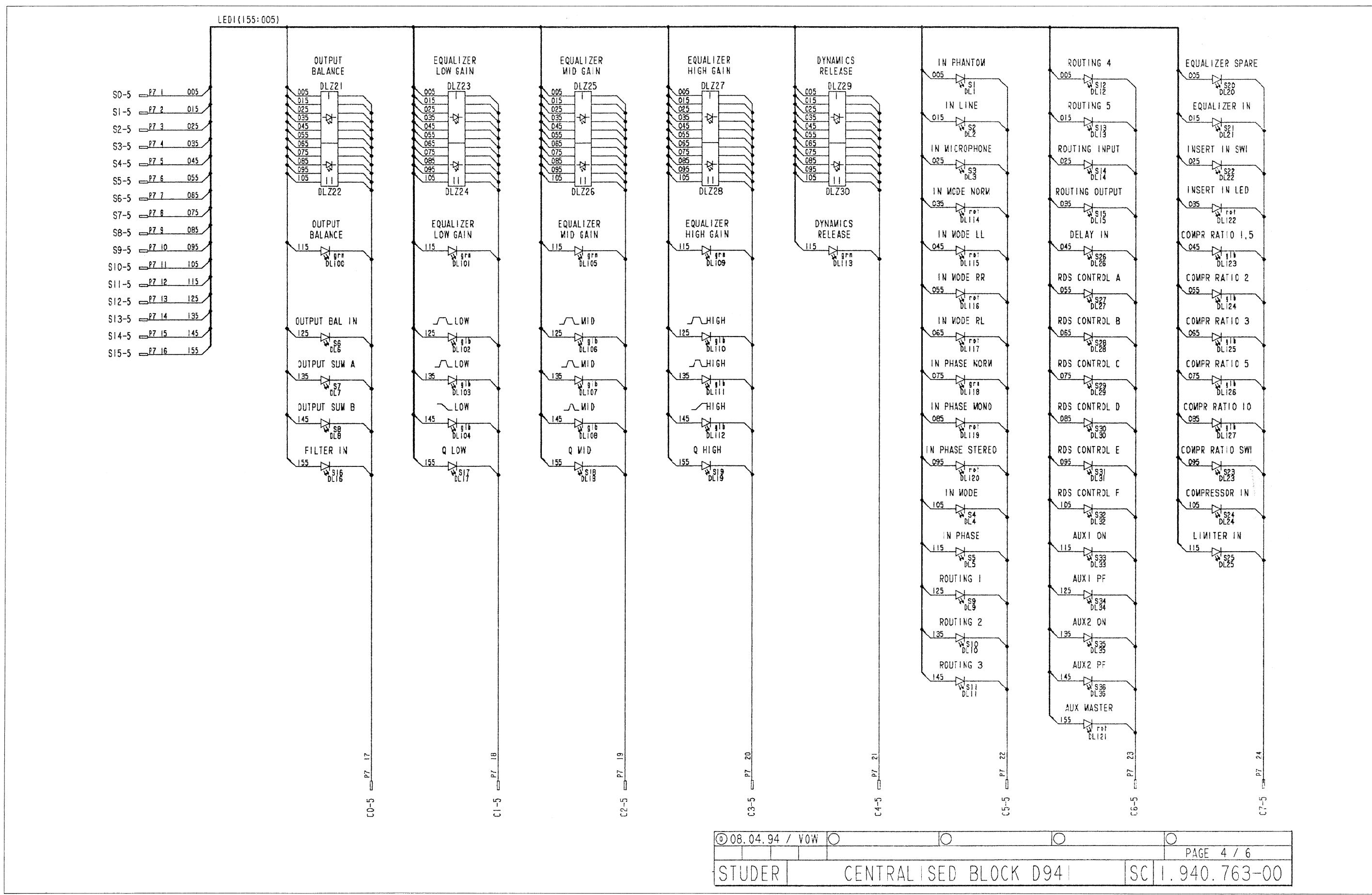


Centralized Front Board 1.940.763.00



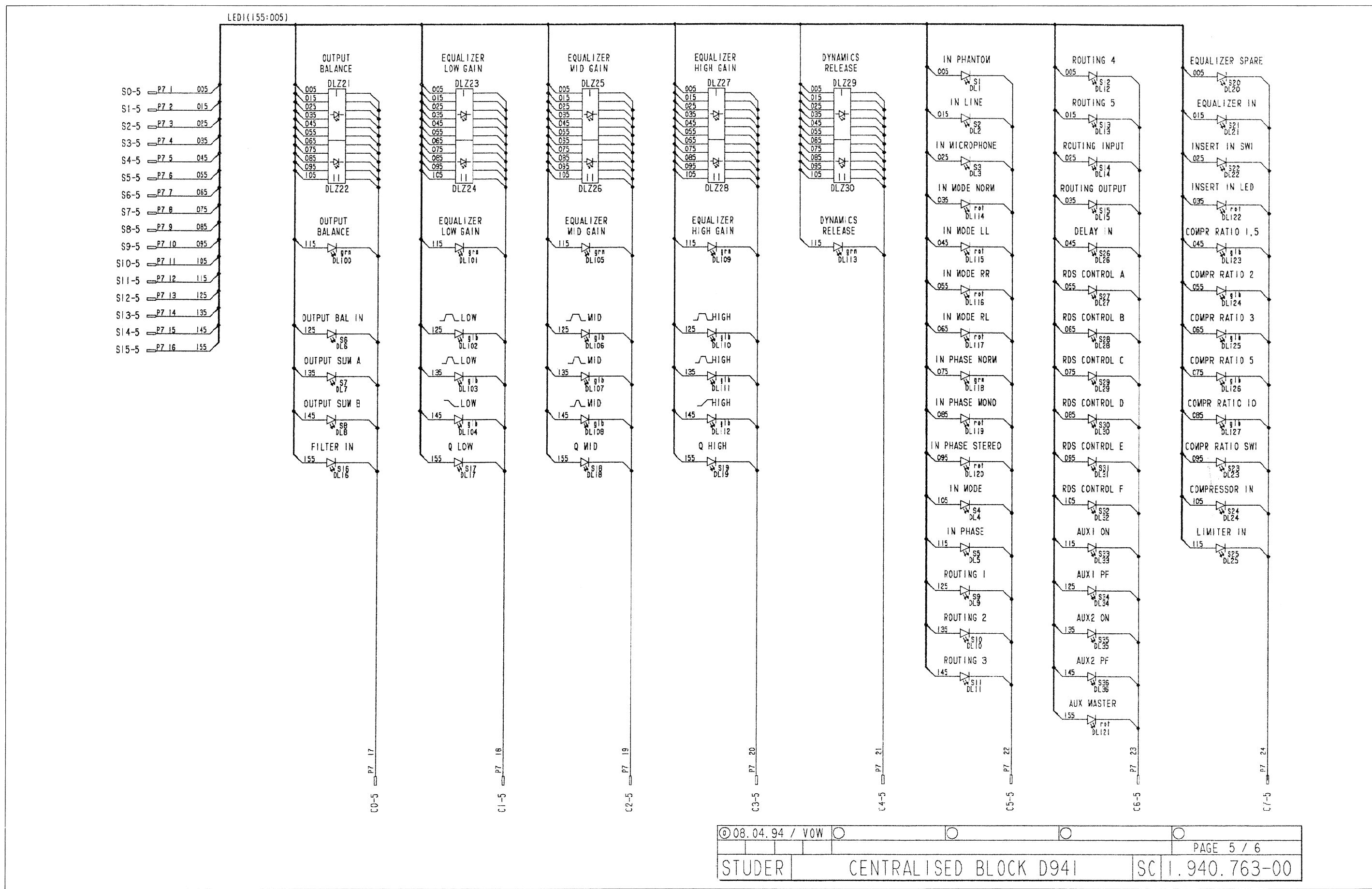


Centralized Front Board 1.940.763.00



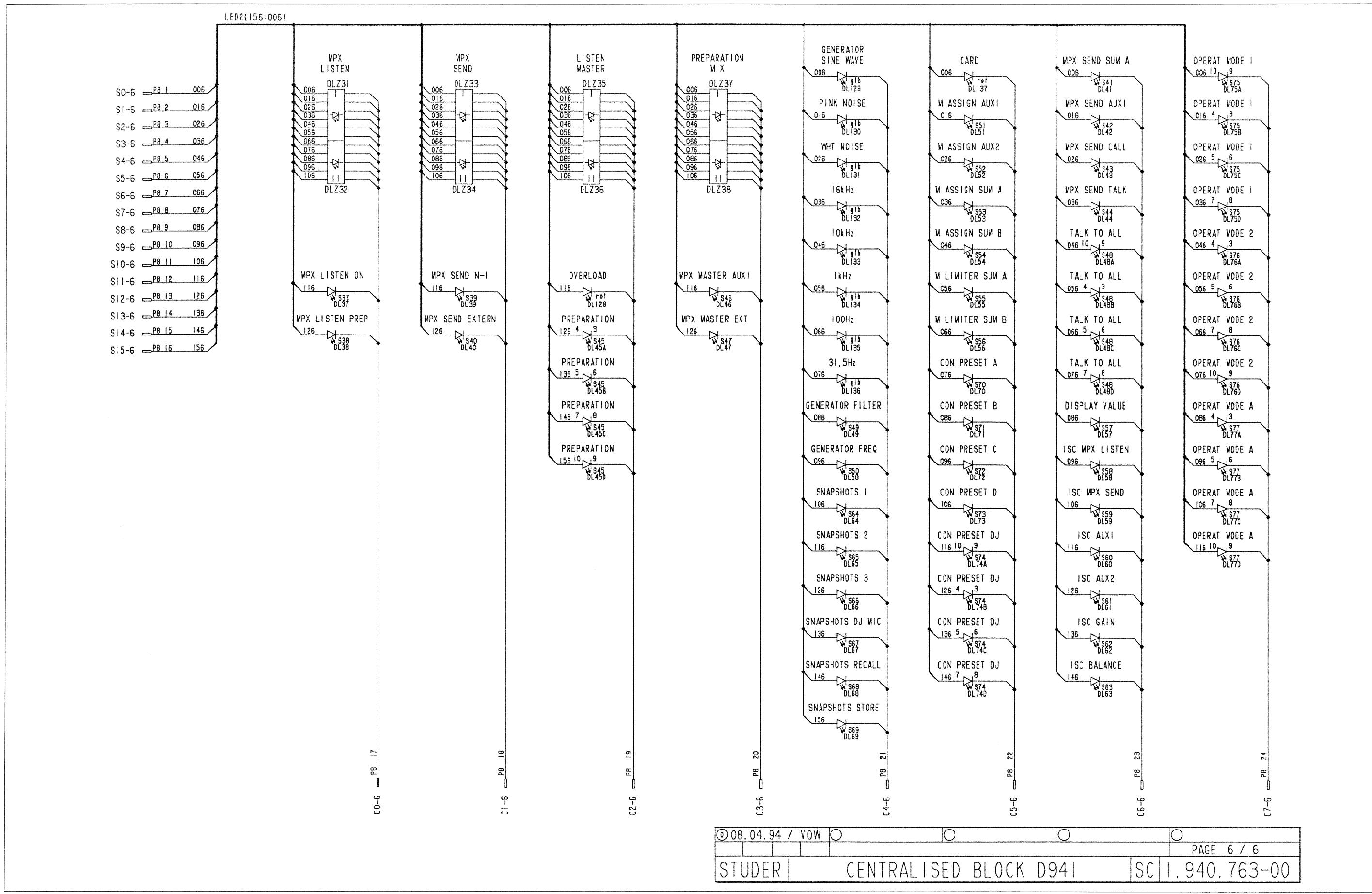


Centralized Front Board 1.940.763.00

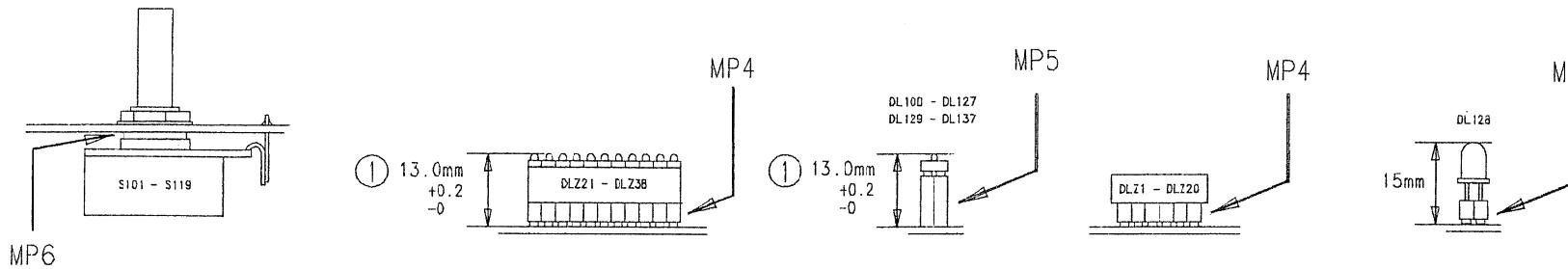




Centralized Front Board 1.940.763.00



Centralized Front Board 1.940.763.00





Centralized Front Board 1.940.763.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 91	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 266	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	DLZ 37	50.04.2812			DLZ 11*D GB	
0	C 2	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 92	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 267	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	DLZ 38	not used	not used	not used	not used	
0	C 3	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 101	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 268	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 1	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 4	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 102	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 269	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 2	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 111	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 270	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 3	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 6	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 112	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 271	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 4	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 7	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 121	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 272	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 5	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 122	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 273	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 6	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 131	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 274	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 7	50.17.1014	74HC14	IC .. 74 HC 14.. , A		
0	C 10	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 132	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 275	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	C 11	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 141	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 276	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	C 12	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 142	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 277	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	C 13	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 151	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 14	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 152	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 15	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 161	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 16	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 162	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 17	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 171	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 18	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 172	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 19	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 181	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 20	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 182	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 21	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 191	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 22	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 192	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 23	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 201	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 24	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 202	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 25	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 203	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 26	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 204	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 205	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 28	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 206	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 29	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 207	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 31	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 208	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 32	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 209	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 33	59.25.2221	220u	C-EL, 20%, 10V		0	D 210	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 34	59.25.2221	220u	C-EL, 20%, 10V		0	D 211	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 35	59.25.2221	220u	C-EL, 20%, 10V		0	D 212	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 36	59.25.2221	220u	C-EL, 20%, 10V		0	D 213	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	C 37	59.25.2221	220u	C-EL, 20%, 10V		0	D 214	50.04.0125	1N4448	75V, 150mA, 4ns,													



Centralized Front Board 1.940.763.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 112	57.11.3104	100k	MF, 1%, 0207		0	S 43	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT	
0	R 113	57.11.3104	100k	MF, 1%, 0207		0	S 44	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN	
0	R 114	57.11.3104	100k	MF, 1%, 0207		0	S 45	55.15.0744	1*a	S TASTE 1*A, 12MM, GB/GB	
0	R 115	57.11.3102	1k0	MF, 1%, 0207		0	S 46	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 121	57.11.3104	100k	MF, 1%, 0207		0	S 47	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 122	57.11.3104	100k	MF, 1%, 0207		0	S 48	55.15.0755	1*a	S TASTE 1*A, 12MM, GN/GN	
0	R 123	57.11.3104	100k	MF, 1%, 0207		0	S 49	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 124	57.11.3104	100k	MF, 1%, 0207		0	S 50	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 131	57.11.3104	100k	MF, 1%, 0207		0	S 51	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 132	57.11.3104	100k	MF, 1%, 0207		0	S 52	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 133	57.11.3104	100k	MF, 1%, 0207		0	S 53	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 134	57.11.3104	100k	MF, 1%, 0207		0	S 54	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 135	57.11.3102	1k0	MF, 1%, 0207		0	S 55	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT	
0	R 141	57.11.3104	100k	MF, 1%, 0207		0	S 56	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT	
0	R 142	57.11.3104	100k	MF, 1%, 0207		0	S 57	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT	
0	R 143	57.11.3104	100k	MF, 1%, 0207		0	S 58	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 144	57.11.3104	100k	MF, 1%, 0207		0	S 59	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 151	57.11.3104	100k	MF, 1%, 0207		0	S 60	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 152	57.11.3104	100k	MF, 1%, 0207		0	S 61	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 153	57.11.3104	100k	MF, 1%, 0207		0	S 62	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 154	57.11.3104	100k	MF, 1%, 0207		0	S 63	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 161	57.11.3104	100k	MF, 1%, 0207		0	S 64	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 162	57.11.3104	100k	MF, 1%, 0207		0	S 65	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 163	57.11.3104	100k	MF, 1%, 0207		0	S 66	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 164	57.11.3104	100k	MF, 1%, 0207		0	S 67	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 171	57.11.3104	100k	MF, 1%, 0207		0	S 68	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN	
0	R 172	57.11.3104	100k	MF, 1%, 0207		0	S 69	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT	
0	R 173	57.11.3104	100k	MF, 1%, 0207		0	S 70	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 174	57.11.3104	100k	MF, 1%, 0207		0	S 71	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 181	57.11.3104	100k	MF, 1%, 0207		0	S 72	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 182	57.11.3104	100k	MF, 1%, 0207		0	S 73	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB	
0	R 183	57.11.3104	100k	MF, 1%, 0207		0	S 74	55.15.0744	1*a	S TASTE 1*A, 12MM, GB/GB	
0	R 184	57.11.3104	100k	MF, 1%, 0207		1	S 75	55.15.0722	1*a	S TASTE 1*A, 12MM, RT/RT	
0	R 191	57.11.3104	100k	MF, 1%, 0207		1	S 76	55.15.0722	1*a	S TASTE 1*A, 12MM, RT/RT	
0	R 192	57.11.3104	100k	MF, 1%, 0207		0	S 77	55.15.0722	1*a	S TASTE 1*A, 12MM, RT/RT	
0	R 193	57.11.3104	100k	MF, 1%, 0207		0	S 101	1.940.751.02		ROTARY ENCODER	
0	R 194	57.11.3104	100k	MF, 1%, 0207		0	S 102	1.940.751.02		ROTARY ENCODER	
0	S 103	1.940.751.02				0	S 103	1.940.751.02		ROTARY ENCODER	
0	RZ 1	57.88.4473	8*47k	2%, SIP 9		0	S 104	1.940.751.02		ROTARY ENCODER	
0	RZ 2	57.88.4473	8*47k	2%, SIP 9		0	S 105	1.940.751.02		ROTARY ENCODER	
0	RZ 3	57.88.4473	8*47k	2%, SIP 9		0	S 106	1.940.751.02		ROTARY ENCODER	
0	RZ 4	57.88.4473	8*47k	2%, SIP 9		0	S 107	1.940.751.02		ROTARY ENCODER	
0	RZ 5	57.88.4473	8*47k	2%, SIP 9		0	S 108	1.940.751.02		ROTARY ENCODER	
0	RZ 6	57.88.4473	8*47k	2%, SIP 9		0	S 109	1.940.751.02		ROTARY ENCODER	
0	S 1	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN		0	S 110	1.940.751.02		ROTARY ENCODER	
0	S 2	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB		0	S 111	1.940.751.02		ROTARY ENCODER	
0	S 3	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB		0	S 112	1.940.751.02		ROTARY ENCODER	
0	S 4	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT		0	S 113	1.940.751.02		ROTARY ENCODER	
0	S 5	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT		0	S 114	1.940.751.02		ROTARY ENCODER	
0	S 6	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT		0	S 115	1.940.751.02		ROTARY ENCODER	
0	S 7	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN		0	S 116	1.940.751.02		ROTARY ENCODER	
0	S 8	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN		0	S 117	1.940.751.02		ROTARY ENCODER	
0	S 9	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB		0	S 118	1.940.751.02		ROTARY ENCODER	
0	S 10	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB		0	S 119	1.940.751.02		ROTARY ENCODER	
0	S 11	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 12	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 13	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 14	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 15	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 16	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 17	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 18	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 19	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
3	S 20	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 21	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 22	not used	not used	not used							
0	S 23	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 24	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 25	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 26	55.15.0622	1*a	S TASTE 1*A, 5MM, RT/RT							
0	S 27	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 28	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 29	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 30	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 31	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 32	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 33	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN							
0	S 34	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 35	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN							
0	S 36	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 37	55.15.0655	1*a	S TASTE 1*A, 5MM, GN/GN							
0	S 38	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 39	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 40	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 41	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							
0	S 42	55.15.0644	1*a	S TASTE 1*A, 5MM, GB/GB							

End of List

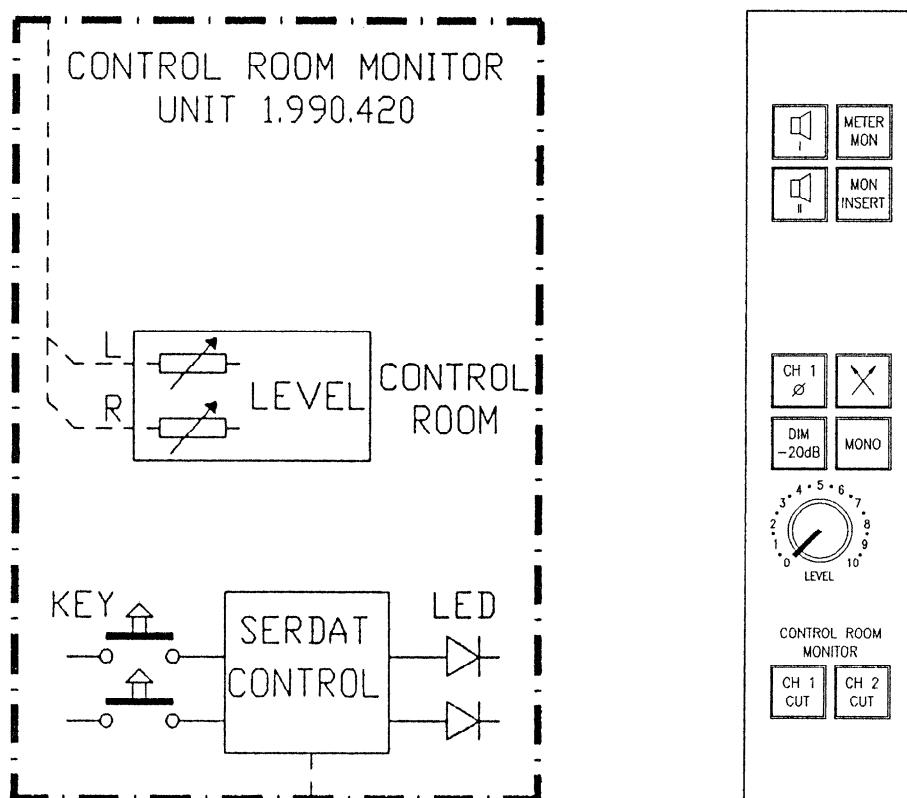
Comments:

(01) S75 and S76 additional inserted

(02) P11 54.99.0185 changed to 54.12.0724

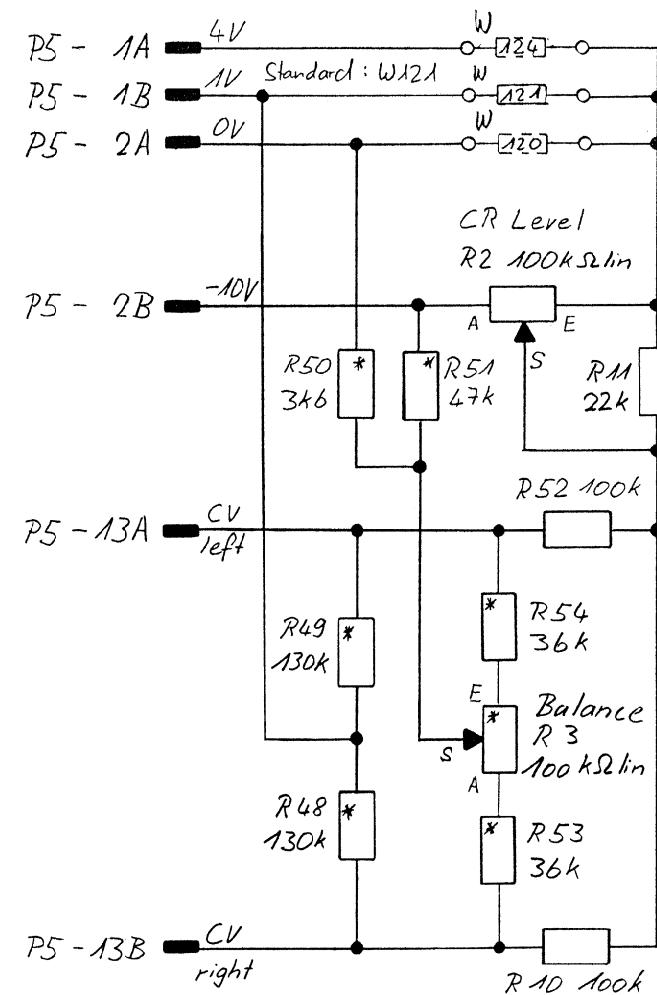
SCHEMATA / CIRCUIT DIAGRAMS**Monitor Units**

CR Monitor Control Unit	1.990.420.00
- CR Monitor Switch Board	1.990.429.00
Studio Monitor Control Unit	1.990.430.00
- Studio Monitor Switch Board	1.990.439.00
PFL/Talk Back Headphone Unit	1.990.440.00
- PFL/Talk Back Switch Board	1.990.449.00
Source Selector Unit	1.990.490.00
- Source Selector Switch Board	1.990.499.00

CR Monitor Control Unit 1.990.420.00

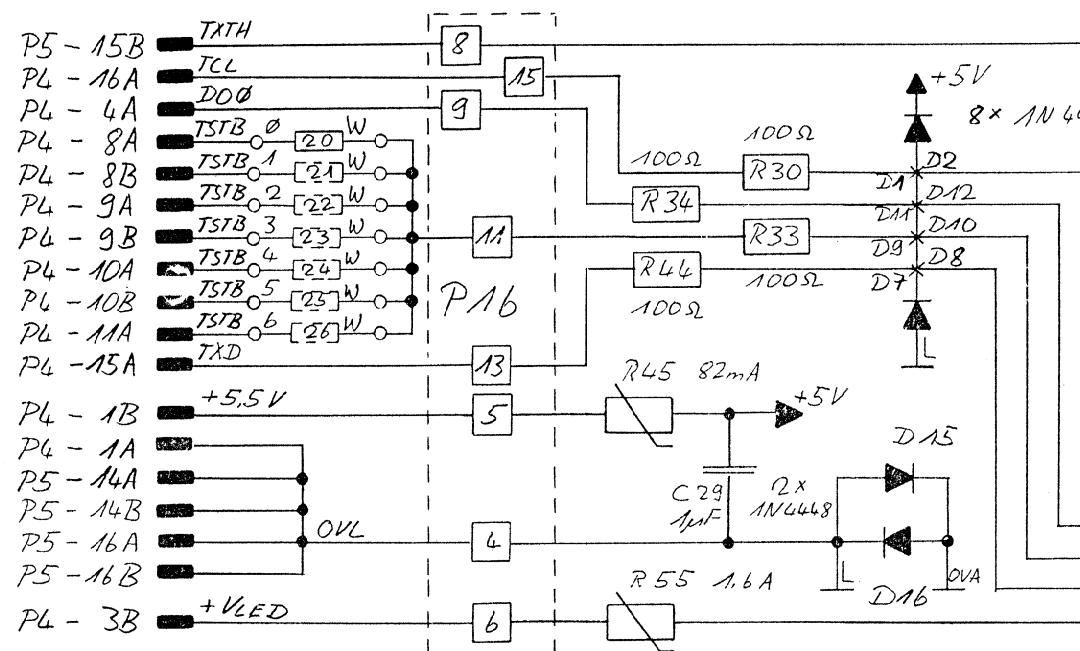
CR Monitor Control Unit 1.990.420.00

- CR Monitor Switch Board 1.990.429.00

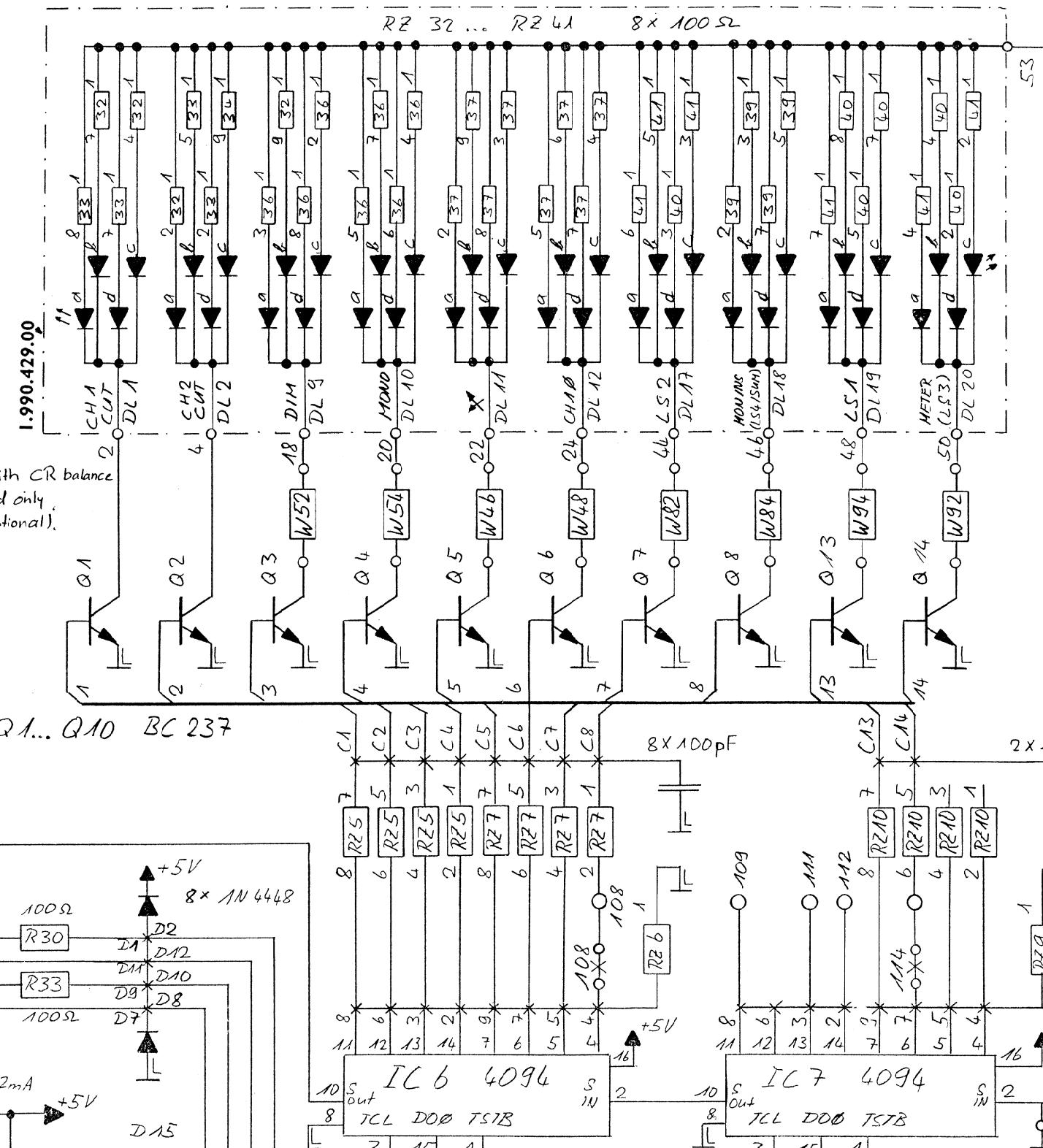


* with
used on
(optional)

Q1... Q10 BC 23



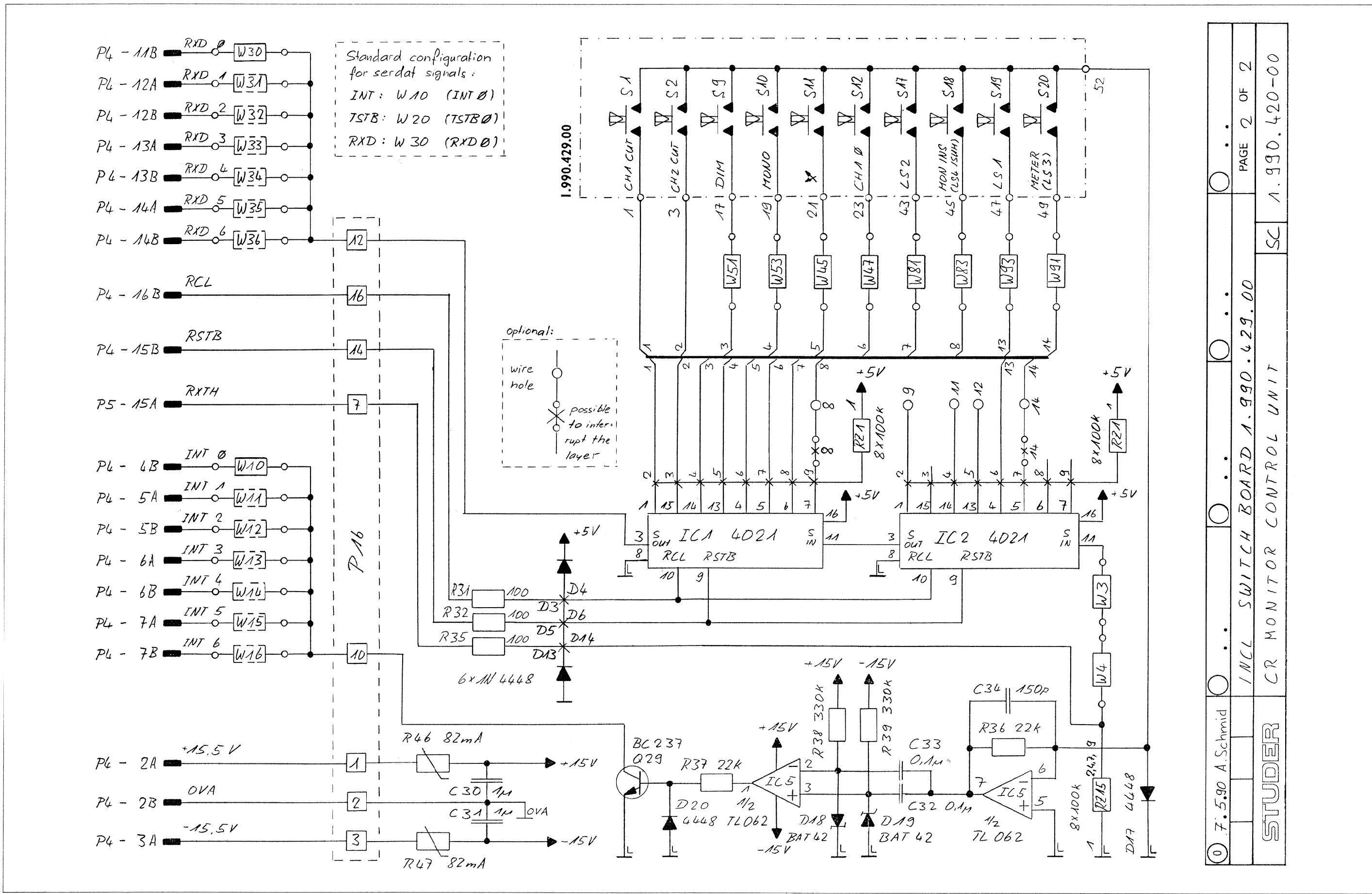
1.990.429.00



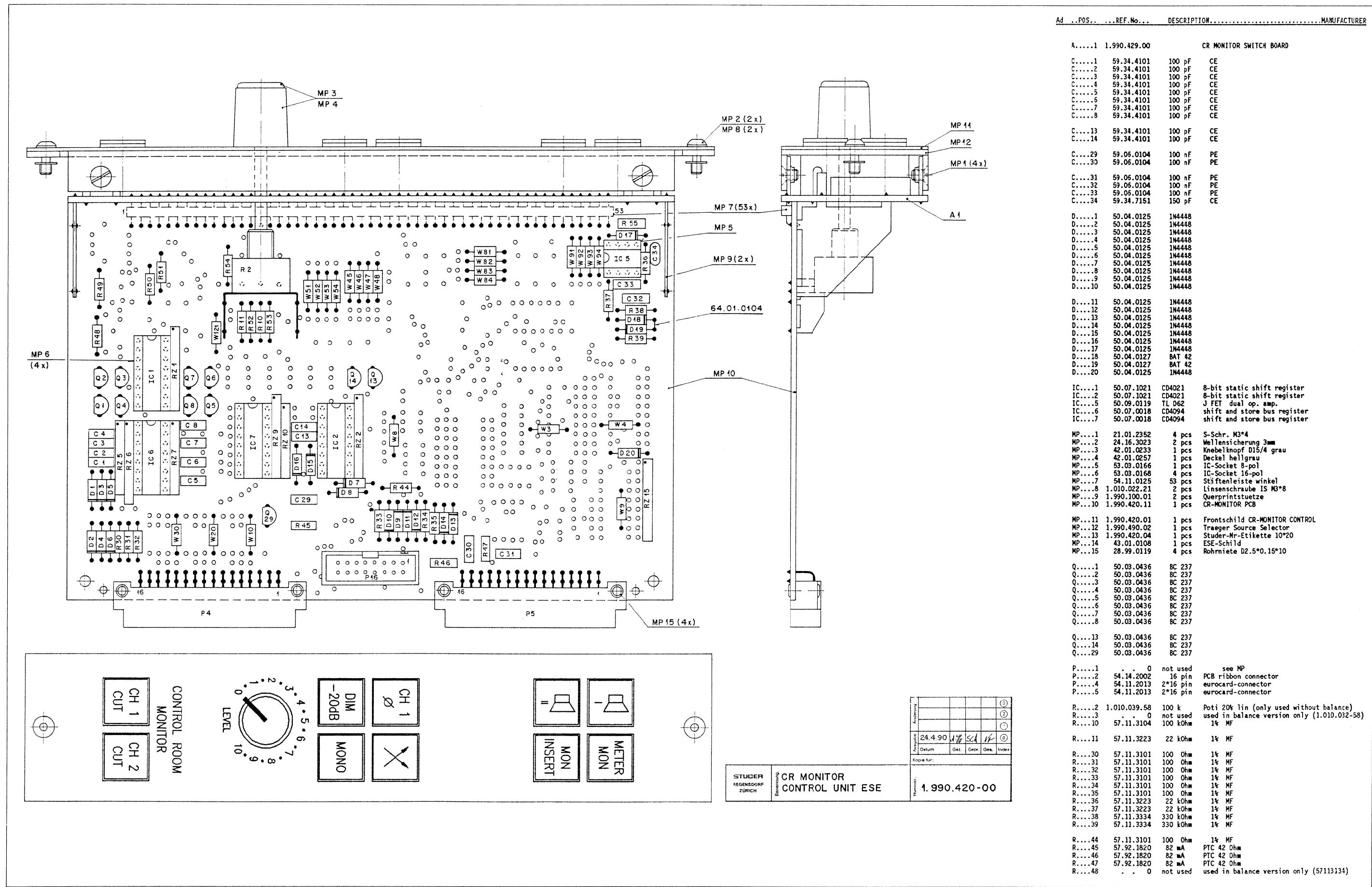
①	7.590 A.Schmid	○ . . . ○ . . . ○ . . . ○ . . .	○ . . . ○ . . . ○ . . . ○ . . .	PAGE 1 OF 2
STUDIER	CR MONITOR CONTROL UNIT			SC 1.990 420-00
INCL. SWITCH BOARD 1.990.429.00				



CR Monitor Control Unit 1.990.420.00
- CR Monitor Switch Board 1.990.429.00



CR Monitor Control Unit 1.990.420.00





CR Monitor Control Unit 1.990.420.00

Ad ..POS.. ...REF.No... DESCRIPTION.....MANUFACTURER

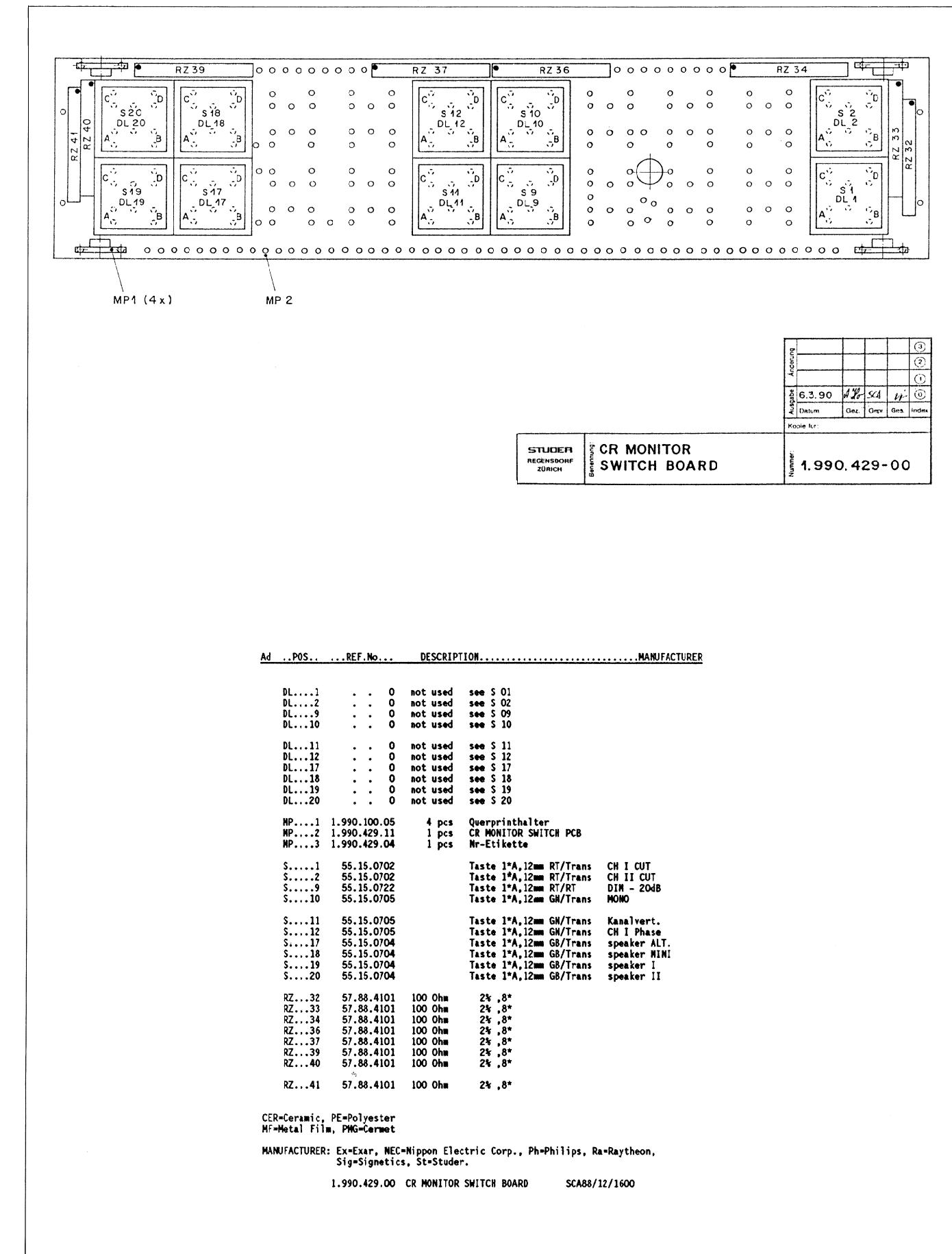
R....49 . . . 0 not used used in balance version only (57113134)
 R....50 . . . 0 not used used in balance version only (57113362)
 R....51 . . . 0 not used used in balance version only (57113473)
 R....52 57.11.3104 100 kOhm 1k MF
 R....53 . . . 0 not used used in balance version only (57113363)
 R....54 . . . 0 not used used in balance version only (57113363)
 R....55 57.92.7016 1.6 A R-PTC 0.22 Ohm
 W....3 57.11.3000 0 Ohm wire bridge RXTH to IC 2
 W....4 57.11.3000 0 Ohm wire bridge RXTH to V 3
 W....8 57.11.3000 0 Ohm wire bridge TXD to IC 7
 W....9 57.11.3000 0 Ohm wire bridge TXD to W 8
 W....10 57.11.3000 0 Ohm wire bridge SERDAT #0 (INT 0)
 W....11 . . . 0 not used wire bridge SERDAT #1 INT 1 57113000
 W....12 . . . 0 not used wire bridge SERDAT #2 INT 2 57113000
 W....13 . . . 0 not used wire bridge SERDAT #3 INT 3 57113000
 W....14 . . . 0 not used wire bridge SERDAT #4 INT 4 57113000
 W....15 . . . 0 not used wire bridge SERDAT #5 INT 5 57113000
 W....16 . . . 0 not used wire bridge SERDAT #6 INT 6 57113000
 W....20 57.11.3000 0 Ohm wire bridge SERDAT #0 (TSTB 0)
 W....21 . . . 0 not used wire bridge SERDAT #1 TSTB 1 57113000
 W....22 . . . 0 not used wire bridge SERDAT #2 TSTB 2 57113000
 W....23 . . . 0 not used wire bridge SERDAT #3 TSTB 3 57113000
 W....24 . . . 0 not used wire bridge SERDAT #4 TSTB 4 57113000
 W....25 . . . 0 not used wire bridge SERDAT #5 TSTB 5 57113000
 W....26 . . . 0 not used wire bridge SERDAT #6 TSTB 6 57113000
 W....30 57.11.3000 0 Ohm wire bridge SERDAT #0 (RXD 0)
 W....31 . . . 0 not used wire bridge SERDAT #1 RXD 1 57113000
 W....32 . . . 0 not used wire bridge SERDAT #2 RXD 2 57113000
 W....33 . . . 0 not used wire bridge SERDAT #3 RXD 3 57113000
 W....34 . . . 0 not used wire bridge SERDAT #4 RXD 4 57113000
 W....35 . . . 0 not used wire bridge SERDAT #5 RXD 5 57113000
 W....36 . . . 0 not used wire bridge SERDAT #6 RXD 6 57113000
 W....45 57.11.3000 0 Ohm wire bridge
 W....46 57.11.3000 0 Ohm wire bridge
 W....47 57.11.3000 0 Ohm wire bridge
 W....48 57.11.3000 0 Ohm wire bridge
 W....51 57.11.3000 0 Ohm wire bridge
 W....52 57.11.3000 0 Ohm wire bridge
 W....53 57.11.3000 0 Ohm wire bridge
 W....54 57.11.3000 0 Ohm wire bridge
 W....81 57.11.3000 0 Ohm wire bridge
 W....82 57.11.3000 0 Ohm wire bridge
 W....83 57.11.3000 0 Ohm wire bridge
 W....84 57.11.3000 0 Ohm wire bridge
 W....91 57.11.3000 0 Ohm wire bridge
 W....92 57.11.3000 0 Ohm wire bridge
 W....93 57.11.3000 0 Ohm wire bridge
 W....94 57.11.3000 0 Ohm wire bridge
 W....120 . . . 0 not used used only for CR LEVEL -100dB...+4dB
 W....121 57.11.3000 0 Ohm wire bridge CR LEVEL -100dB...+10dB
 W....124 . . . 0 not used only used for CR LEVEL -100dB...+40dB

CE=Ceramic, PE=Polyester

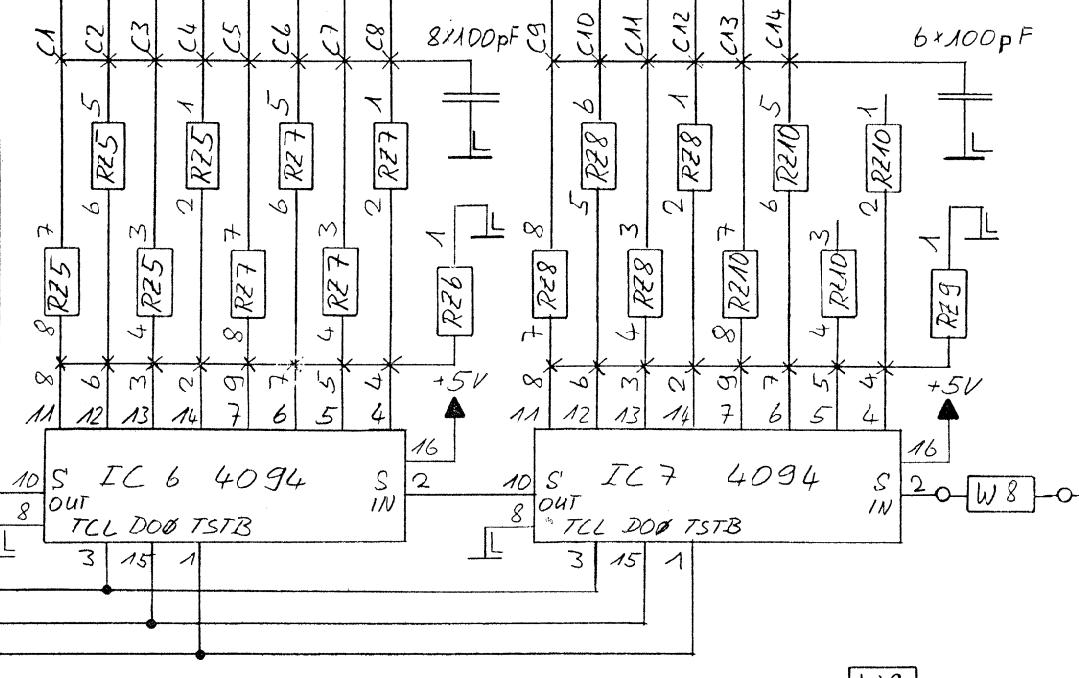
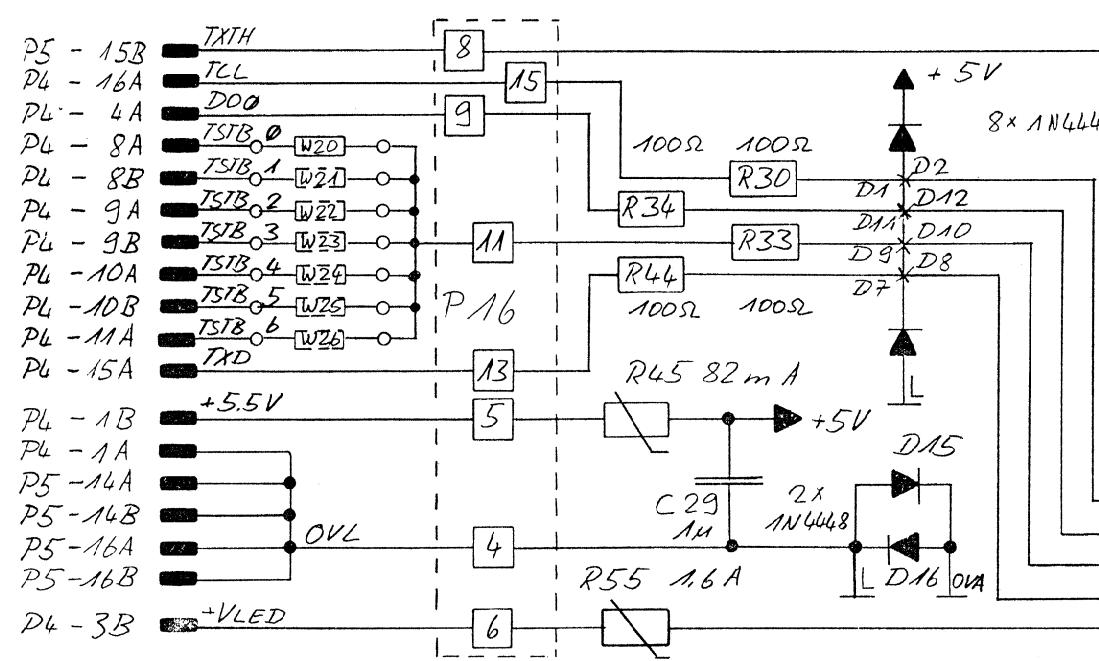
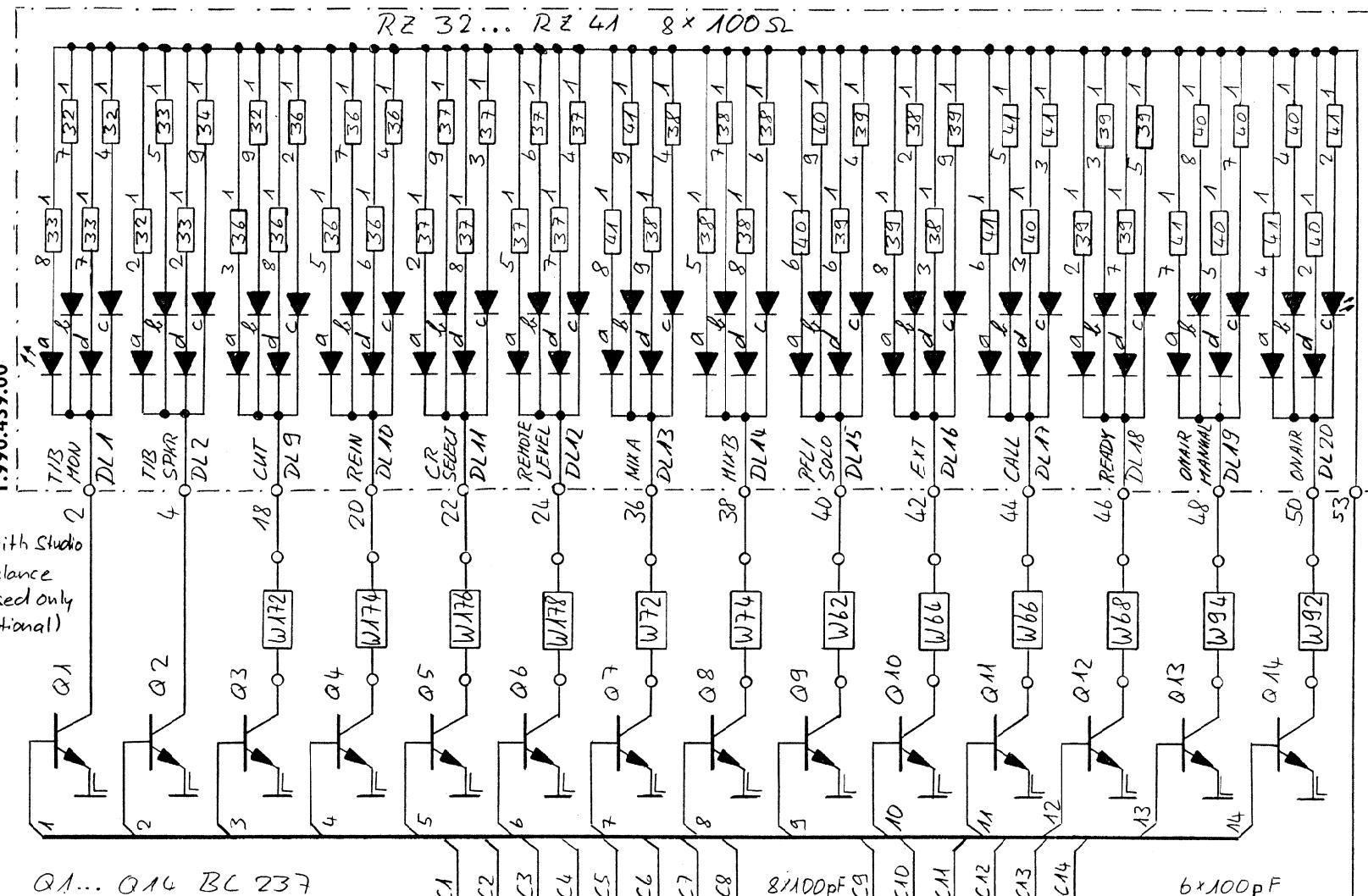
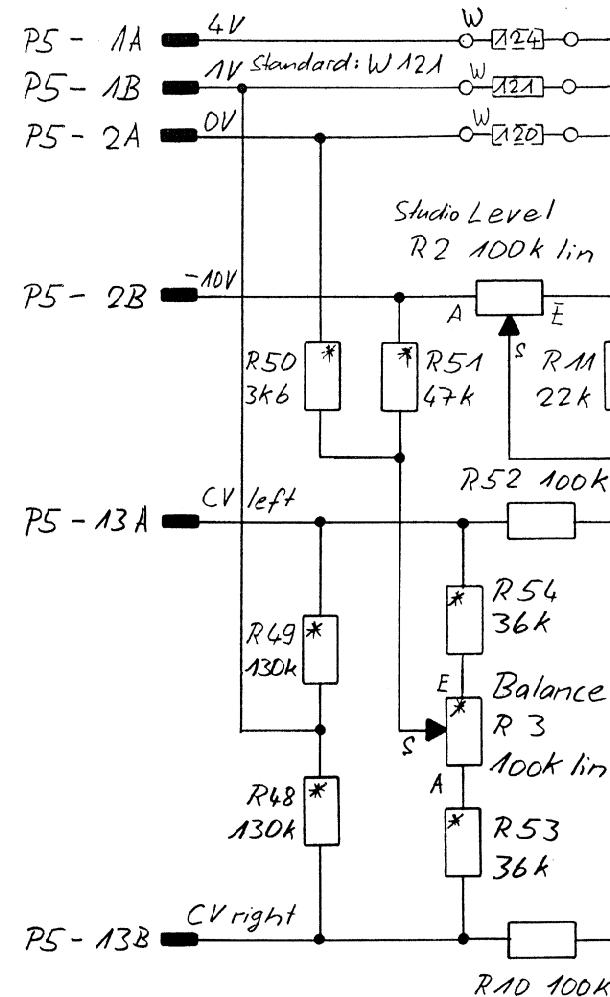
MF=Metal Film

