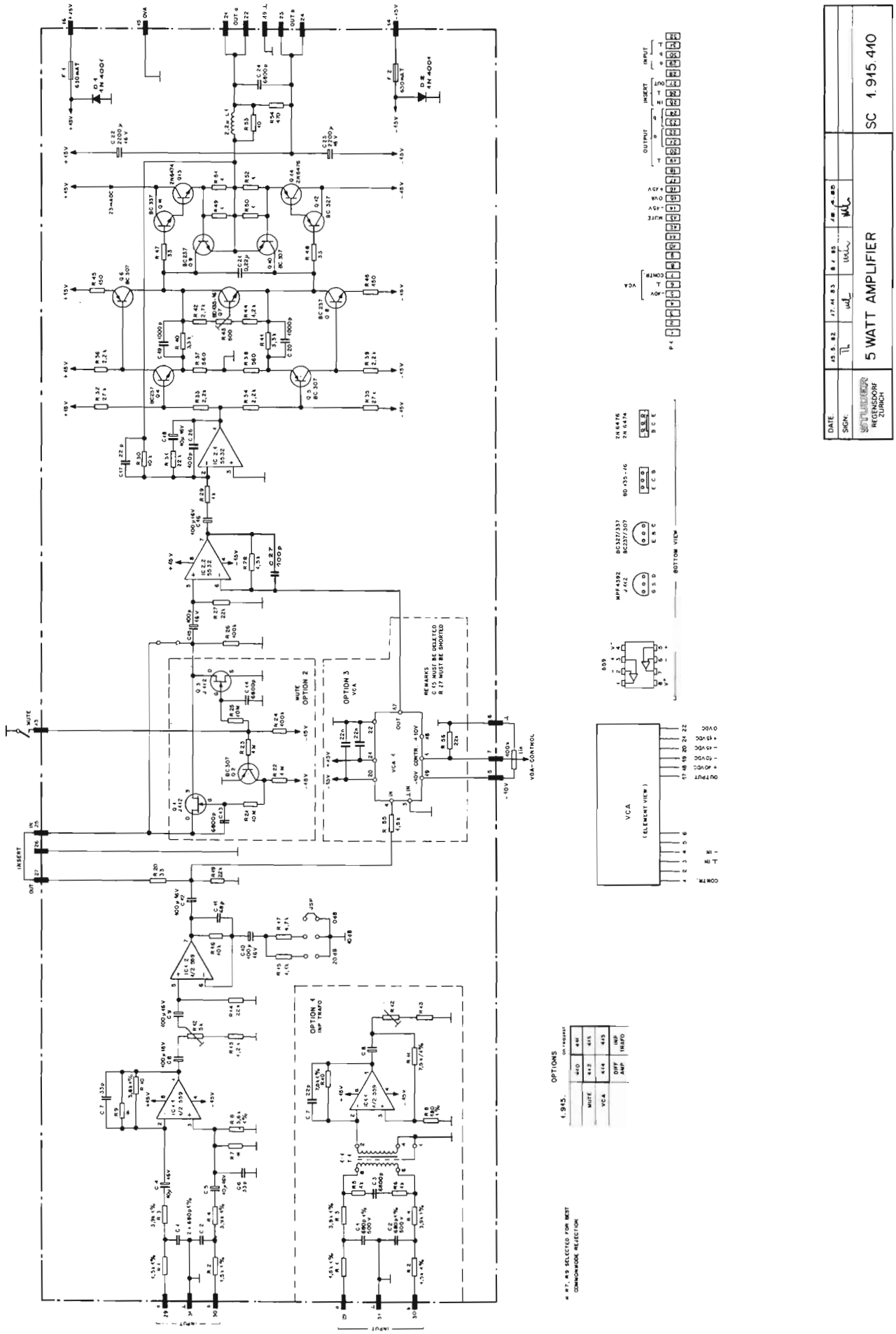
Technical Specifications

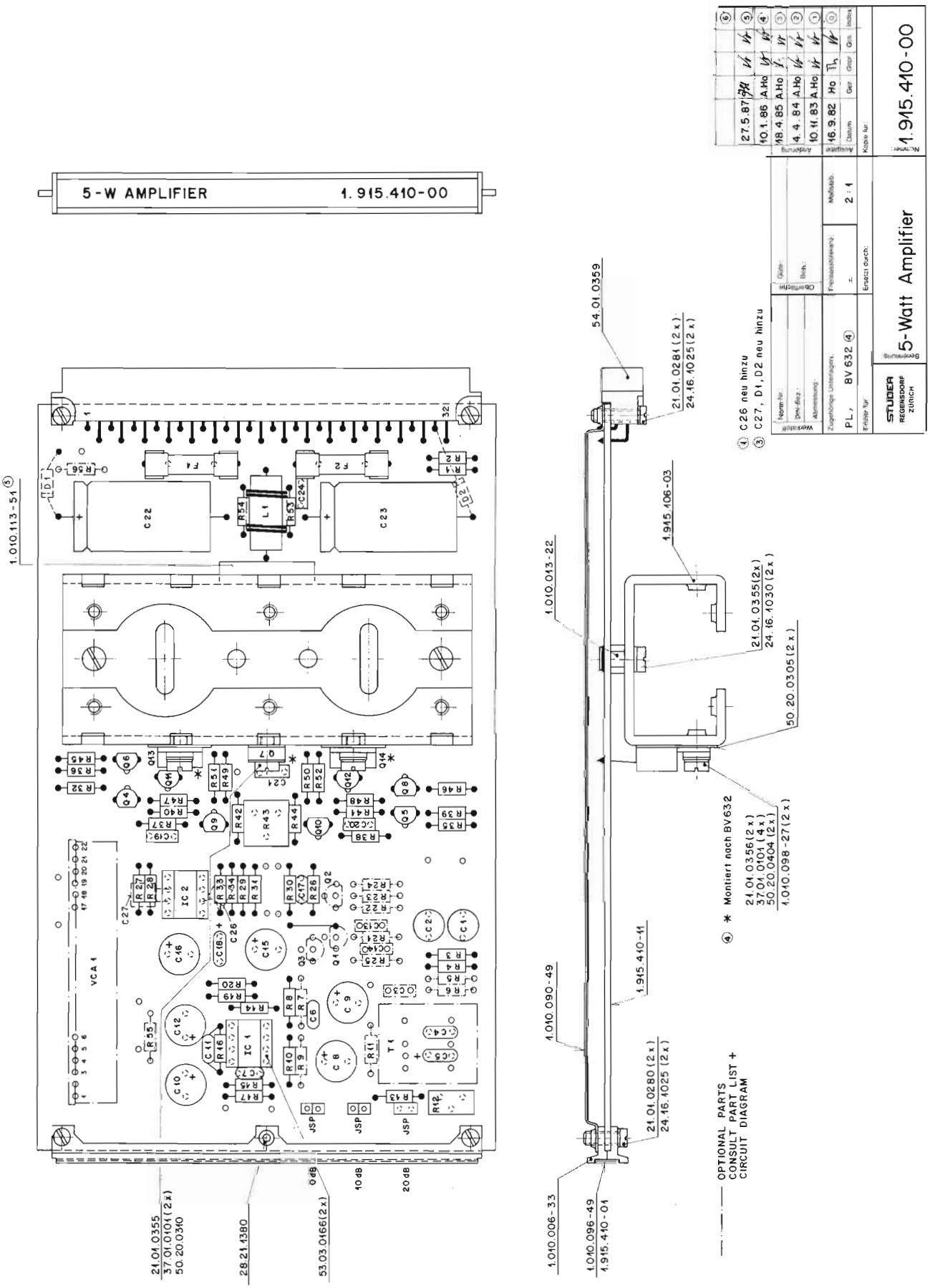
Audio:	Power output	**4 W/15 W** **5 W/8 W** **2.5 W/4 W,** continuous, sine wave
	THD	< **0.1%** @ rated output, 30 Hz...16 kHz
	Frequency response	**±0.5 dB,** 30 Hz...16 kHz
	Input impedance	**10 kW,** balanced
	Sensitivity	**–17...+16 dBu** (0.11...4.9 V_{rms}) for rated output
	Maximum input level	**+24 dBu** (12.3 V_{rms}) clipping point
	S/N	**100 dB,** linear to 23 kHz at normal operating gain (input +6 dBu) **85 dB,** at maximum gain
Supply:		**±15 V DC** (40 mA idling; 400 mA @ 5 W/8 Ω)
	Output stage quiescent current	**23 mA**
Dimensions:	Euro-card	**100 × 160 mm, 7M units wide**
	Weight	**approx. 210 g**

Ordering Information:

5 W amplifier with		
•	transformerless input	1.915.410.xx
•	input transformer	1.915.411.xx
•	transformerless input and remote muting facility	1.915.412.xx
•	input transformer and remote muting facility	1.915.413.xx
•	transformerless input and remote gain control (VCA)	1.915.414.xx
•	input transformer and remote gain control (VCA)	1.915.415.xx


5 WATT AMPLIFIER
SC 1.915.410
STUDER REGENSDORF ZURICH
MUTE
OPTION 2
OPTION 3 VCA
OPTION 4 INP TRAFO
INSERT
VCA
OPTIONS
BOTTOM VIEW

5W AUDIO AMPLIFIER



5W AUDIO AMPLIFIER

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
	C....1	59.05.1681	680p 1% 500V PP	
	C....2	59.05.1681	680p 1% 500V PP	
	C....3		OPT 1	
	C....4	59.26.2100	10µ 16V SAL	
	C....5	59.26.2100	10µ 16V SAL	
	C....6	59.34.2330	33p CER	
	C....7	59.34.2330	33p CER	
	C....8	59.22.5101	100µ 16V EL	
	C....9	59.22.5101	100µ 16V EL	
	C....10	59.22.5101	100µ 16V EL	
	C....11	59.34.4680	68p CER	
	C....12	59.22.5101	100µ 16V EL	
	C....13		OPT 2	
	C....14		OPT 2	
	C....15	59.22.5101	100µ 16V EL	
	C....16	59.22.5101	100µ 16V EL	
	C....17	59.34.2220	22p CER	
	C....18	59.26.2100	10µ 16V SAL	
	C....19	59.06.0102	1000p PE	
	C....20	59.06.0102	1000p PE	
	C....21	59.06.0224	0,22µ PE	
	C....22	59.25.3222	2200µ 16V EL	
	C....23	59.25.3222	2200µ 16V EL	
	C....24	59.06.0682	6800p PE	
	C....25		OPT 3	
①	C....26	59.34.4101	100p CER	
②	C....27	59.34.4101	100p CER	
	F....1	51.01.0115	630mA SLOW BLOW 5•20	
	F....2	51.01.0115	630mA SLOW BLOW 5•20	
	IC....1	50.09.0107	4559 DUAL OP AMP	RA
①	IC....2	50.09.0106	5532 DUAL OP AMP	SIG
	JSP	54.01.0020	PIN (2•)	
		54.01.0021	JUMPER	
	L....1	1.068.614.00	2,2µH	
	P....1	54.01.0359	32p EDGE CONN. TYBE B	
	Q....1		OPT 2	
	Q....2		OPT 2	
	Q....3		OPT 2	
	Q....4	50.03.0436	BC237B NPN GEN. PURPOSE	
	Q....5	50.03.0515	BC307B PNP GEN. PURPOSE	
	Q....6	50.03.0515	BC307B PNP GEN. PURPOSE	
	Q....7	50.03.0495	BD135-16 NPN	
	Q....8	50.03.0436	BC237B NPN GEN. PURPOSE	
	Q....9	50.03.0436	BC237B NPN GEN. PURPOSE	
	Q....10	50.03.0515	BC307B PNP GEN. PURPOSE	
	Q....11	50.03.0340	BC337 NPN 800mA	
	Q....12	50.03.0351	BC327 PNP 800mA	
	Q....13	50.03.0344	2N6474 NPN	RCA
	Q....14	50.03.0345	2N6476 PNP	RCA
	R....1	57.11.3152	1,5k 1%	
	R....2	57.11.3152	1,5k 1%	
	R....3	57.11.3392	3,9k 1%	
	R....4	57.11.3392	3,9k 1%	
	R....5		OPT 1	
	R....6		OPT 1	
	R....7		SELECTED	
	R....8	57.11.3362	3,6k 1%	
	R....9		SELECTED	
	R....10	57.11.3362	3,6k 1%	
	R....11		OPT 1	
	R....12	58.01.7502	5k TRIM	
	R....13	57.11.4122	1,2k	
	R....14	57.11.4223	22k	
	R....15	57.11.3112	1,1k 1%	
	R....16	57.11.4103	10k	
	R....17	57.11.4472	4,7k	
	R....18		NOT USED	
	R....19	57.11.4223	22k	
	R....20	57.11.4330	33	
	R....21		OPT 2	
	R....22		OPT 2	
	R....23		OPT 2	
	R....24		OPT 2	
	R....25		OPT 2	
	R....26	57.11.4104	100k	
	R....27	57.11.4223	22k	
	R....28	57.11.4152	1,5k	
	R....29	57.11.4102	1k	
	R....30	57.11.4103	10k	
	R....31	57.11.4223	22k	
	R....32	57.11.4273	27k	
	R....33	57.11.4222	2,2k	
	R....34	57.11.4222	2,2k	
	R....35	57.11.4273	27k	
	R....36	57.11.4222	2,2k	
	R....37	57.11.4561	560	
	R....38	57.11.4561	560	
	R....39	57.11.4222	2,2k	
	R....40	57.11.4332	3,3k	
	R....41	57.11.4332	3,3k	
	R....42	57.11.4272	2,7k	
	R....43	58.01.8501	500 TRIM	
	R....44	57.11.4122	1,2k	
	R....45	57.11.4151	150	
	R....46	57.11.4151	150	
	R....47	57.11.4330	33	
	R....48	57.11.4330	33	
	R....49	57.11.4109	1	
	R....50	57.11.4109	1	
	R....51	57.11.4109	1	
	R....52	57.11.4109	1	
	R....53	57.11.4100	10	
	R....54	57.11.4471	470	
	R....55		OPT 3	
	R....56		OPT 3	
	XF	53.03.0142	FUSE HOLDER	
	XIC	53.03.0166	8pDIL	
	OPTIONS			
			OPTION 1	
	C....3	59.06.0682	6800p PE	
	C....7	59.34.2220	22p CER	
	R....5	57.11.4102	1k	
	R....6	57.11.4102	1k	
	R....8	57.11.3181	180 1%	
	R....10	57.11.3752	7,5k 1%	
	R....11	57.11.3752	7,5k 1%	
	T....1	1.022.419.00	1:1	ST
		1.022.400.03	INSULATION	
			OPTION 2	
	C....13	59.06.0682	6800p	
	C....14	59.06.0682	6800p	
	Q....1	50.03.0350	J112 ND FET MPF4392	SIX, MOT
	Q....2	50.03.0515	BC307 PNP GEN. PURPOSE	
	Q....3	50.03.0350	J112 ND FET MPF4392	SIX, MOT
	R....21	57.11.6106	10M	
	R....22	57.11.4105	1M	
	R....23	57.11.4105	1M	
	R....24	57.11.4104	100k	
	R....25	57.11.6106	10M	
			OPTION 3	
②	D....1	50.04.0122	1N4001	MOT
②	D....2	50.04.0122	1N4001	MOT
	R....55	57.11.4152	1,5k	
	R....56	57.11.4223	22k	
	VCA...1	1.010.110.50	VOLTAGE CONTROLLED AMPL.	ST

Additional Diodes see Page 6

PP=Polypropylene, SAL= Solid Aluminium, CER=Ceramic, EL=Electrolytic, PE=Polyester

MANUFACTURER: ST=Studer, MOT=Motorola, SIX=Siliconix, RA=Raytheon, SIG=Signetics

1.915.410.00 5 WATT AMPLIFIER TH 14/04/82

1.915.410.00 5 WATT AMPLIFIER ① HO 04/11/83

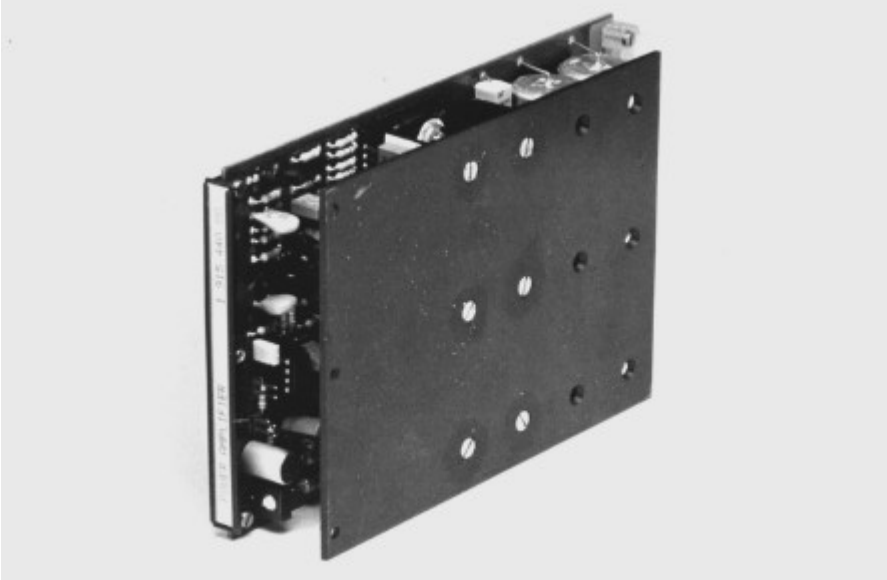
1.915.410.00 5 WATT AMPLIFIER ② PA 18/04/85

END

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2.2.7 40 W Power Amplifier 1.915.440/441

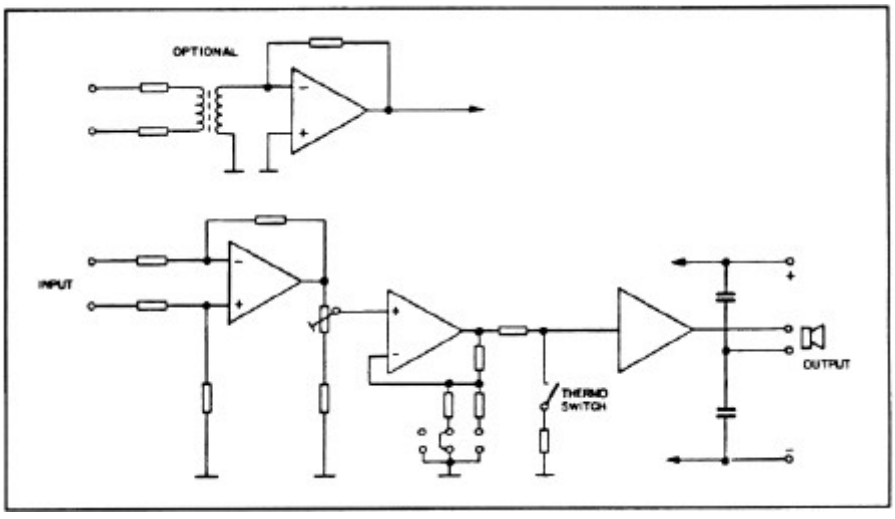
For applications where higher power level is needed, a 40 W amplifier has been realized on a Euro-card. Its width is 32 mm, which equals 7M widths approximately.



Power is supplied from a separate 45 V_{DC} source, as is contained in the 19" mounting frame 1.918.120.xx. Two amplifier cards will fit into that frame, making it suitable for applications where stereophonic monitoring is required.

Special Features

- Transformerless version with electronically balanced inputs standard
- Version with balanced and floating inputs available
- Output stage protected from overload by momentary power limiting
- Temperature sensing avoids thermal overload
- High-end frequency response limited to prevent transient intermodulation distortion
- Low distortion performance, even at low power output
- Operation with output transformer possible

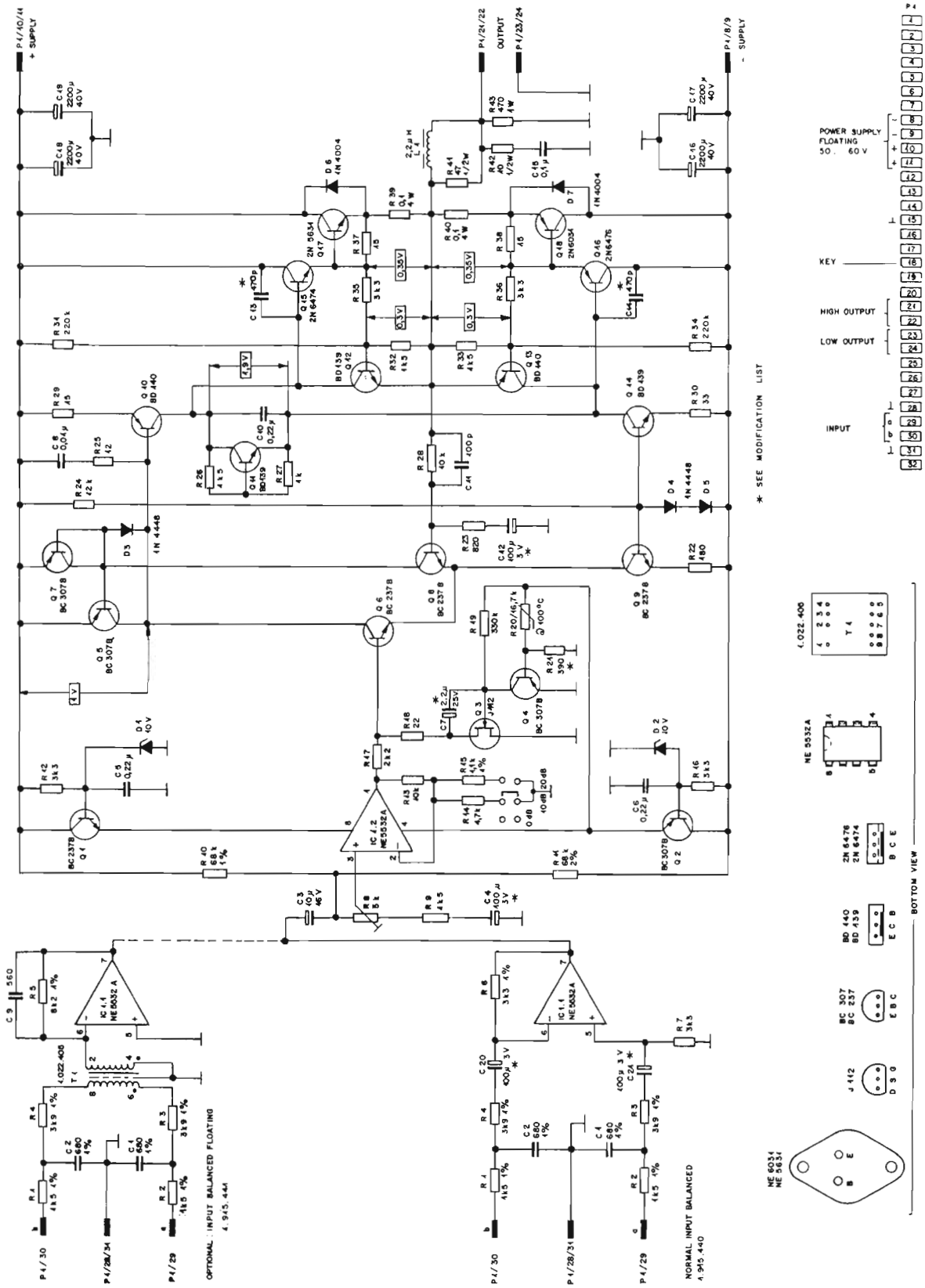


Technical Specifications

Audio:	Power output	**40 W/4 W**, continuous, sine-wave,
	THD	**< 0.1 %**, 30 Hz...15 kHz (up to rated output)
	Output impedance	**0.1 W**
	Input impedance	**10 kW**
	Common mode rejection	**> 50 dB**, 30 Hz...16 kHz (with input transformer)
	Input sensitivity	**–12...+18 dBu** (0.195...6.2 V_{rms}) for rated output (adjustable with jumper in three 10 dB-increments, plus fine-trim range of 12 dB)
	Frequency response	**+0.5/–1 dB,** 30 Hz...15 kHz
	S/N	**105 dB** @ maximum gain
		90 dB @ minimum gain
Supply:		**45 V_{DC}** (70 mA idling, 1.5 A @ 40 W/4 Ω)
Dimensions:	Euro-card	**100 × 160 mm, 7M units wide**

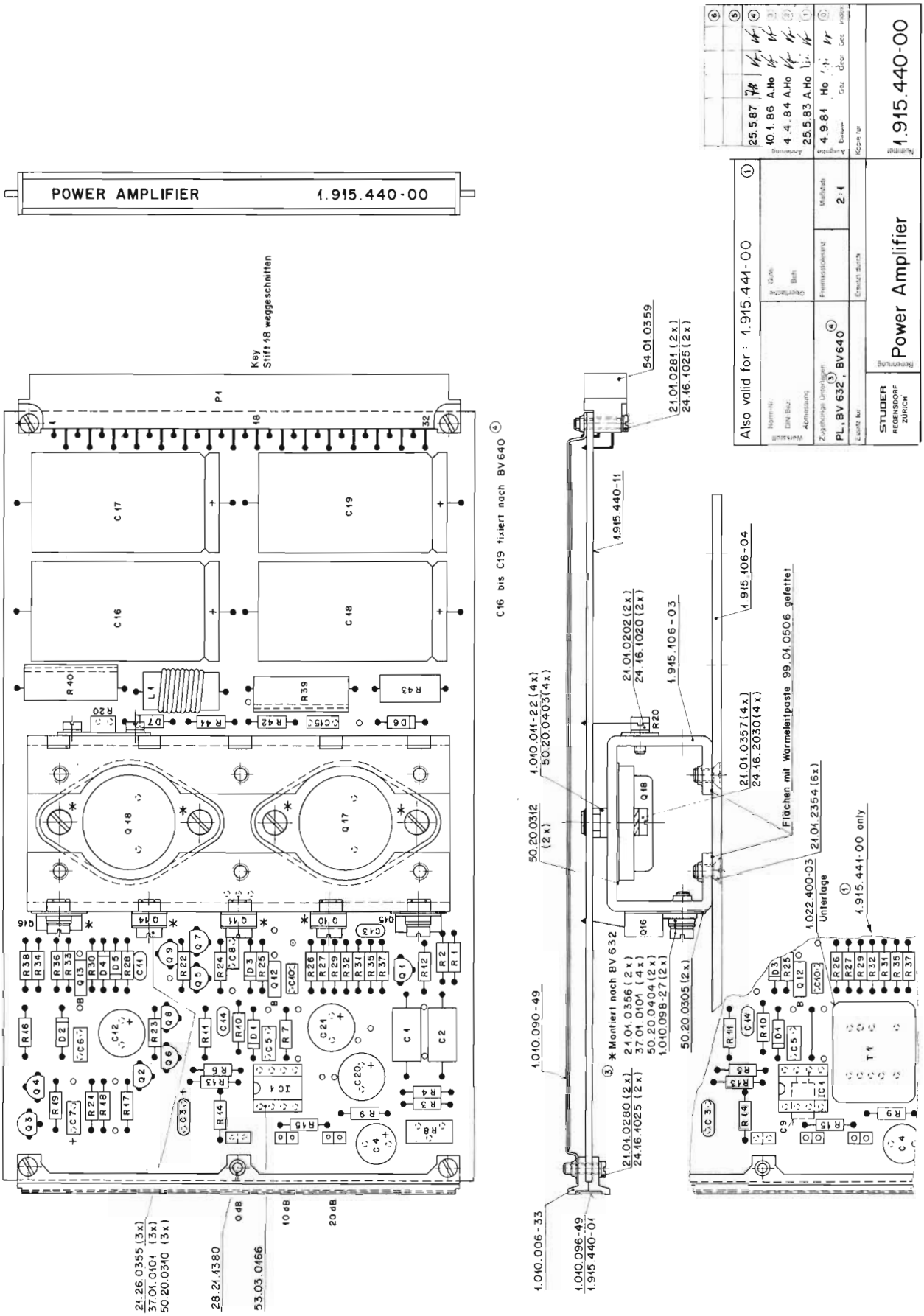
Ordering Information:

Euro-cards	•	40 W power amplifier with transformerless input	1.915.440.xx
	•	40 W power amplifier with input transformer	1.915.441.xx
19”/1U standard products			
40 W power amplifier	•	Mono version, 19”/1U	75.700.80311
	•	Stereo version, 19”/1U	75.700.80322
	•	19”/1U mounting frame (without amplifier cards)	1.918.120.xx



DATE:	12.1.82	24.5.83	24.6.83	23.11.83	
SIGN:					
STUDER REGENSDORF ZÜRICH	POWER AMPLIFIER OPTIONAL : INP. BALANCED FLOATING				SC 1.915.440 4.945.444

40W POWER AMPLIFIER



40W POWER AMPLIFIER

Ad	POS.	REF.No.	DESCRIPTION			MANUFACTURER
	C....1	59.12.9681	680pF	500V 1%	PS	
	C....2	59.12.9681	680pF	500V 1%	PS	
	C....3	59.26.2100	10µF	16V	SAL	
②	C....4	59.30.1101	100µF	3V	TA	
	C....5	59.06.0224	0,22µF		PE	
	C....6	59.06.0224	0,22µF		PE	
①	C....7	59.26.5229	2,2µF	25V	SAL	
	C....8	59.06.0103	0,01µF		PE	
	C....9	59.34.5561	560pF		CER (1.915.441)	
	C...10	59.06.0224	0,22µF		PE	
②	C...11	59.34.4101	100pF		CER	
②	C...12	59.30.1101	100µF	3V	TA	
②	C...13	59.32.1471	470pF		CER	
②	C...14	59.32.1471	470pF		CER	
	C...15	59.06.0104	0,1µF		PE	
	C...16	59.25.5222	2200µF	40V	EL	
	C...17	59.25.5222	2200µF	40V	EL	
	C...18	59.25.5222	2200µF	40V	EL	
	C...19	59.25.5222	2200µF	40V	EL	
②	C...20	59.30.1101	100µF	3V	TA (1.915.440)	
②	C...21	59.30.1101	100µF	3V	TA (1.915.440)	
	D....1	50.04.1114	ZPD10V	10V @ 5mA		
	D....2	50.04.1114	ZPD10V	10V @ 5mA		
	D....3	50.04.0125	1N4448		SI	
	D....4	50.04.0125	1N4448		SI	
	D....5	50.04.0125	1N4448		SI	
	D....6	50.04.0105	1N4004	1,1V @ 1A	SI	
	D....7	50.04.0105	1N4004	1,1V @ 1A	SI	
	IC....1	50.09.0105	NE5532A	DUAL OPA		SIG
	L....1	1.068.614.00	2,2µH			ST
	Q....1	50.03.0436	BC237B	NPN		PH, TI
	Q....2	50.03.0515	BC307B	PNP		PH, TI
	Q....3	50.03.0350	J112	FET		SIX, N
	Q....4	50.03.0515	BC307B	PNP		PH, TI
	Q....5	50.03.0515	BC307B	PNP		PH, TI
	Q....6	50.03.0436	BC237B	NPN		PH, TI
	Q....7	50.03.0515	BC307B	PNP		PH, TI
	Q....8	50.03.0436	BC237B	NPN		PH, TI
	Q....9	50.03.0436	BC237B	NPN		PH, TI
	Q...10	50.03.0452	BD140	PNP		PH, SIE
	Q...11	50.03.0451	BD139	NPN		PH, SIE
	Q...12	50.03.0451	BD139	NPN		PH, SIE
	Q...13	50.03.0452	BD140	PNP		PH, SIE
	Q...14	50.03.0451	BD139	NPN		PH, SIE
	Q...15	50.03.0344	2N6474	NPN		R
	Q...16	50.03.0345	2N6476	PNP		R
	Q...17	50.03.0342	2N5631	NPN		MOT
	Q...18	50.03.0343	2N6031	PNP		MOT
	R....1	57.11.3152	1,5k	1%		
	R....2	57.11.3152	1,5k	1%		
	R....3	57.11.3392	3,9k	1%		
	R....4	57.11.3392	3,9k	1%		
	R....5	57.11.3822	8,2k	1% (1.915.441)		
	R....6	57.11.3332	3,3k	1% (1.915.440)		
	R....7	57.11.3332	3,3k	1% (1.915.440)		
	R....8	58.01.7502	5k	10%	LIN	
	R....9	57.11.4152	1,5k			
	R...10	57.11.4683	68k			
	R...11	57.11.4683	68k			
	R...12	57.11.4332	3,3k			
	R...13	57.11.4103	10k	2%		
	R...14	57.11.4472	4,7k	2%		
	R...15	57.11.3112	1,1k	2%		
	R...16	57.11.4332	3,3k			
	R...17	57.11.4222	2,2k	2%		
	R...18	57.11.4220	22			
	R...19	57.11.4334	330k			
④	R...20	57.99.0803	16,7k		NTC	PH
②	R...21	57.11.4391	390			
	R...22	57.11.4181	180			
	R...23	57.11.4821	820			
	R...24	57.11.4123	12k			
	R...25	57.11.4120	12			
	R...26	57.11.4152	1,5k			
	R...27	57.11.4102	1k			
	R...28	57.11.4103	10k			
	R...29	57.11.4150	15			
	R...30	57.11.4330	33			
③	R...31	57.11.4224	220k			
	R...32	57.11.4152	1,5k			
	R...33	57.11.4152	1,5k			
③	R...34	57.11.4224	220k			
	R...35	57.11.4332	3,3k			
	R...36	57.11.4332	3,3k			
	R...37	57.11.4150	15			
	R...38	57.11.4150	15			
	R...39	57.56.5108	0,1	10% 4W WW		
	R...40	57.56.5108	0,1	10% 4W WW		
	R...41	57.11.4470	47	0,4W		
	R...42	57.11.4100	10	0,4W		
	R...43	57.13.4471	470	1W		
	T....1	1.022.405.00	1:1	INPUT TRANSFORMER		ST

MODIFICATION LIST

②	C....4	220µFEL→100µTA	QUALITY IMPROVEMENT
①	C....7	0,22µF→2,2µF	BETTER INRUSH
②	C...12	100µFEL→100µTA	QUALITY IMPROVEMENT
②	C...13	560pF→470pF	PRODUCTIONS REASONS
②	C...20	100µFEL→100µTA	QUALITY IMPROVEMENT
②	C...21	100µFEL→100µTA	QUALITY IMPROVEMENT
②	R...21	1kΩ→390Ω	SWITCH OFF @ 100°C
③	R...31	100k→220k	CURRENT LIMIT @ HIGHER IDLE VOLTAGES
③	R...34	100k→220k	CURRENT LIMIT @ HIGHER IDLE VOLTAGES

PS=Polystyrene, EL=Electrolytic, SAL=Solid Aluminium, PE=Polyester, CER=Ceramic, SI=Silicium, T=Tantalum
WW=Wire Wound

MANUFACTURER: PH=Philips, SIG=Signetics, SIX=Siliconix, SIE=Siemens, TI=Texas Instruments, R=RCA
MOT=Motorola, N=National, ST=Studer

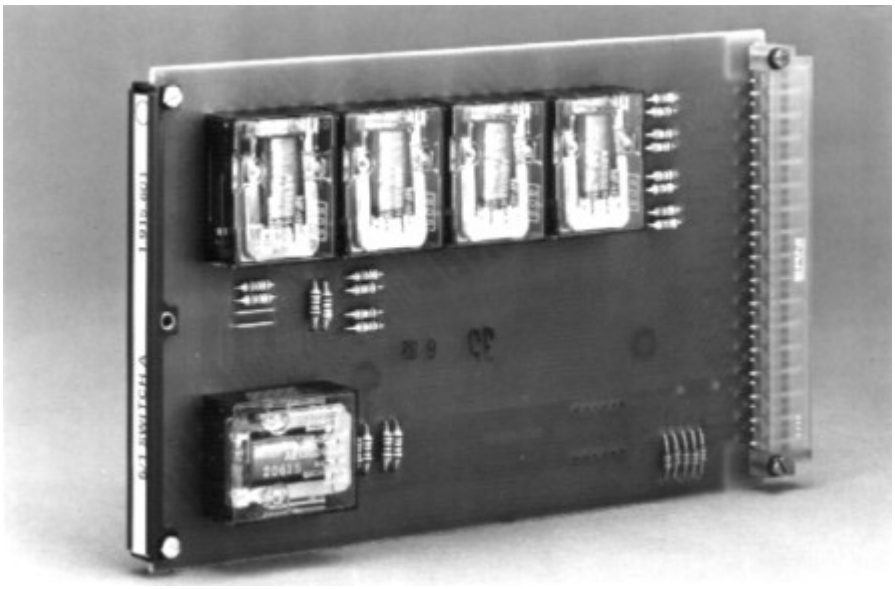
Also Valid for: 1.915.441 ①

1.915.440 POWER AMPLIFIER	PA 09/06/81
1.915.440 POWER AMPLIFIER	① VO 25/05/83
1.915.440 POWER AMPLIFIER	② FRI 06/07/83
1.915.440 POWER AMPLIFIER	③ VO 23/11/83
1.915.440 POWER AMPLIFIER	④ VO 23/09/91

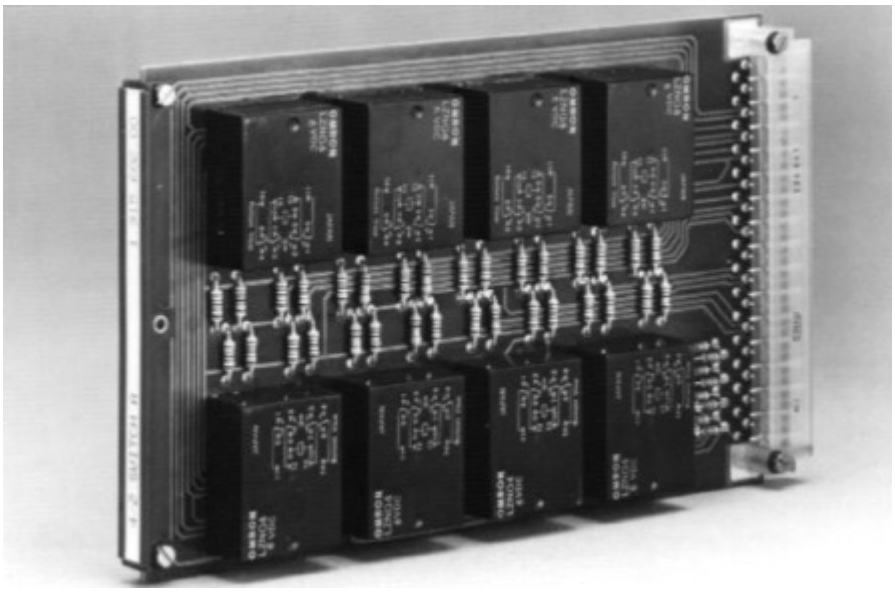
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2.2.8 Monitor Switching Relays 1.915.601/602

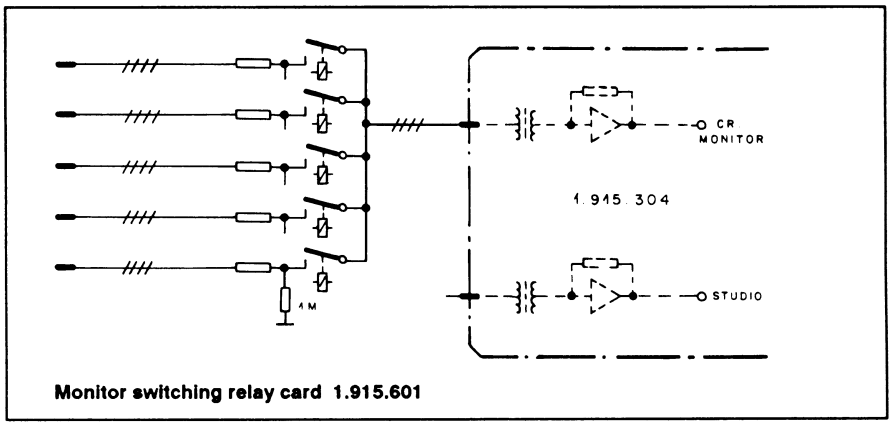
Two different monitor circuit switching cards are available. They are equipped with either five or eight relays for switching of a corresponding number of stereo sources to one or two stereo outputs in monitor circuits.



The relays are available with coil ratings of $6\,V_{DC}$ or $24\,V_{DC}$, depending on the user's requirement. Click-suppressing diodes are wired across each relay coil. The relays are equipped with four double throw (change-over) contacts each.

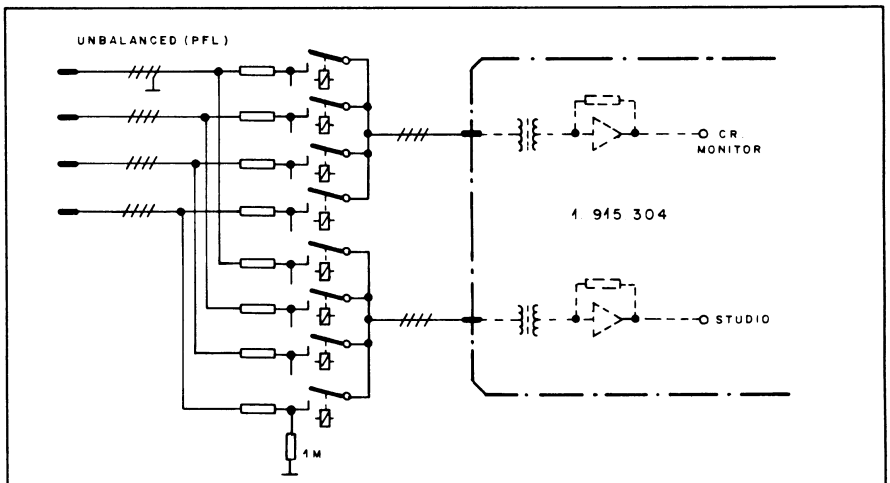


Isolation of the monitor lines from external circuitry is achieved by $5.6\,k\Omega$ resistors in the "a" and "b" legs of each stereo line, thus a high impedance (bridging) load is presented to the outside source, even in de-energized (non-selected) status, when the respective pair of relay contacts shorts the lines after the respective isolation resistors. With a relay energized, the corresponding stereo pair is routed to a stereo bus available on four pins of the 32-contact edge connector (in case of the 5-input card 1.915.601.xx).



Monitor switching relay card 1.915.601

Card 1.915.602.xx features a similar circuit configuration with eight relays, to switch one unbalanced and three balanced stereo inputs. Two stereo buses appear on eight pins of the edge-connector; in this way, the four inputs can be switched to either one or to both outputs, such as may be the case with separate monitor circuits in the control room and in the studio.

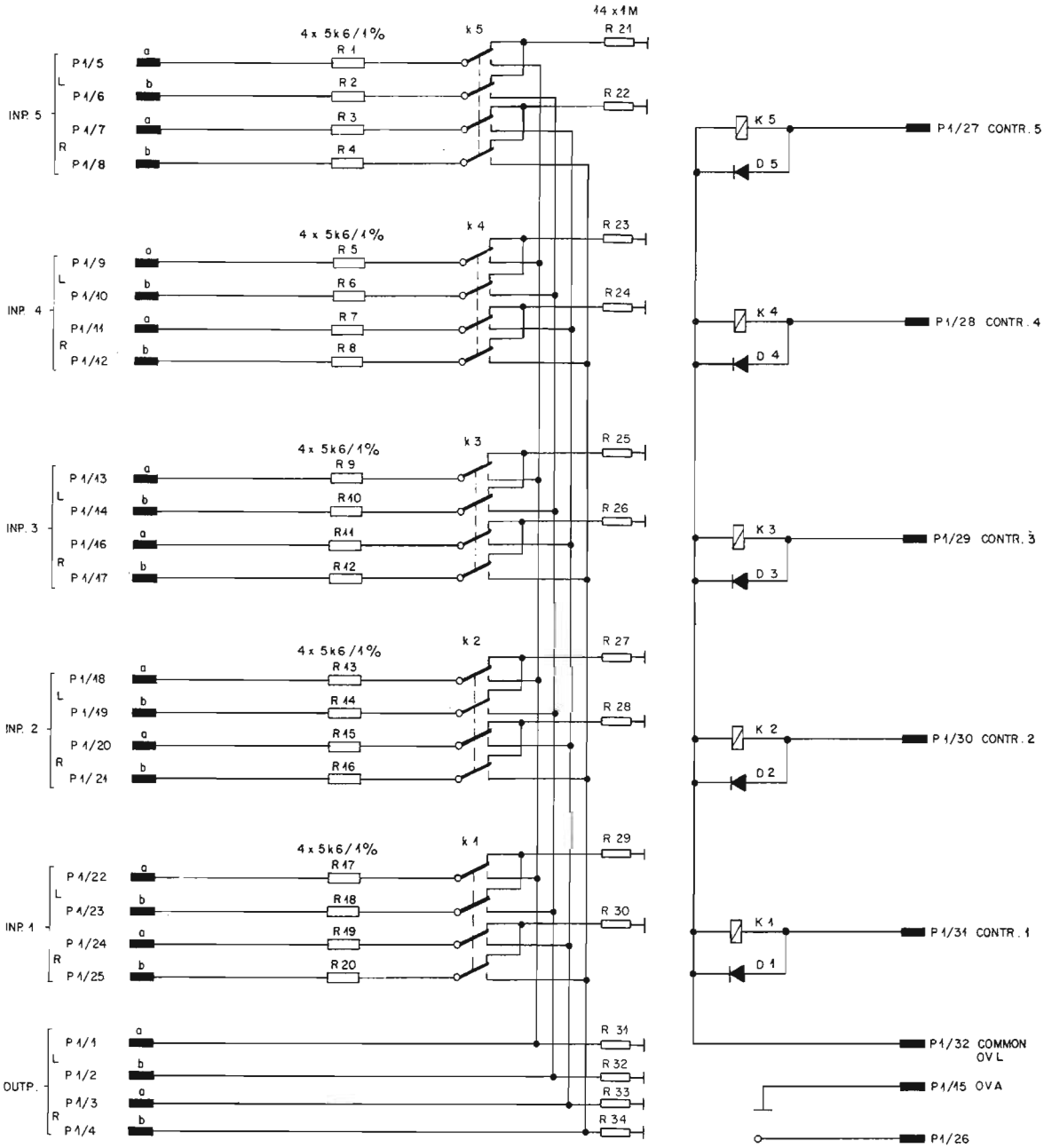


Monitor switching relay card 1.915.602

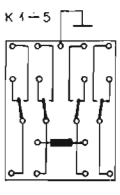
Dimensions: Euro-card **100 × 160 mm, 4 M units wide**
Weight **approx. 250 g**

Ordering Information:

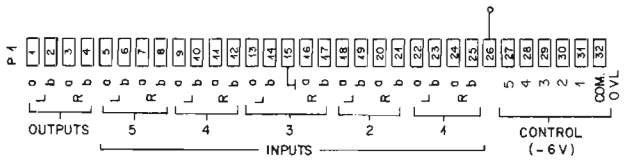
•	Relay card, 5 IN/1 OUT	1.915.601.xx
•	Relay card, 4 IN/2 OUT	1.915.602.xx



D1 . . . D5 = 1N4448

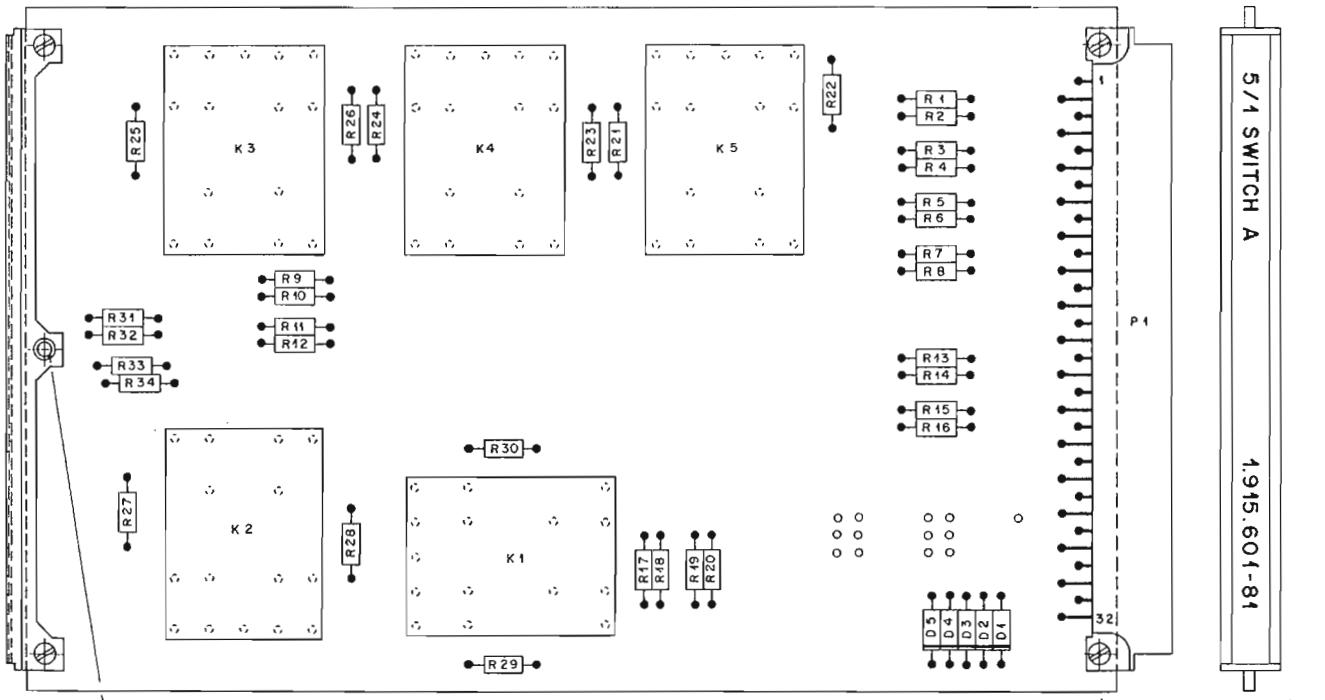


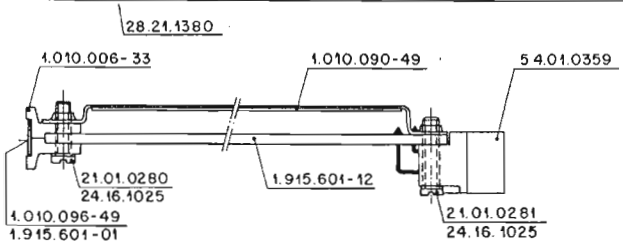
BOTTOM VIEW



DATE:	26.10.87				
SIGN:					
STUDER REGENSDORF ZURICH	5/1 SWITCH A MONITOR RELAYS				SC 1.915.601.81

RELAYS





Werkstoff: Norm-Nr.: DIN-Bez.: Abmessung:	Oberfläche: Güte: Beh.:			Änderung			
Zugehörige Unterlagen: PL	Freimasstoleranz:	Maßstab: 2:1		Ausgabe	9.10.87	A.Ho	
				Datum	Gez.	Gepr.	Ges. Index
Ersatz für: 1.915.601-00	Ersetzt durch:			Kopie für:			
STUDER REGENSDORF ZÜRICH	Benennung: 5/1 SWITCH A			Nummer: 1.915.601-81			

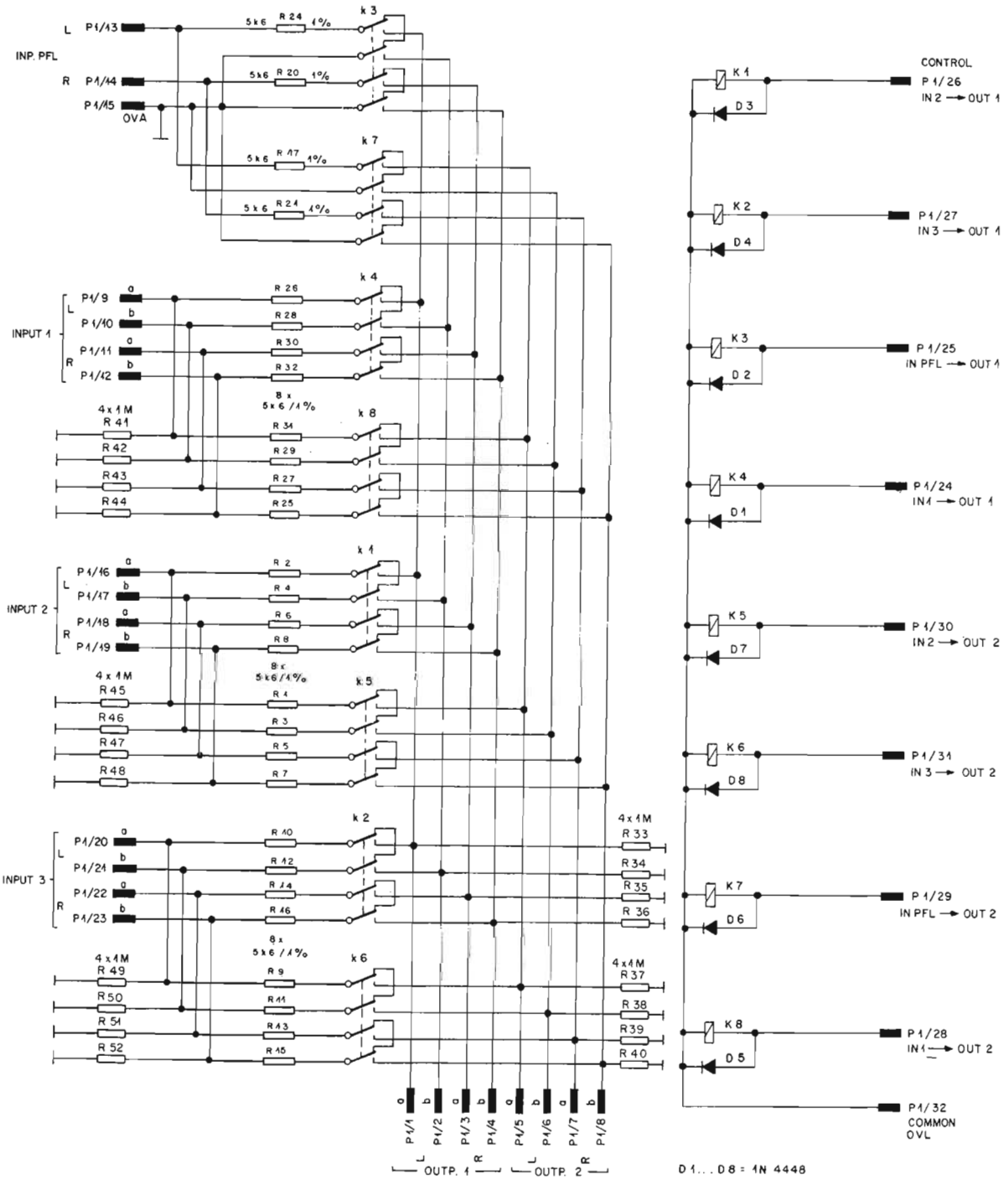
Ad	POS.	REF.No.	DESCRIPTION		MANUFACTURER
	D.....1	50.04.0125	1N4448		ANY
	D.....2	50.04.0125	1N4448		ANY
	D.....3	50.04.0125	1N4448		ANY
	D.....4	50.04.0125	1N4448		ANY
	D.....5	50.04.0125	1N4448		ANY
	K.....1	56.04.0146	4U/6V		N/O
	K.....2	56.04.0146	4U/6V		N/O
	K.....3	56.04.0146	4U/6V		N/O
	K.....4	56.04.0146	4U/6V		N/O
	K.....5	56.04.0146	4U/6V		N/O
	R.....1	57.11.3562	5,6k	1%	
	R.....2	57.11.3562	5,6k	1%	
	R.....3	57.11.3562	5,6k	1%	
	R.....4	57.11.3562	5,6k	1%	
	R.....5	57.11.3562	5,6k	1%	
	R.....6	57.11.3562	5,6k	1%	
	R.....7	57.11.3562	5,6k	1%	
	R.....8	57.11.3562	5,6k	1%	
	R.....9	57.11.3562	5,6k	1%	
	R....10	57.11.3562	5,6k	1%	
	R....11	57.11.3562	5,6k	1%	
	R....12	57.11.3562	5,6k	1%	
	R....13	57.11.3562	5,6k	1%	
	R....14	57.11.3562	5,6k	1%	
	R....15	57.11.3562	5,6k	1%	
	R....16	57.11.3562	5,6k	1%	
	R....17	57.11.3562	5,6k	1%	
	R....18	57.11.3562	5,6k	1%	
	R....19	57.11.3562	5,6k	1%	
	R....20	57.11.3562	5,6k	1%	
	R....21	57.11.4105	1M		
	R....22	57.11.4105	1M		
	R....23	57.11.4105	1M		
	R....24	57.11.4105	1M		
	R....25	57.11.4105	1M		
	R....26	57.11.4105	1M		
	R....27	57.11.4105	1M		

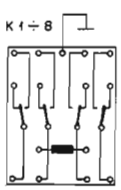
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
	R....28	57.11.4105	1M	
	R....29	57.11.4105	1M	
	R....30	57.11.4105	1M	
	R....31	57.11.4105	1M	
	R....32	57.11.4105	1M	
	R....33	57.11.4105	1M	
	R....34	57.11.4105	1M	

MANUFACTURER: N=National, O=Omron

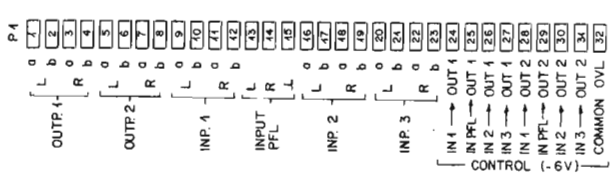
1.915.601.81 5/1 SWITCH A WY 14/10/87

END



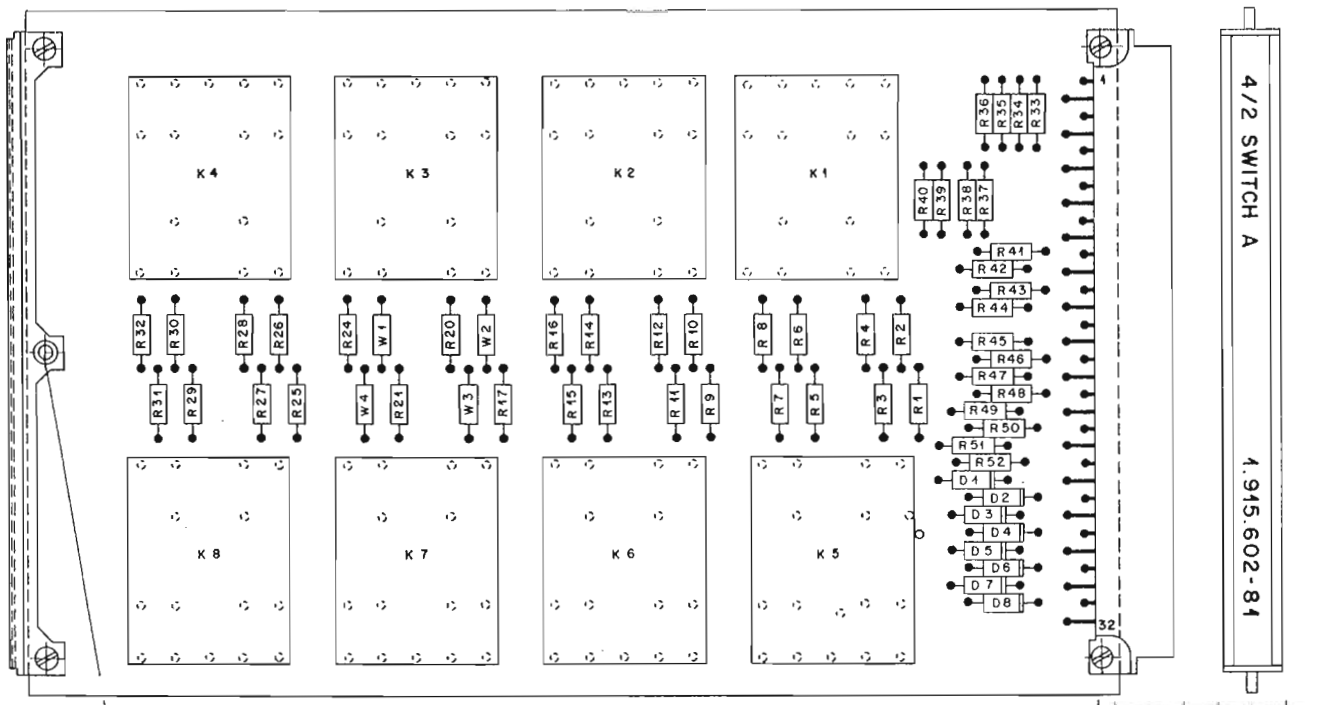


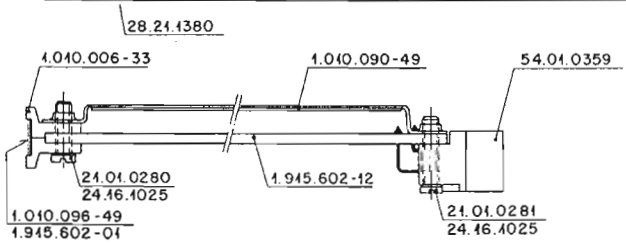
BOTTOM VIEW



DATE:	26.10.87					
SIGN:						
STUDER REGENSDORF ZÜRICH	4/2 SWITCH A MONITOR RELAYS					SC 1.915.602.81

RELAYS





Werkstoff: Norm-Nr.: DIN-Bez.: Abmessung:	Oberfläche: Gute: Beh.:		Änderung:
Zugehörige Unterlagen: PL	Freimasstoleranz:	Maßstab: 2:1	Ausgabe: 9.10.87 A.Ho
Ersatz für: 1.915.602-00	Ersetzt durch:		Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: 4/2 SWITCH A		Nummer: 1.915.602-81

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
	D....1	50.04.0125	1N4448	ANY
	D....2	50.04.0125	1N4448	ANY
	D....3	50.04.0125	1N4448	ANY
	D....4	50.04.0125	1N4448	ANY
	D....5	50.04.0125	1N4448	ANY
	D....6	50.04.0125	1N4448	ANY
	D....7	50.04.0125	1N4448	ANY
	D....8	50.04.0125	1N4448	ANY
	K....1	56.04.0146	4U/6V	N/O
	K....2	56.04.0146	4U/6V	N/O
	K....3	56.04.0146	4U/6V	N/O
	K....4	56.04.0146	4U/6V	N/O
	K....5	56.04.0146	4U/6V	N/O
	K....6	56.04.0146	4U/6V	N/O
	K....7	56.04.0146	4U/6V	N/O
	K....8	56.04.0146	4U/6V	N/O
	R....1	57.11.3562	5,6k 1% 28Stk.	
	R....2	57.11.3562	5,6k 1% 28Stk.	
	R....3	57.11.3562	5,6k 1% 28Stk.	
	R....4	57.11.3562	5,6k 1% 28Stk.	
	R....5	57.11.3562	5,6k 1% 28Stk.	
	R....6	57.11.3562	5,6k 1% 28Stk.	
	R....7	57.11.3562	5,6k 1% 28Stk.	
	R....8	57.11.3562	5,6k 1% 28Stk.	
	R....9	57.11.3562	5,6k 1% 28Stk.	
	R....10	57.11.3562	5,6k 1% 28Stk.	
	R....11	57.11.3562	5,6k 1% 28Stk.	
	R....12	57.11.3562	5,6k 1% 28Stk.	
	R....13	57.11.3562	5,6k 1% 28Stk.	
	R....14	57.11.3562	5,6k 1% 28Stk.	
	R....15	57.11.3562	5,6k 1% 28Stk.	
	R....16	57.11.3562	5,6k 1% 28Stk.	
	R....17	57.11.3562	5,6k 1% 28Stk.	
	R....25	57.11.3562	5,6k 1% 28Stk.	
	R....26	57.11.3562	5,6k 1% 28Stk.	
	R....27	57.11.3562	5,6k 1% 28Stk.	
	R....28	57.11.3562	5,6k 1% 28Stk.	
	R....29	57.11.3562	5,6k 1% 28Stk.	
	R....30	57.11.3562	5,6k 1% 28Stk.	
	R....31	57.11.3562	5,6k 1% 28Stk.	
	R....32	57.11.3562	5,6k 1% 28Stk.	
	R....33	57.11.3105	1M	
	R....34	57.11.3105	1M	
	R....35	57.11.3105	1M	
	R....36	57.11.3105	1M	
	R....37	57.11.3105	1M	
	R....38	57.11.3105	1M	
	R....39	57.11.3105	1M	
	R....40	57.11.3105	1M	
	R....41	57.11.3105	1M	
	R....42	57.11.3105	1M	
	R....43	57.11.3105	1M	
	R....44	57.11.3105	1M	
	R....45	57.11.3105	1M	
	R....46	57.11.3105	1M	
	R....47	57.11.3105	1M	
	R....48	57.11.3105	1M	
	R....49	57.11.3105	1M	
	R....50	57.11.3105	1M	
	R....51	57.11.3105	1M	
	R....52	57.11.3105	1M	
	W....1	57.11.3000	0-Ω	
	W....2	57.11.3000	0-Ω	
	W....3	57.11.3000	0-Ω	
	W....4	57.11.3000	0-Ω	

MANUFACTURER: N=National, O=Omron

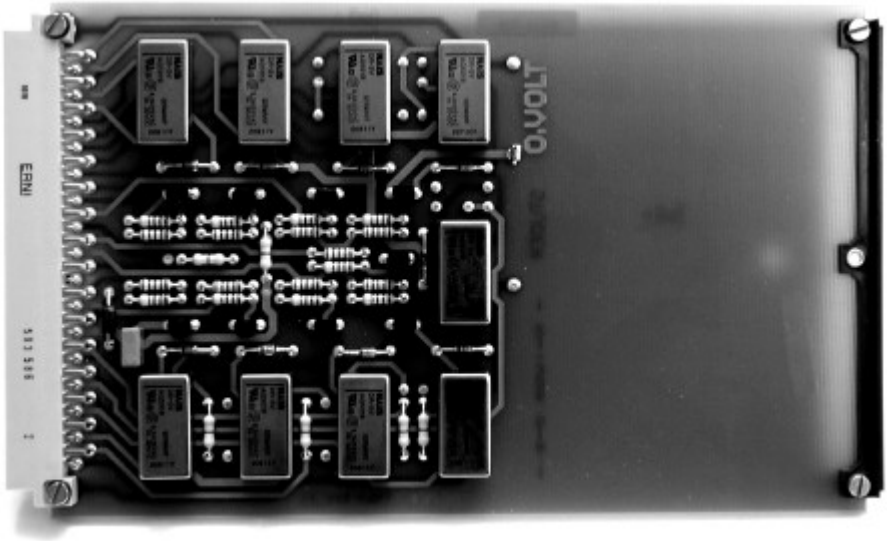
1.915.602.81 4/2 SWITCH A WY 14/10/87

1.915.602.81 4/2 SWITCH A ① WY 22/05/89

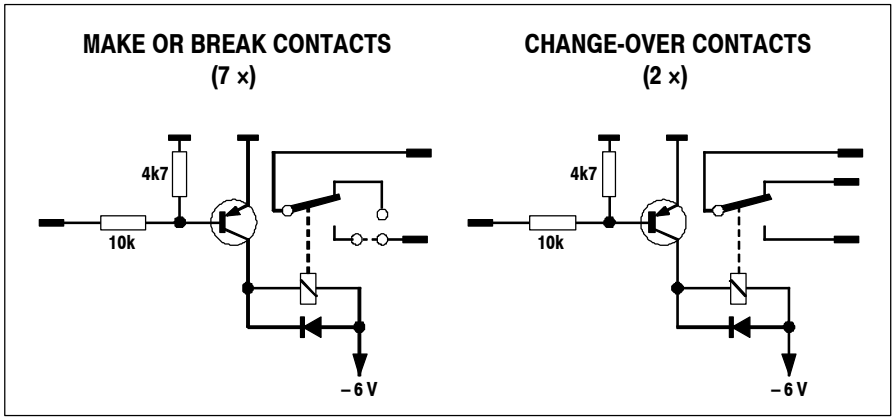
END

2.2.9 Transistor-Driven Relays (7+2) 1.915.603

This Euro-card is supplied with nine transistor-driven relays with single-pole, double-throw (SPDT) contacts. For two of the relays, both normally-open and normally-closed contacts are routed to the edge connector; for the remaining seven it is jumper-selectable whether the normally-open or the normally-closed contact is used.



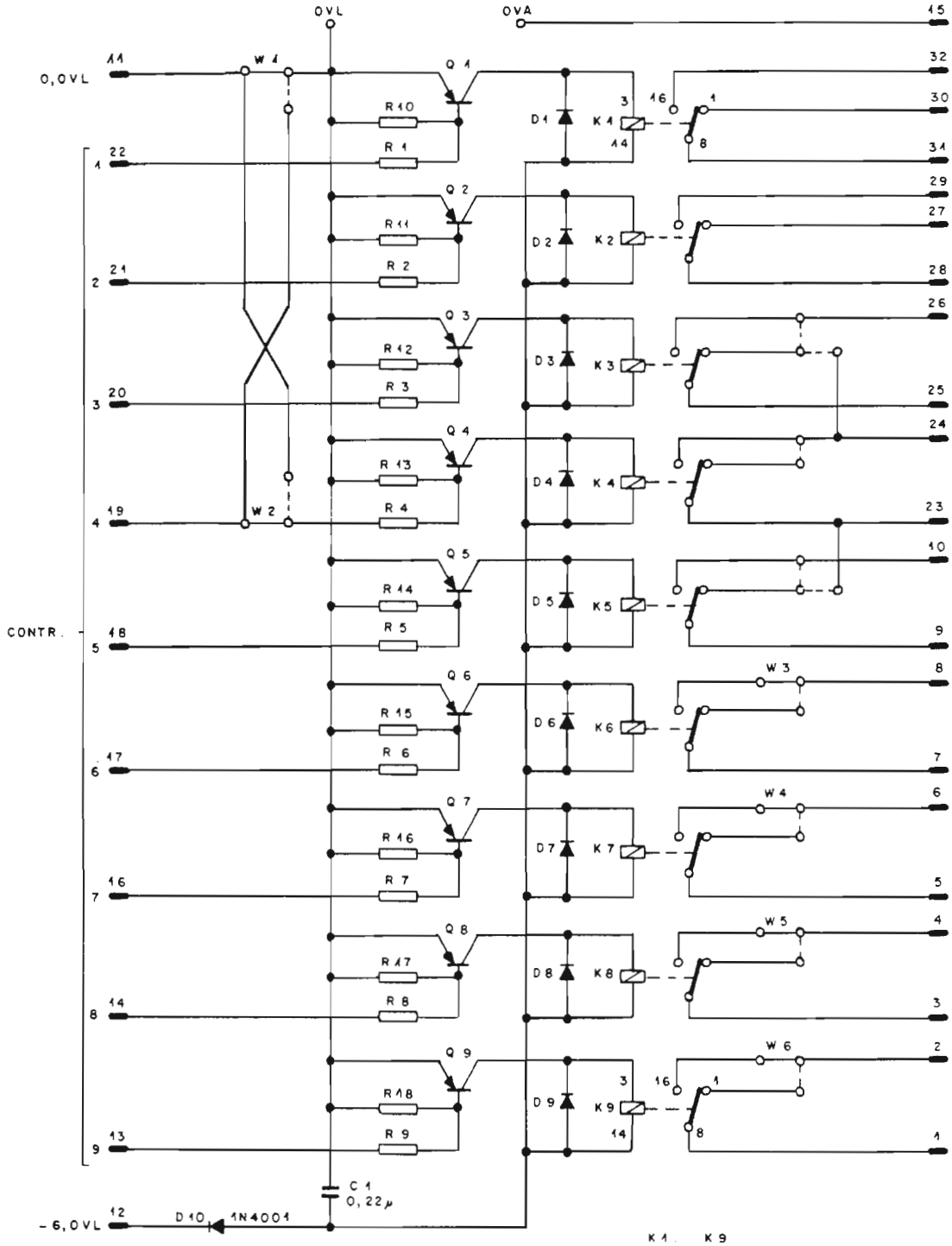
The relays are designed for operation on 6 V_{DC}, and each relay coil is bridged with a click-suppressing diode. PNP transistors in series with the coils are blocking the current flow, because each transistor is normally biased off. By applying the output from the gate of an external control logic to the base of a transistor, it is switched into saturation, thereby energizing the respective relay. This arrangement of nine relays was designed for use in signaling systems within a studio installation; however, it may find its use for other applications as well.



Polarity of the relay's supply voltage must be observed when utilizing this circuit.

Technical Specifications

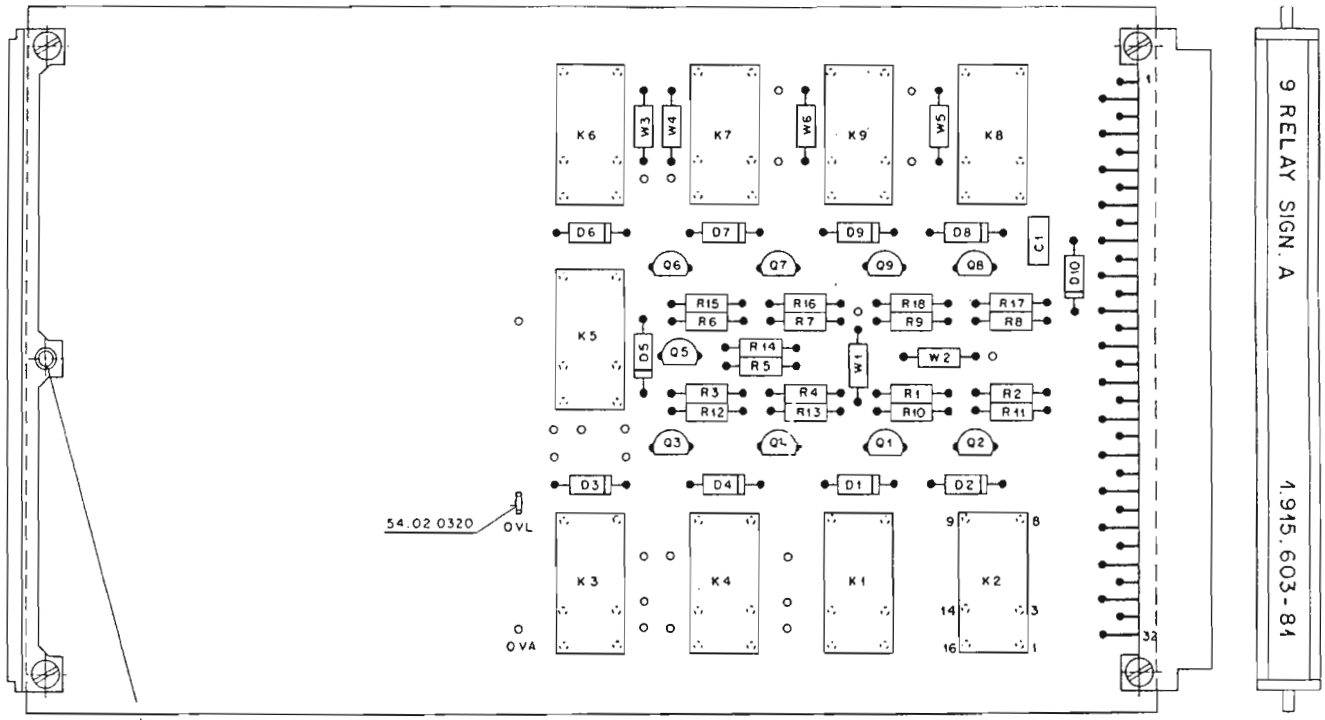
Contact Ratings:		**max. 1 A/30 V_{DC} or 0.3 A/125 V_{AC}**
	Note:	*In this application **48 V** must not be exceeded to avoid shock hazard.*
	Switching power	**60 VA** (AC) **100 W** (DC)
Dimensions:	Euro-card	**100 × 160 mm, 4 M units wide**
Ordering Information:		Transistor-driven relays 1.915.603.xx

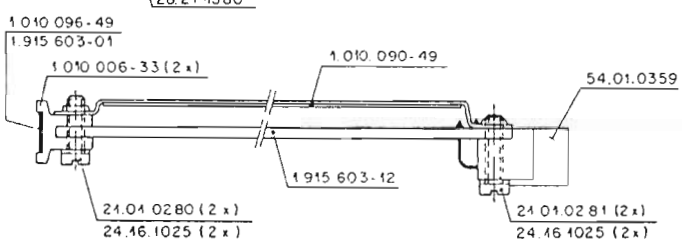


R 1 . . . R 9 = 10 k
R 10 . . . R 18 = 4 k 7
D 1 . . . D 9 = 1N 4448
Q 1 . . . Q 9 = BC 560
K 1 . . . K 9 DR - 5 V

⓪ 24 11 92 We				
STUDER REGENSDORF ZÜRICH	9 RELAYS SIGN. A			SC 1.915.603-81

RELAYS





Werkstoff: Norm-Nr. / DIN-Bez. / Abmessung	Oberfläche: Güte / Ben		Änderung
Zugehörige Unterlagen	Freimaßtoleranz	Maßstab	Ausgabe 30.9.92
PL	±	2 : 1	Datum / Gez. / Gepr. / Gen. / Index
Ersatz für	Ersatz durch		Kopie für
STUDER REGENSDORF ZÜRICH	Benennung: RELAYS UNIT 9A SIGNALISATION		Nummer: 1.915.603-81

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C 1	59.06.0224	KONDENSATOR 0,22µ	
	D.....1	50.04.0125	DIODE	1N 4448
	D.....2	50.04.0125	DIODE	1N 4448
	D.....3	50.04.0125	DIODE	1N 4448
	D.....4	50.04.0125	DIODE	1N 4448
	D.....5	50.04.0125	DIODE	1N 4448
	D.....6	50.04.0125	DIODE	1N 4448
	D.....7	50.04.0125	DIODE	1N 4448
	D.....8	50.04.0125	DIODE	1N 4448
	D.....9	50.04.0125	DIODE	1N 4448
	D....10	50.04.0122	DIODE	1N 4001
	K.....1	56.04.0190	RELAYS	DR-5V
	K.....2	56.04.0190	RELAYS	DR-5V
	K.....3	56.04.0190	RELAYS	DR-5V
	K.....4	56.04.0190	RELAYS	DR-5V
	K.....5	56.04.0190	RELAYS	DR-5V
	K.....6	56.04.0190	RELAYS	DR-5V
	K.....7	56.04.0190	RELAYS	DR-5V
	K.....8	56.04.0190	RELAYS	DR-5V
	K.....9	56.04.0190	RELAYS	DR-5V
	Q.....1	50.03.0601	TRANSISTOR	BC 560
	Q.....2	50.03.0601	TRANSISTOR	BC 560
	Q.....3	50.03.0601	TRANSISTOR	BC 560
	Q.....4	50.03.0601	TRANSISTOR	BC 560
	Q.....5	50.03.0601	TRANSISTOR	BC 560
	Q.....6	50.03.0601	TRANSISTOR	BC 560
	Q.....7	50.03.0601	TRANSISTOR	BC 560
	Q.....8	50.03.0601	TRANSISTOR	BC 560
	Q.....9	50.03.0601	TRANSISTOR	BC 560

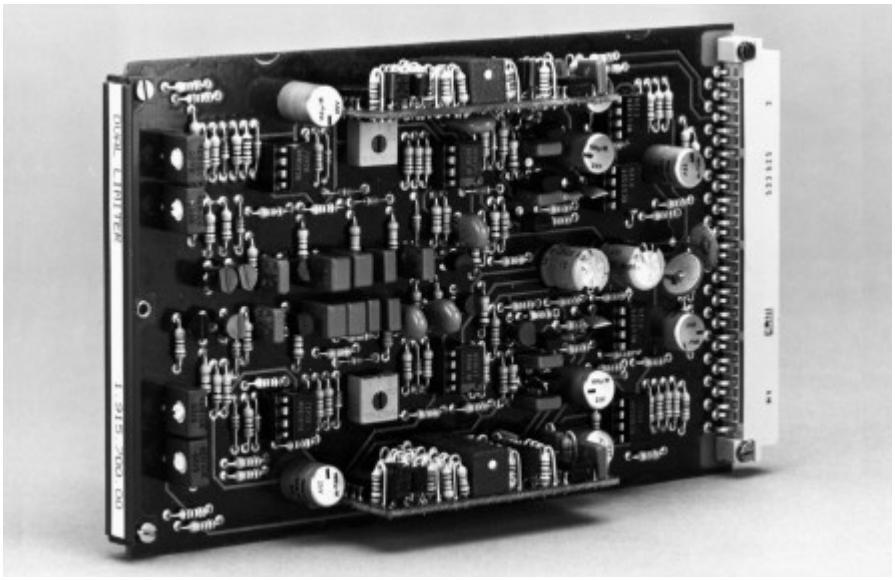
Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R.....1	57.11.3103	WIDERSTAND	10K
	R.....2	57.11.3103	WIDERSTAND	10K
	R.....3	57.11.3103	WIDERSTAND	10K
	R.....4	57.11.3103	WIDERSTAND	10K
	R.....5	57.11.3103	WIDERSTAND	10K
	R.....6	57.11.3103	WIDERSTAND	10K
	R.....7	57.11.3103	WIDERSTAND	10K
	R.....8	57.11.3103	WIDERSTAND	10K
	R.....9	57.11.3103	WIDERSTAND	10K
	R....10	57.11.3472	WIDERSTAND	4,7K
	R....11	57.11.3472	WIDERSTAND	4,7K
	R....12	57.11.3472	WIDERSTAND	4,7K
	R....13	57.11.3472	WIDERSTAND	4,7K
	R....14	57.11.3472	WIDERSTAND	4,7K
	R....15	57.11.3472	WIDERSTAND	4,7K
	R....16	57.11.3472	WIDERSTAND	4,7K
	R....17	57.11.3472	WIDERSTAND	4,7K
	R....18	57.11.3472	WIDERSTAND	4,7K
	W.....1	57.11.3000	O OHM WIDERSTAND	
	W.....2	57.11.3000	O OHM WIDERSTAND	
	W.....3	57.11.3000	O OHM WIDERSTAND	
	W.....4	57.11.3000	O OHM WIDERSTAND	
	W.....5	57.11.3000	O OHM WIDERSTAND	
	W.....6	57.11.3000	O OHM WIDERSTAND	

1.915.603.81 RELAY UNIT 9A 21/10/92

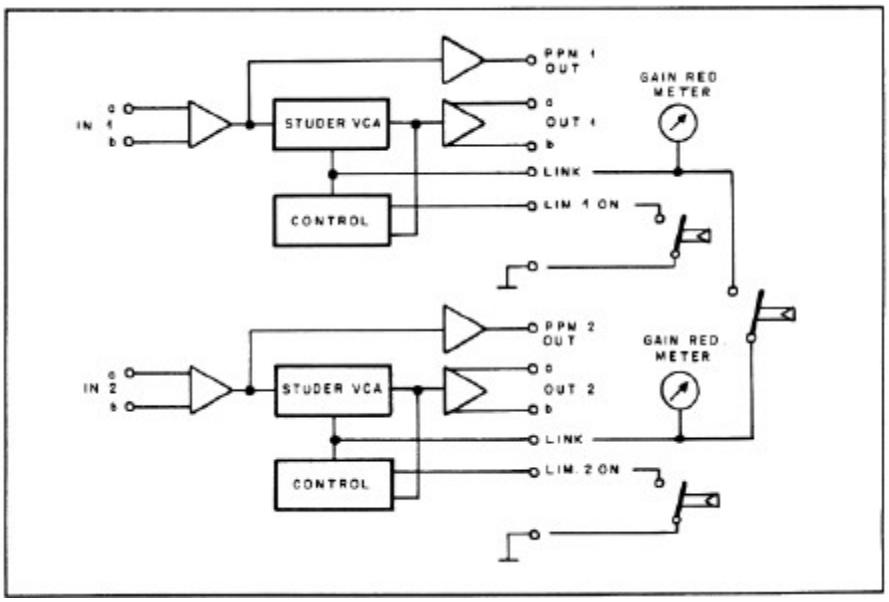
END

2.2.10 Dual Limiter 1.915.700

In sound work there are numerous situations where the signal amplitude has to be limited to a pre-determined level in order to prevent overloading of succeeding equipment, such as light modulators in film work, or radio transmitters. With this limiter, excessive levels are automatically reduced to a preset level, and, since regulation is controlled by the program's energy content, the performance of this limiter is free of any "pumping" effects. Gain reduction is achieved with a Studer Voltage Controlled Amplifier (VCA) which ensures low noise performance and negligible distortion.



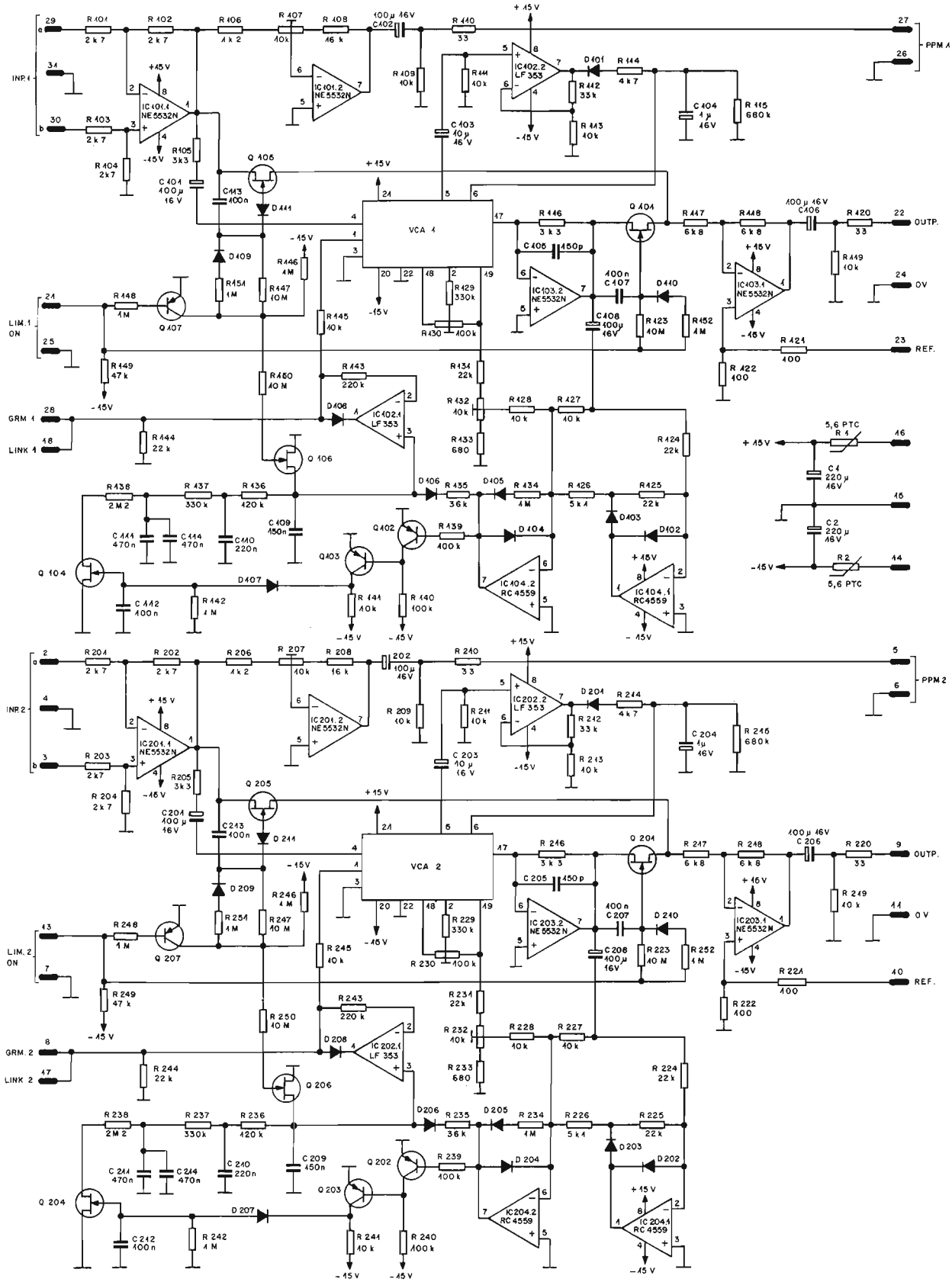
Two identical, independent limiter circuits are contained on one Eurocard, plus additional, separate gain stages to drive peak program meters.
The perfect tracking of the two VCAs makes this Dual Limiter suitable for stereo work as well, in which case a simple electrical connection is needed to link the units.



Note: Gain reduction meters *(not supplied)* can be connected to the LINK outputs as well, if required.

Technical Specifications

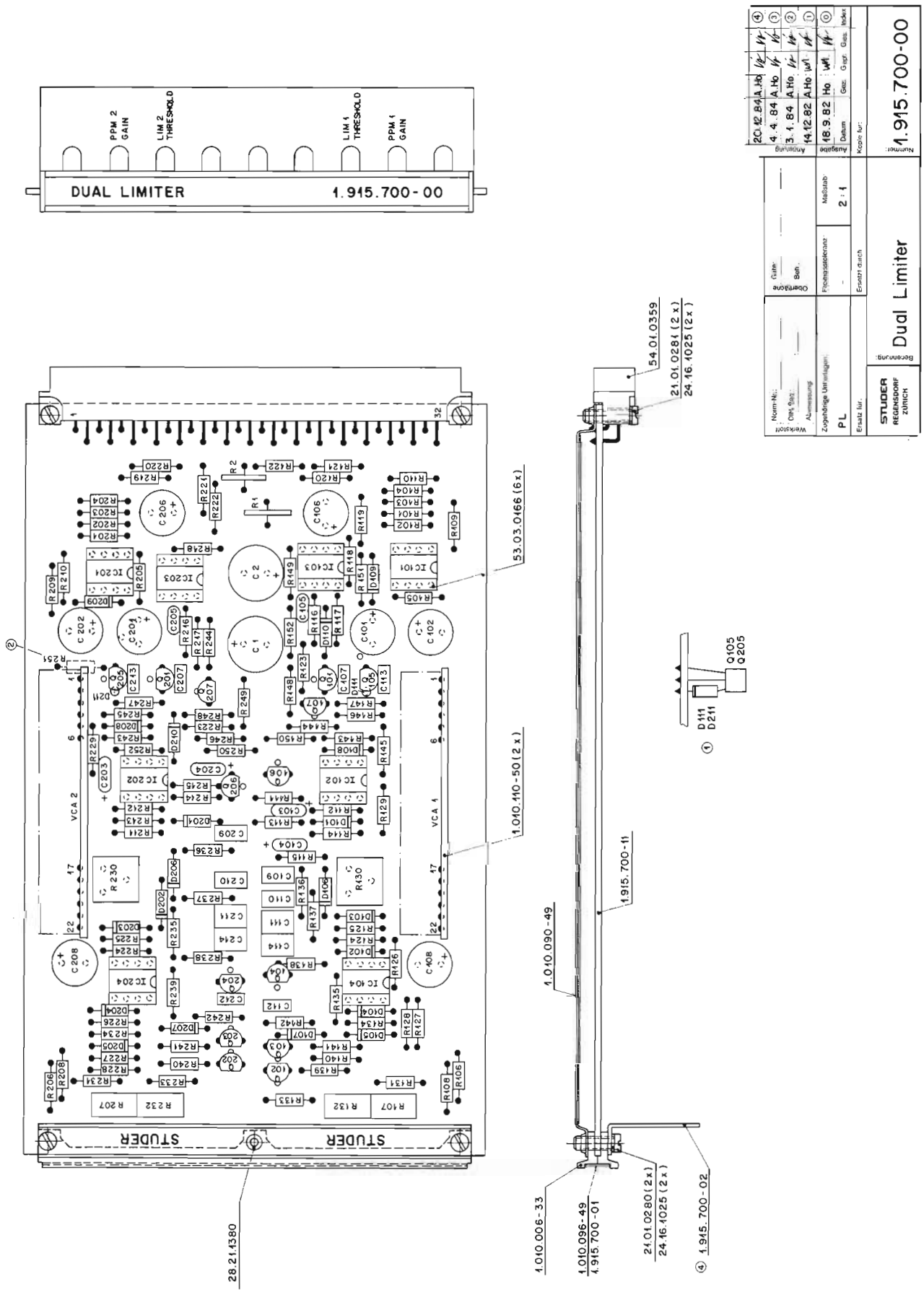
Input:	Impedance	**5.4 kW**, balanced configuration
		2.7 kW, unbalanced configuration
	Overload point	**+20 dBu** (7.75 V_{rms})
Output:	Impedance	**< 50 W,** unbalanced
	Frequency response	**+0/–0.5 dB**, 30 Hz...15 kHz
		+0/–3 dB, 2 Hz...200 kHz
	Gain	**0 dB,** limiter off
	Output noise level	**–102 dBu,** Limiter on
		–106 dBu, Limiter off
	Limiting ratio	**20:1**
	Threshold	**–15 dBu...+3 dBu,** adjustable
	Limited output level	**–14 dBu...+4 dBu,** depending on threshold setting
	Attack time	**1 ms**
	Release time	**50 ms...5 s,** program-dependent
PPM Section:	Output impedance	**< 50 W,** unbalanced
	Maximum output level	**+20 dBu**
	Gain	**2.5 dB...27 dB,** adjustable
	Frequency response	**+0/–3 dB,** 2 Hz...200 kHz
Supply:		**±15 V** (100 mA)
Dimensions:	Euro-card	**100 × 160 mm, 7 M units wide**
Ordering Information:		Dual limiter 1.915.700.xx



ALL DIODES 4N4448
ALL PNP BC560
ALL FET J112

DATE:	3.3.83	16.7.84				
SIGN:	ml	ml				
STUDER REGENSDORF ZÜRICH	DUAL LIMITER					SC 1.915.700

DUAL LIMITER



DUAL LIMITER

Ad	POS.	REF.No.	DESCRIPTION				MANUFACTURER
	C....1	59.22.4221	220µ	16V	EL		
	C....2	59.22.4221	220µ	16V	EL		
	C....1	59.22.4101	100µ	16V	EL		
	C....2	59.22.4101	100µ	16V	EL		
	C....3	59.26.2100	10µ	16V	EL, SAL		
	C....4	59.26.5109	1µ	16V	EL, SAL		
	C....5	59.34.4151	150p		CER		
	C....6	59.22.4101	100µ	16V	EL		
	C....7	59.06.5104	100n		PETP		
	C....8	59.22.4101	100µ	16V	EL		
	C....9	59.06.5154	150n	5%	PETP		
	C....10	59.06.5224	220n	5%	PETP		
	C....11	59.06.5474	470n	5%	PETP		
	C....12	59.06.5104	100n		PETP		
	C....13	59.06.5104	100n		PETP		
	C....14	59.06.5474	470n	5%	PETP		
	D....1	50.04.0125	1N4448		SI		
	D....2	50.04.0125	1N4448		SI		
	D....3	50.04.0125	1N4448		SI		
	D....4	50.04.0125	1N4448		SI		
	D....5	50.04.0125	1N4448		SI		
	D....6	50.04.0125	1N4448		SI		
	D....7	50.04.0125	1N4448		SI		
	D....8	50.04.0125	1N4448		SI		
	D....9	50.04.0125	1N4448		SI		
	D....10	50.04.0125	1N4448		SI		
①	D....11	50.04.0125	1N4448		SI		
	IC....1	50.09.0106	NE5532N	DUAL OP		XR5532N	SIG, EX
	IC....2	50.09.0101	LF353N	DUAL OP		TL072	N, TI
	IC....3	50.09.0106	NE5532N	DUAL OP		XR5532N	SIG, EX
	IC....4	50.09.0107	RC4559NB	DUAL OP			RA, TI
	Q....1	50.03.0350	J112	J-FET			SIX, N
	Q....2	50.03.0496	BC560	PNP			SIE
	Q....3	50.03.0496	BC560	PNP			SIE
	Q....4	50.03.0350	J112	J-FET			SIX, N
	Q....5	50.03.0350	J112	J-FET			SIX, N
	Q....6	50.03.0350	J112	J-FET			SIX, N
	Q....7	50.03.0496	BC560	PNP			SIE
	R....1	57.99.0209	5,6		PTC		PH
	R....2	57.99.0209	5,6		PTC		PH
	R....1	57.11.4272	2,7k	2%			
	R....2	57.11.4272	2,7k	2%			
	R....3	57.11.4272	2,7k	2%			
	R....4	57.11.4272	2,7k	2%			
	R....5	57.11.4332	3,3k	2%			
	R....6	57.11.4122	1,2k				
	R....7	58.01.7103	10k	10% LIN	PMG		
	R....8	57.11.3163	16k				
	R....9	57.11.4103	10k				
	R....10	57.11.4330	33				
	R....11	57.11.4103	10k				
	R....12	57.11.4333	33k				
	R....13	57.11.4103	10k				
	R....14	57.11.4472	4,7k				
	R....15	57.11.4684	680k				
	R....16	57.11.4332	3,3k	2%			
	R....17	57.11.4682	6,8k	2%			
	R....18	57.11.4682	6,8k	2%			
	R....19	57.11.4103	10k				
	R....20	57.11.4330	33				
	R....21	57.11.4101	100	2%			
	R....22	57.11.4101	100	2%			
	R....23	57.11.6106	10M				
	R....24	57.11.4223	22k	2%			
	R....25	57.11.4223	22k	2%			
	R....26	57.11.3512	5,1k	2%			
	R....27	57.11.4103	10k	2%			
	R....28	57.11.4103	10k	2%			
	R....29	57.11.4334	330k				
	R....30	58.01.8104	100k	10% LIN	PMG		
	R....31	57.11.4223	22k				
	R....32	58.01.7103	10k	10% LIN	PMG		
	R....33	57.11.4681	680				
②	R....34	57.11.4105	1M				
③	R....35	57.11.3363	36k				
	R....36	57.11.4124	120k				
	R....37	57.11.4334	330k				
	R....38	57.11.5225	2,2M				
	R....39	57.11.4104	100k				
	R....40	57.11.4104	100k				
	R....41	57.11.4103	10k				
	R....42	57.11.4105	1M				
	R....43	57.11.4224	220k				
	R....44	57.11.4223	22k				
	R....45	57.11.4103	10k				
	R....46	57.11.4105	1M				
	R....47	57.11.6106	10M				
	R....48	57.11.4105	1M				
	R....49	57.11.4473	47k				
	R....50	57.11.6106	10M				
	R....51	57.11.4105	1M				
	R....52	57.11.4105	1M				
④⑤	VCA..1	1.911.290.81		STUDER VCA-BOARD			ST
④⑤	VCA..2	1.911.290.81		STUDER VCA-BOARD			ST
	XIC	53.03.0166	DIP8POL				

EL=Electrolytic, SAL=Solid Aluminium, CER=Ceramic, PETP=Polyester, SI=Silicium, PTC=Pos. Temp. Coif. PMG=Cermet

MANUFACTURER: SIG=Signetics, EX=Exar, N=National, TI=Texas Instruments, RA=Raytheon, SIX=Siliconix SIE=Siemens, PH=Philips, ST=Studer

1.915.700.00	DUAL LIMITER	W. Markl 14/06/82
1.915.700.00	DUAL LIMITER	① W. Markl 14/12/82
1.915.700.00	DUAL LIMITER	② A. Ho 01/04/84
1.915.700.00	DUAL LIMITER	③ VO 16/07/84
1.915.700.00	DUAL LIMITER	④ PA 13/01/89
1.915.700.00	DUAL LIMITER	⑤ WY 17/01/90

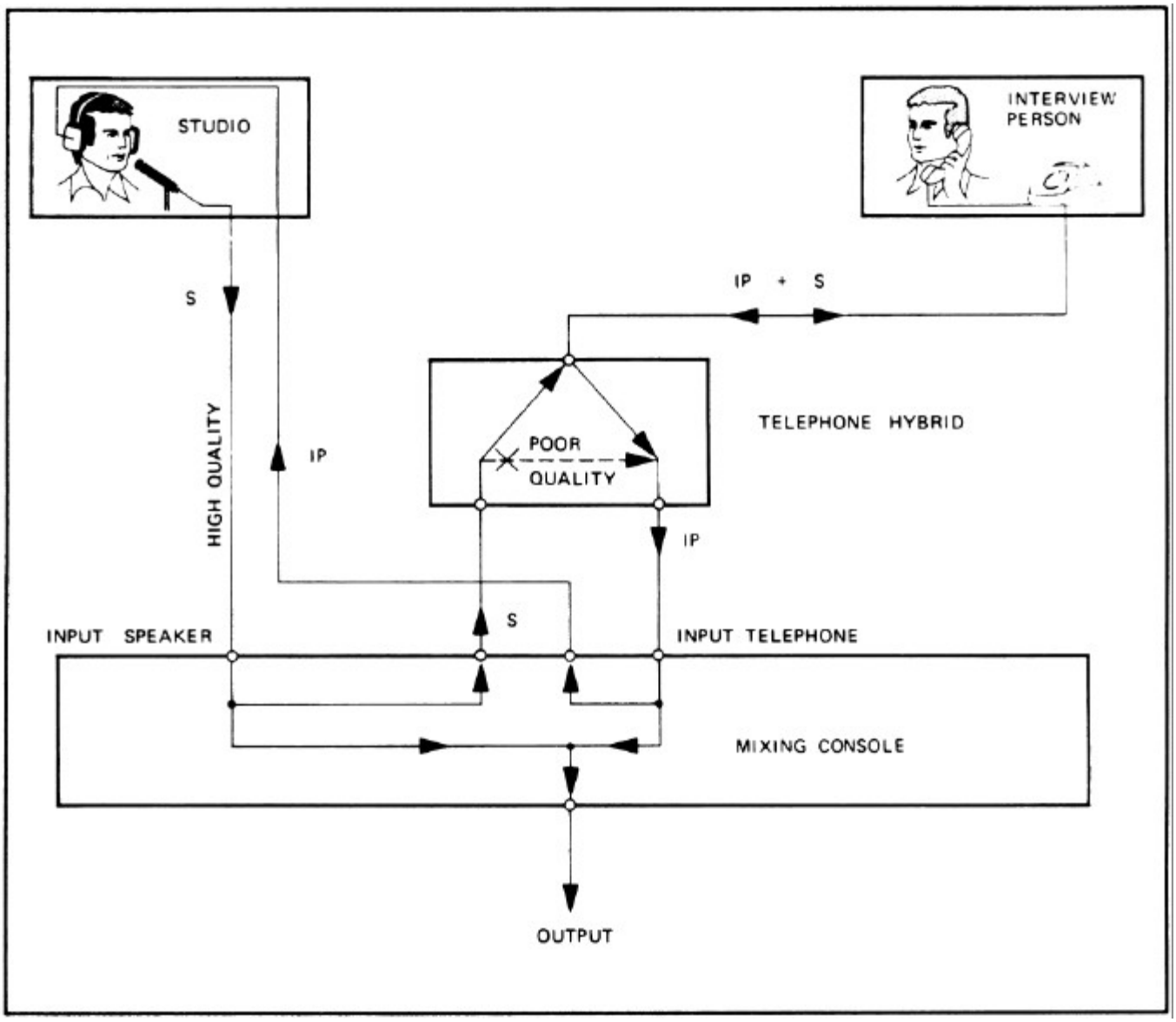
END

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2.2.11 Telephone Hybrid 1.915.760/764

In order to record or transmit a conversation between the announcer in the studio and a person outside the studio being interviewed by telephone, the telephone line must be connected to the mixing console.

In such a case, the full conversation is transmitted, since both voice signals are carried on normal 2-wire telephone lines. However, also the voice of the announcer in the studio is then transmitted in telephone quality (300... 3400 Hz). By mixing the microphone signal of the announcer (in studio quality) to the conversation, the addition of the “good” and “poor” signals results in a distorted and untrue signal.

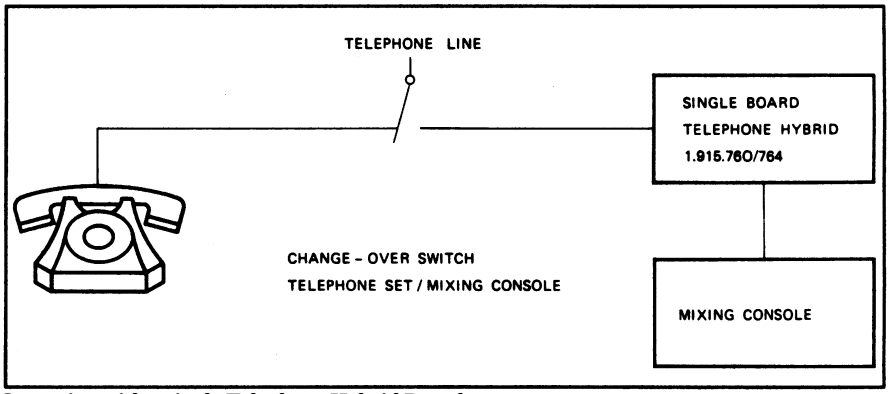


Principle of a telephone transmission via a mixing console

The telephone hybrid allows to greatly improve the quality of a telephone transmission by selectively suppressing the undesired “poor” announcer signal (side-tone attenuation). This side-tone attenuation is done in principle by a hybrid circuit which is a familiar feature in telephony.

The Studer telephone hybrid permits high-quality transmission of telephone conversations with the announcer in the studio. Apart from connecting it to the telephone line, the hybrid works automatically.

Maximum side-tone attenuation of the studio voice signal in the receiver line is achieved by automatically constituting a dummy load for the telephone line. This adjustment is performed electronically, the real (resistive) and imaginary (capacitive) components of the telephone line impedance being matched as near as possible. This automatical matching process begins as soon as an announcer signal is present.



Operation with a single Telephone Hybrid Board

The telephone set is used to establish a telephone connection (call). After switching over to the mixing console, the holding current for the subscriber's relay is maintained by a resistor on the hybrid board.