1.990.420.00 CR MONITOR CONTROL UNIT SCA90/12/0500

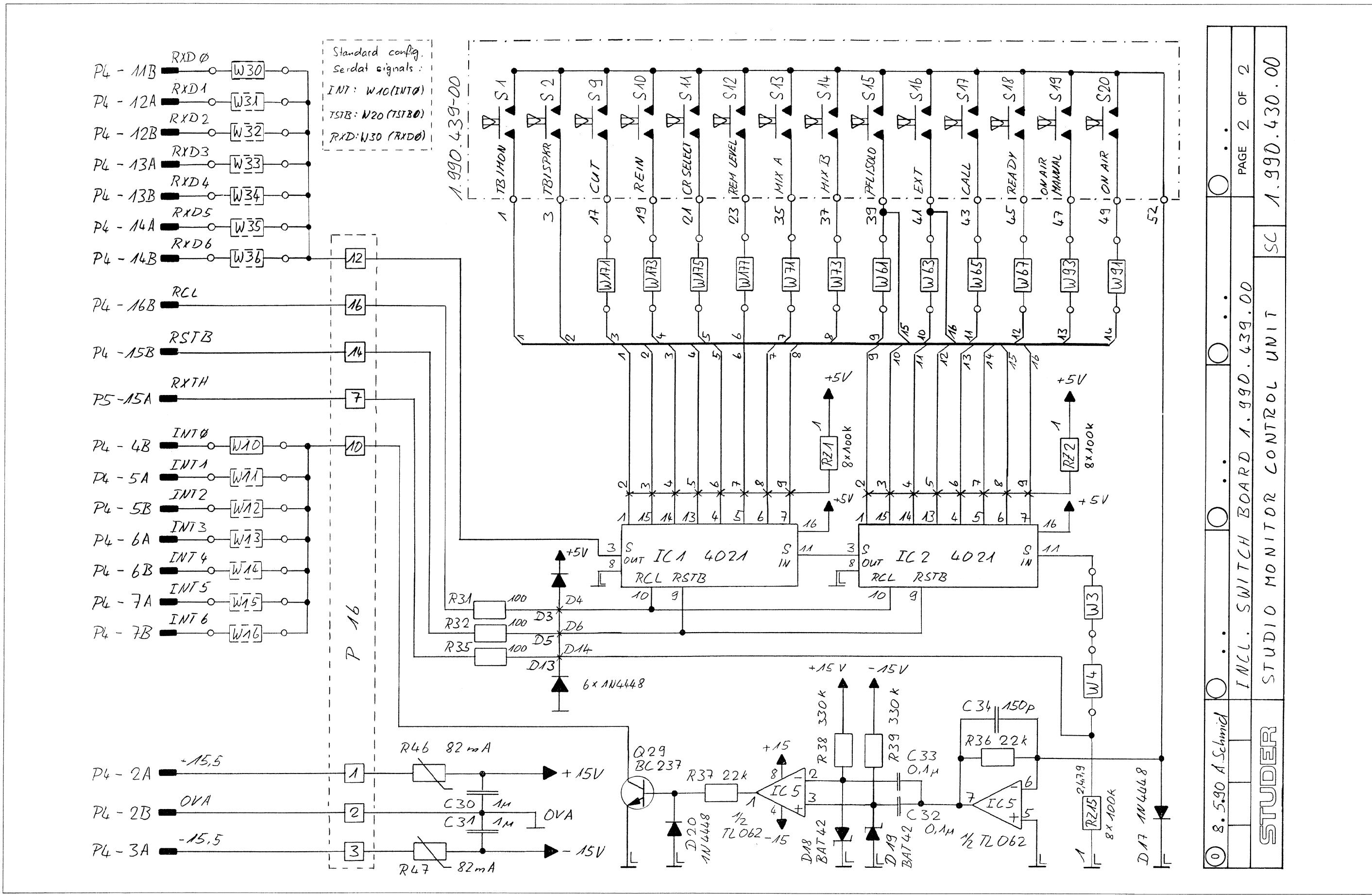
CR Monitor Switch Board 1.990.429.00



Studio Monitor Control Unit 1.990.430.00
 - Studio Monitor Switch Board 1.990.439.00

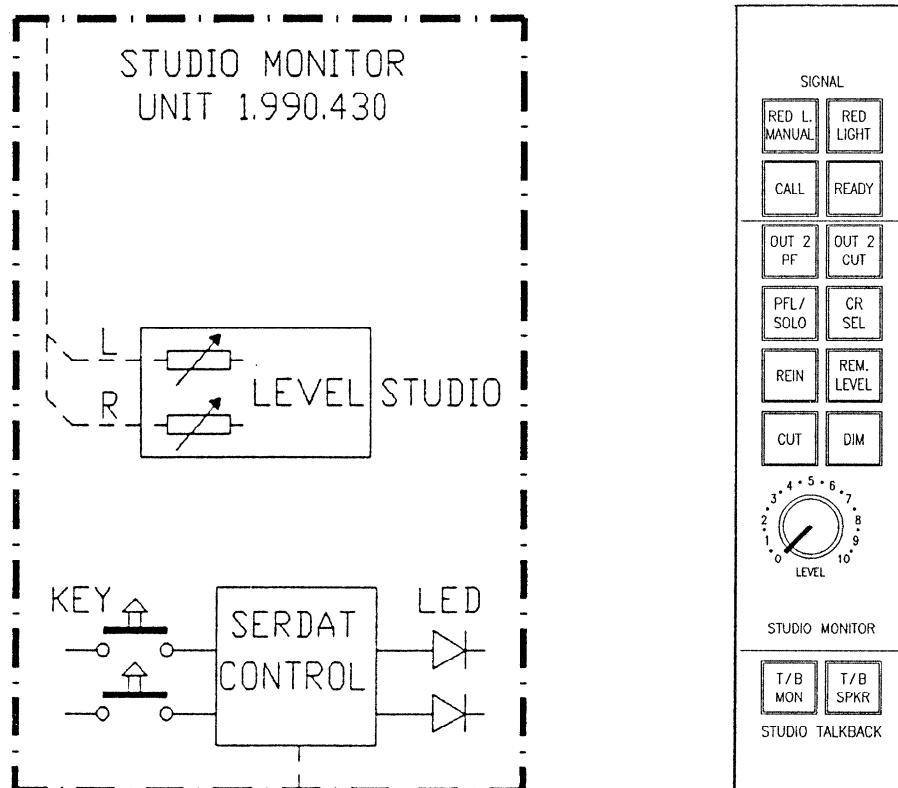


① 8.5.90 A.Schmid	INCL. SWITCH BOARD 1.990.439.00	STUDIO MONITOR CONTROL UNIT SC 1.990.430.00	PAGE 1 OF 2
-------------------	---------------------------------	---	-------------

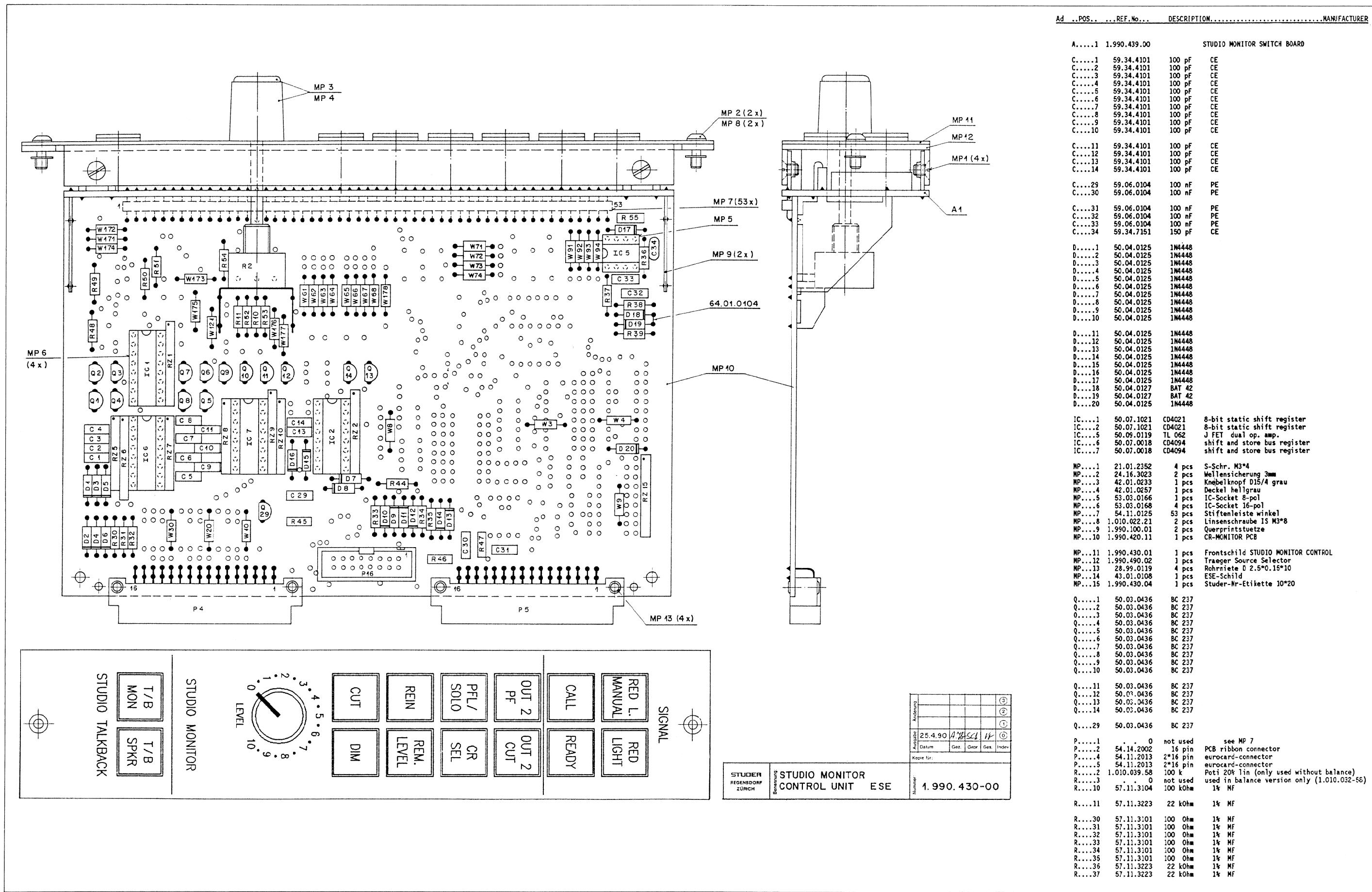
Studio Monitor Control Unit 1.990.430.00
- Studio Monitor Switch Board 1.990.439.00


Pin Location List
CR Monitor Control Unit 1.990.420.00

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P4	01A	OV-L	GROUND SIGN (LOGIC)	
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	OV-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3..4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERRUPT 0	
P4	05A	INT 1	INTERRUPT 1	
P4	05B	INT 2	INTERRUPT 2	
P4	06A	INT 3	INTERRUPT 3	
P4	06B	INT 4	INTERRUPT 4	
P4	07A	INT 5	INTERRUPT 5	
P4	07B	INT 6	INTERRUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	
P5	01A	+4V	CONTROL VOLTAGE VCA	
P5	01B	+1V	CONTROL VOLTAGE VCA	
P5	02A	OV	CONTROL VOLTAGE VCA	
P5	02B	-10V	CONTROL VOLTAGE VCA	
P5	03A	-	N.C.	
P5	03B	--	N.C.	
P5	04A	-	N.C.	
P5	04B	-	N.C.	
P5	05A	-	N.C.	
P5	05B	-	N.C.	
P5	06A	-	N.C.	
P5	06B	-	N.C.	
P5	07A	-	N.C.	
P5	07B	-	N.C.	
P5	08A	-	N.C.	
P5	08B	--	N.C.	
P5	09A	-	N.C.	
P5	09B	-	N.C.	
P5	10A	-	N.C.	
P5	10B	-	N.C.	
P5	11A	-	N.C.	
P5	11B	-	N.C.	
P5	12A	-	N.C.	
P5	12B	-	N.C.	
P5	13A	CV-CR-L	CTRL.VOLTAGE CR LEVEL LEFT	
P5	13B	CV-CR-R	CTRL.VOLTAGE CR LEVEL RIGHT	
P5	14	OV-L	GROUND SIGN (LOGIC)	B X X
P5	15A	RXTH	RECEIVE DATA THROUGH	
P5	15B	TXTH	TRANSMIT DATA THROUGH	
P5	16	OV-L	GROUND SIGN (LOGIC)	B X X

Studio Monitor Control Unit 1.990.430.00

Studio Monitor Control Unit 1.990.430.00





Studio Monitor Control Unit 1.990.430.00

Ad ..POS.. ...REF.No... DESCRIPTION.....MANUFACTURER

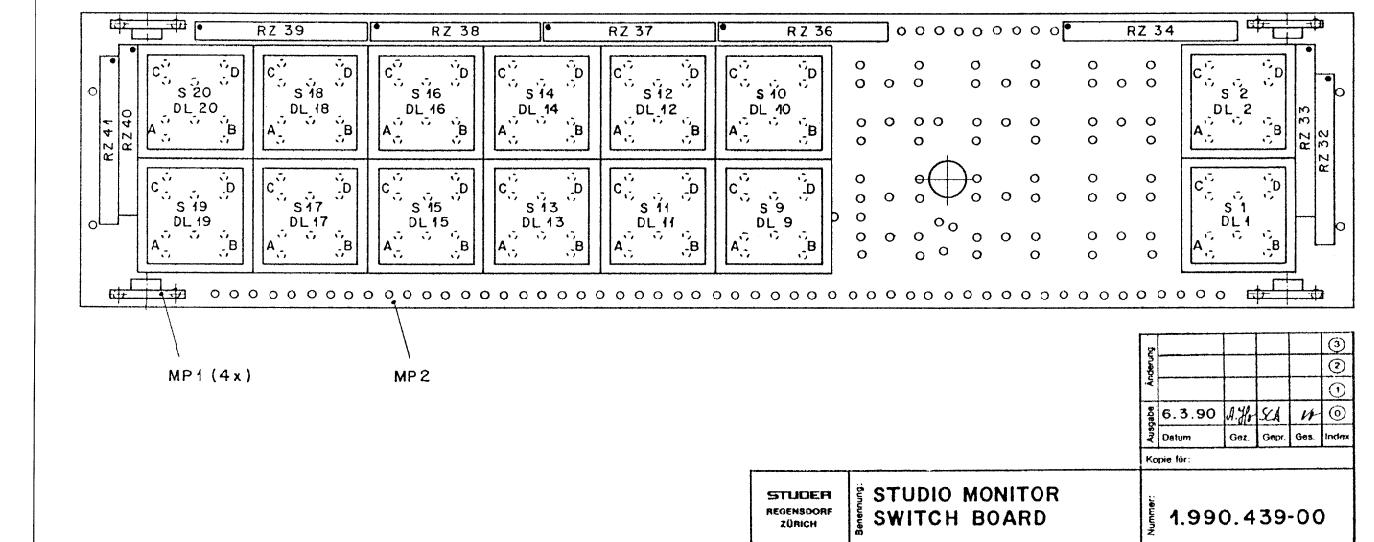
R....38	57.11.3334	330 kOhm	1% MF
R....39	57.11.3334	330 kOhm	1% MF
R....44	57.11.3101	100 Ohm	1% MF
R....45	57.92.1820	82 mA	PTC 42 Ohm
R....46	57.92.1820	82 mA	PTC 42 Ohm
R....47	57.92.1820	82 mA	PTC 42 Ohm
R....48	.. . 0	not used	used in balance version only (57113124)
R....49	.. . 0	not used	used in balance version only (57113134)
R....50	.. . 0	not used	used in balance version only (57113362)
R....51	.. . 0	not used	used in balance version only (57113473)
R....52	57.11.3104	100 kOhm	1% MF
R....53	.. . 0	not used	used in balance version only (57113363)
R....54	.. . 0	not used	used in balance version only (57113363)
R....55	57.92.7016	1.6 A	R-PTC 0.22 Ohm
W....3	57.11.3000	0 Ohm	wire bridge RX/TX to IC 2
W....4	57.11.3000	0 Ohm	wire bridge RX/TX to W 3
W....8	57.11.3000	0 Ohm	wire bridge TXD to IC 7
W....9	57.11.3000	0 Ohm	wire bridge TXD to W 8
W....10	57.11.3000	0 Ohm	wire bridge SERDAT #0 (INT 0)
W....11	.. . 0	not used	wire bridge SERDAT #1 INT 1 57113000
W....12	.. . 0	not used	wire bridge SERDAT #2 INT 2 57113000
W....13	.. . 0	not used	wire bridge SERDAT #3 INT 3 57113000
W....14	.. . 0	not used	wire bridge SERDAT #4 INT 4 57113000
W....15	.. . 0	not used	wire bridge SERDAT #5 INT 5 57113000
W....16	.. . 0	not used	wire bridge SERDAT #6 INT 6 57113000
W....20	57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSTB 0)
W....21	.. . 0	not used	wire bridge SERDAT #1 TSTB 1 57113000
W....22	.. . 0	not used	wire bridge SERDAT #2 TSTB 2 57113000
W....23	.. . 0	not used	wire bridge SERDAT #3 TSTB 3 57113000
W....24	.. . 0	not used	wire bridge SERDAT #4 TSTB 4 57113000
W....25	.. . 0	not used	wire bridge SERDAT #5 TSTB 5 57113000
W....26	.. . 0	not used	wire bridge SERDAT #6 TSTB 6 57113000
W....30	57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)
W....31	.. . 0	not used	wire bridge SERDAT #1 RXD 1 57113000
W....32	.. . 0	not used	wire bridge SERDAT #2 RXD 2 57113000
W....33	.. . 0	not used	wire bridge SERDAT #3 RXD 3 57113000
W....34	.. . 0	not used	wire bridge SERDAT #4 RXD 4 57113000
W....35	.. . 0	not used	wire bridge SERDAT #5 RXD 5 57113000
W....36	.. . 0	not used	wire bridge SERDAT #6 RXD 6 57113000
W....61	57.11.3000	0 Ohm	wire bridge
W....62	57.11.3000	0 Ohm	wire bridge
W....63	57.11.3000	0 Ohm	wire bridge
W....64	57.11.3000	0 Ohm	wire bridge
W....65	57.11.3000	0 Ohm	wire bridge
W....66	57.11.3000	0 Ohm	wire bridge
W....67	57.11.3000	0 Ohm	wire bridge
W....68	57.11.3000	0 Ohm	wire bridge
W....71	57.11.3000	0 Ohm	wire bridge
W....72	57.11.3000	0 Ohm	wire bridge
W....73	57.11.3000	0 Ohm	wire bridge
W....74	57.11.3000	0 Ohm	wire bridge
W....91	57.11.3000	0 Ohm	wire bridge
W....92	57.11.3000	0 Ohm	wire bridge
W....93	57.11.3000	0 Ohm	wire bridge
W....94	57.11.3000	0 Ohm	wire bridge
W....171	57.11.3000	0 Ohm	wire bridge
W....172	57.11.3000	0 Ohm	wire bridge
W....173	57.11.3000	0 Ohm	wire bridge
W....174	57.11.3000	0 Ohm	wire bridge
W....175	57.11.3000	0 Ohm	wire bridge
W....176	57.11.3000	0 Ohm	wire bridge
W....177	57.11.3000	0 Ohm	wire bridge
W....178	57.11.3000	0 Ohm	wire bridge
W....120	.. . 0	not used	used only for CR LEVEL -100dB...+0dB
W....121	57.11.3000	0 Ohm	wire bridge CR LEVEL -100dB...+10dB
W....124	.. . 0	not used	only used for CR LEVEL -100dB...+40dB
RZ....1	57.88.4104	100 kOhm	2% resistor-network
RZ....2	57.88.4104	100 kOhm	2% resistor-network
RZ....5	57.88.2682	6.8 kOhm	2% resistor-network
RZ....6	57.88.4104	100 kOhm	2% resistor-network
RZ....7	57.88.2682	6.8 kOhm	2% resistor-network
RZ....8	57.88.2682	6.8 kOhm	2% resistor-network
RZ....9	57.88.4104	100 kOhm	2% resistor-network
RZ....10	57.88.2682	6.8 kOhm	2% resistor-network
RZ....15	57.88.4104	100 kOhm	2% resistor-network

CE=Ceramic, PE=Polyester

MF=Metal Film

1.990.430.00 STUDIO MONITOR CONTROL UNIT SCA90/12/0500

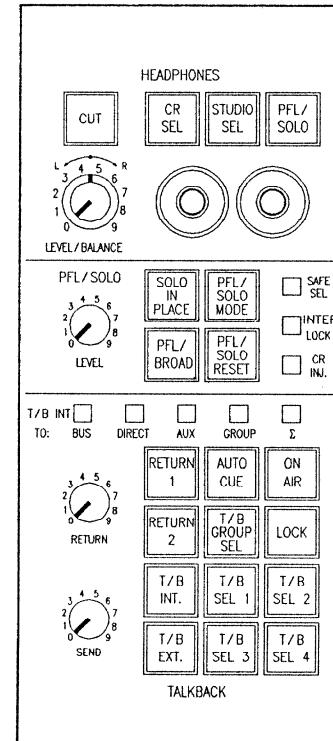
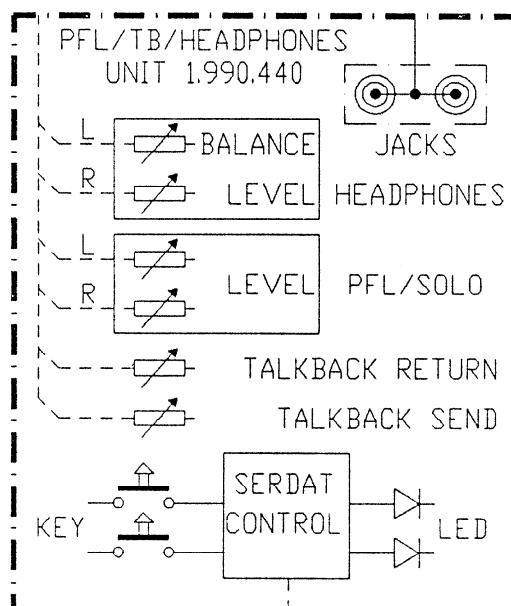
Studio Monitor Switch Board 1.990.439.00

CER=Ceramic, PE=Polyester
MF=Metal Film, PMG=CermetMANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips,
Sig=Signetics, St=Studer.

1.990.439.00 STUDIO MONITOR SWITCH BOARD SCA89/07/0500

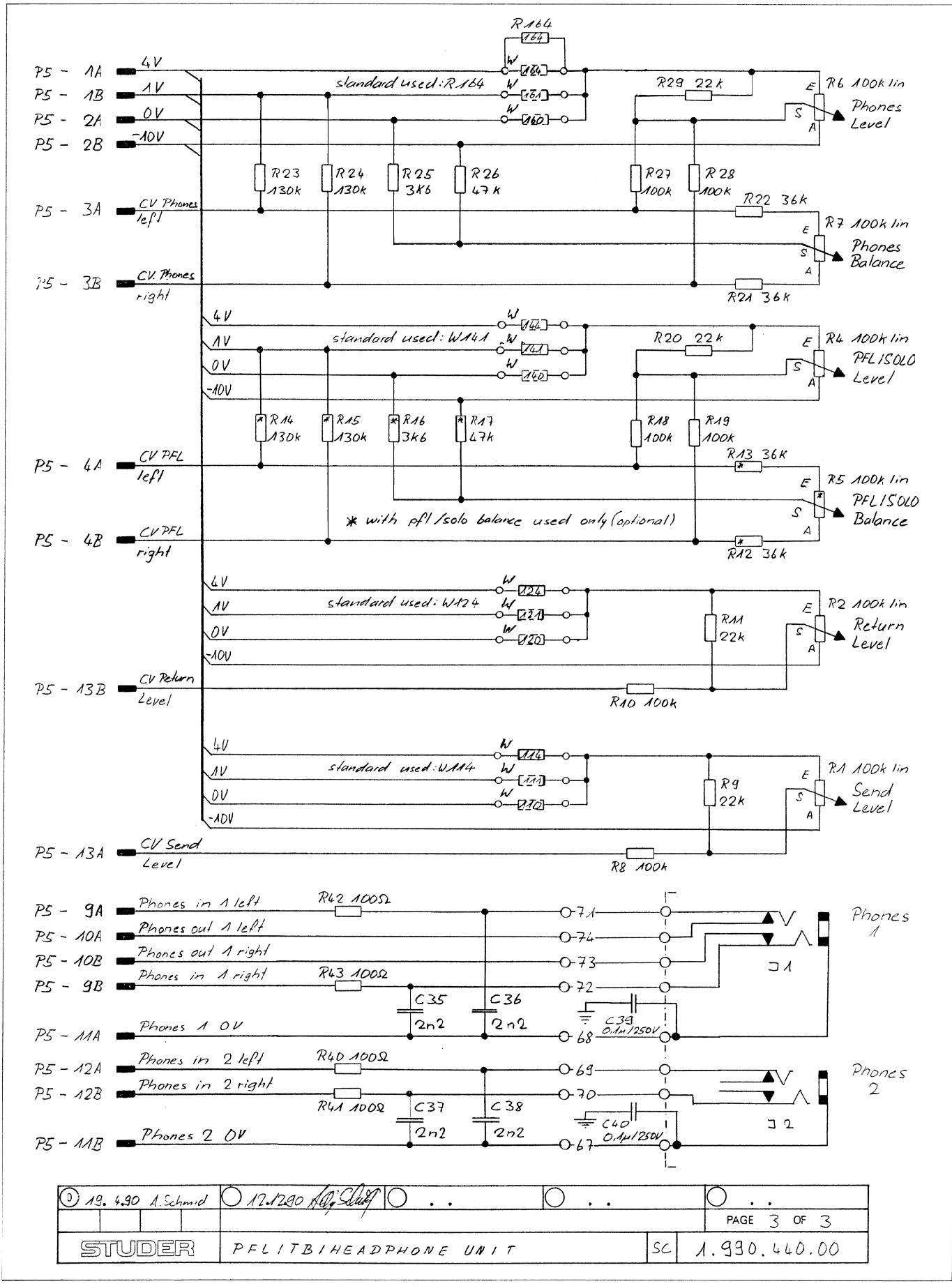
Pin Location List**Studio Monitor Control Unit 1.990.430.00**

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P4	01A	OV-L	GROUND SIGN (LOGIC)	
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	OV-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3...4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERRUPT 0	
P4	05A	INT 1	INTERRUPT 1	
P4	05B	INT 2	INTERRUPT 2	
P4	06A	INT 3	INTERRUPT 3	
P4	06B	INT 4	INTERRUPT 4	
P4	07A	INT 5	INTERRUPT 5	
P4	07B	INT 6	INTERRUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	
P5	01A	+4V	CONTROL VOLTAGE VCA	
P5	01B	+1V	CONTROL VOLTAGE VCA	
P5	02A	OV	CONTROL VOLTAGE VCA	
P5	02B	-10V	CONTROL VOLTAGE VCA	
P5	03A	--	N.C.	
P5	03B	--	N.C.	
P5	04A	--	N.C.	
P5	04B	--	N.C.	
P5	05A	--	N.C.	
P5	05B	--	N.C.	
P5	06A	--	N.C.	
P5	06B	--	N.C.	
P5	07A	--	N.C.	
P5	07B	--	N.C.	
P5	08A	--	N.C.	
P5	08B	--	N.C.	
P5	09A	--	N.C.	
P5	09B	--	N.C.	
P5	10A	--	N.C.	
P5	10B	--	N.C.	
P5	11A	--	N.C.	
P5	11B	--	N.C.	
P5	12A	--	N.C.	
P5	12B	--	N.C.	
P5	13A	CV-STUDIO-L	CTRL.VOLT.STUDIO LEVEL LEFT	
P5	13B	CV-STUDIO-R	CTRL.VOLT.STUDIO LEVEL RIGHT	
P5	14	OV-L	GROUND SIGN (LOGIC)	B X X
P5	15A	RXTH	RECEIVE DATA THROUGH	
P5	15B	TXTH	TRANSMIT DATA THROUGH	
P5	16	OV-L	GROUND SIGN (LOGIC)	B X X

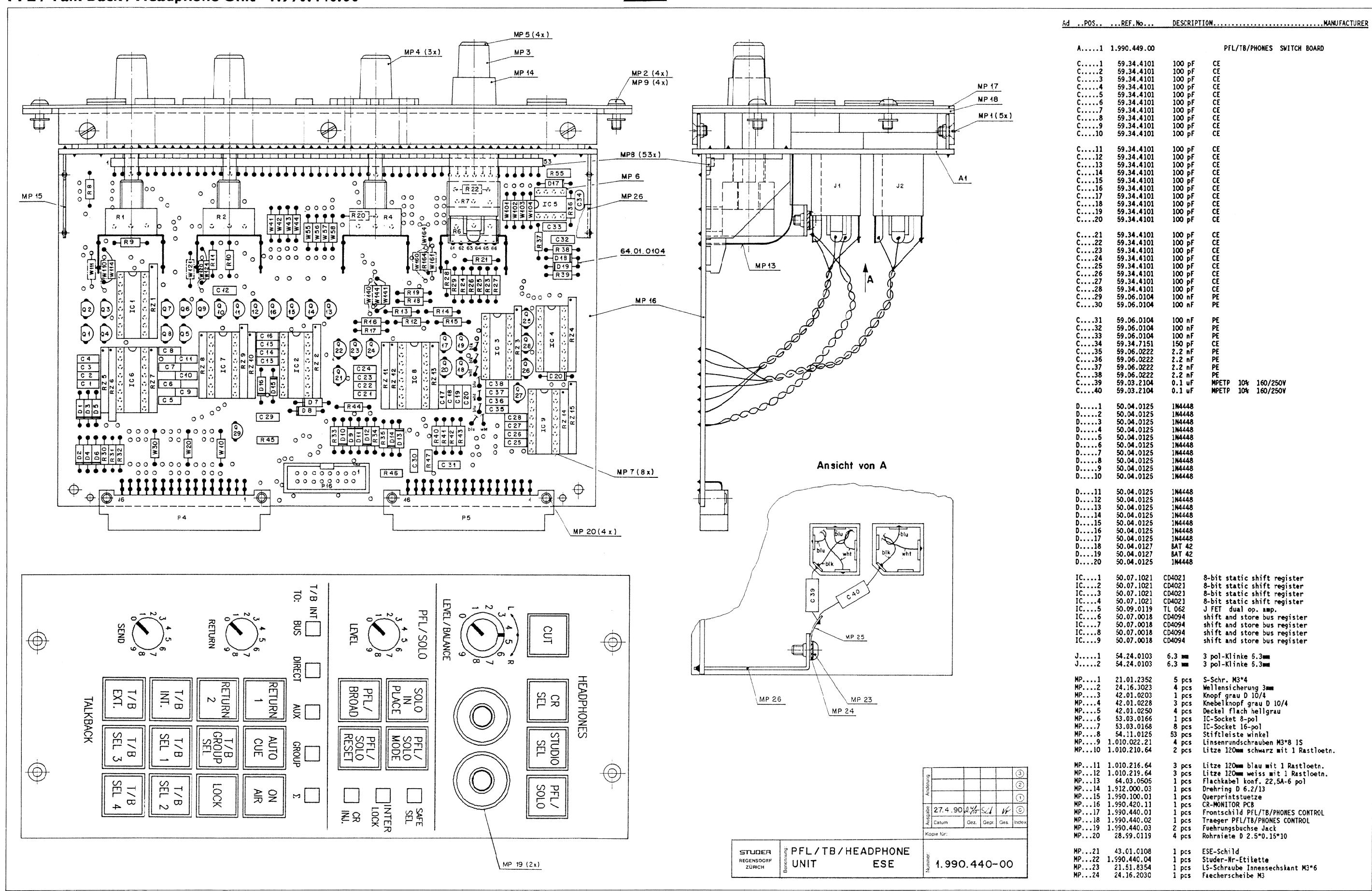
PFL / Talk Back / Headphone Unit 1.990.440.00



PFL / Talk Back / Headphone Unit 1.990.440.00
- PFL / TB / Headphone Switch Board 1.990.449.00



PFL / Talk Back / Headphone Unit 1.990.440.00

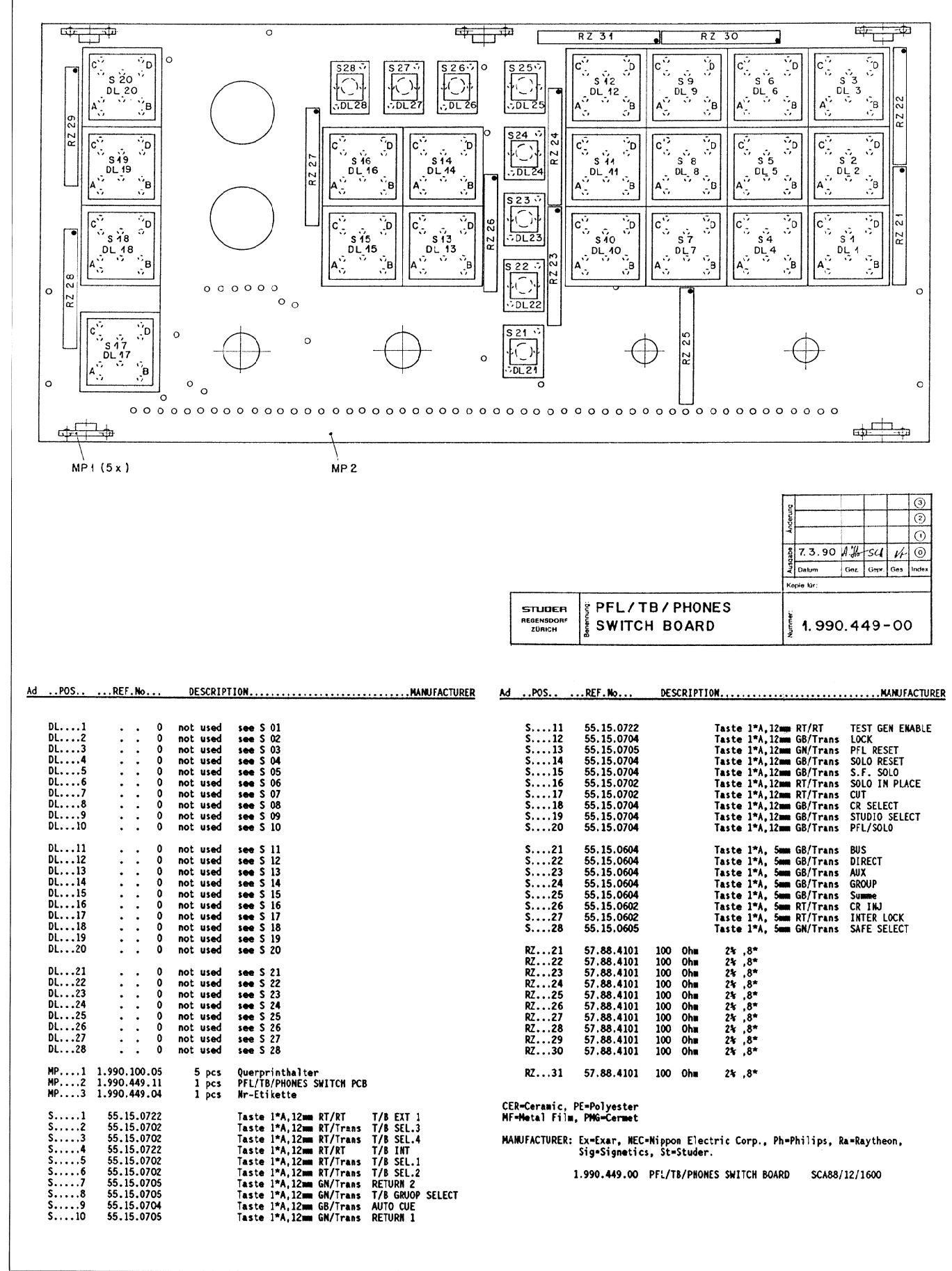




PFL / Talk Back / Headphone Unit 1.990.440.00

Ad ..POS..	...REF.No..	DESCRIPTION.....	MANUFACTURER	Ad ..POS..	...REF.No..	DESCRIPTION.....	MANUFACTURER
MP...25	29.26.1022	1 pcs	Loetose M3	W....24	. . 0	not used	wire bridge SERDAT #4 TSB 4 57113000
MP...26	1.990.100.03	1 pcs	Querprintstuetze rechts	W....25	. . 0	not used	wire bridge SERDAT #5 TSB 5 57113000
Q....1	50.03.0436	BC 237		W....26	. . 0	not used	wire bridge SERDAT #6 TSB 6 57113000
Q....2	50.03.0436	BC 237		W....30	57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSD 0)
Q....3	50.03.0436	BC 237		W....31	. . 0	not used	wire bridge SERDAT #1 RXD 1 57113000
Q....4	50.03.0436	BC 237		W....32	. . 0	not used	wire bridge SERDAT #2 RXD 2 57113000
Q....5	50.03.0436	BC 237		W....33	. . 0	not used	wire bridge SERDAT #3 RXD 3 57113000
Q....6	50.03.0436	BC 237		W....34	. . 0	not used	wire bridge SERDAT #4 RXD 4 57113000
Q....7	50.03.0436	BC 237		W....35	. . 0	not used	wire bridge SERDAT #5 RXD 5 57113000
Q....8	50.03.0436	BC 237		W....36	. . 0	not used	wire bridge SERDAT #6 RXD 6 57113000
Q....9	50.03.0436	BC 237		W....41	57.11.3000	0 Ohm	Bridge
Q....10	50.03.0436	BC 237		W....42	57.11.3000	0 Ohm	Bridge
Q....11	50.03.0436	BC 237		W....43	57.11.3000	0 Ohm	Bridge
Q....12	50.03.0436	BC 237		W....44	57.11.3000	0 Ohm	Bridge
Q....13	50.03.0436	BC 237		W....55	57.11.3000	0 Ohm	Bridge
Q....14	50.03.0436	BC 237		W....56	57.11.3000	0 Ohm	Bridge
Q....15	50.03.0436	BC 237		W....57	57.11.3000	0 Ohm	Bridge
Q....16	50.03.0436	BC 237		W....58	57.11.3000	0 Ohm	Bridge
Q....17	50.03.0436	BC 237		W....101	57.11.3000	0 Ohm	Bridge
Q....18	50.03.0436	BC 237		W....102	57.11.3000	0 Ohm	Bridge
Q....19	50.03.0436	BC 237		W....103	57.11.3000	0 Ohm	Bridge
Q....20	50.03.0436	BC 237		W....104	57.11.3000	0 Ohm	Bridge
Q....21	50.03.0436	BC 237		W....110	. . 0	not used	used only for SEND LEVEL -100dB...+0dB
Q....22	50.03.0436	BC 237		W....111	. . 0	not used	used only for SEND LEVEL -100dB...+10dB
Q....23	50.03.0436	BC 237		W....114	57.11.3000	0 Ohm	wire bridge SEND LEVEL -100dB...+40dB
Q....24	50.03.0436	BC 237		W....120	. . 0	not used	used only for RETURN LEVEL -100dB...+0dB
Q....25	50.03.0436	BC 237		W....121	. . 0	not used	used only for RETURN LEVEL -100dB...+10dB
Q....26	50.03.0436	BC 237		W....124	57.11.3000	0 Ohm	wire bridge RETURN LEVEL -100dB...+40dB
Q....27	50.03.0436	BC 237					
Q....28	50.03.0436	BC 237					
Q....29	50.03.0436	BC 237					
P....1	. . 0	not used	see MP 8	H....140	. . 0	not used	used only for PFL LEVEL -100dB...+0dB
P....2	54.14.2002	16 pin PCB ribbon connector		H....141	57.11.3000	0 Ohm	wire bridge PFL LEVEL -100dB...+10dB
P....4	54.11.2013	2*16 pin eurocard-connector					
P....5	54.11.2013	2*16 pin eurocard-connector					
R....1	1.010.027.58	100 kOhm	Poti 20% lin SEND LEVEL	W....144	. . 0	not used	used only for PFL LEVEL -100dB...+40dB
R....2	1.010.027.58	100 kOhm	Poti 20% lin RETURN LEVEL				
R....4	1.010.027.58	100 kOhm	Poti used only in version without balance	W....160	. . 0	not used	used only for PHONES LEVEL -100dB...+0dB
R....5	. . 0	not used	used only in balance version(1.010.032-58)	W....161	. . 0	not used	used only for PHONES LEVEL -100dB...+10dB
R....6	1.010.032.58	100 kOhm	Poti incl. R7 (100k lin) PHONES LEVEL/BAL	W....164	. . 0	not used	used only for PHONES LEVEL -100dB...+40dB
R....7	. . 0	not used	see R 6	RZ....1	57.88.4104	100 kOhm	2% resistor-network
R....8	57.11.3104	100 kOhm	1% MF	RZ....2	57.88.4104	100 kOhm	2% resistor-network
R....9	57.11.3223	22 kOhm	1% MF	RZ....3	57.88.4104	100 kOhm	2% resistor-network
R....10	57.11.3104	100 kOhm	1% MF	RZ....4	57.88.4104	100 kOhm	2% resistor-network
R....11	57.11.3223	22 kOhm	1% MF	RZ....5	57.88.2682	6.8 kOhm	2% resistor-network
R....12	. . 0	not used	used only in balance version (57113363)	RZ....6	57.88.4104	100 kOhm	2% resistor-network
R....13	. . 0	not used	used only in balance version (57113363)	RZ....7	57.88.2682	6.8 kOhm	2% resistor-network
R....14	. . 0	not used	used only in balance version (57113134)	RZ....8	57.88.2682	6.8 kOhm	2% resistor-network
R....15	. . 0	not used	used only in balance version (57113134)	RZ....9	57.88.4104	100 kOhm	2% resistor-network
R....16	. . 0	not used	used only in balance version (57113362)	RZ....10	57.88.2682	6.8 kOhm	2% resistor-network
R....17	. . 0	not used	used only in balance version (57113473)	RZ....11	57.88.2682	6.8 kOhm	2% resistor-network
R....18	57.11.3104	100 kOhm	1% MF	RZ....12	57.88.4104	100 kOhm	2% resistor-network
R....19	57.11.3104	100 kOhm	1% MF	RZ....13	57.88.2682	6.8 kOhm	2% resistor-network
R....20	57.11.3223	22 kOhm	1% MF	RZ....14	57.88.2682	6.8 kOhm	2% resistor-network
R....21	57.11.3363	36 kOhm	1% MF	RZ....15	57.88.4104	100 kOhm	2% resistor-network
R....22	57.11.3363	36 kOhm	1% MF				
R....23	57.11.3134	130 kOhm	1% MF				
R....24	57.11.3134	130 kOhm	1% MF				
R....25	57.11.3362	3.6 kOhm	1% MF				
R....26	57.11.3473	47 kOhm	1% MF				
R....27	57.11.3104	100 kOhm	1% MF				
R....28	57.11.3104	100 kOhm	1% MF				
R....29	57.11.3223	22 kOhm	1% MF				
R....30	57.11.3101	100 kOhm	1% MF				
CER=Ceramic, PE=Polyester MF=Metal Film							
				1.990.440.00	PFL/TB/HEADPHONE UNIT	SCA90/12/1200	

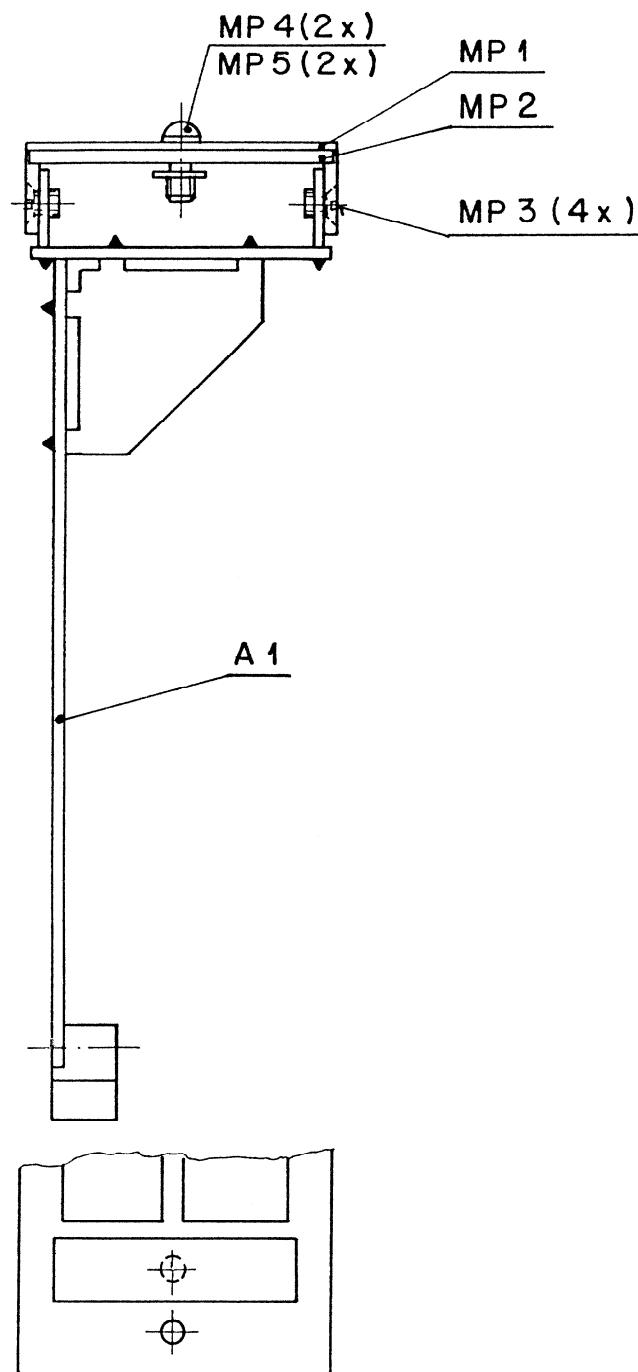
PFL / TB / Headphone Switch Board 1.990.449.00



Pin Location List
PFL / Talk Back / Headphone Unit 1.990.440.00

P	NO	NAME	REMARK	B=BUS Q=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P4	01A	OV-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	OV-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3...4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERRUPT 0	
P4	05A	INT 1	INTERRUPT 1	
P4	05B	INT 2	INTERRUPT 2	
P4	06A	INT 3	INTERRUPT 3	
P4	06B	INT 4	INTERRUPT 4	
P4	07A	INT 5	INTERRUPT 5	
P4	07B	INT 6	INTERRUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	
P5	01A	+4V	CONTROL VOLTAGE VCA	
P5	01B	+1V	CONTROL VOLTAGE VCA	
P5	02A	OV	CONTROL VOLTAGE VCA	
P5	02B	-10V	CONTROL VOLTAGE VCA	
P5	03A	CV-PHONES-L	CONTROL VOLTAGE HEADPHONE L	
P5	03B	CV-PHONES-R	CONTROL VOLTAGE HEADPHONE R	
P5	04A	CV-PFL-L	CONTROL VOLTAGE PFL LEFT	
P5	04B	CV-PFL-R	CONTROL VOLTAGE PFL RIGHT	
P5	05A	-	N.C.	
P5	05B	-	N.C.	
P5	06A	-	N.C.	
P5	06B	-	N.C.	
P5	07A	-	N.C.	
P5	07B	-	N.C.	
P5	08A	-	N.C.	
P5	08B	-	N.C.	
P5	09A	PHO.IN -1-L	PHONE INPUT 1 LEFT	
P5	09B	PHO.IN -1-R	PHONE INPUT 1 RIGHT	
P5	10A	PHO.OUT-1-L	PHONE OUTPUT 1 LEFT	
P5	10B	PHO.OUT-1-R	PHONE OUTPUT 1 RIGHT	
P5	11A	PHONE 1 OV	GROUND SIGN PHONE 1	
P5	11B	PHONE 2-OV	GROUND SIGN PHONE 2	
P5	12A	PHO.IN-2-L	INPUT PHONE 2 LEFT	
P5	12B	PHO.IN-2-R	INPUT PHONE 2 RIGHT	
P5	13A	CV-SEND	CTRL.VOLTAGE SEND LEVEL	
P5	13B	CV-RETURN	CTRL.VOLTAGE RETURN LEVEL	
P5	14	OV-L	GROUND SIGN (LOGIC)	
P5	15A	RXTH	RECEIVE DATA THROUGH	
P5	15B	TXTH	TRANSMIT DATA THROUGH	
P5	16	OV-L	GROUND SIGN (LOGIC)	

Source Selector Unit 1.990.490.00



Ad ...POS... ...REF.No... DESCRIPTION.....MANUFACTURER

A.....1 1.990.498.00 SOURCE SELECTOR

MP....1	1.990.490.01	1 pcs	Frontschild SOURCE SELECTOR 20 PB
MP....2	1.990.490.02	1 pcs	Traeger SOURCE SELECTOR
MP....3	21.01.2352	4 pcs	S-Schr. M3*4
MP....4	1.010.022.21	2 pcs	Linsenrundsch. IS M3*8
MP....5	24.16.3023	2 pcs	Wellensicherung 3mm
MP....6	1.990.490.04	1 pcs	Studer-Nr-Etikette 10*20

CER=Ceramic, PE=Polyester
MF=Metal Film, PMG=Cermet

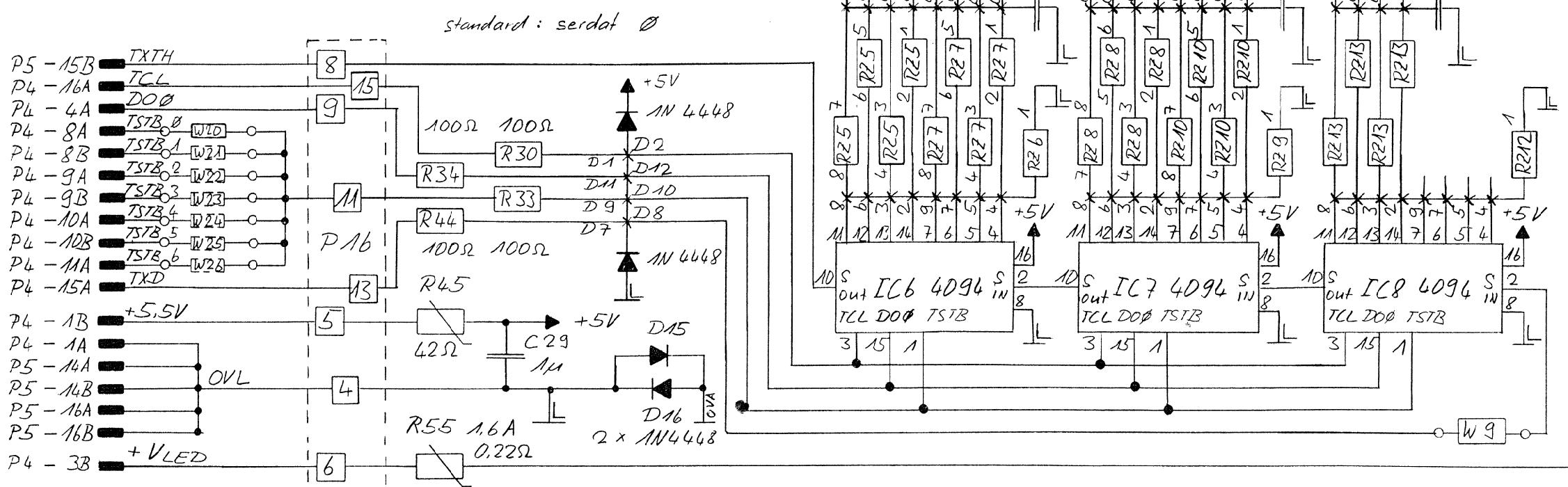
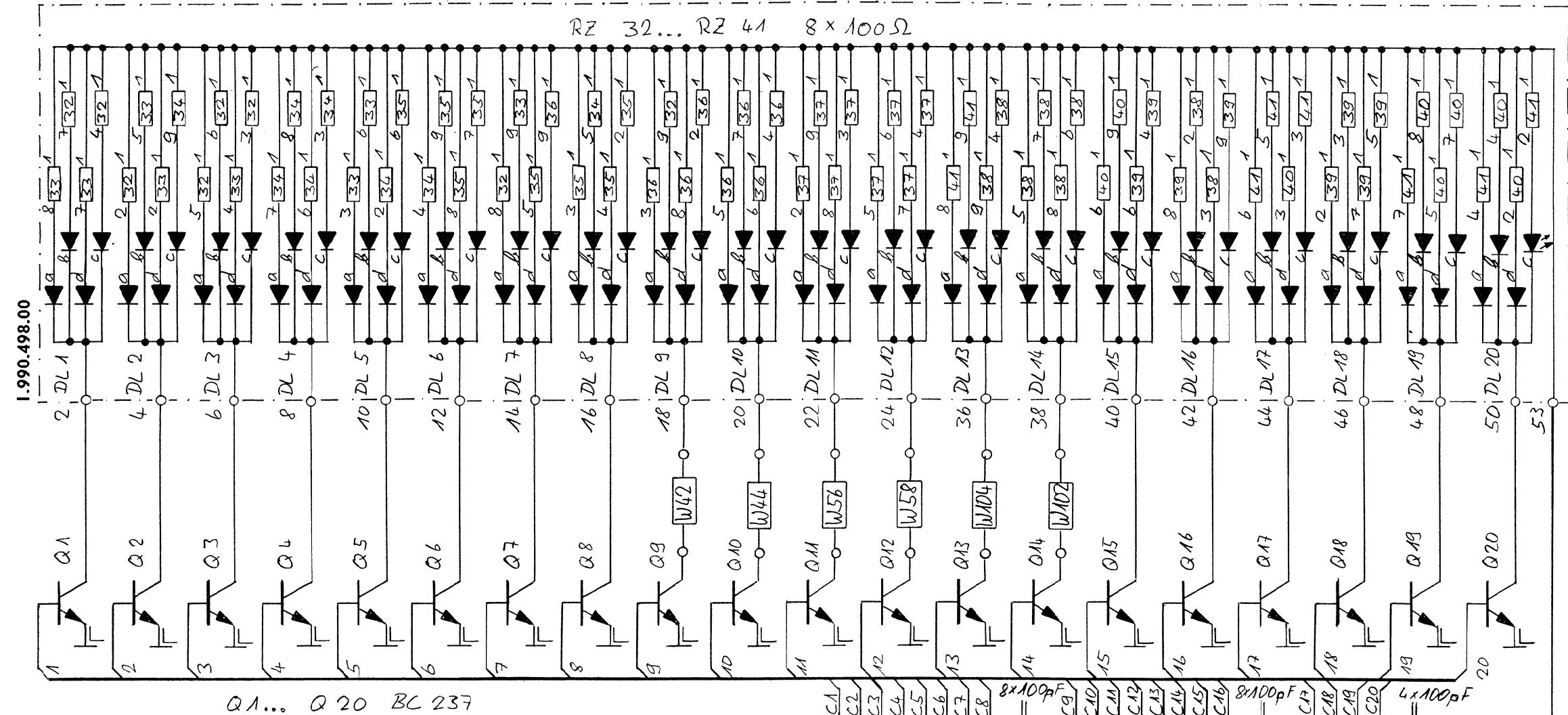
MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,
Sig=Signetics, St=Studer.