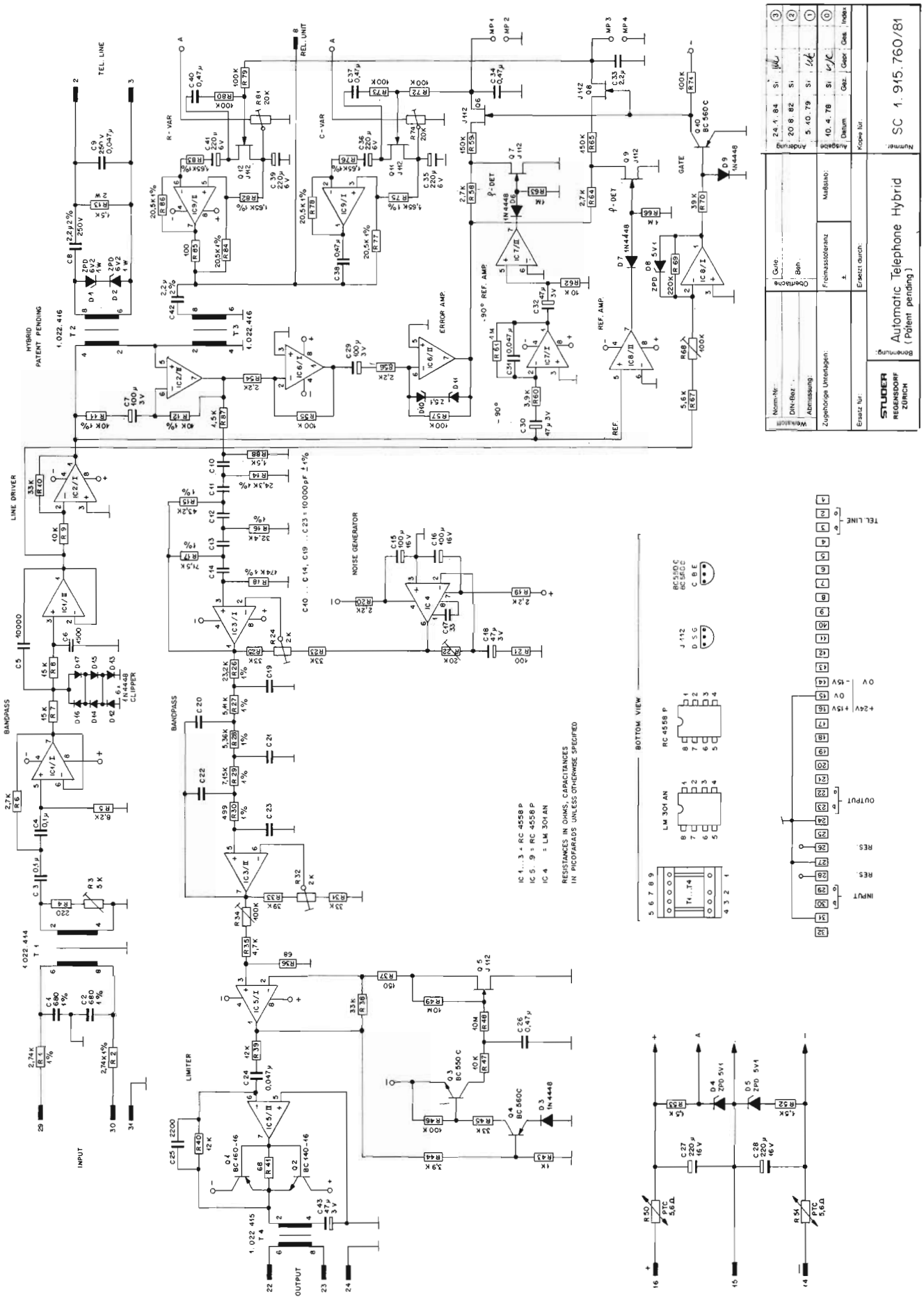
Versions:

A variety of 19" Telephone Hybrid units with one or two channels is available, consisting of the following versions:

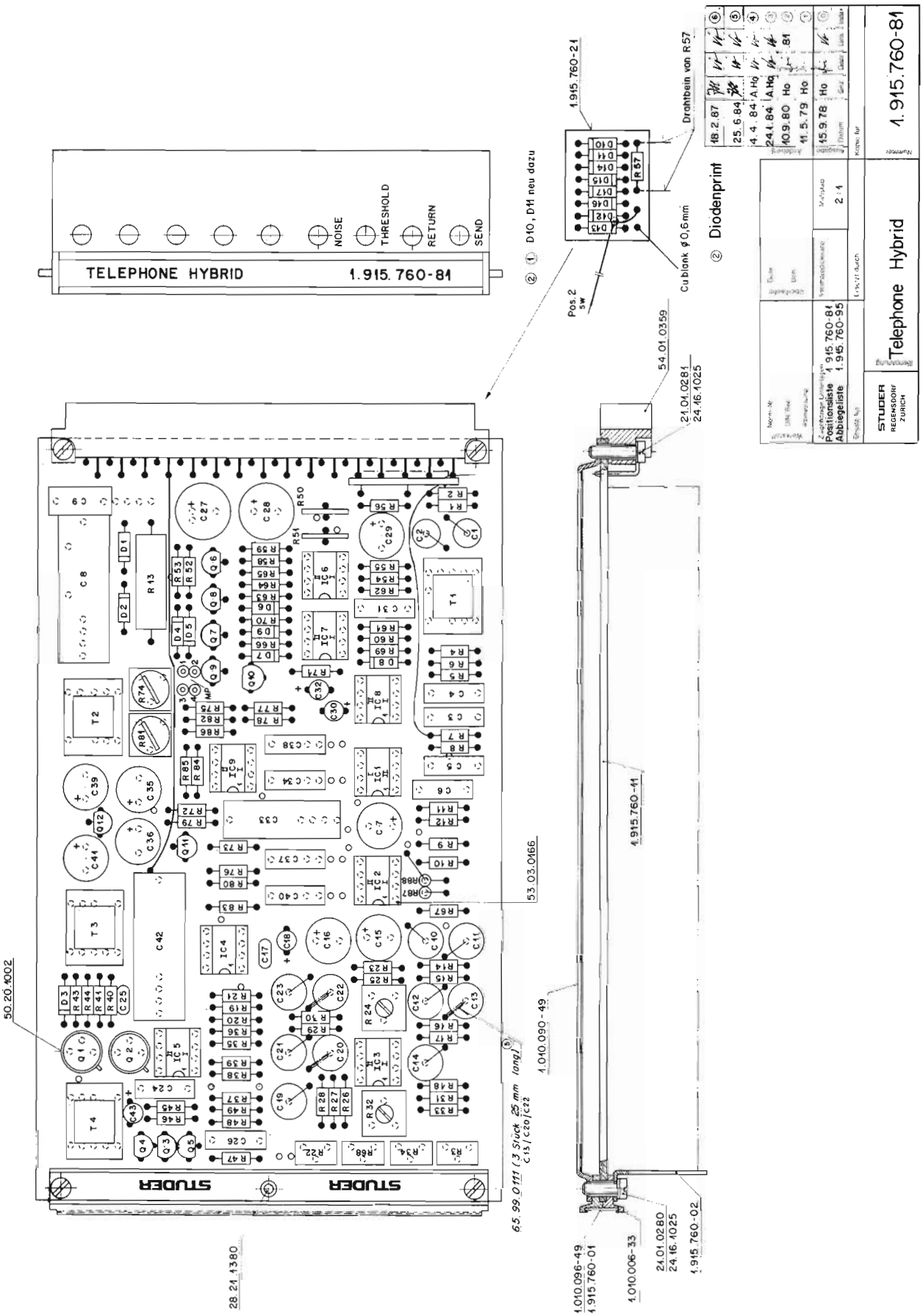
- Standard version (ST) – 19"/1U Telephone Hybrid unit for direct connection to the telephone line and a relay to switch the telephone line from the telephone set to the hybrid.
- Noise gate version (NG) – same as standard version, equipped with a noise gate
- Current-adjustable version (CA) – same as standard version, but additionally featuring adjustable holding current for the telephone line.

Ordering Information:

Euro-cards:	• Telephone hybrid card	1.915.760.xx
	• Telephone hybrid card with noise gate	1.915.764.xx
19" standard products:	• Telephone hybrid 1CH-ST	75.700.89118
	• Telephone hybrid 2CH-ST	75.700.89228
	• Telephone hybrid 1CH-NG	75.700.89114
	• Telephone hybrid 2CH-NG	75.700.89224
	• Telephone hybrid 1CH-CA	75.700.89116
	• Telephone hybrid 2CH-CA	75.700.89226
	• Telephone hybrid 1CH-CA/NG	75.700.89117
	• Telephone hybrid 2CH-CA/NG	75.700.89227


Automatic Telephone Hybrid
(Patent pending)
STUDER
REGENSDORF
ZÜRICH
SC 1.915.760/81
HYBRID
PATENT PENDING
1.022.416
LINE DRIVER
BANDPASS
CLIPPER
INPUT
LIMITER
OUTPUT
NOISE GENERATOR
ERROR AMP.
90° REF. AMP.
REF. AMP.
R - VAR
C - VAR
ρ - DET
GATE
TEL. LINE
REL. UNIT
BOTTOM VIEW
RC 4558 P
LM 301 AN
RESISTANCES IN OHMS, CAPACITANCES
IN PICOFARADS UNLESS OTHERWISE SPECIFIED
IC 1...3 = RC 4558 P
IC 5...9 = RC 4558 P
IC 4 = LM 301 AN

TEL. HYBRID


TELEPHONE HYBRID 1.915.760-81
NOISE
THRESHOLD
RETURN
SEND
① D10, D11 neu dazu
② Diodenprint
1.915.760-21
Drahtbein von R57
Cu blank ø0,6mm
Pos 2 sw
54.01.0359
21.01.0281
24.16.1025
1.915.760-41
53.03.0466
1.010.090-49
65.99.0111 (3 Stück 25 mm lang)
C13/C20/C22
50.20.1002
28.21.1380
1.010.096-49
1.915.760-01
1.010.006-33
21.01.0280
24.16.1025
1.915.760-02
STUDER
REGENSDORF
ZÜRICH
Telephone Hybrid
1.915.760-81
Positionsliste 1.915.760-81
Abbiegeliste 1.915.760-95
2:1

Ad	POS.	REF.No.	DESCRIPTION				MANUFACTURER
	C....1	59.12.9681	680pF	1%	500V-	PS	
	C....2	59.12.9681	680pF	1%		PS	
	C....3	59.31.6104	0,1µF	10%		PE	
	C....4	59.31.6104	0,1µF	10%		PE	
	C....5	59.12.4103	0,01µF	5%		PE	
	C....6	59.11.6152	1500pF	5%		PC	
	C....7	59.22.4101	100µF	3V		EL	
①	C....8	1.915.760.03	2,2µF	1%	250V-	PE	ST
①⑥	C....9	59.31.8473	0,047µF	400V-		PE	
	C....10	59.12.7103	0,01µF	1%		PS	
	C....11	59.12.7103	0,01µF	1%		PS	
	C....12	59.12.7103	0,01µF	1%		PS	
	C....13	59.12.7103	0,01µF	1%		PS	
	C....14	59.12.7103	0,01µF	1%		PS	
	C....15	59.22.4101	100µF	16V		EL	
	C....16	59.22.4101	100µF	16V		EL	
	C....17	59.34.2330	33pF			CER	
	C....18	59.36.0470	47µF	3V		TA	
	C....19	59.12.7103	0,01µF	1%		PS	
	C....20	59.12.7103	0,01µF	1%		PS	
	C....21	59.12.7103	0,01µF	1%		PS	
	C....22	59.12.7103	0,01µF	1%		PS	
	C....23	59.12.7103	0,01µF	1%		PS	
	C....24	59.12.4473	0,047µF			PE	
	C....25	59.32.2222	2200pF			CER	
	C....26	59.02.0474	0,47µF	5%		PC	
	C....27	59.22.4221	220µF	16V		EL	
	C....28	59.22.4221	220µF	16V		EL	
	C....29	59.22.4101	100µF	3V		EL	
	C....30	59.36.0470	47µF	3V		TA	
	C....31	59.12.4473	0,047µF			PE	
	C....32	59.36.0470	47µF	3V		TA	
	C....33	59.02.2225	2,2µF			PC	
①	C....34	59.02.0474	0,47µF			PE	
	C....35	59.22.2221	220µF	6V		EL	
	C....36	59.22.2221	220µF	6V		EL	
	C....37	59.02.0474	0,47µF			PC	
	C....38	59.02.0474	0,47µF			PC	
	C....39	59.22.2221	220µF			EL	
	C....40	59.02.0474	0,47µF			PC	
	C....41	59.22.2221	220µF	6V		EL	
①	C....42	1.915.760.03	2,2µF	1%	250V-	PE	ST
	C....43	59.36.0470	47µF	3V		TA	
	D....1	50.04.1511	U_z 6,2V	ZPD 6V2 1W			
	D....2	50.04.1511	U_z 6,2V	ZPD 6V2 1W			
	D....3	50.04.0125	1N4448			SI	
	D....4	50.04.1112	U_z 5,1V	ZPD 5V1 0,4W			
	D....5	50.04.1112	U_z 5,1V	ZPD 5V1 0,4W			
	D....6	50.04.0125	1N4448			SI	
	D....7	50.04.0125	1N4448			SI	
	D....8	50.04.1112	U_z 5,1V	ZPD 5V1 0,4W			
	D....9	50.04.0125	1N4448			SI	
②	D....10	50.04.1112	U_z 5,1V	ZPD 5V1 0,4W			
②	D....11	50.04.1112	U_z 5,1V	ZPD 5V1 0,4W			
③	D....12	50.04.0125	1N4448			SI	
③	D....13	50.04.0125	1N4448			SI	
③	D....14	50.04.0125	1N4448			SI	
③	D....15	50.04.0125	1N4448			SI	
③	D....16	50.04.0125	1N4448			SI	
③	D....17	50.04.0125	1N4448			SI	
④	IC....1	50.09.0107	RC4559NB	DUAL OP AMP			TI, RA
④	IC....2	50.09.0107	RC4559NB				
④	IC....3	50.09.0107	RC4559NB				
	IC....4	50.05.0144	LM301AN	OP AMP			NS
④	IC....5	50.09.0107	RC4559NB				
④	IC....6	50.09.0107	RC4559NB				
④	IC....7	50.09.0107	RC4559NB				
④	IC....8	50.09.0107	RC4559NB				
④	IC....9	50.09.0107	RC4559NB				
	Q....1	50.03.0315	BC160-16				SIE, F
	Q....2	50.03.0316	BC140-16				SIE, F
	Q....3	50.03.0497	BC550-C				T, ITT
	Q....4	50.03.0496	BC560-C				T, ITT
	Q....5	50.03.0350	J112				SIX, NS
	Q....6	50.03.0350	J112				SIX, NS
	Q....7	50.03.0350	J112				SIX, NS
	Q....8	50.03.0350	J112				SIX, NS
	Q....9	50.03.0350	J112				SIX, NS
	Q....10	50.03.0496	BC560-C				T, ITT
	Q....11	50.03.0350	J112				SIX, NS
	Q....12	50.03.0350	J112				SIX, NS
	R....1	57.39.2741	2,74k	1%			
	R....2	57.39.2741	2,74K	1%			
①	R....3	58.01.7502	5k	LIN			TR, SP

Ad	POS.	REF.No.	DESCRIPTION			MANUFACTURER
	R....4	57.11.4221	220			
	R....5	57.11.4822	8,2k	2%		
	R....6	57.11.4272	2,7k	2%		
	R....7	57.11.4153	15k	2%		
	R....8	57.11.4153	15k			
	R....9	57.11.4103	10k			
	R....10	57.11.4333	33k			
	R....11	57.39.1002	10k	1%		
	R....12	57.39.1002	10k	1%		
	R....13	57.56.5152	1,5k	2W		
	R....14	57.39.2432	24,3k	1%		
	R....15	57.39.4322	43,2k	1%		
	R....16	57.39.3242	32,4k	1%		
	R....17	57.39.7152	71,5k	1%		
	R....18	57.39.1743	174k	1%		
	R....19	57.11.4222	2,2k			
	R....20	57.11.4222	2,2k			
	R....21	57.11.4101	100			
	R....22	58.01.7203	20k	LIN	10%	TR, SP
	R....23	57.11.4333	33k	2%		
	R....24	58.01.8202	2k	LIN	10%	TR, SP
	R....25	57.11.4333	33k	2%		
	R....26	57.39.2322	23,2k	1%		
	R....27	57.39.5111	5,11k	1%		
	R....28	57.39.5361	5,36k	1%		
	R....29	57.39.7151	7,15k	1%		
	R....30	57.39.4990	499	1%		
	R....31	57.11.4333	33k	2%		
	R....32	58.01.8202	2k	LIN	10%	TR, SP
	R....33	57.11.4393	39k	2%		
	R....34	58.01.7104	100k	LIN	10%	TR, SP
	R....35	57.11.4472	4,7k			
	R....36	57.11.4680	68			
	R....37	57.11.4151	150			
	R....38	57.11.4333	33k			
	R....39	57.11.4123	12k			
	R....40	57.11.4123	12k			
	R....41	57.11.4680	68			
	R....42					
	R....43	57.11.4102	1k			
	R....44	57.11.4392	3,9k			
	R....45	57.11.4333	33k			
	R....46	57.11.4104	100k			
	R....47	57.11.4103	10k			
	R....48	57.02.5106	10M			
	R....49	57.02.5106	10M			
	R....50	57.99.0209	5,6Ω	PTC 2322 662 91005		PH
	R....51	57.99.0209	5,6Ω	PTC		PH
	R....52	57.11.4152	1,5k			
	R....53	57.11.4152	1,5k			
	R....54	57.11.4222	2,2k			
	R....55	57.11.4104	100k			
	R....56	57.11.4222	2,2k			
	R....57	57.11.4104	100k			
	R....58	57.11.4272	2,7k			
	R....59	57.11.4154	150k			
	R....60	57.11.4392	3,9k			
	R....61	57.11.4105	1M			
	R....62	57.11.4103	10k			
	R....63	57.11.4105	1M			
	R....64	57.11.4272	2,7k			
	R....65	57.11.4154	150k			
	R....66	57.11.4105	1M			
	R....67	57.11.4562	5,6k			
	R....68	58.01.7104	100k	LIN	10%	TR, SP
	R....69	57.11.4224	220k			
	R....70	57.11.4393	39k			
	R....71	57.11.4104	10k			
	R....72	57.11.4104	100k			
	R....73	57.11.4104	100k			
	R....74	58.01.8203	20k	LIN	10%	TR, SP
	R....75	57.39.1651	1,65k	1%		
	R....76	57.39.1651	1,65k	1%		
	R....77	57.39.2052	20,5k	1%		
	R....78	57.39.2052	20,5k	1%		
	R....79	57.11.4104	100k			
	R....80	57.11.4104	100k			
	R....81	58.01.8203	20k	LIN	10%	TR, SP
	R....82	57.39.1651	1,65k	1%		
	R....83	57.39.1651	1,65k	1%		
	R....84	57.39.2052	20,5k	1%		
	R....85	57.11.4101	100	2%		
	R....86	57.39.2052	20,5k	1%		
①	R....87	57.02.5152	1,5k			
①	R....88	57.02.5152	1,5k			

TEL. HYBRID

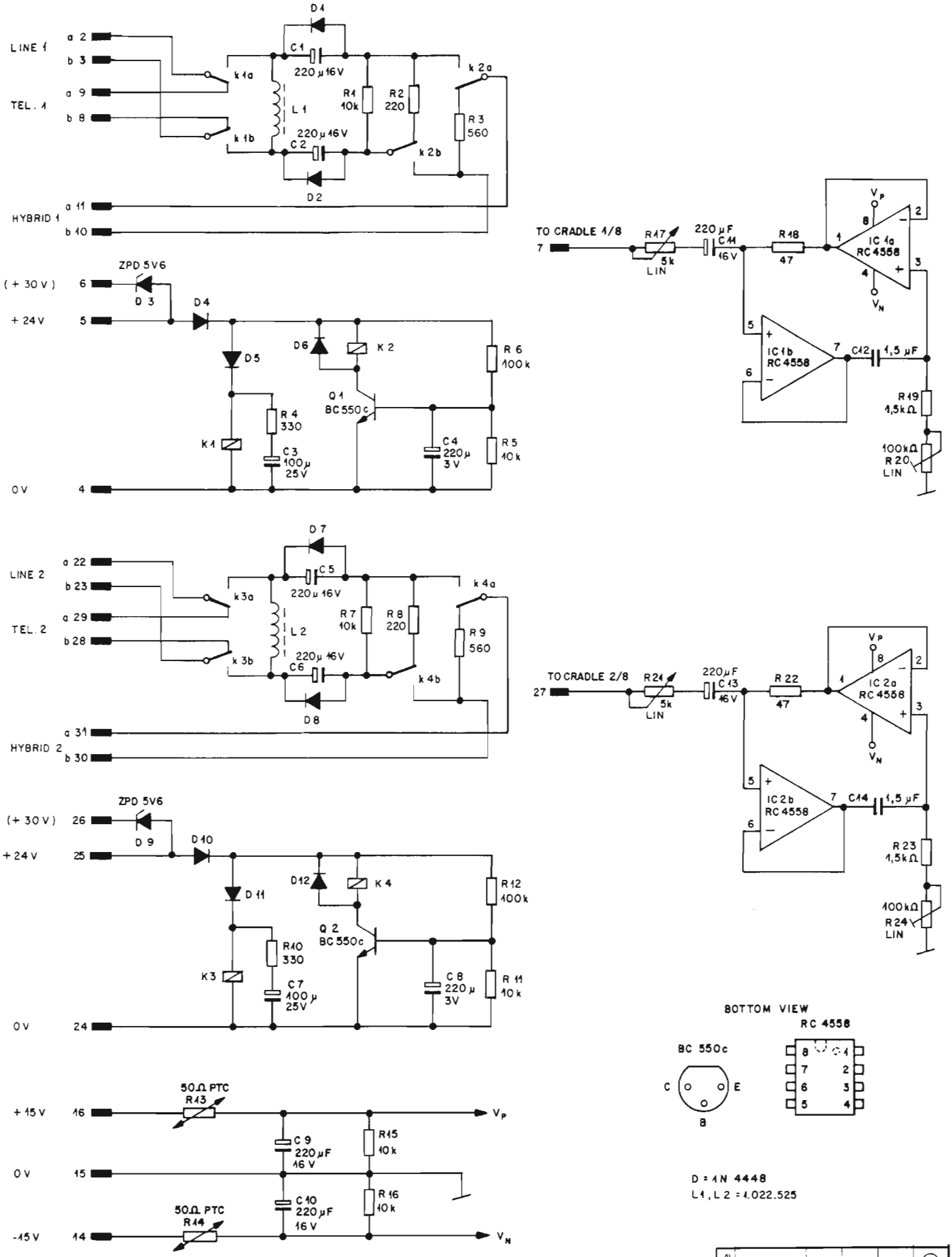
T.....1	1.022.414	1:1	ST
T.....2	1.022.416	1:1	ST
T.....3	1.022.416	1:1	ST
T.....4	1.022.415	1:2	ST

CER=Ceramic, EL=Electrolytic, TA=Tantalum, PE=Polyester, PS=Polystyrene, PC=Polycarbonate

MANUFACTURER: ST=Studer, PH=Philips, TR=TRW, SP=Spectrol, TI=Texas Instruments, RA=Raytheon
NS=National Sem., SIX=Siliconix, T=Telefunken, SIE=Siemens, F=Fairchild

1.915.760.81	TELEPHONE HYBRID	FRI 14/03/78
1.915.760.81	TELEPHONE HYBRID	① FRI 06/11/78
1.915.760.81	TELEPHONE HYBRID	② HO 11/05/79
1.915.760.81	TELEPHONE HYBRID	③ HO 10/09/80
1.915.760.81	TELEPHONE HYBRID	④ VO 11/03/81
1.915.760.81	TELEPHONE HYBRID	⑤ VO 20/08/82

END
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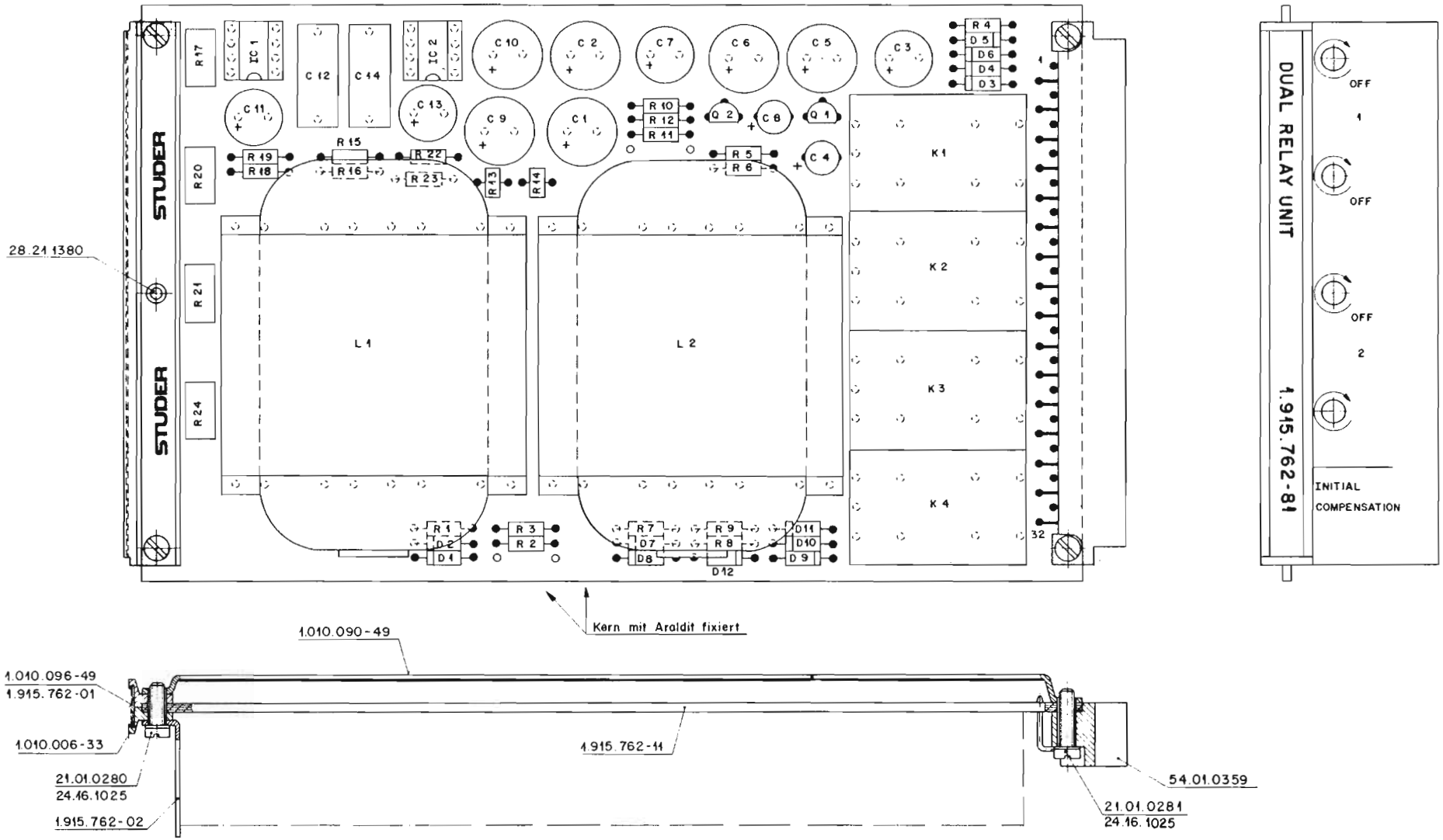


D = 1N 4448

L1, L2 = 1.022.525

Ausgabe	16.2.79	Si			⓪
	Datum	Gez.	Gepr.	Ges.	Index

Ersatz für:	Ersetzt durch:	Kopie für:
STUDER REGENSDORF ZÜRICH	Benennung: DUAL RELAY UNIT	Nummer: SC 1.915.762-81



Werkstoff: Norm Nr / DIN-Bez / Abmessung	Oberfläche: Gute / Beh		Änderung: 4.4.84 A.Ho
Zugehörige Unterlagen: PL, AL	Freimasstoleranz	Maßstab: 2:1	Ausgabe: 18.7.79 Ho (Datum / Gez / Gepr / Ges / Index)
Ersatz für	Ersetzt durch		Kopie für
STUDER REGENSDORF ZURICH	Benennung: Dual Relay Unit		Nummer: 1.915.762-81

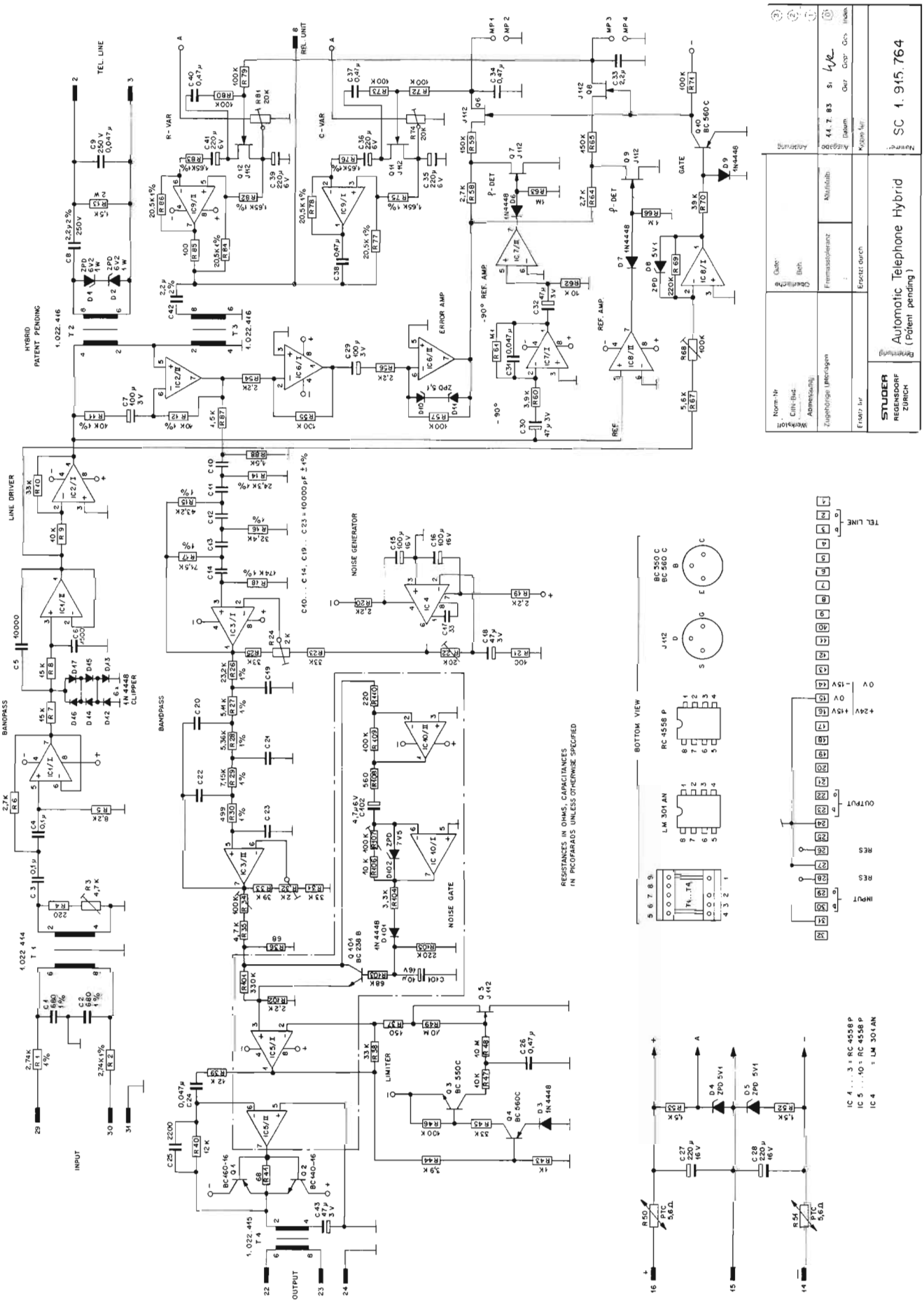
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
C	1	59.22.4221	220µF	16 V EL	
C	2	59.22.4221	220µF	16 V EL	
C	3	59.22.5101	100µF	25V EL	
C	4	59.30.1221	220µF	3V TA	
C	5	59.22.4221	220µF	16 V EL	
C	6	59.22.4221	220µF	16 V EL	
C	7	59.22.5101	100µF	25V EL	
C	8	59.30.1221	220µF	3V TA	
C	9	59.22.4221	220µF	16 V EL	
C	10	59.22.4221	220µF	16 V EL	
C	11	59.22.2221	220µF	6V EL	
C	12	59.05.1155	1,5µF	63V MPC	
C	13	59.22.2221	220µF	6V EL	
C	14	59.05.1155	1,5µF	63V MPC	
D	1...12	50.04.0125	1N4448	or equivalent	ANY
	except				
D	3, 9	50.04.1108	ZPD5V6	BZX83 5V6	ITT, S
① IC	1, 2	50.09.0107	RC4559NB	Dual Op. Amp.	TI, RA
② K	1...4	56.04.0143	2u, AgAu	Relay	NA
L	1, 2	1.022.525		Inductivity	ST
P		54.01.0359		Edge Connector	
Q	1, 2	50.03.0497	BC550C		T, P, ITT

IND	DATE	NAME
④		
③		
②	15.9.82	Jfl
①	11.3.81	Vo
○	18.7.79	WY

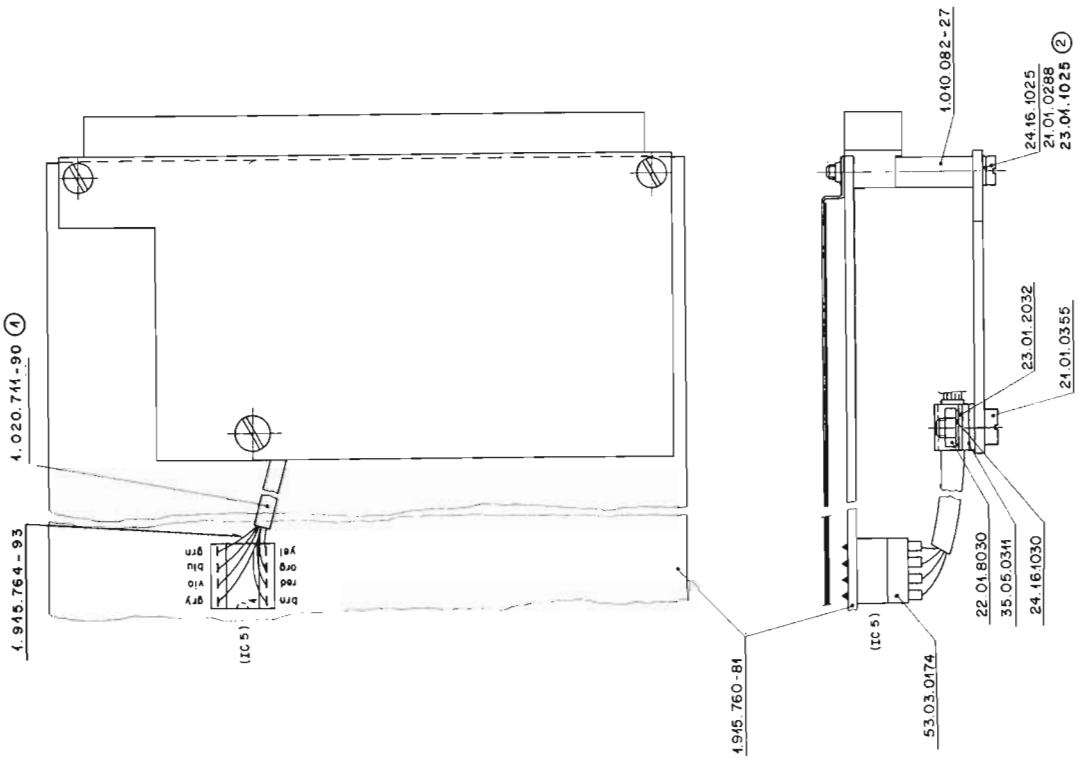
ITT INTERMETALL ST STUDER
NA NATIONAL TI TEXAS INSTRUMENTS
P PHILIPS EL ELECTROLYTIC
RA RAYTHEON TA TANTALLUM
S SIEMENS MPC POLYCARBONATE

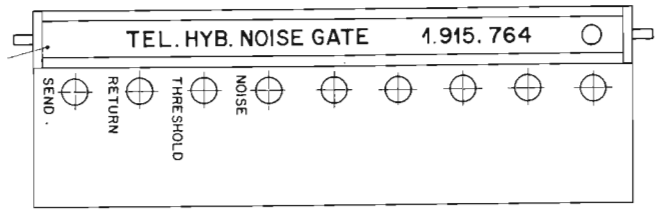
IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
R	1	57.11.4103	10 k		
R	2	57.11.4221	220		
R	3	57.11.4561	560		
R	4	57.11.4331	330		
R	5	57.11.4103	10 k		
R	6	57.11.4104	100k		
R	7	57.11.4103	10 k		
R	8	57.11.4221	220		
R	9	57.11.4561	560		
R	10	57.11.4331	330		
R	11	57.11.4103	10 k		
R	12	57.11.4104	100k		
R	13	57.99.0206	50	PTC	
R	14	57.99.0206	50	PTC	
R	15	57.11.4103	10 k		
R	16	57.11.4103	10 k		
R	17	58.01.7502	5 k	Potm.	
R	18	57.11.4470	47		
R	19	57.11.4152	1,5k		
R	20	58.01.7104	100k	Potm.	
R	21	58.01.7502	5 k	Potm.	
R	22	57.11.4470	47		
R	23	57.11.4152	1,5k		
R	24	58.01.7104	100k	Potm.	
XIC		53.03.0166		IC-Socket DIL 8 pins	

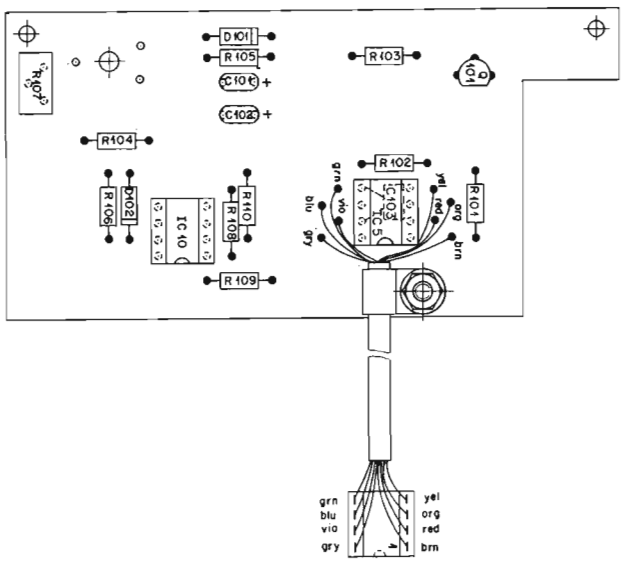
IND	DATE	NAME
④		
③		
②	15.9.82	Jfl
①	11.3.81	Vo
○	18.7.79	WY


Automatic Telephone Hybrid
(Patent pending)
SC 1.915.764
STUDER
REGENSDORF
ZÜRICH
HYBRID
PATENT PENDING
1.022.416
TEL. LINE
REL. UNIT
R-VAR
C-VAR
P-DET
GATE
-90° REF. AMP
ERROR AMP
REF. AMP.
LINE DRIVER
BANDPASS
CLIPPER
NOISE GENERATOR
NOISE GATE
LIMITER
INPUT
OUTPUT
1.022.414
1.022.415
RESISTANCES IN OHMS, CAPACITANCES
IN PICOFARADS UNLESS OTHERWISE SPECIFIED
BOTTOM VIEW
RC 4558 P
LM 301 AN
IC 4 . . . 3 = RC 4558 P
IC 5 . . . 10 = RC 4558 P
IC 4 = LM 301 AN

TEL. HYBRID







Ad	POS.	REF.No.	DESCRIPTION		MANUFACTURER
	C...101	59.26.2100	10µF	16V EL	
	C...102	59.26.1479	4,7µF	10V EL	
①	C...103	59.32.1101	110pF	CR	
	D...101	50.04.0125	1N4448		
	D...102	50.04.1103	ZPD7V5		
	IC....5	50.09.0107	RC4559	DUAL OP AMP	TI, RA
	IC...10	50.09.0107	RC4559	DUAL OP AMP	TI, RA
	Q.....1	50.03.0436	BC237B	NPN	PH, SIE, MOT
		53.03.0174		ADAPTER PLUG	
		1.915.760.81		TEL. HYBRID KOMPL	ST
		21.01.0355	M3x8	SCREW	
		23.01.2032	7/3,2	WASHER	
		22.01.8030	M3	NUT	
		35.05.0311	4,8	BINDER	
		21.01.0288	M2,5x25		
		1.010.082.27	3,2/5x13	SPACER	
		1.915.764.01		LABEL	ST
	R...101	57.11.4334	330k		
	R...102	57.11.4222	2,2k		
	R...103	57.11.4683	68k		
	R...104	57.11.4332	3,3k		
	R...105	57.11.4224	220k		
	R...106	57.11.4103	10k		
	R...107	58.01.7104	100k	LIN	
	R...108	57.11.4561	560		
	R...109	57.11.4104	100k		
	R...110	57.11.4221	220		

EL=Electrolytic

MANUFACTURER: ST=Studer, TI=Texas Instruments, RA=Raytheon, PH=Philips, SIE=Siemens, MOT=Motorola

1.915.764.00 TEL. HYBRID WITH NOISE GATE FRI 30/11/81

1.915.764.00 TEL. HYBRID WITH NOISE GATE ① VO 19/10/87

END

→

			19.10.87	SI	Ge	
			27.5.87	SI	Ge	
			3.6.86	Ho	Ge	
			3.6.84	Ho		
PL, LL		2:1		Gry	Grn	Ges. Form

STUDER REGENSDORF ZURICH

Telephone Hybrid with Noise Gate

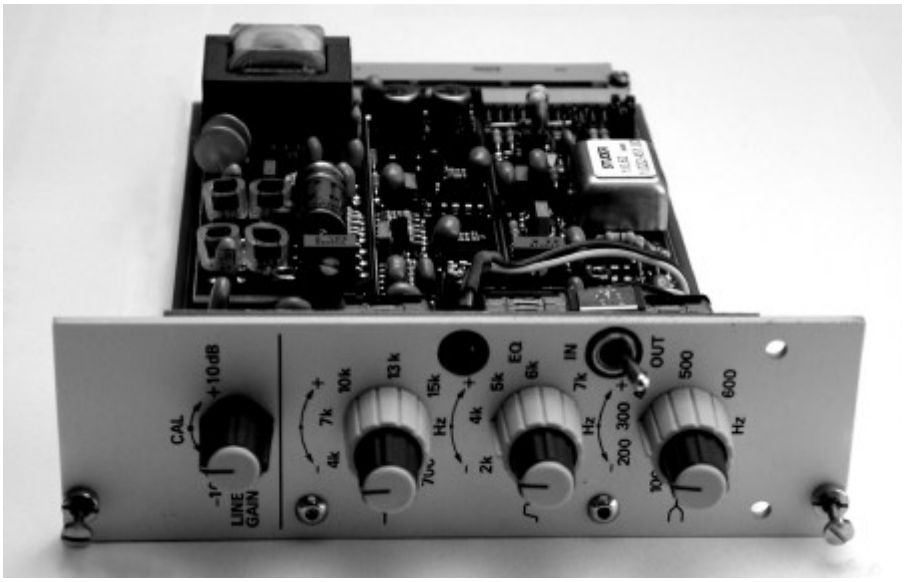
1.915. 764-00

2.2.12 Line Equalizer 1.915.776/777/779

The Line Equalizer Euro-card is the ideal component to cope with situations as inadequate frequency response or excessive level loss on long-haul audio lines. Special effects equalization may be another application.

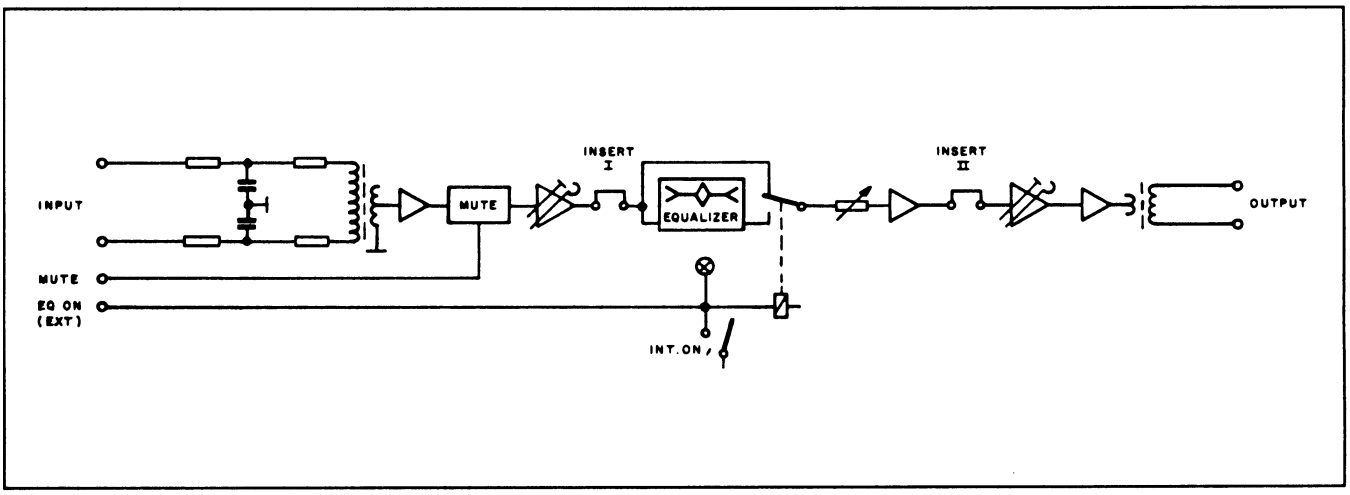
The frequency response can be varied in three bands over a ±15 dB range, as shown by the respective graphs below. Gain is normally set to unity, with 10 dB of continuously variable gain or attenuation available. Remote controlled muting or bypassing is possible.

The equalizer cards are supplied with a choice of different front panels for either horizontal recessed, vertical recessed, or vertical flush installation into suitable mounting frames.



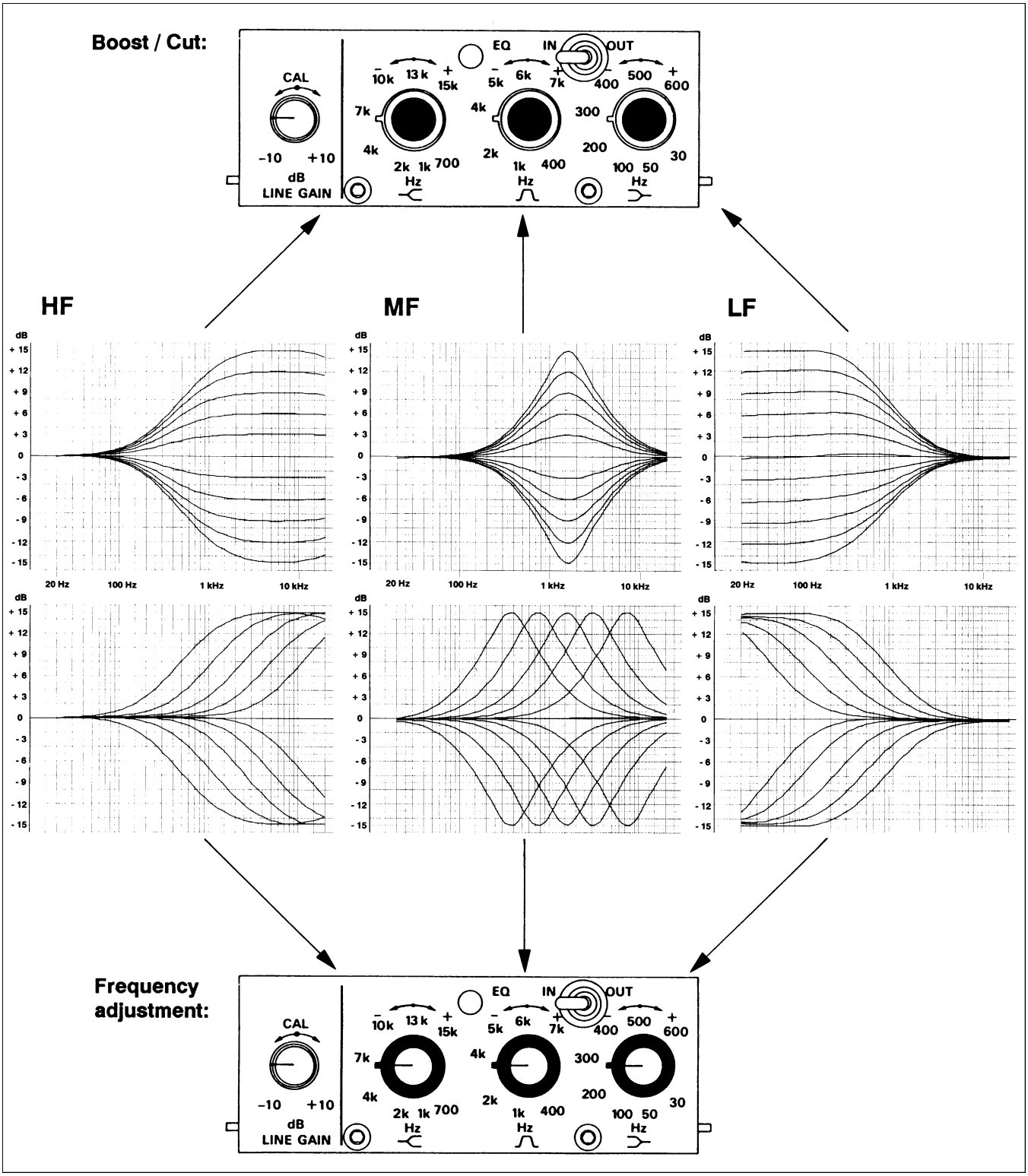
When installed vertically, each equalizer occupies 8 M units.

A 19” mounting frame for three equalizer cards plus the required power supply is described below.



Parametric filter diagrams:

HF shelving equalizer: Treble filter **700 Hz...15 kHz, ±15 dB**
MF bell-shaped equalizer: Center frequency **400 Hz...7 kHz, ±15 dB**; Q approx. 1
LF shelving equalizer: Bass filter **30 Hz...600 Hz, ±15 dB**

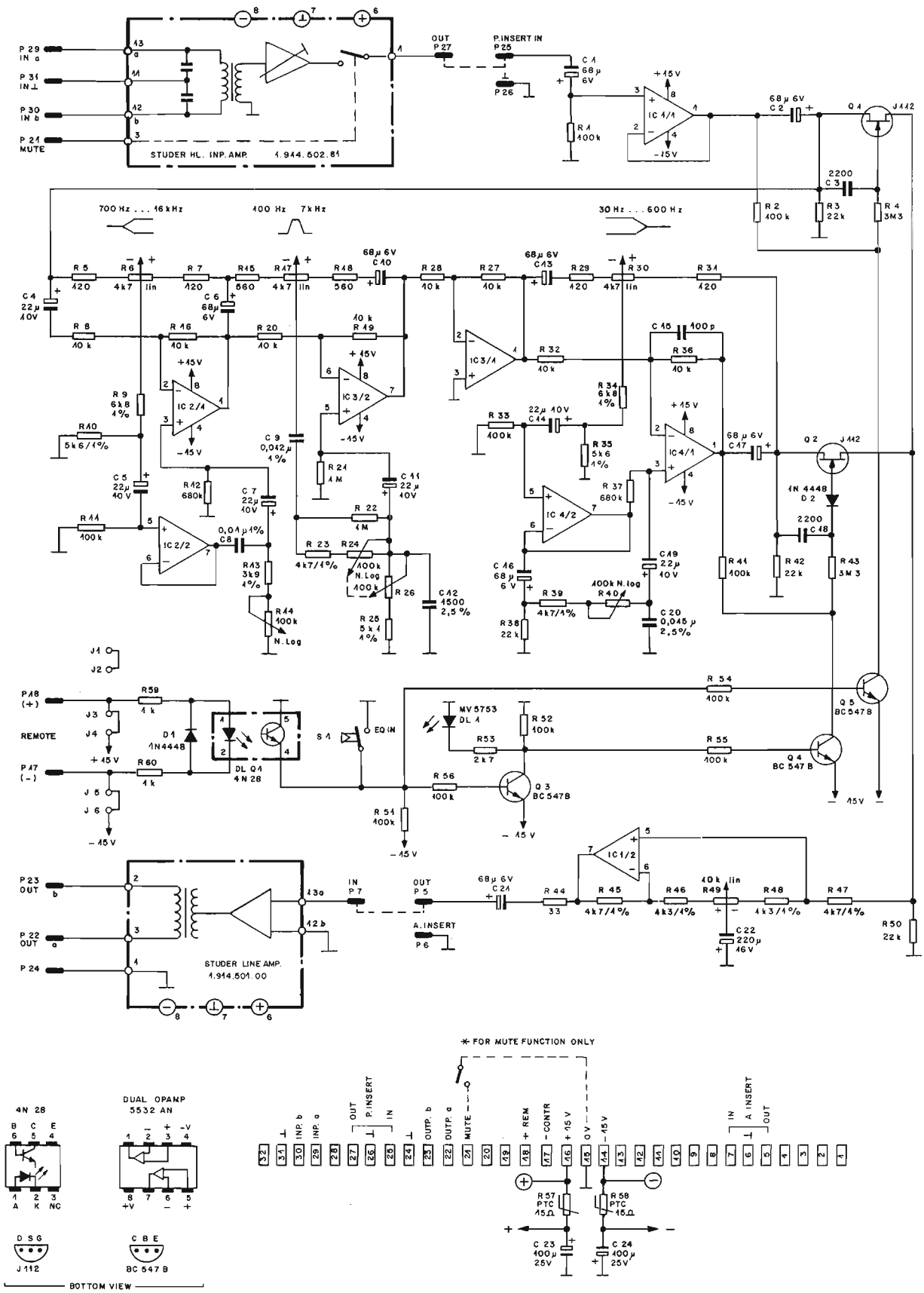


Technical Specifications

Input:		**balanced and floating,** with RF filter
	Impedance	> **10 kW**
	Clipping point	**+24 dBu** (12.3 V)
	Common mode rejection	> **50 dB**, unbalanced to ground
Output:		**balanced and floating**
	Minimum permissible load	**200 W**
	Maximum output level	**+24 dBu** (12.3 V)
	Frequency response	**±0.2 dB**, 30 Hz...60 kHz, equalization off
	THD	< **0.01%,** at nominal level
Equalization:	Characteristics	**see diagram,** referred to +6 dBu in/out
	S/N	> **96 dB,** equalizer off
		> **93 dB,** equalizer on (linear)
Supply:		**±15 V** (80 mA idling, 170 mA @ +24 dBu into 200 Ω)
Dimensions:	Euro-card	**100 × 160 mm, 8 M units wide**

Ordering Information:

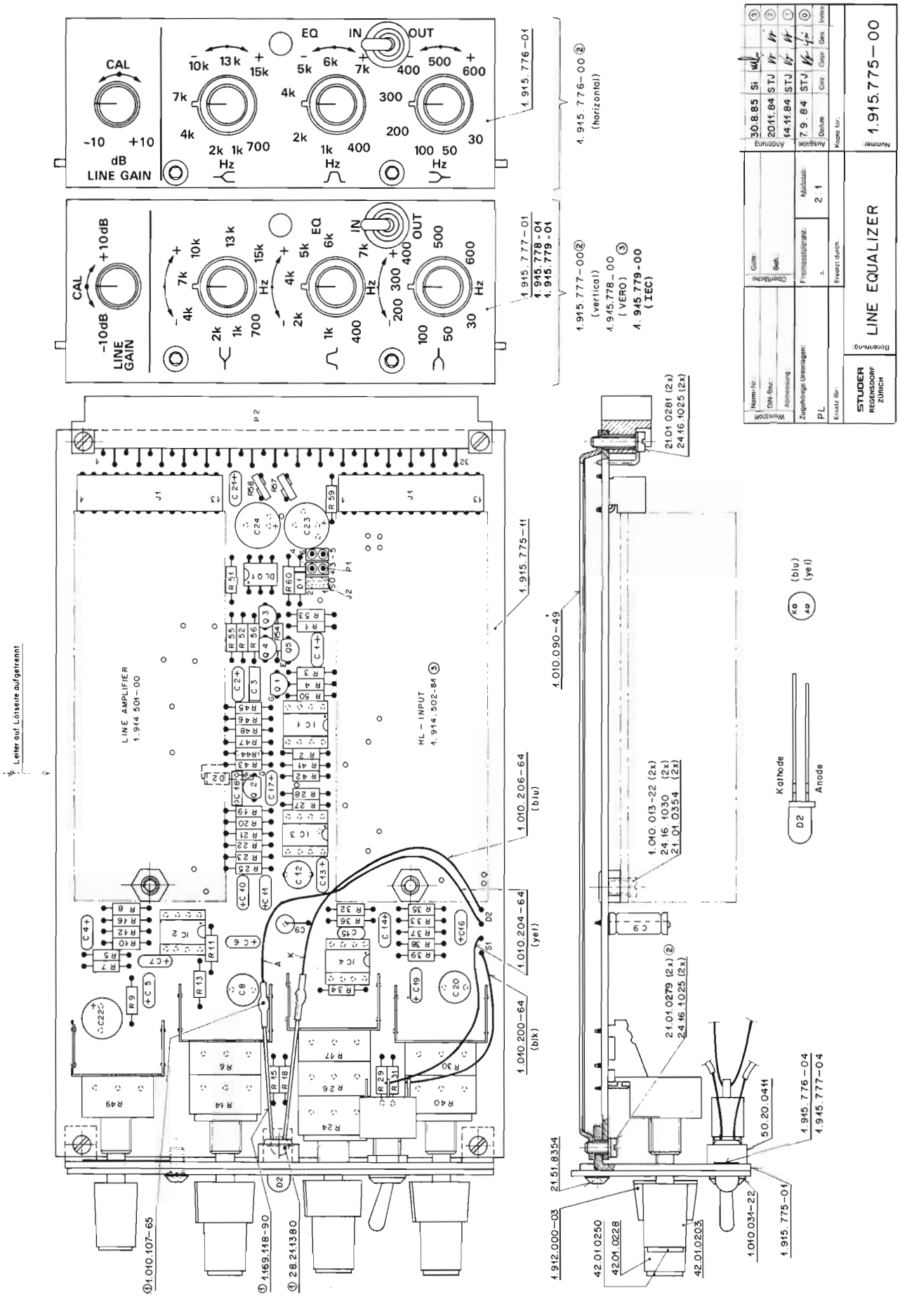
Euro-cards:	•	Line equalizer, horizontal, for recessed mounting	1.915.776.xx
	•	Line equalizer, vertical, for recessed mounting	1.915.777.xx
	•	Line equalizer, vertical, for flush mounting (ELMA)	1.915.779.xx
19" standard product	•	Mounting frame (19"/1U) with power supply and front panel, wired for three equalizer cards 1.915.776 (not incl.)	1.918.117.xx



IC 1 - - - IC 4 = 5532 AN

DATE:	10. 9. 84	20.11. 84	10. 4. 85	30. 8. 85		VERTICAL 1.915.777
SIGN:	we	we				HORIZONTAL 1.915.776
STUDER REGENSDORF ZÜRICH	LINE EQUALIZER BOARD					SC 1.915.775

LINE EQUALIZER



Ad	..POS..	...REF.No...	DESCRIPTION					MANUFACTURER
	C.....1	59.26.0680	68 uF	20%	6.3V	SAL		
	C.....2	59.26.0680	68 uF	20%	6.3V	SAL		
	C.....3	59.06.0222	2.2nF	10%	63V	PETP		
	C.....4	59.26.1220	22 uF	20%	10V	SAL		
	C.....5	59.26.1220	22 uF	20%	10V	SAL		
	C.....6	59.26.0680	68 uF	20%	6.3V	SAL		
	C.....7	59.26.1220	22 uF	20%	10V	SAL		
	C.....8	59.05.1103	10nF	1%	63V	PP		
	C.....9	59.12.7123	12nF	1%	63V	PS		
	C....10	59.26.0680	68 uF	20%	6.3V	SAL		
	C....11	59.26.1220	22 uF	20%	10V	SAL		
	C....12	59.05.2152	1.5nF	2.5%	160V	PP		
	C....13	59.26.0680	68 uF	20%	6.3V	SAL		
	C....14	59.26.1220	22 uF	20%	10V	SAL		
	C....15	59.32.1101	100pF	10%	400V	CE		
	C....16	59.26.0680	68 uF	20%	6.3V	SAL		
	C....17	59.26.0680	68 uF	20%	6.3V	SAL		
	C....18	59.06.0222	2.2nF	10%	63V	PETP		
	C....19	59.26.1220	22 uF	20%	10V	SAL		
	C....20	59.05.2153	15nF	2.5%	63V	PP		
	C....21	59.26.0680	68 uF	20%	6.3V	SAL		
	C....22	59.22.3221	220uF	20%	10V	EL		
	C....23	59.22.5101	100 uF	20%	25V	EL		
	C....24	59.22.5101	100 uF	20%	25V	EL		
	D.....1	50.04.0125	1N4448					any
	D.....2	50.04.0125	1N4448					any
	DL....1	50.04.2111	MV5753	red				GI,HP
	DLQ...1	50.99.0126	4N28					
	IC....1	50.09.0106	NE5532AN	dual op. amp.				RA,SIG
	IC....2	50.09.0106	NE5532AN	dual op. amp.				RA,SIG
	IC....3	50.09.0106	NE5532AN	dual op. amp.				RA,SIG
	IC....4	50.09.0106	NE5532AN	dual op. amp.				RA,SIG
	J.....1	54.01.0309	13 PIN-	CIS 2X				
	J.....2	54.01.0021	JUMPER					
	P.....1	54.01.0020	J-PLUG	6X				
	P.....2	54.01.0359	2*16	EURO - PLUG				
	MP....1	42.01.0203	GRY	UPPER KNOB	3X,4/10			
	MP....2	42.01.0228	GRY	KNOB	1X,4/10			
	MP....3	42.01.0250	L-GRY	COVER	4X,			
	MP....4	1.912.000.03	L-GRY	LOWER KNOB	3X,6/13			
	MP....5	1.010.090.49		SCREEN PLATE				
	MP....6	1.915.776.01		FRONT PANEL VERTICAL				
01	MP....6	1.915.776.01		FRONT PANEL HORIZONTAL				
	MP....7	1.915.777.01		FRONT PANEL HORIZONTAL				
01	MP....7	1.915.777.01		FRONT PANEL VERTICAL				
	Q.....1	50.03.0350	J 112	N-JFET				NS,Mot,Six
	Q.....2	50.03.0350	J 112	N-JFET				NS,Mot,Six
	Q.....3	50.03.0436	BC 547	NPN	IC>100mA, B>100			any
	Q.....4	50.03.0436	BC 547	NPN	IC>100mA, B>100			any
	Q.....5	50.03.0436	BC 547	NPN	IC>100mA, B>100			any
	R.....1	57.11.4104	100 kOhm	2%	0.25W	MF		
	R.....2	57.11.4104	100 kOhm	2%	0.25W	MF		
	R.....3	57.11.4223	22 kOhm	2%	0.25W	MF		
	R.....4	57.11.4335	3.3 MOhm	2%	0.25W	MF		
	R.....5	57.11.4121	120 Ohm	2%	0.25W	MF		
	R.....6	1.010.003.58	4.7 kOhm	20%	lin.		variable resistor	
	R.....7	57.11.4121	120 Ohm	2%	0.25W	MF		
	R.....8	57.11.4103	10 kOhm	2%	0.25W	MF		
	R.....9	57.11.3682	6.8 kOhm	1%	0.25W	MF		
	R....10	57.11.3562	5.6 kOhm	1%	0.25W	MF		
	R....11	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....12	57.11.4684	680 kOhm	2%	0.25W	MF		
	R....13	57.11.3392	3.9 kOhm	1%	0.25W	MF		
	R....14	. .	100 kOhm	10%	neg.log.		variable resistor,see R 6	
	R....15	57.11.4561	560 Ohm	2%	0.25W	MF		
	R....16	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....17	1.010.005.58	4.7 kOhm	20%	lin.		variable resistor	
	R....18	57.11.4561	560 Ohm	2%	0.25W	MF		
	R....19	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....20	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....21	57.11.4105	1 MOhm	2%	0.25W	MF		
	R....22	57.11.4105	1 MOhm	2%	0.25W	MF		
	R....23	57.11.3472	4.7 kOhm	1%	0.25W	MF		
	R....24	. .	100 kOhm	10%	neg.log.		variable resistor,see R17	
	R....25	57.11.3512	5.1 kOhm	1%	0.25W	MF		
	R....26	. .	100 kOhm	10%	neg.log.		variable resistor,see R17	
	R....27	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....28	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....29	57.11.4121	120 Ohm	2%	0.25W	MF		
	R....30	1.010.003.58	4.7 kOhm	20%	lin.		variable resistor	
	R....31	57.11.4121	120 Ohm	2%	0.25W	MF		
	R....32	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....33	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....34	57.11.3682	6.8 kOhm	1%	0.25W	MF		
	R....35	57.11.3562	5.6 kOhm	1%	0.25W	MF		
	R....36	57.11.4103	10 kOhm	2%	0.25W	MF		
	R....37	57.11.4684	680 kOhm	2%	0.25W	MF		
	R....38	57.11.4223	22 kOhm	2%	0.25W	MF		
	R....39	57.11.3472	4.7 kOhm	1%	0.25W	MF		
	R....40	. .	100 kOhm	10%	neg.log.		variable resistor,see R30	
	R....41	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....42	57.11.4223	22 kOhm	2%	0.25W	MF		
	R....43	57.11.5335	3.3 MOhm	5%	0.25W	MF		
	R....44	57.11.4330	33 Ohm	2%	0.25W	MF		
	R....45	57.11.3472	4.7 kOhm	1%	0.25W	MF		
	R....46	57.11.3132	1.3 kOhm	1%	0.25W	MF		
	R....47	57.11.3472	4.7 kOhm	1%	0.25W	MF		
	R....48	57.11.3132	1.3 kOhm	1%	0.25W	MF		
	R....49	1.010.001.58	10 kOhm	20%	lin.		variable resistor	
	R....50	57.11.4223	22 kOhm	2%	0.25W	MF		
	R....51	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....52	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....53	57.11.4272	2.7 kOhm	2%	0.25W	MF		
	R....54	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....55	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....56	57.11.4104	100 kOhm	2%	0.25W	MF		
	R....57	57.92.1121	120 mA		R-PTC 56V		15 ohm	Philips
	R....58	57.92.1121	120 mA		R-PTC 56V		15 ohm	Philips
	R....59	57.11.4102	1 kOhm	2%	0.25W	MF		
	R....60	57.11.4102	1 kOhm	2%	0.25W	MF		
	S.....1	55.01.0111	ON-ON	SWITCH				C & K
	V.....1	1.914.501.00		LINE AMPLIFIER				St
	V.....2	1.914.502.00		HL. INPUT AMP. (FLOATING)				St
	XIC...1	53.03.0166	DIL	8-PIN 4X				

1.915.775.00 LINE EQUALIZER - BOARD
1.915.776.00 LINE EQUALIZER - HORIZONTAL
1.915.777.00 LINE EQUALIZER - VERTICAL

CE=Ceramic, CF=Carbon Film, EL=Electrolytic, MF=Metal Film,
PE=Polyester, PP=Polypropylen, PS=Polystyrol

MANUFACTURER: Bu=Burndy, Ex=Exar, Fc=Fairchild, GI=General Instrument
HP=Hewlett Packard, ITT=Intermetall, Mot=Motorola, Nat=National
{Matsushita}, NS=National Semiconductors, Ph=Philips,
Ra=Raytheon, Sig=Signetics, Six=Siliconix, St=Studer,
TI=Texas Instrument

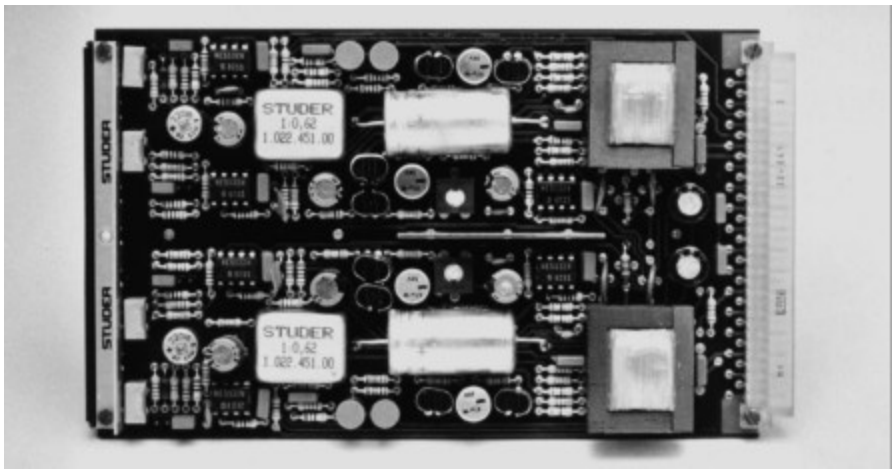
1.915.775.00 LINE-EQUALIZER BOARD FRI 84/09/0600

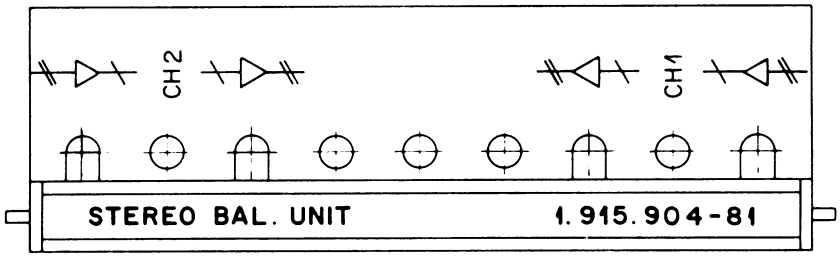
1.915.775.00 LINE-EQUALIZER BOARD FRI 84/11/2001

END

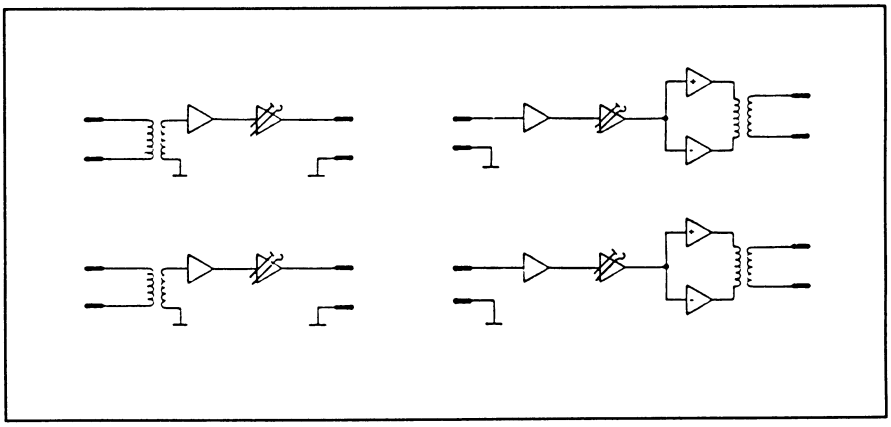
2.2.13 Dual Balancing Unit/Dual Line Amplifier 1.915.904

In professional audio work it is not uncommon that equipment with unbalanced input or output configuration must be connected to a system that is based on a strictly balanced design. The Dual Balancing Unit is the ideal component if the requirement of matching unbalanced to balanced equipment or vice versa has to be satisfied.

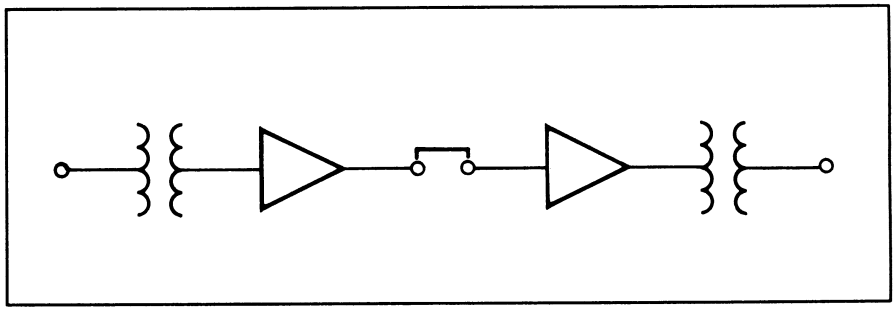




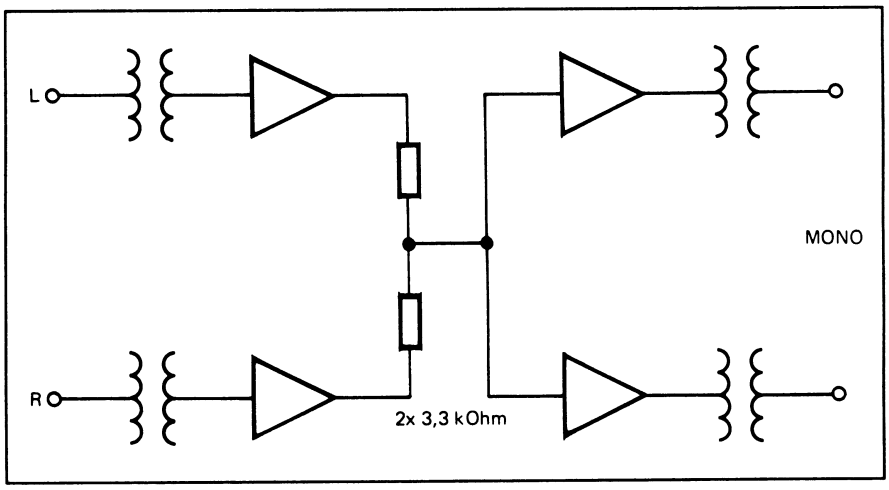
The Dual Balancing Unit consists of one Euro-card which contains four separate circuits to accommodate unbalanced-to-balanced or balanced-to-unbalanced matching in a stereo system. It is the ideal choice for applications in which consumer-type stereo equipment has to be integrated into a professional audio system, where balanced audio lines are a must. The Dual Balancing Unit will also be used in situations where balanced auxiliary units must be connected to unbalanced insert points on a mixing desk.



The use of the balancing unit is not restricted to matching of balanced and unbalanced audio system components, because it can also be utilized as a (line) booster amplifier or as a stereo-to-mono mixer. By simply connecting the unbalanced outputs and inputs together and by adjusting again within the available ranges, two booster amplifiers with a maximum gain of 30 dB and a maximum output capability of +24 dBu*) can be realized.



For stereo-to-mono mixing, the unbalanced sides of the amplifier sections simply are connected by means of combining (mixing) resistors, as shown in the diagram below.



*) To avoid signal clipping, a system should always be designed in such a way that signal peaks stay well below an amplifier's maximum output capacity. Alignment procedures and level settings depend to a large degree on the type of metering used in an audio system. When making measurements with a steady-state signal, a margin of 6 dB below a system's clipping point and the PPM deflected to "zero volume", or a margin of 15 dB (for programs with extreme crest factors, even 20 dB) when utilizing a VU-meter, is considered good engineering practice.

Technical Specifications

Balanced to unbalanced (Section 1):

Input impedance	**³ 10 kW,** balanced/floating
Maximum input level	**+24 dBu**
Output impedance	**< 100 W,** unbalanced
Maximum output level	**+20 dBu**
Minimum load	**600 W**
Frequency response	**±0.2 dB**, 30 Hz...16 kHz
Attenuation	**0/15 dB;** two fixed steps
	0...15 dB; variable
S/N	> **100 dB;** attenuation set to 6 dB, line level +6 dBu

Unbalanced to balanced (Section 2):

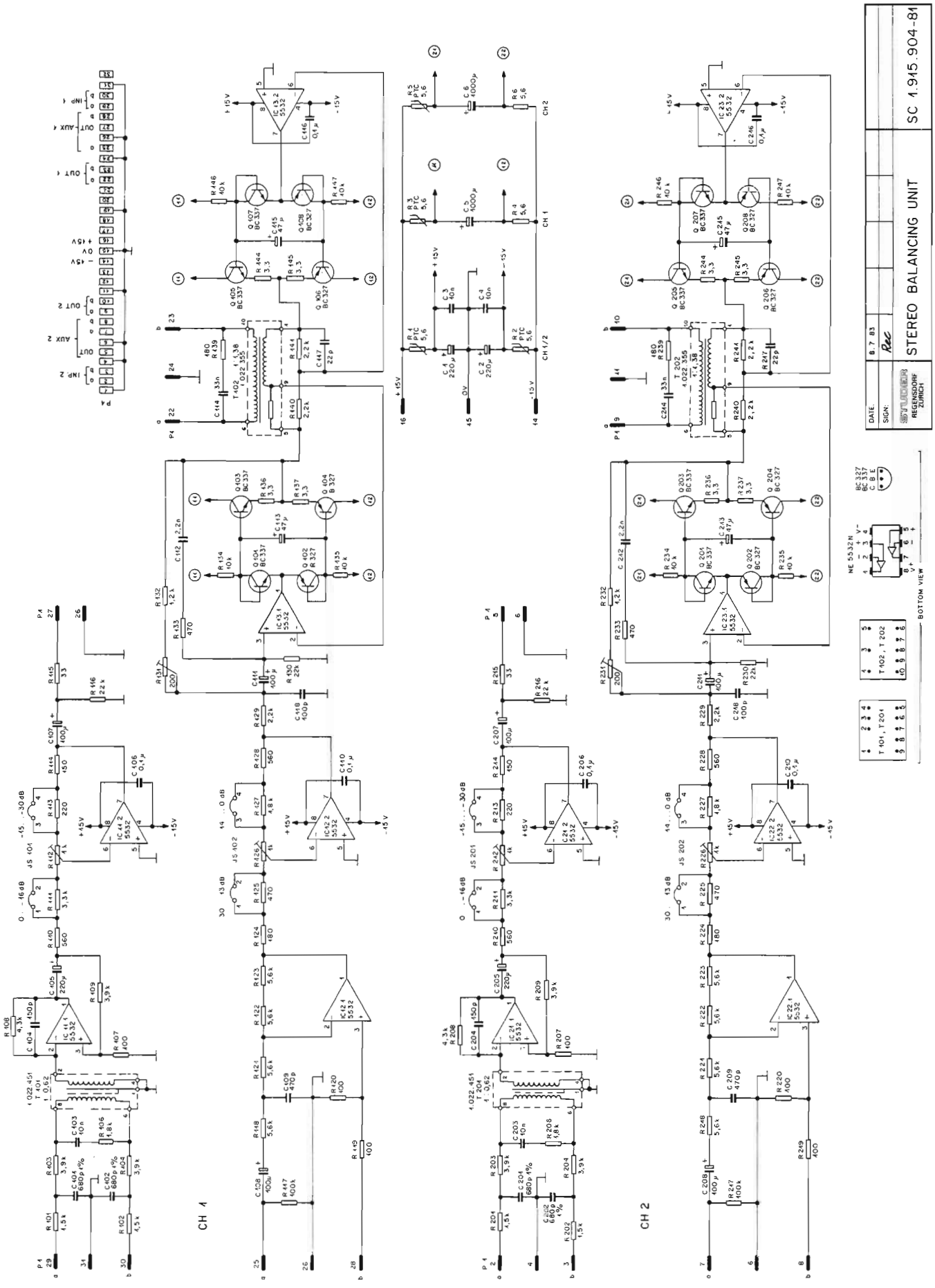
Input impedance	**5 kW,** unbalanced
Maximum input level	**+20 dBu**
Output impedance	**£ 50 W,** balanced/floating
Minimum load	**200 W**
Maximum output level	**+24 dBu**
Frequency response	**±0.2 dB,** 30 Hz...16 kHz
Gain	**14/30 dB;** two fixed steps
	0...17 dB; variable
S/N	> **100 dB;** gain set to 6 dB, line level +6 dBu

Supply: **±15 V** (70 mA, idling; 170 mA, each channel +24 dBu into 200 Ω)

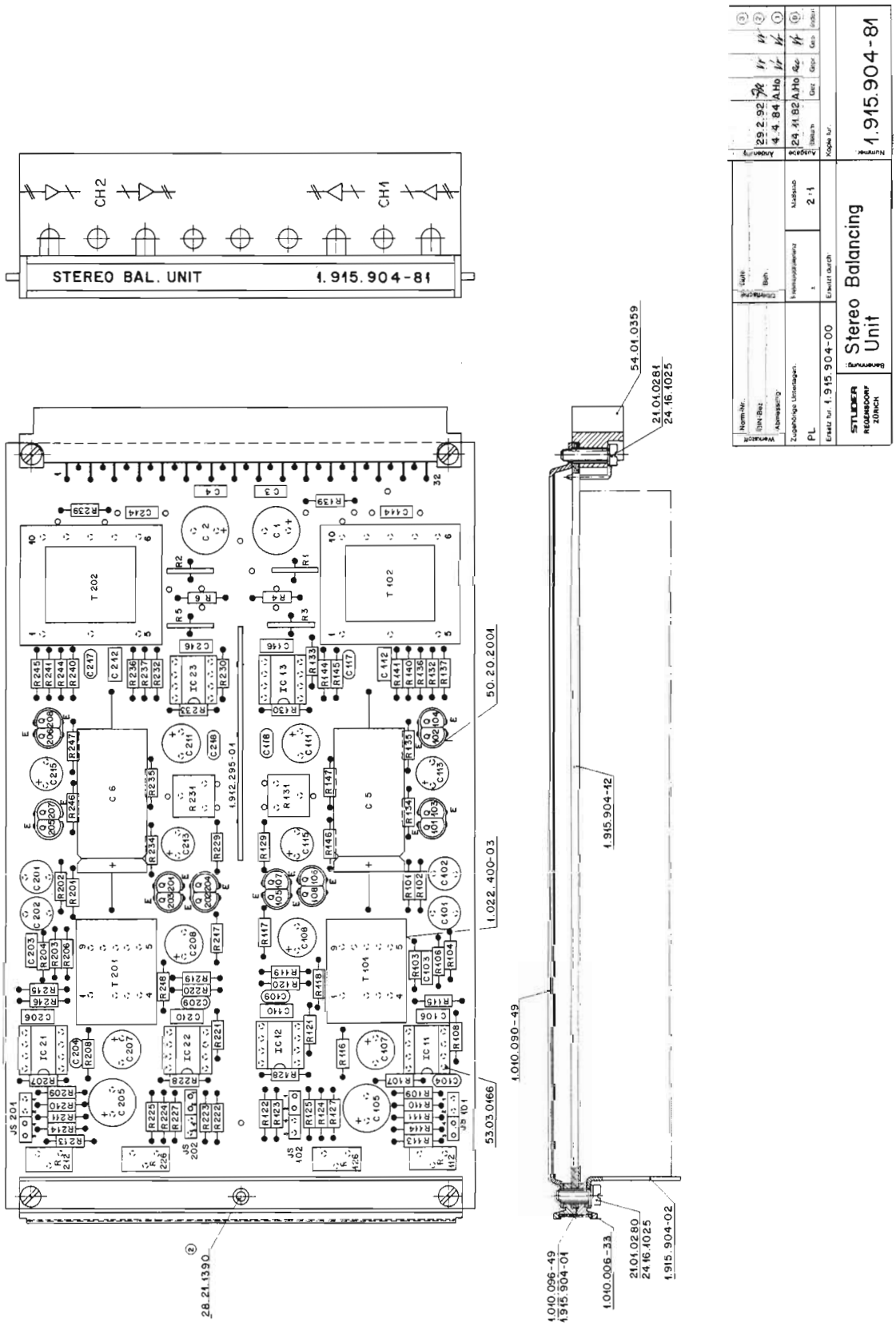
Dimensions: Euro-card **100 × 160 mm, 7 M units wide**

Ordering Information:

Euro-card:	•	Dual balancing unit	1.915.904.xx
19”/1U standard products:	•	2CH balancing unit (1 × 1.915.904)	75.700.89212
	•	4CH balancing unit (2 × 1.915.904)	75.700.89422
	•	6CH balancing unit (3 × 1.915.904)	75.700.89632


STEREO BALANCING UNIT
SC 1.915.904-81
CH 1
CH 2
CH 1/2
BOTTOM VIEW

DUAL BALANCING UNIT



DUAL BALANCING UNIT

Ad	POS.	REF.No.	DESCRIPTION				MANUFACTURER	
	C....1	59.22.4221	220µ		16V	EL		
	C....2	59.22.4221	220µ		16V	EL		
	C....3	59.06.0103	10n		63V	PE		
	C....4	59.06.0103	10n		63V	PE		
	C....5	59.25.5102	1000µ		40V	EL		
	C....6	59.25.5102	1000µ		40V	EL		
	C....1	59.05.1681	680p	1%	630V	PP		
	C....2	59.05.1681	680p	1%	630V	PP		
	C....3	59.06.0103	10n		63V	PE		
	C....4	59.34.4151	150p		63V	CER		
	C....5	59.22.2221	220µ		6V	EL		
	C....6	59.06.0104	0,1µ		63V	PE		
	C....7	59.22.5101	100µ		25V	EL		
	C....8	59.22.5101	100µ		25V	EL		
	C....9	59.34.5471	470p		63V	CER		
	C....10	59.06.0104	0,1µ		63V	PE		
	C....11	59.22.5101	100µ		25V	EL		
	C....12	59.06.0222	2,2n		63V	PE		
	C....13	59.22.5470	47µ		25V	EL		
	C....14	59.06.0333	33n		63V	PE		
	C....15	59.22.5470	47µ		25V	EL		
	C....16	59.06.0104	0,1µ		63V	PE		
	C....17	59.34.2220	22p		63V	CER		
①	C....18	59.34.4101	100p		63V	CER		
	IC....1	50.09.0105	NE5532	DUAL OP AMP			XR5532	SIG, EX
	IC....2	50.09.0105	NE5532	DUAL OP AMP			XR5532	SIG, EX
	IC....3	50.09.0105	NE5532	DUAL OP AMP			XR5532	SIG, EX
	JS....1	54.01.0020	4PIN					
		54.01.0021	JUMPER					
	JS....2	54.01.0021	4PIN					
		54.01.0021	JUMPER					
	P.....1	54.01.0359	2•16P					
	Q.....1	1.010.037.50	BC337	NPN				
	Q.....2	1.010.036.50	BC327	PNP				
	Q.....3	1.010.037.50	BC337	NPN		MATCHED		
	Q.....4	1.010.036.50	BC327	PNP				
	Q.....5	1.010.037.50	BC337	NPN				
	Q.....6	1.010.036.50	BC327	PNP				
	Q.....7	1.010.037.50	BC337	NPN				
	Q.....8	1.010.036.50	BC327	PNP				
	R.....1	57.99.0209	5,6	PTC				PH
	R.....2	57.99.0209	5,6	PTC				PH
	R.....3	57.99.0209	5,6	PTC				PH
	R.....4	57.11.4569	5,6					
	R.....5	57.99.0209	5,6	PTC				PH
	R.....6	57.11.4569	5,6					
	R.....1	57.11.3152	1,5k	1%				
	R.....2	57.11.3152	1,5k	1%				
	R.....3	57.11.3392	3,9k	1%				
	R.....4	57.11.3392	3,9k	1%				
	R.....5							
	R.....6	57.11.4182	1,8k					
	R.....7	57.11.3101	100					
	R.....8	57.11.3432	4,3k					
	R.....9	57.11.3392	3,9k	2%				
	R....10	57.11.4561	560					
	R....11	57.11.4332	3,3k					
	R....12	58.01.9102	1k	10%	TRIM			
	R....13	57.11.4221	220	2%				
	R....14	57.11.4151	150	2%				
	R....15	57.11.4330	33					
	R....16	57.11.4223	22k					
	R....17	57.11.4104	100k					
	R....18	57.11.3562	5,6k					
	R....19	57.11.3101	100					
	R....20	57.11.3101	100	1%				
	R....21	57.11.3562	5,6k					
	R....22	57.11.3562	5,6k					
	R....23	57.11.3562	5,6k					
	R....24	57.11.4181	180	2%				
	R....25	57.11.4471	470	2%				
	R....26	58.01.9102	1k	10%	TRIM			
	R....27	57.11.4182	1,8k	2%				
	R....28	57.11.4561	560	2%				
	R....29	57.11.4222	2,2k					
	R....30	57.11.4223	22k					
	R....31	58.01.8201	200	TRIM				
	R....32	57.11.4122	1,2k					
	R....33	57.11.4471	470					
	R....34	57.11.4103	10k					
	R....35	57.11.4103	10k					
	R....36	57.11.4339	3,3					
	R....37	57.11.4339	3,3					
	R....38							
	R....39	57.11.4181	180					
	R....40	57.11.4222	2,2k	2%				
	R....41	57.11.4222	2,2k	2%				
	R....42							
	R....43							
	R....44	57.11.4339	3,3					
	R....45	57.11.4339	3,3					
	R....46	57.11.4103	10k					
	R....47	57.11.4103	10k					
	T.....1	1.022.451.00	1:0,62	INPUT TRAFO				ST
	T.....2	1.022.355.00	1:1,38	LINE OUTPUT TRAFO				ST
	XIC	53.03.0166	8P	IC SOCKET				

EL=Electrolytic, PE=Polyester, PP=Polypropylen, CER=Ceramic

MANUFACTURER: SIG=Signetics, PH=Philips, EX=Exar, ST=Studer

1.915.904.81 STEREO BAL. UNIT BR 24/11/82

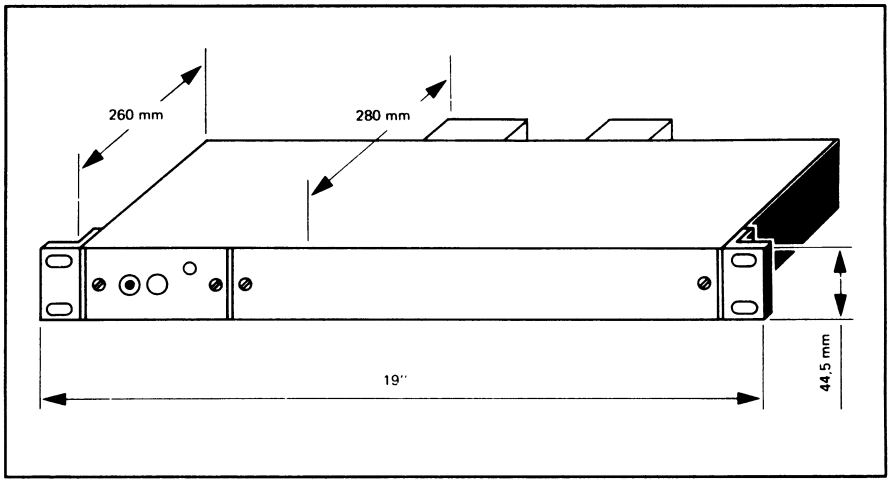
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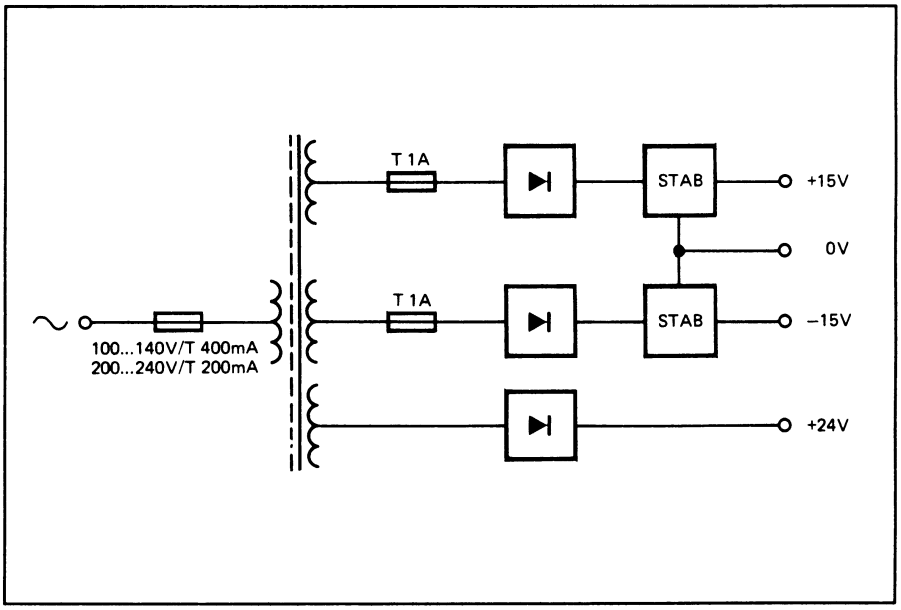
2.3 Racks and Frames

2.3.1 19” Mounting Frame for 3 Euro-Cards 1.918.100

This 19” mounting frame (height: 44.5 mm/1U) offers space for three Euro-cards next to the power supply. The power supply provides ±15 V_{DC} (regulated) and 24 V_{DC} (unregulated).



The frame comes equipped with three edge connectors to accommodate three Euro-cards horizontally, side by side. A blank back panel of anodized aluminium is provided and permits the installation of input and output connectors as required, depending on the application.



Technical Specifications

Primary: Voltage selector for **100, 120, 140, 200, 220, 240 V_{AC}**
Fuse (slow-blow) **400 mA** (for 100...140 V_{AC})
200 mA (for 200...240 V_{AC})

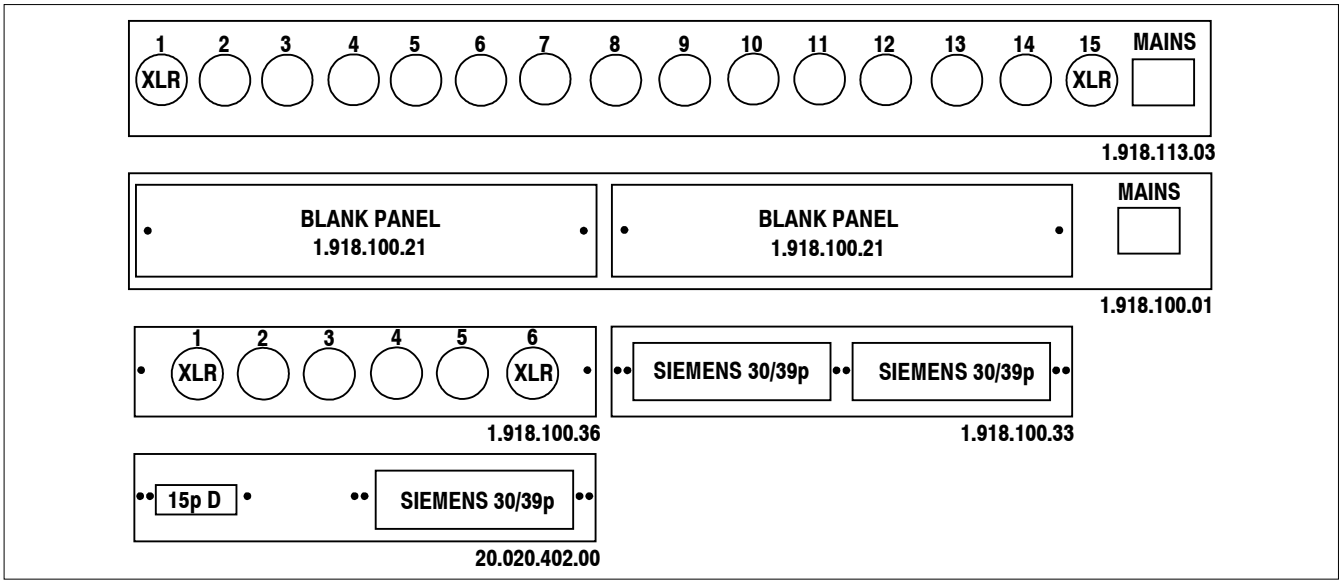
Secondary: Regulated voltage **±15 V_{DC}**, 0.5 A max.
Unregulated voltage **24 V_{DC},** 0.2 A max. (for signaling)
Fuses (slow-blow) **2 × 1 A**

Ordering Information:

19”/1U standard product

- Mounting frame for three Euro-cards with power supply and stabilizer PCB, with two blank aluminium back panels (1.918.100.21) 1.918.100.xx

Alternative Back Panels: The mounting frame 1.918.100.xx can be equipped with the following back panels:



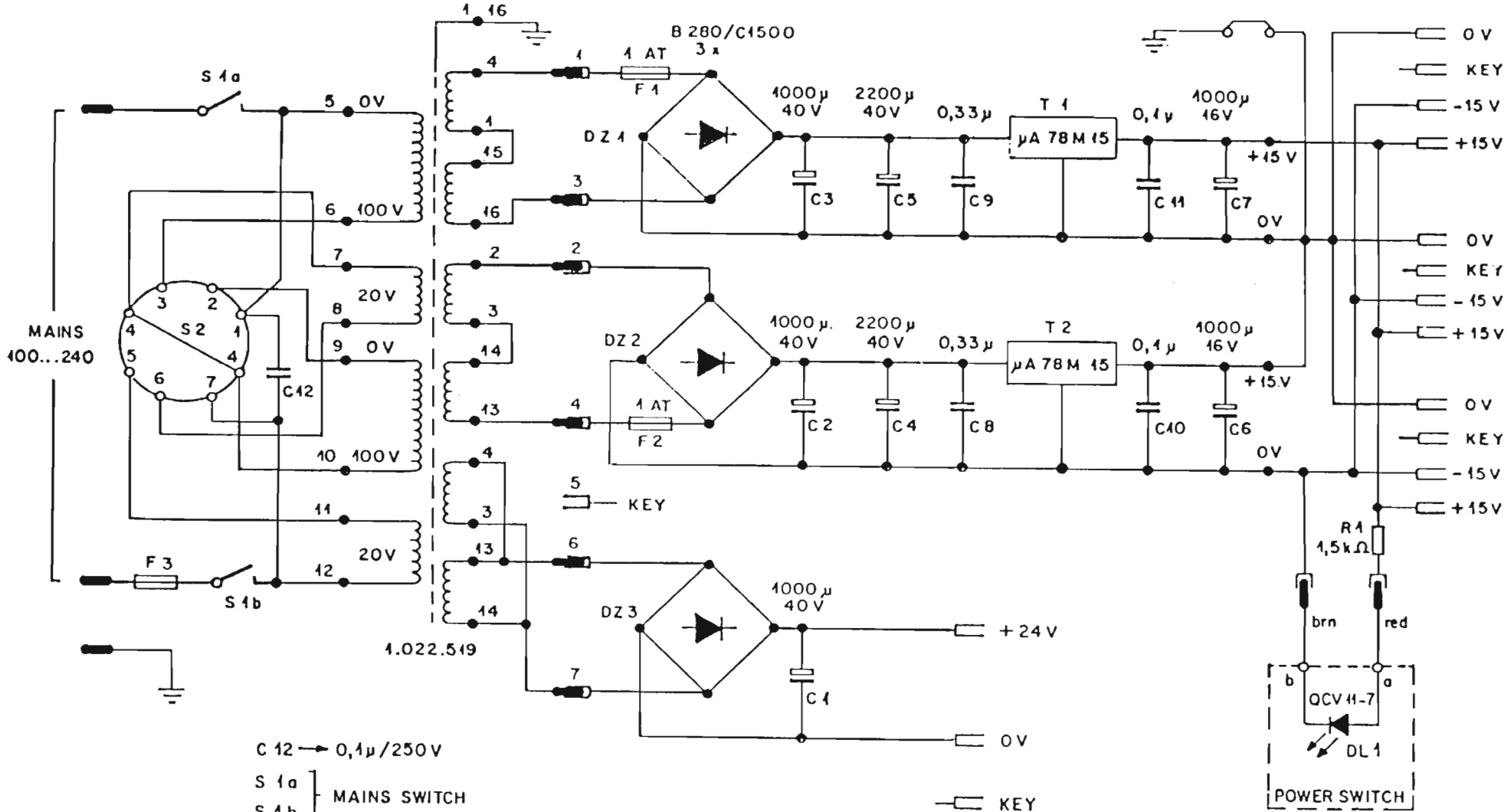
Ordering Information:

Alternative Back Panels for Mounting Frame 1.918.100

- Steel back panel for 15 × XLR sockets (Neutrik) 1.918.113.03

Alternative Back Panels for Blank Panels 1.918.100.21

- Aluminium back panel for 6 × XLR sockets (Neutrik) 1.918.100.36
- Aluminium back panel for 1 × Siemens 30/39 pin and 1 × 15pin D-type sockets 20.020.402.00
- Aluminium back panel for 2 × Siemens 30/39 pin sockets 1.918.100.33
- *Mechanical interface Siemens panel → D-type connector: see chapter 2.3.4.*

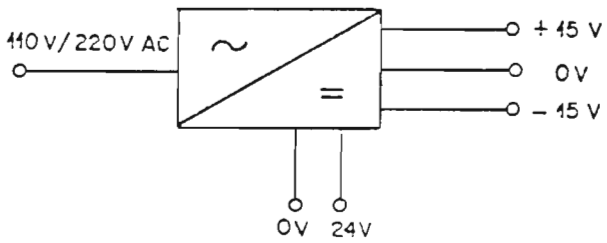


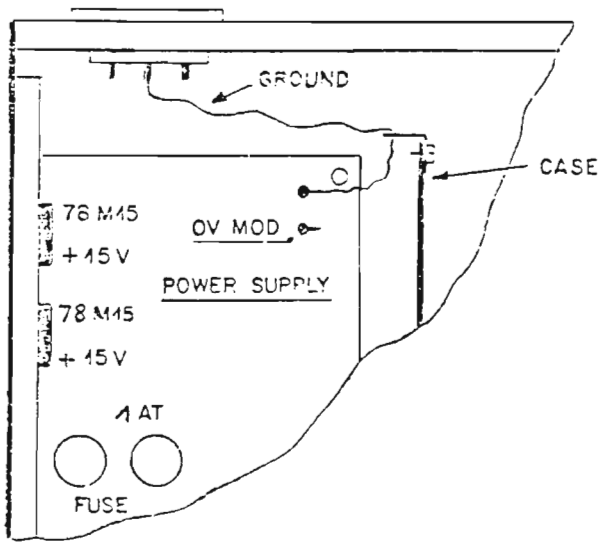
DATE:	9.4.85					REPLACES 1.918.099-81
SIGN:	We					
STUDER REGENSDORF ZURICH	POWER SUPPLY ±15V/24V					1.918.098-00

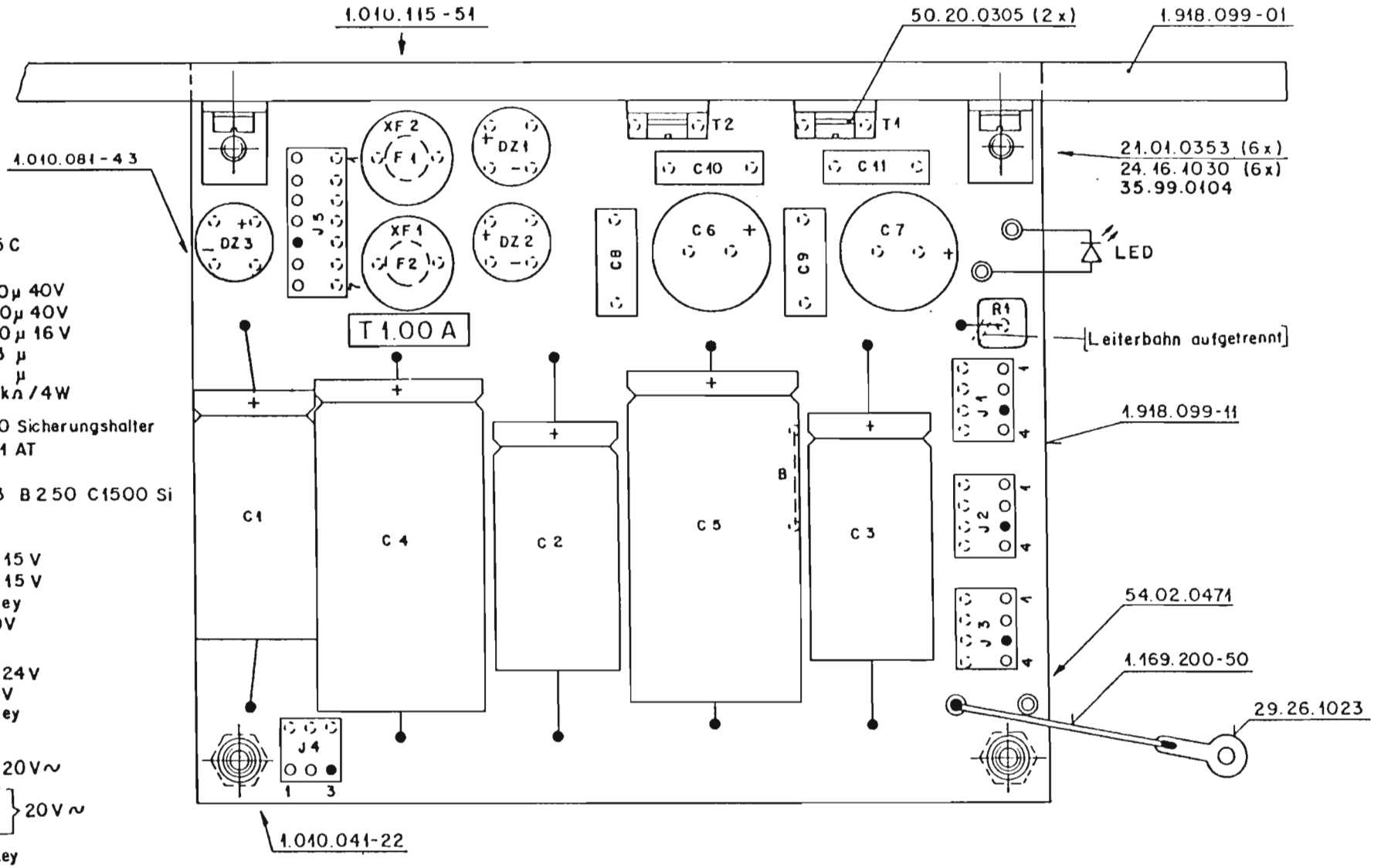
P O W E R S U P P L Y 1.918.098

Technical data:

Input	100 ... 240 V AC
Output	±15 V, 0.5A (audio)
	24 V, 0.2A (signalling)
Prim.fuse	400 mAT (100 ... 140 V AC)
	200 mAT (200 ... 240 V AC)
Sec. fuse	1 AT (± 15 V DC)







B Drahtbrücke

T1, T2 78M15C

C1...C3	1000µ 40V
C4, C5	2200µ 40V
C6, C7	1000µ 16V
C8, C9	0,33 µ
C10, C11	0,1 µ
R1	1,5 kΩ / 4W

XF1, XF2 5x20 Sicherungshalter
F1, F2 1 AT

DZ1, DZ2, DZ3 B250 C1500 Si

J1...J3
1 +15V
2 −15V
3 Key
4 0V

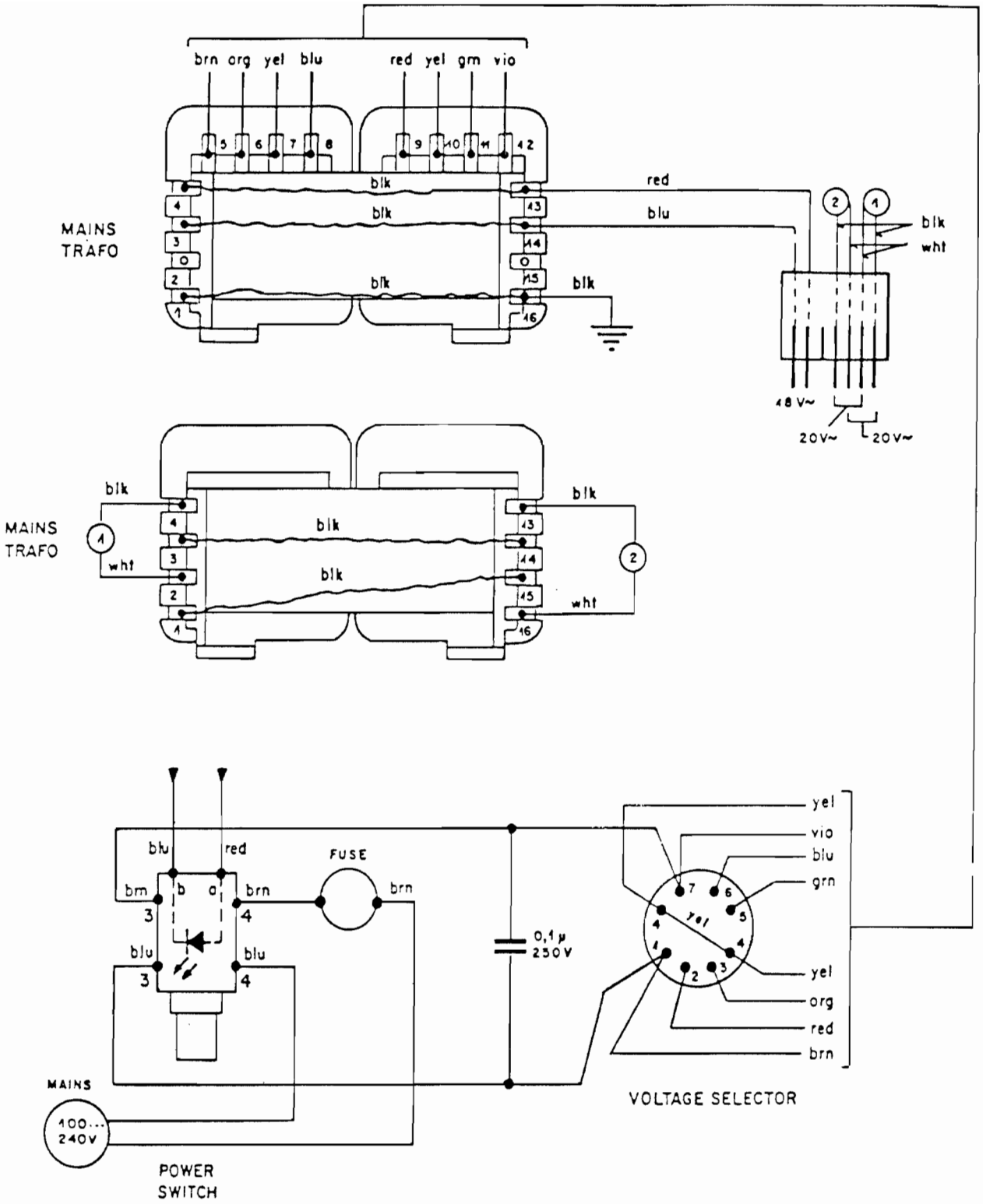
J4
1 +24V
2 0V
3 Key

J7
1, 2 20V~
3, 4 20V~
5 Key
6, 7 20V~

Codierung: Schaltdraht 64.01.0108 ø0,8x8mm
(muss 4mm vorstehen)

In	Buchsenleiste		in	Kontakt	
"	"	J1	"	"	3
"	"	J2	"	"	3
"	"	J3	"	"	3
"	"	J4	"	"	3
"	"	J5	"	"	5

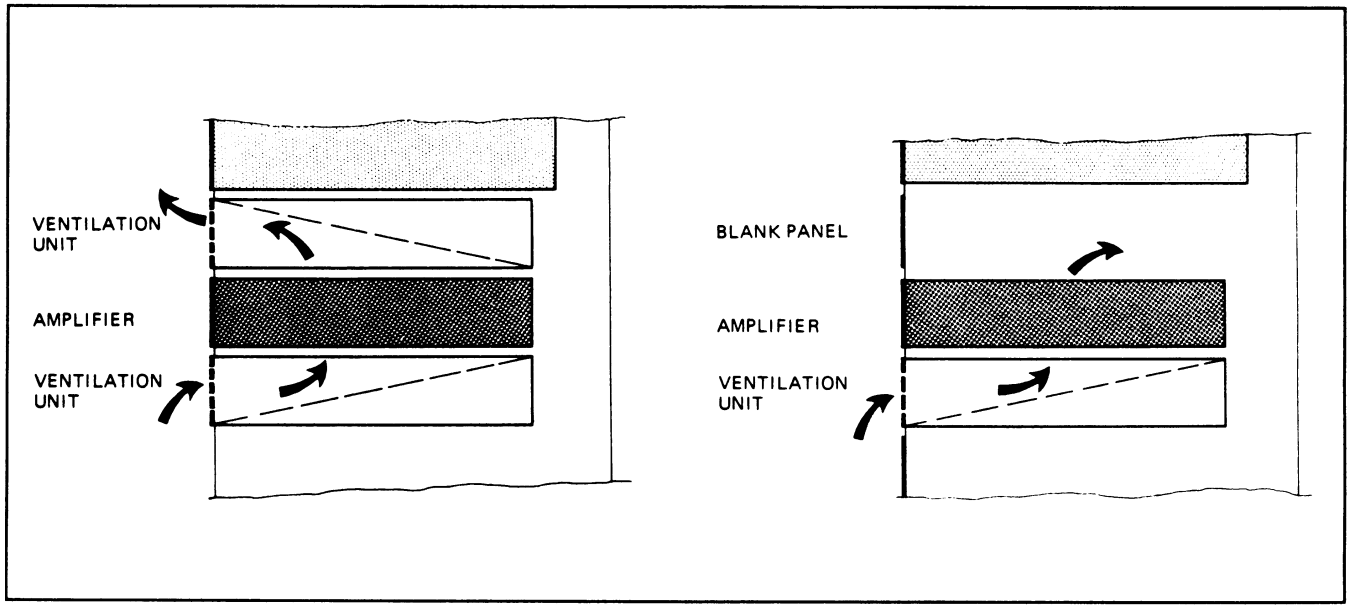
DATE:	9.1.85					REPLACES 1.918.099-81
SIGN:	We					
STUDER REGENSDORF ZURICH	POWER SUPPLY ±15V / 24V					1.918.098



DATE:	6.11.79	25.3.85			
SIGN:	we	we			
STUDER REGENSDORF ZÜRICH	WIRING				1.918.100 1.918.101 1.918.102

2.3.2 19” Ventilation Unit/19” Blank Panels 1.918.119/0XX

When filling a cabinet rack with various electronic equipment, considerable heat may be generated, which could be harmful to other nearby components. To provide for sufficient convection cooling, the use of ventilation units above and below the heat-generating equipment is strongly recommended.