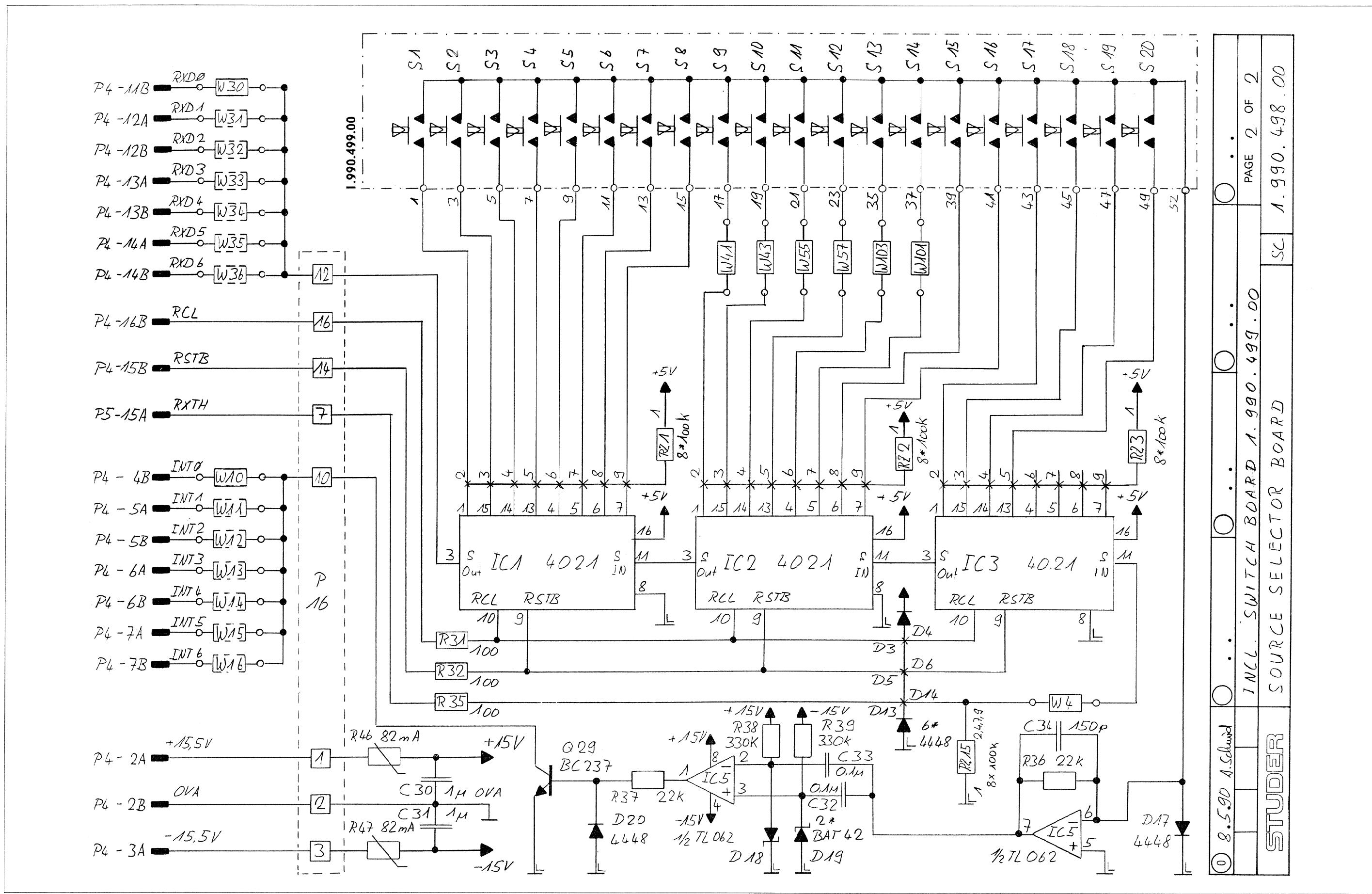
1.990.490.00 SOURCE SELECTOR UNIT 20 PB SCA88/11/3000

Anmerkung				(a)
Ausgabe				(2)
Datum	Gez	Gepr	Ges	Index
3.4.90	A.76.54	W	(o)	

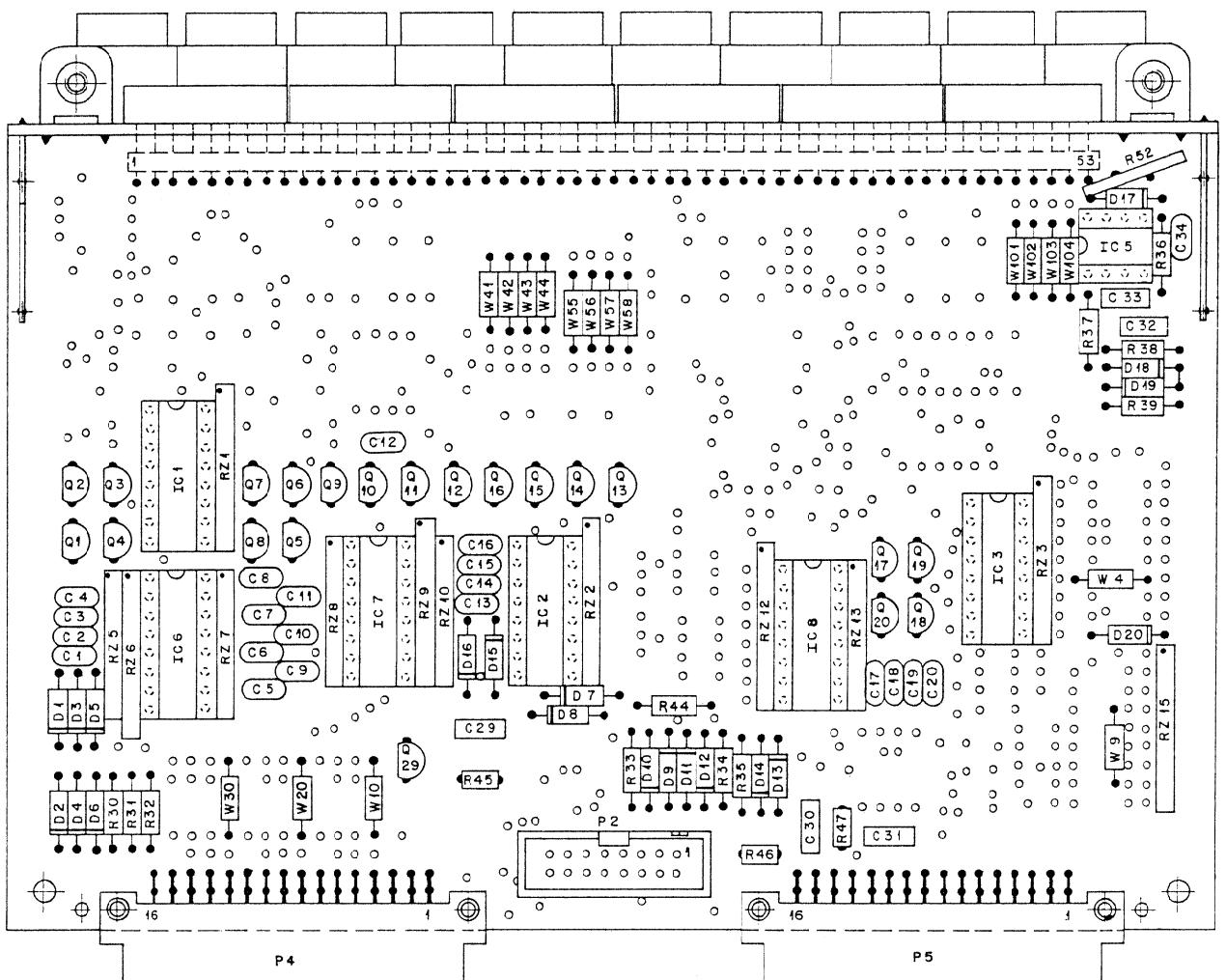
STUDER REGENSDORF ZURICH	Beschreibung SOURCE SELECTOR UNIT 20 PB	Nummer 1.990.490-00
--------------------------------	---	------------------------

Source Selector Board 1.990.498.00
 - Source Selector Switch Board 1.990.499.00



Source Selector Board 1.990.498.00
- Source Selector Switch Board 1.990.499.00


Source Selector Board 1.990.498.00



Ausfuehrung			(3)
Ausfuehrung			(2)
			(1)
2.4.90	4.0	SCA	W
Datum	Gez	Gebr	Ges
Kopie für:			

STUDER
REGENSDORF
ZURICH

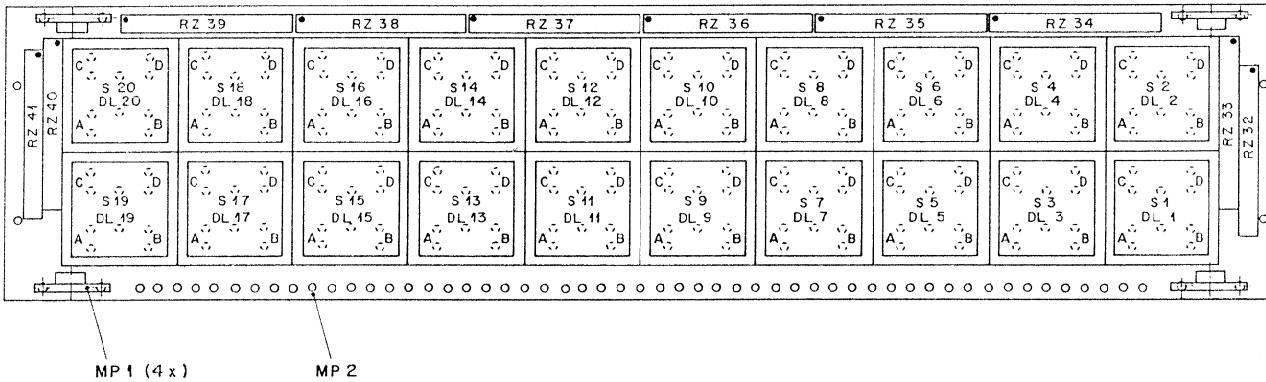
SOURCE SELECTOR
BOARD

ESE

Nummer: 1.990.498-00

Ad	POS.	REF.No...	DESCRIPTION.....	MANUFACTURER	Ad	POS.	REF.No...	DESCRIPTION.....	MANUFACTURER
A....1		1.990.499.00	Source Selector Switch Board		R....36		57.11.3223	22 kOhm	1% MF
C....1		59.34.4101	100 pF CE		R....37		57.11.3223	22 kOhm	1% MF
C....2		59.34.4101	100 pF CE		R....38		57.11.3334	330 kOhm	1% MF
C....3		59.34.4101	100 pF CE		R....39		57.11.3334	330 kOhm	1% MF
C....4		59.34.4101	100 pF CE		R....44		57.11.3101	100 Ohm	1% MF
C....5		59.34.4101	100 pF CE		R....45		57.92.1820	82 mA	PTC 42 Ohm
C....6		59.34.4101	100 pF CE		R....46		57.92.1820	82 mA	PTC 42 Ohm
C....7		59.34.4101	100 pF CE		R....47		57.92.1820	82 mA	PTC 42 Ohm
C....8		59.34.4101	100 pF CE		R....55		57.92.7016	1.6 A	R-PTC 0.22 Ohm
C....9		59.34.4101	100 pF CE		W....4		57.11.3000	0 Ohm	Bridge
C....10		59.34.4101	100 pF CE		W....9		57.11.3000	0 Ohm	Bridge
C....11		59.34.4101	100 pF CE		W....10		57.11.3000	0 Ohm	Bridge SERDAT #0 (INT 0)
C....12		59.34.4101	100 pF CE		W....11		.. . 0	not used	wire bridge SERDAT #1 INT 1 57113000
C....13		59.34.4101	100 pF CE		W....12		.. . 0	not used	wire bridge SERDAT #2 INT 2 57113000
C....14		59.34.4101	100 pF CE		W....13		.. . 0	not used	wire bridge SERDAT #3 INT 3 57113000
C....15		59.34.4101	100 pF CE		W....14		.. . 0	not used	wire bridge SERDAT #4 INT 4 57113000
C....16		59.34.4101	100 pF CE		W....15		.. . 0	not used	wire bridge SERDAT #5 INT 5 57113000
C....17		59.34.4101	100 pF CE		W....16		.. . 0	not used	wire bridge SERDAT #6 INT 6 57113000
C....18		59.34.4101	100 pF CE		W....20		57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSB 0)
C....19		59.34.4101	100 pF CE		W....21		.. . 0	not used	wire bridge SERDAT #1 TSB 1 57113000
C....20		59.34.4101	100 pF CE		W....22		.. . 0	not used	wire bridge SERDAT #2 TSB 2 57113000
C....29		59.06.0104	100 nF PE		W....23		.. . 0	not used	wire bridge SERDAT #3 TSB 3 57113000
C....30		59.06.0104	100 nF PE		W....24		.. . 0	not used	wire bridge SERDAT #4 TSB 4 57113000
C....31		59.06.0104	100 nF PE		W....25		.. . 0	not used	wire bridge SERDAT #5 TSB 5 57113000
C....32		59.06.0104	100 nF PE		W....26		.. . 0	not used	wire bridge SERDAT #6 TSB 6 57113000
C....33		59.06.0104	100 nF PE		W....30		57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)
C....34		59.34.7151	150 pF CE		W....31		.. . 0	not used	wire bridge SERDAT #1 RXD 1 57113000
D....1		50.04.0125	1N4448		W....32		.. . 0	not used	wire bridge SERDAT #2 RXD 2 57113000
D....2		50.04.0125	1N4448		W....33		.. . 0	not used	wire bridge SERDAT #3 RXD 3 57113000
D....3		50.04.0125	1N4448		W....34		.. . 0	not used	wire bridge SERDAT #4 RXD 4 57113000
D....4		50.04.0125	1N4448		W....35		.. . 0	not used	wire bridge SERDAT #5 RXD 5 57113000
D....5		50.04.0125	1N4448		W....36		.. . 0	not used	wire bridge SERDAT #6 RXD 6 57113000
D....6		50.04.0125	1N4448		W....41		57.11.3000	0 Ohm	Bridge
D....7		50.04.0125	1N4448		W....42		57.11.3000	0 Ohm	Bridge
D....8		50.04.0125	1N4448		W....43		57.11.3000	0 Ohm	Bridge
D....9		50.04.0125	1N4448		W....44		57.11.3000	0 Ohm	Bridge
D....10		50.04.0125	1N4448		W....55		57.11.3000	0 Ohm	Bridge
D....11		50.04.0125	1N4448		W....56		57.11.3000	0 Ohm	Bridge
D....12		50.04.0125	1N4448		W....57		57.11.3000	0 Ohm	Bridge
D....13		50.04.0125	1N4448		W....58		57.11.3000	0 Ohm	Bridge
D....14		50.04.0125	1N4448		W....101		57.11.3000	0 Ohm	Bridge
D....15		50.04.0125	1N4448		W....102		57.11.3000	0 Ohm	Bridge
D....16		50.04.0125	1N4448		W....103		57.11.3000	0 Ohm	Bridge
D....17		50.04.0127	BAT 42		W....104		57.11.3000	0 Ohm	Bridge
D....18		50.04.0127	BAT 42						
D....19		50.04.0127	BAT 42						
D....20		50.04.0125	1M4448						
IC....1		50.07.1021	CD4021	8-bit static shift register	RZ....1		57.88.4104	100 kOhm	2% resistor-network
IC....2		50.07.1021	CD4021	8-bit static shift register	RZ....2		57.88.4104	100 kOhm	2% resistor-network
IC....3		50.07.1021	CD4021	8-bit static shift register	RZ....3		57.88.4104	100 kOhm	2% resistor-network
IC....5		50.09.0119	TL 062	J FET dual op. amp.	RZ....5		57.88.2582	6.8 kOhm	2% resistor-network
IC....6		50.07.0018	CD4094	shift and store bus register	RZ....6		57.88.4104	100 kOhm	2% resistor-network
IC....7		50.07.0018	CD4094	shift and store bus register	RZ....7		57.88.2582	6.8 kOhm	2% resistor-network
IC....8		50.07.0018	CD4094	shift and store bus register	RZ....8		57.88.2582	6.8 kOhm	2% resistor-network
MP....1		53.03.0166	1 pcs	IC-Socket 8-pin	RZ....9		57.88.4104	100 kOhm	2% resistor-network
MP....2		53.03.0168	6 pcs	IC-Socket 16-pin	RZ....10		57.88.4104	100 kOhm	2% resistor-network
MP....3		54.11.0125	53 pcs	Stiftleiste Winkel RM 2.54					
MP....4		1.990.100.01	2 pcs	Querprintstuetze					
MP....5		1.990.420.11	1 pcs	CR MONITOR PCB					
MP....6		28.99.0119	1 pcs	Rohrniere 2.5*0.1510					
MP....7		43.01.0108	1 pcs	ESE-Schild					
MP....8		1.990.498.04	1 pcs	Nr-Etikette					
C....1		50.03.0436	BC237	uni npn					
C....2		50.03.0436	BC237	uni npn					
C....3		50.03.0436	BC237	uni npn					
C....4		50.03.0436	BC237	uni npn					
C....5		50.03.0436	BC237	uni npn					
C....6		50.03.0436	BC237	uni npn					
C....7		50.03.0436	BC237	uni npn					
C....8		50.03.0436	BC237	uni npn					
C....9		50.03.0436	BC237	uni npn					
C....10		50.03.0436	BC237	uni npn					
C....11		50.03.0436	BC237	uni npn					
C....12		50.03.0436	BC237	uni npn					
C....13		50.03.0436	BC237	uni npn					
C....14		50.03.0436	BC237	uni npn					
C....15		50.03.0436	BC237	uni npn					
C....16		5							

Source Selector Switch Board 1.990.499.00



Ad ...POS... ...REF.No... DESCRIPTION.....MANUFACTURER

DL....1	.	.	0	not used	see S 01
DL....2	.	.	0	not used	see S 02
DL....3	.	.	0	not used	see S 03
DL....4	.	.	0	not used	see S 04
CL....5	.	.	0	not used	see S 05
DL....6	.	.	0	not used	see S 06
DL....7	.	.	0	not used	see S 07
DL....8	.	.	0	not used	see S 08
DL....9	.	.	0	not used	see S 09
DL...10	.	.	0	not used	see S 10
DL...11	.	.	0	not used	see S 11
DL...12	.	.	0	not used	see S 12
DL...13	.	.	0	not used	see S 13
DL...14	.	.	0	not used	see S 14
DL...15	.	.	0	not used	see S 15
DL...16	.	.	0	not used	see S 16
DL...17	.	.	0	not used	see S 17
DL...18	.	.	0	not used	see S 18
DL...19	.	.	0	not used	see S 19
DL...20	.	.	0	not used	see S 20

MP....1	1.990.429.11	1 pcs	CR MONITOR SWITCH PCB
MP....2	1.990.100.05	4 pcs	Querprintstuetze
MP....3	1.990.499.04	1 pcs	Nr-Etikette

S....1	55.15.0704	Taste 1*A,12mm gelb /trans
S....2	55.15.0704	Taste 1*A,12mm gelb /trans
S....3	55.15.0704	Taste 1*A,12mm gelb /trans
S....4	55.15.0704	Taste 1*A,12mm gelb /trans
S....5	55.15.0704	Taste 1*A,12mm gelb /trans
S....6	55.15.0704	Taste 1*A,12mm gelb /trans
S....7	55.15.0704	Taste 1*A,12mm gelb/trans
S....8	55.15.0704	Taste 1*A,12mm gelb/trans
S....9	55.15.0704	Taste 1*A,12mm gelb/trans
S....10	55.15.0704	Taste 1*A,12mm gelb/trans
S....11	55.15.0704	Taste 1*A,12mm gelb/trans
S....12	55.15.0704	Taste 1*A,12mm gelb/trans
S....13	55.15.0704	Taste 1*A,12mm gelb/trans
S....14	55.15.0704	Taste 1*A,12mm gelb/trans
S....15	55.15.0704	Taste 1*A,12mm gelb/trans
S....16	55.15.0704	Taste 1*A,12mm gelb/trans
S....17	55.15.0704	Taste 1*A,12mm gelb/trans
S....18	55.15.0704	Taste 1*A,12mm gelb/trans
S....19	55.15.0704	Taste 1*A,12mm gelb/trans
S....20	55.15.0704	Taste 1*A,12mm gelb/trans

RZ...32	57.88.4101	100 Ohm	2k .8*
RZ...33	57.88.4101	100 Ohm	2k .8*
RZ...34	57.88.4101	100 Ohm	2k .8*
RZ...35	57.88.4101	100 Ohm	2k .8*
RZ...36	57.88.4101	100 Ohm	2k .8*
RZ...37	57.88.4101	100 Ohm	2k .8*
RZ...38	57.88.4101	100 Ohm	2k .8*
RZ...39	57.88.4101	100 Ohm	2k .8*
RZ...40	57.88.4101	100 Ohm	2k .8*
RZ...41	57.88.4101	100 Ohm	2k .8*

CER=Ceramic, PE=Polyester
MF=Metall film, PMG=Cermet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,
Sig=Signetics, St=Studer.

1.990.499.00 SOURCE SELECTOR SWITCH BOARD SCA88/12/1800

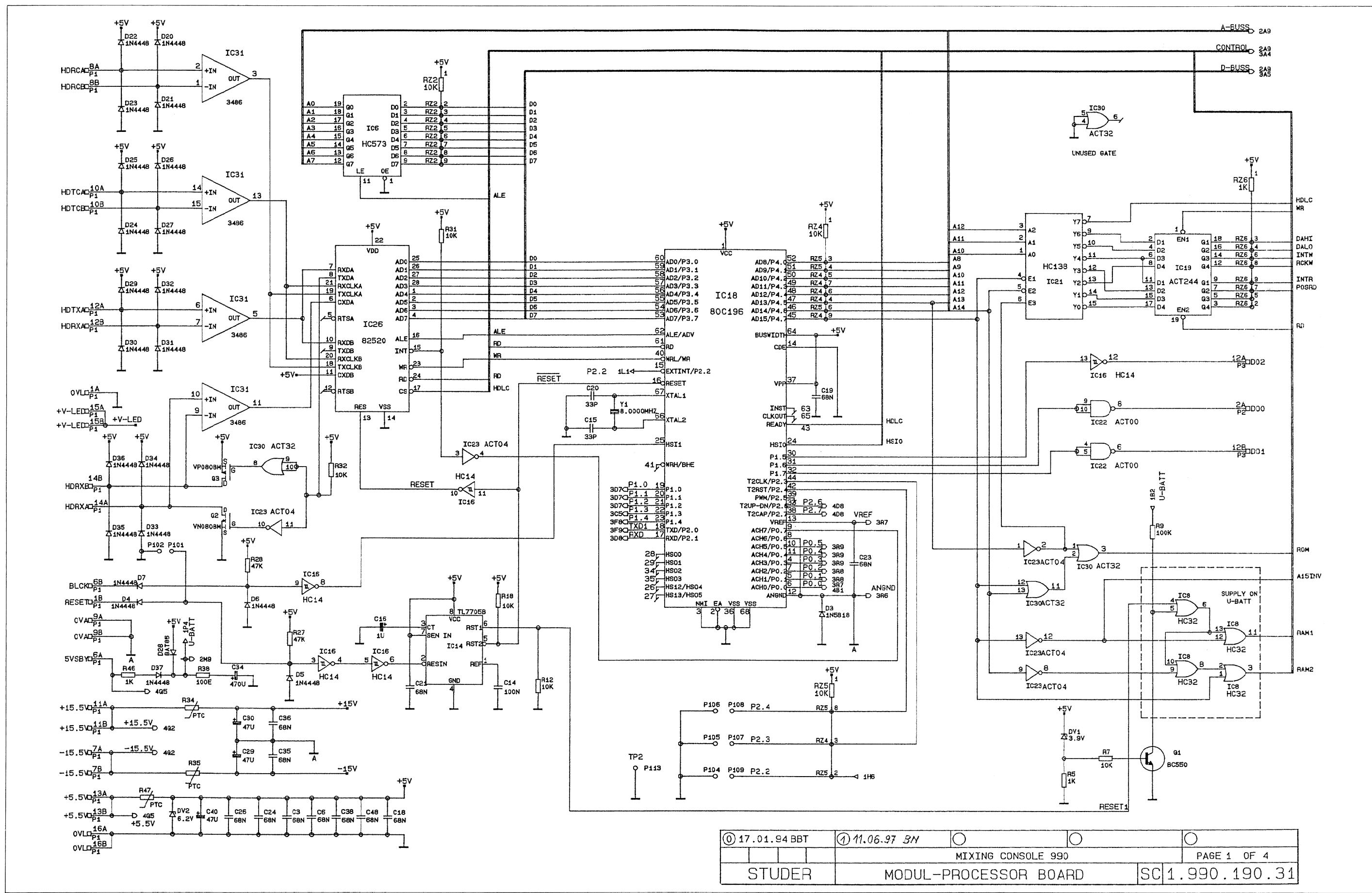
STUDER REGENSBORF ZUERICH	Bemerkung: SOURCE SELECTOR SWITCH BOARD	Nummer: 1.990.499-00
Ausgabe		
6.3.90	✓	Std. H
Datum	Ges	Ges. Ges. Index
Kopie für:		

SCHEMATA / CIRCUIT DIAGRAMS**Processor and Interface Units**

Modul Processor Board	1.990.190.31
Serdat Master Interface	1.990.496.00
Serdat Slave Interface	1.990.497.00

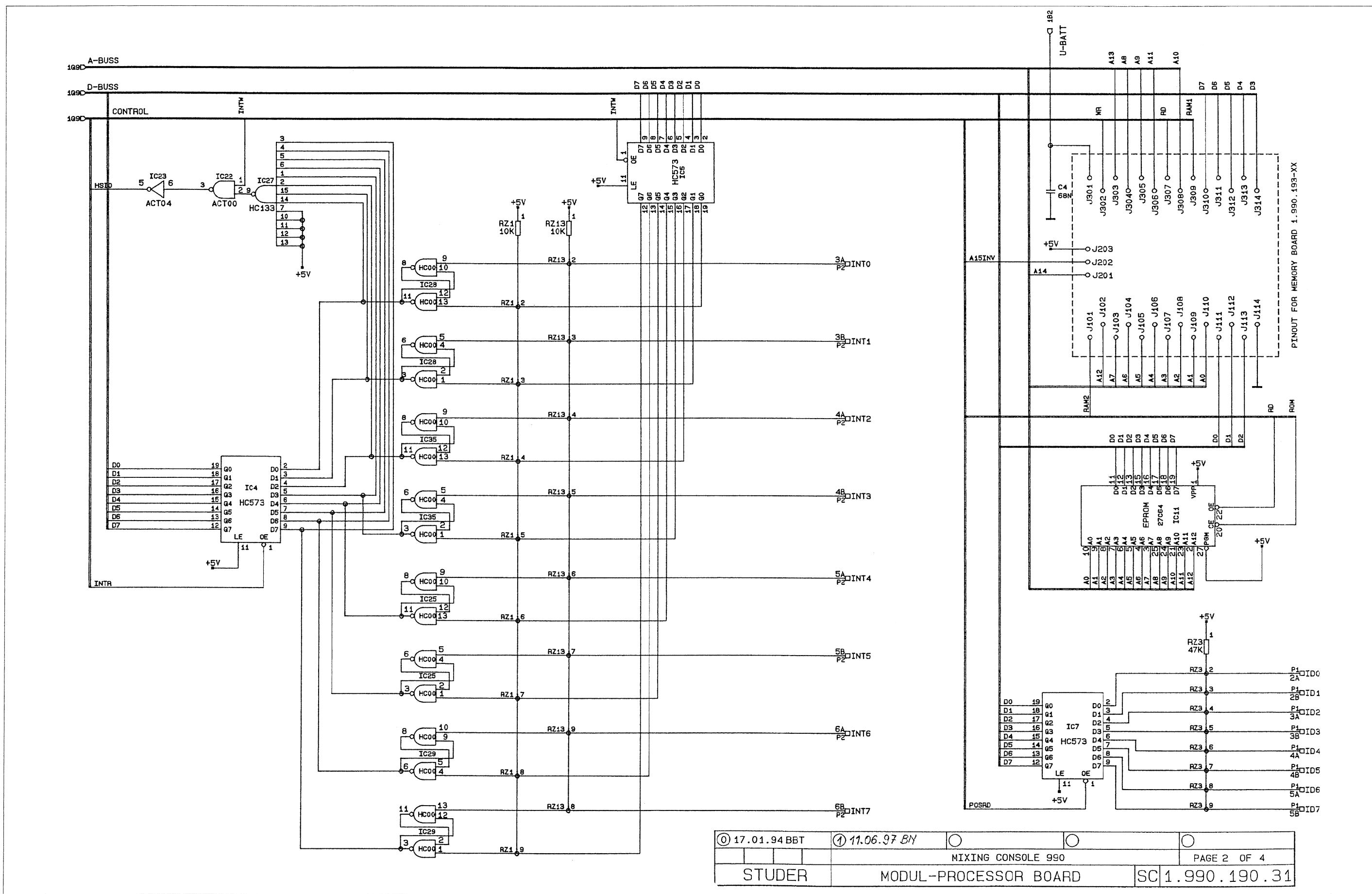


Modul Processor Board 1.990.190.31



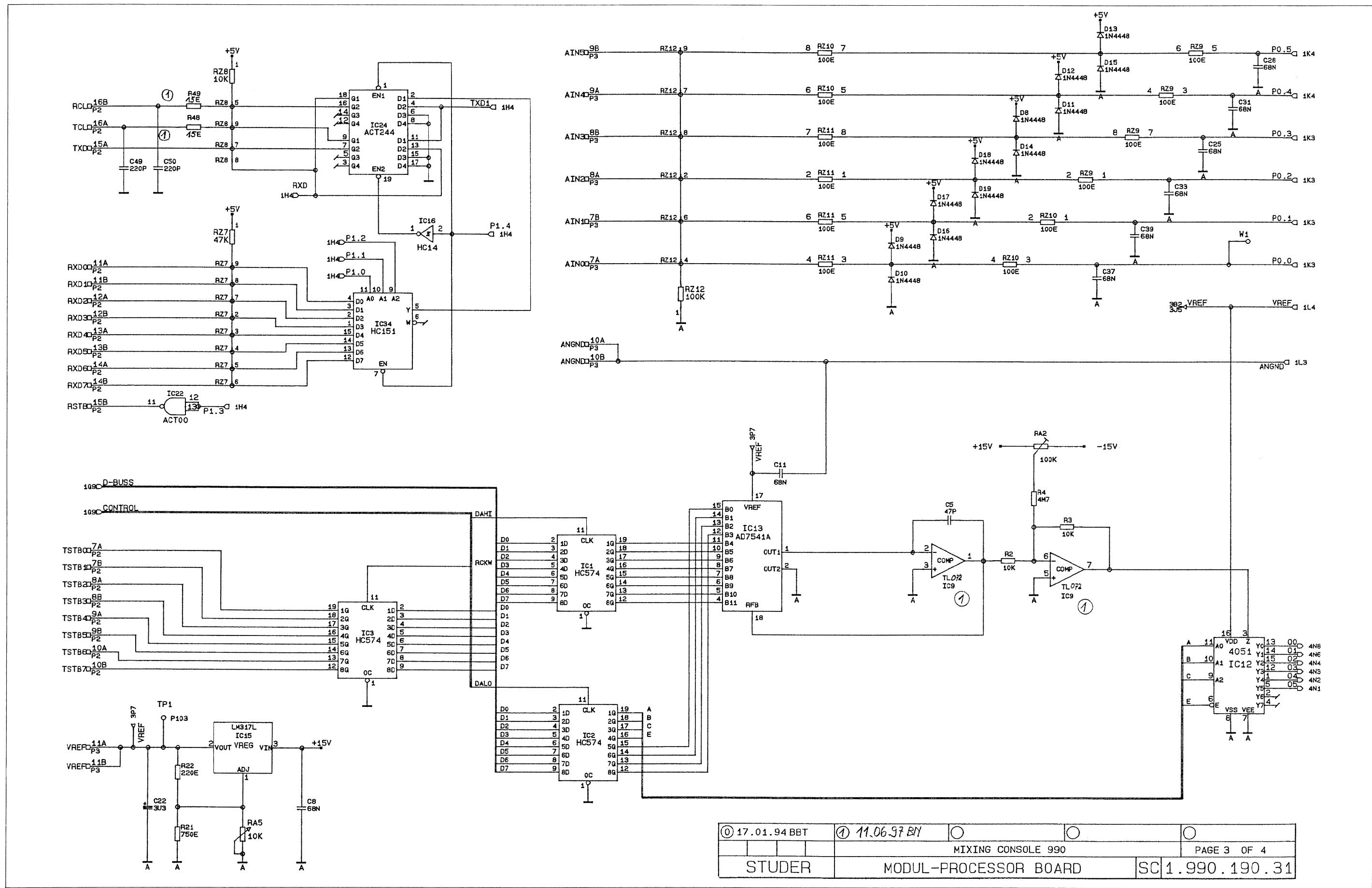


Modul Processor Board 1.990.190.31



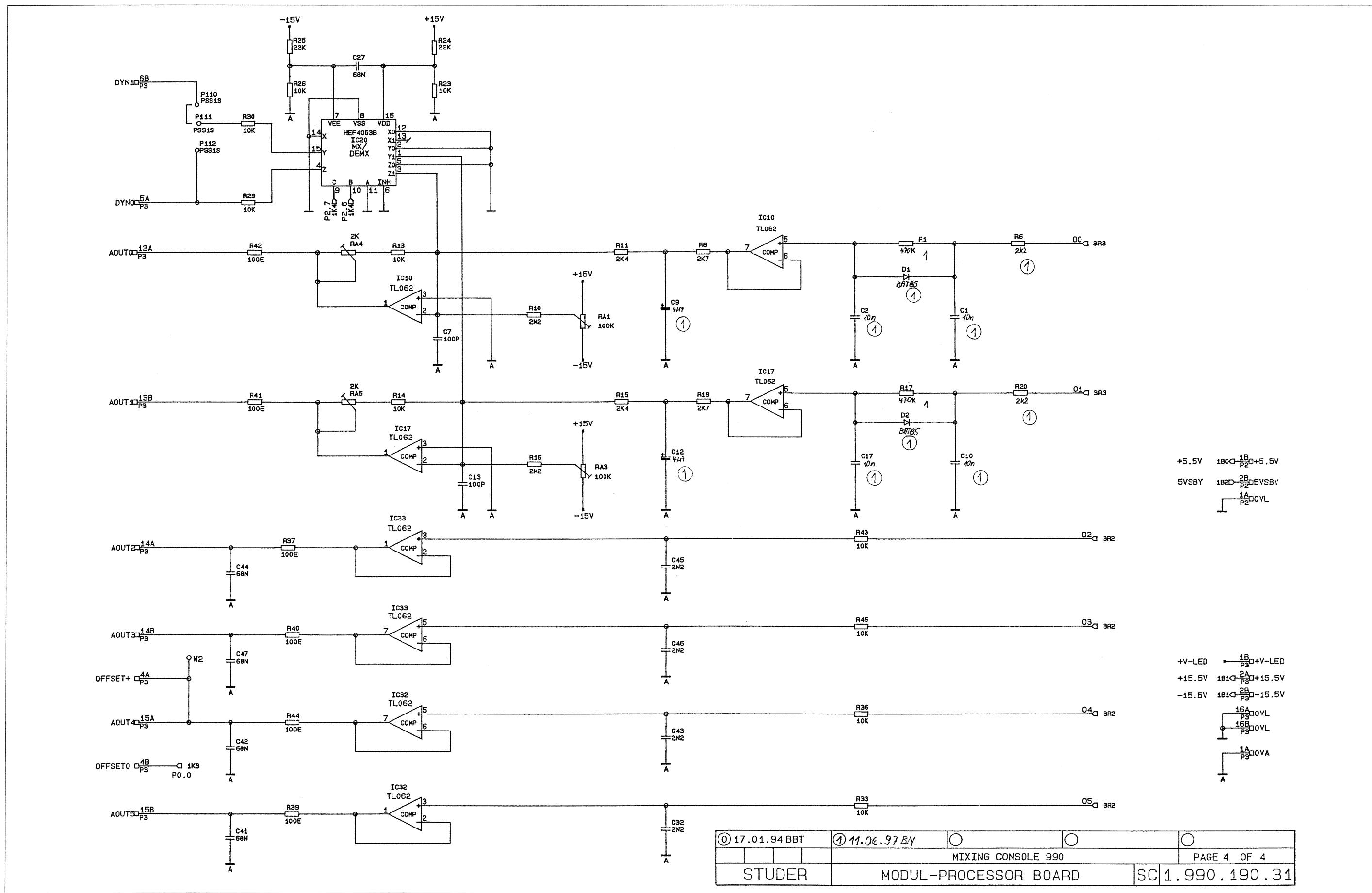
(0) 17.01.94 BBT	(1) 11.06.97 BN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MIXING CONSOLE 990				
PAGE 2 OF 4				
STUDER		MODUL-PROCESSOR BOARD		
		SC 1.990.190.31		

Modul Processor Board 1.990.190.31

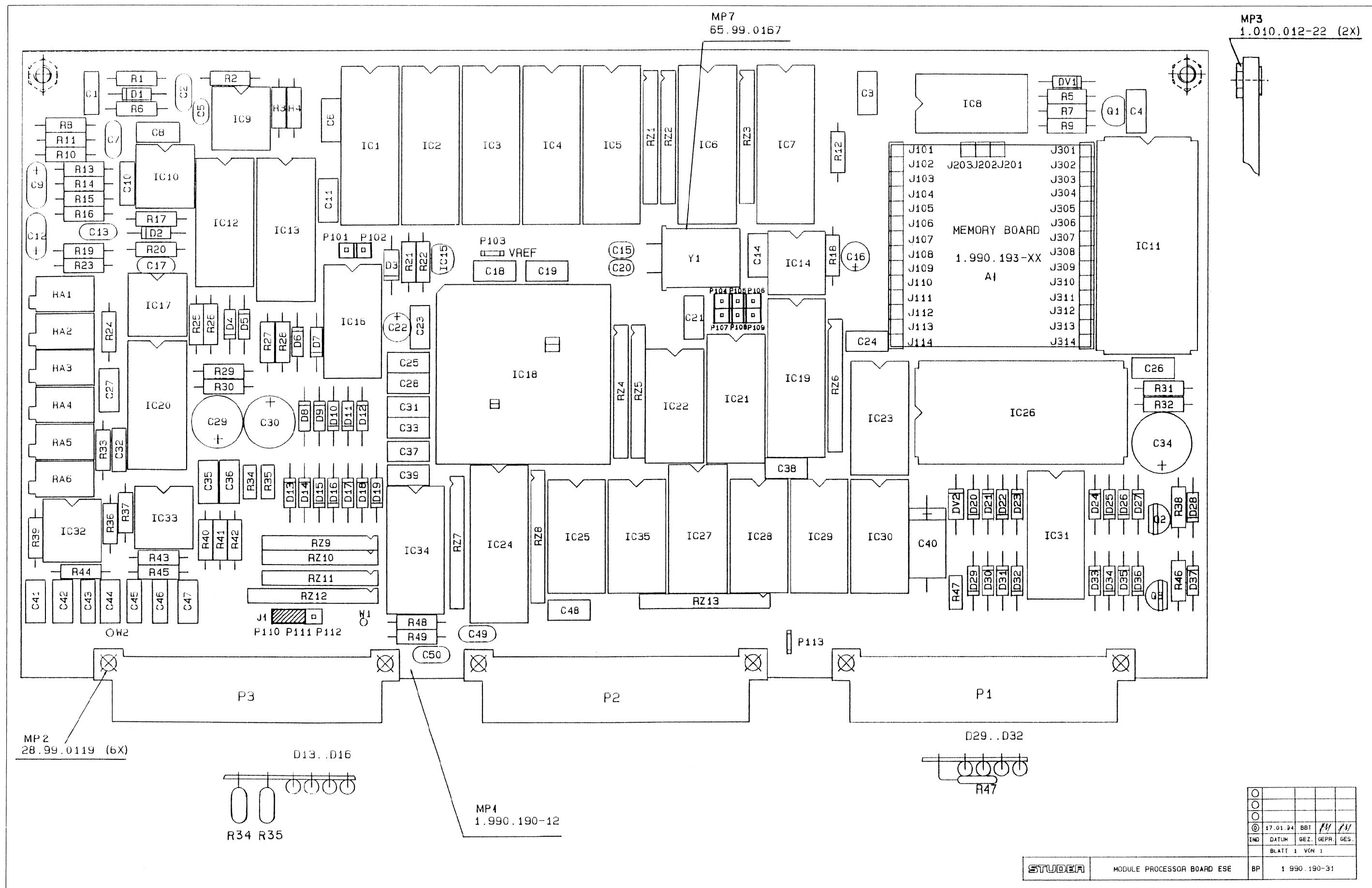




Modul Processor Board 1.990.190.31



Modul Processor Board 1.990.190.31

MP7
65.99.0167MP3
1.010.012-22 (2x)

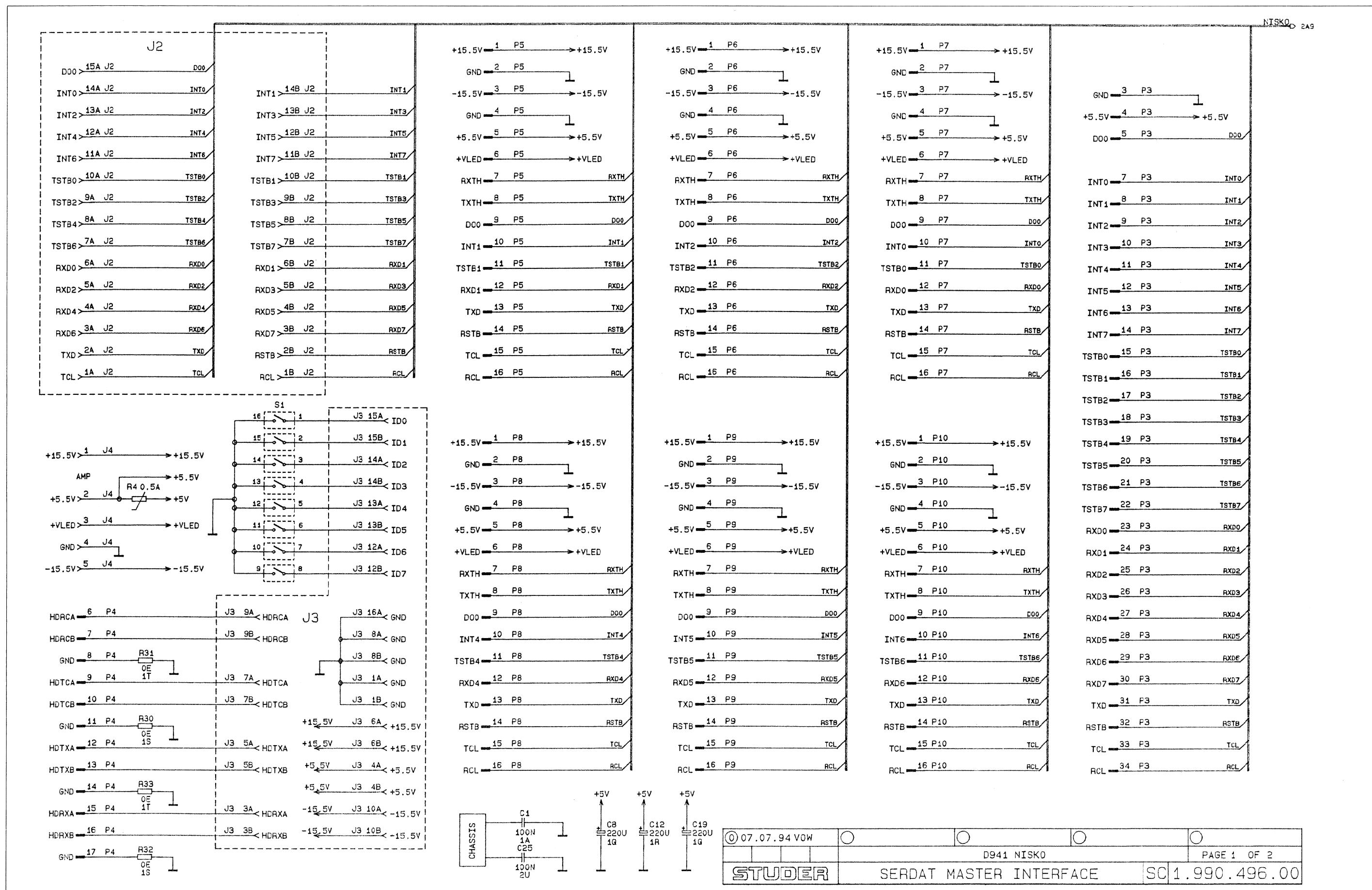
O		
O		
O		
①	17.01.94	BB1
IND	DATUM	GEZ. GEPR. GES.
	BLATT 1 VON 1	

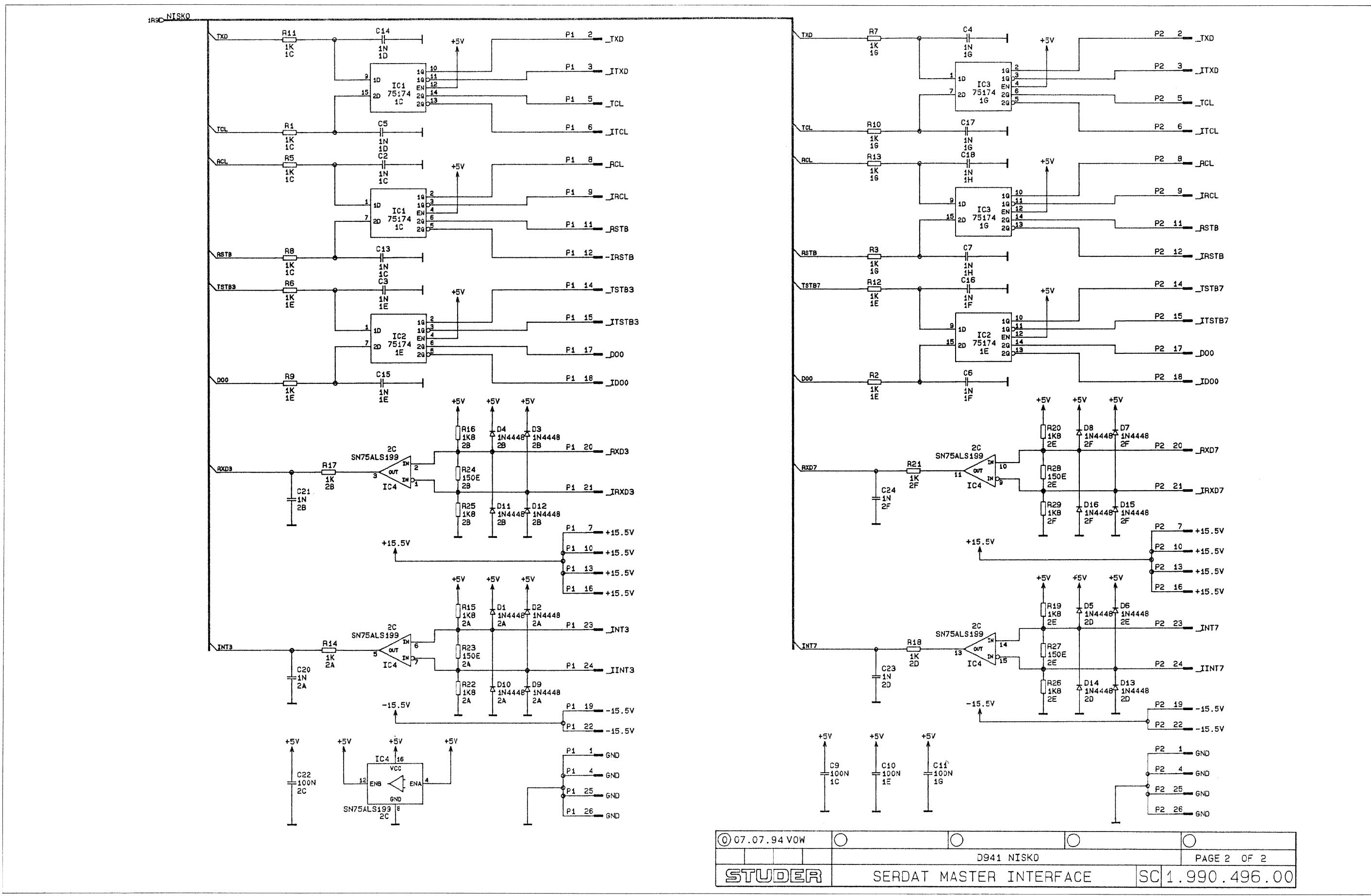


Modul Processor Board 1.990.190.31

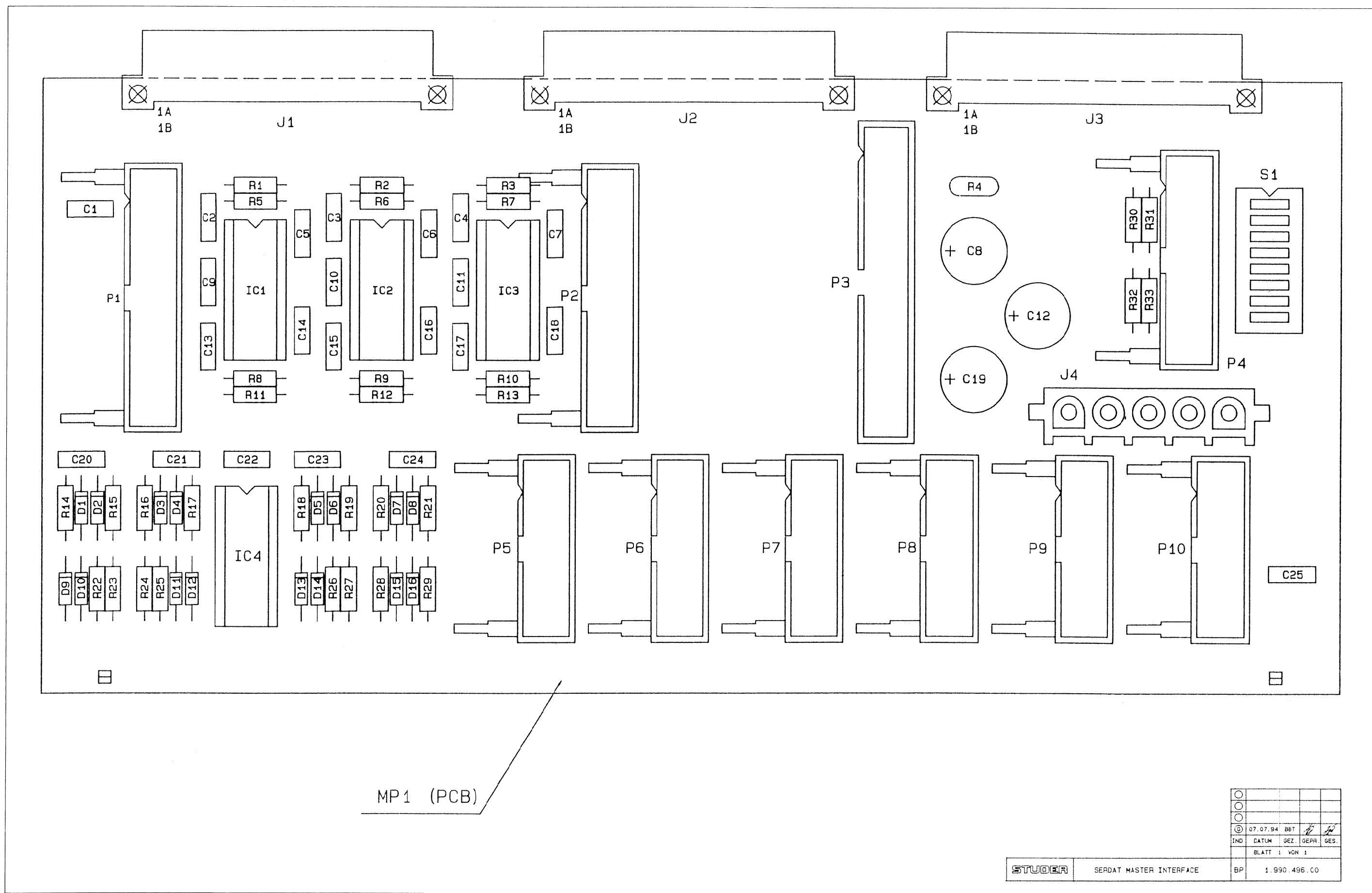
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description		
0	A 1	1.990.193.00			MEMORY BOARD ,A	0	D 30	50.04.0125	1N4448	D 1N 4448, SI		0	MP 1	1.990.190.12			MODULE PROCESSOR PCB	0	RA 4	58.05.0202	2k	R 2 K , 10%, .5 W , PMG			
0	C 1	59.06.0222	2n2		C 220 P , 10%, 63V , PETP	0	D 31	50.04.0125	1N4448	D 1N 4448, SI		0	MP 2	28.99.0119	6 pcs		ROHRNIETE D 2.5*0.15* 9	0	RA 5	58.05.0103	10k	R 10 K , 10%, .5 W , PMG			
0	C 2	59.34.4221	220p		C 220 P , 5% , N750 , CER	0	D 32	50.04.0125	1N4448	D 1N 4448, SI		0	MP 3	1.010.012.22	2 pcs		NIETMUTTER SW 6 M 3 * 2	0	RA 6	58.05.0202	2k	R 2 K , 10%, .5 W , PMG			
0	C 3	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	D 33	50.04.0125	1N4448	D 1N 4448, SI		0	MP 4	1.101.001.31			TEXT-ETIKETTE 5*20 HARDWARE-31	0	RZ 1	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9			
0	C 4	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	D 34	50.04.0125	1N4448	D 1N 4448, SI		0	MP 5	1.990.190.04			NR.-ETIKETTE 5 * 20	0	RZ 2	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9			
0	C 5	59.34.2470	47p		C 47 P , 5% , N150 , CER	0	D 35	50.04.0125	1N4448	D 1N 4448, SI		0	MP 6	43.01.0108			ESE-WARNSCHILD	0	RZ 3	57.88.4473	47k	RZ 8 * 47 K , 2%, SIP 9			
0	C 6	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	D 36	50.04.0125	1N4448	D 1N 4448, SI		0	MP 7	65.99.0167			POLYURH. KLEBBAND WS, 9* 3	0	RZ 4	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9			
0	C 7	59.34.2101	100p		C 100 P , 5% , N150 , CER	0	D 37	50.04.0125	1N4448	D 1N 4448, SI		0	P 1	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 5	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9			
0	C 8	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	DV 1	50.04.1101	3.9V	D 3.9 V, 5%, .40W, Z,		0	P 2	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 6	57.88.4102	1k	RZ 8 * 1 K , 2%, SIP 9			
0	C 9	59.26.2229	2u2		C 22.2 U , 20% , 16V , SAL	0	DV 2	50.04.1511	6.2V	D 6.2 V, 5%, 1.0W, Z,		0	P 3	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 7	57.88.4473	47k	RZ 8 * 47 K , 2%, SIP 9			
0	C 10	59.06.0222	2n2		C 220 P , 10% , 63V , PETP						0	P 101	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	RZ 8	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9				
0	C 11	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 1	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A		0	P 102	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	RZ 9	57.88.2101	R 4 * 100	R 4 * 100 , 2%, SIP 8			
0	C 12	59.26.2229	2u2		C 2.2 U , 20% , 16V , SAL	0	IC 2	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A		0	P 103	54.02.0320	1-P		P FLACH, 2.8*0.8, GERADE	0	RZ 10	57.88.2101	R 4 * 100	R 4 * 100 , 2%, SIP 8			
0	C 13	59.34.2101	100p		C 100 P , 5% , N150 , CER	0	IC 3	50.17.1574	74HC574	IC ... 74 HC 574 .. ,A		0	P 104	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	RZ 11	57.88.2101	R 4 * 100	R 4 * 100 , 2%, SIP 8			
0	C 14	59.06.0104	100n		C .1 U , 10%, 63V , PETP	0	IC 4	50.17.1573	74HC573	IC ... 74 HC 573 .. ,A		0	P 105	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	RZ 12	57.88.4104	100k	RZ 8 * 100 K , 2%, SIP 9			
0	C 15	59.34.2330	33p		C .33 P , 5% , N150 , CER	0	IC 5	50.17.1573	74HC573	IC ... 74 HC 573 .. ,A		0	P 106	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	RZ 13	57.88.4103	10k	RZ 8 * 10 K , 2%, SIP 9			
0	C 16	59.30.6109	1u		C 1 U , 20% , 35V , TA	0	IC 6	50.17.1573	74HC573	IC ... 74 HC 573 .. ,A		0	P 107	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4								
0	C 17	59.34.4221	220p		C 220 P , 5% , N750 , CER	0	IC 7	50.17.1573	74HC573	IC ... 74 HC 573 .. ,A		0	P 108	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	XIC 10	53.03.0166	XIC DIL 8-POL				
0	C 18	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 8	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A		0	P 109	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	XIC 11	53.03.0173	XIC DIL 28-POL				
0	C 19	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 9	50.09.0119	TL062	IC TL 062 ACP ,A		0	P 110	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	XIC 12	53.03.0168	XIC DIL 16-POL				
0	C 20	59.34.2330	33p		C .33 P , 5% , N150 , CER	0	IC 10	50.09.0119	TL062	IC TL 062 ACP ,A		0	P 111	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	XIC 13	53.03.0175	XIC DIL 18-POL				
0	C 21	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 11	50.14.0155	27C64	IC NMC 27 C 64 Q 200 ,A (SW. 1.990.993.30)		0	P 112	54.01.0020	1-P		P STIFT .63*63, H=5.8/3.4	0	XIC 17	53.03.0166	XIC DIL 8-POL				
0	C 22	59.30.4339	3u3		C 3.3 U , 20% , 16V , TA	0	IC 12	50.07.0051	4051	IC ... 4051 .. ,A		0	P 113	54.02.0320	1-P		P FLACH, 2.8*0.8, GERADE	0	XIC 18	53.03.2268	XIC PLCC 68 PIN				
0	C 23	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 13	50.19.0102	AD7541A	IC AD 7541 JN, MP 7523 JN ,A		0	Q 1	50.03.0407			BC550C	Q BC 550 C,				0	XIC 31	53.03.0168	XIC DIL 16-POL
0	C 25	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 14	50.11.0157	TL7705B	IC TL 7705 BCP,		0	Q 2	50.03.1505			VN0808M	Q VN 0808 M, ZVN 0108 A, ,A				0	Y 1	89.01.1008	8.000MHz Y 8.000 MHz, HC 18/U
0	C 26	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 15	50.10.0108	LM317L	IC LM 317 LZ,		0	Q 3	50.03.1554			VP0808M	Q VP 0808 M ,A							
0	C 27	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 16	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0	R 1	57.11.3104	100k		R 100 K , 1%, 0207 , MF								
0	C 28	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0	IC 17	50.09.0119	TL062	IC TL 062 ACP ,A		0	R 2	57.11.3103	10k		R 10 K , 1%, 0207 , MF								
0	C 29	59.22.5470	47u		C 47 U , 20% , 25V , EL	0	IC 18	50.63.0003	80C196	IC N 80C 196 KB - 12 ,A		0	R 3	57.11.3103	10k		R 10 K , 1%, 0207 , MF								
0	C 30	59.22.5470	47u		C 47 U , 20% , 25V , EL	0	IC 19	50.17.7244	ACT244	IC ... 74 ACT 244 .. ,A		0	R 4	57.11.5475	4M7		R 4.7 M , 5% , 0207 , MF								
0	C 31	59.06.0683	68n		C .068 U , 10%, 63V , PETP	0																			

Serdat Master Interface 1.990.496.00



Serdat Master Interface 1.990.496.00

Serdat Master Interface 1.990.496.00

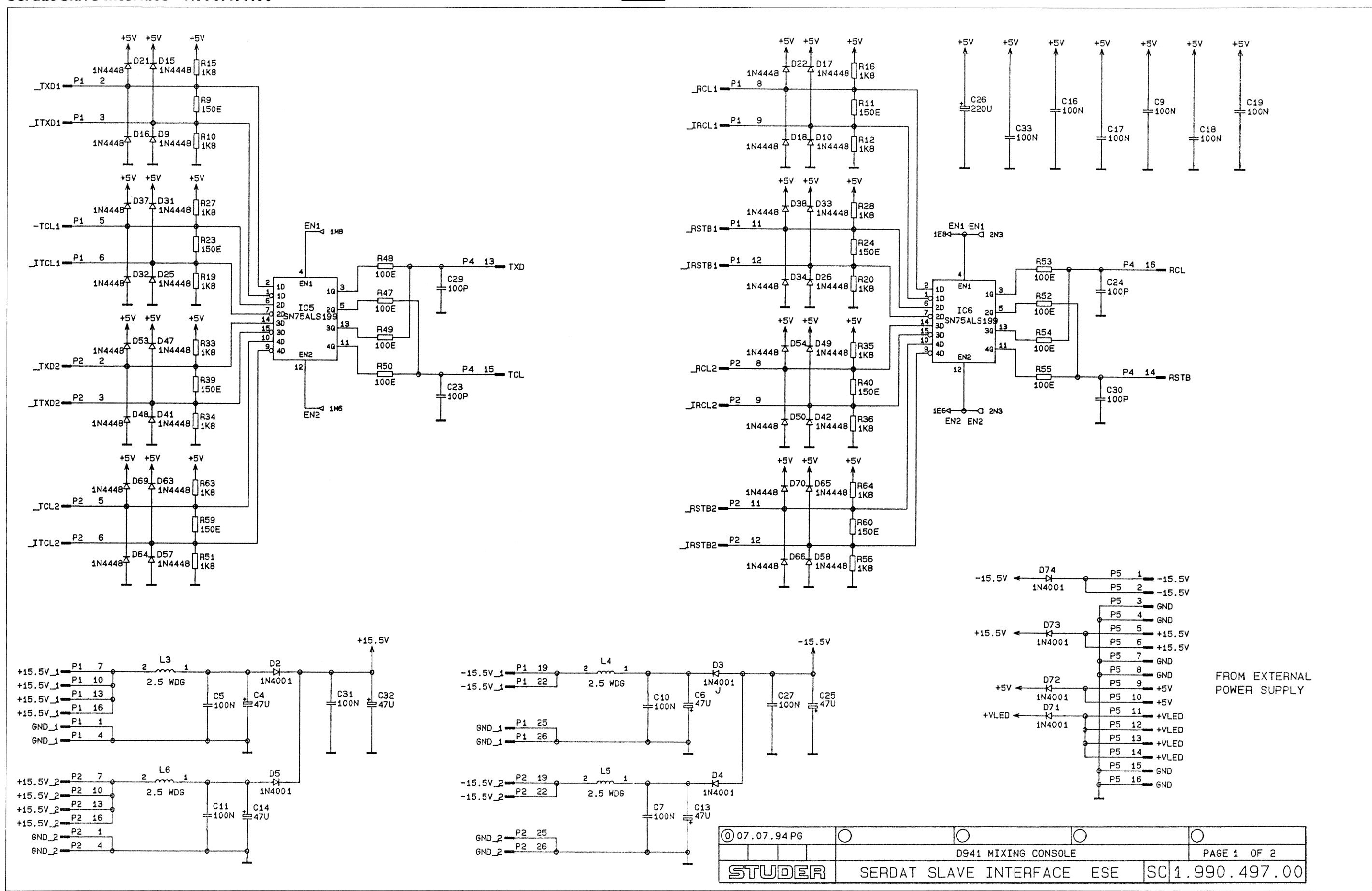


Serdat Master Interface 1.990.496.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 10%, 63V		0	R 19	57.11.3182	1k8	MF, 1%, 0207	
0	C 2	. . . . 0				0	R 20	57.11.3182	1k8	MF, 1%, 0207	
0	C 3	. . . . 0				0	R 21	57.11.3102	1k0	MF, 1%, 0207	
0	C 4	. . . . 0				0	R 22	57.11.3182	1k8	MF, 1%, 0207	
0	C 5	. . . . 0				0	R 23	57.11.3151	150R	MF, 1%, 0207	
0	C 6	. . . . 0				0	R 24	57.11.3151	150R	MF, 1%, 0207	
0	C 7	. . . . 0				0	R 25	57.11.3182	1k8	MF, 1%, 0207	
0	C 8	59.22.4221	220u	EL 16V, 20%, rad RM5		0	R 26	57.11.3182	1k8	MF, 1%, 0207	
0	C 9	59.06.0104	100n	PETP, 10%, 63V		0	R 27	57.11.3151	150R	MF, 1%, 0207	
0	C 10	59.06.0104	100n	PETP, 10%, 63V		0	R 28	57.11.3151	150R	MF, 1%, 0207	
0	C 11	59.06.0104	100n	PETP, 10%, 63V		0	R 29	57.11.3182	1k8	MF, 1%, 0207	
0	C 12	59.22.4221	220u	EL 16V, 20%, rad RM5		0	R 30	57.11.3000	0R0	MF, 0207	
0	C 13	. . . . 0				0	R 31	57.11.3000	0R0	MF, 0207	
0	C 14	. . . . 0				0	R 32	57.11.3000	0R0	MF, 0207	
0	C 15	. . . . 0				0	R 33	57.11.3000	0R0	MF, 0207	
0	C 16	. . . . 0				0	S 1	55.01.0168	8*a	SZ , 8*A, DIL	
0	C 17	. . . . 0				0	XIC 1	53.03.0168	16p	DIL 0 3", löt, gerade	
0	C 18	. . . . 0				0	XIC 2	53.03.0168	16p	DIL 0 3", löt, gerade	
0	C 19	59.22.4221	220u	EL 16V, 20%, rad RM5		0	XIC 3	53.03.0168	16p	DIL 0 3", löt, gerade	
0	C 20	. . . . 0				0	XIC 4	53.03.0168	16p	DIL 0 3", löt, gerade	
0	C 21	. . . . 0									End of List
0	C 22	59.06.0104	100n	PETP, 10%, 63V							Comments:
0	C 23	. . . . 0									
0	C 24	. . . . 0									
0	C 25	59.06.0104	100n	PETP, 10%, 63V							
0	D 1	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 2	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 3	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 4	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 5	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 6	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 10	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 11	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 12	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 13	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 14	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 15	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 16	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	IC 1	50.15.0121	75174	IC SN 75174 N							
0	IC 2	50.15.0121	75174	IC SN 75174 N							
0	IC 3	50.15.0121	75174	IC SN 75174 N							
0	IC 4	50.15.0125	SN75ALS199	IC SN 75 ALS 199 N							
0	J 1	54.11.2038		J EU-QK 2 * 16							
0	J 2	54.11.2038		J EU-QK 2 * 16							
0	J 3	54.11.2038		J EU-QK 2 * 16							
0	J 4	54.25.0005	5p	J BUCHSE 5 POL 12 A AMP							
0	MP 1	1.990.496.11	1 mp	SERDAT MASTER IF PCB /V							
0	MP 2	1.990.496.04	1 mp	NR.-ETIKETTE 5 * 20							
0	MP 3	28.99.0119	6 mp	ROHRNIETE D 2.5*0.15* 9							
0	P 1	54.14.2104	26p	P STECKER 26 P,AU,VR,GERADE							
0	P 2	54.14.2104	26p	P STECKER 26 P,AU,VR,GERADE							
0	P 3	54.14.2105	34p	P STECKER 34 P,AU,VR,GERADE							
0	P 4	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE							
0	P 5	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	P 6	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	P 7	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	P 8	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	P 9	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	P 10	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE							
0	R 1	57.11.3102	1k0	MF, 1%, 0207							
0	R 2	57.11.3102	1k0	MF, 1%, 0207							
0	R 3	57.11.3102	1k0	MF, 1%, 0207							
0	R 4	57.92.7013	0.5A	POLY-PTC, 60V							
0	R 5	57.11.3102	1k0	MF, 1%, 0207							
0	R 6	57.11.3102	1k0	MF, 1%, 0207							
0	R 7	57.11.3102	1k0	MF, 1%, 0207							
0	R 8	57.11.3102	1k0	MF, 1%, 0207							
0	R 9	57.11.3102	1k0	MF, 1%, 0207							
0	R 10	57.11.3102	1k0	MF, 1%, 0207							
0	R 11	57.11.3102	1k0	MF, 1%, 0207							
0	R 12	57.11.3102	1k0	MF, 1%, 0207							
0	R 13	57.11.3102	1k0	MF, 1%, 0207							
0	R 14	57.11.3102	1k0	MF, 1%, 0207							
0	R 15	57.11.3182	1k8	MF, 1%, 0207							
0	R 16	57.11.3182	1k8	MF, 1%, 0207							
0	R 17	57.11.3102	1k0	MF, 1%, 0207							
0	R 18	57.11.3102	1k0	MF, 1%, 0207							

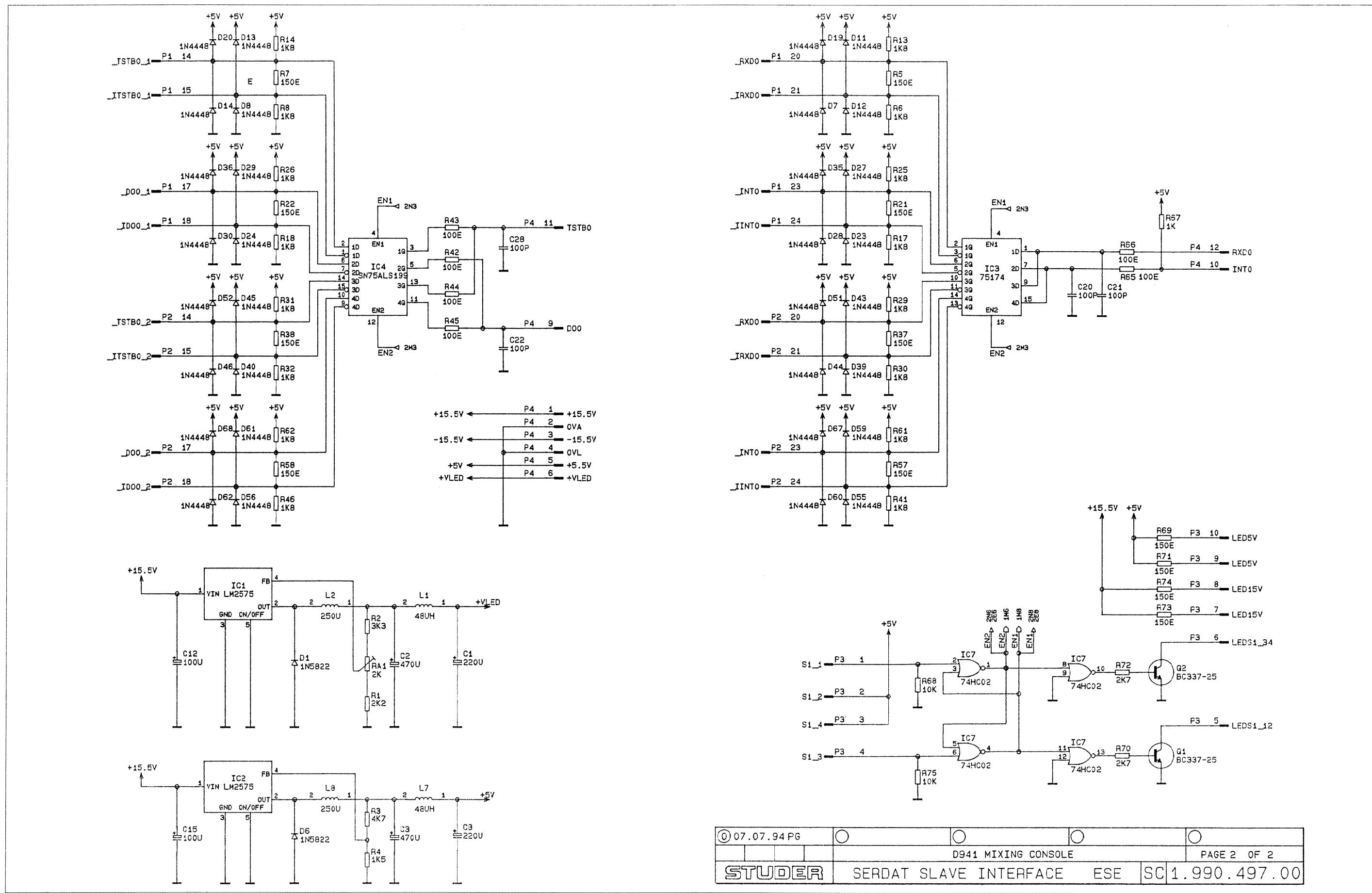


Serdat Slave Interface 1.990.497.00



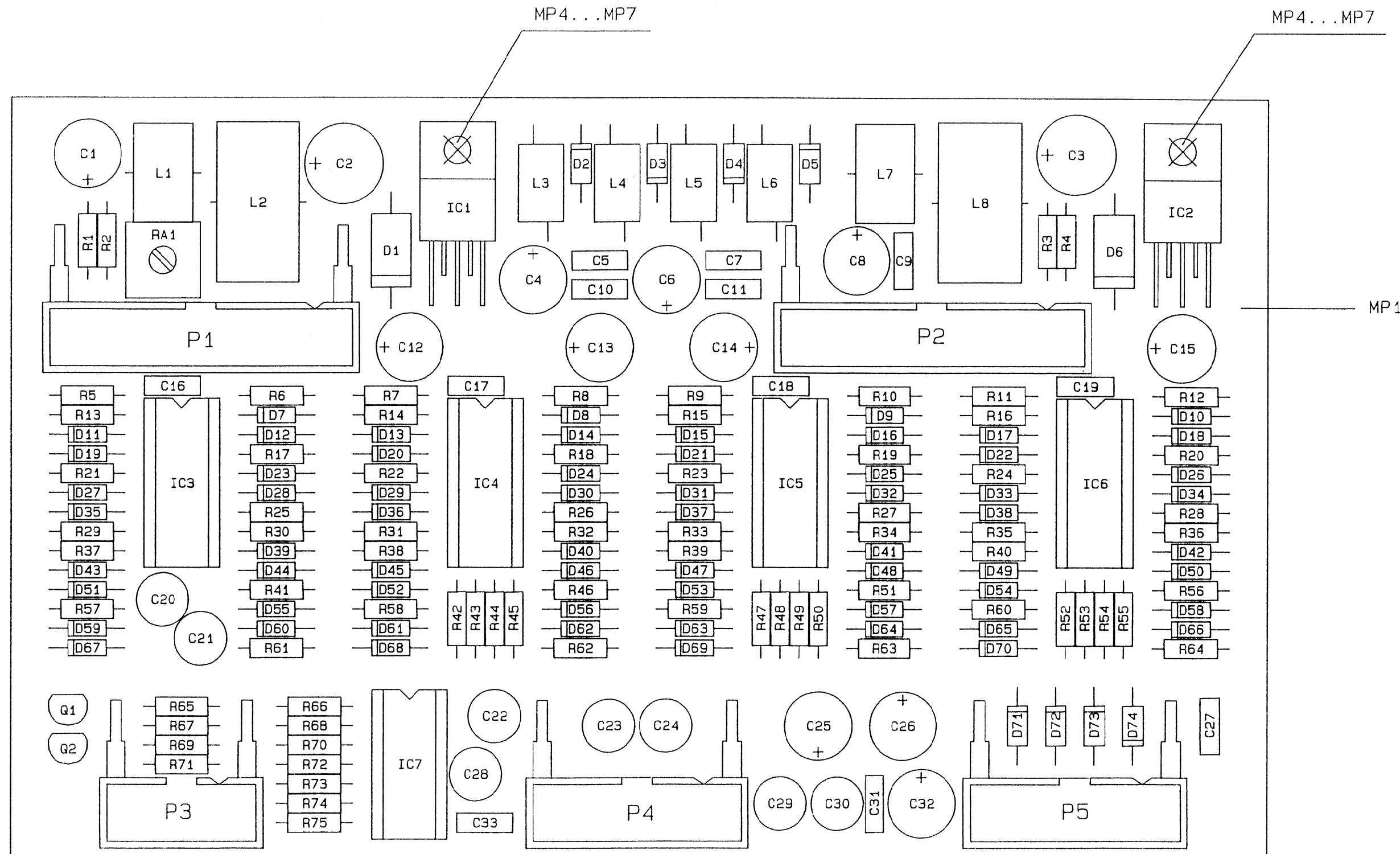


Serdat Slave Interface 1.990.497.00

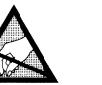




Serdat Slave Interface 1.990.497.00



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	07.07.94	BBT	<i>10/50</i>
IND	DATUM	GEZ.	GEPR.
BLATT 1 VON 1			



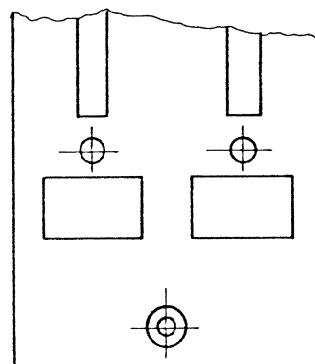
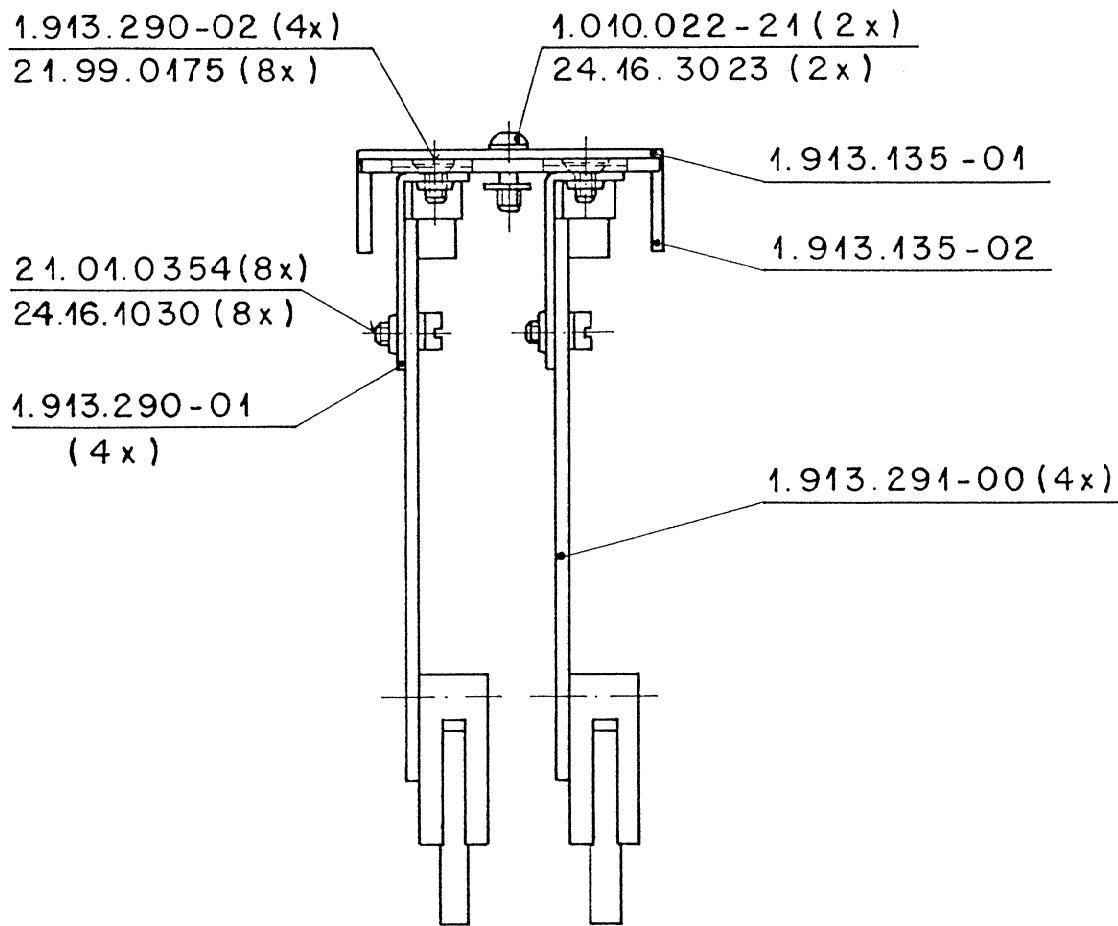
Serdat Slave Interface 1.990.497.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.3221	220u	EL 10V, 20%, RM5		0	D 53	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 30	57.11.3182	1k8	MF, 1%, 0207	
0	C 2	59.22.4471	470u	EL 16V, 20%, RM5		0	D 54	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 31	57.11.3182	1k8	MF, 1%, 0207	
0	C 3	59.22.4471	470u	EL 16V, 20%, RM5		0	D 55	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 32	57.11.3182	1k8	MF, 1%, 0207	
0	C 4	59.22.6470	47u	EL 40V, 20%, RM5		0	D 56	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 33	57.11.3182	1k8	MF, 1%, 0207	
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 57	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 34	57.11.3182	1k8	MF, 1%, 0207	
0	C 6	59.22.6470	47u	EL 40V, 20%, RM5		0	D 58	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 35	57.11.3182	1k8	MF, 1%, 0207	
0	C 7	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 59	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 36	57.11.3182	1k8	MF, 1%, 0207	
0	C 8	59.22.3221	220u	EL 10V, 20%, RM5		0	D 60	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 37	not used			
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 61	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 38	57.11.3151	150R	MF, 1%, 0207	
0	C 10	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 62	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 39	57.11.3151	150R	MF, 1%, 0207	
0	C 11	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 63	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 40	57.11.3151	150R	MF, 1%, 0207	
0	C 12	59.22.5101	100u	EL 25V, 20%, RM5		0	D 64	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 41	57.11.3182	1k8	MF, 1%, 0207	
0	C 13	59.22.6470	47u	EL 40V, 20%, RM5		0	D 65	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	C 14	59.22.6470	47u	EL 40V, 20%, RM5		0	D 66	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	C 15	59.22.5101	100u	EL 25V, 20%, RM5		0	D 67	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	C 16	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 68	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 45	57.11.3101	100R	MF, 1%, 0207	
0	C 17	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 69	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 46	57.11.3182	1k8	MF, 1%, 0207	
0	C 18	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 70	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 47	57.11.3101	100R	MF, 1%, 0207	
0	C 19	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	D 71	50.04.0122	1N4001	1A, DO 41		0	R 48	57.11.3101	100R	MF, 1%, 0207	
0	C 20	not used				0	D 72	50.04.0122	1N4001	1A, DO 41		0	R 49	57.11.3101	100R	MF, 1%, 0207	
0	C 21	not used				0	D 73	50.04.0122	1N4001	1A, DO 41		0	R 50	57.11.3101	100R	MF, 1%, 0207	
0	C 22	not used				0	D 74	50.04.0122	1N4001	1A, DO 41		0	R 51	57.11.3182	1k8	MF, 1%, 0207	
0	C 23	not used										0	R 52	57.11.3101	100R	MF, 1%, 0207	
0	C 24	not used										0	R 53	57.11.3101	100R	MF, 1%, 0207	
0	C 25	59.22.6470	47u	EL 40V, 20%, RM5		0	IC 1	50.10.0121	LM2575HV	5V, 1A Switching Reg		0	R 54	57.11.3101	100R	MF, 1%, 0207	
0	C 26	59.22.3221	220u	EL 10V, 20%, RM5		0	IC 2	50.10.0121	LM2575HV	5V, 1A Switching Reg		0	R 55	57.11.3101	100R	MF, 1%, 0207	
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	IC 3	50.15.0121	75174	IC SN 75174 N		0	R 56	57.11.3182	1k8	MF, 1%, 0207	
0	C 28	not used				0	IC 4	50.15.0125	75ALS199	IC SN 75 ALS 199 N		0	R 57	not used			
0	C 29	not used				0	IC 5	50.15.0125	75ALS199	IC SN 75 ALS 199 N		0	R 58	57.11.3151	150R	MF, 1%, 0207	
0	C 30	not used				0	IC 6	50.15.0125	75ALS199	IC SN 75 ALS 199 N		0	R 59	57.11.3151	150R	MF, 1%, 0207	
0	C 31	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	IC 7	50.17.1002	74HC02	IC ... 74 HC 02 . , A		0	R 60	57.11.3151	150R	MF, 1%, 0207	
0	C 32	59.22.6470	47u	EL 40V, 20%, RM5		0	L 1	62.03.0010	48uH	L 48 U, 2 A, FILTER		0	R 61	57.11.3182	1k8	MF, 1%, 0207	
0	C 33	59.06.0104	100n	PETP, 63V, 10%, RM 5		0	L 2	62.03.0025	250uH	L 250 U, 2 A, FILTER		0	R 62	57.11.3182	1k8	MF, 1%, 0207	
0	D 1	50.04.0519	1N5822	3A, Schottky		0	L 3	62.01.0115	2.5Wdg	L BREITBAND-		0	R 63	57.11.3182	1k8	MF, 1%, 0207	
0	D 2	50.04.0122	1N4001	1A, DO 41		0	L 4	62.01.0115	2.5Wdg	L BREITBAND-		0	R 64	57.11.3182	1k8	MF, 1%, 0207	
0	D 3	50.04.0122	1N4001	1A, DO 41		0	L 5	62.01.0115	2.5Wdg	L BREITBAND-		0	R 65	57.11.3101	100R	MF, 1%, 0207	
0	D 4	50.04.0122	1N4001	1A, DO 41		0	L 6	62.03.0010	48uH	L 48 U, 2 A, FILTER		0	R 66	57.11.3101	100R	MF, 1%, 0207	
0	D 5	50.04.0122	1N4001	1A, DO 41		0	L 7	62.03.0025	250uH	L 250 U, 2 A, FILTER		0	R 67	57.11.3102	1k0	MF, 1%, 0207	
0	D 6	50.04.0519	1N5822	3A, Schottky		0	L 8	62.01.0115	2.5Wdg	L BREITBAND-		0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 1	1.990.497.11 1 pce	SERDAT SLAVE IF PCB	/A		0	R 69	57.11.3151	150R	MF, 1%, 0207	
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 2	1.990.497.04 1 pce	NR.-ETIKETTE 5 * 20			0	R 70	57.11.3272	2k7	MF, 1%, 0207	
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 3	43.01.0108 1 pce	Label	ESE-WARNSCHILD		0	R 71	57.11.3151	150R	MF, 1%, 0207	
0	D 10	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0											

SCHEMATA / CIRCUIT DIAGRAMS

Meter Panel Units

Aux Indicator 4xLED	1.913.135.00
LED PPM Meter	1.913.291.00
PFL Amplifier	1.913.200.00
PFL Amplifier with Vol. + Headphone-Jack	1.913.202.00

Aux Indicator 4x LED 1.913.135.00

Anmerkung							(3)
Anmerkung							(2)
Anmerkung							(1)
14.2.90	✓	✓	✓	✓	✓	✓	✓
Datum							
Gez.							
Gepr.							
Ges.							
Index							
Kopie für							
Nummer							

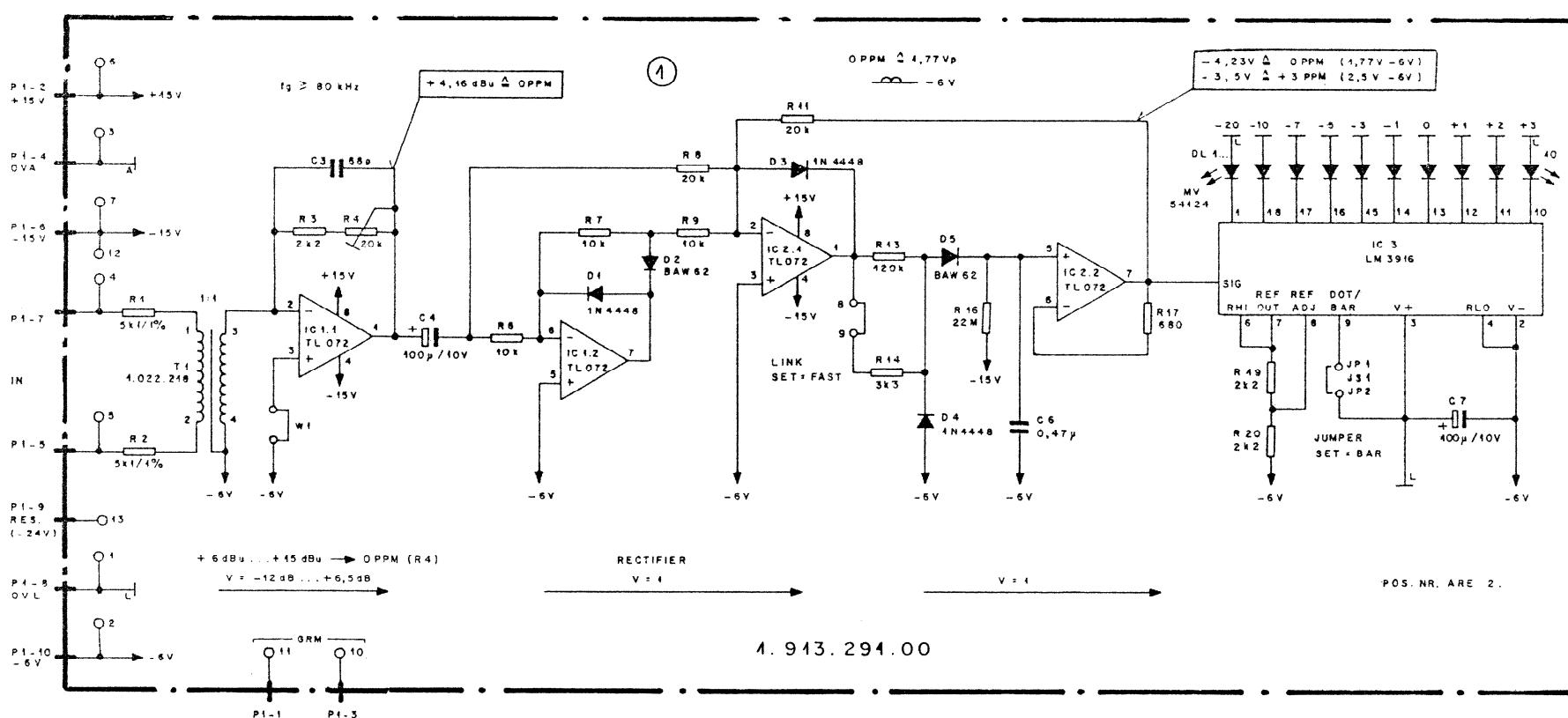
STUDER
REGENSDORF
ZURICH

Betreuung
AUX INDICATOR 4x LED

Nummer 1.913.135-00

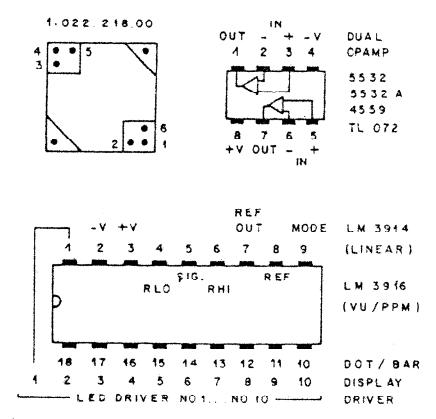
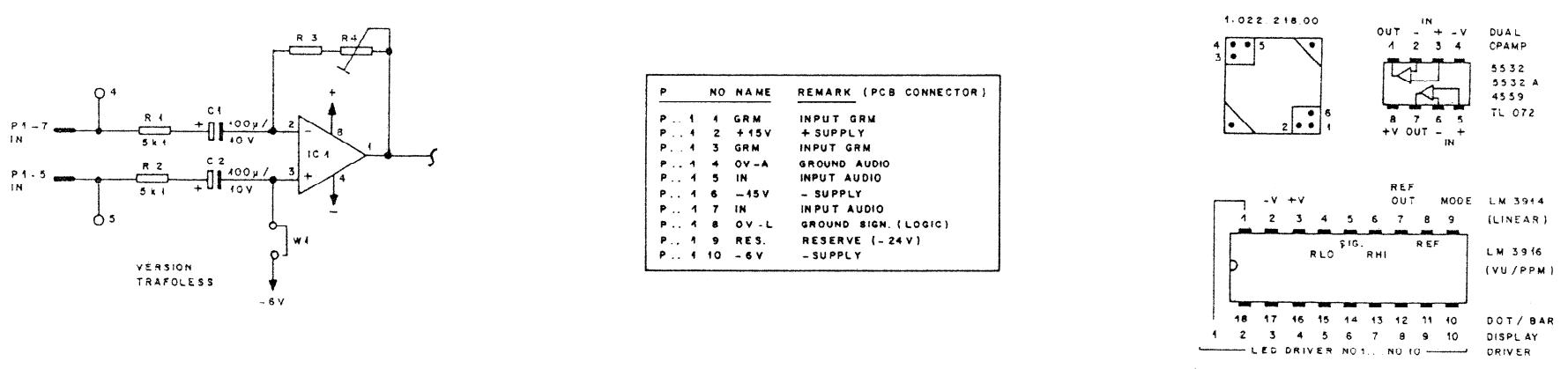
Aux Indicator 4x LED I.913.135.00

SECTION 6

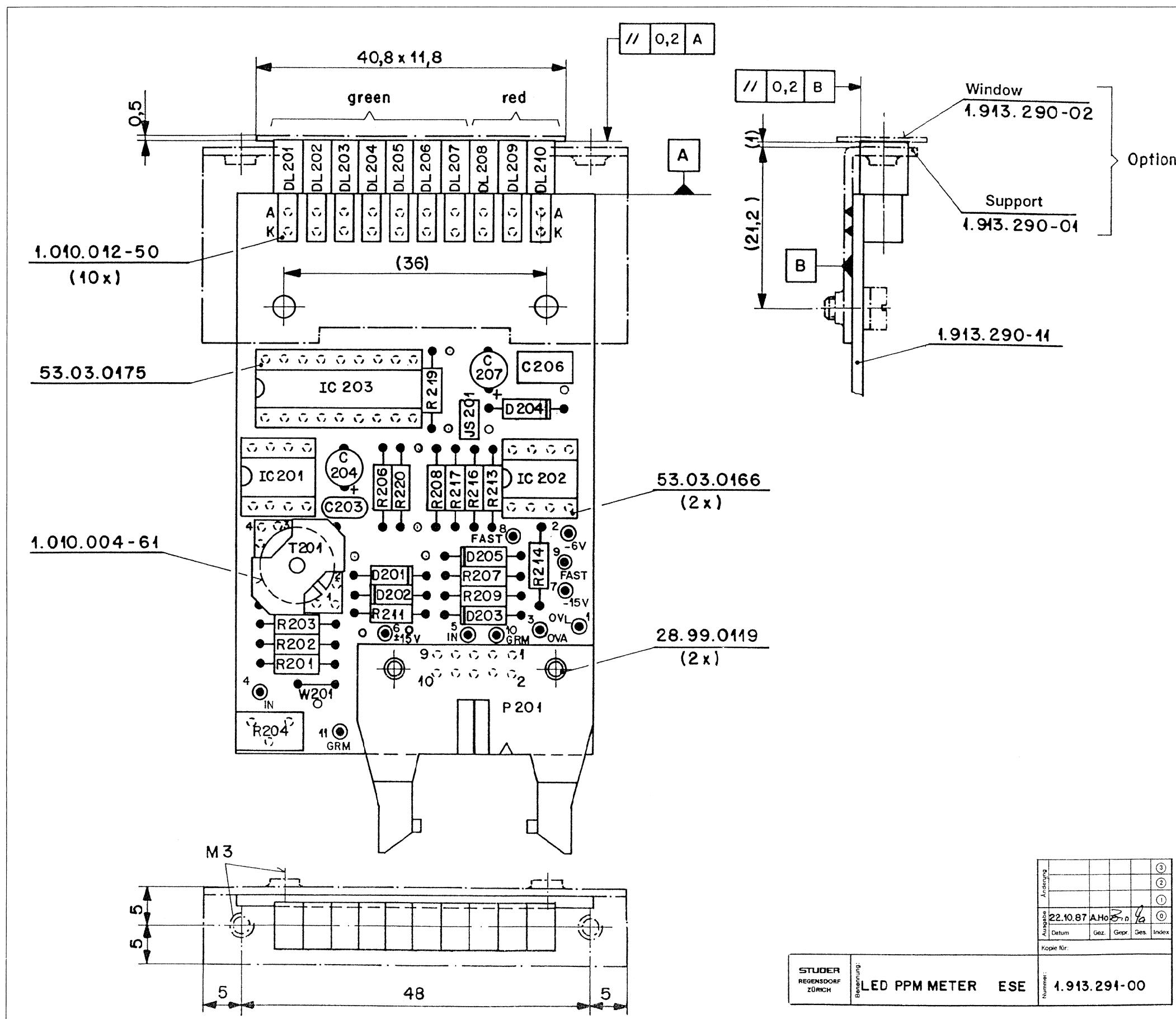


(2)

(3)



LED PPM Meter 1.913.291.00

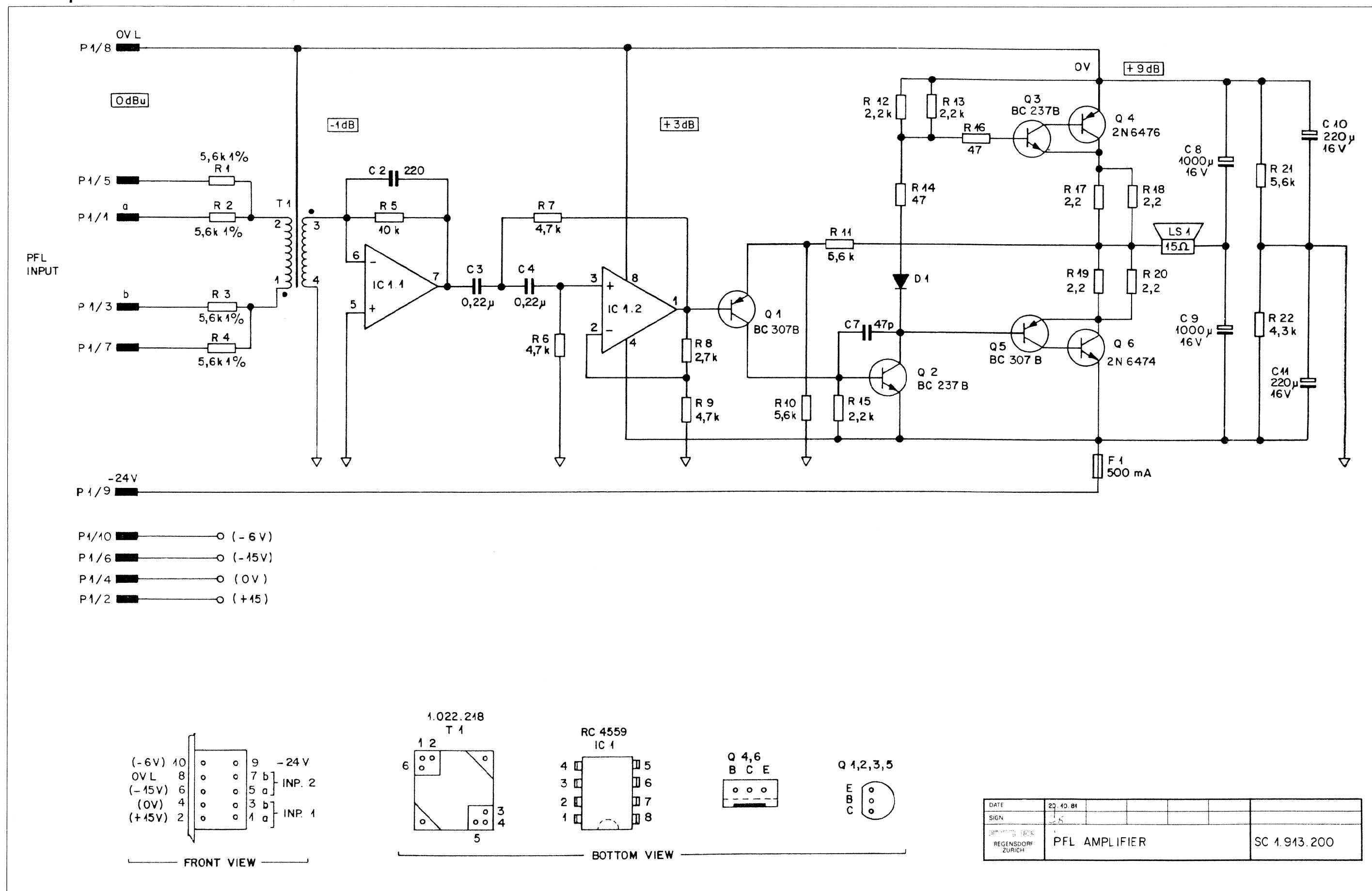


Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
C	C 201		not used	not used	not used
C	C 202		not used	not used	not used
C	C 203	59.34.2680	68p	CER 63V, 5%, N150	
C	C 204	59.22.3101	100u	EL 10V, 20%, RM5	
C	C 205		not used	not used	not used
C	C 206	59.06.5474	470n	PETP, 63V, 5%, RM5	
C	C 207	59.22.3101	100u	EL 10V, 20%, RM5	
C	D 201	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	
C	D 202	50.04.0132	BAW62	D BAW 62	
1	D 203	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	
1	D 204	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	
1	D 205	50.04.0132	BAW62	D BAW 62	
C	D 206	not used	not used	not used	not used
C	DL 201	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 202	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 203	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 204	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 205	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 206	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 207	50.04.2146	MV54124A	DL MV 54124 A,	GN
C	DL 208	50.04.2119	MV57124A	DL MV 57124 A,	RT
C	DL 209	50.04.2119	MV57124A	DL MV 57124 A,	RT
C	DL 210	50.04.2119	MV57124A	DL MV 57124 A,	RT
C	IC 201	50.09.0101	TL072	IC TL 072 CN	.A
C	IC 202	50.09.0101	TL072	IC TL 072 CN	.A
C	IC 203	50.11.0144		IC LM 3916 N	
C	JP 201	54.01.0020	1p	Pin 0.63*0.63	
C	JP 202	54.01.0020	1p	Pin 0.63*0.63	
C	JS 201	54.01.0021	Jumper	0.63 * 0.53mm	
C	MP 201	1913.290.11	1 pce	LED METER PCB	
C	MP 202	1.010.012.50	10 pcs	DIODENHALTER	
C	MP 203	28.99.0119	2 pcs	ROHRNIETE D 2.5*0.15* 9	
C	MP 204	not used	not used	not used	
O	MP 205	53.03.0166	2 pcs	8p DIL 0.3", lot. gerade	
O	MP 206	53.03.0175	1 pce	18p DIL 0.3", lot. gerade	
O	MP 207	54.02.0471	11 pics	P STIFT D 1.5 * 5.5 LOET	
O	MP 208	1.010.004.61	1 pce	PSP-UNTERLAGE ZU SCHKE. R 5	
O	P 201	54.14.2011		P STECKER 10 P. AU, WINDEL	
O	R 201	57.11.3512	5k1	MF, 1%, 0207	
O	R 202	57.11.3512	5k1	MF, 1%, 0207	
O	R 203	57.11.4222		R 2.2 K , 2%, 0207 , MF	
O	R 204	58.01.9203	20k	Cermet, 10%, 0.5W, vertical	
O	R 205	not used	not used	not used	
O	R 206	57.11.4103		replaced by W 201	
O	R 207	57.11.4103		R 10 K , 2%, 0207 , MF	
O	R 208	57.11.3203	20k	R 10 K , 2%, 0207 , MF	
O	R 209	57.11.4103		R 10 K , 2%, 0207 , MF	
O	R 210	not used	not used	not used	
O	R 211	57.11.3203	20k	MF, 1%, 0207	
O	R 212	not used	not used	not used	
O	R 213	57.11.4823		replaced by D 203	
O	R 214	57.11.4332		R 82 K , 2%, 0207 , MF	
O	R 215	not used	not used	R 3.3 K , 2%, 0207 , MF	
O	R 216	57.11.6226	22M	not used	
O	R 217	57.11.4681		replaced by D 205	
O	R 218	not used	not used	MF, 10%, 0207	
O	R 219	57.11.4222		R 680 , 2%, 0207 , MF	
O	R 220	57.11.4222		R 2.2 K , 2%, 0207 , MF	
O	R 221	not used	not used	R 2.2 K , 2%, 0207 , MF	
O	T 201	1.022.218.00		EINGANGSTRAFO 1 : 1	
O	W 201	1.010.321.64	Wire	DRAHTBRUECKE U, 4.3*5.0, 0.6	