A ventilation unit consists of a 19” wide and 1U high sheet metal structure, which extends about 340 mm into the rack. The unit’s front section is perforated, with a slanting metal panel mounted inside. By installing the ventilation unit with that panel either slanting upwards or downwards, the air flow can be directed as desired.

If only moderate heat problems have to be coped with, it may be sufficient to use one ventilation unit above or below the heat source, and to provide sufficient spacing from adjacent equipment by installing a 1U blank panel on the opposite side.

Ordering Information:

19” Ventilation Units

• Ventilation unit 19”/1U	1.918.119.xx
• Ventilation unit without air guide panel	1.918.119.09

19” Blank Panels

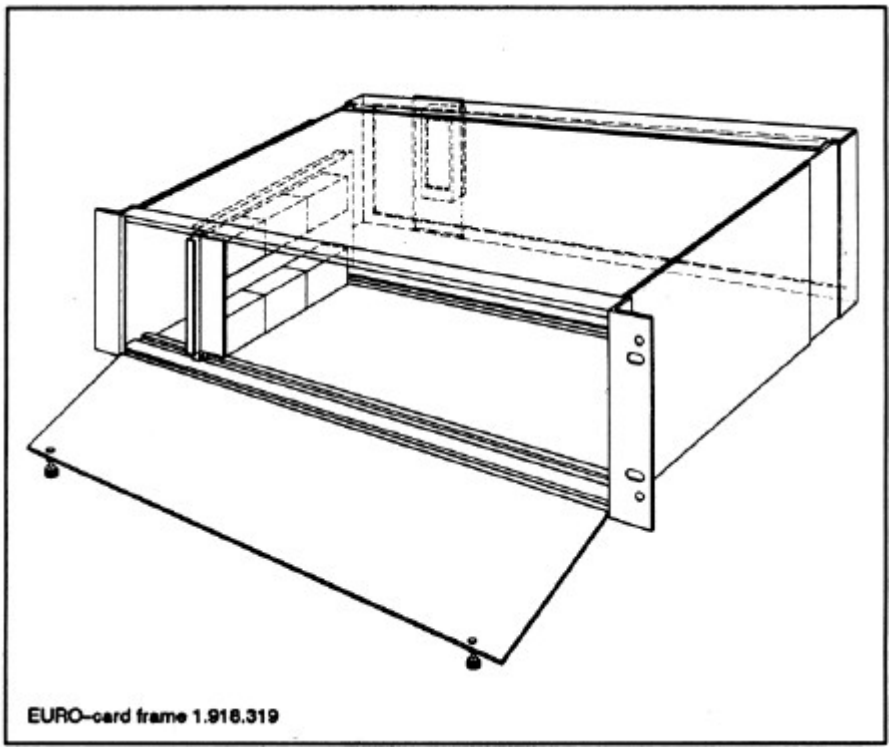
• Blank panel 19”/1U high, anodized finish	1.918.001.xx
• Blank panel 19”/2U high, anodized finish	1.918.002.xx
• Blank panel 19”/3U high, anodized finish	1.918.003.xx
• Blank panel 19”/1U high, plastic coated, grey	1.918.001.09
• Blank panel 19”/2U high, plastic coated, grey	1.918.002.09
• Blank panel 19”/3U high, plastic coated, grey	1.918.003.09
• Blank panel 19”/1U high, paint finish, grey	1.918.011.xx
• Blank panel 19”/2U high, paint finish, grey	1.918.012.xx
• Blank panel 19”/3U high, paint finish, grey	1.918.013.xx

2.3.3 19” Euro-Card Mounting Frames 1.918.318/319

The Euro-card mounting frame (sometimes also referred to as 19” Sub Rack) is an empty structure which fits into any standard 19” rack. It is intended to accommodate PCBs of the Euro format vertically, side by side. The available space within the sub rack is divided into 84 Modular Widths, each measuring 5.08 mm (0.2 inches). One Euro-card usually occupies 7 M (Module) widths, thus up to 12 Euro-cards may be installed.

The Euro-card frame is supplied as a kit for assembly by the user. Assembly instructions are included with each kit.

Supplied with the kit is a hinged front panel of anodized aluminium, providing quick access to the plug-in PCBs if required. This front panel and its hinges are available separately in case a damaged panel or hinge needs to be replaced.



EURO-card frame 1.918.319

Separate edge connectors and slide rails are required for each Euro-card and power supply unit installed into the Euro-card frame. Mounting kits containing the slide rails, edge connectors, and other accessories are described below (1.918.315/316).

To provide for convection cooling within an equipment rack, the Ventilation Unit 1.918.119.xx is recommended.

Euro-Card Racks, Ordering Information:

- Euro-card frame (19”/3U, ELMA), direct access to 32pin connectors on back panel 1.918.318.xx
- Euro-card frame (19”/3U, ELMA) with additional rear panel, for max. 10 freely assignable connector panels 1.918.319.xx

2.3.4 19” Euro-Card Mounting Accessories

Euro-Card Mounting Kit

For installing Euro-cards and/or a power supply unit into a Euro-card frame 1.918.318/319, suitable edge connectors and guide rails are required.

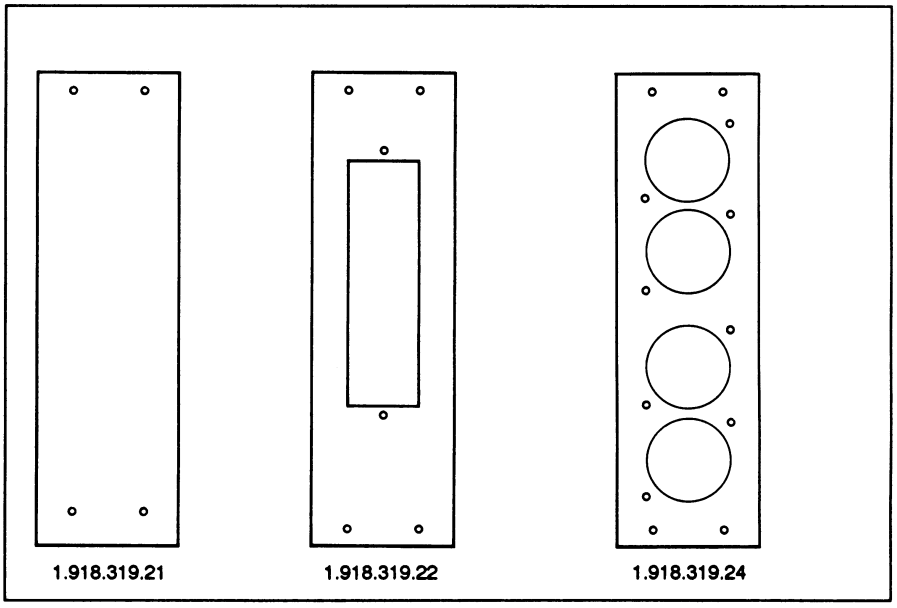


Euro-Card Mounting Kit, Ordering Information:

- Mounting kit for 1 Euro-card (ELMA rack); see photograph 1.918.315.xx
- Mounting kit for power supply 1.915.100 1.918.316.xx

Connector Panels:

The connector panels fit into the Euro-card frame with back panel (1.918.319). Please order the suitable panels separately.



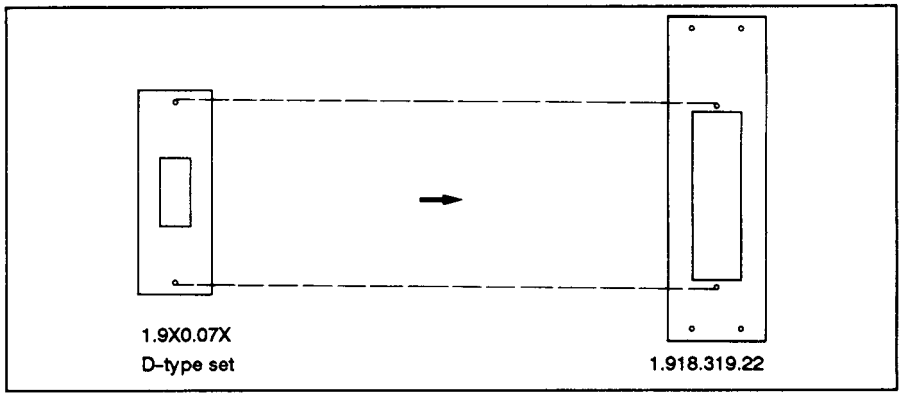
Connector Panel (3U high) Ordering Information:

• Blank panel	1.918.319.21
• Panel for Siemens connector (cut out 18 × 67 mm) *	1.918.319.22
• Panel for mains inlet and 2 banana sockets	1.918.319.23
• Panel for 4 XLR sockets	1.918.319.24

*** Siemens Connector Sets:** Including male and female connector:

– Siemens 30pin, without connector panel	1.900.080.xx
– Siemens 39pin, without connector panel	1.900.081.xx

*** D-Type Adapter Panels:** The Siemens connector panel can be used as a base for mounting a D-type connector adapter panel. The adapter sets listed below include male and female connectors, connector cover, bolting spring, clamp, and adapter panel:



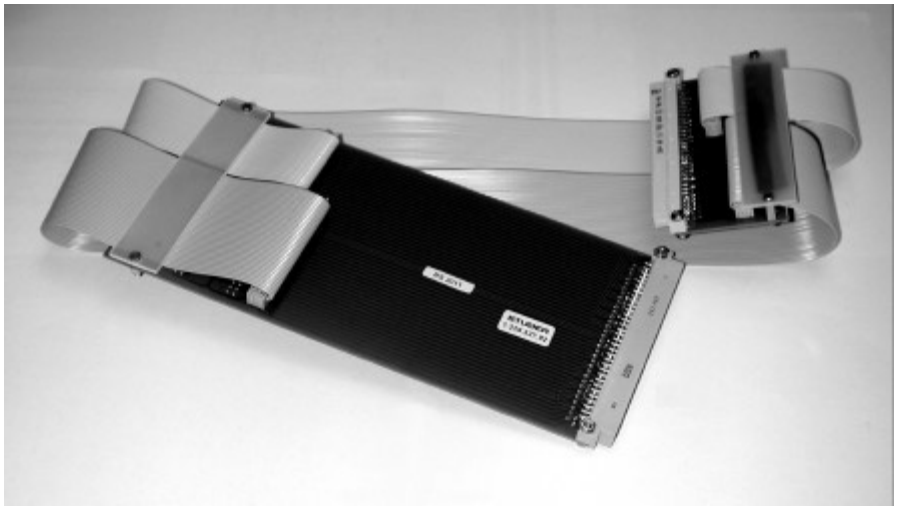
Adapter Panel Ordering Information:

The adapter kits consist of male and female D-type connector, metal or plastic connector cover, adapter panel, and mounting hardware, to fit on the Siemens connector panels 1.918.319.22 (for 3U frames) or 1.918.100.33 (for 1U frames):

– D-type set, 9pin, metal connector cover	1.900.075.xx
– D-type set, 15pin, metal connector cover	1.900.076.xx
– D-type set, 25pin, metal connector cover	1.900.077.xx
– D-type set, 37pin, metal connector cover	1.900.078.xx
– D-type set, 50pin, metal connector cover	1.900.079.xx
– D-type set, 9pin, plastic connector cover	1.970.075.xx
– D-type set, 15pin, plastic connector cover	1.970.076.xx
– D-type set, 25pin, plastic connector cover	1.970.077.xx
– D-type set, 37pin, plastic connector cover	1.970.078.xx
– D-type set, 50pin, plastic connector cover	1.970.079.xx

Extension Board:

For alignment and repair, a Euro-card may have to be operated outside the mounting frame. To facilitate any service work that has to be performed on individual cards, extending the card's 32 electrical connections is possible by means of a flexible extension board.



Ordering Information:	Extension PCB for Euro-cards, 2 × 32pin, flexible	1.228.327.82

CIRCUIT DIAGRAMS

Connectors

Synopsis: Structure Lists

Assembly	Assembly No.
Mono XLR Connection Board	1.928.710.00 1.928.710.81
Stereo XLR Connection Board	1.928.712.00 1.928.712.81
Group Mono XLR Connection Board	1.928.714.00 1.928.714.81
Monitor Connection Board	1.928.720.00
Studio Monitor Connection Board	1.928.722.00

Synopsis: Assemblies, Circuit Diagrams, Component Layouts, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Mono XLR Connection Board	1.928.710.00	1.928.710.00	1.928.710.00	1.928.710.00
Stereo XLR Connection Board	1.928.712.00	1.928.710.00	1.928.710.00	1.928.712.00
Group Mono XLR Connection Board	1.928.714.00	1.928.710.00	1.928.710.00	1.928.714.00
Mono XLR Connection Board	1.928.710.81	1.928.710.81	1.928.710.81	1.928.710.81
Stereo XLR Connection Board	1.928.712.81	1.928.710.81	1.928.710.81	1.928.712.81
Group Mono XLR Connection Board	1.928.714.81	1.928.710.81	1.928.710.81	1.928.714.81
Monitor Connection Board	1.928.720.00	1.928.720.00	1.928.720.00	1.928.720.00
Studio Monitor Connection Board	1.928.722.00	1.928.720.00	1.928.720.00	1.928.722.00
Connector 39 pin EMV	1.963.164.00	1.963.164.00	1.963.164.00	1.963.164.00
Connection Board Studio 39 pin	1.963.165.00	1.963.165.00	1.963.165.00	1.963.165.00

Bus Boards

Synopsis: Structure Lists

Assembly	Assembly No.
Main Bus Board 12A	1.928.800.00 1.928.800.81
Monitor Bus Board 6A	1.928.810.00 1.928.810.81

Synopsis: Assemblies, Circuit Diagrams, Component Layouts, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Main Bus Board 12A	1.928.800.00	1.928.800.00	1.928.800.00	1.928.800.00
Main Bus Board 12A	1.928.800.81	1.928.800.81	1.928.800.81	1.928.800.81
Monitor Bus Board 6A	1.928.810.00	1.928.810.00	1.928.810.00	1.928.810.00
Monitor Bus Board 6A	1.928.810.81	1.928.810.81	1.928.810.81	1.928.810.81

Mono XLR Connection Board 1.928.710.00/.81

Assembly Structure

Assembly	Assembly No.
Mono XLR Connection Board	1.928.710.00
Input XLR Conn. PCB	*1.928.710.11*
Mono XLR Connection Board	1.928.710.81
Input XLR Conn. PCB	*1.928.710.12*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Mono XLR Connection Board	1.928.710.00	1.928.710.00	1.928.710.00	1.928.710.00
Mono XLR Connection Board	1.928.710.81	1.928.710.81	1.928.710.81	1.928.710.81

Stereo XLR Connection Board 1.928.712.00/.81

Assembly Structure

Assembly	Assembly No.
Stereo XLR Connection Board	1.928.712.00
Input XLR Conn. PCB	*1.928.710.11*
Stereo XLR Connection Board	1.928.712.81
Input XLR Conn. PCB	*1.928.710.12*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Stereo XLR Connection Board	1.928.712.00	1.928.710.00	1.928.710.00	1.928.712.00
Stereo XLR Connection Board	1.928.712.81	1.928.710.81	1.928.710.81	1.928.712.81

Group Mono XLR Connection Board 1.928.714.00/.81

Assembly Structure

Assembly	Assembly No.
Group Mono XLR Connection Board	1.928.714.00
Input XLR Conn. PCB	*1.928.710.11*
Group Mono XLR Connection Board	1.928.714.81
Input XLR Conn. PCB	*1.928.710.12*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Group Mono XLR Connection Board	1.928.714.00	1.928.710.00	1.928.710.00	1.928.714.00
Group Mono XLR Connection Board	1.928.714.81	1.928.710.81	1.928.710.81	1.928.714.81

Monitor Connection Board 1.928.720.00

Assembly Structure

Assembly	Assembly No.
Monitor Connection Board	1.928.720.00
Monitor Conn. PCB	*1.928.720.11*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Monitor Connection Board	1.928.720.00	1.928.720.00	1.928.720.00	1.928.720.00

Studio Monitor Connection Board 1.928.722.00

Assembly Structure

Assembly	Assembly No.
Studio Monitor Connection Board	1.928.722.00
Monitor Conn. PCB	*1.928.720.11*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Studio Monitor Connection Board	1.928.722.00	1.928.720.00	1.928.720.00	1.928.722.00

Main Bus Board 12A 1.928.800.00/.81

Assembly Structure

Assembly	Assembly No.
Main Bus Board 12A	1.928.800.00
Main Bus PCB 12A	*1.928.800.11*
Main Bus Board 12A	1.928. 800.81
Main Bus PCB 12A	*1.928. 800.12*

Circuit Diagrams, Component Layout Drawings, Parts Lists

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Main Bus Board 12A	1.928.800.00	1.928.800.00	1.928.800.00	1.928.800.00
Main Bus Board 12A	1.928. 800.81	1.928. 800.81	1.928. 800.81	1.928. 800.81

Monitor Bus Board 6A 1.928.810.00/.81

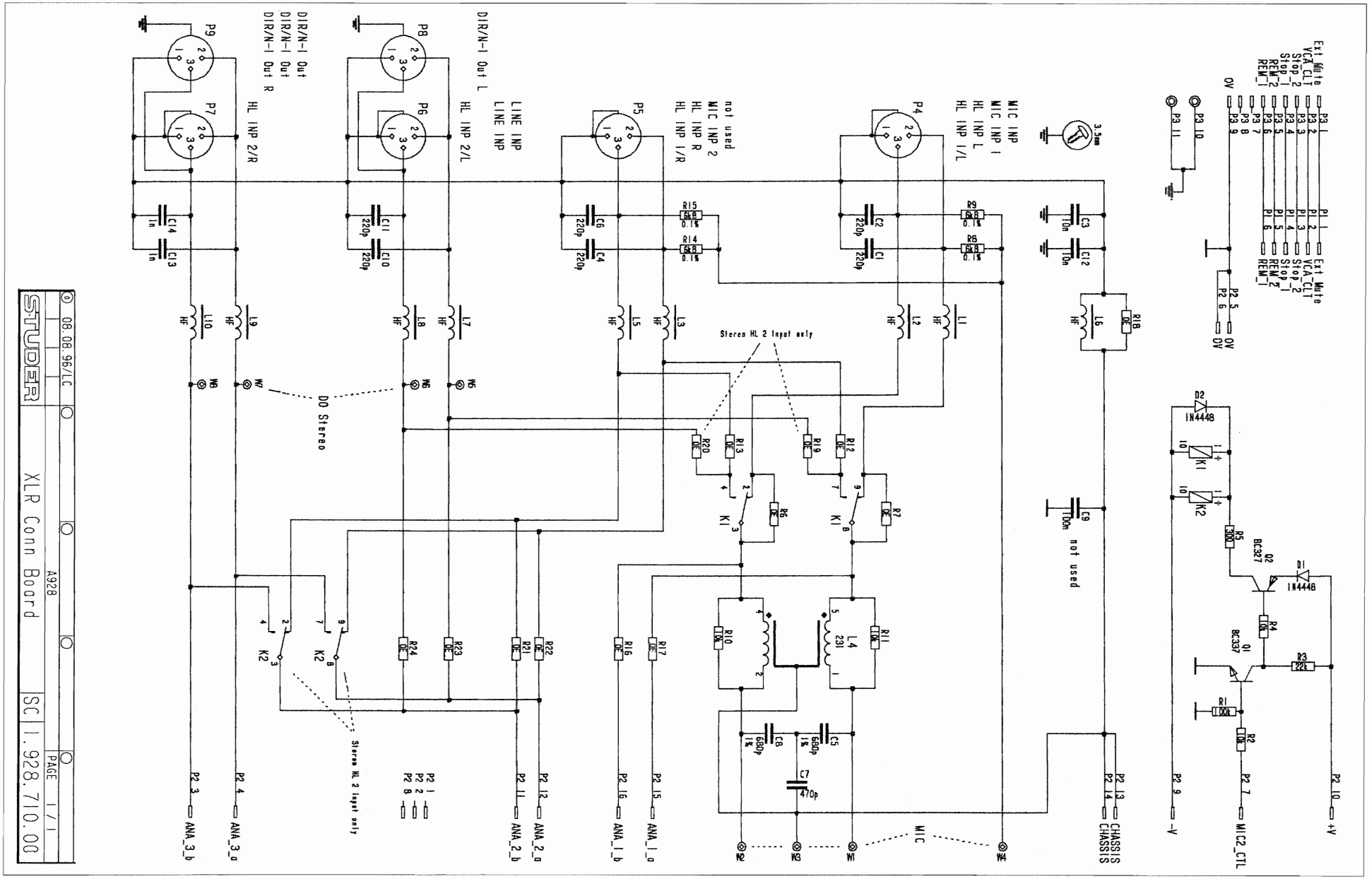
Assembly Structure

Assembly	Assembly No.
Monitor Bus Board 6A	1.928.810.00
Monitor Bus PCB 6A	*1.928.810.11*
Monitor Bus Board 6A	1.928. 810.81
Monitor Bus PCB 6A	*1.928. 810.12*

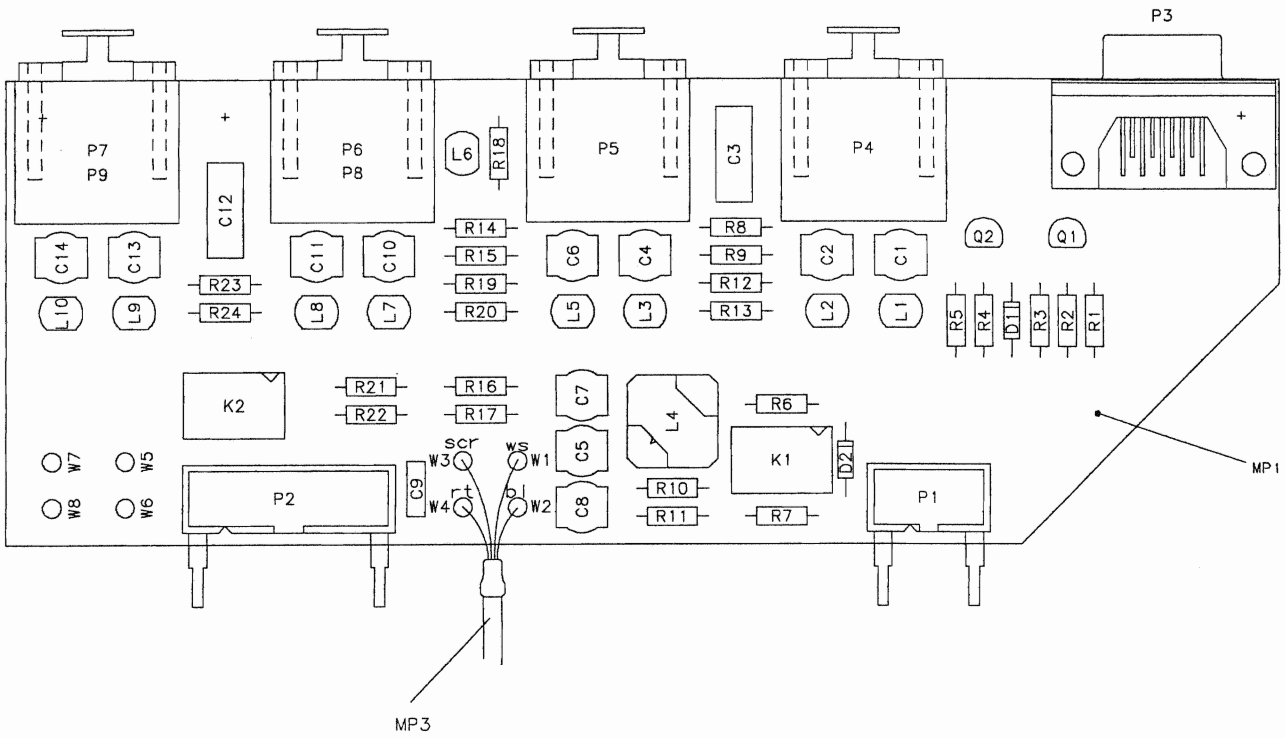
Circuit Diagrams, Component Layout Drawings, Parts Lists

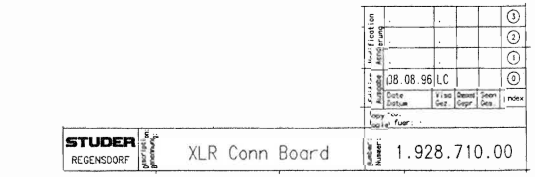
Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Monitor Bus Board 6A	1.928.810.00	1.928.810.00	1.928.810.00	1.928.810.00
Monitor Bus Board 6A	1.928. 810.81	1.928. 810.81	1.928. 810.81	1.928. 810.81

Mono XLR Connection Board 1.928.710.00/
Stereo XLR Connection Board 1.928.712.00/
Group Mono XLR Connection Board 1.928.714.00



Mono XLR Connection Board 1.928.710.00/
Stereo XLR Connection Board 1.928.712.00/
Group Mono XLR Connection Board 1.928.714.00





Mono XLR Connection Board 1.928.710.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.02.6103		10n	C .01 U , 5%, 400V , MPC
0	C 4	not used		220p	PP, 2.5%, 630V
0	C 5	59.05.1681		680p	PP, 1%, 630V
0	C 6	not used		220p	PP, 2.5%, 630V
0	C 7	59.05.2471		470p	PP, 2.5%, 630V
0	C 8	59.05.1681		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.02.6103		10n	C .01 U , 5%, 400V , MPC
0	C 13	59.05.2102		1n	PP, 2.5%, 630V
0	C 14	59.05.2102		1n	PP, 2.5%, 630V
0	D 1	not used		1N4448	75V, 150mA, 4ns, DO-35
0	D 2	not used		1N4448	75V, 150mA, 4ns, DO-35
0	K 1	not used		2u	24V, 125V/2A, AG/AU
0	K 2	not used		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	not used		110MHz	BREITBAND-DROSSEL
0	L 4	1.022.231.00		235mH	HF-ASYM. DROSSEL, RM5
0	L 5	not used		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.710.11			XLR CONN PCB
0	MP 2	1.928.710.04			NR.-ETIKETTE 5 * 20
1	MP 3	1.928.710.01			KABEL ABGESCHIRMT 3P
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
0	P 5	not used		3p	XLR 3p PCB WINKEL LOCK
0	P 6	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
0	P 7	not used		3p	XLR 3p PCB WINKEL LOCK
0	P 8	not used		3p	XLR 3p PCB WINKEL
0	P 9	54.21.2202		3p	XLR 3p PCB WINKEL
0	Q 1	not used		BC337-25	800mA, 45V, NPN
0	Q 2	not used		BC327-25	PNP, 800mA
0	R 1	not used		100k	MF, 1%, 0207
0	R 2	not used		10k	MF, 1%, 0207
0	R 3	not used		22k	MF, 1%, 0207
0	R 4	not used		10k	MF, 1%, 0207
1	R 5	not used		330R	MF, 1%, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	57.99.0250		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 9	57.99.0250		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 10	57.11.3103		10k	MF, 1%, 0207
0	R 11	57.11.3103		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 15	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 16	not used		0R0	MF, 0207
0	R 17	not used		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
0	R 19	not used		0R0	MF, 0207
0	R 20	not used		0R0	MF, 0207
0	R 21	not used		0R0	MF, 0207
0	R 22	not used		0R0	MF, 0207
0	R 23	57.11.3000		0R0	MF, 0207
0	R 24	57.11.3000		0R0	MF, 0207

End of List

Comments:
(01) MP3 Kabel neu dazu 1.928.710.01 R5 neu 330R

Stereo XLR Connection Board 1.928.712.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.02.6103		10n	C .01 U , 5%, 400V , MPC
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	not used		680p	PP, 1%, 630V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	not used		470p	PP, 2.5%, 630V
0	C 8	not used		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.02.6103		10n	C .01 U , 5%, 400V , MPC
1	C 13	59.05.2221		220p	PP, 2.5%, 630V
1	C 14	59.05.2221		220p	PP, 2.5%, 630V
1	D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
1	D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
1	K 1	56.04.0197		2u	24V, 125V/2A, AG/AU
1	K 2	56.04.0197		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
1	L 3	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 4	not used		235mH	HF-ASYM. DROSSEL RM5
1	L 5	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.710.11			XLR CONN PCB
1	MP 2	1.928.712.04			NR.-ETIKETTE 5 * 20
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
0	P 5	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
1	P 6	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
1	P 7	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
1	P 8	not used		3p	XLR 3p PCB WINKEL
1	P 9	not used		3p	XLR 3p PCB WINKEL
1	Q 1	50.03.0340		BC337-25	800mA, 45V, NPN
1	Q 2	50.03.0351		BC327-25	PNP, 800mA
1	R 1	57.11.3104		100k	MF, 1%, 0207
1	R 2	57.11.3103		10k	MF, 1%, 0207
1	R 3	57.11.3223		22k	MF, 1%, 0207
1	R 4	57.11.3103		10k	MF, 1%, 0207
1	R 5	57.11.3331		330R	MF, 1%, 0207
1	R 6	not used		0R0	MF, 0207
1	R 7	not used		0R0	MF, 0207
0	R 8	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 9	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 10	not used		10k	MF, 1%, 0207
0	R 11	not used		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 15	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
1	R 16	not used		0R0	MF, 0207
1	R 17	not used		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
1	R 19	57.11.3000		0R0	MF, 0207
1	R 20	57.11.3000		0R0	MF, 0207
1	R 21	not used		0R0	MF, 0207
1	R 22	not used		0R0	MF, 0207
0	R 23	not used		0R0	MF, 0207
0	R 24	not used		0R0	MF, 0207

End of List

Comments

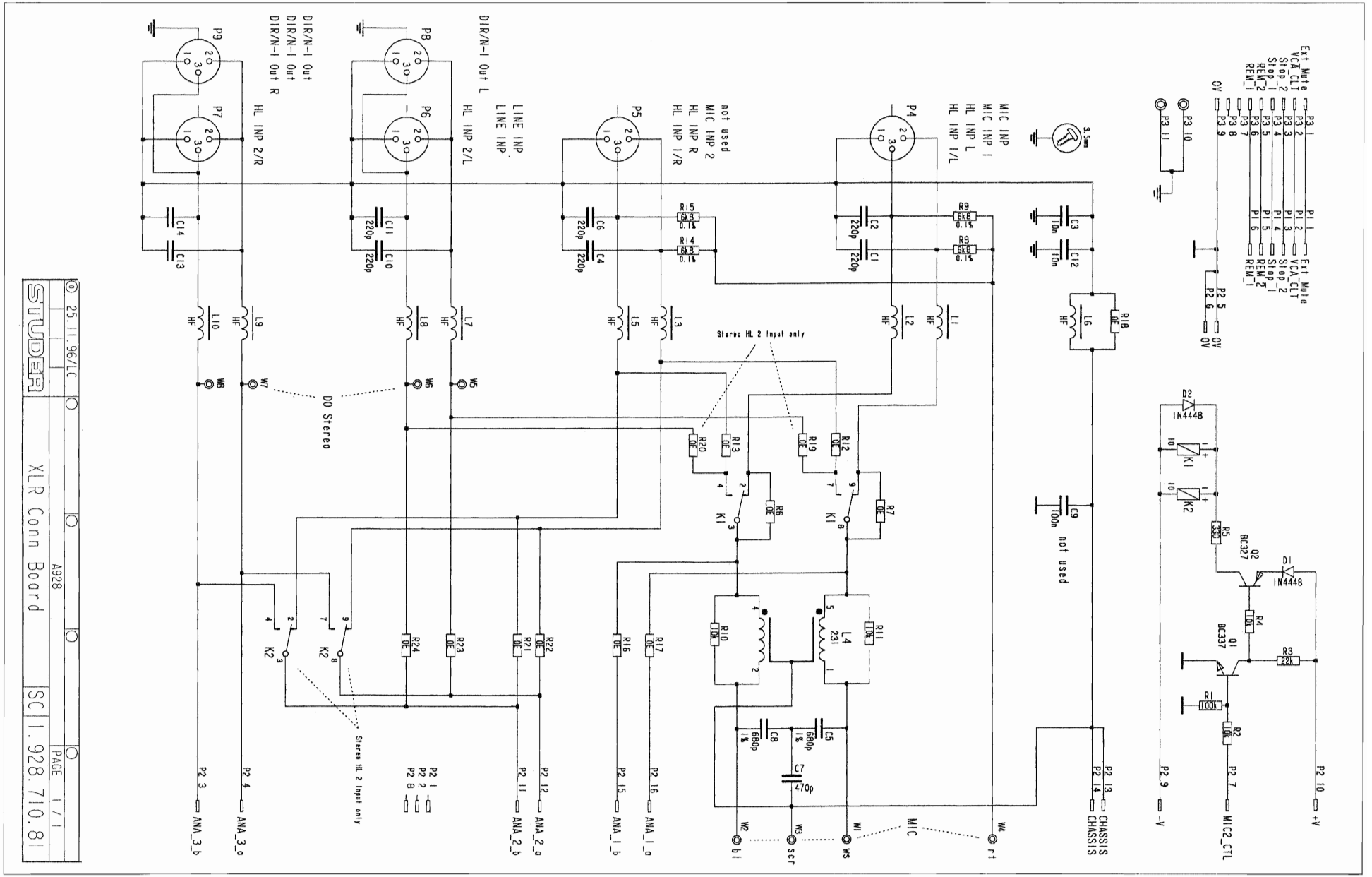
Group Mono XLR Connection Board 1.928.714.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.02.6103		10n	C .01 U , 5%, 400V , MPC
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	not used		680p	PP, 1%, 630V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	not used		470p	PP, 2.5%, 630V
0	C 8	not used		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	not used		220p	PP, 2.5%, 630V
0	C 12	59.02.6103		10n	C .01 U , 5%, 400V , MPC
0	C 13	59.05.2102		1n	PP, 2.5%, 630V
0	C 14	59.05.2102		1n	PP, 2.5%, 630V
0	D 1	not used		1N4448	75V, 150mA, 4ns, DO-35
0	D 2	not used		1N4448	75V, 150mA, 4ns, DO-35
0	K 1	not used		2u	24V, 125V/2A, AG/AU
0	K 2	not used		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 4	not used		235mH	HF-ASYM. DROSSEL RM5
0	L 5	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	not used		110MHz	BREITBAND-DROSSEL
0	L 8	not used		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.710.11			XLR CONN PCB
0	MP 2	1.928.714.04			STUDER NR. ETIKETTE
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
0	P 5	54.21.2205		3p	XLR 3p PCB WINKEL LOCK
0	P 6	not used		3p	XLR 3p PCB WINKEL LOCK
0	P 7	not used		3p	XLR 3p PCB WINKEL LOCK
0	P 8	not used		3p	XLR 3p PCB WINKEL
0	P 9	54.21.2202		3p	XLR 3p PCB WINKEL
0	Q 1	not used		BC337-25	800mA, 45V, NPN
0	Q 2	not used		BC327-25	PNP, 800mA
0	R 1	not used		100k	MF, 1%, 0207
0	R 2	not used		10k	MF, 1%, 0207
0	R 3	not used		22k	MF, 1%, 0207
0	R 4	not used		10k	MF, 1%, 0207
0	R 5	not used		300R	MF, 1%, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 9	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 10	not used		10k	MF, 1%, 0207
0	R 11	not used		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 15	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 16	not used		0R0	MF, 0207
0	R 17	not used		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
0	R 19	not used		0R0	MF, 0207
0	R 20	not used		0R0	MF, 0207
0	R 21	57.11.3000		0R0	MF, 0207
0	R 22	57.11.3000		0R0	MF, 0207
0	R 23	not used		0R0	MF, 0207
0	R 24	not used		0R0	MF, 0207

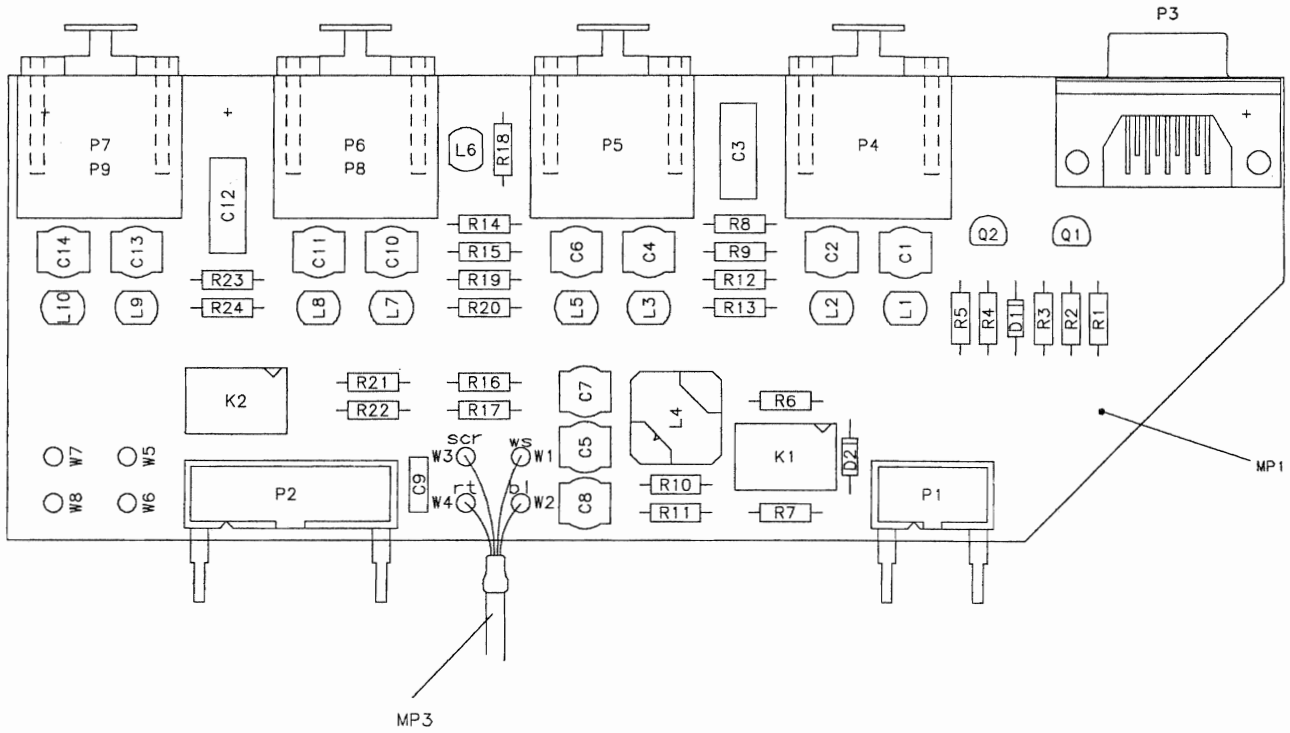
End of List

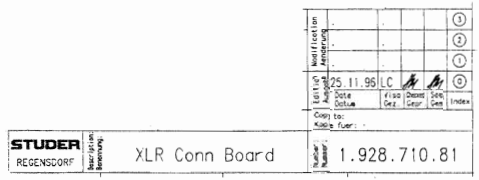
Comments:

Mono XLR Connection Board 1.928.710.81/
Stereo XLR Connection Board 1.928.712.81/
Group Mono XLR Connection Board 1.928.714.81



Mono XLR Connection Board 1.928.710.81/
Stereo XLR Connection Board 1.928.712.81/
Group Mono XLR Connection Board 1.928.714.81





Mono XLR Connection Board 1.928.710.81

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 4	not used		220p	PP, 2.5%, 630V
0	C 5	59.05.1681		680p	PP, 1%, 630V
0	C 6	not used		2200p	PP, 2.5%, 630V
0	C 7	59.05.2471		470p	PP, 2.5%, 630V
0	C 8	59.05.1681		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 13	59.05.2102		1n	PP, 2.5%, 630V
0	C 14	59.05.2102		1n	PP, 2.5%, 630V
0	D 1	not used		1N4448	75V, 150mA, 4ns, DO-35
0	D 2	not used		1N4448	75V, 150mA, 4ns, DO-35
0	K 1	not used		2u	24V, 125V/2A, AG/AU
0	K 2	not used		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	not used		110MHz	BREITBAND-DROSSEL
0	L 4	1.022.231.00		235mH	HF-ASYM. DROSSEL RM5
0	L 5	not used		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.710.12			XLR CONN PCB
0	MP 2	1.928.710.04			NR.-ETIKETTE 5 / 20
0	MP 3	1.928.710.01			KABEL ABGESCHIRMT 3P
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 5	not used		3p	XLR, PCB, WINKEL, LOCK
0	P 6	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 7	not used		3p	XLR, PCB, WINKEL, LOCK
0	P 8	not used		3p	XLR 3p PCB WINKEL
0	P 9	54.21.2202		3p	XLR 3p PCB WINKEL
0	Q 1	not used		BC337-25	800mA, 45V, NPN
0	Q 2	not used		BC327-25	PNP, 800mA
0	R 1	not used		100k	MF, 1%, 0207
0	R 2	not used		10k	MF, 1%, 0207
0	R 3	not used		22k	MF, 1%, 0207
0	R 4	not used		10k	MF, 1%, 0207
0	R 5	not used		330R	MF, 1%, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	57.99.0250		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 9	57.99.0250		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 10	57.11.3103		10k	MF, 1%, 0207
0	R 11	57.11.3103		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 15	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 16	not used		0R0	MF, 0207
0	R 17	not used		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
0	R 19	not used		0R0	MF, 0207
0	R 20	not used		0R0	MF, 0207
0	R 21	not used		0R0	MF, 0207
0	R 22	not used		0R0	MF, 0207
0	R 23	57.11.3000		0R0	MF, 0207
0	R 24	57.11.3000		0R0	MF, 0207

End of List

Stereo XLR Connection Board 1.928.712.81

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	not used		680p	PP, 1%, 630V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	not used		470p	PP, 2.5%, 630V
0	C 8	not used		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 13	59.05.2221		220p	PP, 2.5%, 630V
0	C 14	59.05.2221		220p	PP, 2.5%, 630V
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	K 1	56.04.0197		2u	24V, 125V/2A, AG/AU
0	K 2	56.04.0197		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 4	not used		235mH	HF-ASYM. DROSSEL RM5
0	L 5	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.710.12			XLR CONN PCB
0	MP 2	1.928.712.04			NR.-ETIKETTE 5 * 20
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 5	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 6	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 7	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 8	not used		3p	XLR 3p PCB WINKEL
0	P 9	not used		3p	XLR 3p PCB WINKEL
0	Q 1	50.03.0340		BC337-25	800mA, 45V, NPN
0	Q 2	50.03.0351		BC327-25	PNP, 800mA
0	R 1	57.11.3104		100k	MF, 1%, 0207
0	R 2	57.11.3103		10k	MF, 1%, 0207
0	R 3	57.11.3223		22k	MF, 1%, 0207
0	R 4	57.11.3103		10k	MF, 1%, 0207
0	R 5	57.11.3331		330R	MF, 1%, 0207
0	R 6	not used		0R0	MF, 0207
0	R 7	not used		0R0	MF, 0207
0	R 8	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 9	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 10	not used		10k	MF, 1%, 0207
0	R 11	not used		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 15	not used		6k8	R 6.8 K ,0.1%, 25PPM, MF
0	R 16	57.11.3000		0R0	MF, 0207
0	R 17	57.11.3000		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
0	R 19	57.11.3000		0R0	MF, 0207
0	R 20	57.11.3000		0R0	MF, 0207
0	R 21	not used		0R0	MF, 0207
0	R 22	not used		0R0	MF, 0207
0	R 23	not used		0R0	MF, 0207
0	R 24	not used		0R0	MF, 0207

End of List

Comments:

Group Mono XLR Connection Board 1.928.714.81

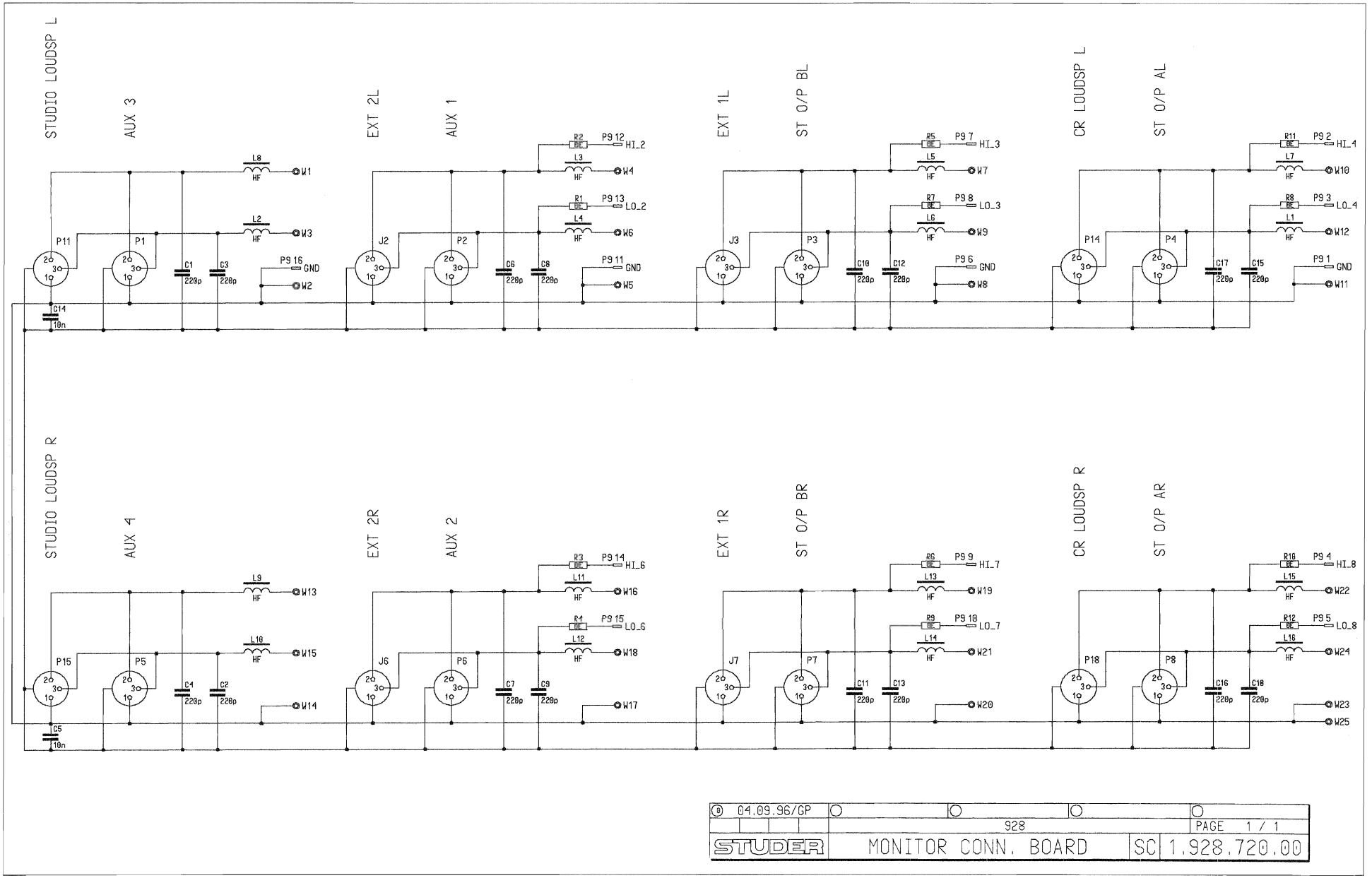
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	not used		680p	PP, 1%, 630V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	not used		470p	PP, 2.5%, 630V
0	C 8	not used		680p	PP, 1%, 630V
0	C 9	not used		100n	PETP, 63V, 10%, RM5
0	C 10	not used		220p	PP, 2.5%, 630V
0	C 11	not used		220p	PP, 2.5%, 630V
0	C 12	59.31.7103		10n	C .01 U , 10%, 250V , MPETP
0	C 13	59.05.2102		1n	PP, 2.5%, 630V
0	C 14	59.05.2102		1n	PP, 2.5%, 630V
0	D 1	not used		1N4448	75V, 150mA, 4ns, DO-35
0	D 2	not used		1N4448	75V, 150mA, 4ns, DO-35
0	K 1	not used		2u	24V, 125V/2A, AG/AU
0	K 2	not used		2u	24V, 125V/2A, AG/AU
0	L 1	62.01.0301		110MHz	Breitband-Drossel
0	L 2	62.01.0301		110MHz	Breitband-Drossel
0	L 3	62.01.0301		110MHz	Breitband-Drossel
0	L 4	not used		235mH	HF-ASYM. DROSSEL RM5
0	L 5	62.01.0301		110MHz	Breitband-Drossel
0	L 6	not used		110MHz	Breitband-Drossel
0	L 7	not used		110MHz	Breitband-Drossel
0	L 8	not used		110MHz	Breitband-Drossel
0	L 9	62.01.0301		110MHz	Breitband-Drossel
0	L 10	62.01.0301		110MHz	Breitband-Drossel
0	MP 1	1.928.710.12			XLR CONN PCB
0	MP 2	1.928.714.04			STUDER NR. ETIKETTE
0	P 1	54.14.2100		6p	P STECKER 6 P,AU,VR,GERADE
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 4	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 5	54.21.2207		3p	XLR, PCB, WINKEL, LOCK
0	P 6	not used		3p	XLR, PCB, WINKEL, LOCK
0	P 7	not used		3p	XLR, PCB, WINKEL, LOCK
0	P 8	not used		3p	XLR 3p PCB WINKEL
0	P 9	54.21.2202		3p	XLR 3p PCB WINKEL
0	Q 1	not used		BC337-25	800mA, 45V, NPN
0	Q 2	not used		BC327-25	PNP, 800mA
0	R 1	not used		100k	MF, 1%, 0207
0	R 2	not used		10k	MF, 1%, 0207
0	R 3	not used		22k	MF, 1%, 0207
0	R 4	not used		10k	MF, 1%, 0207
0	R 5	not used		330R	MF, 1%, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	not used		6k8	MF 0.1%, 25ppm 0207
0	R 9	not used		6k8	MF 0.1%, 25ppm 0207
0	R 10	not used		10k	MF, 1%, 0207
0	R 11	not used		10k	MF, 1%, 0207
0	R 12	not used		0R0	MF, 0207
0	R 13	not used		0R0	MF, 0207
0	R 14	not used		6k8	MF 0.1%, 25ppm 0207
0	R 15	not used		6k8	MF 0.1%, 25ppm 0207
1	R 16	57.11.3000		0R0	MF, 0207
1	R 17	57.11.3000		0R0	MF, 0207
0	R 18	57.11.3000		0R0	MF, 0207
0	R 19	not used		0R0	MF, 0207
0	R 20	not used		0R0	MF, 0207
0	R 21	57.11.3000		0R0	MF, 0207
0	R 22	57.11.3000		0R0	MF, 0207
0	R 23	not used		0R0	MF, 0207
0	R 24	not used		0R0	MF, 0207