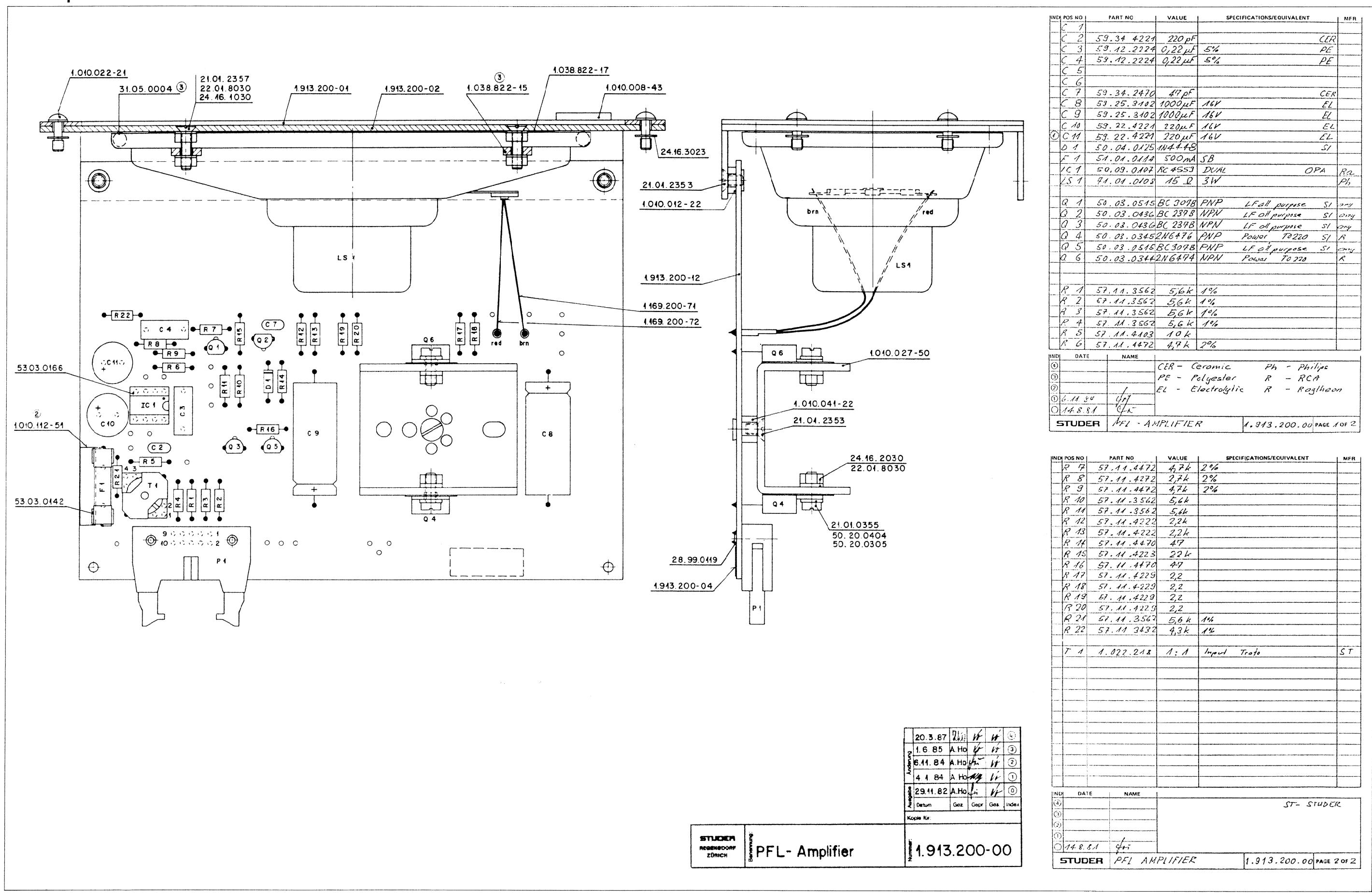
Comments

— End of List —

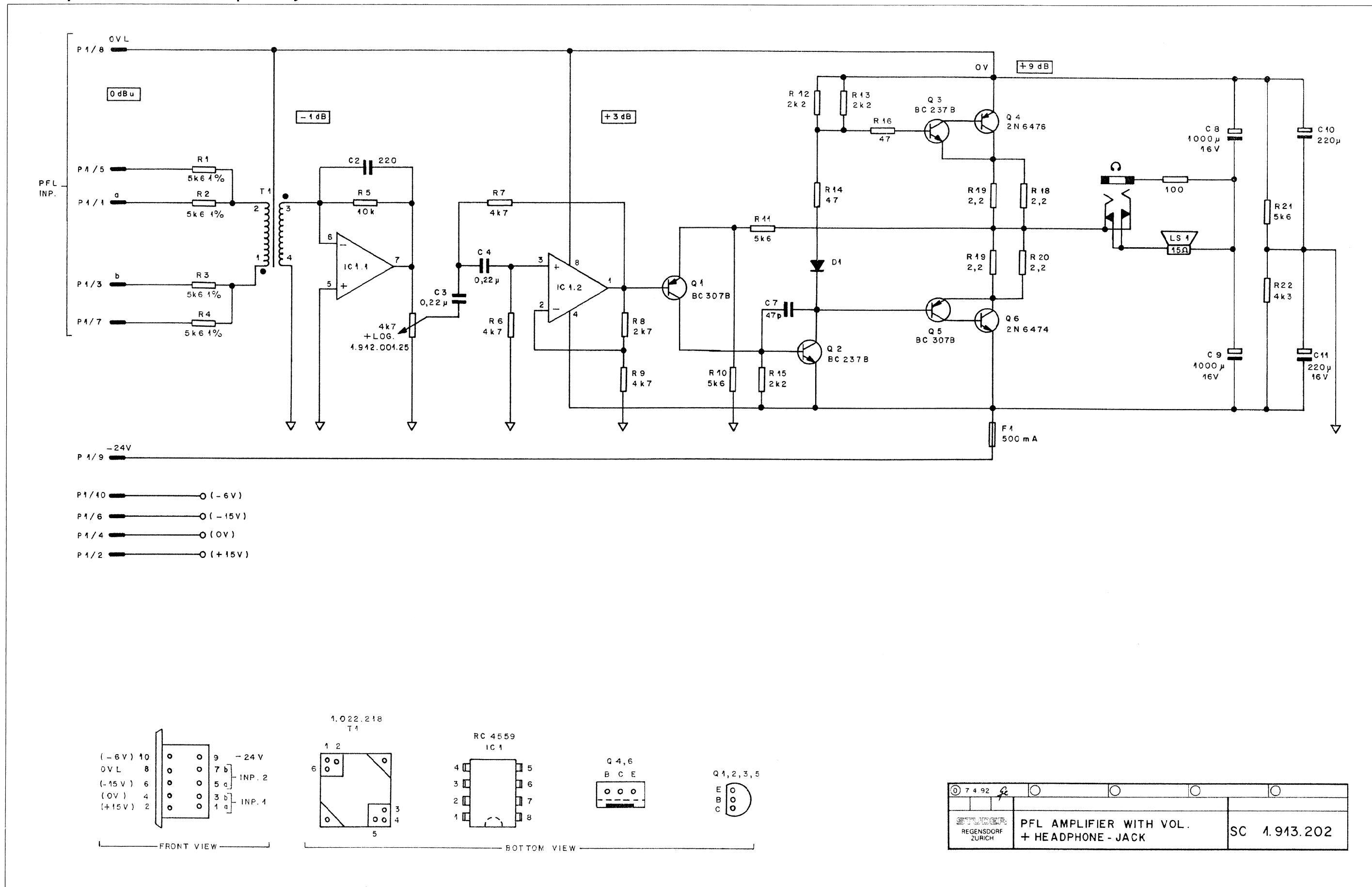
PFL Amplifier 1.913.200.00



PFL Amplifier 1.913.200.00



PFL Amplifier with Vol. + Headphone - Jack 1.913.202.00

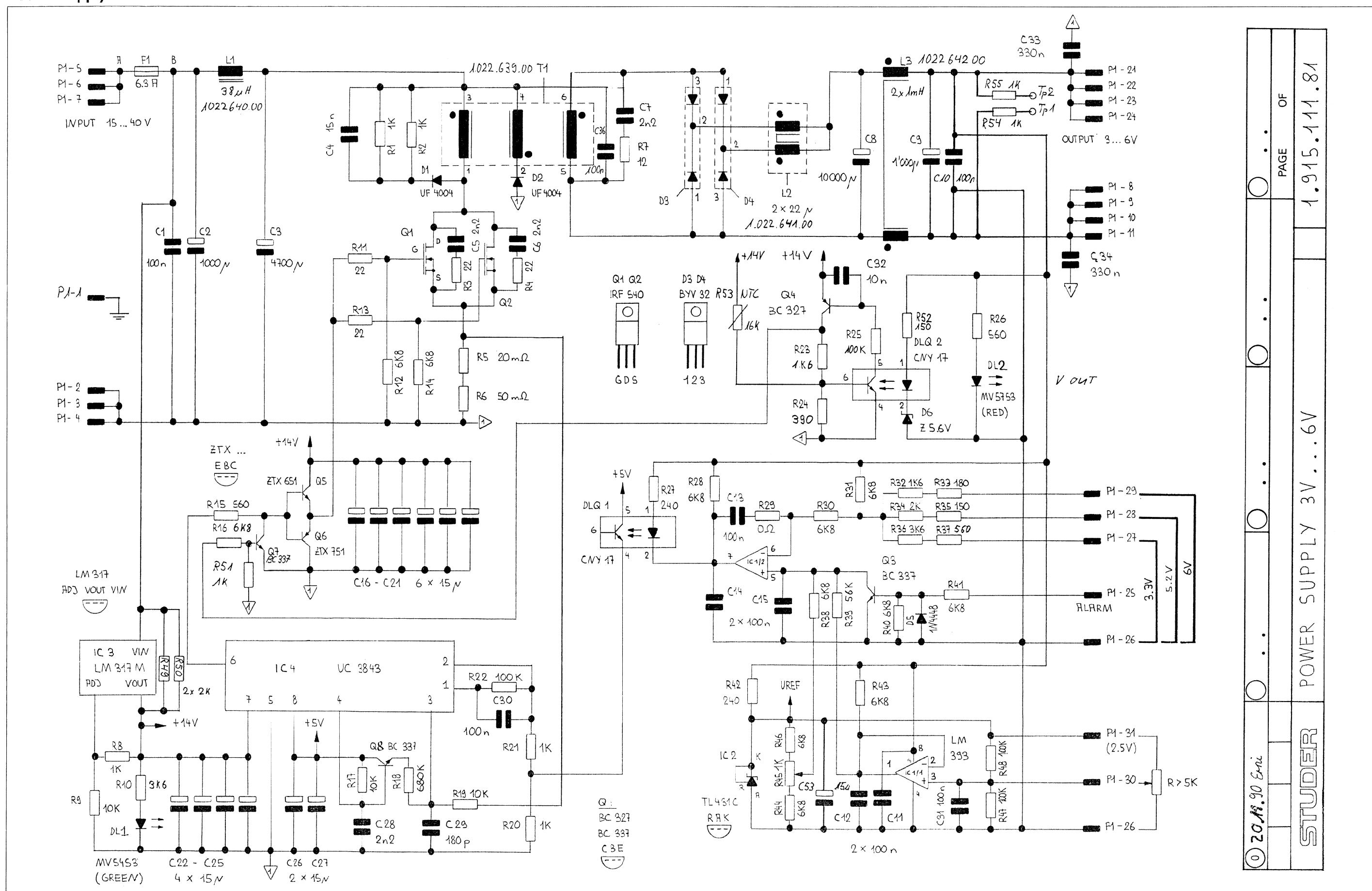


SCHEMATA / CIRCUIT DIAGRAMS**Units of Eurocard Frame**

Power Supply 3V...6V	1.915.111.81
4 Balancing Amplifier Gain 6 dB	1.915.914.00
CR + Studio Monitor Mix Amplifier	1.917.300.00
CR/Studio Monitor Amplifier	1.917.310.00
Subcard for CR/Studio Monitor	1.917.311.00
CR/Studio Monitor Amplifier/Out	1.917.312.00
Talk Back Amplifier	1.917.320.00
PFL/Talk Back Headphone Amplifier	1.917.330.81
Subcard for PFL Talk Back Headphone	1.917.331.00
Monitor Relays Unit 8x2/2	1.917.601.00
Signal Input/Output Interface	1.917.611.00
Power Supply 5V/20A	1.940.601.00
Power Supply ±15V/3.4A	1.940.602.00
Power Supply 24V/4.2A	1.940.603.00

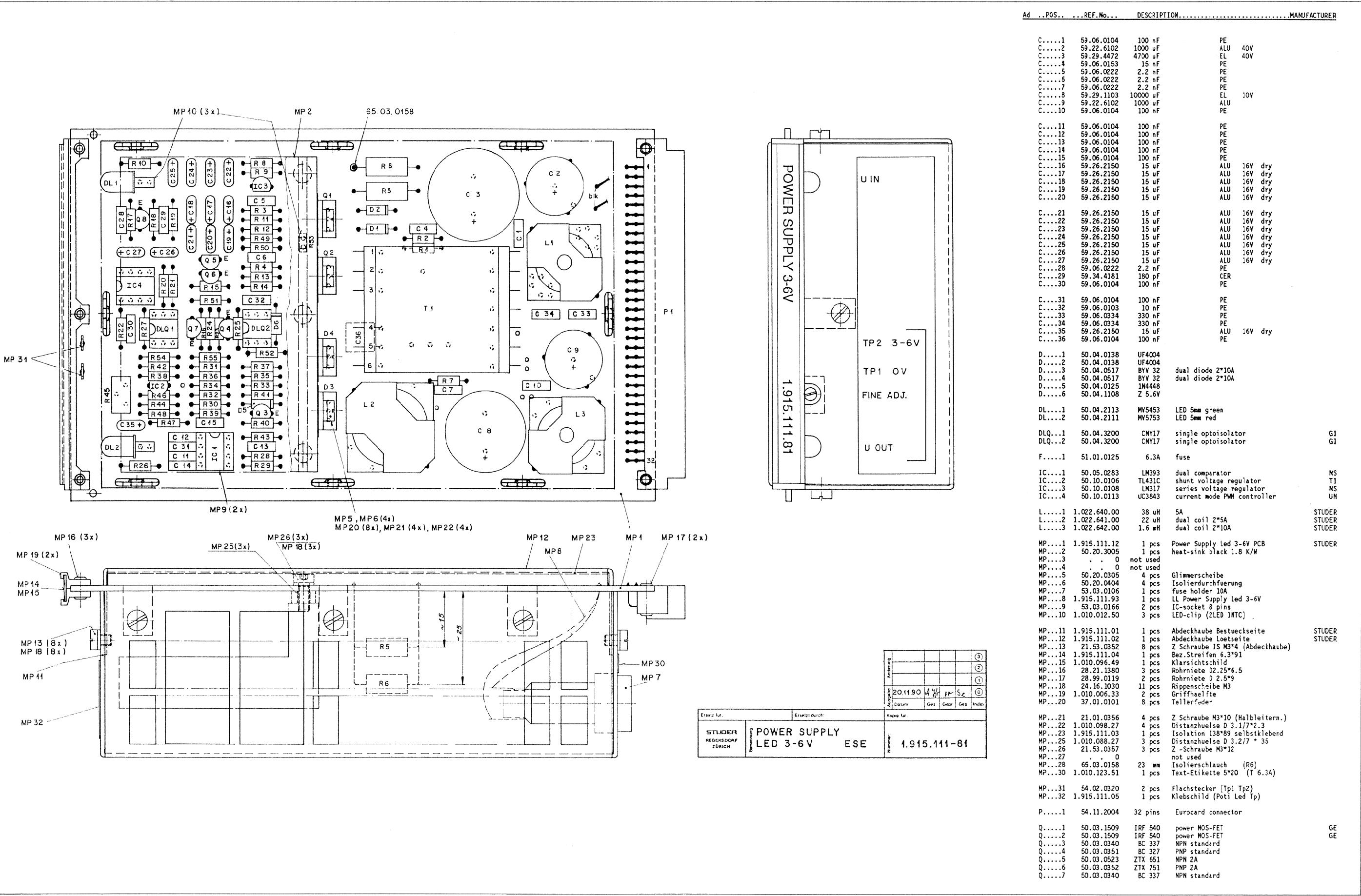


Power Supply 3V...6V 1.915.111.81





Power Supply 3V...6V 1.915.111.81





Power Supply 3V...6V 1.915.111.81

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
		50.03.0340	BC 337	NPN standard
Q.....8		57.11.3102	1 kOhm	
R.....1		57.11.3102	1 kOhm	
R....-2		57.11.3102	1 kOhm	
R....-3		57.11.3220	22 Ohm	
R....-4		57.11.3220	22 Ohm	
R....-5		57.56.2020	20 mOhm	3W small L (10nH)
R....-6		57.56.2050	50 mOhm	3W small L (10nH)
R....-7		57.11.3120	12 Ohm	
R....-8		57.11.3102	1 kOhm	5%
R....-9		57.11.3103	10 kOhm	5%
R....-10		57.11.3362	3.6 kOhm	
R....-11		57.11.3220	22 Ohm	
R....-12		57.11.3682	6.8 kOhm	
R....-13		57.11.3220	22 Ohm	
R....-14		57.11.3682	6.8 kOhm	
R....-15		57.11.3561	560 Ohm	
R....-16		57.11.3682	6.8 kOhm	
R....-17		57.11.3103	10 kOhm	5%
R....-18		57.11.3684	680 kOhm	5%
R....-19		57.11.3103	10 kOhm	
R....-20		57.11.3102	1 kOhm	
R....-21		57.11.3102	1 kOhm	
R....-22		57.11.3104	100 kOhm	
R....-23		57.11.3162	1.6 kOhm	
R....-24		57.11.3391	390 Ohm	
R....-25		57.11.3104	100 kOhm	
R....-26		57.11.3561	560 Ohm	
R....-27		57.11.3241	240 Ohm	
R....-28		57.11.3682	6.8 kOhm	
R....-29		57.11.3000	0 Ohm	
R....-30		57.11.3682	6.8 kOhm	
R....-31		57.11.3682	6.8 kOhm	1%
R....-32		57.11.3162	1.6 kOhm	1%
R....-33		57.11.3181	180 Ohm	1%
R....-34		57.11.3202	2 kOhm	1%
R....-35		57.11.3151	150 Ohm	1%
R....-36		57.11.3362	3.6 kOhm	1%
R....-37		57.11.3561	560 Ohm	1%
R....-38		57.11.3682	6.8 kOhm	1%
R....-39		57.11.3563	56 kOhm	1%
R....-40		57.11.3682	6.8 kOhm	
R....-41		57.11.3682	6.8 kOhm	
R....-42		57.11.3241	240 Ohm	
R....-43		57.11.3682	6.8 kOhm	
R....-44		57.11.3682	6.8 kOhm	1%
R....-45		58.01.9102	1 kOhm	trimmer
R....-46		57.11.3682	6.8 kOhm	1%
R....-47		57.11.3104	100 kOhm	1%
R....-48		57.11.3104	100 kOhm	1%
R....-49		57.11.3202	2 kOhm	
R....-50		57.11.3202	2 kOhm	
R....-51		57.11.3102	1 kOhm	
R....-52		57.11.3151	150 Ohm	
R....-53		57.99.0220	16 kOhm	NTC
R....-54		57.11.3102	1 kOhm	
R....-55		57.11.3102	1 kOhm	

T.....1 1.022.639.00

Schalttrafo Power Supply 3 - 6V STUDER

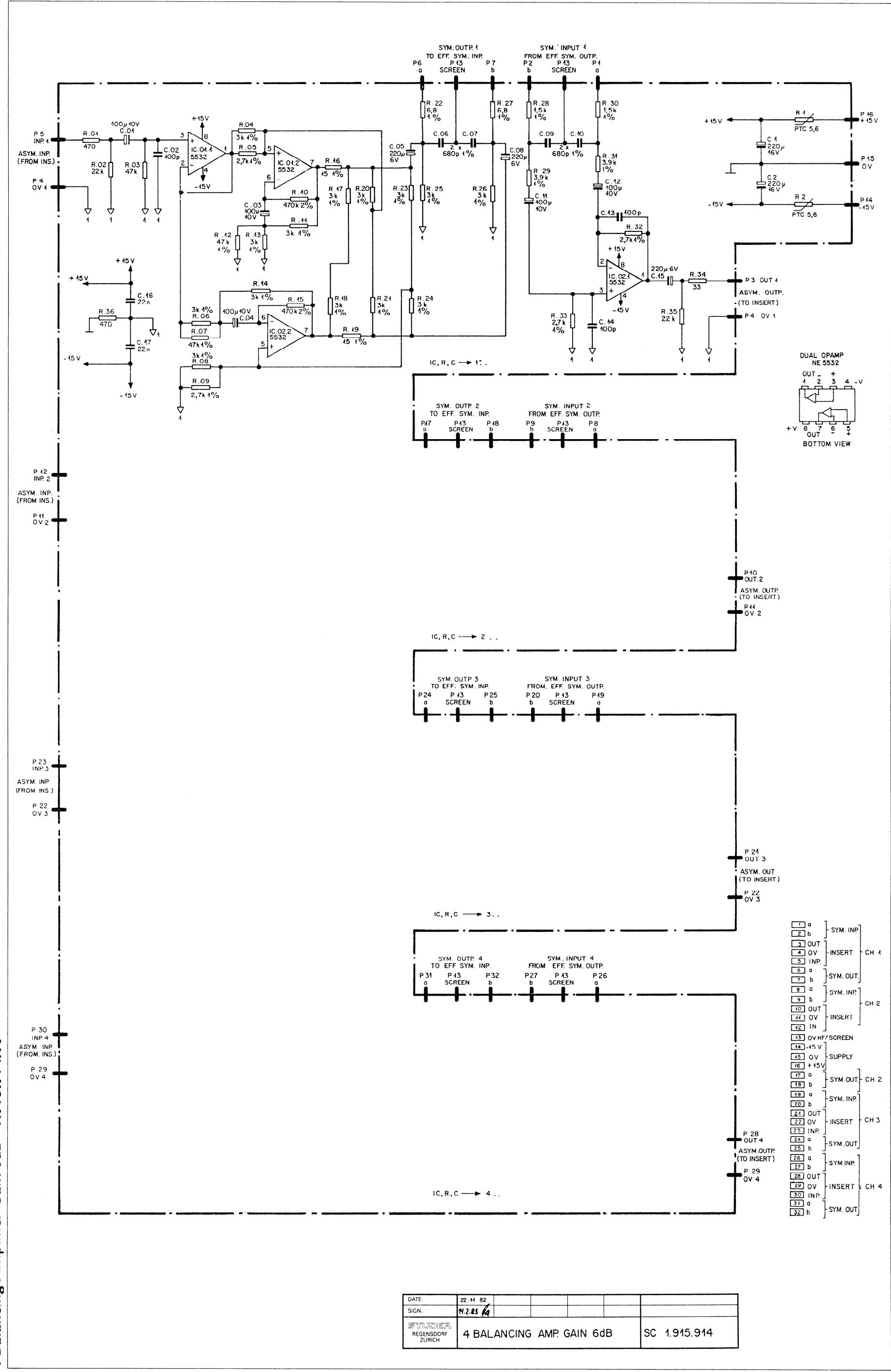
PE=Polyester, EL=Electrolytic, ALU=Aluminium, CER=Ceramic

MANUFACTURER: NS=National Semiconductors, TI=Texas Instrument
 GI=General Instruments, UN=Unitrode,
 GE=General Electric,

1.915.111.81 POWER SUPPLY LED 3-6V

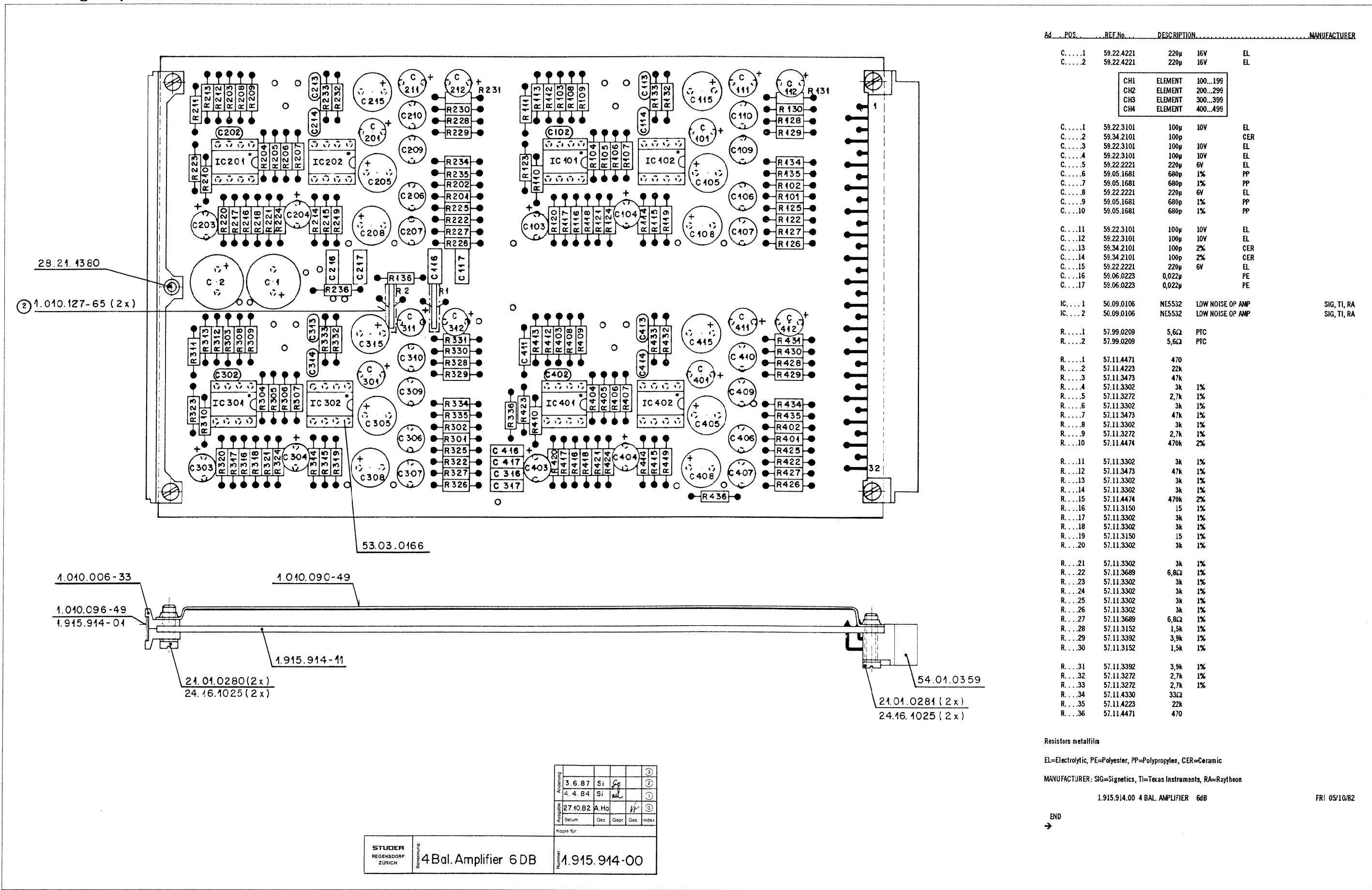
SE 92/01/2400

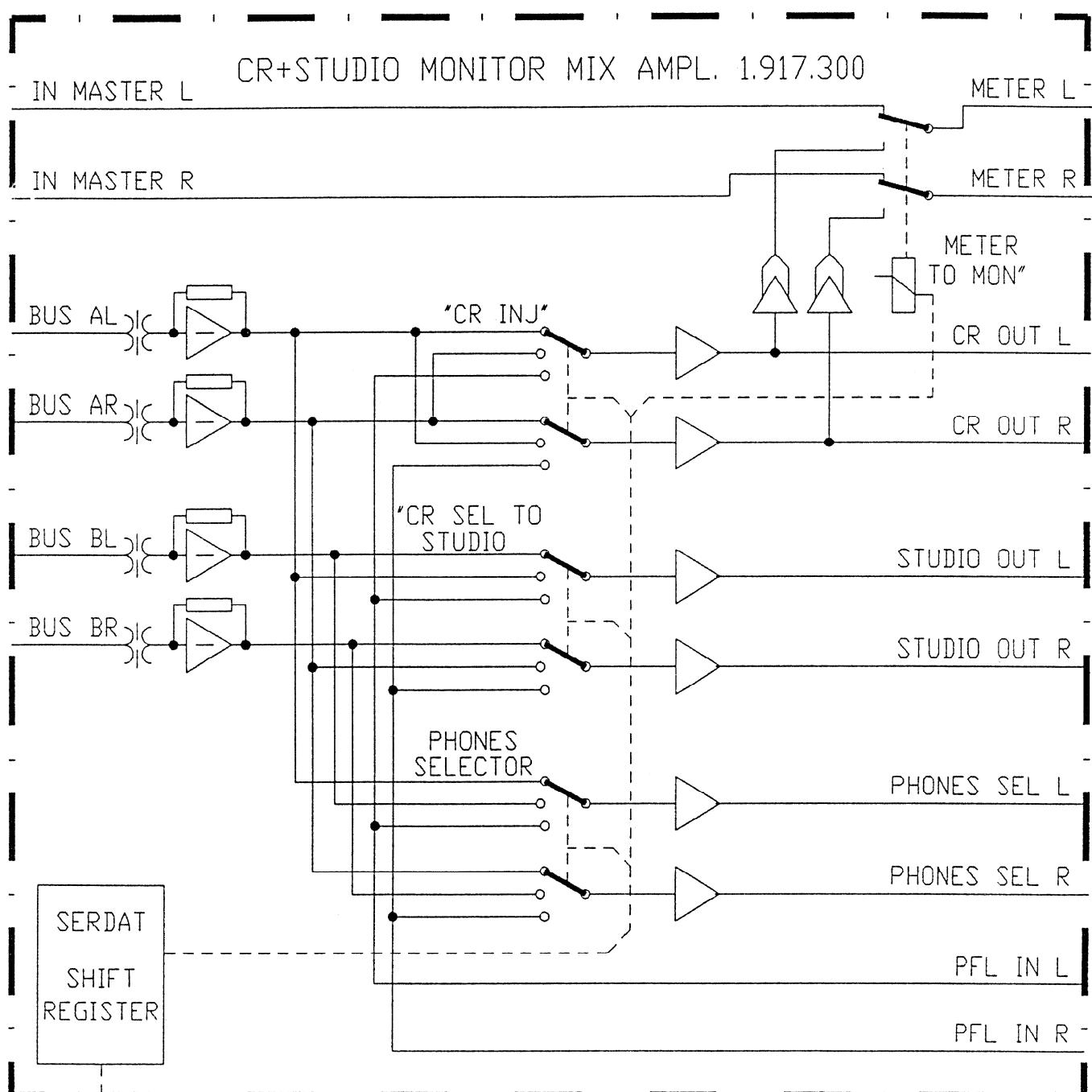
4 Balancing Amplifier Gain 6dB 1.915.914.00



DATE: 22.4.82	SIGN: 11.2.83		
REGENDORF ZURICH	4 BALANCING AMP. GAIN 6dB		SC 1.915.914

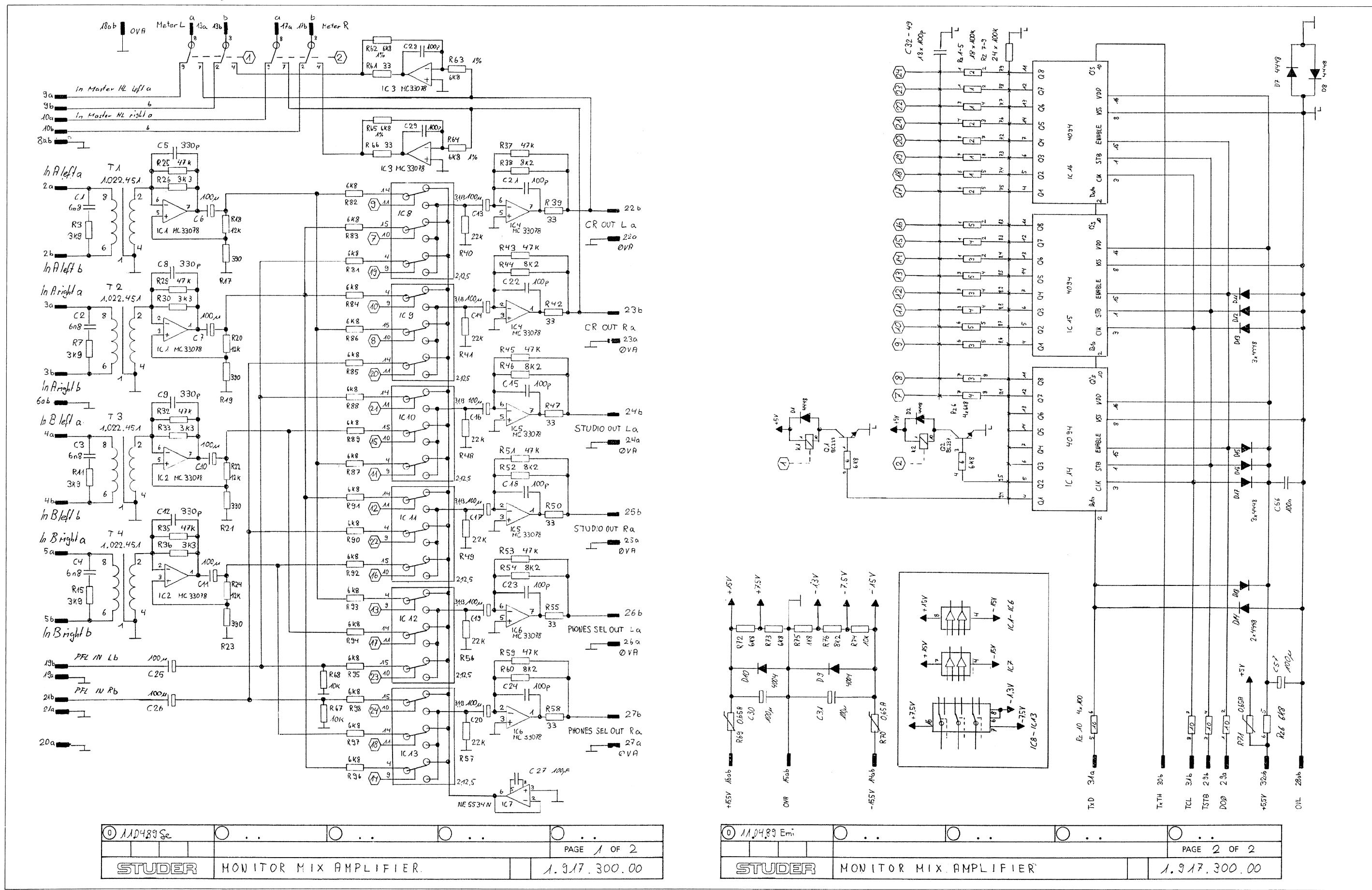
4 Balancing Amplifier Gain 6dB 1.915.914.00



CR + Studio Monitor Mix Amplifier 1.917.300.00

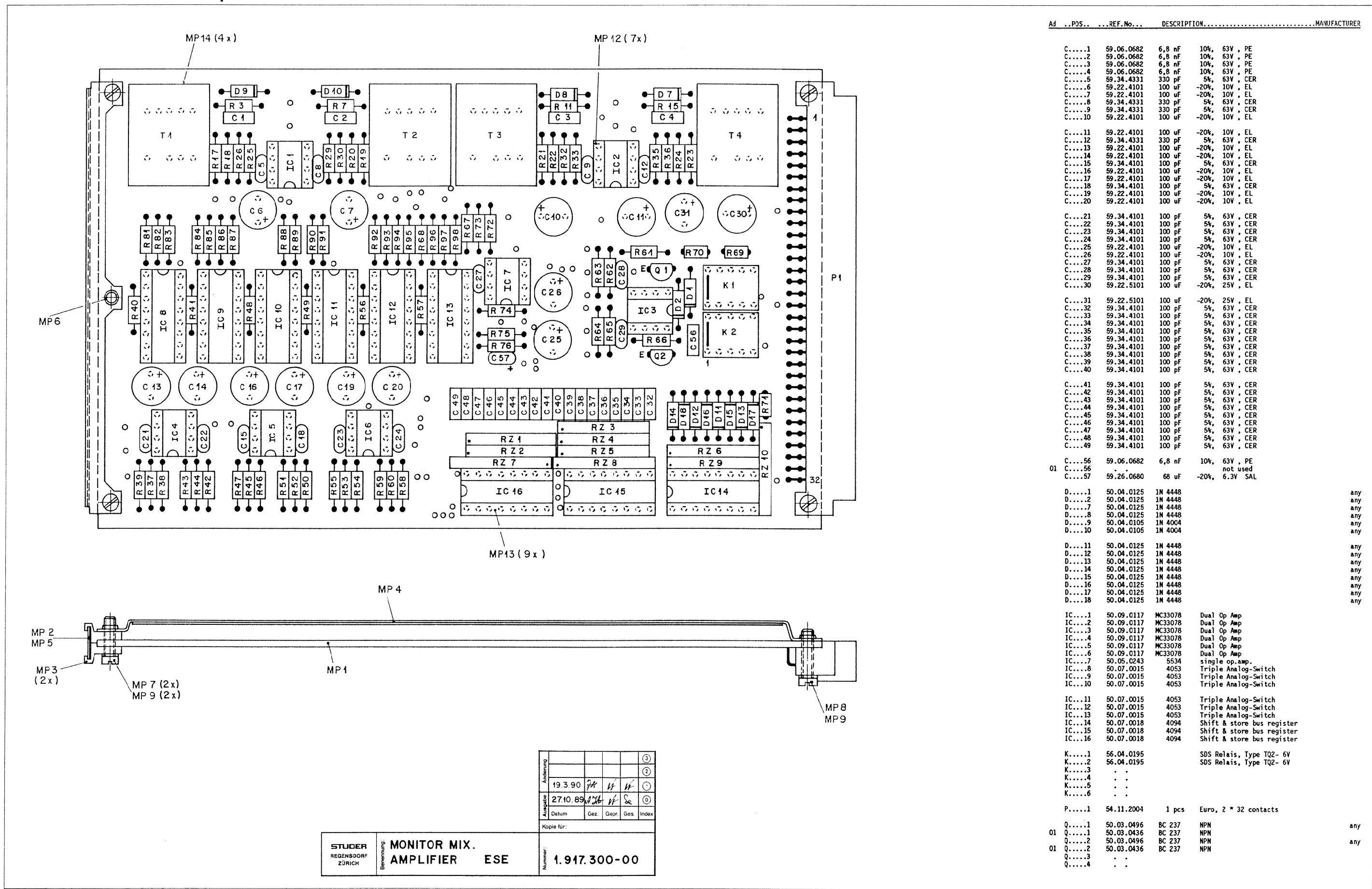


CR + Studio Monitor Mix Amplifier 1.917.300.00





CR + Studio Monitor Mix Amplifier 1.917.300.00



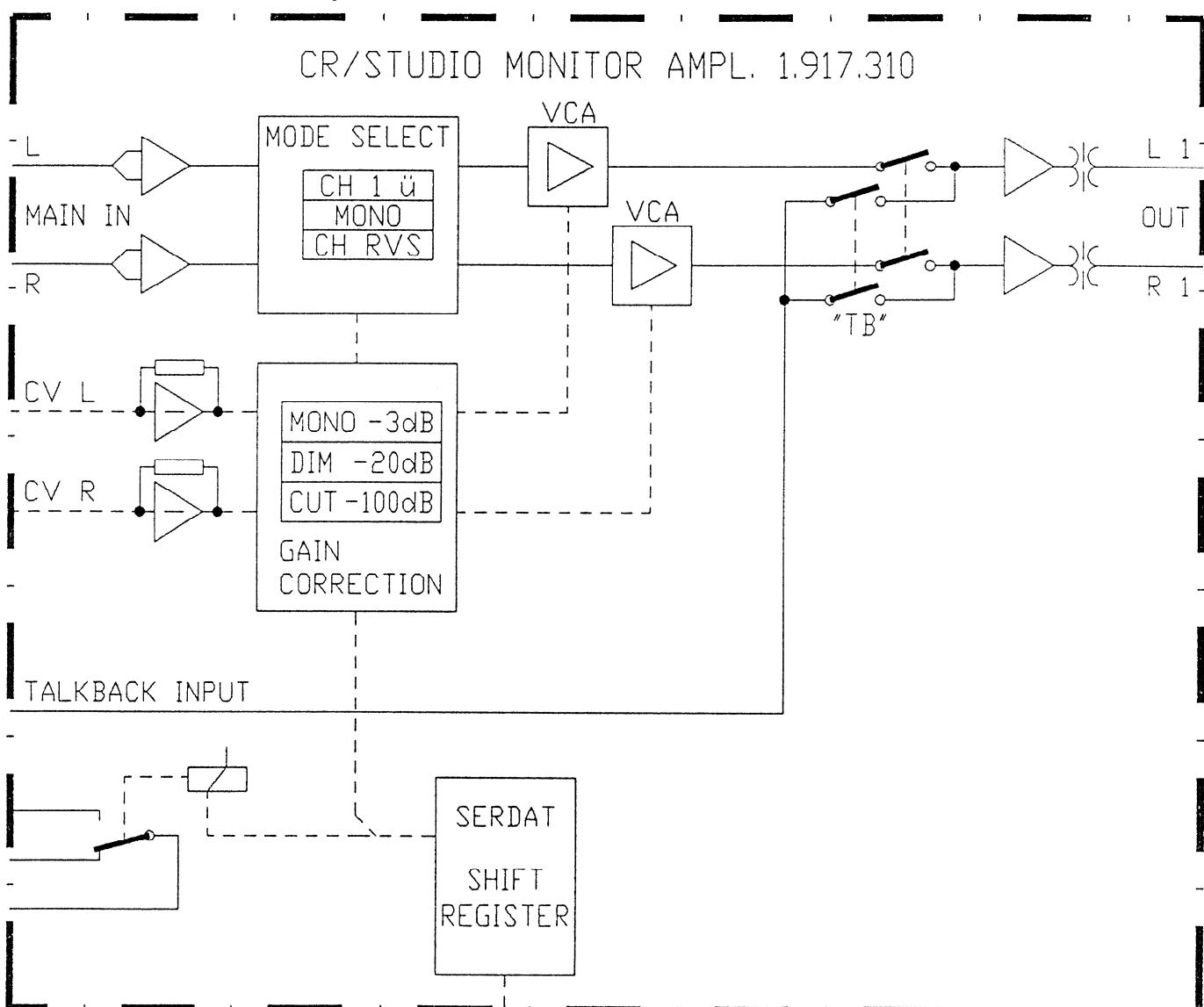


CR + Studio Monitor Mix Amplifier 1.917.300.00

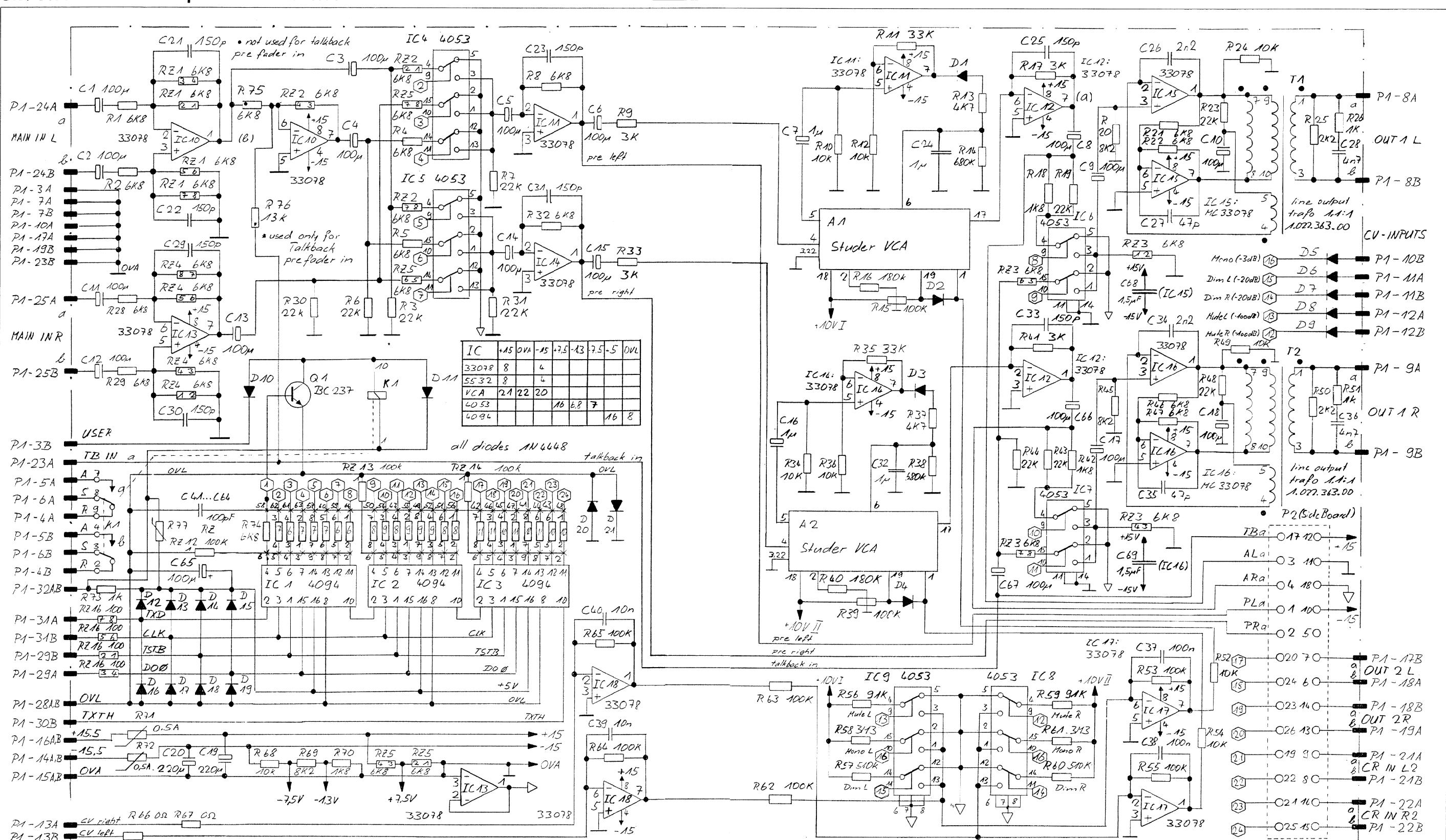
Ad ..	POS..	REF.No...	DESCRIPTION.....	MANUFACTURER	Ad ..	POS..	REF.No...	DESCRIPTION.....	MANUFACTURER
Q....5	.	.			RZ....5	57.88.2104	100 kOhm	2%, 4 * 100k	
Q....6	.	.			RZ....6	57.88.2682	6.8 kOhm	2%, 4 * 6.8k	
R....1	.	.			RZ....7	57.88.4104	100 kOhm	2%, 8 * 100k	
R....2	.	.			RZ....8	57.88.4104	100 kOhm	2%, 8 * 100k	
R....3	57.11.3392	3.9 kOhm	1%		RZ....9	57.88.4104	100 kOhm	2%, 8 * 100k	
R....4	.	.			RZ....10	57.88.2104	100 kOhm	2%, 4 * 100k	
R....5	.	.						2%, 4 * 100	
R....6	.	.			T....1	1.022.451.00		INPUT TRAFO	STUDER
R....7	57.11.3392	3.9 kOhm	1%		T....2	1.022.451.00		INPUT TRAFO	STUDER
R....8	.	.			T....3	1.022.451.00		INPUT TRAFO	STUDER
R....9	.	.			T....4	1.022.451.00		INPUT TRAFO	STUDER
R....10	.	.							
R....11	57.11.3392	3.9 kOhm	1%		MP....1	1.917.300.11	1 pcs	Print	Studer
R....12	.	.			MP....2	1.917.300.01	1 pcs	Bez. Streifen 6.3*91	Studer
R....13	.	.			MP....3	1.010.006.33	2 pcs	Griphaelften	Studer
R....14	.	.			MP....4	1.010.090.49	1 pcs	Abschirmblech	Studer
R....15	57.11.3392	3.9 kOhm	1%		MP....5	1.010.096.49	1 pcs	Klarsicht Schild	
R....16	.	.			MP....6	28.21.1380	1 pcs	Rohrniete D2.5/6	
R....17	57.11.3391	390 Ohm	1%		MP....7	21.01.0280	2 pcs	Z - Schraube M2.5*8	
P....18	57.11.3123	12 kOhm	1%		MP....8	21.01.0281	2 pcs	Z - Schraube M2.5*10	
P....19	57.11.3391	390 Ohm	1%		MP....9	24.16.1025	4 pcs	Rippenscheibe D2.7/5	
R....20	57.11.3123	12 kOhm	1%		MP....10	43.01.0108	1 pcs	ESE-Warnschild	
R....21	57.11.3391	390 Ohm	1%						
R....22	57.11.3123	12 kOhm	1%		MP....11	.			
R....23	57.11.3391	390 Ohm	1%		MP....12	53.03.0166	7 pcs	IC-Sockel 8 Pin	
R....24	57.11.3123	12 kOhm	1%		MP....13	53.03.0168	9 pcs	IC-Sockel 16 Pin	
R....25	57.11.3473	47 kOhm	1%		MP....14	1.022.400.03	4 pcs	Isolation zu Trafo	
R....26	57.11.3332	3.3 kOhm	1%						
R....27	57.11.3473	47 kOhm	5%						
R....28	57.11.3332	3.3 kOhm	1%						
R....29	57.11.3473	47 kOhm	5%						
R....30	57.11.3332	3.3 kOhm	1%						
R....31	57.11.3473	47 kOhm	1%						
R....32	57.11.3332	3.3 kOhm	1%						
R....33	57.11.3391	390 Ohm	1%						
R....34	57.11.3473	47 kOhm	1%						
R....35	57.11.3473	47 kOhm	1%						
R....36	57.11.3332	3.3 kOhm	1%						
R....37	57.11.3473	47 kOhm	1%						
R....38	57.11.3822	8.2 kOhm	1%						
R....39	57.11.3330	33 Ohm	1%						
R....40	57.11.3223	22 kOhm	1%						
R....41	57.11.3223	22 kOhm	1%						
R....42	57.11.3330	33 Ohm	1%						
R....43	57.11.3473	47 kOhm	1%						
R....44	57.11.3822	8.2 kOhm	1%						
R....45	57.11.3473	47 kOhm	1%						
R....46	57.11.3822	8.2 kOhm	1%						
R....47	57.11.3330	33 Ohm	1%						
R....48	57.11.3223	22 kOhm	1%						
R....49	57.11.3223	22 kOhm	1%						
R....50	57.11.3330	33 Ohm	1%						
R....51	57.11.3473	47 kOhm	1%						
R....52	57.11.3822	8.2 kOhm	1%						
R....53	57.11.3473	47 kOhm	1%						
R....54	57.11.3822	8.2 kOhm	1%						
R....55	57.11.3330	33 Ohm	1%						
R....56	57.11.3223	22 kOhm	1%						
R....57	57.11.3223	22 kOhm	1%						
R....58	57.11.3330	33 Ohm	1%						
R....59	57.11.3473	47 kOhm	1%						
R....60	57.11.3822	8.2 kOhm	1%						
R....61	57.11.3330	33 Ohm	1%						
R....62	57.11.3682	6.8 kOhm	1%						
R....63	57.11.3682	6.8 kOhm	1%						
R....64	57.11.3682	6.8 kOhm	1%						
R....65	57.11.3682	6.8 kOhm	1%						
R....66	57.11.3330	33 Ohm	1%						
R....67	57.11.3103	10 kOhm	1%						
R....68	57.11.3103	10 kOhm	1%						
R....69	57.92.7014			PTC 650mA					
R....70	57.92.7014			PTC 650mA					
R....71	57.92.7014			PTC 650mA					
R....72	57.11.3682	6.8 kOhm	1%						
R....73	57.11.3682	6.8 kOhm	1%						
R....74	57.11.3103	10 kOhm	1%						
R....75	57.11.3182	1.8 kOhm	1%						
R....76	57.11.3822	8.2 kOhm	1%						
R....77	57.11.3682	6.8 kOhm	1%						
R....78	57.11.3682	6.8 kOhm	1%						
R....79	57.11.3682	6.8 kOhm	1%						
R....80	57.11.3682	6.8 kOhm	1%						
R....81	57.11.3682	6.8 kOhm	1%						
R....82	57.11.3682	6.8 kOhm	1%						
R....83	57.11.3682	6.8 kOhm	1%						
R....84	57.11.3682	6.8 kOhm	1%						
R....85	57.11.3682	6.8 kOhm	1%						
R....86	57.11.3682	6.8 kOhm	1%						
R....87	57.11.3682	6.8 kOhm	1%						
R....88	57.11.3682	6.8 kOhm	1%						
R....89	57.11.3682	6.8 kOhm	1%						
R....90	57.11.3682	6.8 kOhm	1%						
R....91	57.11.3682	6.8 kOhm	1%						
R....92	57.11.3682	6.8 kOhm	1%						
R....93	57.11.3682	6.8 kOhm	1%						
R....94	57.11.3682	6.8 kOhm	1%						
R....95	57.11.3682	6.8 kOhm	1%						
R....96	57.11.3682	6.8 kOhm	1%						
R....97	57.11.3682	6.8 kOhm	1%						
R....98	57.11.3682	6.8 kOhm	1%						
RZ....1	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....2	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....3	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....4	57.88.2104	100 kOhm	2%, 4 * 100k						

Pin Location List
CR + Studio Monitor Mix Amplifier 1.917.300.00

P	NO	NAME	REMARK	B=BUS	O=CONNECTION	S=SYMMETRIC	I=INVERS	AS=ASYMMETRIC
P1	01	OV-A	GROUND AUDIO					
P1	02A	IN A-L-a	0-OHM INPUT A LEFT a					S
P1	02B	IN A-L-b	0-OHM INPUT A LEFT b					S
P1	03A	IN A-R-a	0-OHM INPUT A RIGHT a					S
P1	03B	IN A-R-b	0-OHM INPUT A RIGHT b					S
P1	04A	IN B-L-a	0-OHM INPUT B LEFT a					S
P1	04B	IN B-L-b	0-OHM INPUT B LEFT b					S
P1	05A	IN B-R-a	0-OHM INPUT B RIGHT a					S
P1	05B	IN B-R-b	0-OHM INPUT B RIGHT b					S
P1	06	OV-A	GROUND AUDIO					
P1	07A	-	RES	B		X X		
P1	07B	-	RES					
P1	8	OV-A	GROUND AUDIO					
P1	09A	M-HL-L-a	INPUT MASTER HL LEFT a					S
P1	09B	M-HL-L-b	INPUT MASTER HL LEFT b					S
P1	10A	M-HL-R-a	INPUT MASTER HL RIGHT a					S
P1	10B	M-HL-R-b	INPUT MASTER HL RIGHT b					S
P1	11A	-	N.C.					
P1	11B	-	N.C.					
P1	12A	-	N.C.					
P1	12B	-	N.C.					
P1	13A	METER-L-a	OUTPUT METER LEFT a					S
P1	13B	METER-L-b	OUTPUT METER LEFT b					S
P1	14	- 15.5V	- SUPPLY	B		X X		
P1	15	OV-A	GROUND AUDIO					
P1	16	+ 15.5V	+ SUPPLY	B		X X		
P1	17A	METER-R-a	OUTPUT METER RIGHT a					S
P1	17B	METER-R-b	OUTPUT METER RIGHT b					S
P1	18	OV-A	GROUND AUDIO					
P1	19A	OV-A	GROUND AUDIO	B		X X		
P1	19B	PFL-IN-L-b	PFL INPUT LEFT (b)					AS, I
P1	20A	OV-A	GROUND AUDIO					B
P1	20B	-	N.C.					
P1	21A	OV-A	GROUND AUDIO					
P1	21B	PFL-IN-R-b	PFL INPUT RIGHT (b)					AS, I
P1	22A	OV-A	GROUND AUDIO					
P1	22B	CR-OUT-L-a	CR OUTPUT LEFT (a)					AS
P1	23A	OV-A	GROUND AUDIO					
P1	23B	CR-OUT-R-a	CR OUTPUT RIGHT (a)					AS
P1	24A	OV-A	GROUND AUDIO					
P1	24B	S-OUT-L-a	STUDIO OUTPUT LEFT (a)					AS
P1	25A	OV-A	GROUND AUDIO					
P1	25B	S-OUT-R-a	STUDIO OUTPUT RIGHT (a)					AS
P1	26A	OV-A	GROUND AUDIO					
P1	26B	PHO-OUT-L-a	PHONE OUTPUT LEFT (a)					AS
P1	27A	OV-A	GROUND AUDIO					
P1	27B	PHO-OUT-R-a	PHONE OUTPUT RIGHT (a)					AS
P1	28	OV-L	GROUND SIGN (LOGIC)					
P1	29A	DO 0	DATA OUT 0 (ENABLE)	B		X X		
P1	29B	TSTB 5	TRANSMIT STROBE 5					
P1	30A	-	RES					
P1	30B	TXTH	TRANSMIT DATA THROUGH					
P1	31A	TXD	TRANSMIT DATA					
P1	31B	TCL	TRANSMIT CLOCK					
P1	32	+ 5.5V	+ SUPPLY	B		X X		

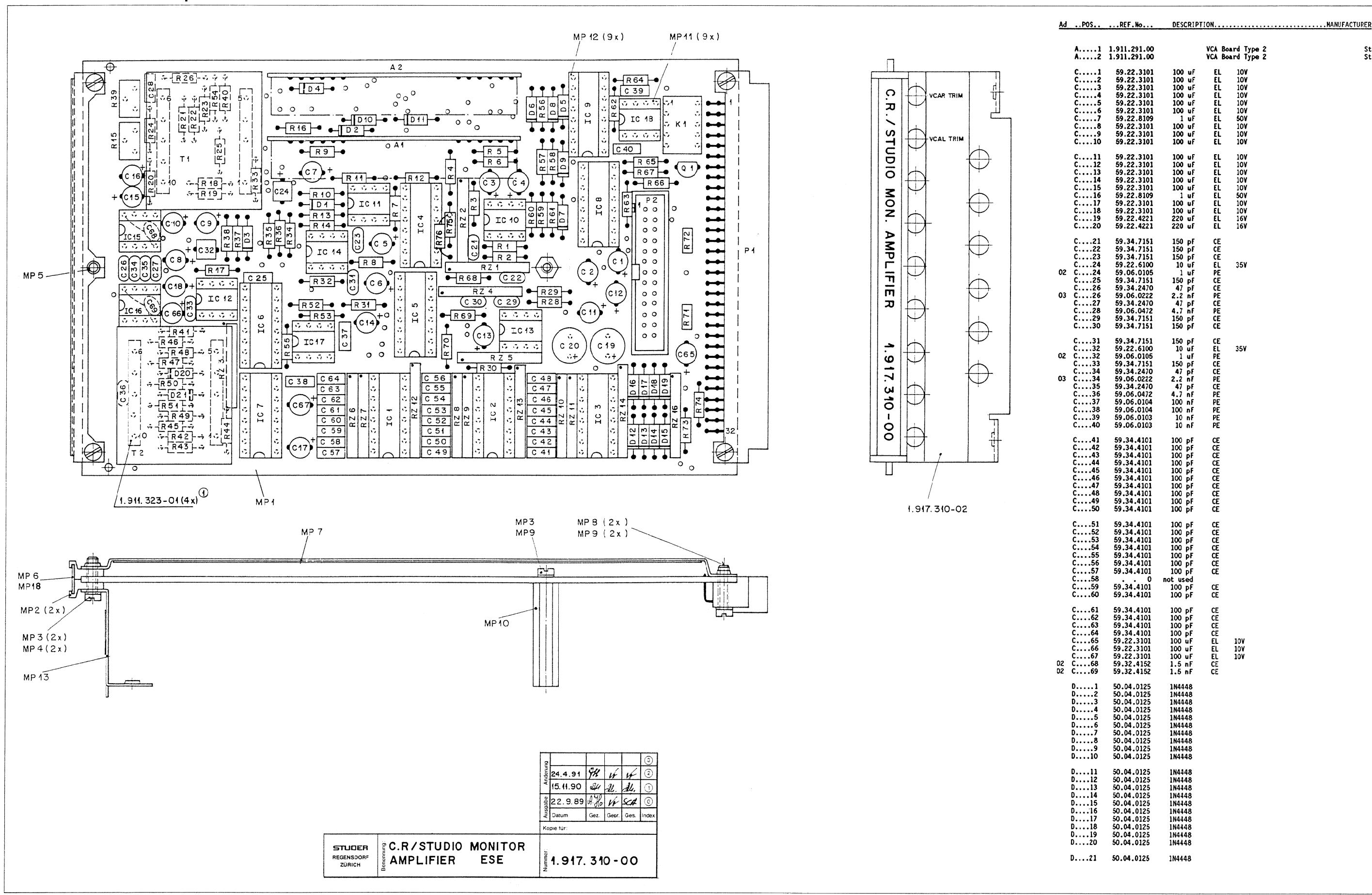
CR / Studio Monitor Amplifier 1.917.310.00

CR / Studio Monitor Amplifier 1.917.310.00





CR / Studio Monitor Amplifier 1.917.310.00





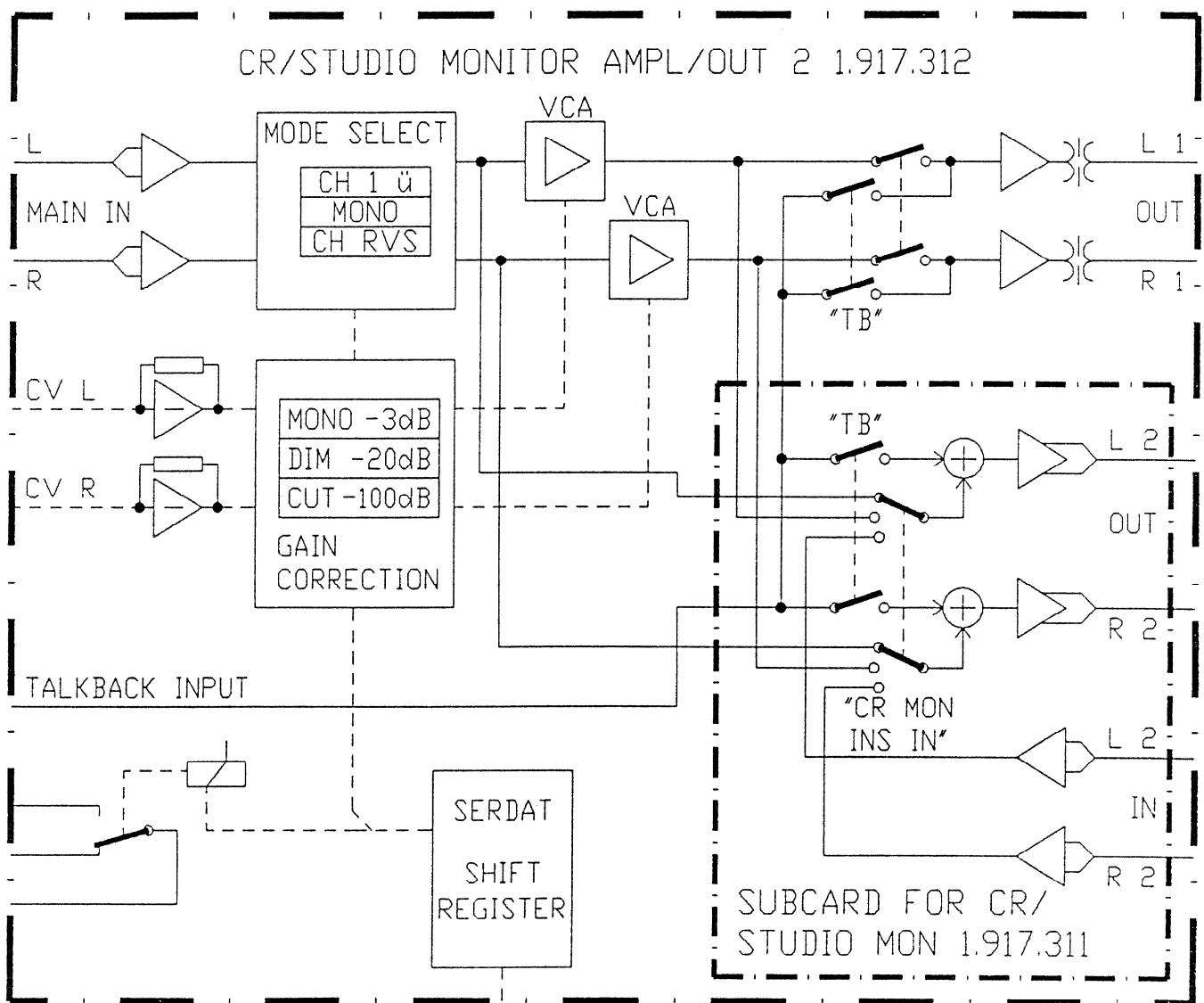
CR / Studio Monitor Amplifier 1.917.310.00

Ad ..	POS..	REF.No..	DESCRIPTION.....	MANUFACTURER	Ad ..	POS..	REF.No..	DESCRIPTION.....	MANUFACTURER
	IC....1	50.07.0018	CD4094	shift and store busregister		R....55	57.11.3104	100 kOhm	1% MF
	IC....2	50.07.0018	CD4094	shift and store busregister		R....56	57.11.3913	91 kOhm	1% MF
	IC....3	50.07.0018	CD4094	shift and store busregister		R....57	57.11.3514	510 kOhm	1% MF
	IC....4	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....58	57.11.5335	3.3 MOhm	1% MF
	IC....5	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....59	57.11.3913	91 kOhm	1% MF
	IC....6	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....60	57.11.3514	510 kOhm	1% MF
	IC....7	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....61	57.11.5335	3.3 MOhm	1% MF
	IC....8	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....62	57.11.3104	100 kOhm	1% MF
	IC....9	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....63	57.11.3104	100 kOhm	1% MF
	IC...10	50.09.0117	MC33078	dual op. amp.		R....64	57.11.3104	100 kOhm	1% MF
	IC...11	50.09.0117	MC33078	dual op. amp.		R....65	57.11.3104	100 kOhm	1% MF
	IC...12	50.09.0117	MC33078	dual op. amp.		R....66	57.11.3000	0 Ohm	Bridge
	IC...13	50.09.0117	MC33078	dual op. amp.		R....67	57.11.3000	0 Ohm	Bridge
	IC...14	50.09.0117	MC33078	dual op. amp.		R....68	57.11.3103	10 kOhm	1% MF
	IC...15	50.09.0106	NE5522AN	dual op. amp.		R....69	57.11.3622	8.2 kOhm	1% MF
01	IC...15	50.09.0117	MC33078	dual op. amp.		R....70	57.11.3182	1.8 kOhm	1% MF
	IC...16	50.09.0106	NE5522AN	dual op. amp.		R....71	57.92.7013	500 mA	R - PTC 0.5 Ohm
01	IC...16	50.09.0117	MC33078	dual op. amp.		R....72	57.92.7013	500 mA	R - PTC 0.5 Ohm
	IC...17	50.09.0117	MC33078	dual op. amp.		R....73	57.11.3102	1.0 kOhm	1% MF 5V-R Version used only (see R77)
	IC...18	50.09.0117	MC33078	dual op. amp.		R....74	57.11.3682	6.8 kOhm	1% MF
	K....1	56.04.0195	2*U	RELAIS 6V 2*U		R....75	57.11.3682	6.8 kOhm	1% MF TB AF used only (see R76)
	HP....1	1.917.310.11	1 pcs	PCB		R....76	: : 0	not used	TB PF Version used only 57.11.3133(see R75)
	HP....2	1.010.006.33	2 pcs	Griffhaelfte		R....77	: : 0	not used	5V-PTC Version used only 57.92.1121(see R73)
	HP....3	21.01.0280	3 pcs	Z-Schr.,ZN,M2.5*8		RZ....1	57.88.2682	6.8 kOhm	2% 4*1 network
	HP....4	24.16.1025	2 pcs	Rippenscheibe D2.7/5		RZ....2	57.88.2682	6.8 kOhm	2% 4*1 network
	HP....5	28.21.1380	1 pcs	Rohrniete,D2.25*6.5		RZ....3	57.88.2682	6.8 kOhm	2% 4*1 network
04	HP...8	28.21.1390	1 pcs	Rohrniete,D2.25*7.0		RZ....4	57.88.2682	6.8 kOhm	2% 4*1 network
	HP....6	1.010.096.49	1 pcs	Klarsichtschild		RZ....5	57.88.2682	6.8 kOhm	2% 4*1 network
	HP....7	1.010.090.49	1 pcs	Abschirmung komplett		RZ....6	57.88.2104	100 kOhm	2% 4*1 network
	HP....8	21.01.0281	2 pcs	Z-Schr.,ZN,M2.5*10		RZ....7	57.88.2104	100 kOhm	2% 4*1 network
	HP....9	24.16.1025	3 pcs	Rippenscheibe D2.7/5		RZ....8	57.88.2104	100 kOhm	2% 4*1 network
	HP...10	1.010.204.27	1 pcs	Mutterbolzen M2.5*25		RZ....9	57.88.2104	100 kOhm	2% 4*1 network
	HP...11	53.03.0166	9 pcs	IC-Socket, 8-pin		RZ....10	57.88.2104	100 kOhm	2% 4*1 network
	HP...12	53.03.0168	9 pcs	IC-Socket,16-pin		RZ....11	57.88.2104	100 kOhm	2% 4*1 network
	HP...13	1.917.142.01	1 pcs	Halter		RZ....12	57.88.4104	100 kOhm	2% 8*1 network
	HP...17	43.01.0108	1 pcs	ESE-Schild		RZ....13	57.88.4104	100 kOhm	2% 8*1 network
	HP...18	1.917.310.01	1 pcs	Bezeichnungsstreifen 6.3*91		RZ....14	57.88.4104	100 kOhm	2% 8*1 network
	Q....1	50.03.0436	BC 237	UNI NPN 100 mA		RZ....15	57.88.2101	100 Ohm	2% 4*1 network
	P....1	54.11.2004	2*32 pin	eurocard-connector		RZ....16	57.88.2104	100 kOhm	2% 4*1 network
	P....2	54.14.2003	26 pin	PCB ribbon connector		RZ....17	57.88.4104	100 kOhm	2% 8*1 network
	R....1	57.11.3682	6.8 kOhm	1% MF		RZ....18	57.88.4104	100 kOhm	2% 8*1 network
	R....2	57.11.3682	6.8 kOhm	1% MF		RZ....19	57.88.4104	100 kOhm	2% 8*1 network
	R....3	57.11.3223	22 kOhm	1% MF		RZ....20	57.88.4104	100 kOhm	2% 8*1 network
	R....4	57.11.3682	6.8 kOhm	1% MF		RZ....21	57.11.3333	33 kOhm	1% MF
	R....5	57.11.3682	6.8 kOhm	1% MF		RZ....22	57.11.3103	10 kOhm	1% MF
	R....6	57.11.3223	22 kOhm	1% MF		RZ....23	57.11.3472	4.7 kOhm	1% MF
	R....7	57.11.3223	22 kOhm	1% MF		RZ....24	57.11.3684	680 kOhm	1% MF
	R....8	57.11.3682	6.8 kOhm	1% MF		RZ....25	58.01.9104	100 kOhm	trimpot
	R....9	57.11.3302	3.0 kOhm	1% MF		RZ....26	57.11.3102	1.0 kOhm	1% MF
	R....10	57.11.3103	10 kOhm	1% MF		RZ....27	57.11.3222	2.2 kOhm	1% MF
	R....11	57.11.3333	33 kOhm	1% MF		RZ....28	57.11.3682	6.8 kOhm	1% MF
	R....12	57.11.3103	10 kOhm	1% MF		RZ....29	57.11.3682	6.8 kOhm	1% MF
	R....13	57.11.3472	4.7 kOhm	1% MF		RZ....30	57.11.3223	22 kOhm	1% MF
	R....14	57.11.3684	680 kOhm	1% MF		R....31	57.11.3223	22 kOhm	1% MF
	R....15	58.01.9104	100 kOhm	trimpot		R....32	57.11.3682	6.8 kOhm	1% MF
	R....16	57.11.3184	180 kOhm	1% MF		R....33	57.11.3302	3.0 kOhm	1% MF
	R....17	57.11.3302	3.0 kOhm	1% MF		R....34	57.11.3103	10 kOhm	1% MF
	R....18	57.11.3182	1.8 kOhm	1% MF		R....35	57.11.3333	33 kOhm	1% MF
	R....19	57.11.3223	22 kOhm	1% MF		R....36	57.11.3103	10 kOhm	1% MF
	R....20	57.11.3822	8.2 kOhm	1% MF		R....37	57.11.3472	4.7 kOhm	1% MF
	R....21	57.11.3682	6.8 kOhm	1% MF		R....38	57.11.3684	680 kOhm	1% MF
	R....22	57.11.3682	6.8 kOhm	1% MF		R....39	58.01.9104	100 kOhm	trimpot
	R....23	57.11.3223	22 kOhm	1% MF		R....40	57.11.3184	180 kOhm	1% MF
	R....24	57.11.3103	10 kOhm	1% MF		R....41	57.11.3302	3.0 kOhm	1% MF
	R....25	57.11.3222	2.2 kOhm	1% MF		R....42	57.11.3182	1.8 kOhm	1% MF
	R....26	57.11.3102	1.0 kOhm	1% MF		R....43	57.11.3223	22 kOhm	1% MF
	R....27	57.11.3682	6.8 kOhm	1% MF		R....44	57.11.3223	22 kOhm	1% MF
	R....28	57.11.3682	6.8 kOhm	1% MF		R....45	57.11.3822	8.2 kOhm	1% MF
	R....29	57.11.3682	6.8 kOhm	1% MF		R....46	57.11.3682	6.8 kOhm	1% MF
	R....30	57.11.3223	22 kOhm	1% MF		R....47	57.11.3682	6.8 kOhm	1% MF
	R....31	57.11.3223	22 kOhm	1% MF		R....48	57.11.3223	22 kOhm	1% MF
	R....32	57.11.3682	6.8 kOhm	1% MF		R....49	57.11.3103	10 kOhm	1% MF
	R....33	57.11.3302	3.0 kOhm	1% MF		R....50	57.11.3222	2.2 kOhm	1% MF
	R....34	57.11.3103	10 kOhm	1% MF		R....51	57.11.3102	1 kOhm	1% MF
	R....35	57.11.3333	33 kOhm	1% MF		R....52	57.11.3103	10 kOhm	1% MF
	R....36	57.11.3103	10 kOhm	1% MF		R....53	57.11.3104	100 kOhm	1% MF
	R....37	57.11.3472	4.7 kOhm	1% MF		R....54	57.11.3103	10 kOhm	1% MF

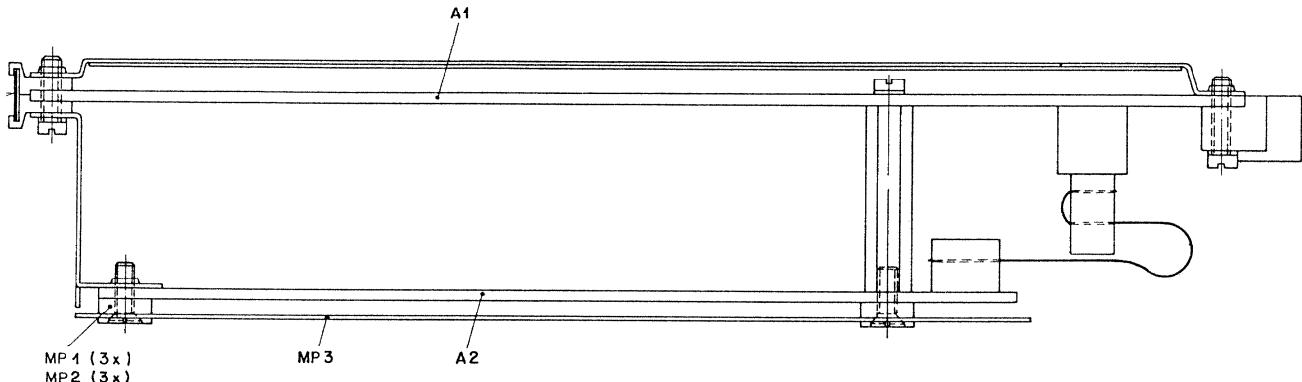
Pin Location List
CR / Studio Monitor Amplifier 1.917.310.00

P	NO	NAME	REMARK	B=BUS	O=CONNECTION	S=SYMMETRIC	I=INVERS	AS=ASYMMETRIC
P1	01A	-	RES					
P1	01B	-	RES					
P1	02A	-	RES					
P1	02B	-	RES					
P1	03A	OV-A	GROUND AUDIO					
P1	03B	D USER						
P1	04A	REL-A-r	RELAIS A ; r= BREAK CONTACT					
P1	04B	REL-B-r	RELAIS B ; r= BREAK CONTACT					
P1	05A	REL-A-a	RELAIS A ; a= MAKE CONTACT					
P1	05B	REL-B-a	RELAIS B ; a= MAKE CONTACT					
P1	06A	REL-A-s	RELAIS A ; s= CONTACT					
P1	06B	REL-B-s	RELAIS B ; s= CONTACT					
P1	07	OV-A	GROUND AUDIO	B	X X			
P1	08A	MON-OUT1-L-a	MONITOR OUTPUT 1 LEFT a	S				
P1	08B	MON-OUT1-L-b	MONITOR OUTPUT 1 LEFT b	S				
P1	09A	MON-OUT1-R-a	MONITOR OUTPUT 1 RIGHT a	S				
P1	09B	MON-OUT1-R-b	MONITOR OUTPUT 1 RIGHT b	S				
P1	10A	OV-A	GROUND AUDIO					
P1	10B	CV-MONO-D	CONTROL VOLTAGE MONO					
P1	11A	CV-DIM -D-L	CONTROL VOLTAGE -20dB LEFT					
P1	11B	CV-DIM -D-R	CONTROL VOLTAGE -20dB RIGHT					
P1	12A	CV-MUTE-D-L	CONTROL VOLTAGE MUTE LEFT					
P1	12B	CV-MUTE D-R	CONTROL VOLTAGE MUTE RIGHT					
P1	13A	CV-VCA-R	CONTROL VOLTAGE VCA RIGHT					
P1	13B	CV-VCA-L	CONTROL VOLTAGE VCA LEFT					
P1	14	- 15.5V	- SUPPLY	B	X X			
P1	15	OV-A	GROUND AUDIO	B	X X			
P1	16	+ 15.5V	+ SUPPLY	B	X X			
P1	17A	OV-A	GROUND AUDIO					
P1	17B	MON-OUT2-L-a	MONITOR OUTPUT 2 LEFT a	S				
P1	18A	MON-OUT2-L-b	MONITOR OUTPUT 2 LEFT b	S				
P1	18B	MON-OUT2-R-a	MONITOR OUTPUT 2 RIGHT a	S				
P1	19A	MON-OUT2-R-b	MONITOR OUTPUT 2 RIGHT b	S				
P1	19B	OV-A	GROUND AUDIO					
P1	20A	-	N.C.					
P1	20B	-	N.C.					
P1	21A	MON-IN2-L-a	MONITOR INPUT 2 LEFT a	S				
P1	21B	MON-IN2-L-b	MONITOR INPUT 2 LEFT b	S				
P1	22A	MON-IN2-R-a	MONITOR INPUT 2 RIGHT a	S				
P1	22B	MON-IN2-R-b	MONITOR INPUT 2 RIGHT b	S				
P1	23A	TB-IN-a	TALKBACK INPUT (a)	AS				
P1	23B	OV-A	GROUND AUDIO					
P1	24A	MON-IN1-L-a	MONITOR INPUT 1 LEFT a	S				
P1	24B	MON-IN1-L-b	MONITOR INPUT 1 LEFT b	S				
P1	25A	MON-IN1-R-a	MONITOR INPUT 1 RIGHT a	S				
P1	25B	MON-IN1-R-b	MONITOR INPUT 1 RIGHT b	S				
P1	26A	-	RES					
P1	26B	-	RES					
P1	27A	-	RES					
P1	27B	-	RES					
P1	28	DV-L	GROUND SIGN (LOGIC)	B	X X			
P1	29A	DO 0	DATA OUT 0 (ENABLE)					
P1	29B	TSTB 4	TRANSMIT STROBE 4					
P1	30A	-	RES					
P1	30B	TXTH	TRANSMIT DATA THROUGH					
P1	31A	TXD	TRANSMIT DATA					
P1	31B	TCL	TRANSMIT CLOCK					
P1	32	+ 5.5V	+ SUPPLY	B	X X			

Subcard for CR / Studio Monitor 1.917.311.00
CR / Studio Monitor Amplifier / Out 1.917.312.00



CR / Studio Monitor Amplifier / Out 2 1.917.312.00



Änderung					(3)
					(7)
					(1)
Ausgabe	30.1.90	A 46	1K	Sch	(6)
Datum		Gez	Gepr	Ges	Index

Kopie für:

Ad ..POS.. ...REF.No... DESCRIPTION..... MANUFACTURER

A.....1	1.917.310.00	CR/STUDIO MONITOR AMP.,A		
A.....2	1.917.311.00	SUBCARD FOR CR/STUDIO MON.,A		
 01	 MP....1	21.01.2279	3 pcs	S-SCHR.,ZN,M2.5*6
	MP....1	21.01.2280	3 pcs	S-SCHR.,ZN,M2.5*8
	MP....2	1.917.142.02	3 pcs	Isolierhuelle
	MP....3	1.917.142.03	1 pcs	Isolation
	MP....4	1.917.312.01	1 pcs	RECHNUNGSSTREIFEN 6.3 *

(01) 90/03/01 MP 1 Screws were too short

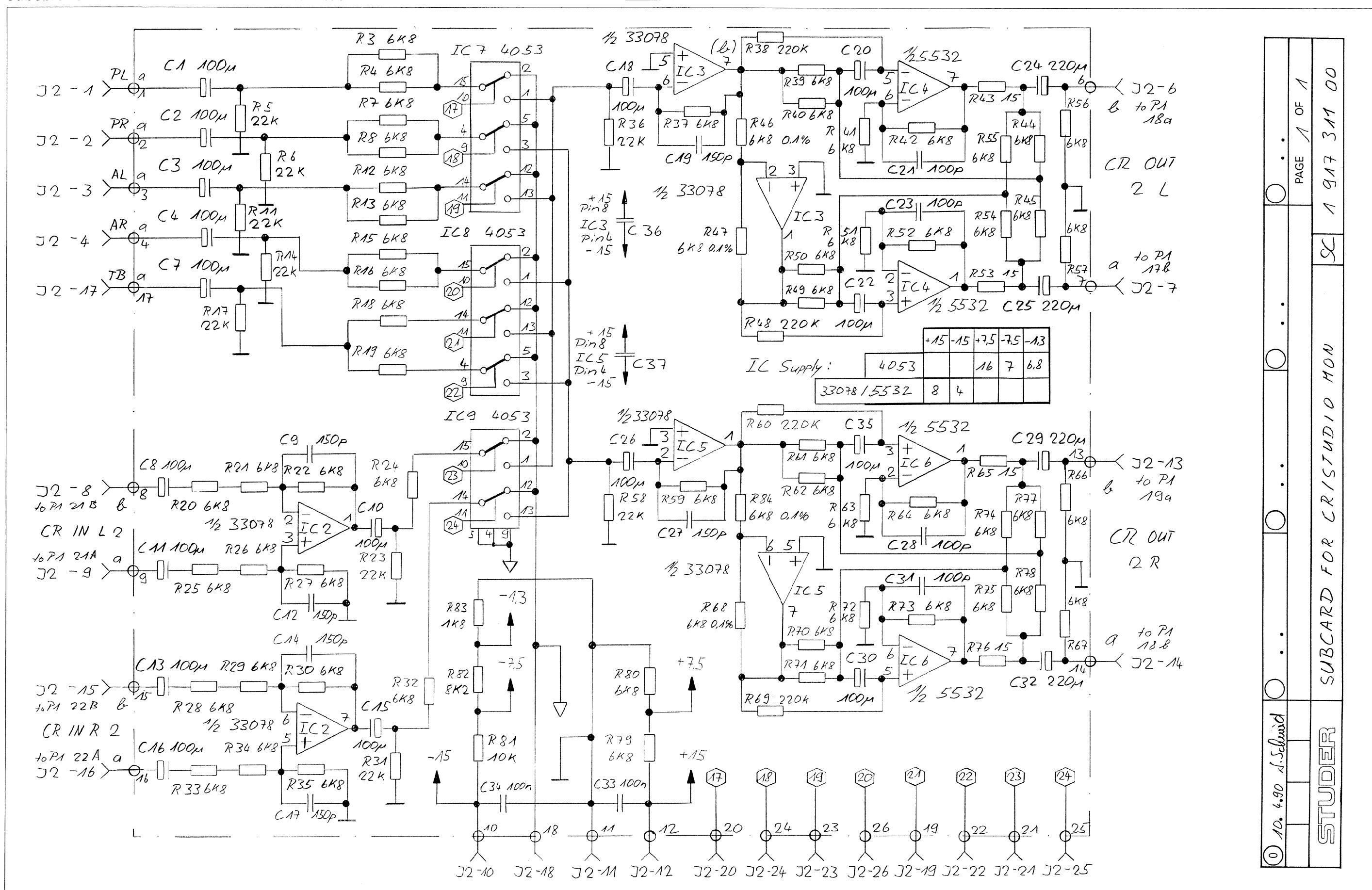
CER=Ceramic, PE=Polyester
MF=Metal Film, PMG=Formet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,
Si=Signetics, St=Studer.

1.917.312.00 CR/STUDIO-MONITOR AMPLI / UNIT 2 SCA90/08/0100

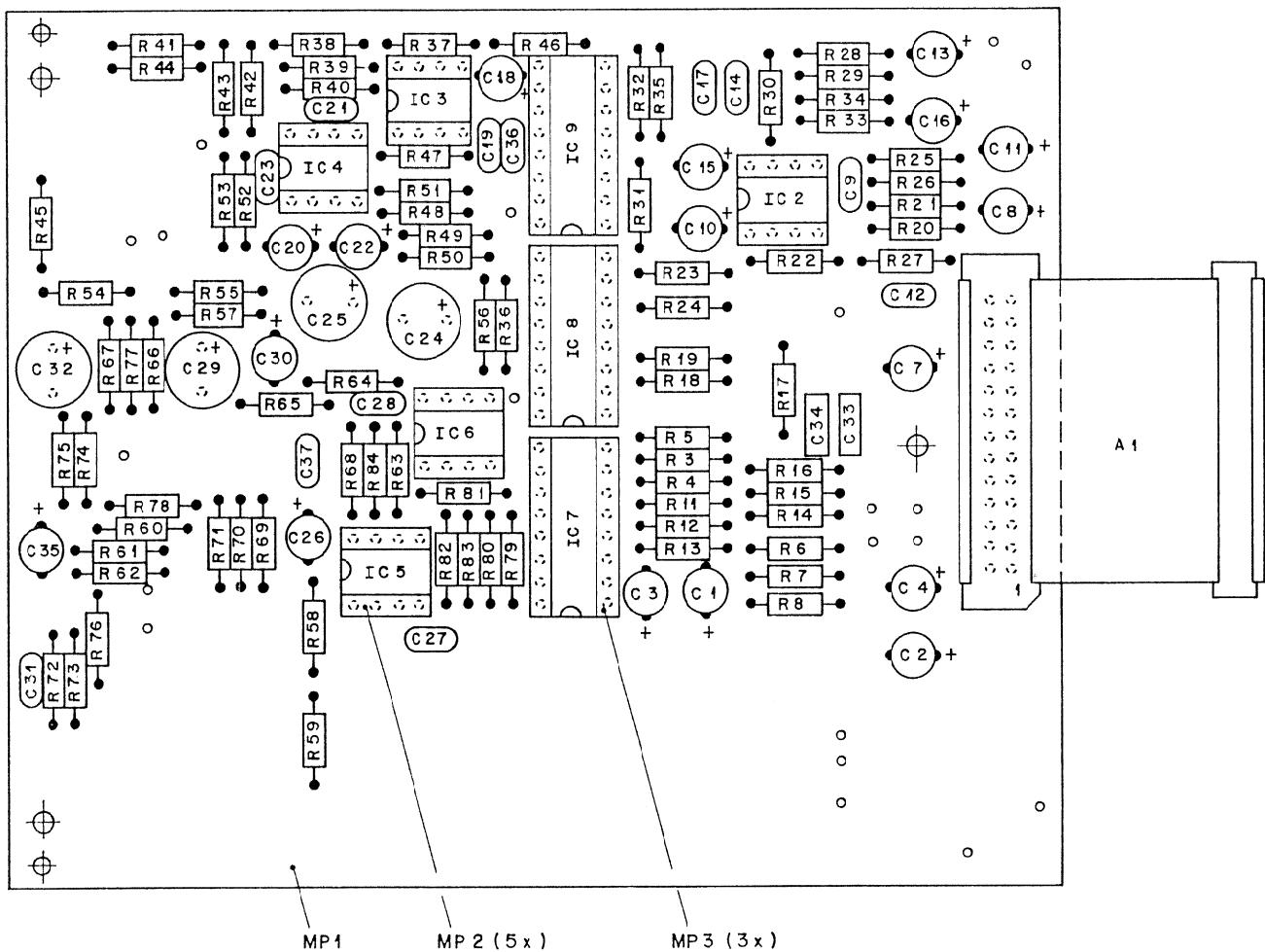
1-917-312-00 CB/STUDIO-MONITOR AMPL/OUT 2 SCA90/03/0101

Subcard for CR / Studio Monitor 1.917.311.00



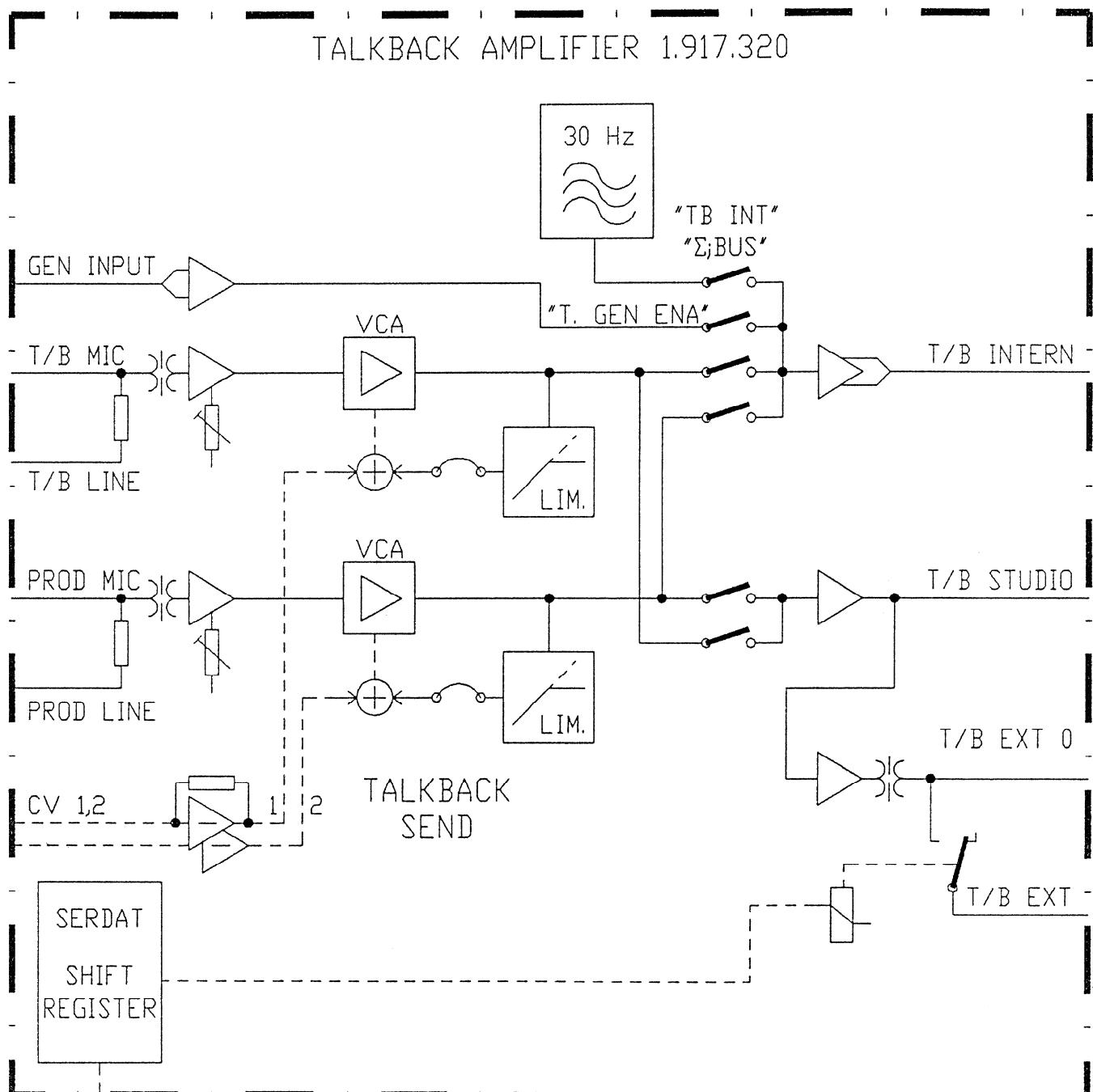


Subcard for CR / Studio Monitor 1.917.311.00

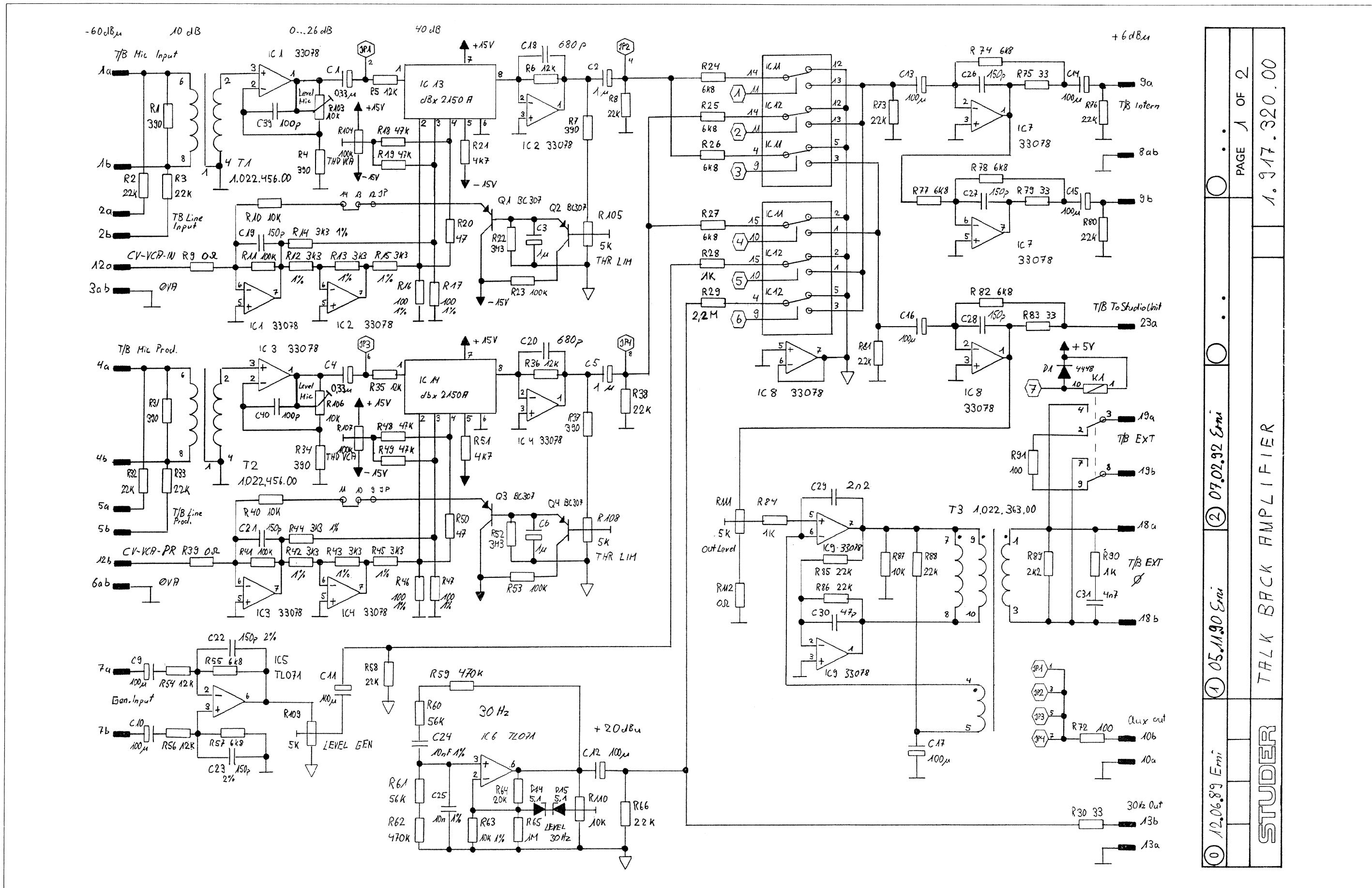


Ad	POS.	REF.No...	DESCRIPTION.....	MANUFACTURER	Ad	POS.	REF.No...	DESCRIPTION.....	MANUFACTURER
A.....1	1	1.023.112.01	Flachkabel 26 Pol	ST	R....51	57.11.3682	6.8 kOhm	1% MF	
C.....1		59.22.3101	100 uF EL 10V		R....52	57.11.3682	6.8 kOhm	1% MF	
C.....2		59.22.3101	100 uF EL 10V		R....53	57.11.3150	15 Ohm	1% MF	
C.....3		59.22.3101	100 uF EL 10V		R....54	57.11.3682	6.8 kOhm	1% MF	
C.....4		59.22.3101	100 uF EL 10V		R....55	57.11.3682	6.8 kOhm	1% MF	
C.....7		59.22.3101	100 uF EL 10V		R....56	57.11.3682	6.8 kOhm	1% MF	
C.....8		59.22.3101	100 uF EL 10V		R....57	57.11.3682	6.8 kOhm	1% MF	
C.....9		59.34.7151	150 pF CE 63V 2%		R....58	57.11.3223	22 kOhm	1% MF	
C.....10		59.22.3101	100 uF EL 10V		R....59	57.11.3682	6.8 kOhm	1% MF	
C.....11		59.22.3101	100 uF EL 10V		R....60	57.11.3224	220 kOhm	1% MF	
C.....12		59.34.7151	150 pF CE 63V 2%		R....61	57.11.3682	6.8 kOhm	1% MF	
C.....13		59.22.3101	100 uF EL 10V		R....62	57.11.3682	6.8 kOhm	1% MF	
C.....14		59.34.7151	150 pF CE 63V 2%		R....63	57.11.3682	6.8 kOhm	1% MF	
C.....15		59.22.3101	100 uF EL 10V		R....64	57.11.3682	6.8 kOhm	1% MF	
C.....16		59.22.3101	100 uF EL 10V		R....65	57.11.3150	15 Ohm	1% MF	
C.....17		59.34.7151	150 pF CE 63V 2%		R....66	57.11.3682	6.8 kOhm	1% MF	
C.....18		59.22.3101	100 uF EL 10V		R....67	57.11.3682	6.8 kOhm	1% MF	
C.....19		59.34.7151	150 pF CE 63V 2%		R....68	57.99.0250	6.8 kOhm	0.1%	
C.....20		59.22.3101	100 uF EL 10V		R....69	57.11.3224	220 kOhm	1% MF	
C.....21		59.34.4101	100 pF CE 63V 2%		R....70	57.11.3682	6.8 kOhm	1% MF	
C.....22		59.22.3101	100 uF EL 10V		R....71	57.11.3682	6.8 kOhm	1% MF	
C.....23		59.34.4101	100 pF CE 63V 2%		R....72	57.11.3682	6.8 kOhm	1% MF	
C.....24		59.22.4221	220 uF EL 16V		R....73	57.11.3682	6.8 kOhm	1% MF	
C.....25		59.22.4221	220 uF EL 16V		R....74	57.11.3682	6.8 kOhm	1% MF	
C.....26		59.22.3101	100 uF EL 10V		R....75	57.11.3682	6.8 kOhm	1% MF	
C.....27		59.34.7151	150 pF CE 63V 2%		R....76	57.11.3150	15 Ohm	1% MF	
C.....28		59.34.4101	100 pF CE 63V 2%		R....77	57.11.3682	6.8 kOhm	1% MF	
C.....29		59.22.4221	220 uF EL 16V		R....78	57.11.3682	6.8 kOhm	1% MF	
C.....30		59.22.3101	100 uF EL 10V		R....79	57.11.3682	6.8 kOhm	1% MF	
C.....31		59.34.4101	100 pF CE 63V 2%		R....80	57.11.3682	6.8 kOhm	1% MF	
IC.....2		50.09.0117	HC33078 dual op. amp.		R....81	57.11.3103	10 kOhm	1% MF	
IC.....3		50.09.0117	MC33078 dual op. amp.		R....82	57.11.3182	8.2 kOhm	1% MF	
IC.....4		50.09.0105	NE5532M dual op. amp.		R....83	57.11.3182	1.8 kOhm	1% MF	
IC.....5		50.09.0117	HC33078 dual op. amp.		R....84	57.99.0250	6.8 kOhm	0.1%	
IC.....6		50.09.0105	NE5532M dual op. amp.		R....85	.. . 0	not used		
IC.....7		50.07.0015	CD4053 triple 2 ch. analog mux/demux		R....86	.. . 0	not used		
IC.....8		50.07.0015	CD4053 triple 2 ch. analog mux/demux						
IC.....9		50.07.0015	CD4053 triple 2 ch. analog mux/demux						
MP.....1	1.917.311.11	1 pcs	SUB-PCB for CR/Studio Monitor						
MP.....2	53.03.0166	5 pcs	IC-Socket 8-pin						
MP.....3	53.03.0168	3 pcs	IC-Socket 16-pin						
MP.....4	43.01.0108	1 pcs	ESE-Schild						
MP.....5	1.917.311.04	1 pcs	Nr-Etikette 5*20						
R.....3	57.11.3682	6.8 kOhm	1% MF						
R.....4	57.11.3682	6.8 kOhm	1% MF						
R.....5	57.11.3223	22 kOhm	1% MF						
R.....6	57.11.3223	22 kOhm	1% MF						
R.....7	57.11.3682	6.8 kOhm	1% MF						
R.....8	57.11.3682	6.8 kOhm	1% MF						
R.....11	57.11.3223	22 kOhm	1% MF						
R.....12	57.11.3682	6.8 kOhm	1% MF						
R.....13	57.11.3682	6.8 kOhm	1% MF						
R.....14	57.11.3223	22 kOhm	1% MF						
R.....15	57.11.3682	6.8 kOhm	1% MF						
R.....16	57.11.3682	6.8 kOhm	1% MF						
R.....17	57.11.3223	22 kOhm	1% MF						
R.....18	57.11.3682	6.8 kOhm	1% MF						
R.....19	57.11.3682	6.8 kOhm	1% MF						
R.....20	57.11.3682	6.8 kOhm	1% MF						
R.....21	57.11.3682	6.8 kOhm	1% MF						
R.....22	57.11.3682	6.8 kOhm	1% MF						
R.....23	57.11.3223	22 kOhm	1% MF						
R.....24	57.11.3682	6.8 kOhm	1% MF						
R.....25	57.11.3682	6.8 kOhm	1% MF						
R.....26	57.11.3682	6.8 kOhm	1% MF						
R.....27	57.11.3682	6.8 kOhm	1% MF						
R.....28	57.11.3682	6.8 kOhm	1% MF						
R.....29	57.11.3682	6.8 kOhm	1% MF						
R.....30	57.11.3682	6.8 kOhm	1% MF						
R.....31	57.11.3223	22 kOhm	1% MF						
R.....32	57.11.3682	6.8 kOhm	1% MF						
R.....33	57.11.3682	6.8 kOhm	1% MF						
R.....34	57.11.3682	6.8 kOhm	1% MF						
R.....35	57.11.3682	6.8 kOhm	1% MF						
R.....36	57.11.3223	22 kOhm	1% MF						
R.....37	57.11.3682	6.8 kOhm	1% MF						
R.....38	57.11.3224	220 kOhm	1% MF						
R.....39	57.11.3682	6.8 kOhm	1% MF						
R.....40	57.11.3682	6.8 kOhm	1% MF						
R.....41	57.11.3682	6.8 kOhm	1% MF						
R.....42	57.11.3682	6.8 kOhm	1% MF						
R.....43	57.11.3150	15 Ohm	1% MF						
R.....44	57.11.3682	6.8 kOhm	1% MF						
R.....45	57.11.3682	6.8 kOhm	1% MF						
R.....46	57.99.0250	6.8 kOhm	0.1%						
R.....47	57.99.0250	6.8 kOhm	0.1%						
R.....48	57.11.3224	220 kOhm	1% MF						
R.....49	57.11.3682	6.8 kOhm	1% MF						
R.....50	57.11.3682	6.8 kOhm	1% MF		</				

Talkback Amplifier 1.917.320.00

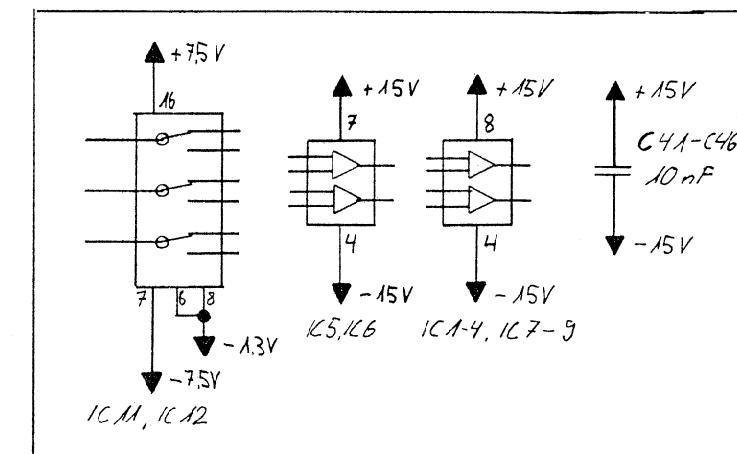
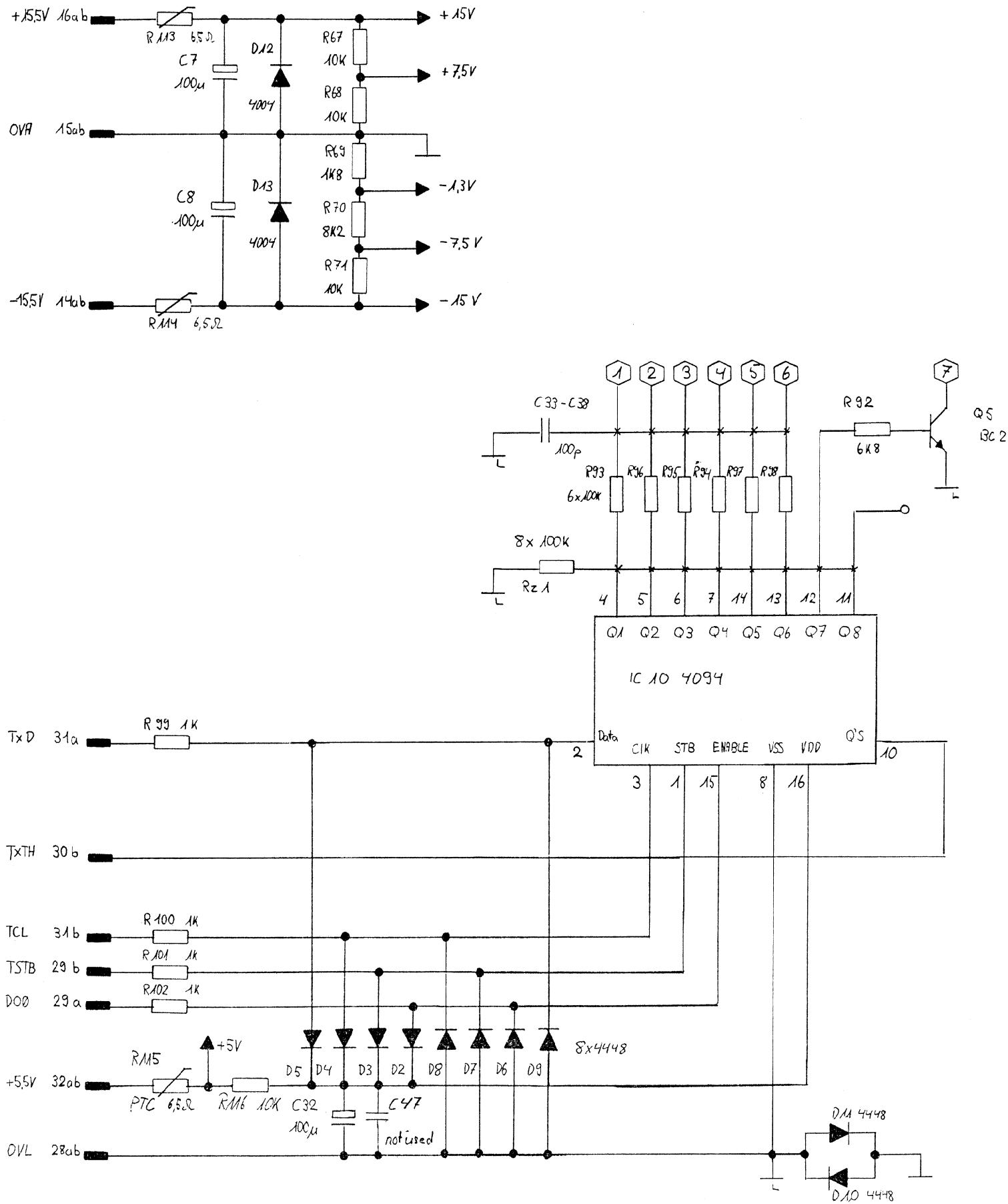


Talkback Amplifier 1.917.320.00





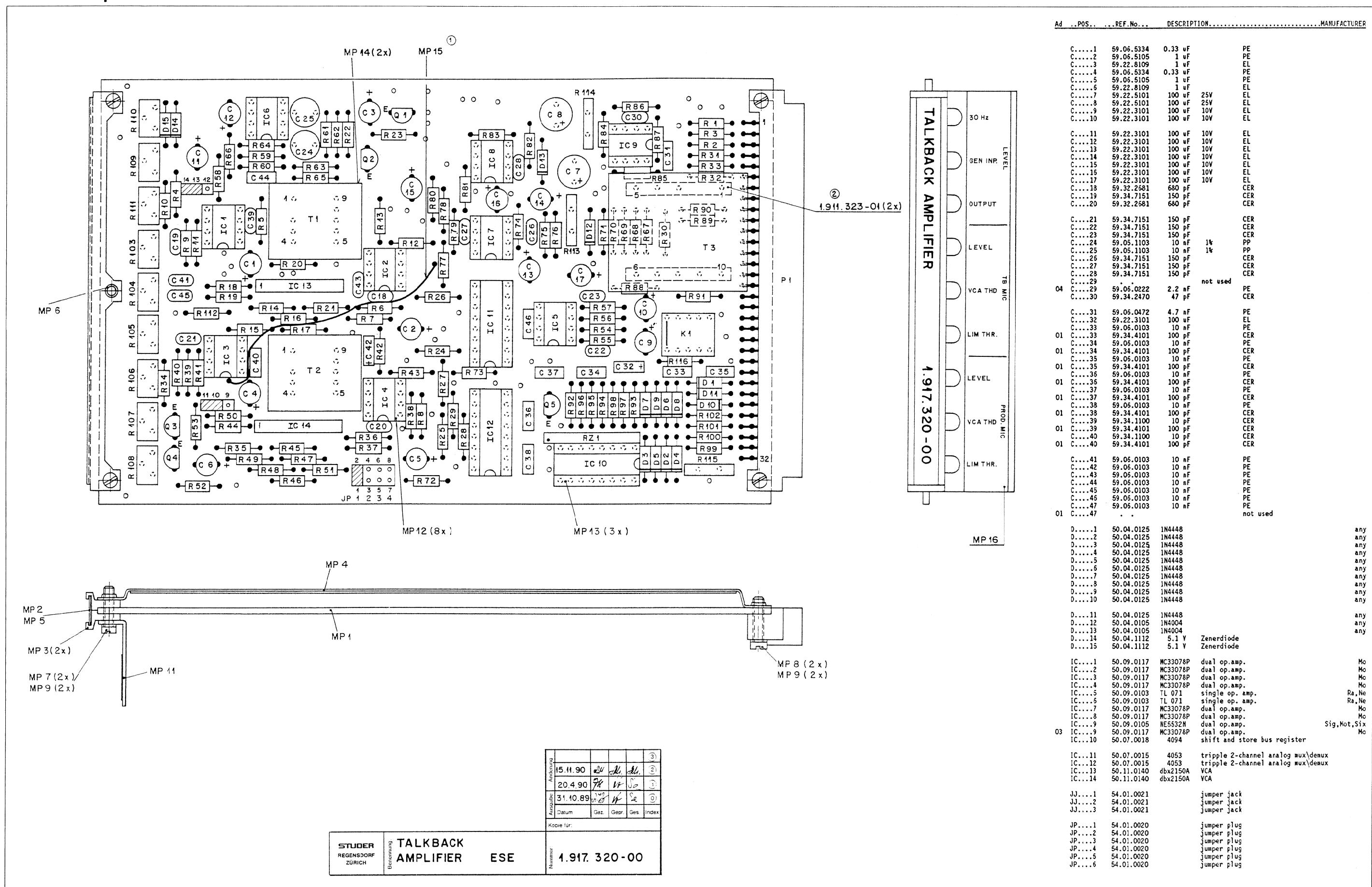
Talkback Amplifier 1.917.320.00



① 120689 Emi	② 05.11.90 Emi	③ 07.02.92 Emi	④ 05.11.90 Emi	⑤ 07.02.92 Emi
STUDER	TALKBACK AMPLIFIER	STUDER	TALKBACK AMPLIFIER	STUDER