End of List

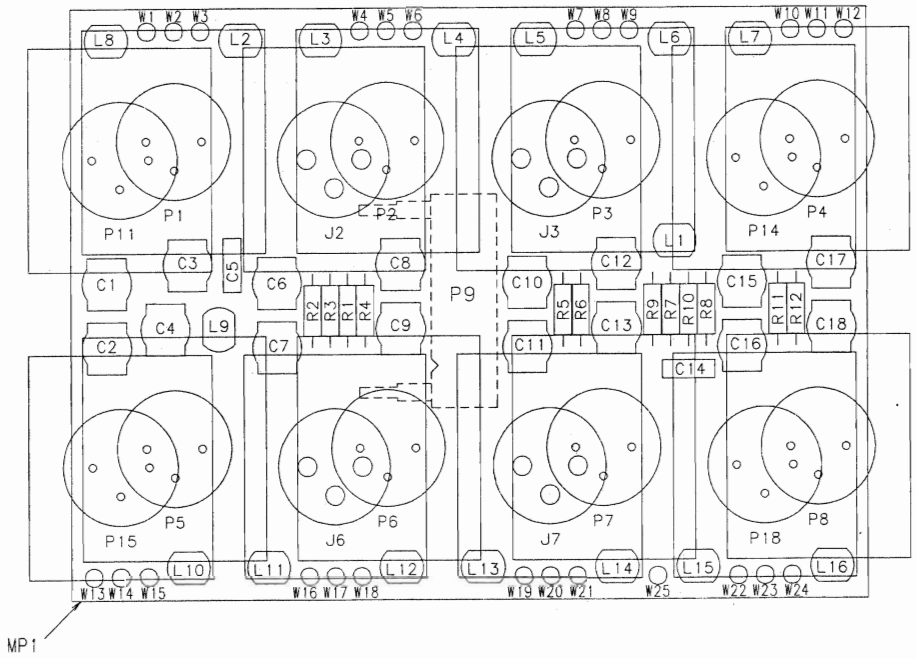
Comments

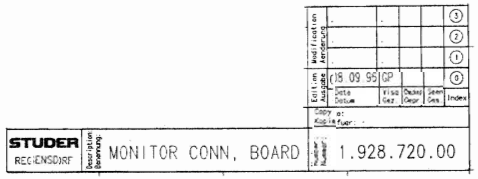
(1) R16+R17 changed to 57.11.0000

Monitor Connector Board 1.928.720.00/
Studio Monitor Connector Board 1.928.722.00



Monitor Connector Board 1.928.720.00/
Studio Monitor Connector Board 1.928.722.00





Monitor Connector Board 1.928.720.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.05.2221		220p	PP, 2.5%, 630V
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	59.06.0103		10n	PETP, 10%, 63V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	59.05.2221		220p	PP, 2.5%, 630V
0	C 8	59.05.2221		220p	PP, 2.5%, 630V
0	C 9	59.05.2221		220p	PP, 2.5%, 630V
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.05.2221		220p	PP, 2.5%, 630V
0	C 13	59.05.2221		220p	PP, 2.5%, 630V
0	C 14	59.06.0103		10n	PETP, 10%, 63V
0	C 15	59.05.2221		220p	PP, 2.5%, 630V
0	C 16	59.05.2221		220p	PP, 2.5%, 630V
0	C 17	59.05.2221		220p	PP, 2.5%, 630V
0	C 18	59.05.2221		220p	PP, 2.5%, 630V
0	J 2	not used		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 3	not used		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 6	not used		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 7	not used		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	L 1	not used		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	not used		110MHz	BREITBAND-DROSSEL
0	L 4	not used		110MHz	BREITBAND-DROSSEL
0	L 5	not used		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	not used		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 11	not used		110MHz	BREITBAND-DROSSEL
0	L 12	not used		110MHz	BREITBAND-DROSSEL
0	L 13	not used		110MHz	BREITBAND-DROSSEL
0	L 14	not used		110MHz	BREITBAND-DROSSEL
0	L 15	not used		110MHz	BREITBAND-DROSSEL
0	L 16	not used		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.720.11			MONITOR CONN PCB
0	MP 2	1.928.720.04			NR.-ETIKETTE 5 * 20
0	P 1	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 2	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 3	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 4	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 5	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 6	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 7	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 8	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 9	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 11	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 14	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 15	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 18	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	R 1	57.11.3000		0R0	MF, 0207
0	R 2	57.11.3000		0R0	MF, 0207
0	R 3	57.11.3000		0R0	MF, 0207
0	R 4	57.11.3000		0R0	MF, 0207
0	R 5	57.11.3000		0R0	MF, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	57.11.3000		0R0	MF, 0207
0	R 9	57.11.3000		0R0	MF, 0207
0	R 10	57.11.3000		0R0	MF, 0207
0	R 11	57.11.3000		0R0	MF, 0207
0	R 12	57.11.3000		0R0	MF, 0207

End of List

Comments

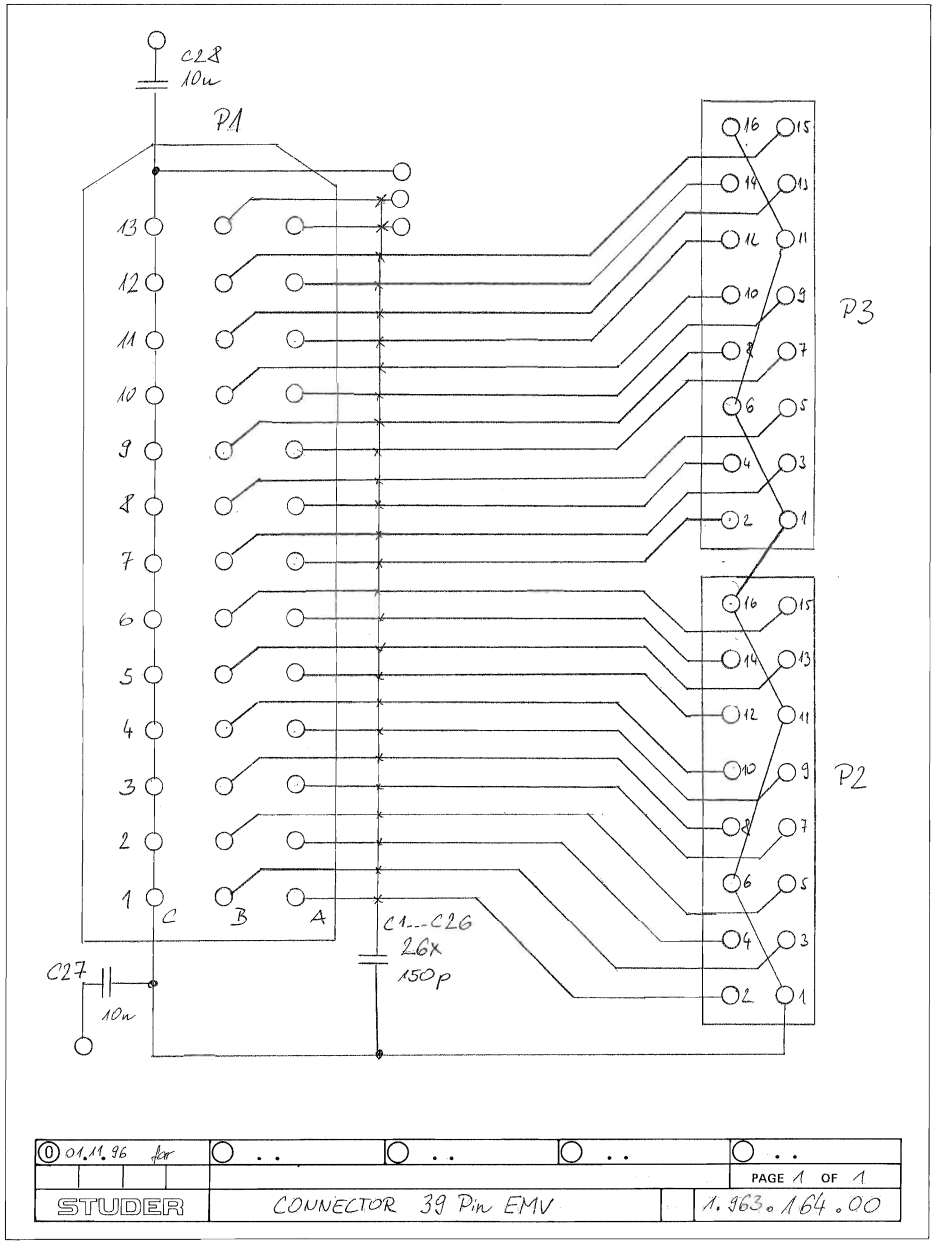
Studio Monitor Connector Board 1.928.722.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.05.2221		220p	PP, 2.5%, 630V
0	C 2	59.05.2221		220p	PP, 2.5%, 630V
0	C 3	59.05.2221		220p	PP, 2.5%, 630V
0	C 4	59.05.2221		220p	PP, 2.5%, 630V
0	C 5	59.06.0103		10n	PETP, 10%, 63V
0	C 6	59.05.2221		220p	PP, 2.5%, 630V
0	C 7	59.05.2221		220p	PP, 2.5%, 630V
0	C 8	59.05.2221		220p	PP, 2.5%, 630V
0	C 9	59.05.2221		220p	PP, 2.5%, 630V
0	C 10	59.05.2221		220p	PP, 2.5%, 630V
0	C 11	59.05.2221		220p	PP, 2.5%, 630V
0	C 12	59.05.2221		220p	PP, 2.5%, 630V
0	C 13	59.05.2221		220p	PP, 2.5%, 630V
0	C 14	59.06.0103		10n	PETP, 10%, 63V
0	C 15	59.05.2221		220p	PP, 2.5%, 630V
0	C 16	59.05.2221		220p	PP, 2.5%, 630V
0	C 17	59.05.2221		220p	PP, 2.5%, 630V
0	C 18	59.05.2221		220p	PP, 2.5%, 630V
0	J 2	54.21.2002		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 3	54.21.2002		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 6	54.21.2002		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	J 7	54.21.2002		JXLR3p	J 3 POL CHASSIS/PCB XLR
0	L 1	not used		110MHz	BREITBAND-DROSSEL
0	L 2	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 3	not used		110MHz	BREITBAND-DROSSEL
0	L 4	not used		110MHz	BREITBAND-DROSSEL
0	L 5	not used		110MHz	BREITBAND-DROSSEL
0	L 6	not used		110MHz	BREITBAND-DROSSEL
0	L 7	not used		110MHz	BREITBAND-DROSSEL
0	L 8	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 9	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 10	62.01.0301		110MHz	BREITBAND-DROSSEL
0	L 11	not used		110MHz	BREITBAND-DROSSEL
0	L 12	not used		110MHz	BREITBAND-DROSSEL
0	L 13	not used		110MHz	BREITBAND-DROSSEL
0	L 14	not used		110MHz	BREITBAND-DROSSEL
0	L 15	not used		110MHz	BREITBAND-DROSSEL
0	L 16	not used		110MHz	BREITBAND-DROSSEL
0	MP 1	1.928.720.11			MONITOR CONN PCB
0	MP 2	1.928.722.04			NR.-ETIKETTE 5 * 20
0	P 1	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 2	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 3	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 4	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 5	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 6	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 7	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 8	not used		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 9	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 11	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 14	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 15	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	P 18	54.21.2001		PXLR3p	P 3 POL CHASSIS/PCB XLR
0	R 1	57.11.3000		0R0	MF, 0207
0	R 2	57.11.3000		0R0	MF, 0207
0	R 3	57.11.3000		0R0	MF, 0207
0	R 4	57.11.3000		0R0	MF, 0207
0	R 5	57.11.3000		0R0	MF, 0207
0	R 6	57.11.3000		0R0	MF, 0207
0	R 7	57.11.3000		0R0	MF, 0207
0	R 8	57.11.3000		0R0	MF, 0207
0	R 9	57.11.3000		0R0	MF, 0207
0	R 10	57.11.3000		0R0	MF, 0207
0	R 11	57.11.3000		0R0	MF, 0207
0	R 12	57.11.3000		0R0	MF, 0207

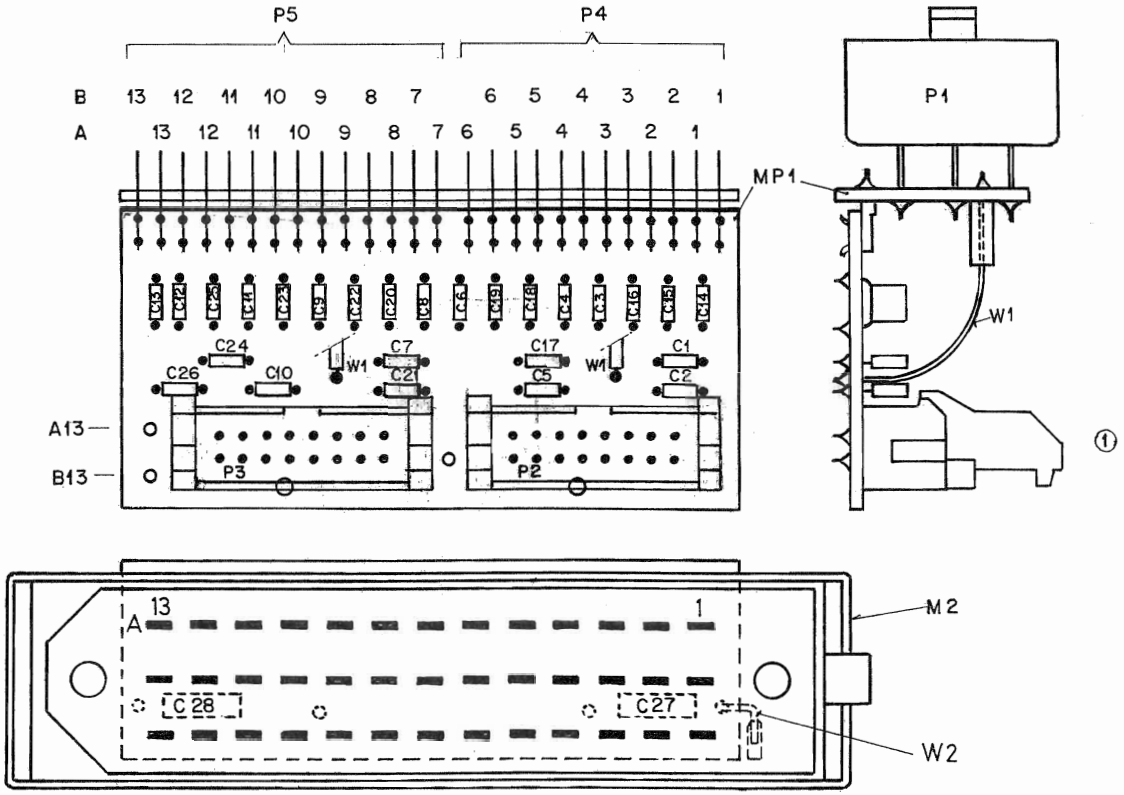
End of List

Comments

Connector 39 Pin EMV 1.963.164.00



Connector 39 Pin EMV 1.963.164.00



C27 and C28 on solder side

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.34.7151		150p	CER 63V, 2%, NP150
0	C 2	59.34.7151		150p	CER 63V, 2%, NP150
0	C 3	59.34.7151		150p	CER 63V, 2%, NP150
0	C 4	59.34.7151		150p	CER 63V, 2%, NP150
0	C 5	59.34.7151		150p	CER 63V, 2%, NP150
0	C 6	59.34.7151		150p	CER 63V, 2%, NP150
0	C 7	59.34.7151		150p	CER 63V, 2%, NP150
0	C 8	59.34.7151		150p	CER 63V, 2%, NP150
0	C 9	59.34.7151		150p	CER 63V, 2%, NP150
0	C 10	59.34.7151		150p	CER 63V, 2%, NP150
0	C 11	59.34.7151		150p	CER 63V, 2%, NP150
0	C 12	59.34.7151		150p	CER 63V, 2%, NP150
0	C 13	59.34.7151		150p	CER 63V, 2%, NP150
0	C 14	59.34.7151		150p	CER 63V, 2%, NP150
0	C 15	59.34.7151		150p	CER 63V, 2%, NP150
0	C 16	59.34.7151		150p	CER 63V, 2%, NP150
0	C 17	59.34.7151		150p	CER 63V, 2%, NP150
0	C 18	59.34.7151		150p	CER 63V, 2%, NP150
0	C 19	59.34.7151		150p	CER 63V, 2%, NP150
0	C 20	59.34.7151		150p	CER 63V, 2%, NP150
0	C 21	59.34.7151		150p	CER 63V, 2%, NP150
0	C 22	59.34.7151		150p	CER 63V, 2%, NP150
0	C 23	59.34.7151		150p	CER 63V, 2%, NP150
0	C 24	59.34.7151		150p	CER 63V, 2%, NP150
0	C 25	59.34.7151		150p	CER 63V, 2%, NP150
0	C 26	59.34.7151		150p	CER 63V, 2%, NP150
0	C 27	59.06.0103		10n	PETP, 63V, 10%, RM5
0	C 28	59.06.0103		10n	PETP, 63V, 10%, RM5
2	MP 1	1.963.164.12			CONNECTOR 39-PIN EMV PCB
0	MP 2	54.14.7002			MP RIEGELWANNE 30/39 POL
0	MP 3	1.963.164.04			NR.-ETIKETTE 5*20
0	P 1	54.14.1023			P LEISTE 39 POL PRINT
1	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
1	P 3	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 4	54.01.0221		12-P	P LEISTE 12 POL CIS WINKEL
0	P 5	54.01.0274		14-P	P LEISTE 14 POL CIS WINKEL
0	W 1	1.963.164.93	2 pcs		LL-CONNECTOR 39-PIN EMV BOARD
0	W 2	64.01.0106			SCHALTDRAHT SN D 0.6

End of List

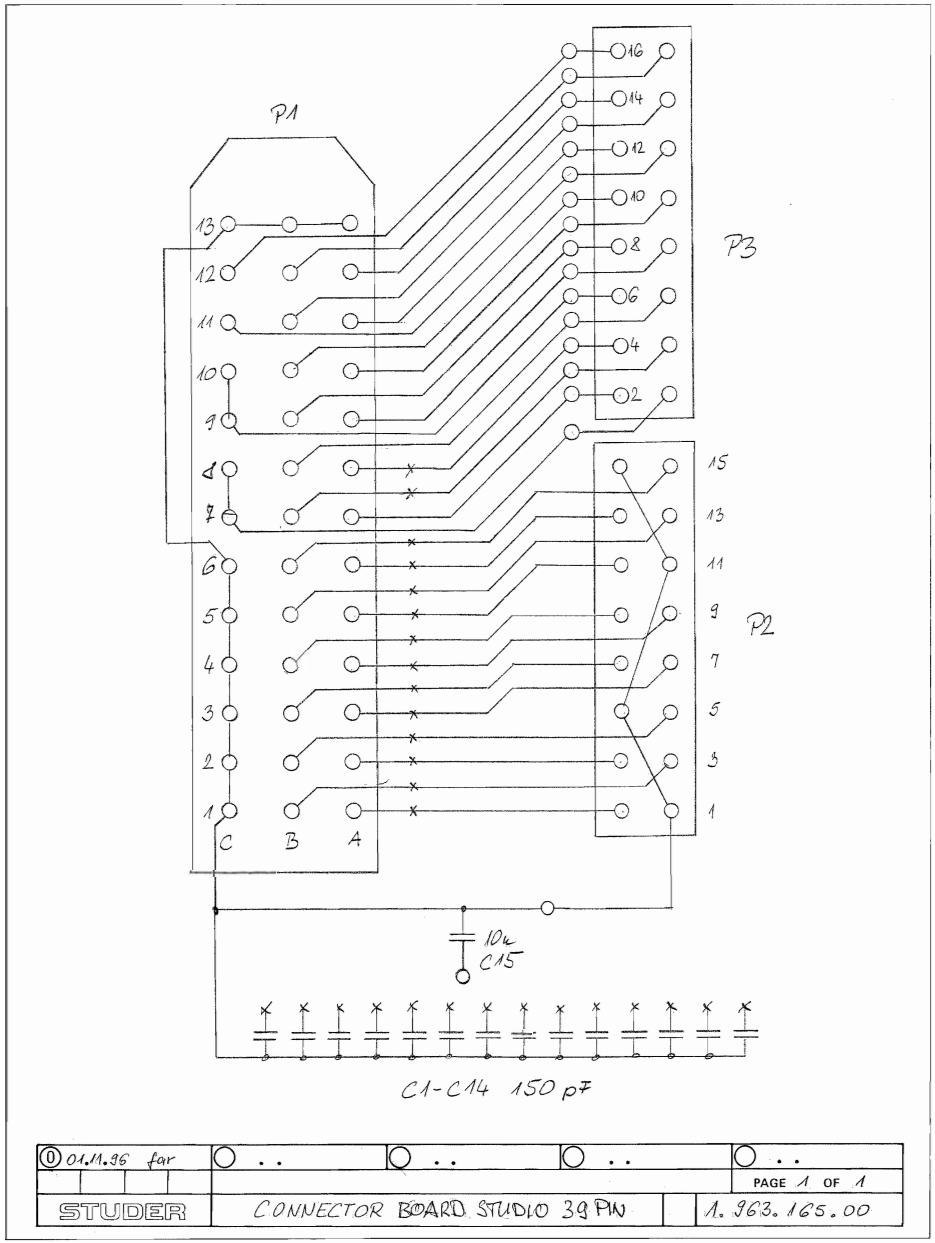
Comments:
(01) P2+P3 54.14.2142 Changed to 54.14.2102
(02) MP1 1.963.164.11 Changed to 1.963.164.12

Änderung					
					③
					②
	20.11.96				①
Ausgabe	29.8.96				⓪
	Datum	Gez.	Gepr.	Ges.	Index

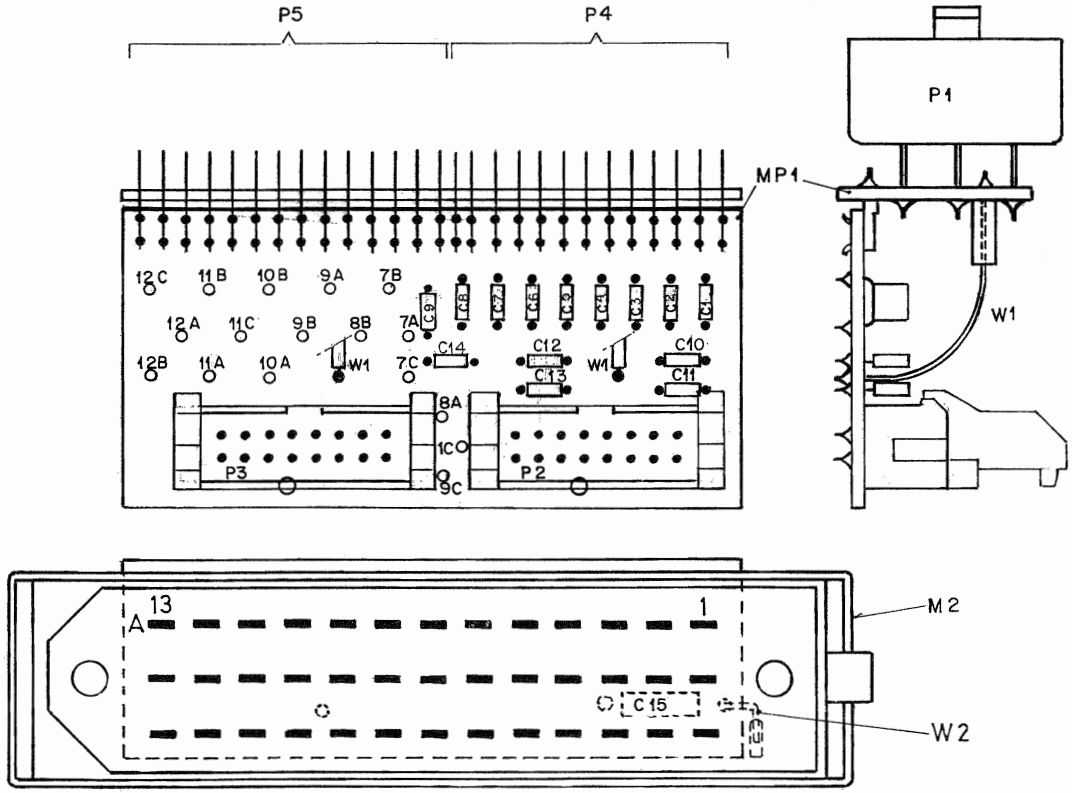
Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: Connector 39-Pin EMV	Nummer: 1.963.164-00

Connector Board Studio 39 Pin 1.963.165.00



Connector Board Studio 39 Pin 1.963.165.00



C15 on solder side

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.34.7151		150p	CER 63V, 2%, NP150
0	C 2	59.34.7151		150p	CER 63V, 2%, NP150
0	C 3	59.34.7151		150p	CER 63V, 2%, NP150
0	C 4	59.34.7151		150p	CER 63V, 2%, NP150
0	C 5	59.34.7151		150p	CER 63V, 2%, NP150
0	C 6	59.34.7151		150p	CER 63V, 2%, NP150
0	C 7	59.34.7151		150p	CER 63V, 2%, NP150
0	C 8	59.34.7151		150p	CER 63V, 2%, NP150
0	C 9	59.34.7151		150p	CER 63V, 2%, NP150
0	C 10	59.34.7151		150p	CER 63V, 2%, NP150
0	C 11	59.34.7151		150p	CER 63V, 2%, NP150
0	C 12	59.34.7151		150p	CER 63V, 2%, NP150
0	C 13	59.34.7151		150p	CER 63V, 2%, NP150
0	C 14	59.34.7151		150p	CER 63V, 2%, NP150
0	C 15	59.06.0103		10n	PETP, 63V, 10%, RM5
0	MP 1	1.963.165.11			CONNECTOR PCB STUDIO 39-PIN
0	MP 2	54.14.7002			MP RIEGELWANNE 30/39 POL
0	MP 3	1.963.165.04			NR.-ETIKETTE 5*20
0	P 1	54.14.1023			P LEISTE 39 POL PRINT
0	P 2	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 3	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	P 4	54.01.0273		13-P	P LEISTE 13 POL CIS WINKEL
0	P 5	54.01.0274		14-P	P LEISTE 14 POL CIS WINKEL
0	W 1	1.963.164.93	2 pcs		LL-CONNECTOR 39-PIN EMV BOARD
0	W 2	64.01.0106			SCHALTDRAHT SN D 0.6

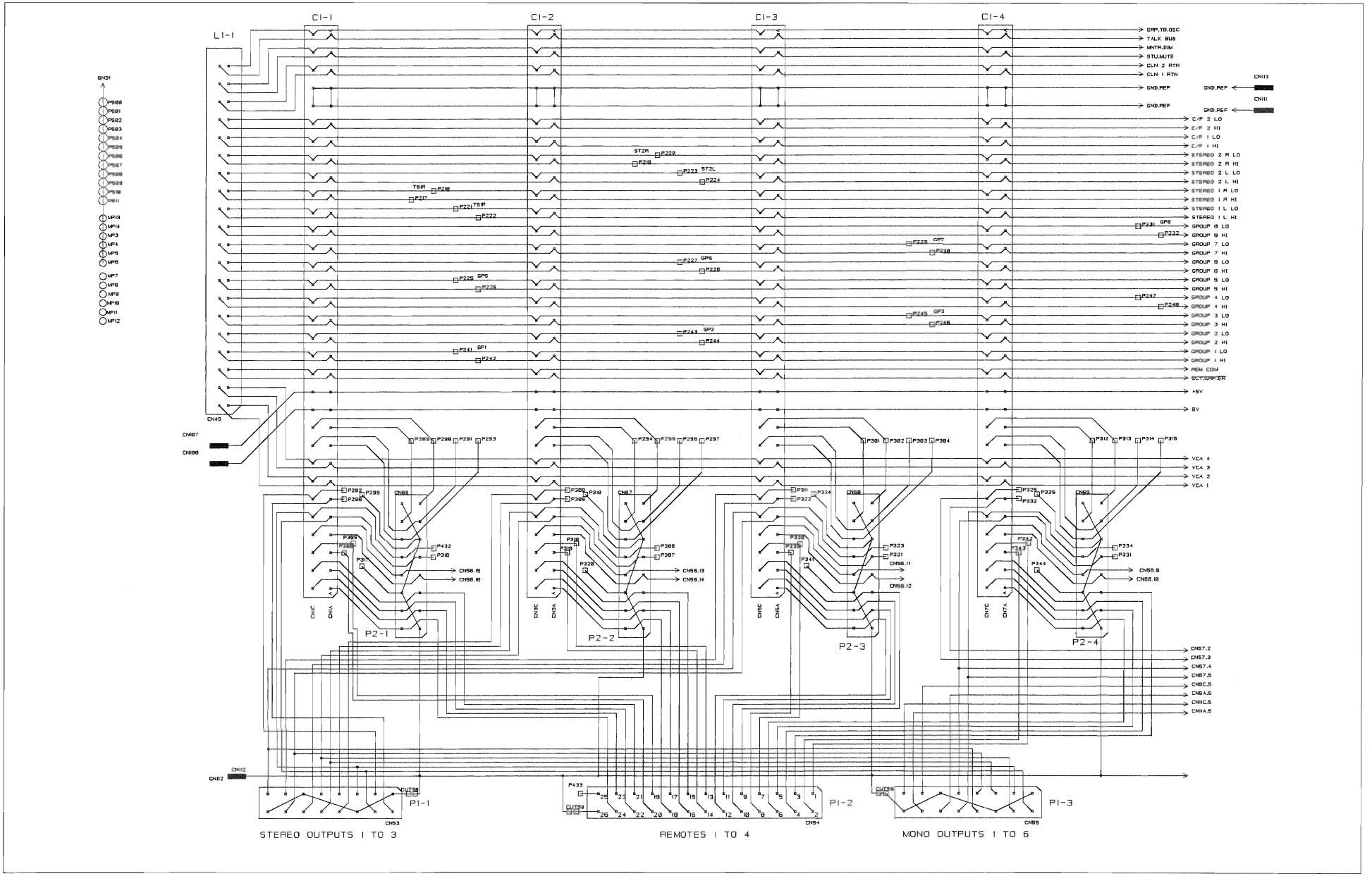
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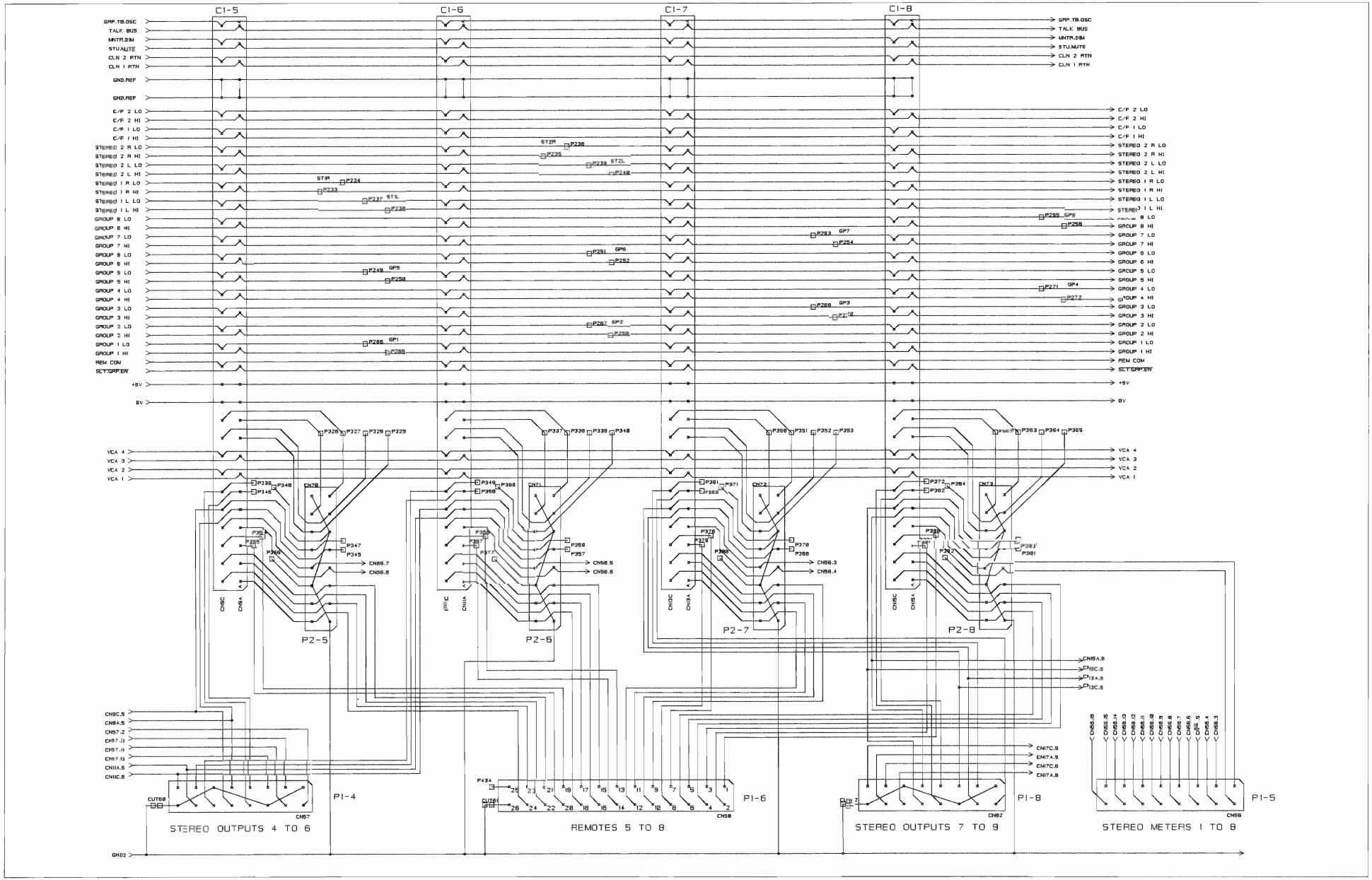
Änderung					③ ② ①
Ausgabe	6.11.96	R.	fa	M	⓪
	Datum	Gez.	Gepr.	Ges.	Index
Kopie für:					

STUDER REGENSDORF ZÜRICH | Benennung: Connector Board Studio 39 Pin | Nummer: 1.963.165-00

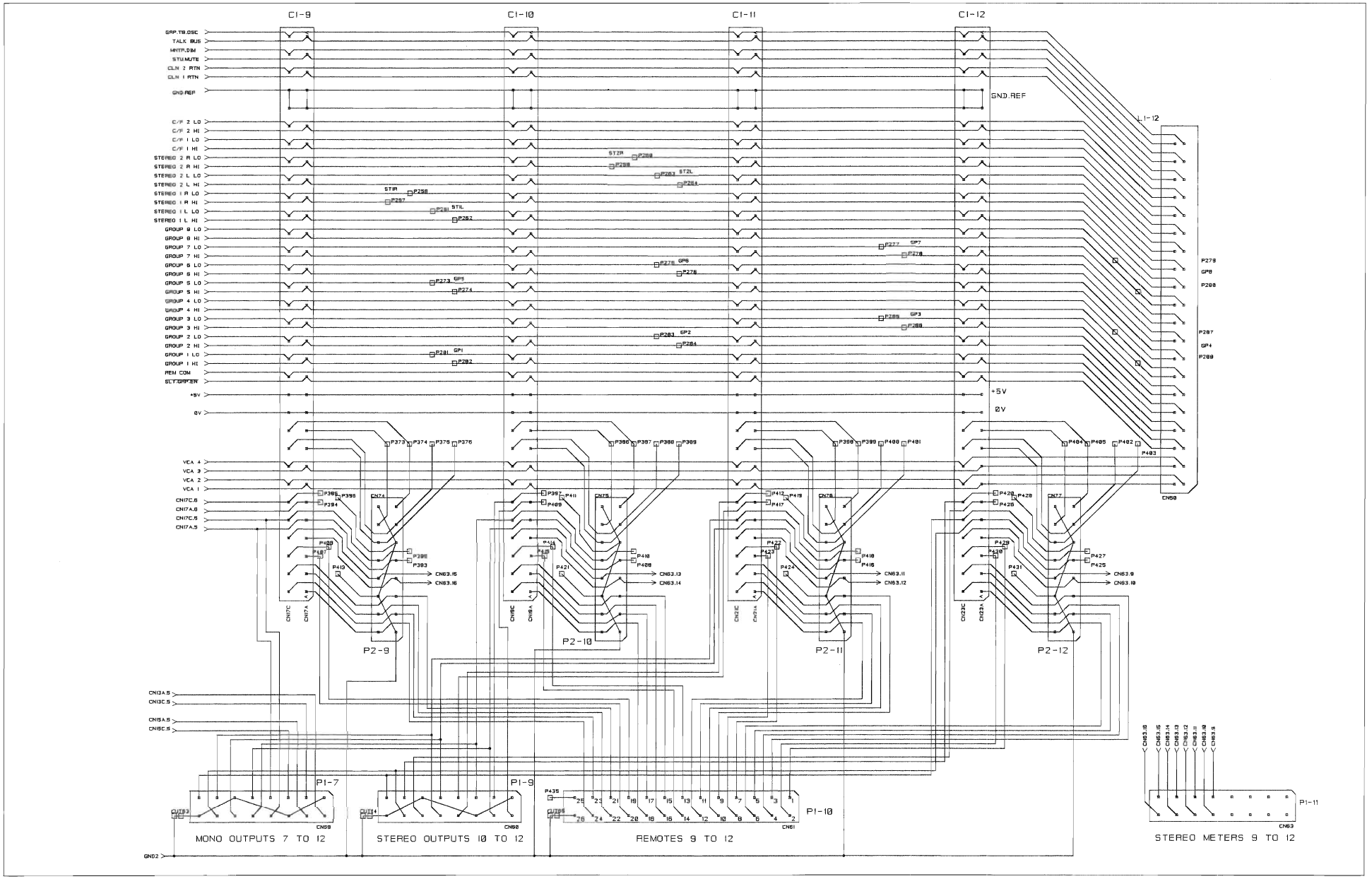
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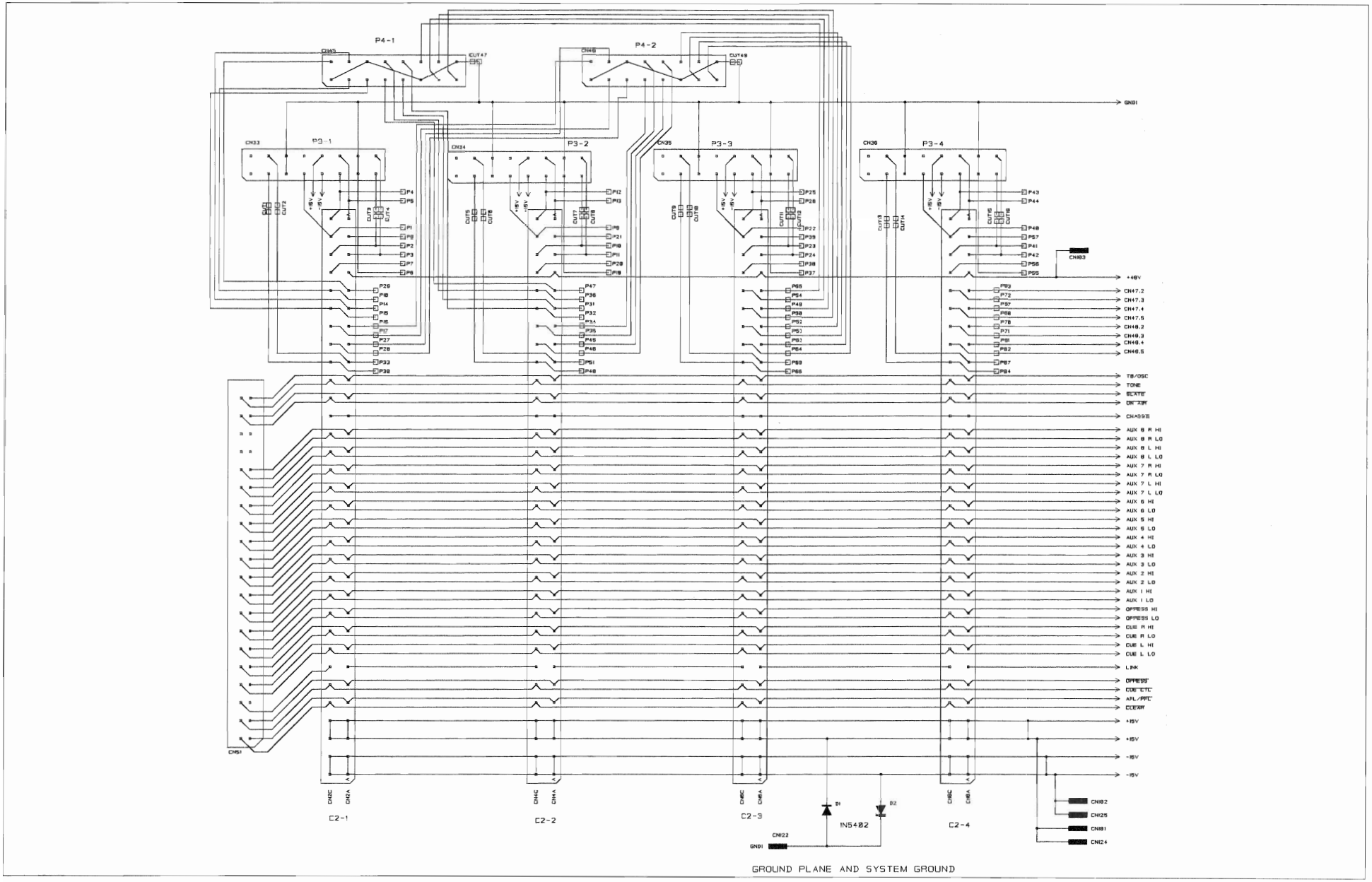
Main Bus Board 12A 1.928.800.00



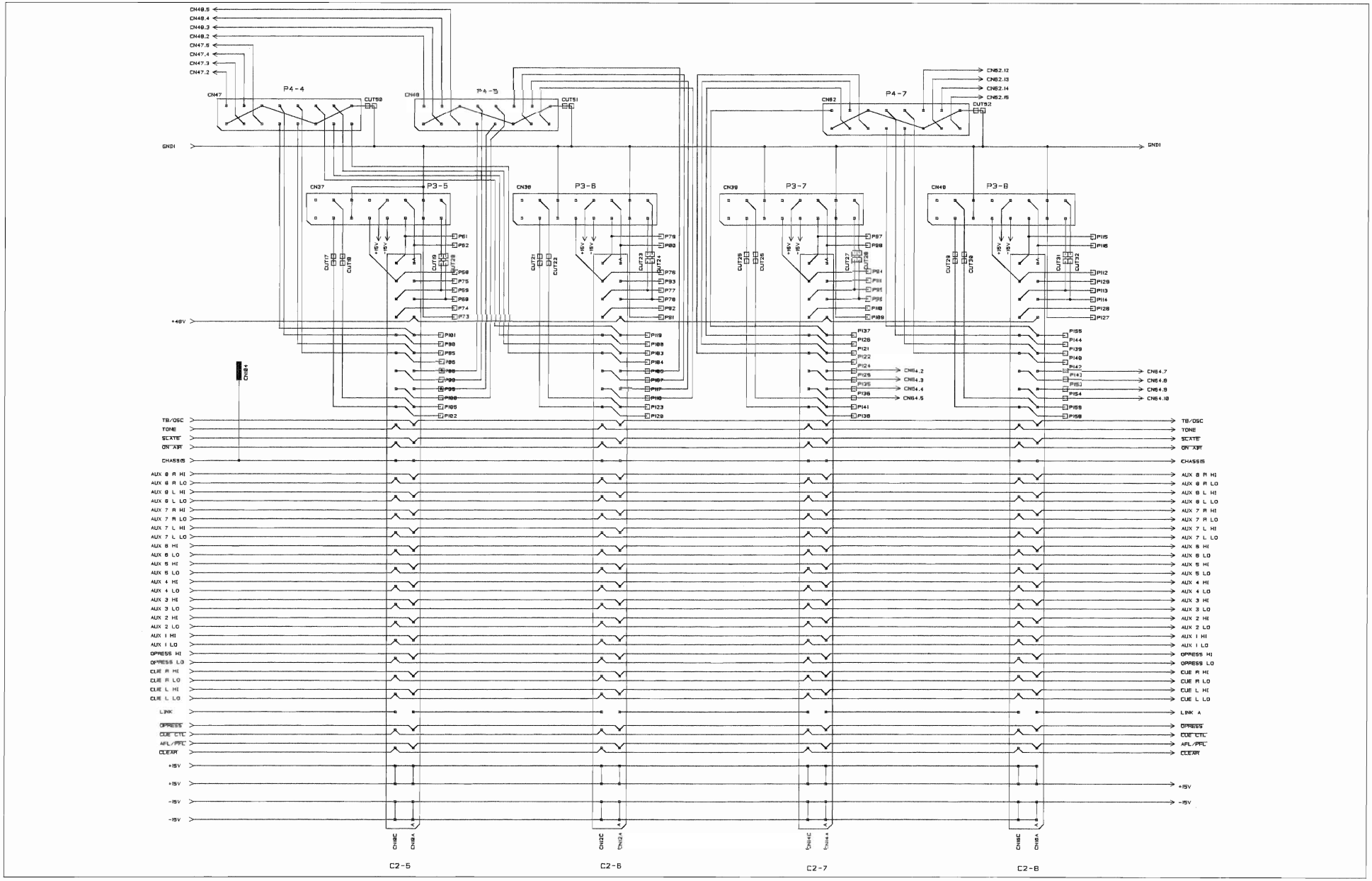
Main Bus Board 12A 1.928.800.00



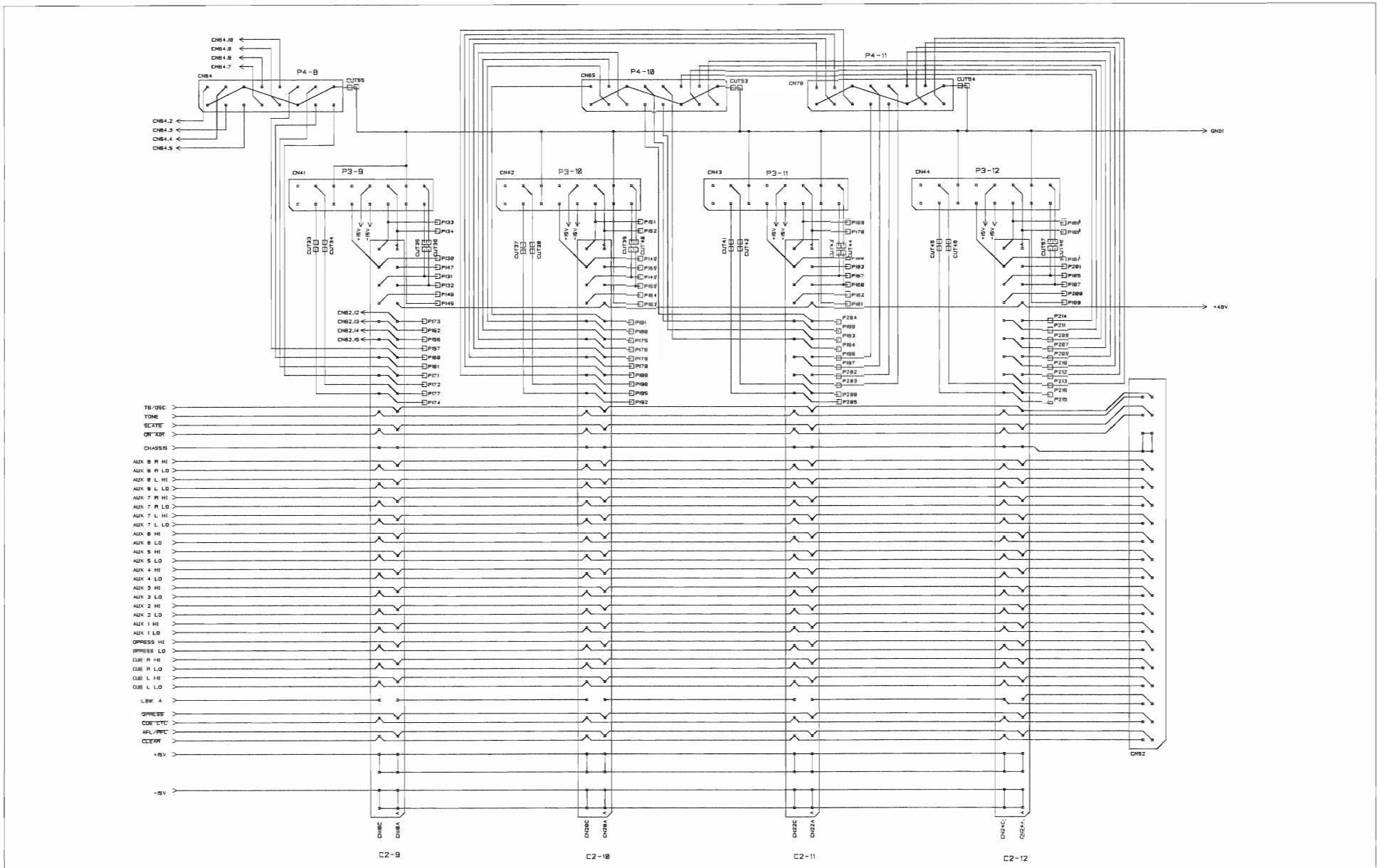
Main Bus Board 12A 1.928.800.00



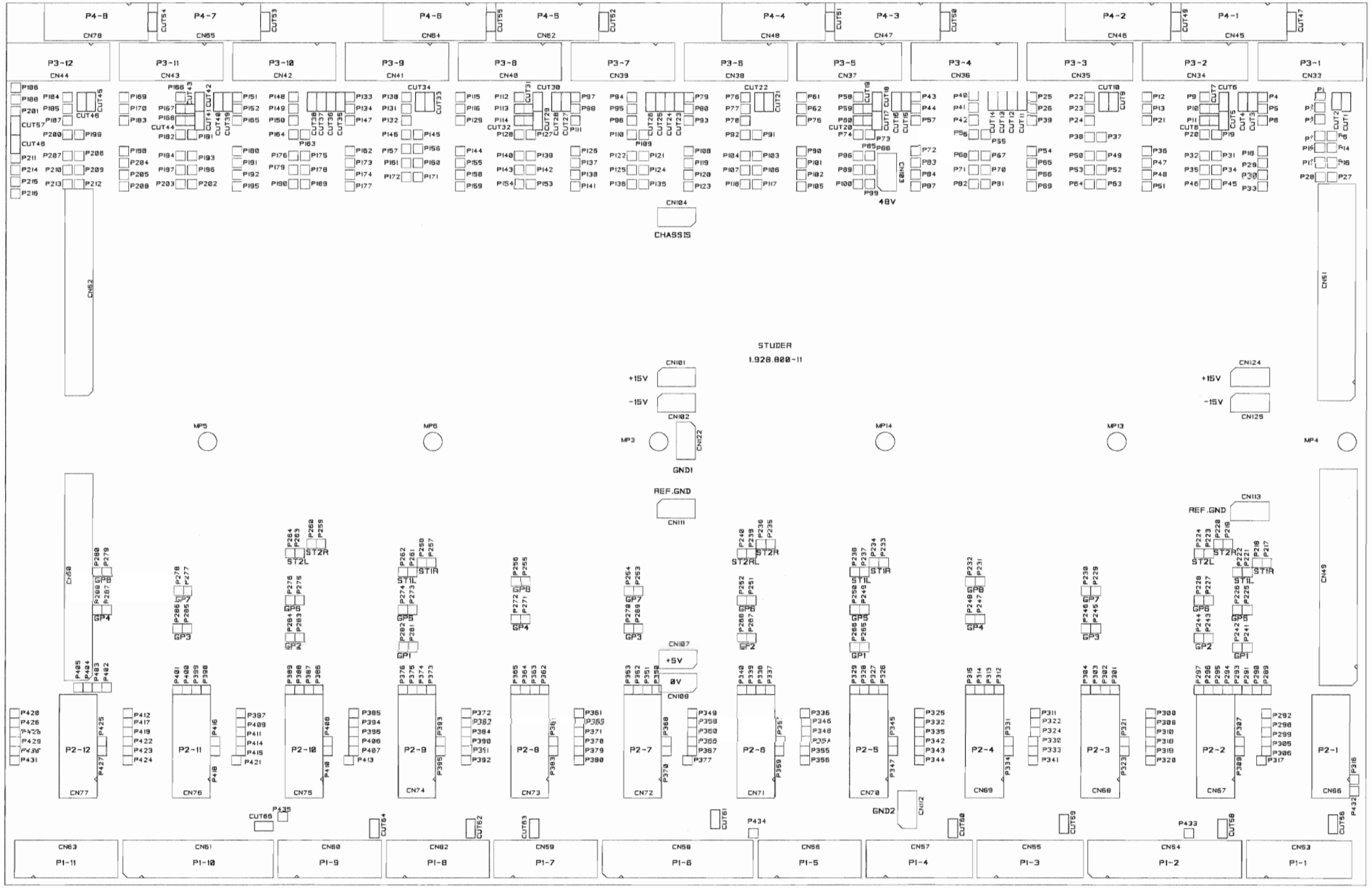
Main Bus Board 12A 1.928.800.00



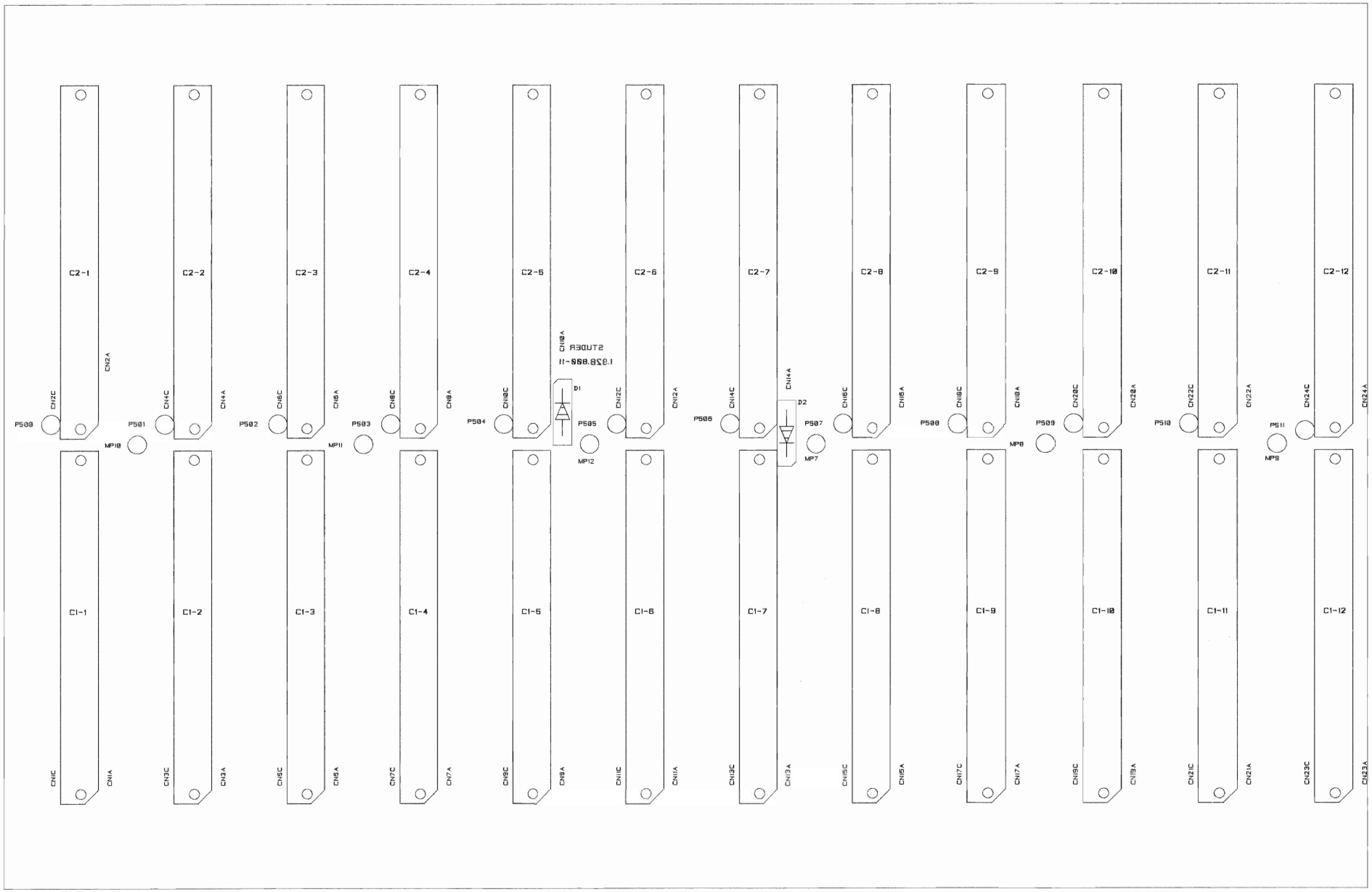
Main Bus Board 12A 1.928.800.00



Main Bus Board 12A 1.928.800.00



Main Bus Board 12A 1.928.800.00



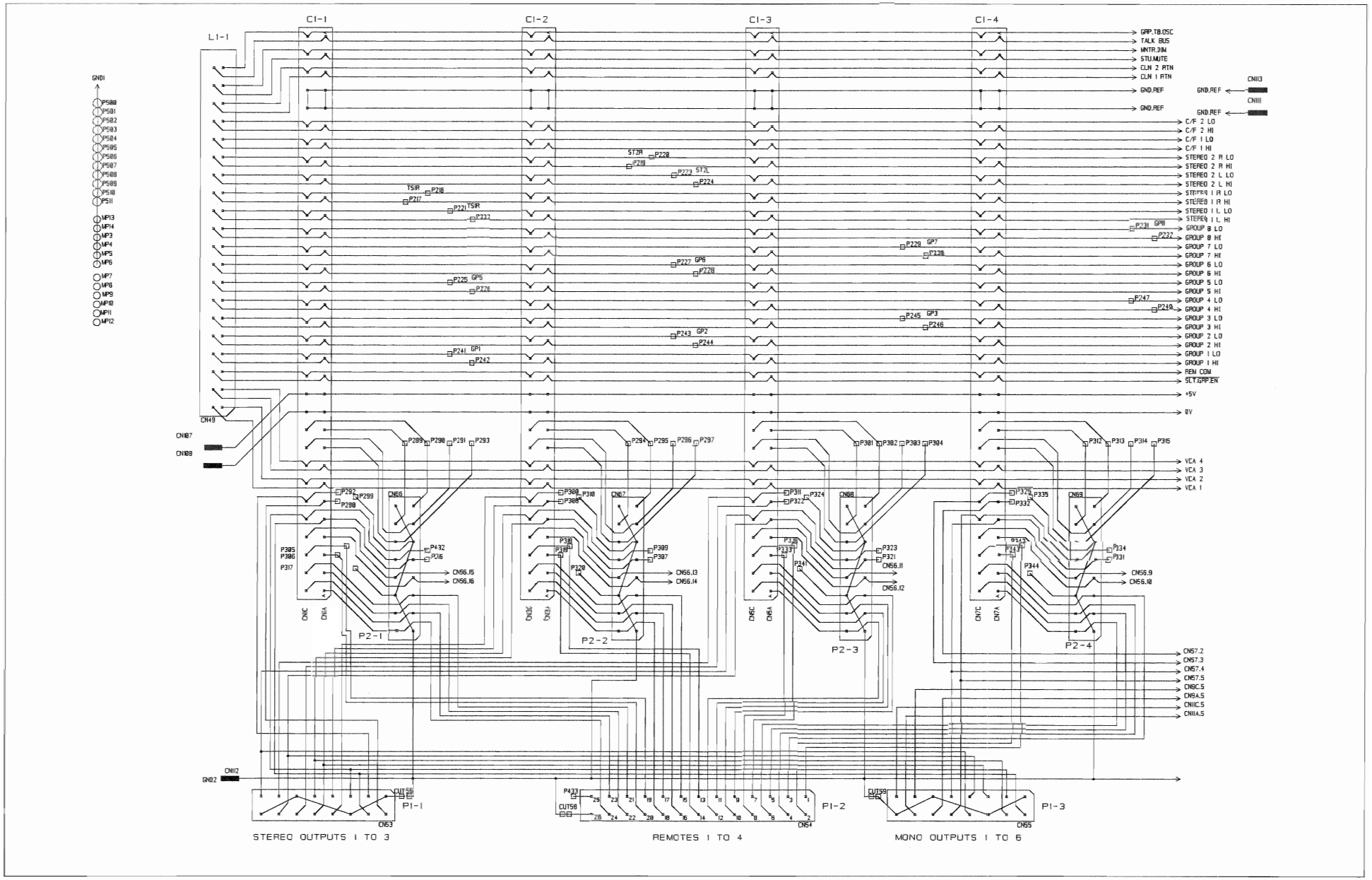
Main Bus Board 12A 1.928.800.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	CN 1	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 2	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 3	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 4	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 5	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 6	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 7	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 8	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 9	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 10	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 11	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 12	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 13	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 14	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 15	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 16	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 17	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 18	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 19	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 20	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 21	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 22	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 23	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 24	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 33	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 34	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 35	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 36	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 37	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 38	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 39	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 40	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 41	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 42	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 43	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 44	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 45	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 46	54.14.4016			P STECKER 16 P, AU, PRINT
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0	CN 54	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
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0	CN 58	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
0	CN 59	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 60	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 61	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
0	CN 62	54.14.4016			P STECKER 16 P, AU, PRINT
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0	CN 65	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 66	54.14.4016			P STECKER 16 P, AU, PRINT
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0	CN 78	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 82	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 101	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 102	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 103	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 104	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 107	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 108	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 111	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 112	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 113	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 122	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 124	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 125	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
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0	MP 1	1.928.800.11			Main Bus 12A PCB
0	MP 2	1.928.800.04			STUDER NR. ETIKETTE 10x20
0	MP 3	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 4	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 5	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 6	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 7	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 8	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 9	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 10	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 11	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 12	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 13	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 14	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 15	21.53.0280	24 pcs		Z - SCHR. IS , ZN , M2.5 * 8
0	MP 16	1.928.800.01	6 pcs		Befestigungswinkel
0	MP 17	1.928.800.93	12 pcs		LL-Main Bus Board 12A