Talkback Amplifier 1.917.320.00





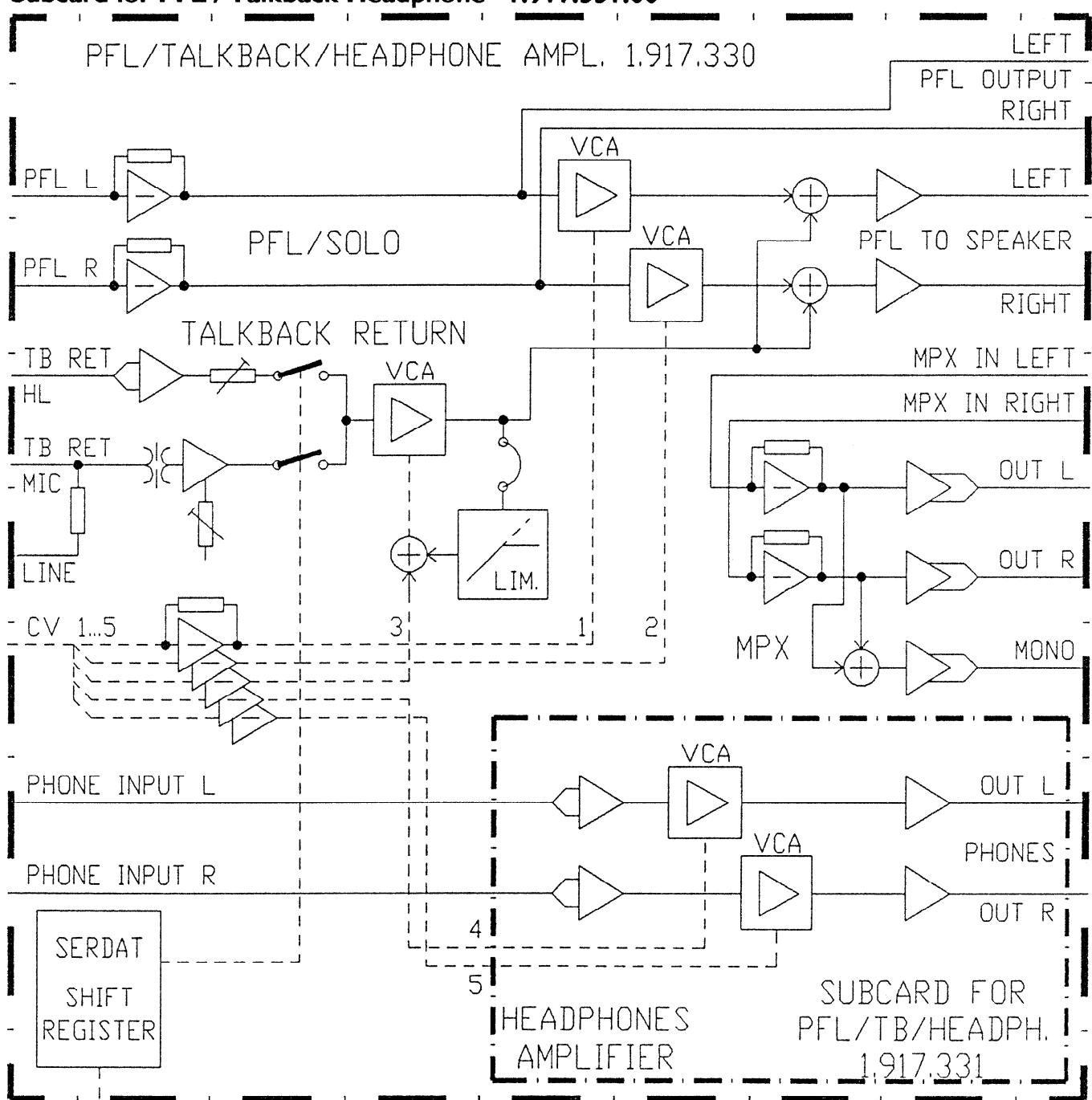
Talkback Amplifier 1.917.320.00

Ad	...POS.	...REF.No...	DESCRIPTION.....	MANUFACTURER	Ad	...POS.	...REF.No...	DESCRIPTION.....	MANUFACTURER	
	JP....7	54.01.0020	jumper plug			R....74	57.11.3682	6.8 kOhm		
	JP....8	54.01.0020	jumper plug			R....75	57.11.3330	33 Ohm		
	JP....9	54.01.0020	jumper plug			R....76	57.11.3223	22 kOhm		
	JP....10	54.01.0020	jumper plug			R....77	57.11.3682	6.8 kOhm		
	JP....11	54.01.0020	jumper plug			R....78	57.11.3682	6.8 kOhm		
	JP....12	54.01.0020	jumper plug			R....79	57.11.3330	33 Ohm		
	JP....13	54.01.0020	jumper plug			R....80	57.11.3223	22 kOhm		
	JP....14	54.01.0020	jumper plug			R....81	57.11.3223	22 kOhm		
	K....1	56.04.0195	SDS Relais Type TQ2-6V			R....82	57.11.3682	6.8 kOhm		
	P....1	54.11.2004	2*32pin euroconnector	Bu		R....83	57.11.3330	33 Ohm		
	Q....1	50.03.0515	BC307 PNP or equivalent	any		R....84	57.11.3102	1 kOhm		
	Q....2	50.03.0515	BC307 PNP or equivalent	any		R....85	57.11.3223	22 kOhm		
	Q....3	50.03.0515	BC307 PNP or equivalent	any		R....86	57.11.3223	22 kOhm		
	Q....4	50.03.0515	BC307 PNP or equivalent	any		R....87	57.11.3103	10 kOhm		
	Q....5	50.03.0436	BC237 NPN or equivalent	any		R....88	57.11.3223	22 kOhm		
	R....1	57.11.3391	390 Ohm			R....89	57.11.3222	2.2 kOhm		
	R....2	57.11.3223	22 kOhm			R....90	57.11.3102	1 kOhm		
	R....3	57.11.3223	22 kOhm			R....91	57.11.3101	100 Ohm		
	R....4	57.11.3391	390 Ohm			R....92	57.11.3682	6.8 kOhm		
	R....5	57.11.3123	12 kOhm			R....93	57.11.3104	100 kOhm		
	R....6	57.11.3123	12 kOhm			R....94	57.11.3104	100 kOhm		
	R....7	57.11.3391	390 Ohm			R....95	57.11.3104	100 kOhm		
	R....8	57.11.3223	22 kOhm			R....96	57.11.3104	100 kOhm		
	R....9	57.11.3104	100 kOhm			R....97	57.11.3104	100 kOhm		
02	R....9	57.11.3000	0 Ohm			R....98	57.11.3104	100 kOhm		
	R....10	57.11.3103	10 kOhm			R....99	57.11.3101	100 Ohm		
	R....11	57.11.3104	100 kOhm			R....100	57.11.3101	100 Ohm		
	R....12	57.11.3332	3.3 kOhm	1%	01	R....101	57.11.3101	100 Ohm		
	R....13	57.11.3332	3.3 kOhm	1%		R....102	57.11.3101	100 Ohm		
	R....14	57.11.3332	3.3 kOhm	1%		R....103	58.01.9103	10 kOhm	trimpot.	
	R....15	57.11.3332	3.3 kOhm	1%		R....104	58.01.9104	10 kOhm	trimpot.	
	R....16	57.11.3101	100 Ohm	1%		R....105	58.01.9502	5 kOhm	trimpot.	
	R....17	57.11.3101	100 Ohm	1%		R....106	58.01.9103	10 kOhm	trimpot.	
	R....18	57.11.3473	47 kOhm			R....107	58.01.9104	100 kOhm	trimpot.	
	R....19	57.11.3473	47 kOhm			R....108	58.01.9502	5 kOhm	trimpot.	
	R....20	57.11.3470	47 Ohm			R....109	58.01.9502	5 kOhm	trimpot.	
	R....21	57.11.3472	4.7 kOhm			R....110	58.01.9103	10 kOhm	trimpot.	
	R....22	57.11.5335	3.3 Mohm		01	R....111	57.11.3103	10 kOhm		
	R....23	57.11.3104	100 kOhm			R....112	58.01.9502	5 kOhm	trimpot.	
	R....24	57.11.3682	6.8 kOhm			R....113	57.92.1271		PTC, 270mA, ca. 6.5 Ohm	
	R....25	57.11.3682	6.8 kOhm			R....114	57.92.1271		PTC, 270mA, ca. 6.5 Ohm	
	R....26	57.11.3682	6.8 kOhm			R....115	57.92.1271		PTC, 270mA, ca. 6.5 Ohm	
	R....27	57.11.3682	6.8 kOhm			R....116	57.11.3103	10 kOhm		
	R....28	57.11.3222	2.2 kOhm		01	RZ....1	57.88.4104	100 kOhm	8*100kOhm	
01	R....28	57.11.3102	1 kOhm			T....1	1.022.456.00		STUDER	
	R....29	57.11.3683	68 kOhm			T....2	1.022.456.00		STUDER	
02	R....29	57.11.5225	2.2 Mohm			06	T....3	1.022.363.81		STUDER
	R....30	57.11.3330	33 Ohm			MP....1	1.917.320.11	1 pcs	Print	
	R....31	57.11.3391	390 Ohm			MP....2	1.917.320.01	1 pcs	Bez. Streifen 6.3*91 Studer	
	R....32	57.11.3223	22 kOhm			MP....3	1.010.006.33	2 pcs	Griffhaelften Studer	
	R....33	57.11.3223	22 kOhm			MP....4	1.010.090.49	1 pcs	Abschirmblech Studer	
	R....34	57.11.3391	390 Ohm			MP....5	1.010.096.49	1 pcs	Klarsicht Schild Studer	
	R....35	57.11.3123	12 kOhm			MP....6	28.21.1380	1 pcs	Rohrniete D2.5/6	
	R....36	57.11.3123	12 kOhm			05	MP....6	28.21.1390	1 pcs	Rohrniete D 2.25 * 7.0
	R....37	57.11.3391	390 Ohm			MP....7	21.01.0280	2 pcs	Z - Schraube M2.5*8	
	R....38	57.11.3223	22 kOhm			MP....8	21.01.0281	2 pcs	Z - Schraube M2.5*10	
	R....39	57.11.3104	100 kOhm			MP....9	24.16.1025	4 pcs	Rippenscheibe D2.7/5	
02	R....39	57.11.3000	0 Ohm			MP....10	43.01.0108	1 pcs	ESE-Warnschild Studer	
	R....40	57.11.3103	10 kOhm			MP....11	1.915.001.02	1 pcs	Winkel fuer Poti Studer	
	R....41	57.11.3104	100 kOhm			MP....12	53.03.0166	9 pcs	IC-Socket 8 Pin Studer	
	R....42	57.11.3332	3.3 kOhm	1%		MP....13	53.03.0168	3 pcs	IC-Socket 16 Pin Studer	
	R....43	57.11.3332	3.3 kOhm	1%		MP....14	1.022.400.03	2 pcs	Isolation zu Trafo Studer	
	R....44	57.11.3332	3.3 kOhm	1%		01	MP....15	1.010.112.64	1 pcs	Draht isoliert 68mm Studer
	R....45	57.11.3332	3.3 kOhm	1%		01	MP....16	1.917.320.02	1 pcs	Schild Potmeterbeschriftung Studer
	R....46	57.11.3101	100 Ohm	1%		01	Seriebereinigung			
	R....47	57.11.3101	100 Ohm	1%		02	Pegelbereich des 30HZ Gen. korrig. und Regelbereich T/B vergroessert.			
	R....48	57.11.3473	47 kOhm			03	Ein-Ausschaltknallein verbessert.			
	R....49	57.11.3473	47 kOhm			04	Trafostufe angepasst.			
	R....50	57.11.3470	47 Ohm			05	Rohrniete neu 7.0 statt 6.5 mm			
	R....51	57.11.3472	4.7 kOhm			06	Trafo 1.022.363.81 Ri < 40 Ohm			
	R....52	57.11.5335	3.3 Mohm							
	R....53	57.11.3104	100 kOhm							
	R....54	57.11.3682	6.8 kOhm							
01	R....54	57.11.3123	12 kOhm							
	R....55	57.11.3682	6.8 kOhm							
	R....56	57.11.3682	6.8 kOhm							
01	R....56	57.11.3123	12 kOhm							
	R....57	57.11.3682	6.8 kOhm							
	R....58	57.11.3223	22 kOhm							
	R....59	57.11.3474	470 kOhm							
	R....60	57.11.3563	56 kOhm							
	R....61	57.11.3563	56 kOhm							
	R....62	57.11.3474	470 kOhm							
	R....63	57.11.3103	10 kOhm	1%						
	R....64	57.11.3203	20 kOhm	1%						
	R....65	57.11.3105	1 MOhm							
	R....66	57.11.3223	22 kOhm							
	R....67	57.11.3103	10 kOhm							
	R....68	57.11.3103	10 kOhm							
	R....69	57.11.3182	1.8 kOhm							
	R....70	57.11.3822	8.2 kOhm							
	R....71	57.11.3103	10 kOhm							
	R....72	57.11.3101	100 Ohm							
	R....73	57.11.3223	22 kOhm							

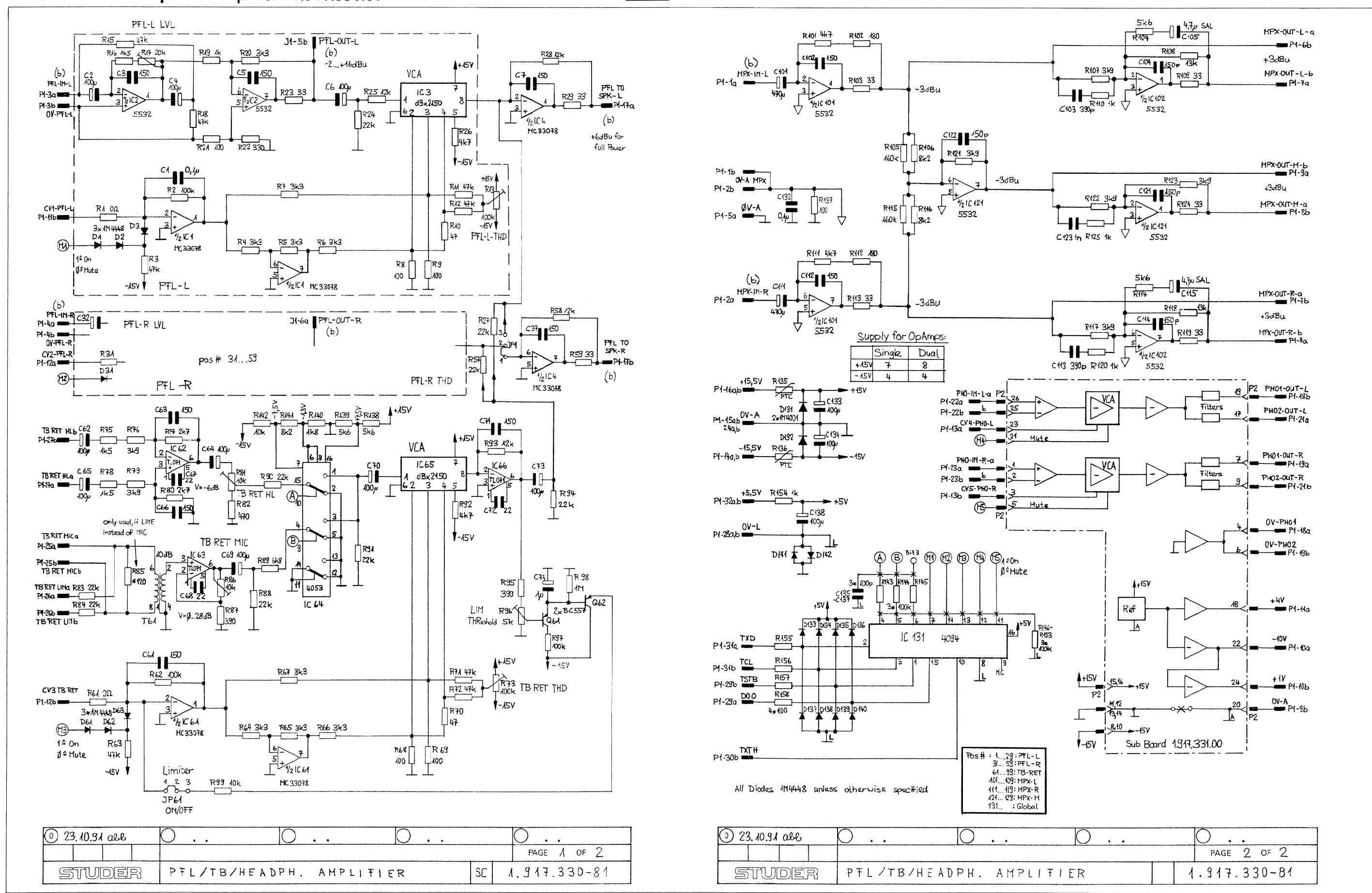
Pin Location List**Talkback Amplifier 1.917.320.00**

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P1	01A	TB-MIC -IN-a	TALKBACK MIC INPUT a	O,S
P1	01B	TB-MIC -IN-b	TALKBACK MIC INPUT b	O,S
P1	02A	TB-LINE-IN-a	TALKBACK LINE INPUT a	O,S
P1	02B	TB-LINE-IN-b	TALKBACK LINE INPUT b	O,S
P1	03	OV-A	GROUND AUDIO	X X
P1	04A	TB-MIC -PR-a	TALKBACK MIC PRODUCER a	O,S
P1	04B	TB-MIC -PR-b	TALKBACK MIC PRODUCER b	O,S
P1	05A	TB-LINE-PR-a	TALKBACK LINE PRODUCER a	O,S
P1	05B	TB-LINE-PR-b	TALKBACK LINE PRODUCER b	O,S
P1	06	OV-A	GROUND AUDIO	X X
P1	07A	OSZ-IN-a	OSZILATOR INPUT a	O,S
P1	07B	OSZ-IN-b	OSZILATOR INPUT b	O,S
P1	08	OV-A	GROUND AUDIO TALKBACK INTERN	X X
P1	09A	TB-INT-a	OUTPUT ; TALKBACK INTERN a	O,S
P1	09B	TB-INT-b	OUTPUT ; TALKBACK INTERN b	O,S
P1	10A	OV-A	GROUND AUDIO	X X
P1	10B	AUX-OUT	AUX OUTPUT	O,AS
P1	11A	-	N.C.	
P1	11B	-	N.C.	
P1	12A	CV-VCA-IN	CONTROL VOLTAGE VCA INPUT	
P1	12B	CV-VCA-PR	CONTROL VOLTAGE VCA PRODUCER	
P1	13A	OV-A	GROUND AUDIO	
P1	13B	30HZ-OUT	30HZ OUTPUT	O,AS
P1	14	- 15.5V	- SUPPLY	B X X
P1	15	OV-A	GROUND AUDIO	B X X
P1	16	+ 15.5V	+ SUPPLY	B X X
P1	17	OV-A	GROUND AUDIO	X X
P1	18A	TB-EXT-0-a	OUTPUT ; TALKBACK EXTERN 0 a	O,S
P1	18B	TB-EXT-0-b	OUTPUT ; TALKBACK EXTERN 0 b	O,S
P1	19A	TB-EXT-1-a	OUTPUT ; TALKBACK EXTERN 1 a	O,S
P1	19B	TB-EXT-1-b	OUTPUT ; TALKBACK EXTERN 1 b	O,S
P1	20A	-	N.C.	
P1	20B	-	N.C.	
P1	21A	-	N.C.	
P1	21B	-	N.C.	
P1	22A	-	N.C.	
P1	22B	-	N.C.	
P1	23A	TB TO STUDIO	OUTPUT ; TALKBACK TO STUDIO	O,S
P1	23B	-	N.C.	
P1	24A	-	N.C.	
P1	24B	-	N.C.	
P1	25A	-	N.C.	
P1	25B	-	N.C.	
P1	26A	-	N.C.	
P1	26B	-	N.C.	
P1	27A	-	N.C.	
P1	27B	-	N.C.	
P1	28	OV-L	GROUND SIGN (LOGIC)	B X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)	
P1	29B	TSTB 4	TRANSMIT STROBE 4	
P1	30A	-	RES	
P1	30B	TXTH	TRANSMIT DATA THROUGH	
P1	31A	TXD	TRANSMIT DATA	
P1	31B	TCL	TRANSMIT CLOCK	
P1	32	+ 5.5V	+ SUPPLY	B X X

PFL / Talkback Headphone Amplifier 1.917.330.81
Subcard for PFL / Talkback Headphone 1.917.331.00

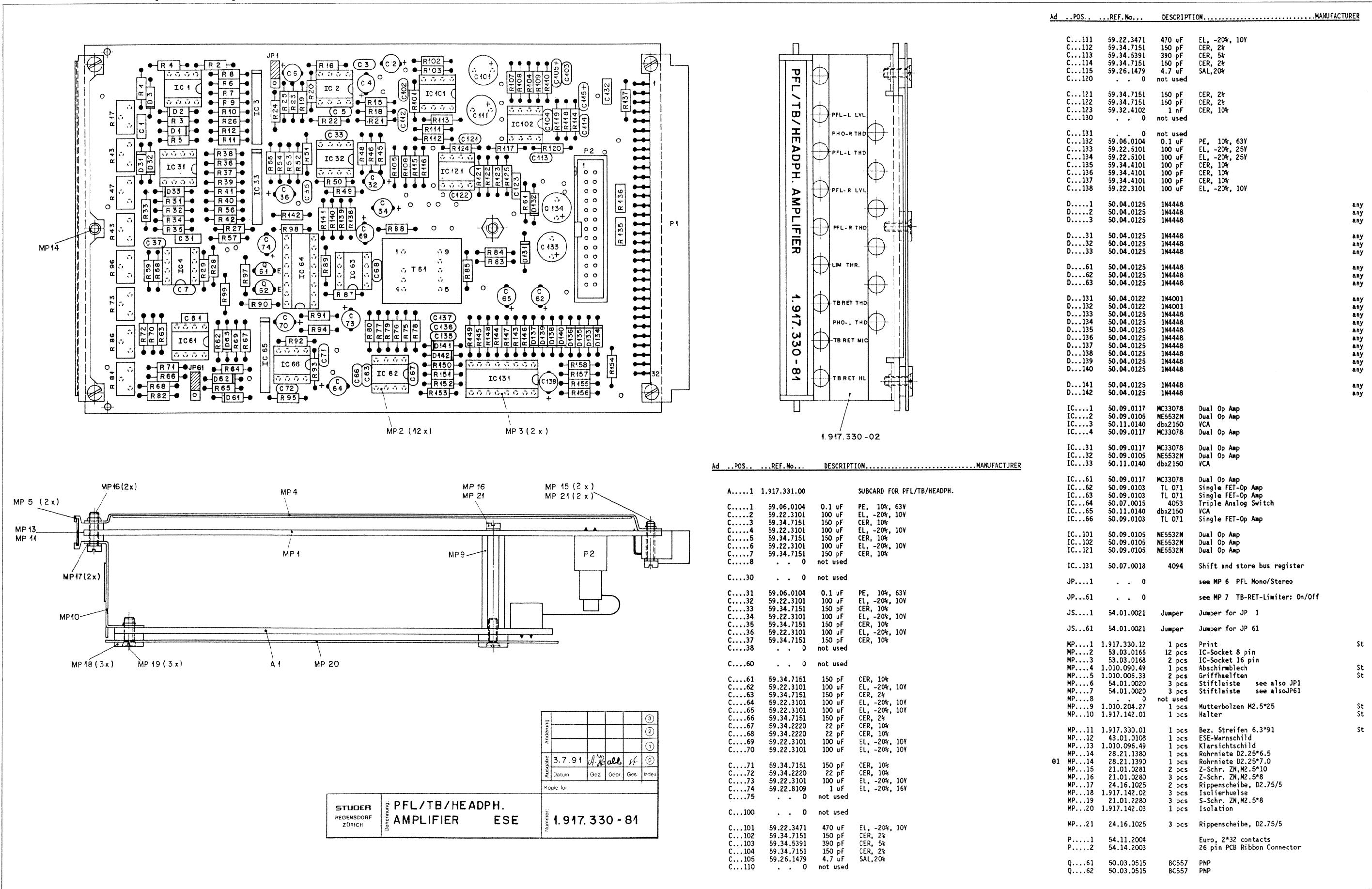


PFL / Talkback Headphone Amplifier 1.917.330.81





PFL / Talkback Headphone Amplifier 1.917.330.81

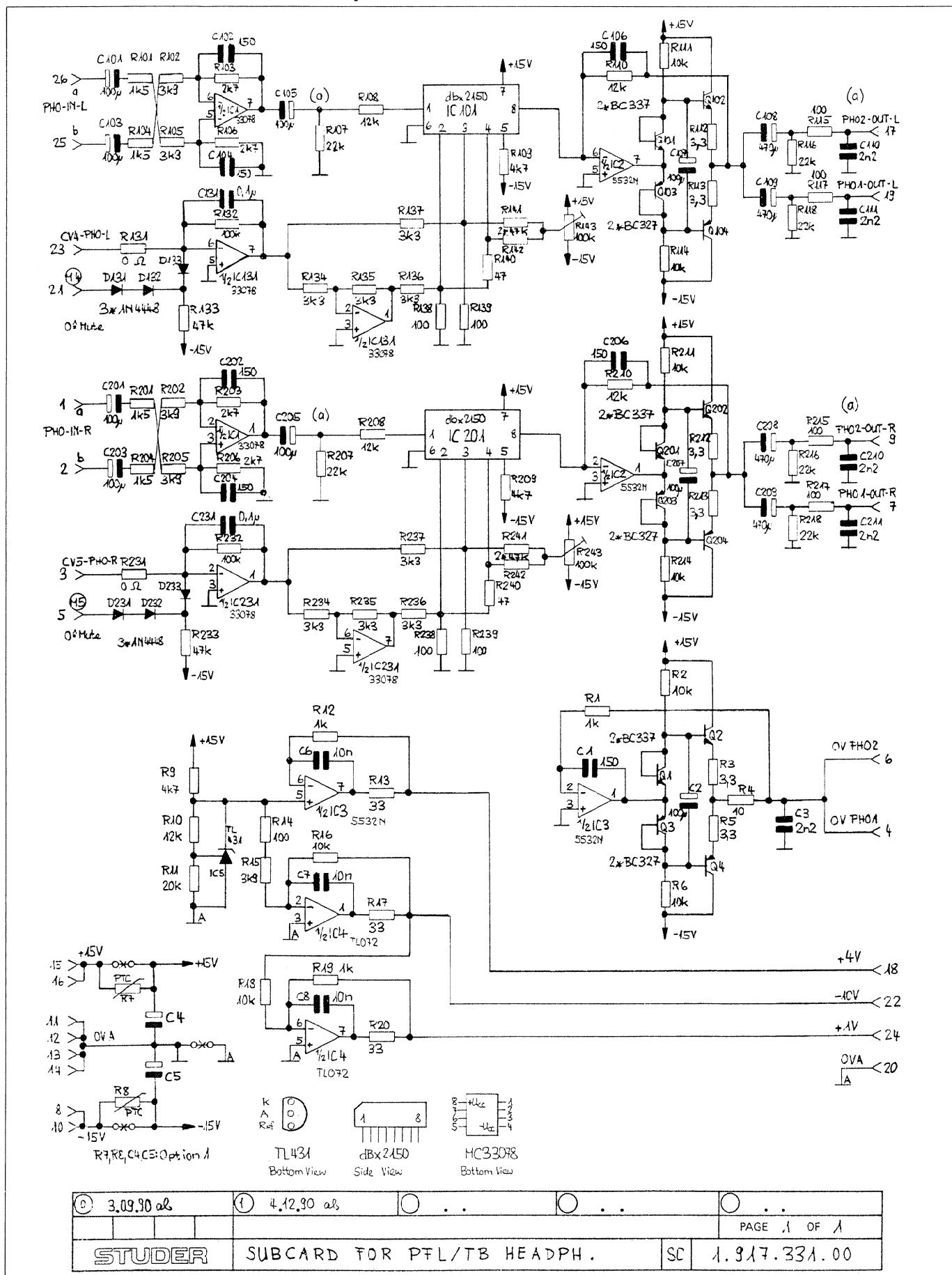


Pin Location List
PFL / Talkback Headphone Amplifier 1.917.330.81

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P1	01A	MPX-IN-L	MULTIPLEX INPUT LEFT	O, AS
P1	01B	OV-A MPX	GROUND AUDIO MPX	O
P1	02A	MPX-IN-R	MULTIPLEX INPUT RIGHT	O, AS
P1	02B	OV-A MPX	GROUND AUDIO MPX	O
P1	03A	PFL-IN-L	PFL INPUT LEFT	O, AS
P1	03B	OV PFL-L	GROUND AUDIO PFL LEFT	O
P1	04A	PFL-IN-R	PFL INPUT RIGHT	O, AS
P1	04B	OV PFL-R	GROUND AUDIO PFL RIGHT	O
P1	05A	OV-A	GROUND AUDIO	
P1	05B	PFL-OUT-L	PFL OUTPUT LEFT	O, AS
P1	06A	PFL-OUT-R	PFL OUTPUT RIGHT	O, AS
P1	06B	MPX-OUT-L-a	MULTIPLEX OUTPUT LEFT a	O, S
P1	07A	MPX-OUT-L-b	MULTIPLEX OUTPUT LEFT b	O, S
P1	07B	MPX-OUT-R-a	MULTIPLEX OUTPUT RIGHT a	O, S
P1	08A	MPX-OUT-R-b	MULTIPLEX OUTPUT RIGHT b	O, S
P1	08B	MPX-OUT-M-a	MULTIPLEX OUTPUT MASTER a	O, S
P1	09A	MPX-OUT-M-b	MULTIPLEX OUTPUT MASTER b	O, S
P1	09B	OV-A	GROUND AUDIO	
P1	10A	-10V	CONTROL VOLTAGE VCA	
P1	10B	+1V	CONTROL VOLTAGE VCA	
P1	11A	+4V	CONTROL VOLTAGE VCA	
P1	11B	CV 1-PFL-L	CTRL.VOLTAGE VCA 1.PFL LEFT	
P1	12A	CV 2-PFL-R	CTRL.VOLTAGE VCA 2 PFL RIGHT	
P1	12B	CV 3-TB RET	CTRL.VOLTAGE VCA 3 TB RETURN	
P1	13A	CV 4-PHO-L	CTRL.VOLTAGE VCA 4 PHONE L	
P1	13B	CV 5-PHÖ-R	CTRL.VOLTAGE VCA 5 PHONE R	
P1	14	- 15.5V	- SUPPLY	B X X
P1	15	OV-A	GROUND AUDIO	B X X
P1	16	+ 15.5V	+ SUPPLY	B X X
P1	17A	PFL TO SPK-L	PFL TO SPEAKER LEFT	O, AS
P1	17B	PFL TO SPK-R	PFL TO SPEAKER RIGHT	O, AS
P1	18A	OV-PHO1	GROUND AUDIO PHONE 1	O
P1	18B	PHO1-OUT-L	PHONE 1 OUTPUT LEFT	O, AS
P1	19A	PHO1-OUT-R	PHONE 1 OUTPUT RIGHT	O, AS
P1	19B	OV PHO2	GROUND AUDIO PHONE 2	O
P1	20A	-	RES	
P1	20B	-	RES	
P1	21A	PHO2-OUT-L	PHONE 2 OUTPUT LEFT	O, AS
P1	21B	PHO2-OUT-R	PHONE 2 OUTPUT RIGHT	O, AS
P1	22A	PHO-IN-L-a	PHONE INPUT LEFT a	O, S
P1	22B	PHO-IN-L-b	PHONE INPUT LEFT b	O, S
P1	23A	PHO-IN-R-a	PHONE INPUT RIGHT a	O, S
P1	23B	PHO-IN-R-b	PHONE INPUT RIGHT b	O, S
P1	24	OV-A	GROUND AUDIO	B X X
P1	25A	TB RET MIC-a	TALKBACK RETURN MIC a	O, S
P1	25B	TB RET MIC-b	TALKBACK RETURN MIC b	O, S
P1	26A	TB RET LIN-a	TALKBACK RETURN LINE a	O, S
P1	26B	TB RET LIN-b	TALKBACK RETURN LINE b	O, S
P1	27A	TB RET HL-a	TALKBACK RETURN HIGH LEVEL a	O, S
P1	27B	TB RET HL-b	TALKBACK RETURN HIGH LEVEL b	O, S
P1	28	OV-L	GROUND SIGN (LOGIC)	B X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)	
P1	29B	TSTB	TRANSMIT STROBE	
P1	30A	-	RES	
P1	30B	TXTH	TRANSMIT DATA THROUGH	
P1	31A	TXD	TRANSMIT DATA	
P1	31B	TCL	TRANSMIT CLOCK	
P1	32	+ 5.5V	+ SUPPLY	B X X



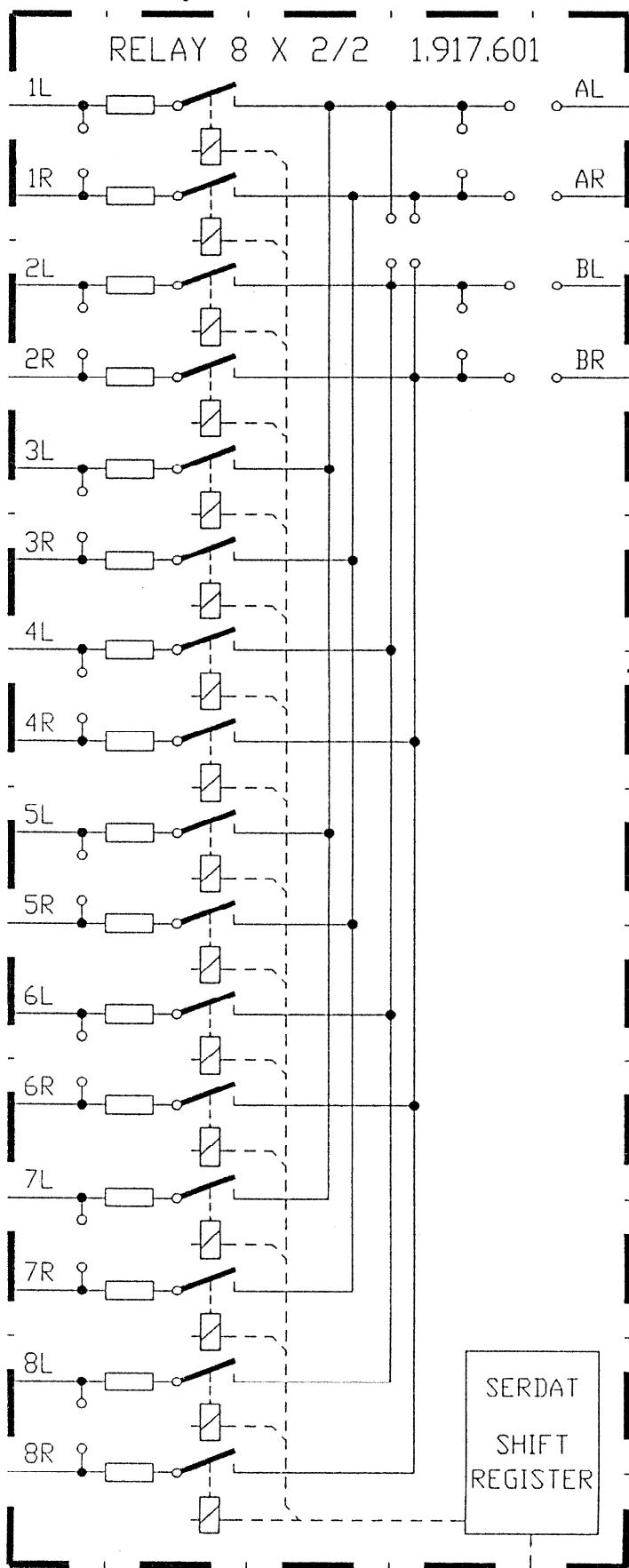
Subcard for PFL / Talkback Headphone 1.917.331.00



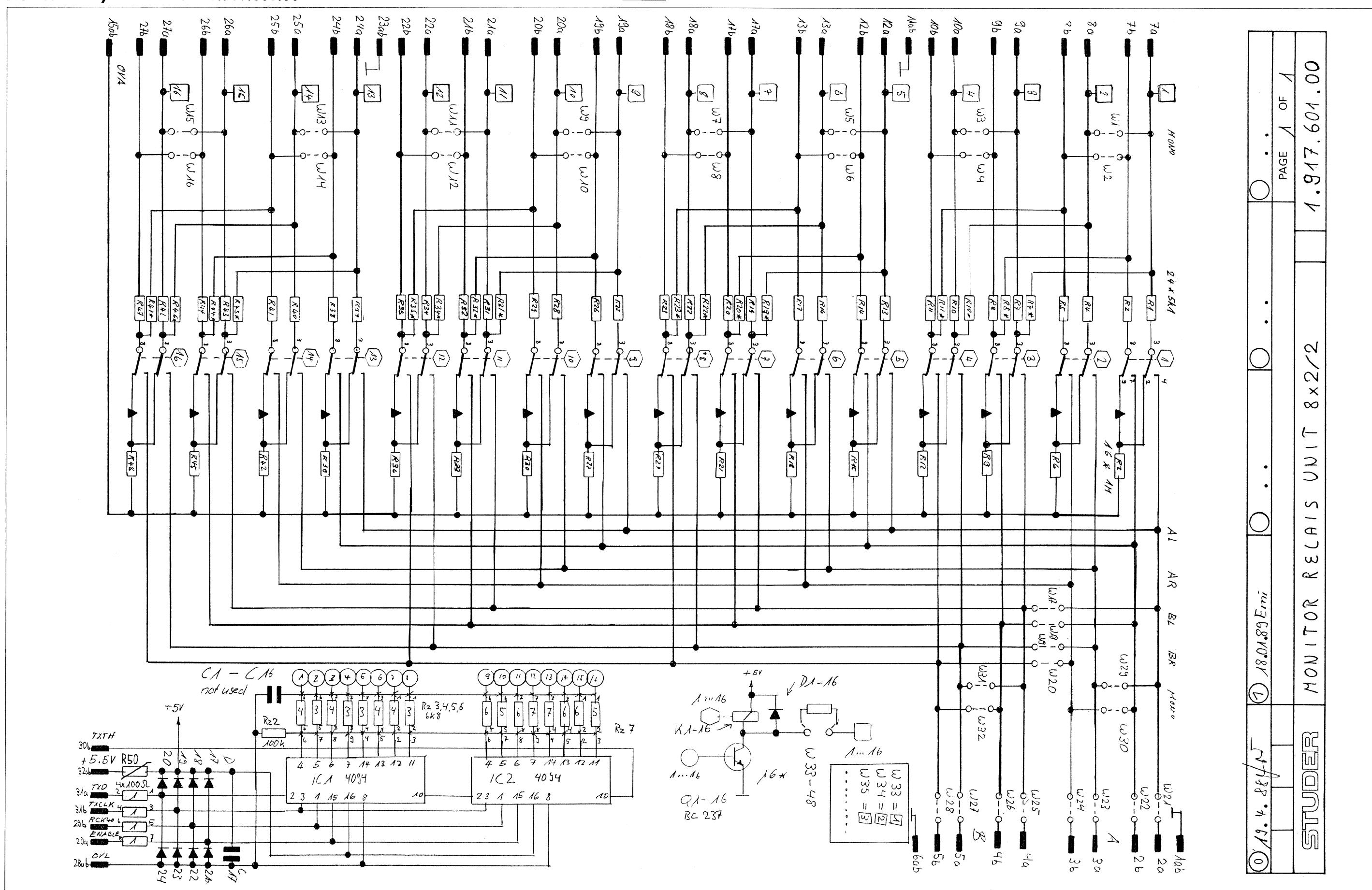


Subcard for PFL / Talkback Headphone 1.917.331.00

Ad	POS.	REF. No...	DESCRIPTION.....	MANUFACTURER	Ad	POS.	REF. No...	DESCRIPTION.....	MANUFACTURER
A.....1		1.023.112.01	Flachkabel konf. 26-pol		R....101		57.11.3152	1.5 kOhm	2 %
C.....1		59.34.7151	150 pF CER, 10%		R....102		57.11.3392	3.9 kOhm	2 %
C.....2		59.22.3101	100 uF EL, -20%, 10V		R....103		57.11.3272	2.7 kOhm	2 %
C.....3		59.06.0222	2.2 nF PE, 10%, 63V		R....104		57.11.3152	1.5 kOhm	2 %
C.....4		100 uF EL, -20%, 25V	59.22.5101 Option 1		R....105		57.11.3392	3.9 kOhm	2 %
C.....5		100 uF EL, -20%, 25V	59.22.5101 Option 1		R....106		57.11.3272	2.7 kOhm	2 %
C.....6		10 nF PE, 10%, 63V			R....107		57.11.3223	22 kOhm	10 %
C.....7		10 nF PE, 10%, 63V			R....108		57.11.3123	12 kOhm	2 %
C.....8		10 nF PE, 10%, 63V			R....109		57.11.3472	4.7 kOhm	10 %
C....101		59.22.3101	100 uF EL, -20%, 10V		R....110		57.11.3123	12 kOhm	2 %
C....102		59.34.7151	150 pF CER, 2%		C....111		57.11.3103	10 kOhm	10 %
C....103		59.22.3101	100 uF EL, -20%, 10V		R....112		57.11.3339	3.3 Ohm	10 %
C....104		59.34.7151	150 pF CER, 2%		R....113		57.11.3339	3.3 Ohm	10 %
C....105		59.22.3101	100 uF EL, -20%, 10V		R....114		57.11.3103	10 kOhm	10 %
C....106		59.34.7151	150 pF CER, 10%		R....115		57.11.3101	100 Ohm	10 %
C....107		59.22.3101	100 uF EL, -20%, 10V		R....116		57.11.3223	22 kOhm	10 %
C....108		59.22.3471	470 uF EL, -20%, 10V		R....117		57.11.3101	100 Ohm	10 %
C....109		59.22.3471	470 uF EL, -20%, 10V		R....118		57.11.3223	22 kOhm	10 %
C....110		59.06.0222	2.2 nF PE, 10%, 63V		R....131		57.11.3000	0 Ohm	Wiring Bridge
C....111		59.06.0222	2.2 nF PE, 10%, 63V		R....132		57.11.3104	100 kOhm	1 %
C....131		59.06.0104	0.1 uF PE, 10%, 63V		R....133		57.11.3473	47 kOhm	10 %
C....201		59.22.3101	100 uF EL, -20%, 10V		R....134		57.11.3332	3.3 kOhm	1 %
C....202		59.34.7151	150 pF CER, 2%		R....135		57.11.3332	3.3 kOhm	1 %
C....203		59.22.3101	100 uF EL, -20%, 10V		R....136		57.11.3332	3.3 kOhm	1 %
C....204		59.34.7151	150 pF CER, 2%		R....137		57.11.3332	3.3 kOhm	1 %
C....205		59.22.3101	100 uF EL, -20%, 10V		R....138		57.11.3101	100 Ohm	1 %
C....206		59.34.7151	150 pF CER, 10%		R....139		57.11.3101	100 Ohm	1 %
C....207		59.22.3101	100 uF EL, -20%, 10V		R....140		57.11.3470	47 Ohm	10 %
C....208		59.22.3471	470 uF EL, -20%, 10V		R....141		57.11.3473	47 kOhm	10 %
C....209		59.22.3471	470 uF EL, -20%, 10V		R....142		57.11.3473	47 kOhm	10 %
C....210		59.06.0222	2.2 nF PE, 10%, 63V		R....143		58.01.9104	100 kOhm	10 %, variable resistor
C....211		59.06.0222	2.2 nF PE, 10%, 63V		R....201		57.11.3152	1.5 kOhm	2 %
C....231		59.06.0104	0.1 uF PE, 10%, 63V		R....202		57.11.3392	3.9 kOhm	2 %
D....131		50.04.0125	1N4448		R....203		57.11.3272	2.7 kOhm	2 %
D....132		50.04.0125	1N4448		R....204		57.11.3152	1.5 kOhm	2 %
D....133		50.04.0125	1N4448		R....205		57.11.3392	3.9 kOhm	2 %
D....134		50.04.0125	1N4448		R....206		57.11.3272	2.7 kOhm	2 %
D....135		50.04.0125	1N4448		R....207		57.11.3223	22 kOhm	10 %
D....136		50.04.0125	1N4448		R....208		57.11.3123	12 kOhm	2 %
D....137		50.04.0125	1N4448		R....209		57.11.3472	4.7 kOhm	10 %
D....138		50.04.0125	1N4448		R....210		57.11.3123	12 kOhm	2 %
D....139		50.04.0125	1N4448		R....211		57.11.3103	10 kOhm	10 %
D....140		50.04.0125	1N4448		R....212		57.11.3339	3.3 Ohm	10 %
D....141		50.04.0125	1N4448		R....213		57.11.3339	3.3 Ohm	10 %
D....142		50.04.0125	1N4448		R....214		57.11.3103	10 kOhm	10 %
D....143		50.04.0125	1N4448		R....215		57.11.3101	100 Ohm	10 %
D....144		50.04.0125	1N4448		R....216		57.11.3223	22 kOhm	10 %
D....145		50.04.0125	1N4448		R....217		57.11.3101	100 Ohm	10 %
D....146		50.04.0125	1N4448		R....218		57.11.3223	22 kOhm	10 %
IC....1		50.09.0117	MC3307B Dual Op Amp		R....231		57.11.3000	0 Ohm	Wiring Bridge
IC....2		50.09.0117	MC3307B Dual Op Amp		R....232		57.11.3104	100 kOhm	1 %
IC....3		50.09.0105	NE5532N Dual Op Amp		R....233		57.11.3473	47 kOhm	10 %
IC....4		50.09.0117	MC3307B Dual Op Amp		R....234		57.11.3332	3.3 kOhm	1 %
IC....5		50.09.0105	NE5532N Dual Op Amp		R....235		57.11.3332	3.3 kOhm	1 %
IC....6		50.09.0117	MC3307B Dual Op Amp		R....236		57.11.3332	3.3 kOhm	1 %
IC....7		50.09.0101	TL 072 Dual FET-Op Amp		R....237		57.11.3332	3.3 kOhm	1 %
IC....8		50.10.0106	TL431C Shunt Regulator		R....238		57.11.3101	100 Ohm	1 %
IC....9		50.11.0140	dbx2150 VCA		R....239		57.11.3101	100 Ohm	1 %
IC....10		50.09.0117	MC3307B Dual Op Amp		R....240		57.11.3470	47 Ohm	10 %
IC....11		50.11.0140	dbx2150 VCA		R....241		57.11.3473	47 kOhm	10 %
IC....12		50.09.0117	MC3307B Dual Op Amp		R....242		57.11.3473	47 kOhm	10 %
IC....13		50.11.0140	dbx2150 VCA		R....243		58.01.9104	100 kOhm	10 %, variable resistor
MP....1	1.917.331.11	1 pcs	Print		(01)	90/12/04	Better output performance. IC 2,3,4 changed		
MP....2	53.03.0166	6 pcs	IC-Socket 8 pin		Option 1 :	for standalone headphone-amplifier			
MP....3	50.20.2001	6 pcs	Transistor-Clip		Global or both: Pos No 1...				
Q....1	50.03.0516	BC 337	NPN		Left channel : Pos No 101...				
Q....2	50.03.0516	BC 337	NPN		Right channel : Pos No 201...				
Q....3	50.03.0625	BC 327	PNP		CER=Ceramic, EL=Electrolytic, PE=Polyester				
Q....4	50.03.0625	BC 327	PNP						
Q....101	50.03.0516	BC 337	NPN						
Q....102	50.03.0516	BC 337	NPN						
Q....103	50.03.0625	BC 327	PNP						
Q....104	50.03.0625	BC 327	PNP						
Q....201	50.03.0515	BC 337	NPN						
Q....202	50.03.0515	BC 337	NPN						
Q....203	50.03.0625	BC 327	PNP						
Q....204	50.03.0625	BC 327	PNP						
R....1	57.11.3102	1 kOhm	10 %						
R....2	57.11.3103	10 kOhm	10 %						
R....3	57.11.3339	3.3 Ohm	10 %						
R....4	57.11.3100	10 Ohm	10 %						
R....5	57.11.3339	3.3 Ohm	10 %				</td		