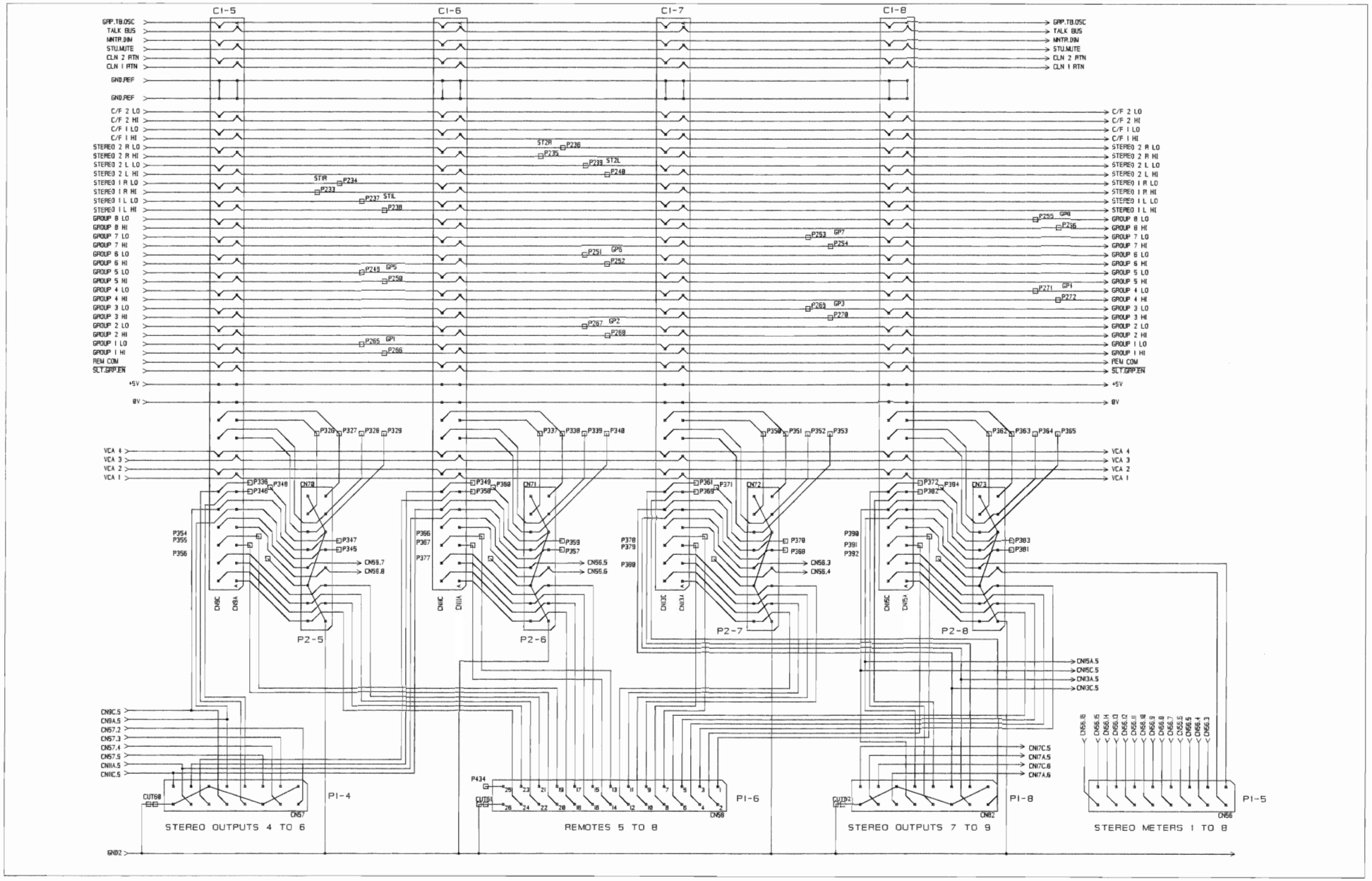
End of List

Comments

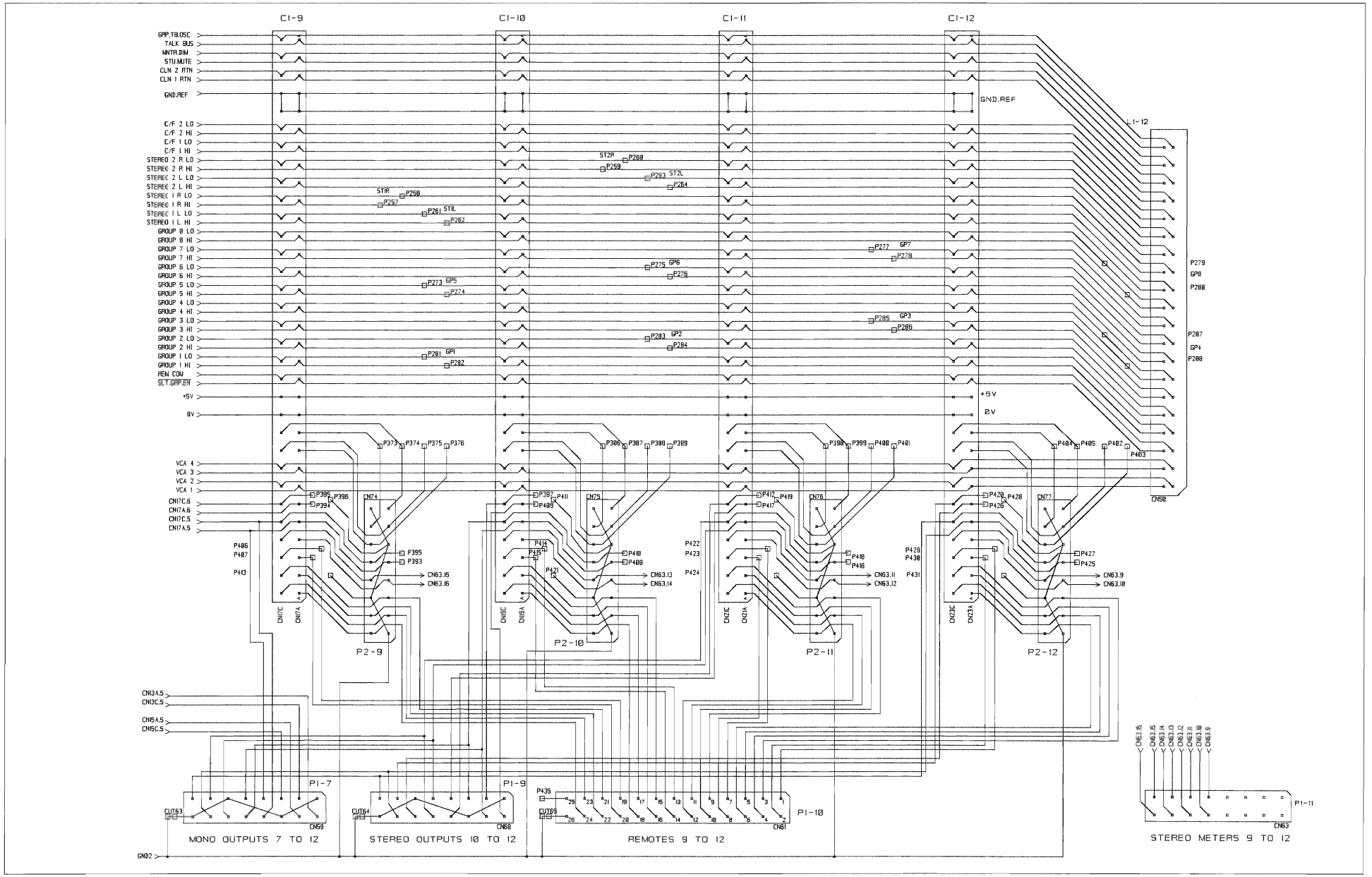
Main Bus Board 12A 1.928.800.81



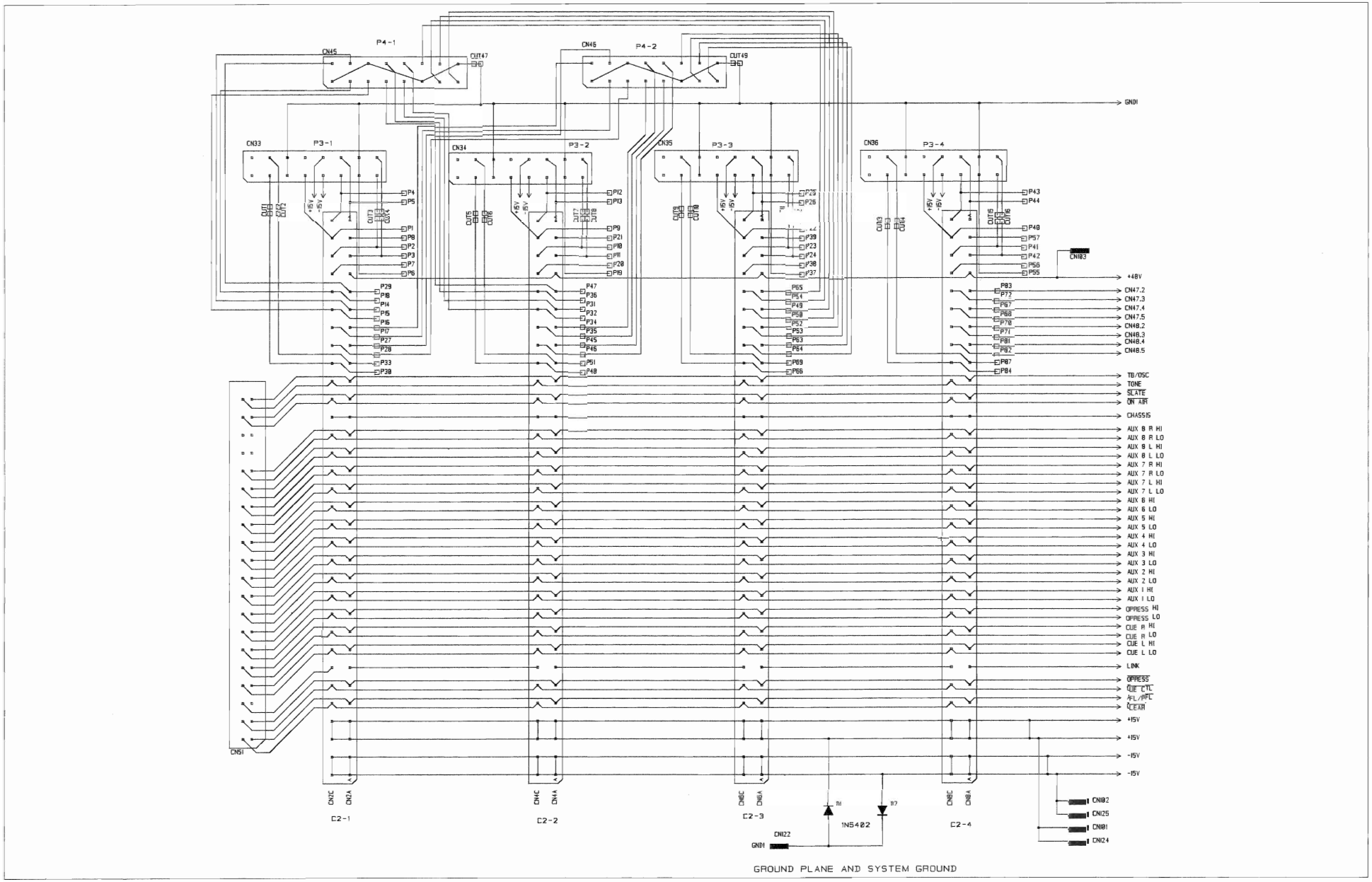
Main Bus Board 12A 1.928.800.81



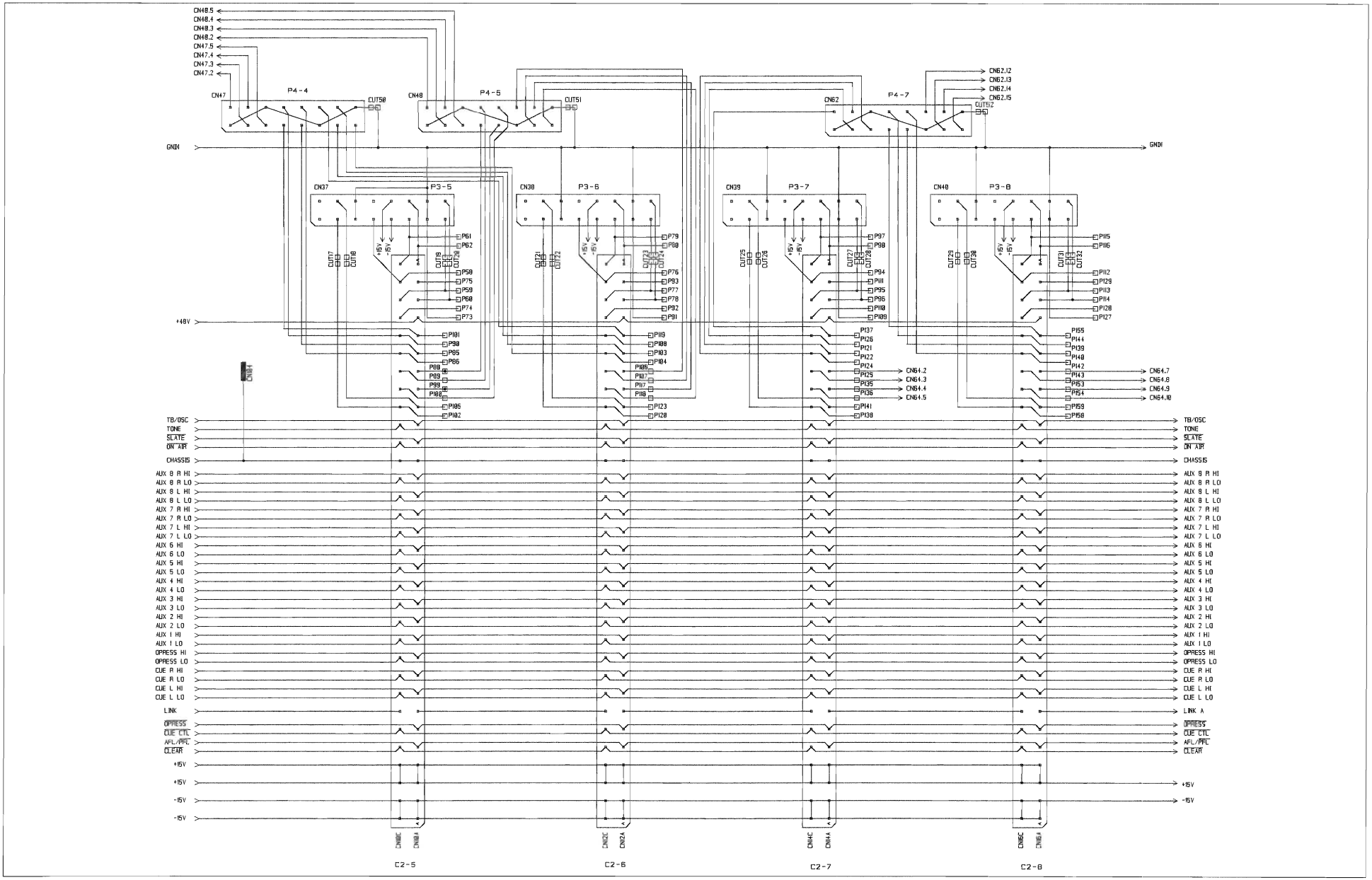
Main Bus Board 12A 1.928.800.81



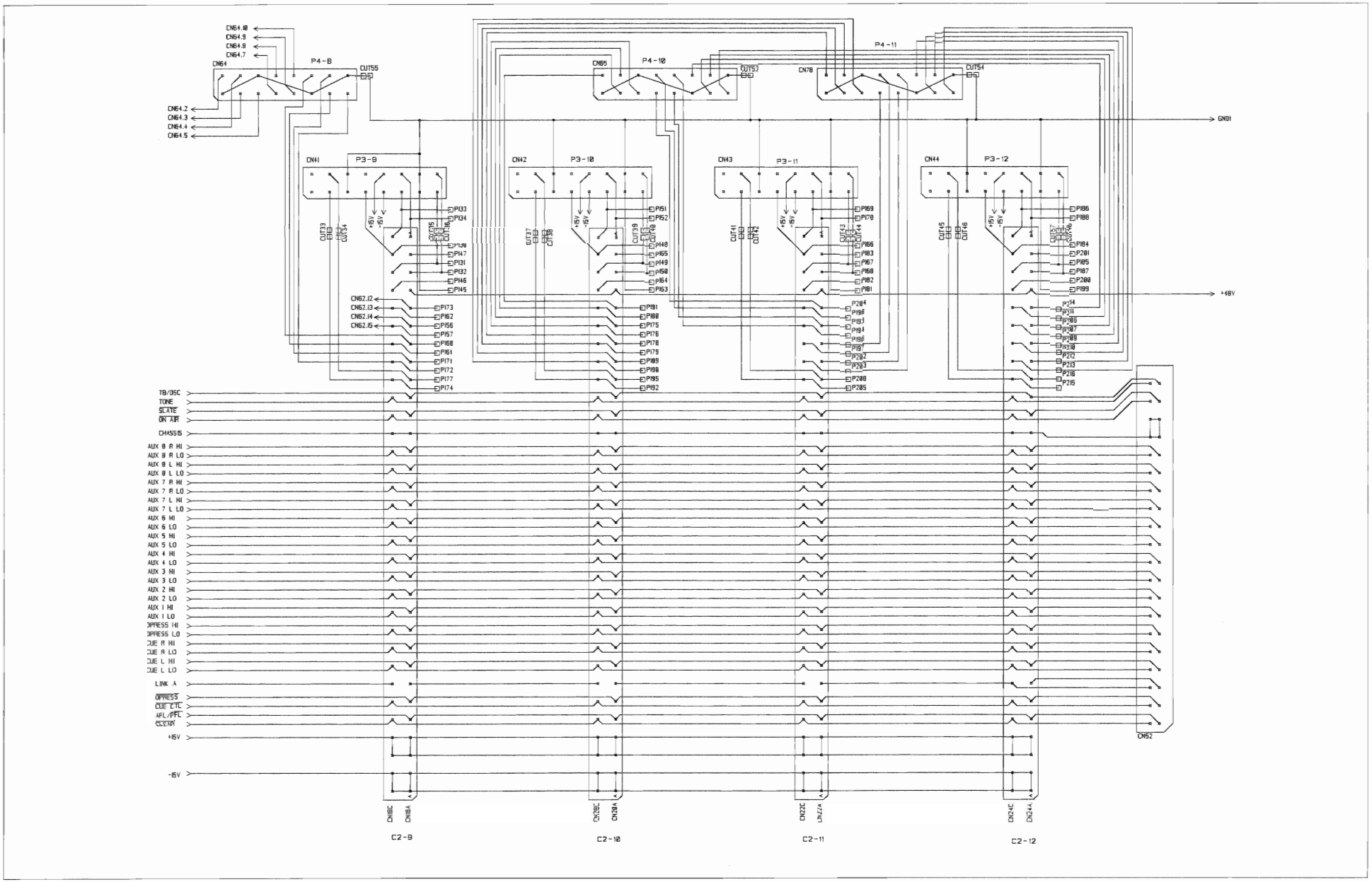
Main Bus Board 12A 1.928.800.81



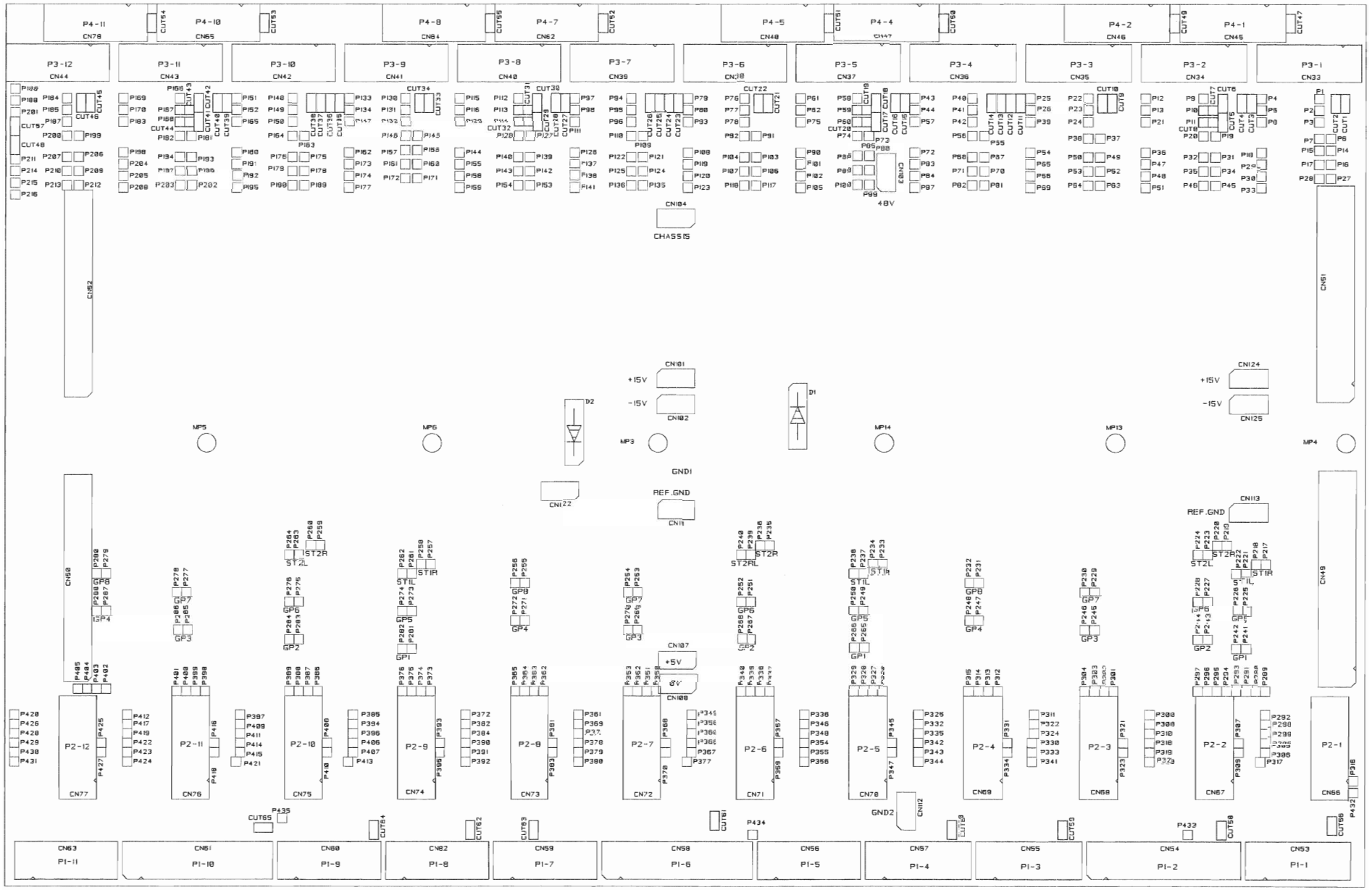
Main Bus Board 12A 1.928.800.81



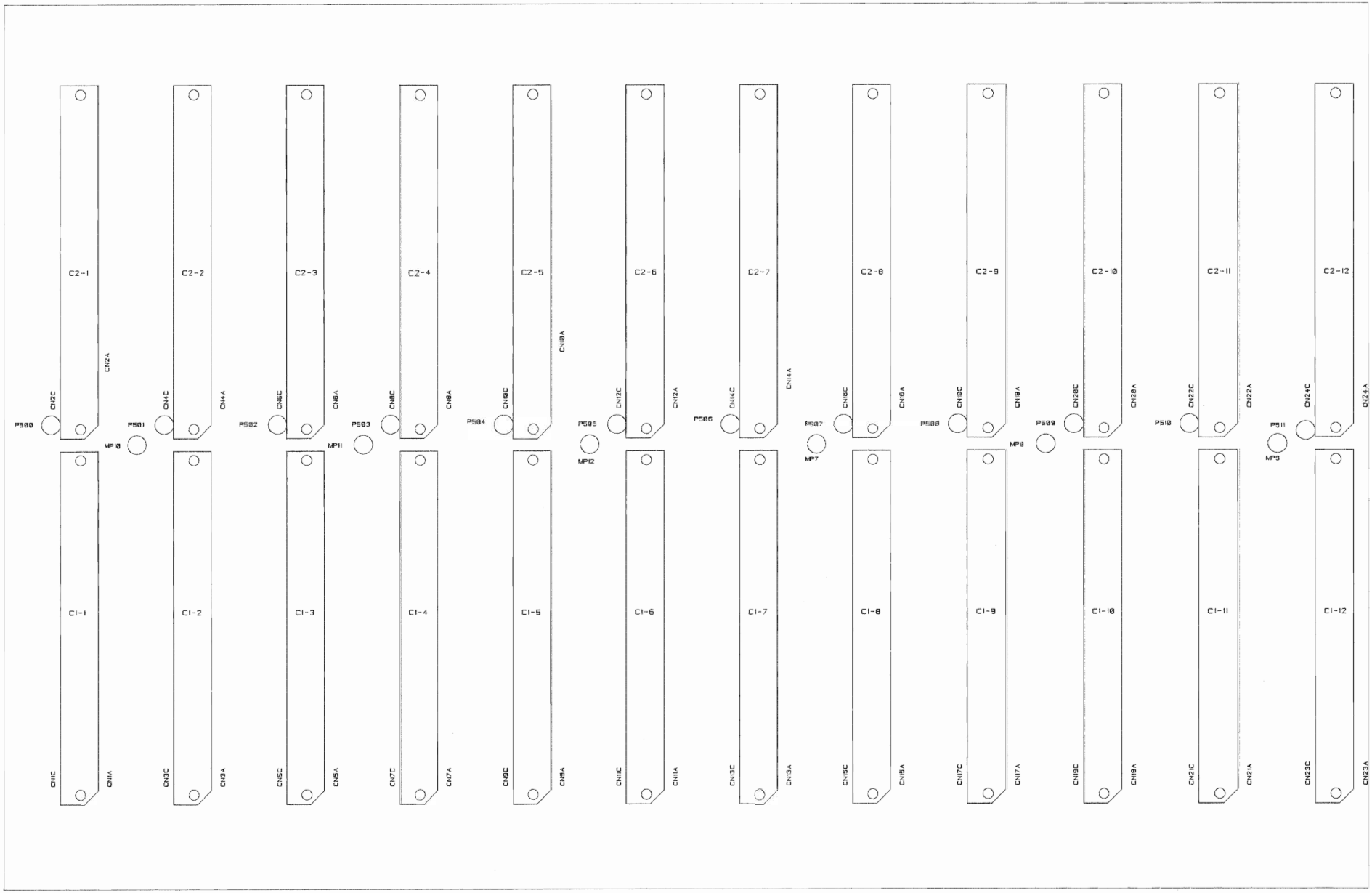
Main Bus Board 12A 1.928.800.81



Main Bus Board 12A 1.928.800.81



Main Bus Board 12A 1.928.800.81



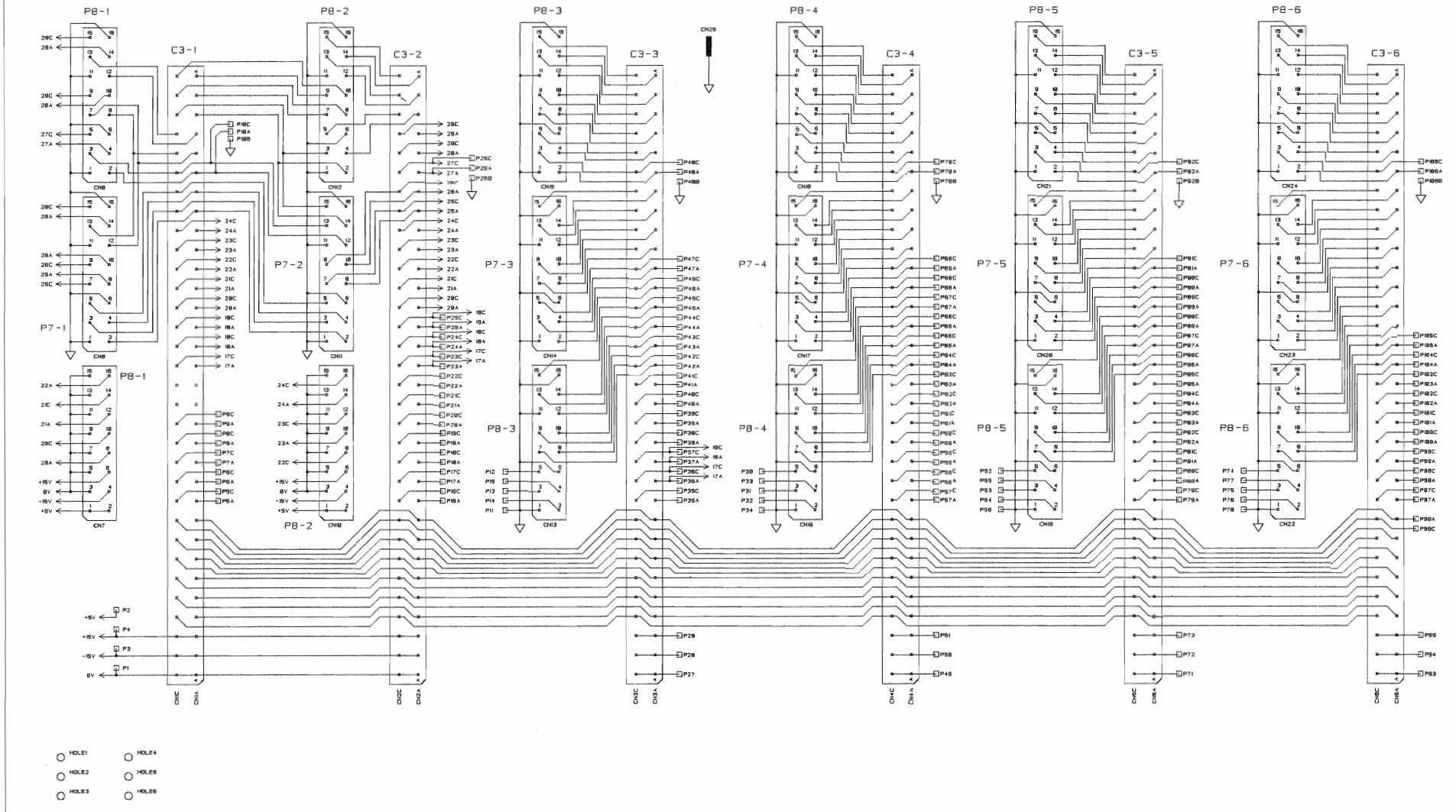
Main Bus Board 12A 1.928.800.81

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	CN 1	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 2	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 3	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 4	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 5	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 6	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 7	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 8	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 9	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 10	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 11	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 12	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 13	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 14	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 15	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 16	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 17	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 18	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 19	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 20	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 21	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 22	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 23	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 24	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 33	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 34	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 35	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 36	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 37	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 38	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 39	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 40	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 41	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 42	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 43	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 44	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 45	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 46	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 47	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 48	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 49	54.14.4040			P STECKER 40 P, AU, PRINT
0	CN 50	54.14.4040			P STECKER 40 P, AU, PRINT
0	CN 51	54.14.4040			P STECKER 40 P, AU, PRINT
0	CN 52	54.14.4040			P STECKER 40 P, AU, PRINT
0	CN 53	not used			P STECKER 16 P, AU, PRINT
0	CN 54	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
0	CN 55	not used			P STECKER 16 P, AU, PRINT
0	CN 56	not used			P STECKER 16 P, AU, PRINT
0	CN 57	not used			P STECKER 16 P, AU, PRINT
0	CN 58	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
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0	CN 60	not used			P STECKER 16 P, AU, PRINT
0	CN 61	54.14.4026		26-P	P STECKER 26 P, AU, PRINT
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0	CN 63	not used			P STECKER 16 P, AU, PRINT
0	CN 64	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 65	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 66	not used			P STECKER 16 P, AU, PRINT
0	CN 67	not used			P STECKER 16 P, AU, PRINT
0	CN 68	not used			P STECKER 16 P, AU, PRINT
0	CN 69	not used			P STECKER 16 P, AU, PRINT
0	CN 70	not used			P STECKER 16 P, AU, PRINT
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0	CN 77	not used			P STECKER 16 P, AU, PRINT
0	CN 78	54.14.4016			P STECKER 16 P, AU, PRINT
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0	CN 101	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 102	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 103	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 104	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 107	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 108	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 111	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 112	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 113	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 122	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 124	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	CN 125	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	D 1	50.04.0507		1N5402	D 1 N 5402,
0	D 2	50.04.0507		1N5402	D 1 N 5402,
0	MP 1	1.928.800.12			Main Bus 12A PCB
0	MP 2	1.928.800.04			STUDER NR. ETIKETTE 10x20
0	MP 3	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 4	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 5	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 6	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 7	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 8	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 9	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 10	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 11	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 12	1.010.016.22			NIETMUTTER SW 6 M 3 * 5
0	MP 13	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 14	1.010.054.22			NIETMUTTER, M 3 * 30.5
0	MP 15	21.53.0280	24 pcs		Z - SCHR. IS , ZN , M2.5 * 8
0	MP 16	1.928.800.01	6 pcs		Befestigungswinkel
0	MP 17	1.928.800.93	12 pcs		LL-Main Bus Board 12A

End of List

Comments

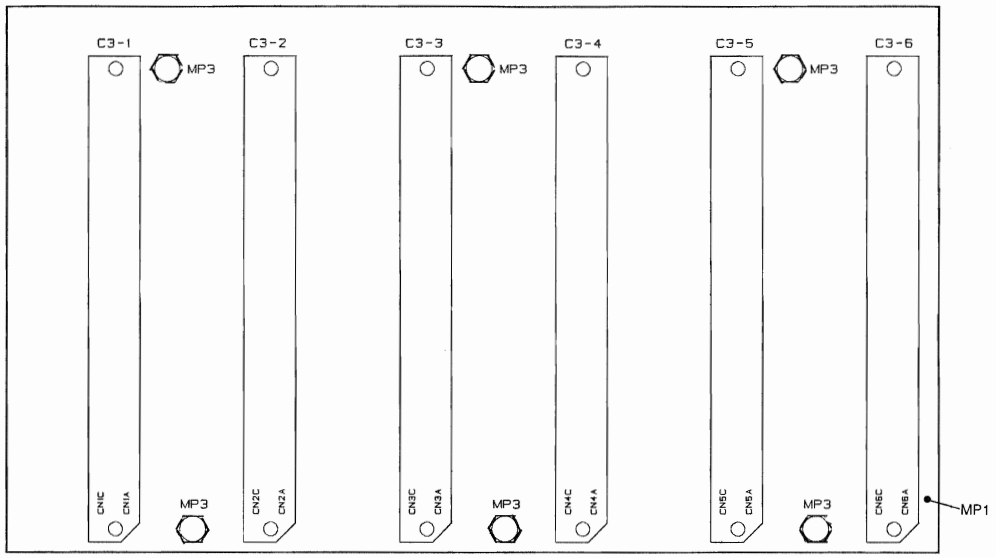
Monitor Bus Board 6A 1.928.810.00



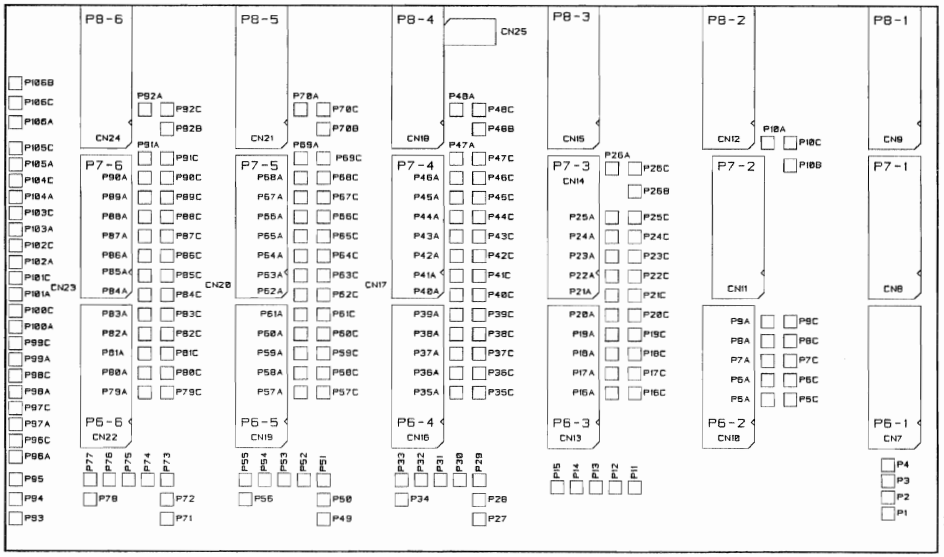
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STUDER	MONITOR BUS BOARD 6A	SC	1.928.810.00	

Monitor Bus Board 6A 1.928.810.00

Component side



Solder side



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	CN 1	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 2	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 3	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 4	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 5	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 6	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 7	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 8	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 9	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 10	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 11	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 12	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 13	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 14	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 15	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 16	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 17	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 18	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 19	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 20	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 21	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 22	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 23	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 24	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 25	54.02.0335		1p	P FLACH, 6.3*0,8, GERADE
0	MP 1	1.928.802.11	1 pce		Monitor Bus 6A PCB
0	MP 2	1.928.810.04	1 pce		STUDER NR. ETIKETTE 10x20
0	MP 3	1.010.016.22	6 pcs		NIETMUTTER SW 6 M 3 * 5

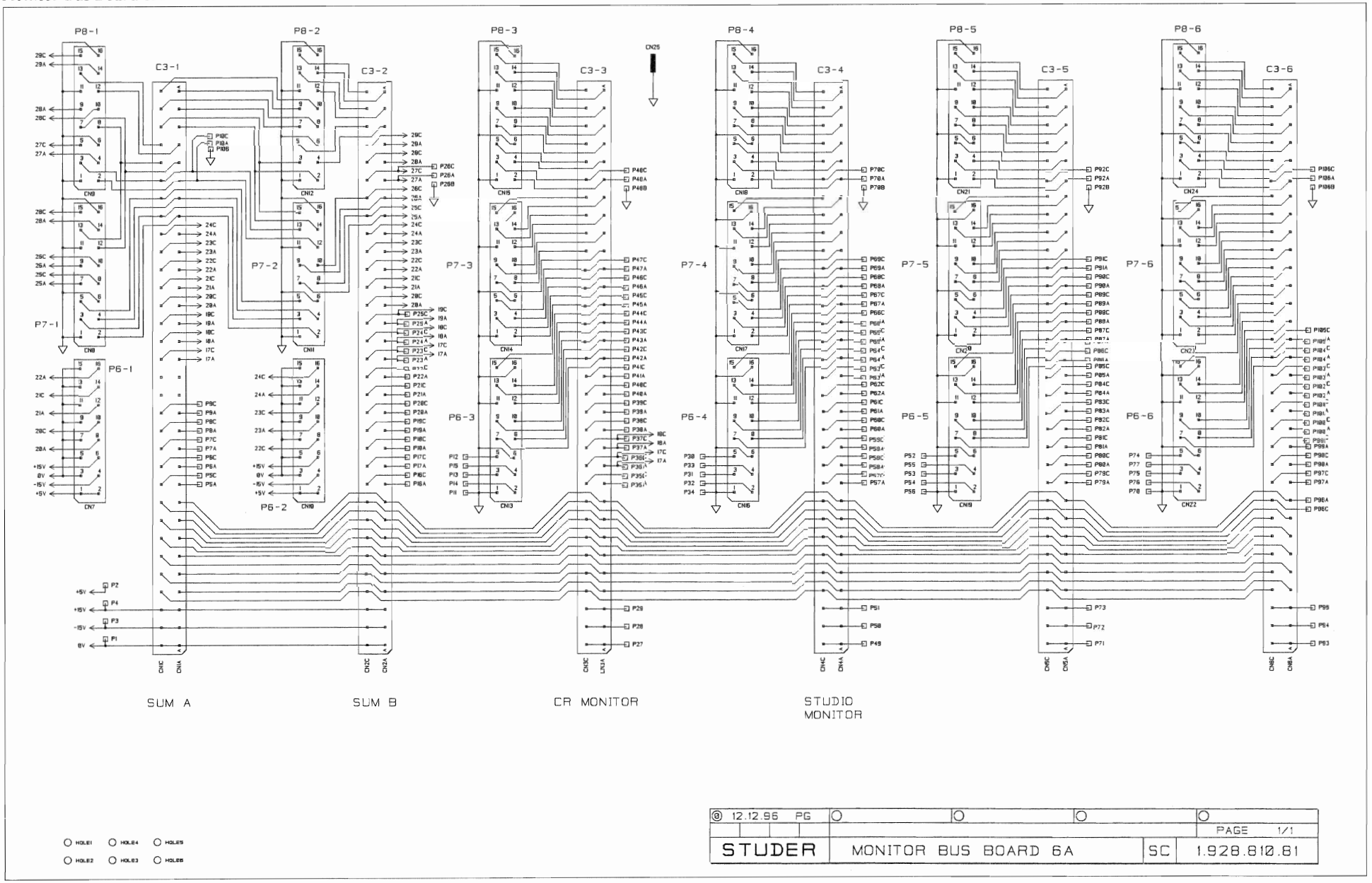
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Comments:

Edition Modification Ausgabe Änderung					
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	.	.	.	.	2
	.	.	.	.	1
Edition Ausgabe	Date Datum	Visa Kez.	Checked Kontr.	Seen Ges.	Index
	15.10.96	hm	HM	HM	0
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STUDER REGENSDORF | Description Benennung: Monitor Bus Board 6A | Number Nummer: 1.928.810.00

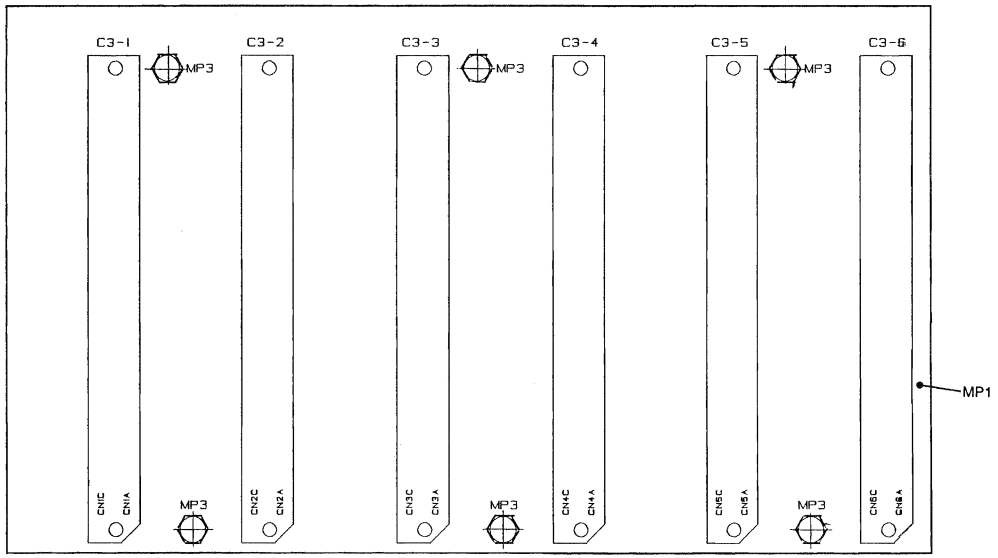
Monitor Bus Board 6A 1.928.810.81



12.12.96 PG					PAGE 1/1
STUDER	MONITOR BUS BOARD 6A			SC	1.928.810.81

Monitor Bus Board 6A 1.928.810.81

Component side

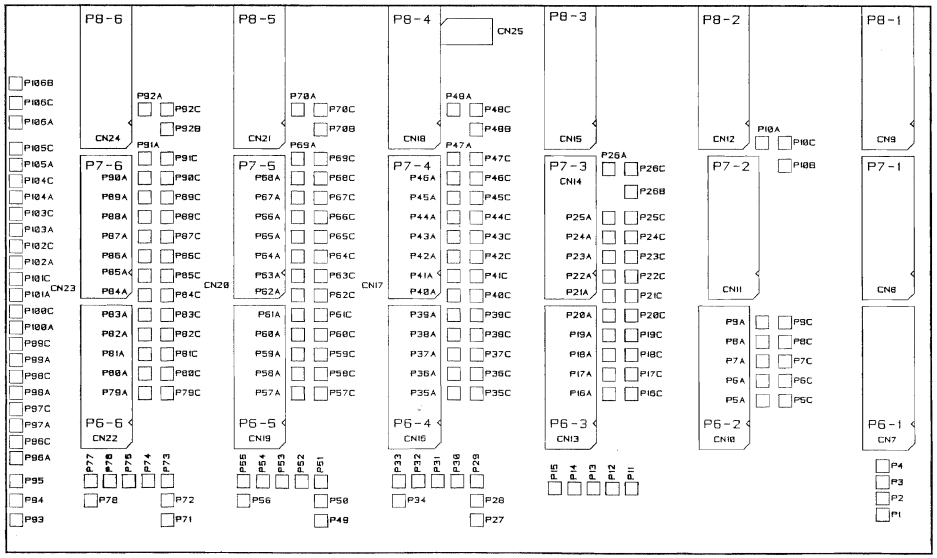


Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	CN 1	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 2	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 3	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 4	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 5	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 6	54.11.2202		64p	EU-C 2*32p, a,c Action
0	CN 7	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 8	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 9	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 10	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 11	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 12	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 13	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 14	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 15	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 16	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 17	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 18	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 19	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 20	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 21	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 22	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 23	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 24	54.14.4016			P STECKER 16 P, AU, PRINT
0	CN 25	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE
0	MP 1	1.928.802.12	1 pce		Monitor Bus 6A PCB
0	MP 2	1.928.810.04	1 pce		STUDER NR. ETIKETTE 10x20
0	MP 3	1.010.016.22	6 pcs		NIETMUTTER SW 6 M 3 * 5

End of List

Comments:

Solder side



Modification Änderung	.	.	.	.	3
	.	.	.	.	2
	.	.	.	.	1
Section Abteilung	Date Datum	Visa Ges.	Checked Gepr.	Seen Ges.	Index
	12.12.96	hm	HM	HM	0
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STUDER REGENSDORF Description Benennung: Monitor Bus Board 6A Number: 1.928.810.81

CIRCUIT DIAGRAMS

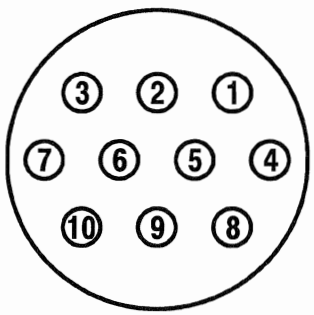
Power Supply Units

Assembly	Assembly No.
* Power Supply Unit, 5 A (no diagrams available)	1.918.210.00
* Power Supply Unit, 6 A (no diagrams available)	1.918.210.81
* Power Supply Unit, 5 A, with Alarm (no diagrams available)	1.918.211.00
* Power Supply Unit, 6 A, with Alarm (no diagrams available)	1.918.211.81
* **Note:** The switched power supply units from external manufacturers cannot be serviced in the field – please ship them to your nearest Studer Representative for repair or replacement.	