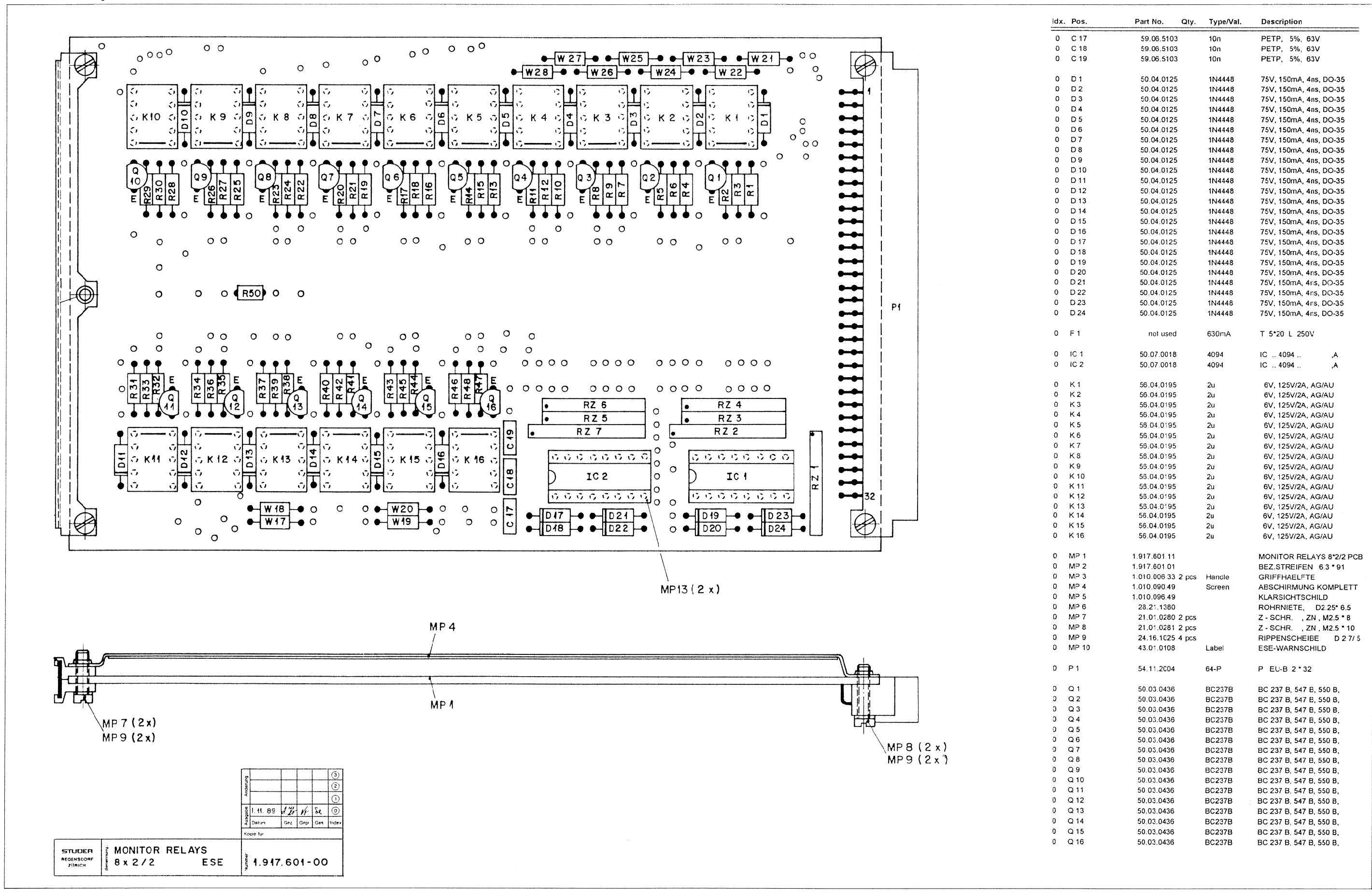
Monitor Relays Unit 8x2/2 1.917.601.00

Monitor Relays Unit 8x2/2 1.917.601.00





Monitor Relays Unit 8x2/2 1.917.601.00



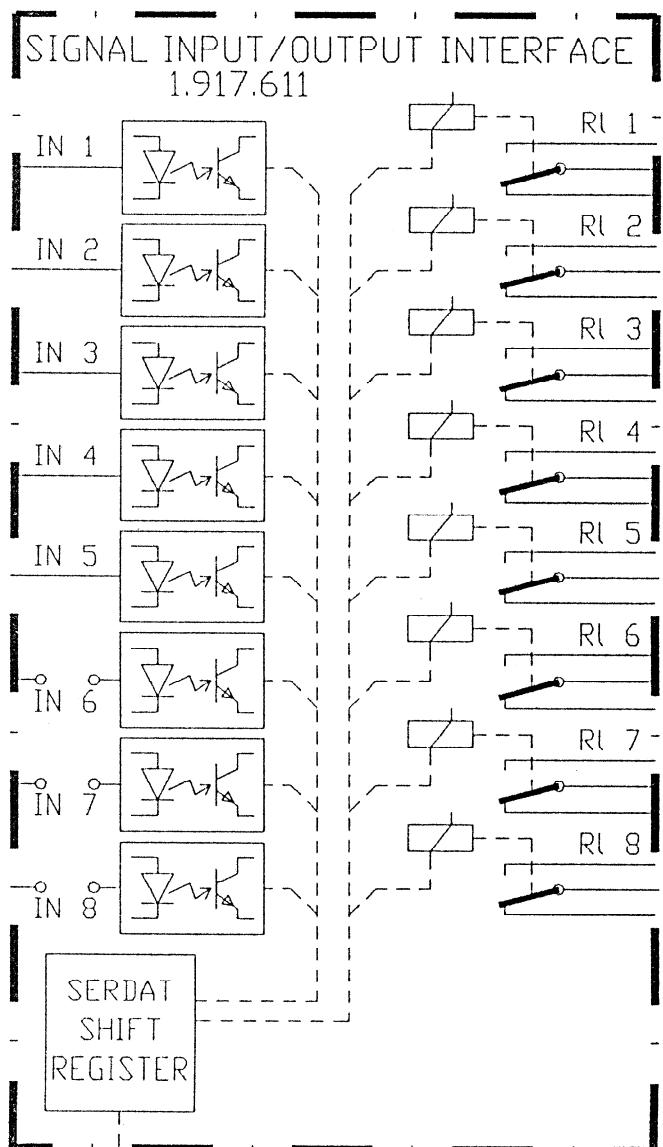

Monitor Relays Unit 8x2/2 1.917.601.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 1	57.11.3512	5k1	MF, 1%, 0207		0	W 26	57.11.3000	OR0	MF,	0207
0	R 2	57.11.3512	5k1	MF, 1%, 0207		0	W 27	57.11.3000	OR0	MF,	0207
0	R 3	57.11.3105	1M0	MF, 1%, 0207		0	W 28	57.11.3000	OR0	MF,	0207
0	R 4	57.11.3512	5k1	MF, 1%, 0207		0	W 29	not used	OR0	MF,	0207
0	R 5	57.11.3512	5k1	MF, 1%, 0207		0	W 30	not used	OR0	MF,	0207
0	R 6	57.11.3105	1M0	MF, 1%, 0207		0	W 31	not used	OR0	MF,	0207
0	R 7	57.11.3512	5k1	MF, 1%, 0207		0	W 32	not used	OR0	MF,	0207
0	R 8	57.11.3512	5k1	MF, 1%, 0207		0	W 33	not used	OR0	MF,	0207
0	R 9	57.11.3105	1M0	MF, 1%, 0207		0	W 34	not used	OR0	MF,	0207
0	R 10	57.11.3512	5k1	MF, 1%, 0207		0	W 35	not used	OR0	MF,	0207
0	R 11	57.11.3512	5k1	MF, 1%, 0207		0	W 36	not used	OR0	MF,	0207
0	R 12	57.11.3105	1M0	MF, 1%, 0207		0	W 37	not used	OR0	MF,	0207
0	R 13	57.11.3512	5k1	MF, 1%, 0207		0	W 38	not used	OR0	MF,	0207
0	R 14	57.11.3512	5k1	MF, 1%, 0207		0	W 39	not used	OR0	MF,	0207
0	R 15	57.11.3105	1M0	MF, 1%, 0207		0	W 40	not used	OR0	MF,	0207
0	R 16	57.11.3512	5k1	MF, 1%, 0207		0	W 41	not used	OR0	MF,	0207
0	R 17	57.11.3512	5k1	MF, 1%, 0207		0	W 42	not used	OR0	MF,	0207
0	R 18	57.11.3105	1M0	MF, 1%, 0207		0	W 43	not used	OR0	MF,	0207
0	R 19	57.11.3512	5k1	MF, 1%, 0207		0	W 44	not used	OR0	MF,	0207
0	R 20	57.11.3512	5k1	MF, 1%, 0207		0	W 45	not used	OR0	MF,	0207
0	R 21	57.11.3105	1M0	MF, 1%, 0207		0	W 46	not used	OR0	MF,	0207
0	R 22	57.11.3512	5k1	MF, 1%, 0207		0	W 47	not used	OR0	MF,	0207
0	R 23	57.11.3512	5k1	MF, 1%, 0207		0	W 48	not used	OR0	MF,	0207
0	R 24	57.11.3105	1M0	MF, 1%, 0207		0	XIC 13	53.03.0168 2 pcs	16p	DIL 0.3", löt, gerade	
0	R 25	57.11.3512	5k1	MF, 1%, 0207							
0	R 26	57.11.3512	5k1	MF, 1%, 0207							
0	R 27	57.11.3105	1M0	MF, 1%, 0207							
0	R 28	57.11.3512	5k1	MF, 1%, 0207							
0	R 29	57.11.3512	5k1	MF, 1%, 0207							
0	R 30	57.11.3105	1M0	MF, 1%, 0207							
0	R 31	57.11.3512	5k1	MF, 1%, 0207							
0	R 32	57.11.3512	5k1	MF, 1%, 0207							
0	R 33	57.11.3105	1M0	MF, 1%, 0207							
0	R 34	57.11.3512	5k1	MF, 1%, 0207							
0	R 35	57.11.3512	5k1	MF, 1%, 0207							
0	R 36	57.11.3105	1M0	MF, 1%, 0207							
0	R 37	57.11.3512	5k1	MF, 1%, 0207							
0	R 38	57.11.3512	5k1	MF, 1%, 0207							
0	R 39	57.11.3105	1M0	MF, 1%, 0207							
0	R 40	57.11.3512	5k1	MF, 1%, 0207							
0	R 41	57.11.3512	5k1	MF, 1%, 0207							
0	R 42	57.11.3105	1M0	MF, 1%, 0207							
0	R 43	57.11.3512	5k1	MF, 1%, 0207							
0	R 44	57.11.3512	5k1	MF, 1%, 0207							
0	R 45	57.11.3105	1M0	MF, 1%, 0207							
0	R 46	57.11.3512	5k1	MF, 1%, 0207							
0	R 47	57.11.3512	5k1	MF, 1%, 0207							
0	R 48	57.11.3105	1M0	MF, 1%, 0207							
0	R 50	57.92.7014	0.65A	POLY- PTC, 60V							
0	RZ 1	57.88.2101	R 4*100R	RZ 4 * 100 ,	2%, SIP 8						
0	RZ 2	57.88.4104	100k	RZ 8 * 100 K,	2%, SIP 9						
0	RZ 3	57.88.2682	R 4*6k8	RZ 4 * 6.8 K,	2%, SIP 8						
0	RZ 4	57.88.2682	R 4*6k8	RZ 4 * 6.8 K,	2%, SIP 8						
0	RZ 5	57.88.2682	R 4*6k8	RZ 4 * 6.8 K,	2%, SIP 8						
0	RZ 6	57.88.2682	R 4*6k8	RZ 4 * 6.8 K,	2%, SIP 8						
0	RZ 7	57.88.4104	100k	RZ 8 * 100 K,	2%, SIP 9						
0	W 1	not used	OR0	MF,	0207						
0	W 2	not used	OR0	MF,	0207						
0	W 3	not used	OR0	MF,	0207						
0	W 4	not used	OR0	MF,	0207						
0	W 5	not used	OR0	MF,	0207						
0	W 6	not used	OR0	MF,	0207						
0	W 7	not used	OR0	MF,	0207						
0	W 8	not used	OR0	MF,	0207						
0	W 9	not used	OR0	MF,	0207						
0	W 10	not used	OR0	MF,	0207						
0	W 11	not used	OR0	MF,	0207						
0	W 12	not used	OR0	MF,	0207						
0	W 13	not used	OR0	MF,	0207						
0	W 14	not used	OR0	MF,	0207						
0	W 15	not used	OR0	MF,	0207						
0	W 16	not used	OR0	MF,	0207						
0	W 17	not used	OR0	MF,	0207						
0	W 18	not used	OR0	MF,	0207						
0	W 19	not used	OR0	MF,	0207						
0	W 20	not used	OR0	MF,	0207						
0	W 21	57.11.3000	OR0	MF,	0207						
0	W 22	57.11.3000	OR0	MF,	0207						
0	W 23	57.11.3000	OR0	MF,	0207						
0	W 24	57.11.3000	OR0	MF,	0207						
0	W 25	57.11.3000	OR0	MF,	0207						

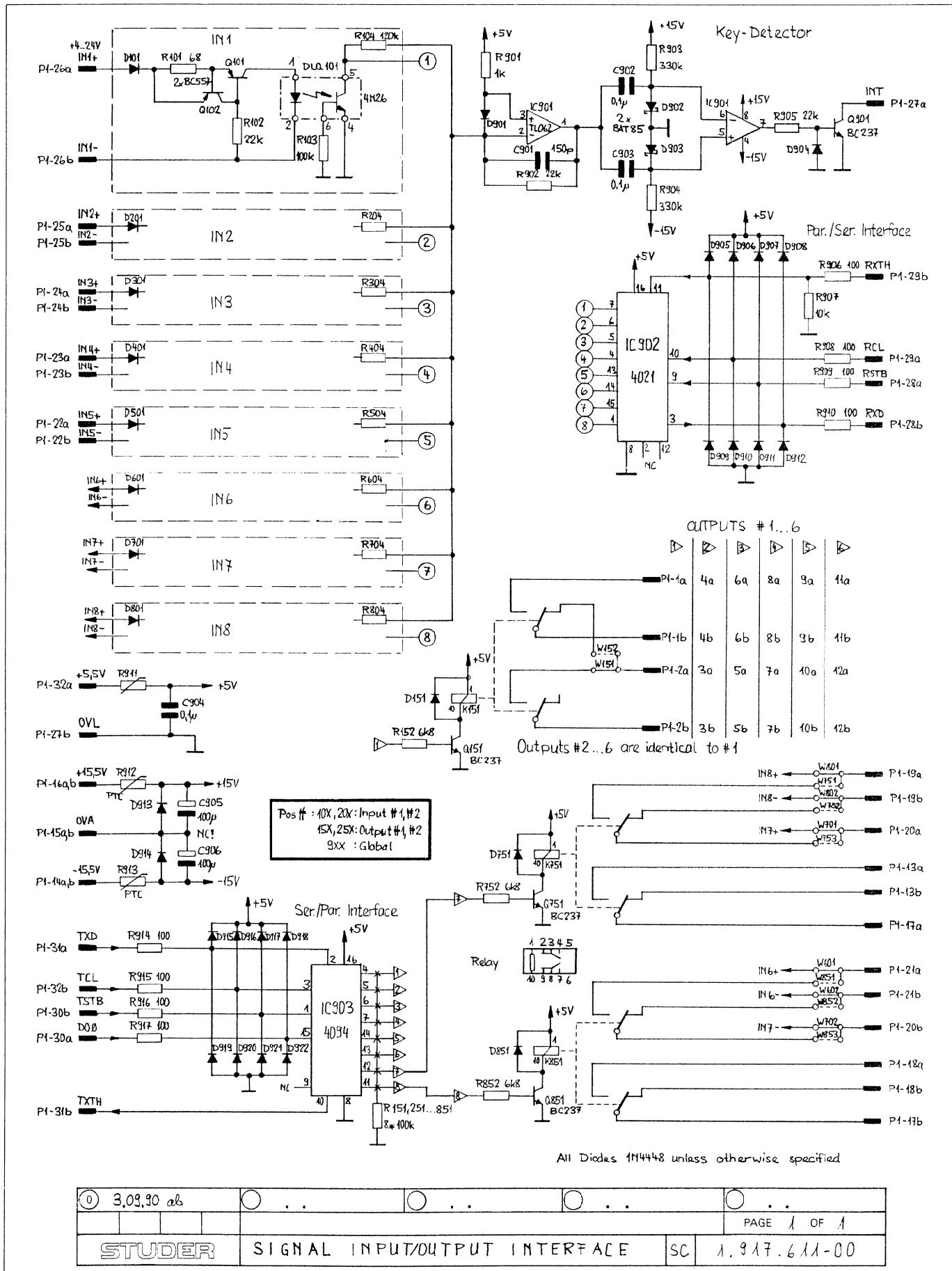
End of List**Comments**

Pin Location List**Monitor Relays Unit 8x2/2 1.917.601.00**

P	NO	NAME	REMARK	B=BUS
				O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
P1	01	OV-A	GROUND AUDIO	X X
P1	02A	BUS A-L-a	OUTPUT A LEFT a ; 0-0HM BUS	B,S
P1	02B	BUS A-L-b	OUTPUT A LEFT b ; 0-0HM BUS	B,S
P1	03A	BUS A-R-a	OUTPUT A RIGHT a ; 0-0HM BUS	B,S
P1	03B	BUS A-R-b	OUTPUT A RIGHT b ; 0-0HM BUS	B,S
P1	04A	BUS B-L-a	OUTPUT B LEFT a ; 0-0HM BUS	B,S
P1	04B	BUS B-L-b	OUTPUT B LEFT b ; 0-0HM BUS	B,S
P1	05A	BUS B-R-a	OUTPUT B RIGHT a ; 0-0HM BUS	B,S
P1	05B	BUS B-R-b	OUTPUT B RIGHT b ; 0-0HM BUS	B,S
P1	06	OV-A	GROUND AUDIO	X X
P1	07A	IN 1-L-a	INPUT 1 LEFT a ; RELAIS 1	O,S
P1	07B	IN 1-L-b	INPUT 1 LEFT b ; RELAIS 1	O,S
P1	08A	IN 1-R-a	INPUT 1 RIGHT a ; RELAIS 2	O,S
P1	08B	IN 1-R-b	INPUT 1 RIGHT b ; RELAIS 2	O,S
P1	09A	IN 2-L-a	INPUT 2 LEFT a ; RELAIS 3	O,S
P1	09B	IN 2-L-b	INPUT 2 LEFT b ; RELAIS 3	O,S
P1	10A	IN 2-R-a	INPUT 2 RIGHT a ; RELAIS 4	O,S
P1	10B	IN 2-R-b	INPUT 2 RIGHT b ; RELAIS 4	O,S
P1	11	OV-A	GROUND AUDIO	X X
P1	12A	IN 3-L-a	INPUT 3 LEFT a ; RELAIS 5	O,S
P1	12B	IN 3-L-b	INPUT 3 LEFT b ; RELAIS 5	O,S
P1	13A	IN 3-R-a	INPUT 3 RIGHT a ; RELAIS 6	O,S
P1	13B	IN 3-R-b	INPUT 3 RIGHT b ; RELAIS 6	O,S
P1	14	- 15.5V	- SUPPLY	B X X
P1	15	OV-A	GROUND AUDIO	B X X
P1	16	+ 15.5V	+ SUPPLY	B X X
P1	17A	IN 4-L-a	INPUT 4 LEFT a ; RELAIS 7	O,S
P1	17B	IN 4-L-b	INPUT 4 LEFT b ; RELAIS 7	O,S
P1	18A	IN 4-R-a	INPUT 4 RIGHT a ; RELAIS 8	O,S
P1	18B	IN 4-R-b	INPUT 4 RIGHT b ; RELAIS 8	O,S
P1	19A	IN 5-L-a	INPUT 5 LEFT a ; RELAIS 9	O,S
P1	19B	IN 5-L-b	INPUT 5 LEFT b ; RELAIS 9	O,S
P1	20A	IN 5-R-a	INPUT 5 RIGHT a ; RELAIS 10	O,S
P1	20B	IN 5-R-b	INPUT 5 RIGHT b ; RELAIS 10	O,S
P1	21A	IN 6-L-a	INPUT 6 LEFT a ; RELAIS 11	O,S
P1	21B	IN 6-L-b	INPUT 6 LEFT b ; RELAIS 11	O,S
P1	22A	IN 6-R-a	INPUT 6 RIGHT a ; RELAIS 12	O,S
P1	22B	IN 6-R-b	INPUT 6 RIGHT b ; RELAIS 12	O,S
P1	23	OV-A	GROUND AUDIO	X X
P1	24A	IN 7-L-a	INPUT 7 LEFT a ; RELAIS 13	O,S
P1	24B	IN 7-L-b	INPUT 7 LEFT b ; RELAIS 13	O,S
P1	25A	IN 7-R-a	INPUT 7 RIGHT a ; RELAIS 14	O,S
P1	25B	IN 7-R-b	INPUT 7 RIGHT b ; RELAIS 14	O,S
P1	26A	IN 8-L-a	INPUT 8 LEFT a ; RELAIS 15	O,S
P1	26B	IN 8-L-b	INPUT 8 LEFT b ; RELAIS 15	O,S
P1	27A	IN 8-R-a	INPUT 8 RIGHT a ; RELAIS 16	O,S
P1	27B	IN 8-R-b	INPUT 8 RIGHT b ; RELAIS 16	O,S
P1	28	OV-L	GROUND SIGN (LOGIC)	B X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)	
P1	29B	TSTB 5	TRANSMIT STROBE 5	
P1	30A	-	RES	
P1	30B	TXTH	TRANSMIT DATA THROUGH	
P1	31A	TXD	TRANSMIT DATA	
P1	31B	TCL	TRANSMIT CLOCK	
P1	32	+ 5.5V	+ SUPPLY	B X X

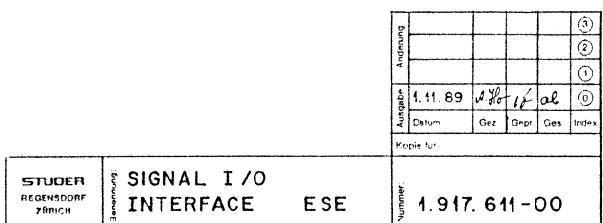
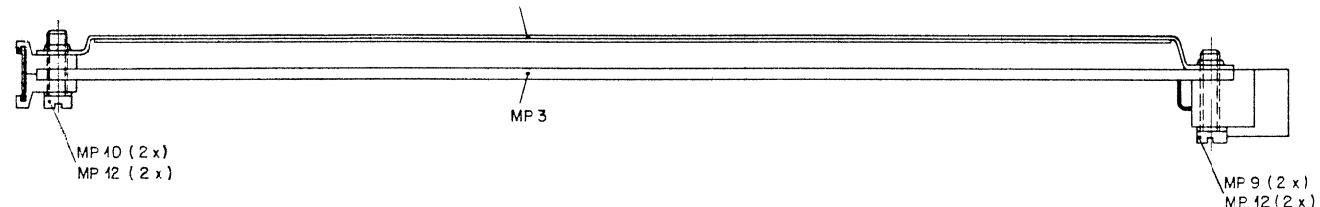
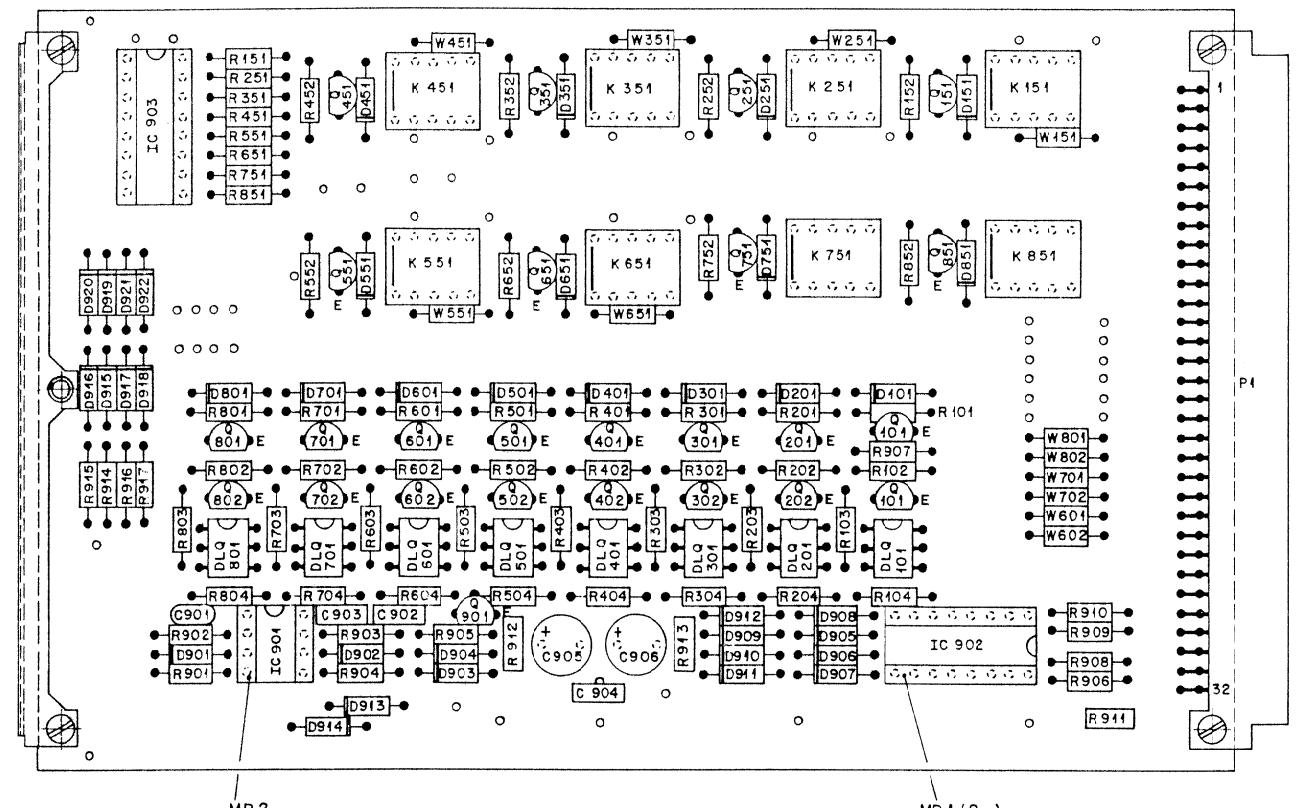
Signal Input / Output Interface 1.917.611.00

Signal Input / Output Interface 1.917.611.00





Signal Input / Output Interface 1.917.611.00



Ad ...POS... ...REF.No... DESCRIPTION.....MANUFACTURER

C...901	59.34.2151	150 pF	CER, 10%
C...902	59.06.0104	100 nF	PE, 10%
C...903	59.06.0104	100 nF	PE, 10%
C...904	59.06.0104	100 nF	PE, 10%
C...905	59.22.5101	100 uF	EL, -20%, 25V
C...906	59.22.5101	100 uF	EL, -20%, 25V

D...101 50.04.0125 1N4448

D...151 50.04.0125 1N4448

D...201 50.04.0125 1N4448

D...251 50.04.0125 1N4448

D...301 50.04.0125 1N4448

D...351 50.04.0125 1N4448

D...401 50.04.0125 1N4448

D...451 50.04.0125 1N4448

Ad ...POS... ...REF.No... DESCRIPTION.....MANUFACTURER

D...501 50.04.0125 IN4448

D...551 50.04.0125 IN4448

D...601 50.04.0125 IN4448

D...651 50.04.0125 IN4448

D...701 50.04.0125 IN4448

D...751 50.04.0125 IN4448

D...801 50.04.0125 IN4448

D...851 50.04.0125 IN4448

D...901 50.04.0125 IN4448

D...92 50.04.0125 BAT85

D...93 50.04.0127 BAT85

D...94 50.04.0125 IN4448

D...95 50.04.0125 IN4448

D...96 50.04.0125 IN4448

D...97 50.04.0125 IN4448

D...98 50.04.0125 IN4448

D...99 50.04.0125 IN4448

D...910 50.04.0125 IN4448

D...911 50.04.0125 IN4448

D...912 50.04.0125 IN4448

D...920 50.04.0125 IN4448

D...921 50.04.0125 IN4448

D...922 50.04.0125 IN4448

SECTION 7

Ad ...POS...	...REF.No...	DESCRIPTION.....	MANUFACTURER	Ad ...POS...	...REF.No...	DESCRIPTION.....	MANUFACTURER
DLQ.101	50.99.0126	4N26	Opto-Coupler	R...501	57.11.3680	68 Ohm	
DLQ.201	50.99.0126	4N26	Opto-Coupler	R...502	57.11.3223	22 kOhm	
DLQ.301	50.99.0126	4N26	Opto-Coupler	R...503	57.11.3104	100 kOhm	
DLQ.401	50.99.0126	4N26	Opto-Coupler	R...504	57.11.3124	120 kOhm	
DLQ.501	50.99.0126	4N26	Opto-Coupler	R...551	57.11.3104	100 kOhm	
DLQ.601	50.99.0126	4N26	Opto-Coupler	R...552	57.11.3682	6.8 kOhm	
DLQ.701	50.99.0126	4N26	Opto-Coupler	R...601	57.11.3680	68 Ohm	
DLQ.801	50.99.0126	4N26	Opto-Coupler	R...602	57.11.3223	22 kOhm	
IC..901	50.09.0119	TI062	Dual Cp Amp	R...603	57.11.3104	100 kOhm	
IC..902	50.07.1021	4021	Shift register PI/SO	R...604	57.11.3124	120 kOhm	
IC..903	50.07.0018	4094	Shift and store bus register	K...151	56.04.0195	SDS Relais, Type TQ2-6V	
				K...251	56.04.0195	SDS Relais, Type TQ2-6V	
				K...351	56.04.0195	SDS Relais, Type TQ2-6V	
				K...451	56.04.0195	SDS Relais, Type TQ2-6V	
				K...551	56.04.0195	SDS Relais, Type TQ2-6V	
				K...651	56.04.0195	SDS Relais, Type TQ2-6V	
				K...751	56.04.0195	SDS Relais, Type TQ2-6V	
				K...851	56.04.0195	SDS Relais, Type TQ2-6V	
				MP....1	53.03.0168	2 pcs	IC-Sockets 16 Pin
				MP....2	53.03.0166	1 pcs	IC-Socket 8 Pin
				MP....3	1.917.611.11	1 pcs	Print
				MP....4	1.010.090.49	1 pcs	Absch. komplett
				MP....5	1.010.006.33	2 pcs	Griffhalften
				MP....6	43.01.0108	1 pcs	ESE Warnschild
				MP....7	1.917.611.01	1 pcs	Bez. Streifen 6.3*91
				MP....8	28.21.1380	1 pcs	Rohrniete,D2.25*6.5
				MP....9	21.01.0281	2 pcs	Z Schr. ZM M2.5*10
				MP....10	21.01.0280	2 pcs	Z Schr. ZM M2.5*8
				MP....11	1.010.096.49	1 pcs	Klarsichtschild
				MP....12	24.16.1025	4 pcs	Ripperscheibe, D2.75/5
				P....1	54.11.2004		Euro, 2*32 contacts
				Q...101	50.03.015	BC557	PNP
				Q...102	50.03.015	BC557	PNP
				Q...151	50.03.0436	BC237	NPN
				Q...201	50.03.0515	BC557	PNP
				Q...202	50.03.0515	BC557	PNP
				Q...251	50.03.0436	BC237	NPN
				Q...301	50.03.0515	BC557	PNP
				Q...302	50.03.0515	BC557	PNP
				Q...351	50.03.0436	BC237	NPN
				Q...401	50.03.0515	BC557	PNP
				Q...402	50.03.0515	BC557	PNP
				Q...451	50.03.0436	BC237	NPN
				Q...501	50.03.0515	BC557	PNP
				Q...502	50.03.0515	BC557	PNP
				Q...551	50.03.0436	BC237	NPN
				Q...601	50.03.0515	BC557	PNP
				Q...602	50.03.0515	BC557	PNP
				Q...651	50.03.0436	BC237	NPN
				Q...701	50.03.0515	BC557	PNP
				Q...702	50.03.0515	BC557	PNP
				Q...751	50.03.0436	BC237	NPN
				Q...801	50.03.0515	BC557	PNP
				Q...802	50.03.0515	BC557	PNP
				Q...851	50.03.0436	BC237	NPN
				Q...901	50.03.0436	BC237	NPN
				R...101	57.11.3680	68 Ohm	
				R...102	57.11.3223	22 kOhm	
				R...103	57.11.3104	100 kOhm	
				R...104	57.11.3124	120 kOhm	
				R...151	57.11.3104	100 kOhm	
				R...152	57.11.3682	6.8 kOhm	
				R...201	57.11.3680	68 Ohm	
				R...202	57.11.3223	22 kOhm	
				R...203	57.11.3104	100 kOhm	
				R...204	57.11.3124	120 kOhm	
				R...251	57.11.3104	100 kOhm	
				R...252	57.11.3682	6.8 kOhm	
				R...301	57.11.3680	68 Ohm	
				R...302	57.11.3223	22 kOhm	
				R...303	57.11.3104	100 kOhm	
				R...304	5		

Pin Location List**Signal Input / Output Interface I.917.611.00**

1.1 = RELAIS 1 , CONTACT 1
 a = MAKE CONTACT ; ARBEITSKONTAKT
 r = BREAK CONTACT ; RUHEKONTAKT
 s = SWITCH CONTACT ; SCHALTKONTAKT

P	NO	NAME	REMARK	B=BUS	O=CONNECTION	S=SYMMETRIC	I=INVERS	AS=ASYMMETRIC
P1	01A	1.1-a	RELAIS 1.1	A				
P1	01B	1.1-s	RELAIS 1.1	A				
P1	02A	1.2-a/1.1-r	RELAIS 1.2 / RELAIS 1.1	A				
P1	02B	1.2-s	RELAIS 1.2	A				
P1	03A	2.2-a/2.1-r	RELAIS 2.2 / RELAIS 2.1	A				
P1	03B	2.2-s	RELAIS 2.2	A				
P1	04A	2.1-a	RELAIS 2.1	B				
P1	04B	2.1-s	RELAIS 2.1	B				
P1	05A	3.2-a/3.1-r	RELAIS 3.2 / RELAIS 3.1	B				
P1	05B	3.2-s	RELAIS 3.2	B				
P1	06A	3.1-a	RELAIS 3.1	B				
P1	06B	3.1-s	RELAIS 3.1	B				
P1	07A	4.2-a/4.1-r	RELAIS 4.2 / RELAIS 4.1	C				
P1	07B	4.2-s	RELAIS 4.2	C				
P1	08A	4.1-a	RELAIS 4.1	C				
P1	08B	4.1-s	RELAIS 4.1	C				
P1	09A	5.1-a	RELAIS 5.1	C				
P1	09B	5.1-s	RELAIS 5.1	C				
P1	10A	5.2-a/5.1-r	RELAIS 5.2 / RELAIS 5.1	D				
P1	10B	5.2-s	RELAIS 5.2	D				
P1	11A	6.1-a	RELAIS 6.1	D				
P1	11B	6.1-s	RELAIS 6.1	D				
P1	12A	6.2-a/6.1-r	RELAIS 6.2 / RELAIS 6.1	D				
P1	12B	6.2-s	RELAIS 6.2	D				
P1	13A	7.2-a	RELAIS 7.2	E				
P1	13B	7.2-r	RELAIS 7.2	E				
P1	14	- 15.5V	- SUPPLY	B	X X			
P1	15	OV-A	GROUND AUDIO	B	X X			
P1	16	+ 15.5V	+ SUPPLY	B	X X			
P1	17A	7.2-s	RELAIS 7.2	E				
P1	17B	8.2-s	RELAIS 8.2	E				
P1	18A	8.2-a	RELAIS 8.2	F				
P1	18B	8.2-r	RELAIS 8.2	F				
P1	19A	IN 8+ / 7.1-a	OPTO IN 8+ / RELAIS 7.1	F				
P1	19B	IN 8- / 7.1-r	OPTO IN 8- / RELAIS 7.1	F				
P1	20A	IN 7+ / 7.1-s	OPTO IN 7+ / RELAIS 7.1	F				
P1	20B	IN 7- / 8.1-a	OPTO IN 7- / RELAIS 8.1	F				
P1	21A	IN 6+ / 8.1-r	OPTO IN 6+ / RELAIS 8.1	F				
P1	21B	IN 6- / 8.1-s	OPTO IN 6- / RELAIS 8.1	F				
P1	22A	IN 5+	OPTO IN 5+	G				
P1	22B	IN 5-	OPTO IN 5-	G				
P1	23A	IN 4+	OPTO IN 4+	G				
P1	23B	IN 4-	OPTO IN 4-	G				
P1	24A	IN 3+	OPTO IN 3+	G				
P1	24B	IN 3-	OPTO IN 3-	G				
P1	25A	IN 2+	OPTO IN 2+	H				
P1	25B	IN 2-	OPTO IN 2-	H				
P1	26A	IN 1+	OPTO IN 1+	H				
P1	26B	IN 1-	OPTO IN 1-	H				
P1	27A	INT	INTERRUPT					
P1	27B	OV-L	GROUND SIGN (LOGIC)	B	X X			
P1	28A	RSTB	RECEIVE STROBE					
P1	28B	RXD	RECEIVE DATA					
P1	29A	RCL	RECEIVE CLOCK					
P1	29B	RXTH	RECEIVE DATA THROUGH					
P1	30A	DO 0	DATA OUT 0 (ENABLE)					
P1	30B	TSTB	TRANSMIT STROBE					
P1	31A	TXD	TRANSMIT DATA					
P1	31B	TXTH	TRANSMIT DATA THROUGH					
P1	32A	+ 5.5V	+ SUPPLY	B				
P1	32B	TCL	TRANSMIT CLOCK					

8 POWER SUPPLY UNITS

General For the power supply of the D940/D941 mixing consoles, Coutant 19" units (HSU series) are used which are equipped with a Studer front panel.

Studer Part No.	Description	Basic Coutant product
1.940.601.00	Power Supply 5 V/20 A	HSU-100-10
1.940.602.00	Power Supply ±15 V/3.4 A	HSU-100-23
1.940.603.00	Power Supply 24 V/4.2 A	HSU-100-13



Important As the power supply units are safety-relevant parts, they may be serviced only by authorized personnel using original spare parts. For replacement, contact your nearest Studer representative; for repair, contact the nearest Coutant distributor. The Coutant brand is represented worldwide by companies with the following names: Coutant, Coutant-Lambda, Lambda-Coutant, Lambda electronics, Nemic-Lambda, or CL electronics.

8.1 Specifications

Mains voltages: 230 V (200...240 V $\pm 10\%$)
115 V (100...120 V $\pm 10\%$)

Voltage selector: Jumper below cover

Mains frequency: 47...440 Hz

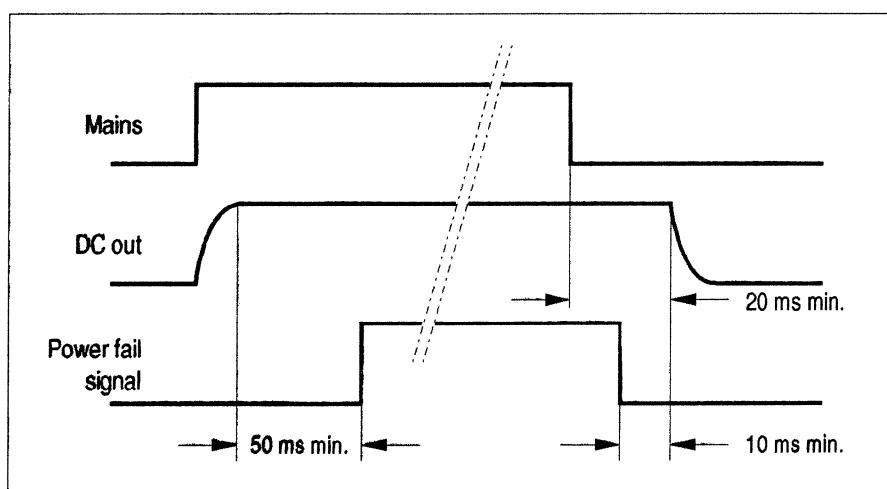
Efficiency: typ. 75%

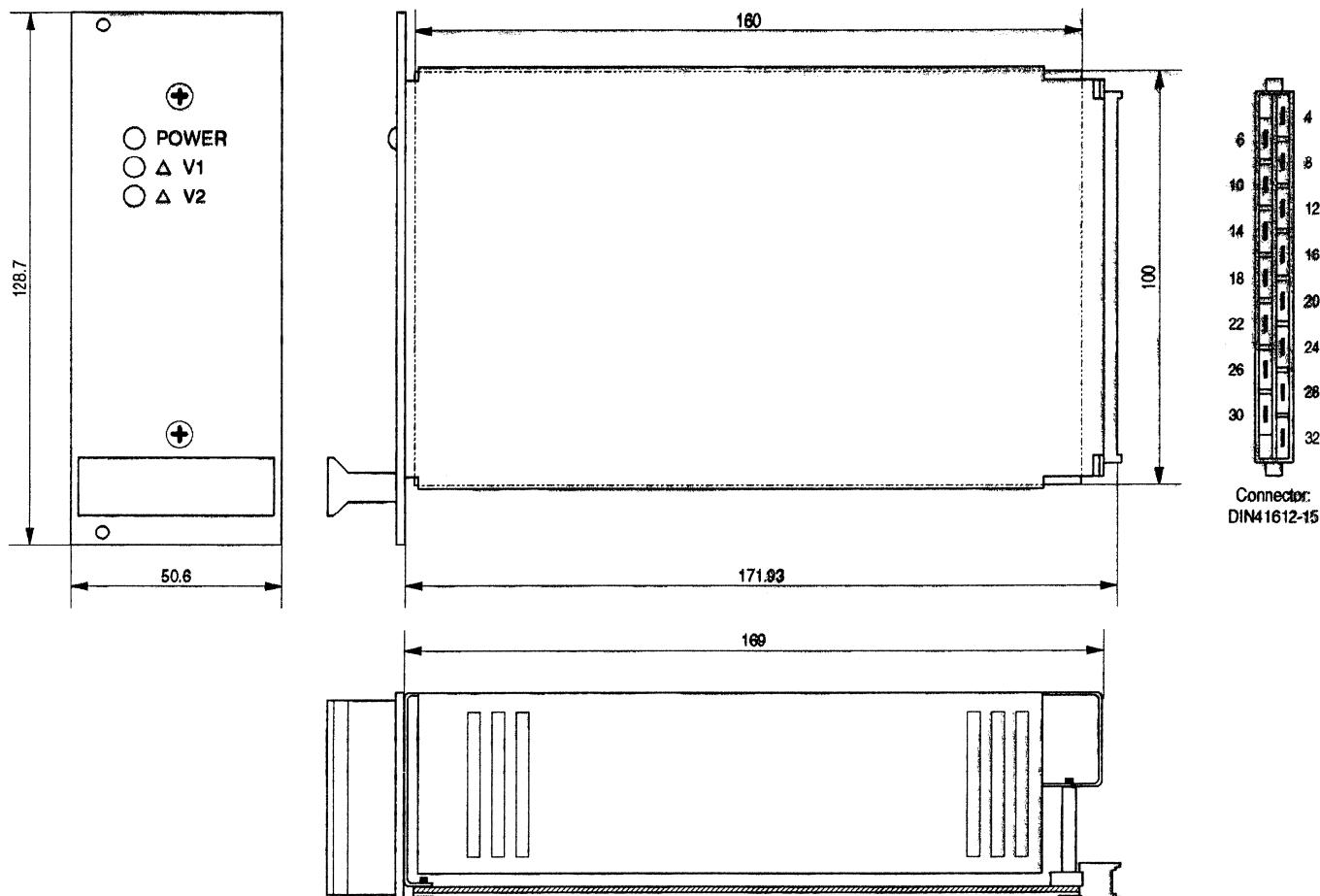
Output power: 100 W total

Output(s): short-circuit protected, main output(s) overload protected (110%)

Power down (logic inhibit): Control input, TTL compatible, active high (5 V/1.6 mA)

Power fail: Output, open collector, TTL compatible, active low (max. 30 V/16 mA)
(see diagram below).



Dimensions: (in mm)**Pin assignment:**

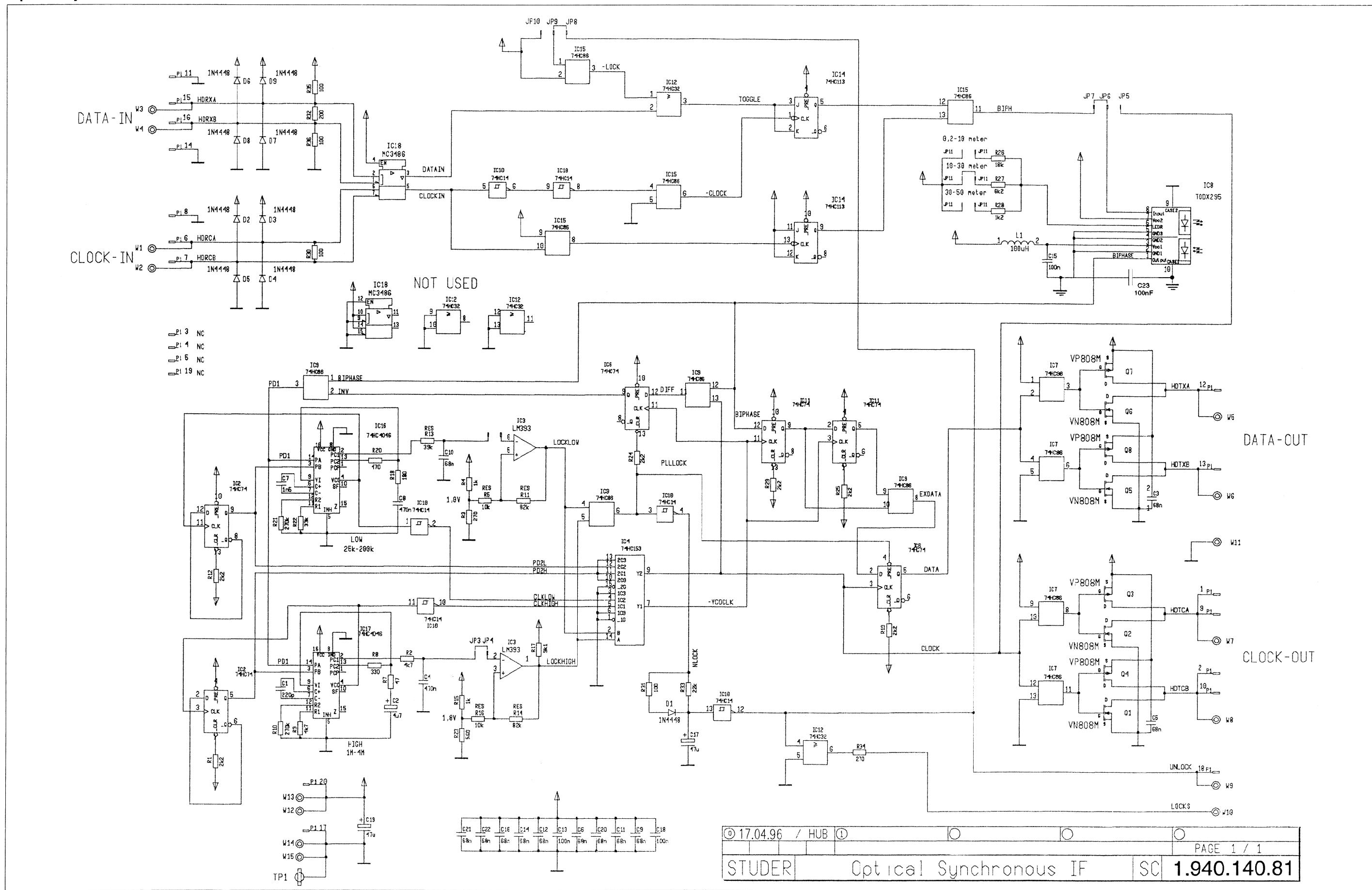
Pin	Single output	Twin output
4	V1 +	
6	V1 +	V1 GND
8	Sense +	V2 -
10	Sense GND	V2 GND
12	V1 GND	
14	V1 GND	
16		
18		
20	Logic inhibit	Logic inhibit
22	Power fail	Power fail
24		
26		
28	AC live	AC live
30	AC neutral	AC neutral
32	Safety GND	Safety GND

SCHEMATA / CIRCUIT DIAGRAMS**Connector Panel**

Optical Synchronous IF 1.940.140.81

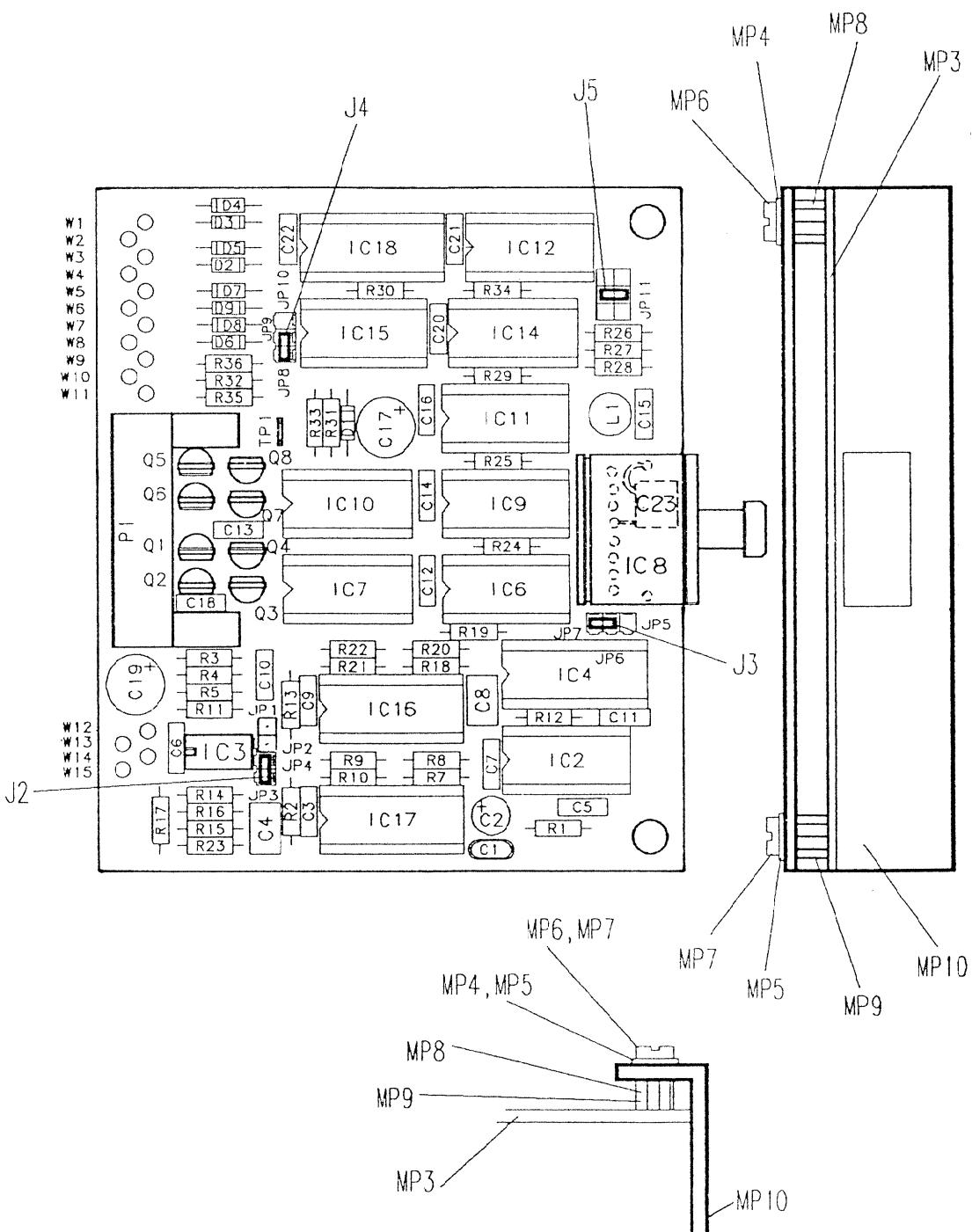


Optical Synchronous Interface 1.940.140.81





Optical Synchronous Interface 1.940.140.81



Werkstatt	Arbeitsnr.				(3)
					(2)
					(1)
Datum	17.4.96	R.	M.	H.	(0)
Date		Visa	Bez.	Sein	Inde
Date		Bez.	Gepr.	Gepr.	
Copy to:					
Kopie fuer: .					

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.34.4221	220p	C 220 P , 5%, N750 , CER		0	Q 1	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	
0	C 2	59.22.8479	4u7	EL 50V, 20%, rad RM5		0	Q 2	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	
0	C 3	59.06.0683	68n	PETP, 10%, 63V		0	Q 3	50.03.1554	VP0808M	VP 0808 M	
0	C 4	59.06.0474	470n	PETP, 10%, 63V		0	Q 4	50.03.1554	VP0808M	VP 0808 M	
0	C 5	59.06.0683	68n	PETP, 10%, 63V		0	Q 5	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	
0	C 6	59.06.0683	68n	PETP, 10%, 63V		0	Q 6	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	
0	C 7	59.06.0152	1n5	PETP, 10%, 63V		0	Q 7	50.03.1554	VP0808M	VP 0808 M	
0	C 8	59.06.0474	470n	PETP, 10%, 63V		0	Q 8	50.03.1554	VP0808M	VP 0808 M	
0	C 9	59.06.0683	68n	PETP, 10%, 63V		0	R 1	57.11.3222	2k2	MF, 1%, 0207	
0	C 10	59.06.0683	68n	PETP, 10%, 63V		0	R 2	57.11.3472	4k7	MF, 1%, 0207	
0	C 11	59.06.0683	68n	PETP, 10%, 63V		0	R 3	57.11.3271	270R	MF, 1%, 0207	
0	C 12	59.06.0683	68n	PETP, 10%, 63V		0	R 4	57.11.3102	1k0	MF, 1%, 0207	
0	C 13	59.06.0104	100n	PETP, 10%, 63V		0	R 5	57.11.3103	10k	MF, 1%, 0207	
0	C 14	59.06.0683	68n	PETP, 10%, 63V		0	R 6	not used	9k1	MF, 1%, 0207	
0	C 15	59.06.0104	100n	PETP, 10%, 63V		0	R 7	57.11.3470	47R	MF, 1%, 0207	
0	C 16	59.06.0683	68n	PETP, 10%, 63V		0	R 8	57.11.3331	330R	MF, 1%, 0207	
0	C 17	59.22.6470	47u	EL 40V, 20%, rad RM5		0	R 9	57.11.3472	4k7	MF, 1%, 0207	
0	C 18	59.06.0104	100n	PETP, 10%, 63V		0	R 10	57.11.3274	270k	MF, 1%, 0207	
0	C 19	59.22.6470	47u	EL 40V, 20%, rad RM5		0	R 11	57.11.3823	82k	MF, 1%, 0207	
0	C 20	59.06.0683	68n	PETP, 10%, 63V		0	R 12	57.11.3222	2k2	MF, 1%, 0207	
0	C 21	59.06.0683	68n	PETP, 10%, 63V		0	R 13	57.11.3393	39k	MF, 1%, 0207	
0	C 22	59.06.0683	68n	PETP, 10%, 63V		0	R 14	57.11.3823	82k	MF, 1%, 0207	
0	C 23	59.06.0104	100n	PETP, 10%, 63V		0	R 15	57.11.3102	1k0	MF, 1%, 0207	
0	D 1	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 16	57.11.3103	10k	MF, 1%, 0207	
0	D 2	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 17	57.11.3912	9k1	MF, 1%, 0207	
0	D 3	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 18	57.11.3181	180R	MF, 1%, 0207	
0	D 4	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 19	57.11.3222	2k2	MF, 1%, 0207	
0	D 5	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 20	57.11.3471	470R	MF, 1%, 0207	
0	D 6	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 21	57.11.3274	270k	MF, 1%, 0207	
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 22	57.11.3333	33k	MF, 1%, 0207	
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 23	57.11.3561	560R	MF, 1%, 0207	
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	R 24	57.11.3222	2k2	MF, 1%, 0207	
0						0	R 25	57.11.3222	2k2	MF, 1%, 0207	
0	IC 2	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A		0	R 26	57.11.3183	18k	MF, 1%, 0207	
0	IC 3	50.05.0283	LM393	Dual Comparator ..		0	R 27	57.11.3622	6k2	MF, 1%, 0207	
0	IC 4	50.17.1153	74HC153	IC ... 74 HC 153 .. ,A		0	R 28	57.11.3122	1k2	MF, 1%, 0207	
0	IC 6	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A		0	R 29	57.11.3222	2k2	MF, 1%, 0207	
0	IC 7	50.17.1086	74HC86	IC ... 74 HC 86 .. ,A		0	R 30	57.11.3101	100R	MF, 1%, 0207	
0	IC 8	89.10.0101	TODX 295	.A		0	R 31	57.11.3101	100R	MF, 1%, 0207	
0	IC 9	50.17.1086	74HC86	IC ... 74 HC 86 .. ,A		0	R 32	57.11.3201	200R	MF, 1%, 0207	
0	IC 10	50.17.1014	74HC14	IC ... 74 HC 14 .. ,A		0	R 33	57.11.3223	22k	MF, 1%, 0207	
0	IC 11	50.17.1074	74HC74	IC ... 74 HC 74 .. ,A		0	R 34	57.11.3271	270R	MF, 1%, 0207	
0	IC 12	50.17.1032	74HC32	IC ... 74 HC 32 .. ,A		0	R 35	57.11.3101	100R	MF, 1%, 0207	
0	IC 14	50.17.1113	74HC113	IC ... 74 HC 113 .. ,A		0	R 36	57.11.3101	100R	MF, 1%, 0207	
0	IC 15	50.17.1086	74HC86	IC ... 74 HC 86 .. ,A		0	TP 1	54.02.0320	1p	Flatpin, 2.8*0.8mm	
0	IC 16	50.17.4046		IC ... 74 HC 4046 .. ,A							
0	IC 17	50.17.4046		IC ... 74 HC 4046 .. ,A							
0	IC 18	50.15.0104	MC3486	IC MC 3486 P, DS 3486 N,							

— End of List —

Comment

0	J 2	54.01.0021	Jumper	0.63 * 0.63mm
0	J 3	54.01.0021	Jumper	0.63 * 0.63mm
0	J 4	54.01.0021	Jumper	0.63 * 0.63mm
0	J 5	54.01.0021	Jumper	0.63 * 0.63mm
0	JP 1	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 2	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 3	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 4	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 5	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 6	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 7	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 8	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 9	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 10	54.01.0020	1-P	P STIFT .63*.63, H=5.8/3.4
0	JP 11	54.11.0126	22P	PIN 0.621-0.62, RM2.54

0	L 1	62.02.3101	100uH	L	100 U , 10%, RAD., RM 5
0	MP 1	43.01.0108	pce	Label	ESE-WARNSCHILD
0	MP 2	1.940.140.04	pce		NR.-ETIKETTE 5 * 20
0	MP 3	1.940.140.11	pce		OPTICAL SYNCHRONOUS PCB
0	MP 4	24.16.1030	pce		RIPPENSCHEIBE D 3.2/5.5
0	MP 5	24.16.1030	pce		RIPPENSCHEIBE D 3.2/5.5
0	MP 6	21.53.0354	pce		Z- SCHR. IS , ZN, M 3 * 6
0	MP 7	21.53.0354	pce		Z- SCHR. IS , ZN, M 3 * 6
0	MP 8	1.010.014.22	pce	3*4.5	NIETMUTTER SW 6 M 3 * 4.5
0	MP 9	1.010.014.22	pce	3*4.5	NIETMUTTER SW 6 M 3 * 4.5
0	MP 10	1.940.140.01	pce		PRINTHALTER

0 P 1 54.14.2103 20-P P STECKER 20 P,AU,VR,GERA