Assembly	Assembly No.	Circuit Diagram	Component Layout	Parts List
Power Supply Unit	1.918.213.00	-	1.918.213.00	1.918.213.00
Subboard for PSU (1.918.213.00)	1.918.214.00	1.918.214.00	1.918.214.00	1.918.214.00
Power Supply Unit, 6 A (9 A), with Alarm	1.918.215.00	1.918.215.00	-	-
Subboard for PSU (1.918.215.00)	1.918.216.00	1.918.216.00	1.918.216.81	1.918.216.00
Power Supply Unit, 6 A (9 A), with Alarm	1.918.215.81	1.918.215.81	-	-
Subboard for PSU (1.918.215.81)	1.918.216.81	1.918.216.81	1.918.216.81	1.918.216.00
Power Supply Cable for 928	* 1.925.20x.81	-	* 1.925.20x.81	-
Power Supply Link Cable for 928	1.925.220.81	-	1.925.220.81	-
Power Supply Cable for 928, Dual	** 1.925.21y.81	-	** 1.925.21y.81	-

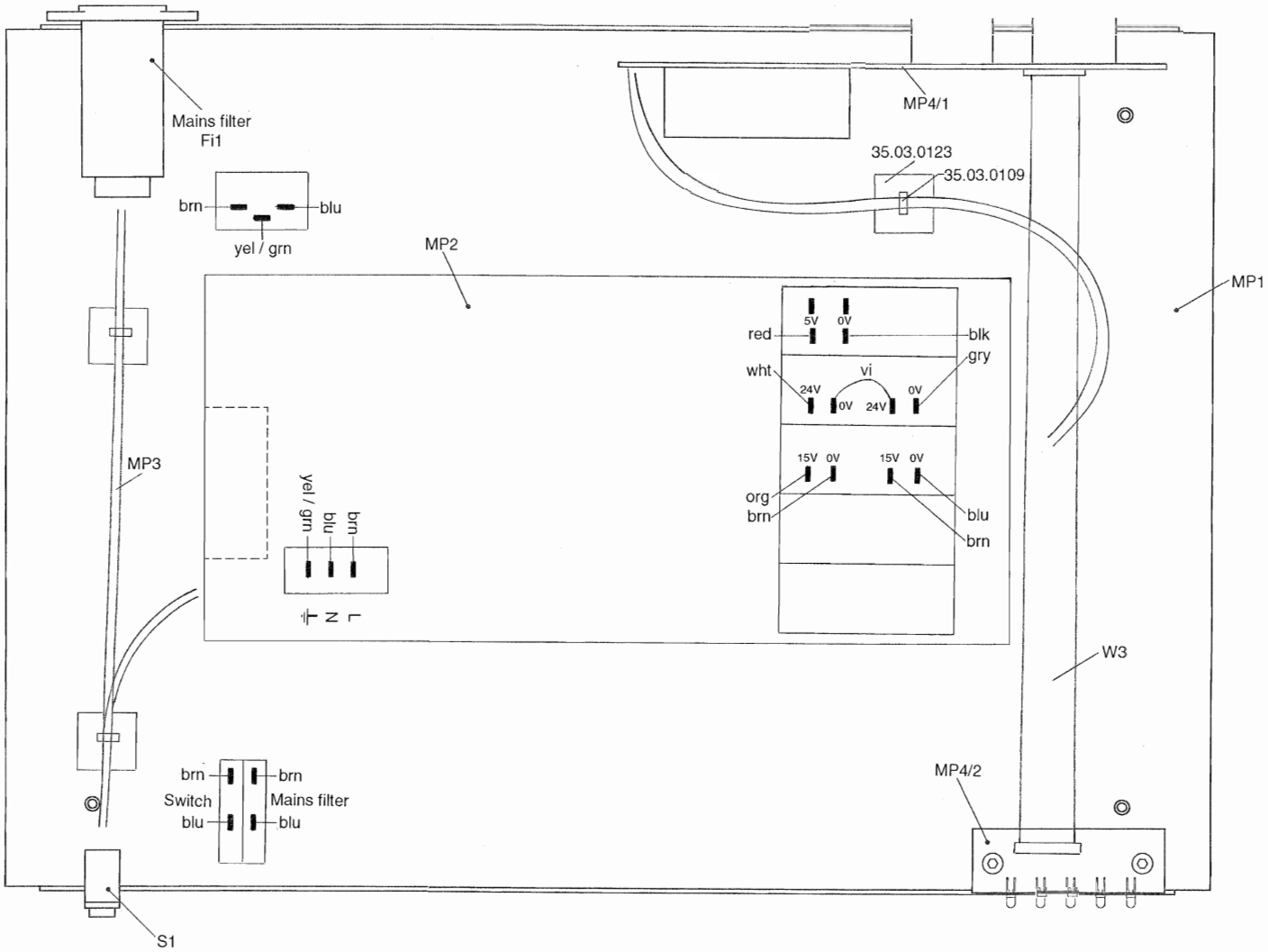
* x =	Length [m]	** y =	Length [m]
3	3	3	3
5	5	5	5
7	10	7	10
8	12	8	15

Connector Pin Assignments: (valid for both CONSOLE and LINK connectors)



Pin	Assembly				
	1.918.210.00 1.918.210.81	1.918.211.00 1.918.211.81	1.918.213.00	1.918.215.00	1.918.215.81
1	+15 V	+15 V	+15 V	+15 V	+15 V
2	+5 V	+5 V	+5 V	+5 V	+5 V
3	–15 V	–15 V	–15 V	–15 V	–15 V
4	Chassis	Chassis	Chassis	Chassis	Chassis
5	Common earth	Common earth	Common earth	Common earth	+15 V
6	not used	not used	not used	not used	–15 V
7	Common earth	Common earth	Common earth	Common earth	Common earth
8	not used	Alarm	Alarm	Alarm	Alarm
9	Common earth	Common earth	Common earth	Common earth	Common earth
10	+48 V	+48 V	+48 V	+48 V	+48 V

Studer PSU 1.918.213.00



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Fi 1	89.01.4104		4A	Netzfilter, 2kV
0	MP 1	1.918.213.01	1 pce		19" Gehaeuse.Nacharbeit
0	MP 2	89.20.2007	1 pce	5/2*15/2*24	Power Supply 400W
0	MP 3	1.918.213.93	1 pce		LL Studer PSU
0	MP 4	1.918.214.00	1 pce		SUBBOARD FOR PSU
0	MP 5	not used	1 pce		VENTILATOR 12 V / 6 W
0	MP 6	33.04.0116	4 pcs		GERAETEFUSS SW, D 21 * 8.0
0	MP 7	1.918.213.10	1 pce		Typenschild
0	MP 8	1.918.213.02	1 pce		Beschriftungsstreifen
0	MP 9	1.918.213.03	1 pce		Schild
0	MP 10	1.010.025.21	4 pcs		LINSENSCHRAUBE M 3 X 6
0	MP 11	21.99.0175	2 pcs		S - SCHR. IS ,SWOX, M 3 * 6
0	MP 12	21.53.9354	2 pcs	M3*6	Z-Schraube Inbus-Ripp Zn gb ch
0	MP 13	1.010.021.27	2 pcs		MUTTERBOLZEN M 3 * 10
0	MP 14	1.010.042.21	8 pcs		LS-SCHR IS SW M 4 * 6
0	MP 15	24.16.1040	4 pcs		RIPPENSCHEIBE D 4.3/ 7
0	MP 16	24.16.1030	4 pcs		RIPPENSCHEIBE D 3.2/5.5
0	MP 17	35.03.0109	3 pcs		BEFESTIGUNGSRIEMEN 2.5 * 92
0	MP 18	35.03.0123	3 pcs		SOCKEL ZU BEFESTIGUNGSRIEMEN
0	S 1	55.12.0001			S SCHIEBE, 2*A, NETZ

End of List

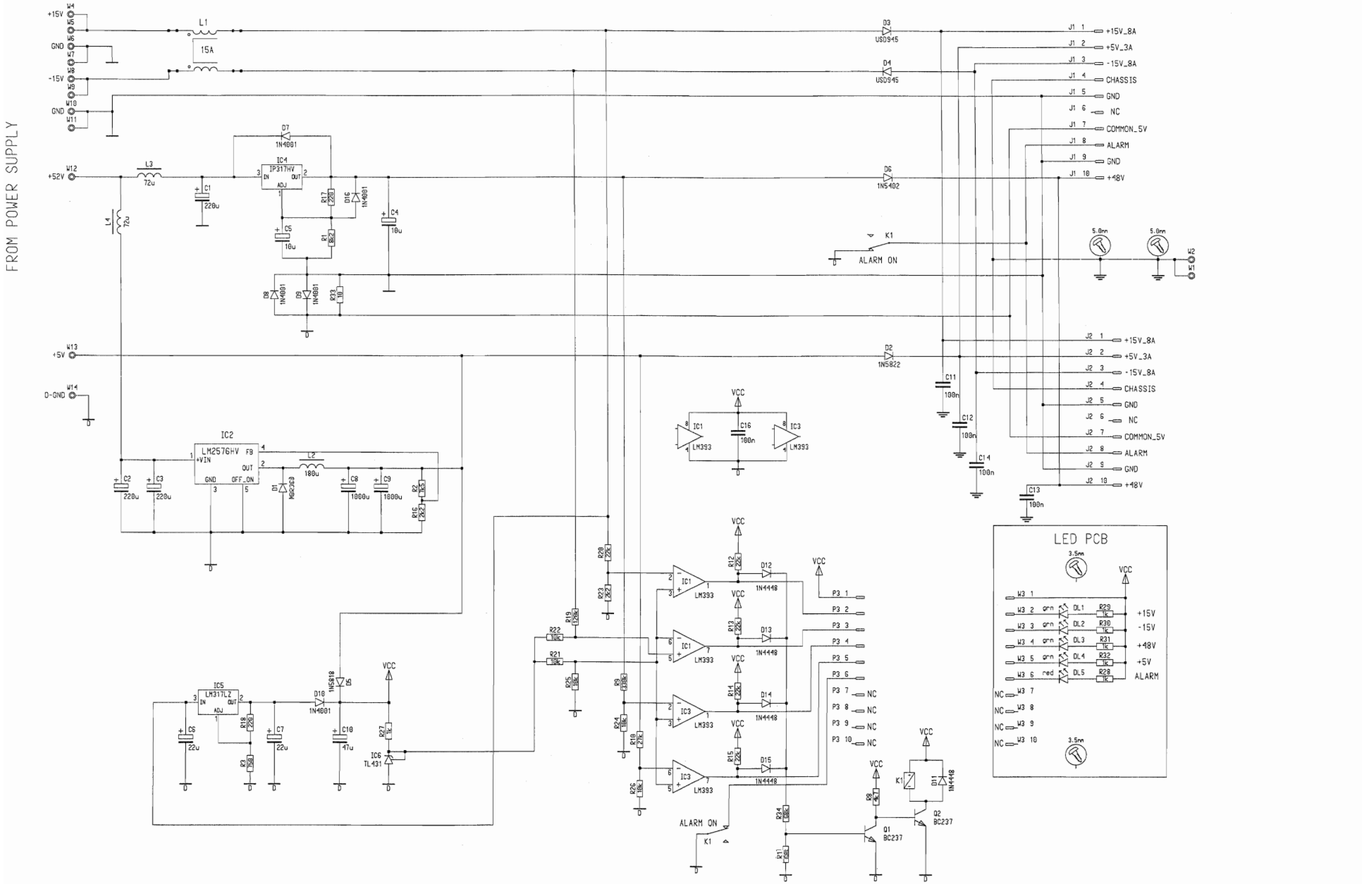
Comments

Modification / Änderung					
Date / Datum	Visa / Gez.	Checked / Gepr.	Seen / Ges.	Index	
05.9.97	WR			0	

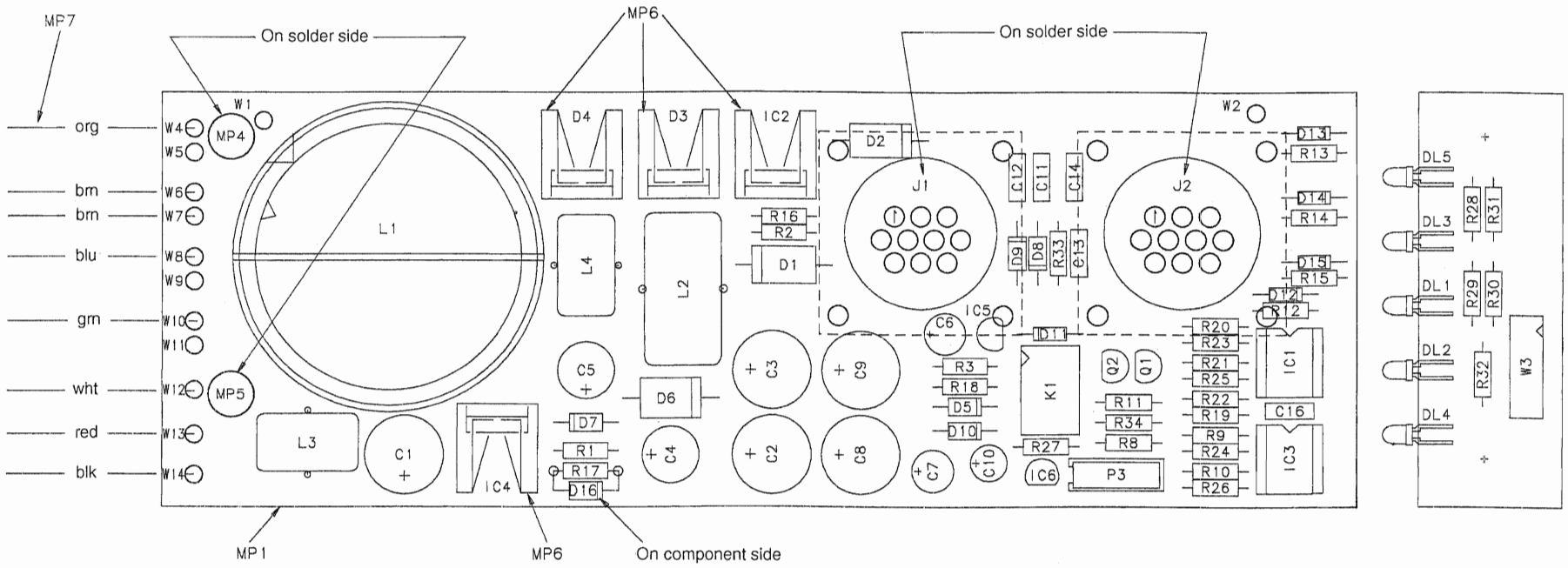
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STUDER REGENSDORF — Studer PSU — Number / Nummer: 1.918.213.00

Subboard for PSU 1.918.214.00



Subboard for PSU 1.918.214.00



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.8221		220u	EL 63V, 20%, RM5
0	C 2	not used		220u	EL 63V, 20%, RM5
0	C 3	not used		220u	EL 63V, 20%, RM5
0	C 4	59.22.8100		10u	EL 63V, 20%, RM5
0	C 5	59.22.8100		10u	EL 63V, 20%, RM5
0	C 6	59.22.6220		22u	EL 35V, 20%, RM5
0	C 7	59.22.6220		22u	EL 35V, 20%, RM5
0	C 8	not used		1m	EL 16V, 20%, RM5
0	C 9	not used		1m	EL 16V, 20%, RM5
0	C 10	59.22.3470		47u	EL 10V, 20%, RM5
0	C 11	59.05.0104		100n	PETP, 63V, 10%, RM5
0	C 12	59.05.0104		100n	PETP, 63V, 10%, RM5
0	C 13	59.05.0104		100n	PETP, 63V, 10%, RM5
0	C 14	59.05.0104		100n	PETP, 63V, 10%, RM5
0	C 16	59.05.0104		100n	PETP, 63V, 10%, RM5
0	D 1	not used		MBR360	D MBR 360, SB 360, 31 DQ 06,
0	D 2	50.04.0519		1N5822	3A, Schottky
0	D 3	50.04.0516		USD945	D USD 945,
0	D 4	50.04.0516		USD945	D USD 945,
0	D 5	50.04.0512		1N5818	D 1N 5818, 1N 5819,
0	D 6	50.04.0507		1N5402	D 1 N 5402,
0	D 7	50.04.0122		1N4001	1A, DO 41
0	D 8	50.04.0122		1N4001	1A, DO 41
0	D 9	50.04.0122		1N4001	1A, DO 41
0	D 10	50.04.0122		1N4001	1A, DO 41
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	50.04.0122		1N4001	1A, DO 41
0	DL 1	50.04.2206		934GT	LED 3mm green
0	DL 2	50.04.2206		934GT	LED 3mm green
0	DL 3	50.04.2206		934GT	LED 3mm green

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	DL 4	50.04.2206		934GT	LED 3mm green
0	DL 5	50.04.2204		934ID	LED 3mm red
0	IC 1	50.05.0283		LM393	Dual Comparator
0	IC 2	not used		LM2576HV-A	1.23V...57V, 3A Switching Reg
0	IC 3	50.05.0283		LM393	Dual Comparator
0	IC 4	50.10.0116		LM317HV	IC IP 317 HVT, LM 317 HVT
0	IC 5	50.10.0108		LM317L	IC LM 317 LZ,
0	IC 6	50.10.0106		TL431	IC TL 431 CLP,
0	K 1	56.04.0198		2u	5V, 125V/2A, AG/AU
0	L 1	62.03.0115		1.0uH	15A Toroid Chocke compensated
0	L 2	not used		180uH	3A Toroid Chocke
0	L 3	62.03.0015		72uH	2A Toroid Chocke
0	L 4	not used		72uH	2A Toroid Chocke
0	MP 1	1.918.214.11	1 pce		SUB PCB FOR PSU
0	MP 2	1.918.214.10	1 pce		Nr.-Etikette 5x20
0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD
0	MP 4	1.010.018.22	1 pce	3*12	NIETMUTTER SW 6 M 3 * 12
0	MP 5	1.010.018.22	1 pce	3*12	NIETMUTTER SW 6 M 3 * 12
0	MP 6	50.20.3011	3 pcs		Kühlkörper, TO 220, vertikal
0	MP 7	1.918.214.93			LL Subboard for PSU
0	P 3	54.14.6510		10p	PCB-Buchse gerade
0	Q 1	50.03.0436		BC237B	BC 237 B, 547 B, 550 B,
0	Q 2	50.03.0436		BC237B	BC 237 B, 547 B, 550 B,
0	R 1	57.11.3822		8k2	MF, 1%, 0207
0	R 2	not used		7k5	MF, 1%, 0207
0	R 3	57.11.3751		750R	MF, 1%, 0207
0	R 8	57.11.3472		4k7	MF, 1%, 0207
0	R 9	57.11.3334		330k	MF, 1%, 0207
0	R 10	57.11.3273		27k	MF, 1%, 0207
0	R 11	57.11.3683		68k	MF, 1%, 0207

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 12	57.11.3223		22k	MF, 1%, 0207
0	R 13	57.11.3223		22k	MF, 1%, 0207
0	R 14	57.11.3223		22k	MF, 1%, 0207
0	R 15	57.11.3223		22k	MF, 1%, 0207
0	R 16	not used		2k2	MF, 1%, 0207
0	R 17	57.11.3221		220R	MF, 1%, 0207
0	R 18	57.11.3221		220R	MF, 1%, 0207
0	R 19	57.11.3124		120k	MF, 1%, 0207
0	R 20	57.11.3223		22k	MF, 1%, 0207
0	R 21	57.11.3103		10k	MF, 1%, 0207
0	R 22	57.11.3103		10k	MF, 1%, 0207
0	R 23	57.11.3222		2k2	MF, 1%, 0207
0	R 24	57.11.3103		10k	MF, 1%, 0207
0	R 25	57.11.3103		10k	MF, 1%, 0207
0	R 26	57.11.3103		10k	MF, 1%, 0207
0	R 27	57.11.3102		1k0	MF, 1%, 0207
0	R 28	57.11.3102		1k0	MF, 1%, 0207
0	R 29	57.11.3102		1k0	MF, 1%, 0207
0	R 30	57.11.3102		1k0	MF, 1%, 0207
0	R 31	57.11.3102		1k0	MF, 1%, 0207
0	R 32	57.11.3102		1k0	MF, 1%, 0207
0	R 33	57.11.3100		10R	MF, 1%, 0207
0	R 34	57.11.3683		68k	MF, 1%, 0207
0	W 1	not used			MP RAST-LOETKONTAKT, D 1,85
0	W 2	not used			MP RAST-LOETKONTAKT, D 1,85
0	W 3	1.023.390.36			FLACHKABEL 10 POL. 0.36M

End of List

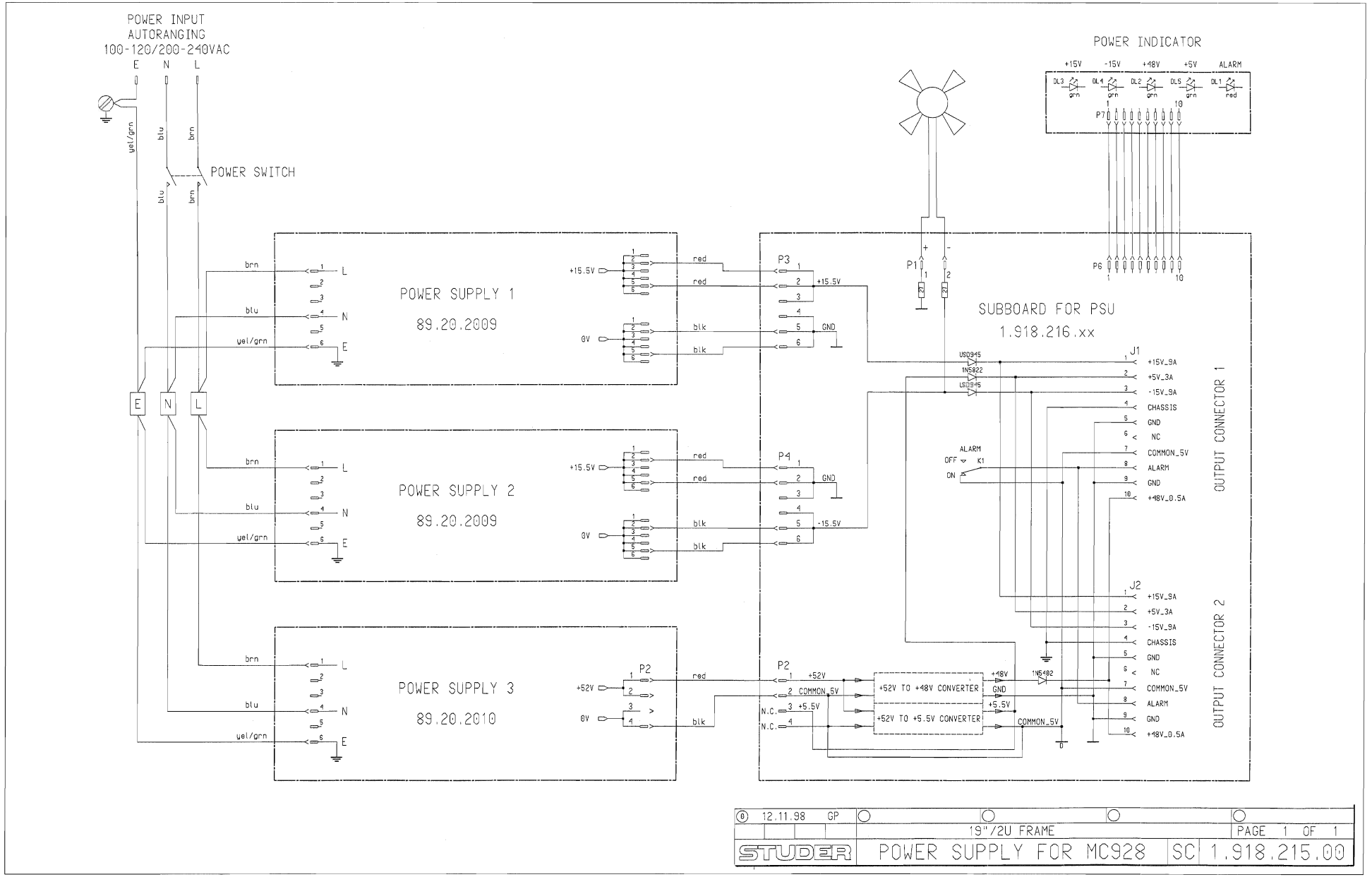
Comments

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					1
1	1st Item	Basic Function	03.06.97	ZS	0
			Date	Name	Index

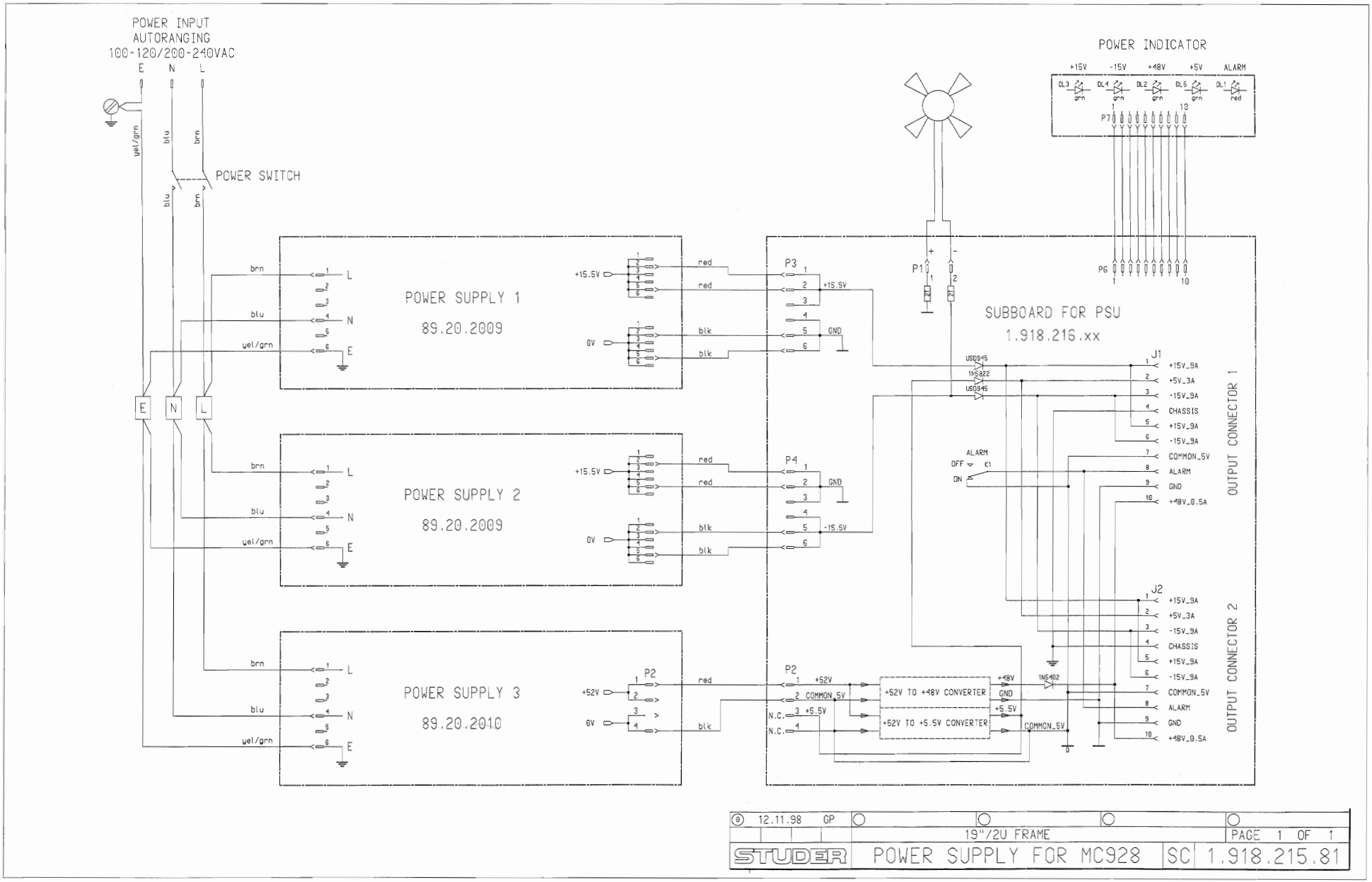
Copy for Info:

STUDER REGENSDORF | SUBBOARD FOR PSU 'ESE' | 1.918.214.00

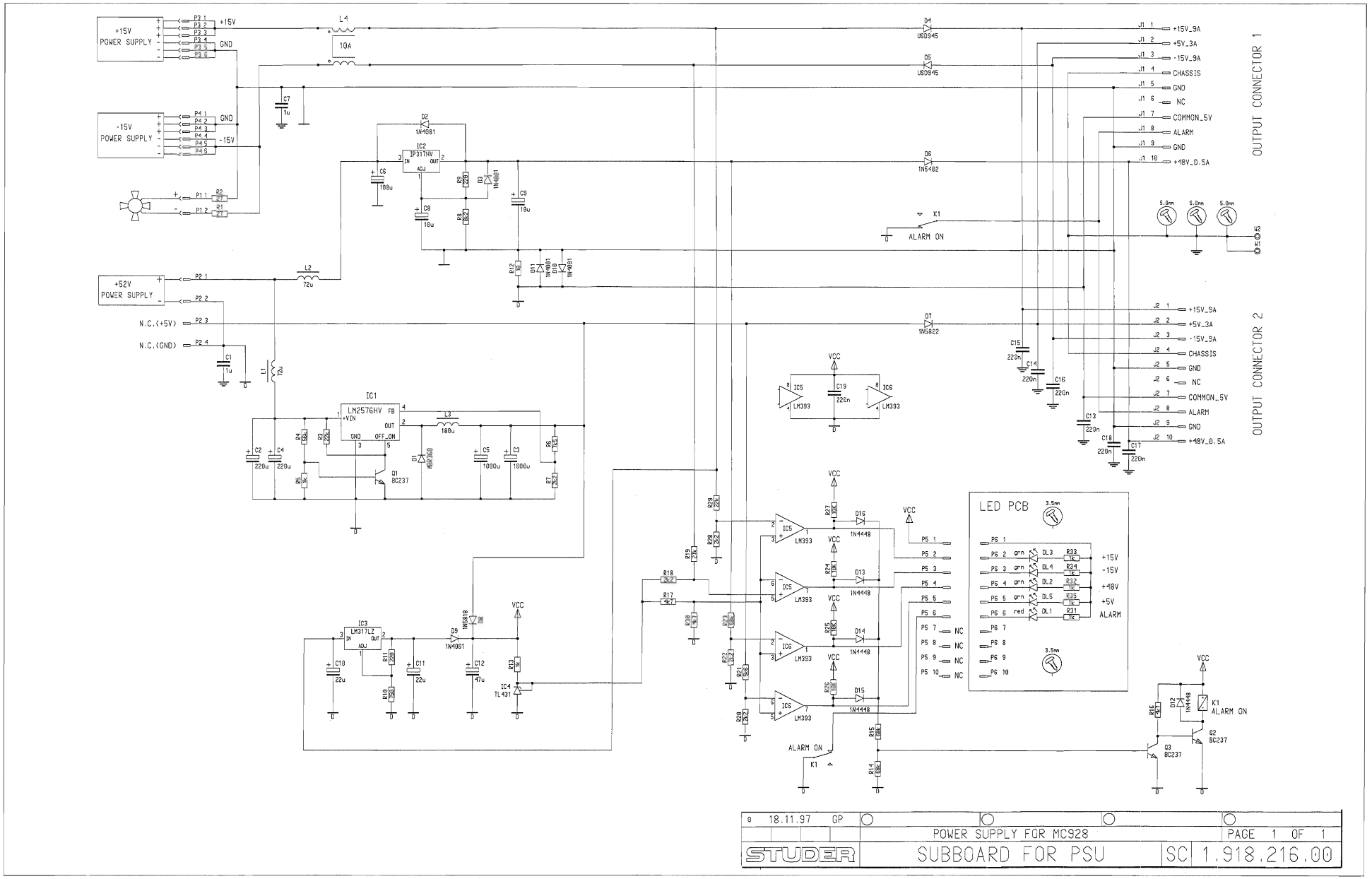
Power Supply for MC 928 1.918.215.00



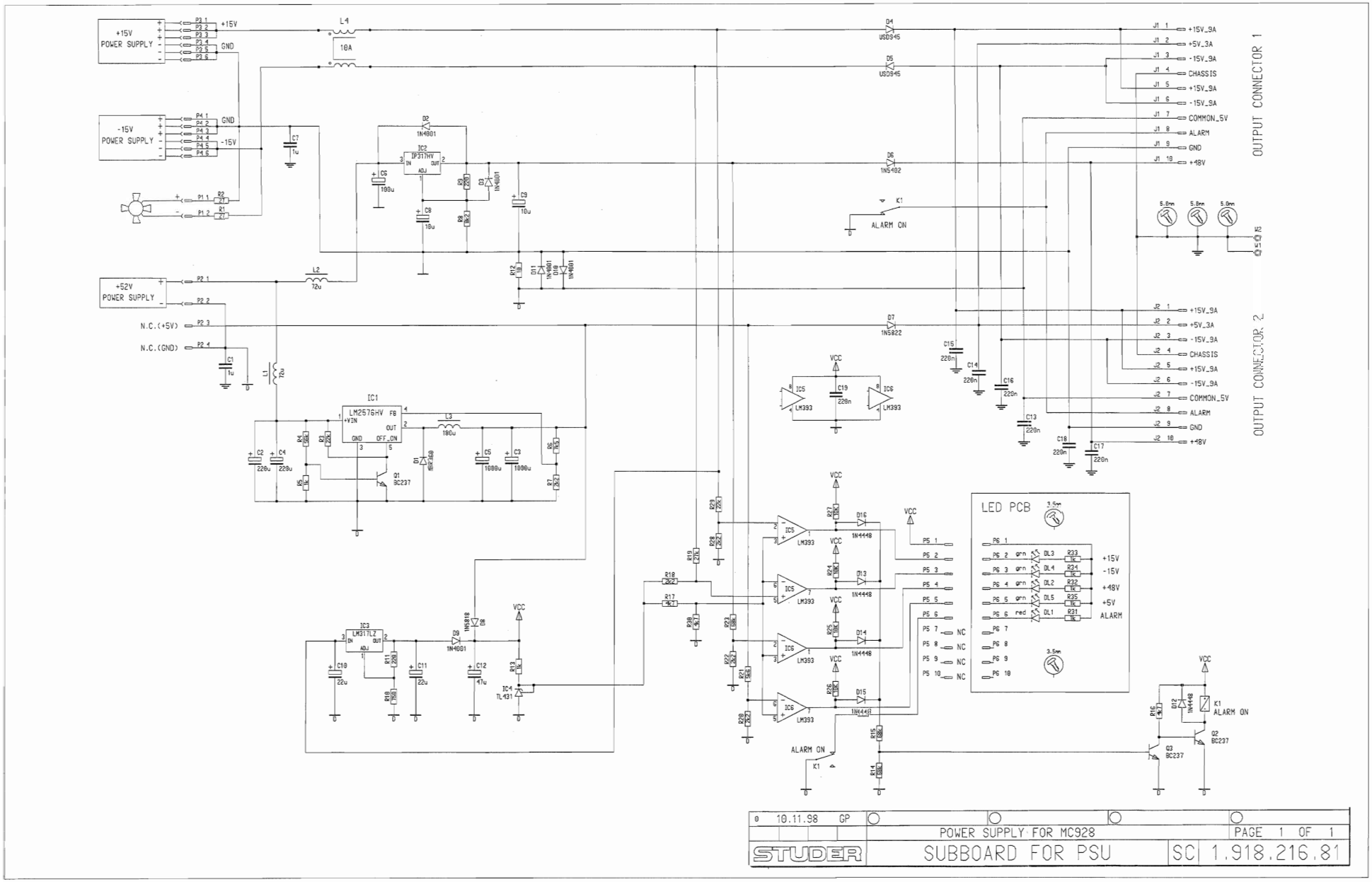
Power Supply for MC 928 1.918.215.81



Subboard for PSU 1.918.216.00



Subboard for PSU 1.918.216.81

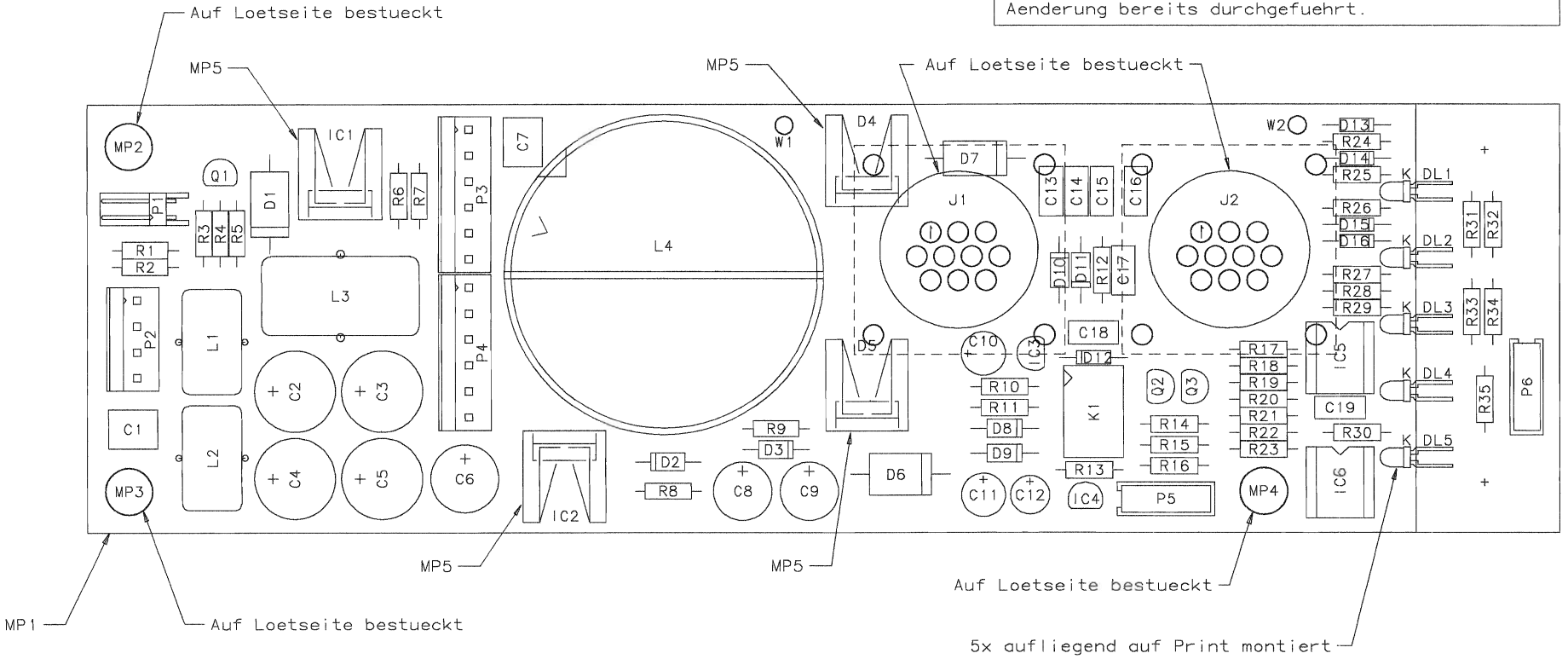


Subboard for PSU 1.918.216.00 (1)
Subboard for PSU 1.918.216.81 (2)

Aenderung der Anschlussbelegung von J1 und J2
mit Printplatte 1.918.216-11

Leiterbahn auftrennen zwischen Pin 5 und Pin 9
Dtrahtbruecke einloeten zwischen Pin 1 und Pin 5
Dtrahtbruecke einloeten zwischen Pin 3 und Pin 6

Bei der Printplatte 1.918.216.12 ist diese
Aenderung bereits durchgefuehrt.



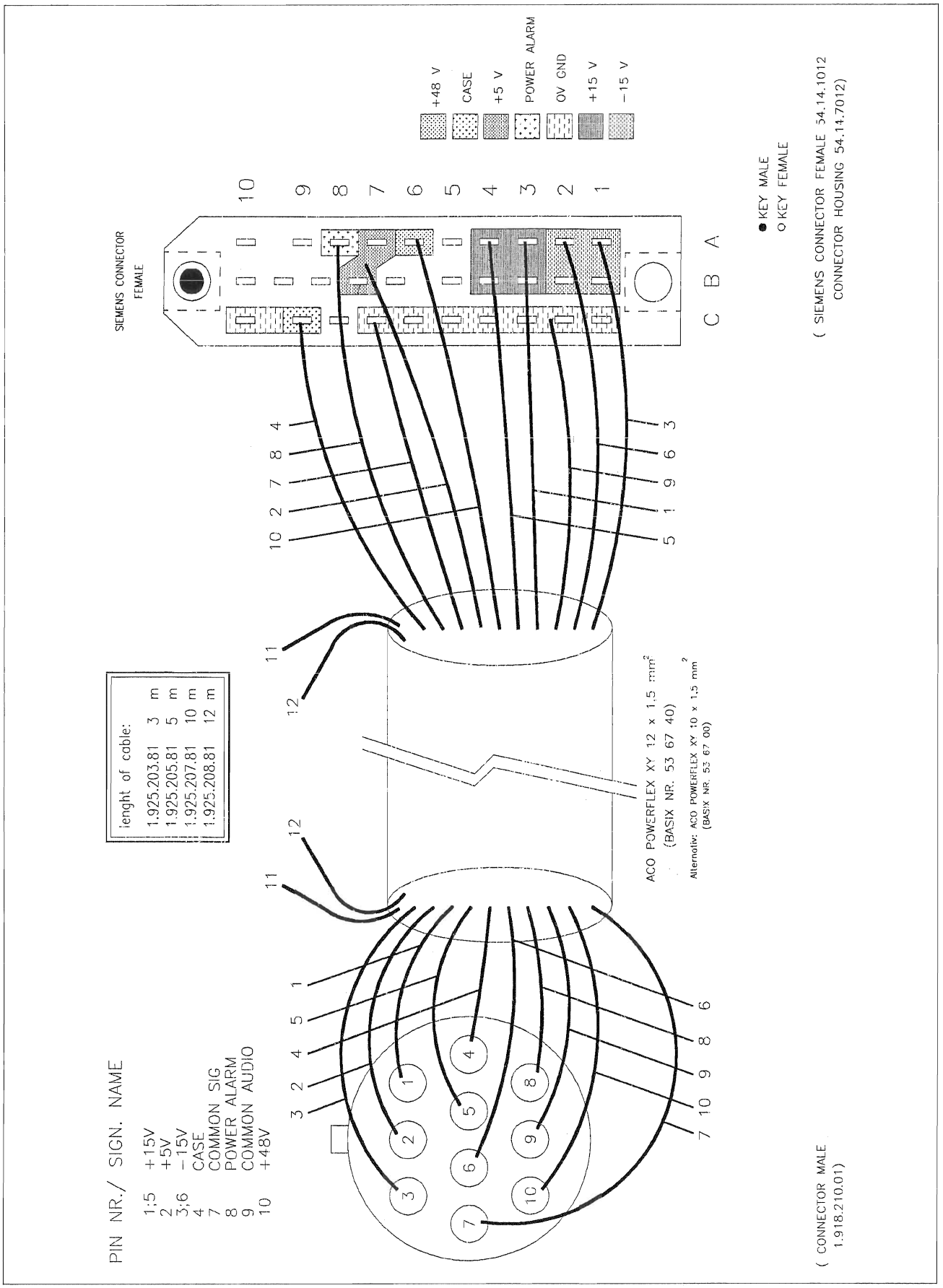
Subboard for PSU 1.918.216.00 (1)
Subboard for PSU 1.918.216.81 (2)

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0105		1u0	PETP, 50V, 10%, RM5
0	C 2	59.22.8221		220u	EL 63V, 20%, RM5
0	C 3	59.22.4102		1m0	EL 16V, 20%, RM5
0	C 4	59.22.8221		220u	EL 63V, 20%, RM5
0	C 5	59.22.4102		1m0	EL 16V, 20%, RM5
0	C 6	59.22.8101		100u	EL 63V, 20%, RM5
0	C 7	59.06.0105		1u0	PETP, 50V, 10%, RM5
0	C 8	59.22.8100		10u	EL 63V, 20%, RM5
0	C 9	59.22.8100		10u	EL 63V, 20%, RM5
0	C 10	59.22.6220		22u	EL 35V, 20%, RM5
0	C 11	59.22.6220		22u	EL 35V, 20%, RM5
0	C 12	59.22.3470		47u	EL 10V, 20%, RM5
0	C 13	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 14	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 15	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 16	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 17	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 18	59.06.0224		220n	PETP, 63V, 10%, RM5
0	C 19	59.06.0224		220n	PETP, 63V, 10%, RM5
0	D 1	50.04.0526		MBR360	D MBR 360, SB 360, 31 DQ 06,
0	D 2	50.04.0122		1N4001	1A, DO 41
0	D 3	50.04.0122		1N4001	1A, DO 41
0	D 4	50.04.0516		USD945	D USD 945,
0	D 5	50.04.0516		USD945	D USD 945,
0	D 6	50.04.0507		1N5402	D 1 N 5402,
0	D 7	50.04.0519		1N5822	3A, Schottky
0	D 8	50.04.0512		1N5818	D 1N 5818, 1N 5819,
0	D 9	50.04.0122		1N4001	1A, DO 41
0	D 10	50.04.0122		1N4001	1A, DO 41
0	D 11	50.04.0122		1N4001	1A, DO 41
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	DL 1	50.04.2204		934ID	LED 3mm red
0	DL 2	50.04.2206		934GT	LED 3mm green
0	DL 3	50.04.2206		934GT	LED 3mm green
0	DL 4	50.04.2206		934GT	LED 3mm green
0	DL 5	50.04.2206		934GT	LED 3mm green
0	IC 1	50.10.0126		LM2576HV-A	Switching Reg 1.23V...57V, 3A
0	IC 2	50.10.0116		LM317HV	IC IP 317 HVT, LM 317 HVT
0	IC 3	50.10.0108		LM317L	IC LM 317 LZ,
0	IC 4	50.10.0106		TL431	IC TL 431 CLP,
0	IC 5	50.05.0283		LM393	Dual Comparator
0	IC 6	50.05.0283		LM393	Dual Comparator
0	K 1	56.04.0198		2u	5V 125V 2A Ag/Au
0	L 1	62.03.0015		72uH	2A Toroid Chocke
0	L 2	62.03.0015		72uH	2A Toroid Chocke
0	L 3	62.03.0035		180uH	3A Toroid Chocke
0	L 4	62.03.0110		1.8mH	10A Toroid Chocke compensated
0	MP 1	1.918.216.12			SUBPCB FOR PSU
0	MP 2	1.010.018.22	mp	3*12	NIETMUTTER SW 6 M 3 * 12
0	MP 3	1.010.018.22	mp	3*12	NIETMUTTER SW 6 M 3 * 12
0	MP 4	1.010.018.22	mp	3*12	NIETMUTTER SW 6 M 3 * 12
0	MP 5	50.20.3011	4 pcs		Kühlkörper, TO 220, vertikal
0	MP 6	1.918.216.10	mp		Nr.-Etikette 5x20
0	MP 7	43.01.0108	mp	Label	ESE-WARNSCHILD
0	P 1	54.12.0722		2p	Stecker winkel PCB
0	P 2	54.12.0504		4p	P Stecker 4p Power-Pin
0	P 3	54.12.0506		6p	P Stecker 6p Power-Pin
0	P 4	54.12.0508		6p	P Stecker 6p Power-Pin
0	P 5	54.14.5510		10p	PCB-Buchse gerade
0	P 6	54.14.5510		10p	PCB-Buchse gerade
0	Q 1	50.03.0436		BC237B	BC 237 B, 547 B, 550 B,
0	Q 2	50.03.0436		BC237B	BC 237 B, 547 B, 550 B,
0	Q 3	50.03.0436		BC237B	BC 237 B, 547 B, 550 B,
0	R 1	57.11.3270		27R	MF, 1%, 0207
0	R 2	57.11.3270		27R	MF, 1%, 0207
0	R 3	57.11.3223		22k	MF, 1%, 0207
0	R 4	57.11.3563		56k	MF, 1%, 0207
0	R 5	57.11.3102		1k0	MF, 1%, 0207
0	R 6	57.11.3752		7k5	MF, 1%, 0207
0	R 7	57.11.3222		2k2	MF, 1%, 0207
0	R 8	57.11.3822		8k2	MF, 1%, 0207
0	R 9	57.11.3221		220R	MF, 1%, 0207
0	R 10	57.11.3751		750R	MF, 1%, 0207
0	R 11	57.11.3221		220R	MF, 1%, 0207
0	R 12	57.11.3100		10R	MF, 1%, 0207
0	R 13	57.11.3102		1k0	MF, 1%, 0207
0	R 14	57.11.3683		68k	MF, 1%, 0207
0	R 15	57.11.3683		68k	MF, 1%, 0207
0	R 16	57.11.3472		4k7	MF, 1%, 0207
0	R 17	57.11.3472		4k7	MF, 1%, 0207
0	R 18	57.11.3222		2k2	MF, 1%, 0207
0	R 19	57.11.3273		27k	MF, 1%, 0207
0	R 20	57.11.3222		2k2	MF, 1%, 0207
0	R 21	57.11.3562		5k6	MF, 1%, 0207
0	R 22	57.11.3222		2k2	MF, 1%, 0207
0	R 23	57.11.3683		68k	MF, 1%, 0207
0	R 24	57.11.3103		10k	MF, 1%, 0207
0	R 25	57.11.3103		10k	MF, 1%, 0207
0	R 26	57.11.3103		10k	MF, 1%, 0207
0	R 27	57.11.3103		10k	MF, 1%, 0207
0	R 28	57.11.3222		2k2	MF, 1%, 0207
0	R 29	57.11.3223		22k	MF, 1%, 0207
0	R 30	57.11.3472		4k7	MF, 1%, 0207
0	R 31	57.11.3102		1k0	MF, 1%, 0207
0	R 32	57.11.3102		1k0	MF, 1%, 0207
0	R 33	57.11.3102		1k0	MF, 1%, 0207
0	R 34	57.11.3102		1k0	MF, 1%, 0207
0	R 35	57.11.3102		1k0	MF, 1%, 0207
0	W 1	not used			MP RAST-LOETKONTAKT, D 1,85
0	W 2	not used			MP RAST-LOETKONTAKT, D 1,85

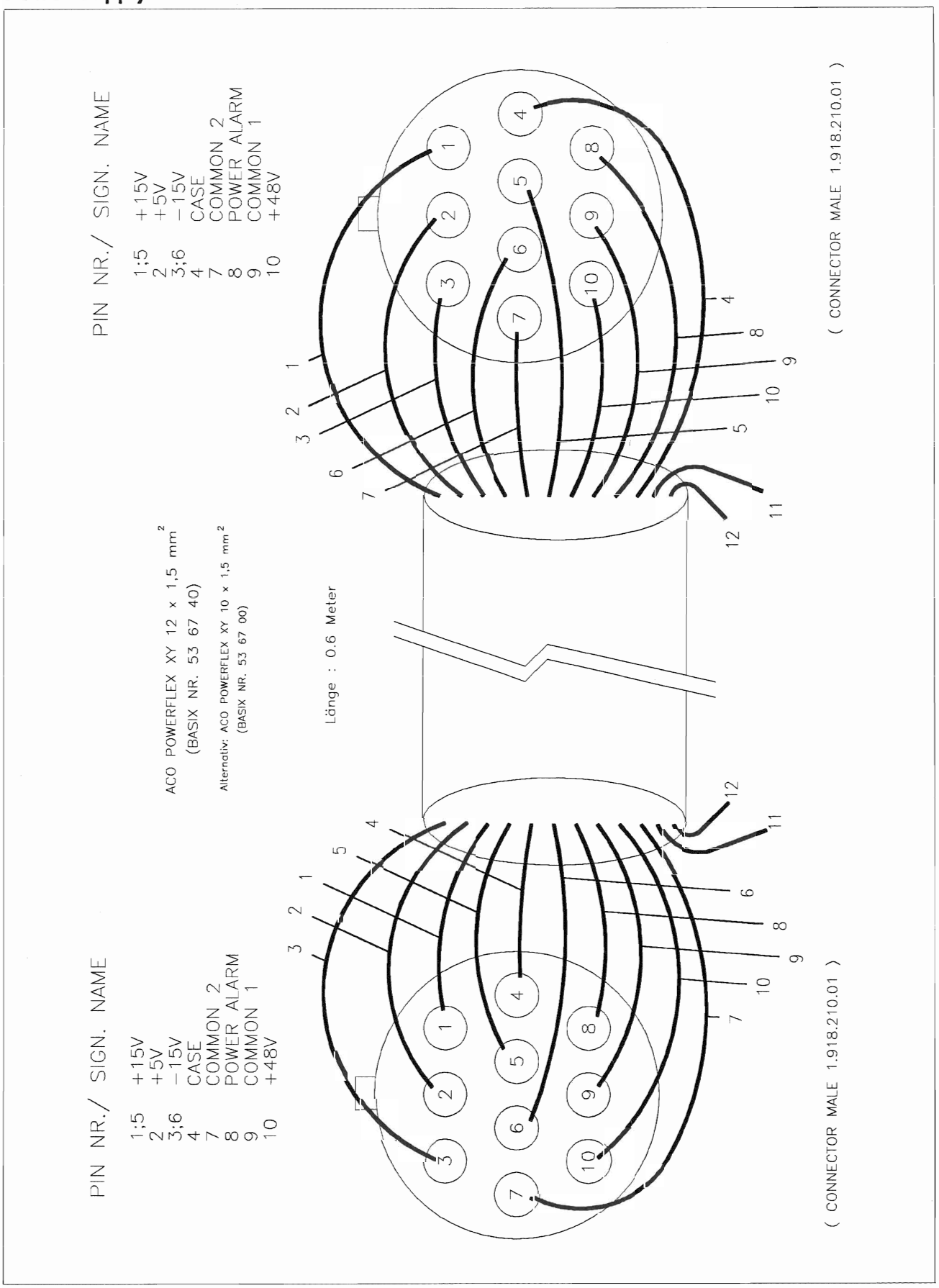
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Comments

Power Supply Cable for 928 1.925.20x.81



Power Supply Link Cable for 928 1.925.220.81



Power Supply Cable for 928, Dual 1.925.21y.81

